

Arboricultural Assessment and Report

Merrifield North PSP

7 May 2026

Tree Logic Ref. 014275

Prepared for Department of Transport & Planning

Prepared by Harry Webb – Tree Logic Pty. Ltd.



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Cover photo: Tree 115, an indigenous River Red Gum (*Eucalyptus camaldulensis*) growing at property #8.

1 Summary

Reason for Assessment

Tree Logic Pty Ltd was engaged by the Department of Transport and Planning to undertake an Arboricultural Assessment and prepare a report to inform the Merrifield North PSP. Requirements of the arboricultural report include:

- To provide a preliminary arboricultural assessment and report to inform potential future development.
- To provide information on the species, origin, dimensions, health and structure of the trees and their appropriateness for retention.
- Provide relevant information on tree protection zones, compliant with AS4970-2025 'Protection of trees on development sites'.
- To offer recommendations regarding the management of the trees, including any tree protection measures for retained trees.

Overview

An arboricultural survey was undertaken within the Merrifield North PSP. The study covered 20 properties, spanning 987ha of mostly rural properties. Approximately 80% of the land was accessed, with dimensions and characteristics of other trees estimated from adjoining land and with footage captured with aerial drone. Most of the vegetation (approximately 3150 trees) were assessed as collective groupings (133 groups), though 160 trees were individually assessed. Most of the trees were concentrated around households and along paddock perimeters and were primarily composed of planted natives and exotics (mainly conifers). A significant group of indigenous River Red Gums was growing along the western boundary (within and adjacent to Properties 1 & 2), north of Gunns Gully Road, and another younger patch was identified within the Broadhangar Equestrian property (Property 4) with other isolated occurrences in Properties 6, 8, 9 & 14.

Planners and designers should generally refer to the arboricultural and landscape values when prioritising trees and groups for retention in the precinct. The area of highest arboricultural value was the group of remnant River Red Gums growing within and adjacent to Properties 1 & 2. Other higher rated vegetation was relatively rare across the precinct with scattered incidences in Properties 4, 5, 6, 8, 9 & 14, although the groups of planted natives along the Hume Freeway were also of High landscape value. In total, 10 trees were afforded High ratings and 16 trees were Moderate A rated while in terms of Tree groups, 2 were of Very high Landscape value and 10 were of High value. All of these trees should be prioritised for retention within the precinct although most of the trees in the other Moderate/Medium arboricultural and landscape ratings are also suitable to retain. Trees with lower arboricultural ratings can also be considered for retention, especially those offering other benefits (such as the habitat values afforded to many of the lower rated Southern Mahogany and Sugar Gums), though these may require varying levels of arboricultural maintenance to manage their structural issues. Planners should refer to the notional root zones (NRZ) to determine space requirements for trees being retained.

2 Method

Site inspections were undertaken between 8th- 21st January 2026. The trees were inspected from the ground and observations were made of the growing environment and surrounding area. The trees were not climbed

and no samples of the tree or soil were taken. Details were recorded individually for scattered trees and as groups for homogenous patches of trees.

Details recorded for the trees and tree groups included:

- Tree species and common name(s).
- Origin (i.e. indigenous, planted indigenous, Victorian native, Australian native, Exotic evergreen, Exotic deciduous, Exotic conifer or mixed native).
- Tree age (young, semi-mature, early-mature, maturing or over-mature).
- Diameter at standard height (DSH) was measured at 1.4 m from ground level and basal diameter just above the root flare. These were measured with a diameter or builder's tape, or estimated in homogenous patches of trees or where trunks were not accessible.
- Tree heights measured with a Nikon Pro Forestry device or estimated in metres when canopy was obscured.
- Canopy width
- Health and Structural condition.
- Arboricultural rating.
- Landscape value
- Useful life expectancy (ULE).
- Notional Root Zone (NRZ) and Structural root zone (SRZ).
- Comments on any issues, habitat hollows, recommended works or any appropriate specific site characteristics.

Group characteristics were recorded as averages in terms of Age, DSH, Height, Canopy spread, Health, Structure, Arb. Rating, ULE and NRZ

Trees were observed from the closest accessible vantage point for properties where site access was not granted. Photographs and videos were recorded by aerial drone to assist with viewing inaccessible areas. All drones and drone operators were CASR (Civil Aviation Safety Authority) certified.

Assessment details of individual trees are listed in Appendix 1 and a copy of the tree location plan can be seen in Appendix 2.

A photograph of each viewable tree and tree group was taken and included in the photographic catalogue at Appendix 3.

Only trees with a stem diameter greater than 150mm at a height of 1.4 metres above ground level were assessed and data collected.

Definitions of each assessment category can be seen in Appendix 4.

The assessed trees have been allocated Notional Root Zones (NRZ) and structural root zones (SRZ) as per the Australian Standard, AS 4970-2025. See Appendix 5 for TPZ establishment and types of encroachment.

3 Observations

The study area comprised 987ha of land divided over 20 properties in Beveridge and Mickleham, on the northern fringe of Melbourne (Figure 1). The study area was bounded by the Hume Freeway to the east and Gunns Gully Road ran east to west through the middle of the precinct. Aside from the Melbourne Water land in the southwest corner, which functions as a retarding basin, a majority of the land (by area) was undeveloped and was being used for cropping/grazing. Several of the properties on the southern side of Gunns Gully Road were semi-rural (~12ha) properties, most of which had households in the northern third and sections of paddock to the rear. The study had access to over 80% of land in the precinct, a large portion of which included the Melbourne Water site, and most of the area under cropping on the northern side of Gunns Gully Road, along with 'Broadhangar Equestrian' which was associated with the cropping land. Most of the semi-rural properties on the southern side of Gunns Gully Road were not participating in the study (Table 1).

The topography of the study area was predominantly flat with the land sloping up in the far northeastern corner of the property, although it also sloped up to the west, beyond the western boundary. Kalkallo Creek ran through the precinct from northwest to southeast and was draining through several man-made channels in the Melbourne Water retention basin, presumably to assist with drainage in the wider catchment.

In terms of vegetation profile, a high percentage (>95%) of observed trees were either amenity plantings growing around households or were planted windrows along paddock perimeters. One significant patch of indigenous River Red Gums (*Eucalyptus camaldulensis*) was growing midway along the eastern boundary, just north of Gunns Gully Road, along with a small number of scattered incidences, generally in the eastern half of the precinct. Several significant patches of mixed natives were also growing alongside the Hume Freeway, providing an important visual screen at the precinct interface.

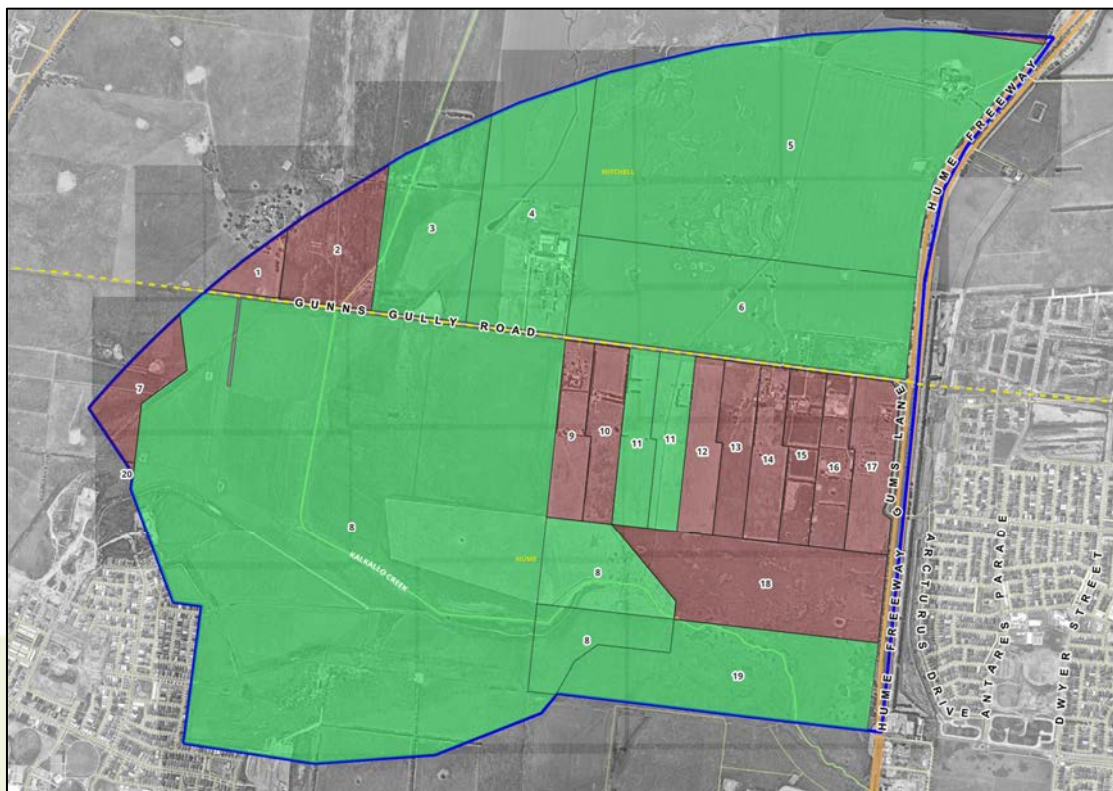


Figure 1. Study area divided into 20 properties (PSP ID shown) and colour coded by category of land access consent (green=access granted, red=access not granted). Dark blue line = precinct boundary.

Table 1. Property details

PSP ID	Address	LGA	Land access obtained
1	290 Gunns Gully Road, Beveridge	Mitchell	No
2	260 Gunns Gully Road, Beveridge	Mitchell	No
3	180 Gunns Gully Road, Beveridge	Mitchell	Yes
4	160 Gunns Gully Road, Beveridge (Broadhangar Equestrian)	Mitchell	Yes
5	155 Hume Freeway, Beveridge	Mitchell	Yes
6	160 Gunns Gully Road, Beveridge	Mitchell	Yes
7	330 Old Sydney Road, Mickleham	Hume	No
8	1375 Hume Fwy, Mickleham	Hume	Yes
9	155 Gunns Gully Road, Mickleham	Hume	No
10	135 Gunns Gully Road, Mickleham	Hume	No
11	125 Gunns Gully Road, Mickleham	Hume	Yes
12	95 Gunns Gully Road, Mickleham	Hume	No
13	75 Gunns Gully Road, Mickleham	Hume	No
14	63 Gunns Gully Road, Mickleham	Hume	No
15	51 Gunns Gully Road, Mickleham	Hume	No
16	35 Gunns Gully Road, Mickleham	Hume	No
17	15 Gunns Gully Road, Mickleham	Hume	No
18	1425 Hume Fwy, Mickleham	Hume	No
19	1375 Hume Fwy, Mickleham	Hume	Yes
20	450-500 Donnybrook Road, Mickleham	Hume	No

160 individually assessed trees and 133 Tree groups (comprising approximately 3150 trees) were growing within the study area. Of these:

- 104 trees and 72 groups were growing in properties consenting to access.
- 56 trees and 61 groups were growing in properties not consenting to access.

Origin

In terms of origin, <5% of assessed trees were categorised as indigenous (remnant) vegetation. River Red Gum comprised all of the indigenous trees aside from one Late-black Wattle (*Acacia mearnsii*) growing adjacent to Gunns Gully Road.

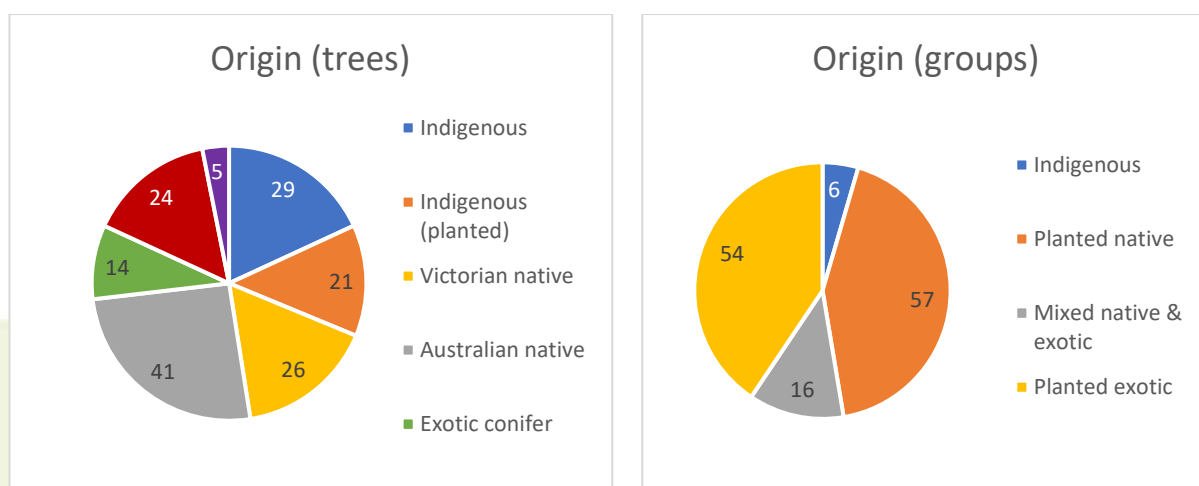


Figure 2 Breakdown of individuals (left) and groups (right), categorised by origin.

More than 95% of assessed trees were a mixture of exotics and natives that had been planted in windrows, shelter belts and around households. Most of these were cypress (*Cupressus* spp.), pines (*Pinus radiata*) and mixed natives including eucalypts, wattles, paperbarks and sheoaks. Several of the planted natives contained species that would be considered indigenous to the local region, including Yellow Box (*Eucalyptus melliodora*), Grey Box (*E. microcarpa*) and Manna Gum (*E. viminalis*), although most of the precinct is covered by Plains Grassy Wetland (EVC125) & Plains Grassland (EVC132) EVCs that describe the area pre-1750 as primarily treeless with occasional incidences of *E. camaldulensis* and *E. ovata*. Small sections of land along and adjacent to the eastern and western precinct boundaries fall under Plains Grassy Woodland (EVC55) where other species of eucalypt are more likely to have been growing pre 1750, although *E. camaldulensis* is the only listed canopy species. Riparian Scrub (EVC191) occurs in the southeast corner of the precinct and is described as 'shrubland' with *Leptospermum lanigerum* (Woolly-tea tree) being the listed canopy species, although it also describes emergent *Eucalyptus* spp. as possibly occurring in these areas (see Figure 3).

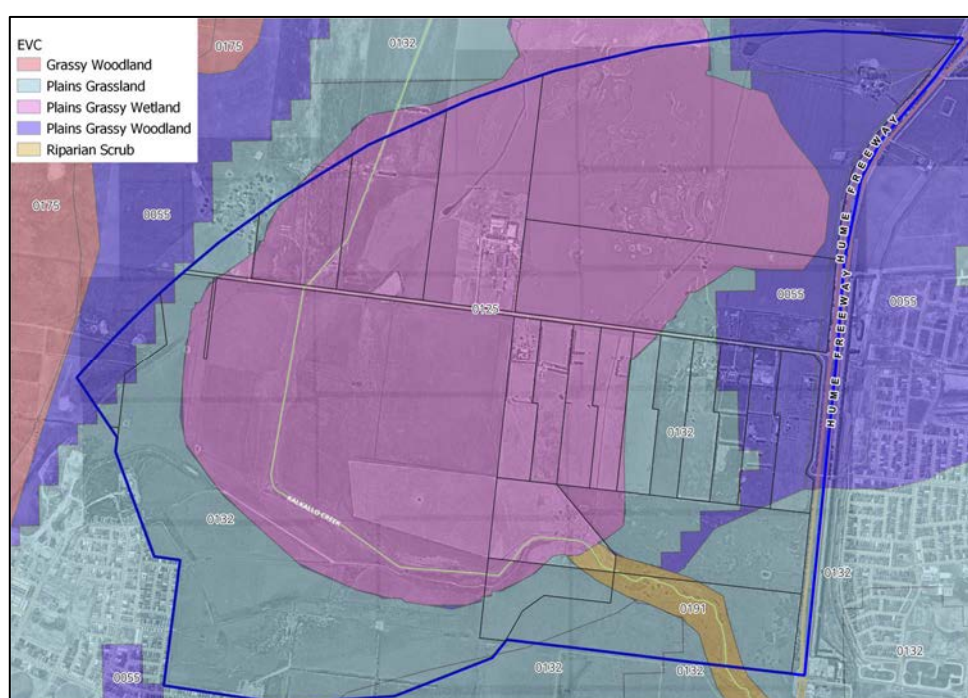


Figure 3. EVCs coverage of precinct.

Species

More than 40 species were identified in the study area, a majority of which were either exotic conifers (mostly *Cupressus* spp and *Pinus* spp.) or various species of natives (*Eucalyptus* spp., *Acacia* spp., *Allocasuarina* spp., *Melaleuca* spp.) The individual species with more than one recorded individual are recorded in Table 2. Table 3 summarises the tree groups according to origin type and recorded species.

See the tree assessment table attached as Appendix 1 for details of each tree feature. See Appendix 2 for tree numbers and locations.

Table 2. Recorded species with at least 2 individuals.

Species	Common Name	Origin	Count (individuals)
<i>Eucalyptus camaldulensis</i>	River Red Gum	Indigenous	27
		Indigenous (planted)	21
<i>Eucalyptus cladocalyx</i>	Sugar Gum	Australian native	18

Species	Common Name	Origin	Count (individuals)
<i>Eucalyptus</i> sp.	Gum Tree	Australian native	8
		Indigenous	1
<i>Eucalyptus botryoides</i>	Southern Mahogany	Victorian native	9
<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Exotic deciduous	8
<i>Cupressus macrocarpa</i>	Monterey Cypress	Exotic conifer	7
<i>Eucalyptus melliodora</i>	Yellow Box	Victorian native	6
<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Exotic deciduous	5
<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic palm	5
<i>Eucalyptus viminalis</i>	Manna Gum	Victorian native	5
<i>Pinus radiata</i>	Monterey Pine	Exotic conifer	4
<i>Quercus robur</i>	English Oak	Exotic deciduous	3
<i>Cupressus sempervirens</i>	Italian Cypress	Exotic conifer	3
<i>Eucalyptus globulus</i>	Southern Blue Gum	Australian native	3
<i>Prunus</i> sp.	Almond, Cherry, Peach, Plum	Exotic deciduous	2
<i>Eucalyptus saligna</i>	Sydney Blue Gum	Australian native	2
Total			137

Table 3. Summary of tree groups.

Group type	Primary species	Count of groups	Estimate trees
Single species indigenous	<i>Eucalyptus camaldulensis</i>	6	85
Single species native	<i>Eucalyptus</i> spp. <i>E. cladocalyx</i> , <i>E. camaldulensis</i> , <i>E. saligna</i> , <i>E. globulus</i> , <i>E. spathulata</i> , <i>Melaleuca styphelioides</i> , <i>Allocasuarina verticillata</i> , <i>E. occidentalis</i> , <i>E. viminalis</i> , <i>E. melliodora</i> .	35	815
Multi-species native		22	651
Single species exotic	<i>XCupressocyparis leylandii</i> , <i>Pinus radiata</i> , <i>Cupressus macrocarpa</i> , <i>Fraxinus</i> sp., <i>Cupressus</i> spp.	41	930
Multi-species exotic		12	241
		7	141
		4	94
		1	6
Multi-species mixed native & exotic	<i>Cupressus macrocarpa</i> , <i>Eucalyptus</i> spp., <i>Pinus radiata</i> , <i>Eucalyptus botryoides</i> , <i>Eucalyptus cladocalyx</i>	17	434
Grand Total		133	3156

Tree age

Age categorisation was evenly distributed between semi-mature, early-mature and maturing age categories in the individually assessed trees (Figure 4) while the groups, though also evenly distributed between the younger and established age categories, tended to have higher proportions of younger trees. Several of the scattered remnant trees on the western boundary are expected to be at least 100-200 years while all other trees in the precinct are estimated to be between 5-75 years of age.

It is noted that trees in young to semi-mature categories have lower arboricultural ratings than those in early to mature age categories, although younger trees are often some of the best options for retaining in the context of site redevelopment due to higher inherent vigour, longer useful life expectancy and generally better adaptability to site changes.

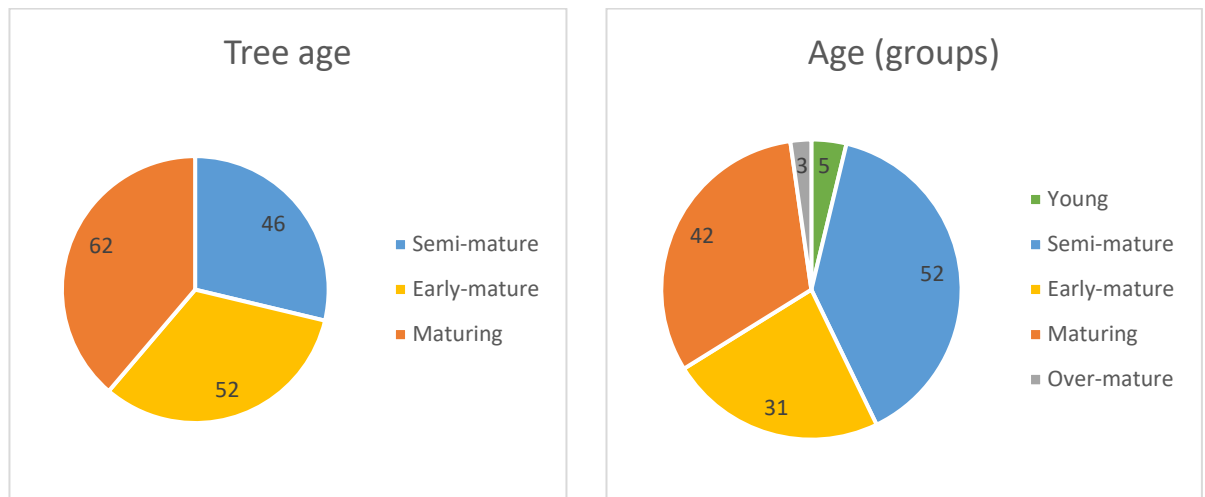


Figure 4. Breakdown of tree age category

Tree condition

Tree health was assessed based on foliage colour, size and density as well as shoot initiation and elongation.

- Approximately 3/4 of trees were displaying characteristics considered to be typical or better of the species growing in this part of Victoria under current prevailing climatic conditions. These trees generally had at least 80% canopy density with little to no dieback and no significant issues with leaf size or colouration.
- Approximately 16% of the population had Fair to poor health with reduced foliage density, partial dieback, chlorotic foliage, lerp, and deadwood signifying stress or the beginnings of age-related decline. Trees in this category may respond positively to landscape improvements such as mulching, irrigation, top dressing, soil decompaction. Some trees in this category may also require some canopy pruning to manage risk of falling tree parts, depending on occupancy levels in the fall zone. It should also be noted that trees in reduced health are also likely to be less tolerant of NRZ incursions than those with good or fair health.
- Approximately 6% of trees exhibited poor health characteristics such as sparse foliage, extensive canopy dieback, defoliation, excessive deadwood or foliage discoloration. Most of the trees in this health category are in decline and would not be expected to respond to landscape treatments.
- The remaining trees (<5%) were dead.

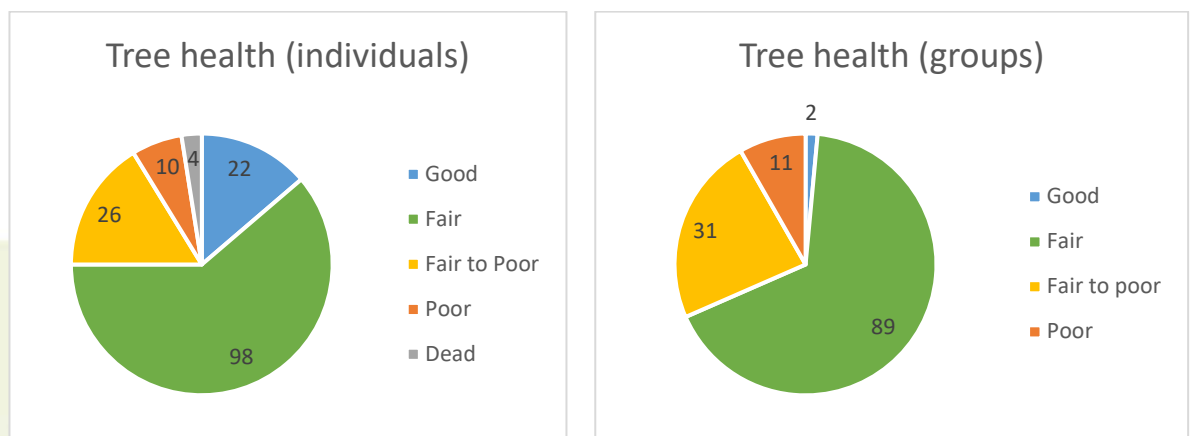


Figure 5. Breakdown of tree health

Tree structure was assessed for structural defects and deficiencies, likelihood of failures and risk to potential targets.

- Close to 50% of assessed trees and groups displayed Fair or better structure in terms of primary branching arrangement and architecture and most would not require any immediate structural pruning if retained as landscape features.
- Approximately 40% of the population had Fair to poor structure with minor deficiencies such as over-extended limbs, acute fork attachments, limb and trunk wounds, incipient decay, presence of decay fungi, past failures and crown asymmetry. Some of the deficiencies may be manageable with arboricultural input such as weight reduction of selected branches, deadwood removal and minor crown reduction.
- Approximately 10% of trees had Poor or Very poor structure. These had deficiencies such as included bark forks in primary unions and/or in numerous secondary forks, active splits or cracks, major or multiple past failures, advanced basal decay, decay within primary unions and/or decay in numerous parts of the trunk. These trees had an elevated risk of partial or entire tree failure. Several trees in this category should be reduced to habitat stumps (i.e. major crown reduction) if they are retained in the landscape or removed.
- It is noted that large percentages of the older Swamp Mahogany and Sugar Gums were in the Fair to poor to Poor structural categories. While these trees are usually of lower arboricultural value, they are generally of higher ecological value with residual hollows providing ideal habitat for birds and small mammals. Trees with habitat hollows can usually be retained in the landscape though they may require crown reduction pruning depending on the intended usage around the tree. A thorough crown reduction (or reduction to habitat stump) is an effective means of diminishing the hazard potential of a tree while retaining its ecological benefits. Trees that are too structurally poor to retain in ground can also be retained as ground logs although their usefulness to birdlife and climbing fauna would be diminished.

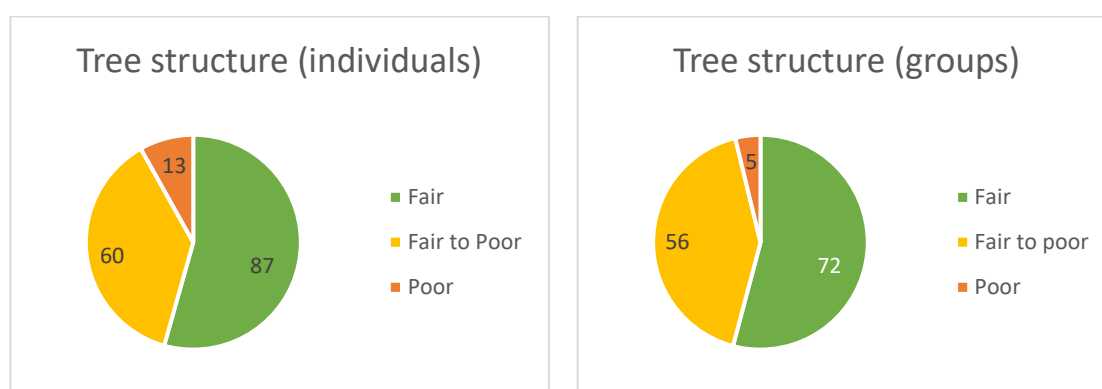


Figure 6. Breakdown of tree structure

Retention value

Each of the assessed trees was attributed an 'Arboricultural Rating'. The arboricultural rating correlates the combination of tree condition factors (health, structure & form) with tree amenity value. Amenity relates to the trees biological, functional and aesthetic characteristics within an urban landscape context and its ability to continue to provide these qualities into the medium to long term future. The arboricultural rating in combination with other factors can assist the project team and planners in nominating trees suitable for retention. It should be noted that the arboricultural rating is different to the conservation/ecological values placed on trees by other professions. Definitions of arboricultural ratings can be seen in Appendix 3.

Trees may be considered significant to the landscape because of their size, dominance within the site, presence within outlooks and general amenity in terms of shade, screen, foliage and flowers and historic, cultural or horticultural characteristics. The key to successful tree retention is to identify the trees that represent the best opportunity for retention and implement tree protection and design amendments before any site works commence.

The six arboricultural ratings used by Tree Logic include:

- High: Trees of high quality in good to fair condition. Trees with outstanding landscape presence. Retention of such trees is highly desirable.
- Moderate: Trees with a Moderate arboricultural rating are generally suitable for retention and design should attempt to incorporate these trees and provide adequate clearances during development stages where reasonable design intent is not unduly hampered. The following sub-categories relate predominately to age, size and amenity.
 - A: Moderate to large, maturing tree with pronounced landscape presence.
 - B: Moderate sized, established tree >50% of attainable age/size. Maturing tree with amenity value but could have identified deficiencies.
 - C: Small and/or semi-mature tree, established > 5 years in location, without any significant qualities yet, but has potential to grow into a landscape feature; Or a maturing tree with landscape presence but with accumulating deficiencies, trending towards becoming of Low arboricultural value.
- Low: Trees with a Low arboricultural rating generally have low retention values. They are either fair specimens of relatively small size, larger, established trees with significant health or structural deficiencies, or are environmental weed species. Retention of Low rated trees may be considered in some instances if not requiring a disproportionate expenditure of resources to successfully incorporate into the design or manage ongoing condition.
- Very low: Trees attributed an arboricultural rating of Very low are either recently planted saplings which are easily replaceable or are trees with health or structural characteristics that are beyond arboricultural maintenance. Trees rated Very low due to condition are generally recommended for removal or habitat pruning, regardless of design intent.

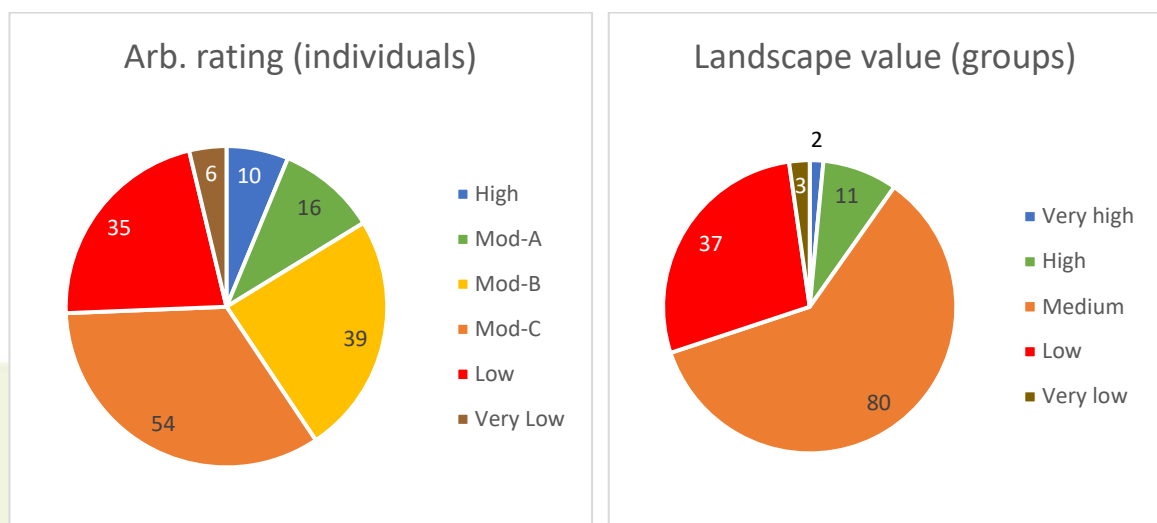


Figure 7. Breakdown of arboricultural rating in tree individuals and Landscape value in Tree groups.

As shown in Figure 7, there was a slight skew toward lower ranking categories with nearly 60% of trees being Mod.C, Low and Very low rated and 40% being in the top three categories. The majority of trees in the Mod.C ratings is a combination of large numbers of smaller amenity plantings along with higher levels of health and structural issues that are commonly seen in rural settings, due to lower ongoing maintenance on trees being used for agricultural purposes.

Landscape value was also assigned to each tree and tree group. Landscape values used by Tree logic are in descending order:

- Very high: Exceptional landscape features. Likely to be valued by large numbers of the surrounding population and may have additional qualities in terms of ecological, historical, horticultural or cultural associations. Rarely seen in a typical population (<5%).
- High: Standout environmental landmarks but occur more commonly than the Very high rated trees (i.e. 10-20% of a typical population).
- Medium: Typical trees without special qualities. Contain the bulk of trees in any given population (generally > 50% of a typical population). Retain if possible but removal is unlikely to result in major loss to landscape.
- Low: Contain little presence or are detracting from the amenity of the landscape. Landscape likely to benefit if removed.
- Very low: Generally reserved for trees classified as significant environmental weeds or trees that are hazardous to the surrounding setting. Landscape would be improved if removed.

See Table 4 and Figure 8 for tree locations and IDs of the High and Mod.A rated trees along with groups of Very high and High landscape value.



Figure 8. Locations of High and Mod.A rated trees (arb.rating) and Very high / High rated Tree groups (Landscape value)

Table 3 lists which trees were attributed High and Mod.A ratings.

Table 4. Individual IDs of High and Mod.A rated trees.

Arb rating	Species	Tree IDs	Subtotal	Total
High	<i>Eucalyptus camaldulensis</i>	2, 5, 7, 8, 9, 10, 11, 12, 59, 115	10	10
Mod.A	<i>Cupressus macrocarpa</i>	127	1	16
	<i>Eucalyptus botryoides</i>	110	1	
	<i>Eucalyptus camaldulensis</i>	3, 4, 6, 107, 123, 124, 125, 126, 131, 145	10	
	<i>Eucalyptus occidentalis</i>	95	1	
	<i>Eucalyptus viminalis</i>	13, 14	2	
	<i>Quercus robur</i>	86	1	
Total				26

Tree groups with Very high to High Landscape value included:

Very high Landscape value

- G2 & G3 both contained indigenous River Red Gums. They were on the western edge of the study area and comprised approximately 10 trees in total.

High Landscape value

- G19, G34, G35 & G36 were growing in the landscaped grounds of Broadhangar Equestrian. They each contained mixed native plantings, were in relatively good condition and were contributing higher than typical amenity value to the surroundings.
- G49, G50, G52, G131, G132 & G133 were all groups of natives that were planted alongside Hume Freeway. They were mostly typical in terms of size and quality but had enhanced landscape appeal given their function as a natural screen at the highway interface.

Useful life expectancy (ULE) was collected to provide an indication of health and tree appropriateness to the study area. It involves an estimate of how long a tree is likely to remain in the landscape based on species, stage of life (cycle), health, amenity, environmental services contribution, conflicts with adjacent infrastructure and risk to landowners. The ULE categories can be used as a guide when developing a landscape strategy for a future site redevelopment.

The ULE breakdown of the population is summarised below in Figure 9.

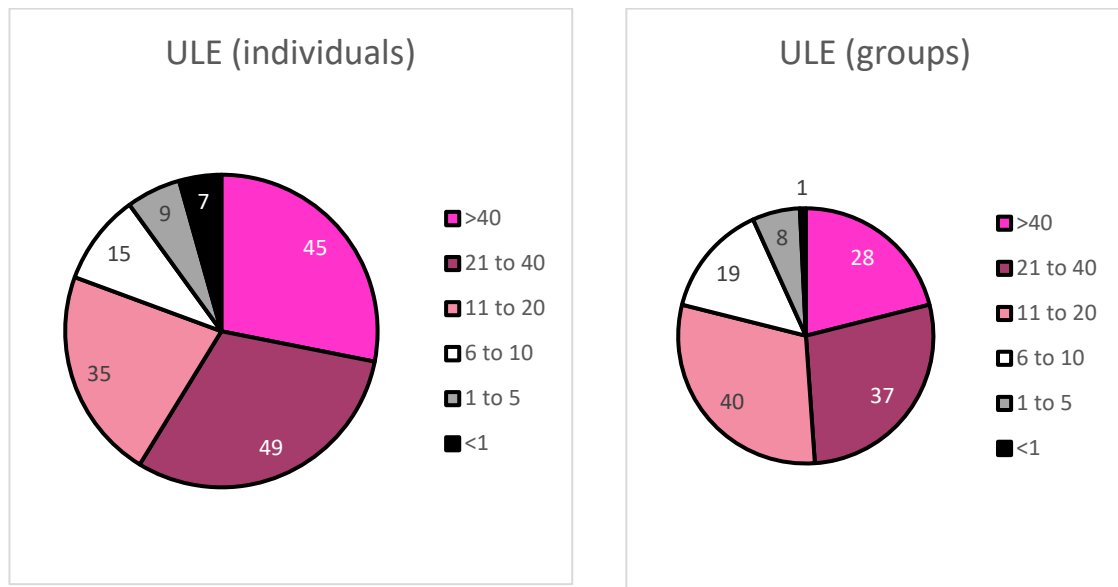


Figure 9. Breakdown of Useful life expectancy (ULE) across tree population.

The trees with greater than forty years ULE were either young trees in fair or better health or were well-established semi-mature to mature trees in fair or better condition. They are, or are expected to become, valuable landscape features for the long term.

The trees with between 21 to 40 years ULE were also well-established trees, however, were either closer to late-maturity or had some minor health deficiencies and would be expected to begin displaying age-related decline symptoms within this time frame. These trees are generally suitable to retain within this time frame but may be more sensitive to site changes compared with those with >40 years of ULE.

The trees with between 11 and 20 years had inherent health or structural issues and would be expected to senesce in the short to medium term. Most of these trees could be considered for retention in the short to medium term, however they would be expected to require periodic arboricultural maintenance and/or monitoring. Those with minor health issues may particularly benefit from mulching and/or watering.

In general, the trees in the remaining ULE categories (less than 10 years) should be considered for removal within this time frame, although dead/declining trees can be retained as habitat stumps. A site redevelopment presents a good opportunity to replace a majority of these trees.

Habitat trees: Habitat values were recorded in 20 trees and 4 tree groups. Their locations are shown in Figure 10, and the types of trees, and their IDs are listed in Table 4. As shown, habitat hollows (and other relevant habitat features) were most commonly observed in planted natives rather than indigenous trees, although it is noted that habitat values could generally not be determined on non-participating properties as they were not directly assessed.

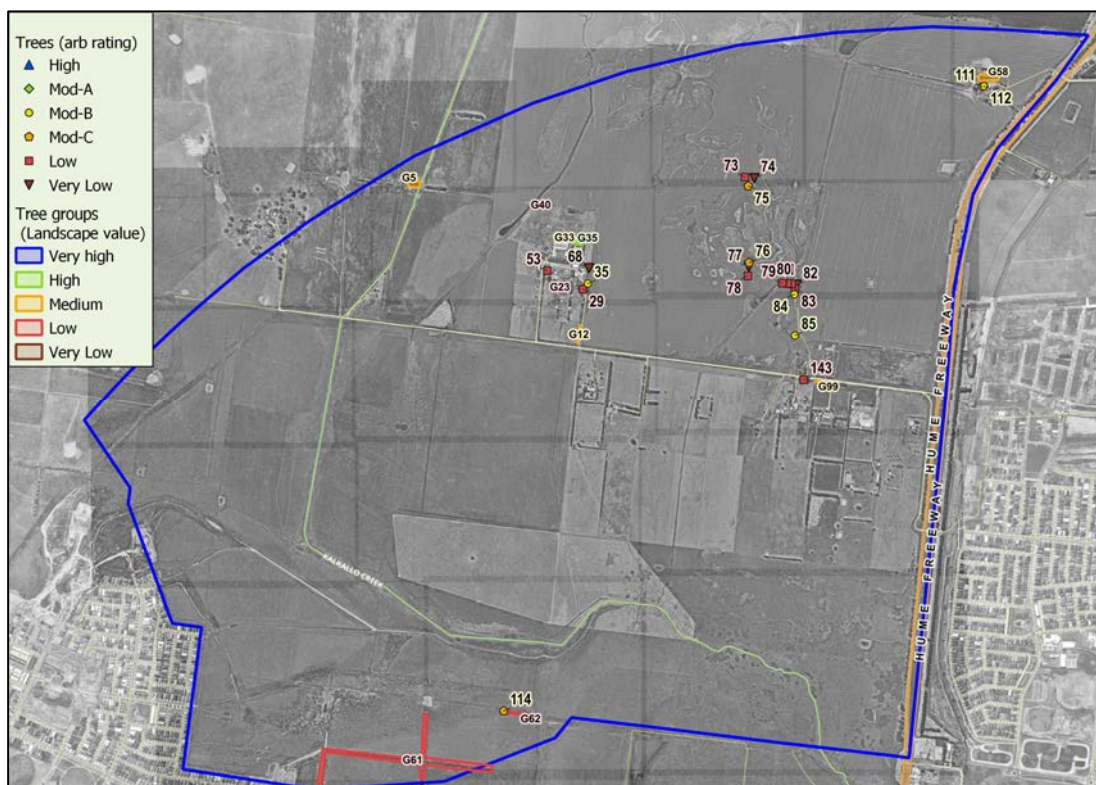


Figure 10. Locations of habitat trees and tree groups.

Table 5. Trees with identified habitat values.

Species	Origin	Tree IDs	Count
<i>Eucalyptus cladocalyx</i>	Australian native	73, 74, 75, 80, 81, 82, 83, 84, 85, 111, 112, 114, 143, G58, G62, G99	13 + 3 Groups
<i>Eucalyptus botryoides</i>	Victorian native	76, 77, 78, 79	4
<i>Eucalyptus</i> sp.	Indigenous	53	1
	Australian native	68	1
<i>Eucalyptus viminalis</i>	Victorian native	35	1
<i>Cupressus macrocarpa</i>	Exotic conifer	G61	1 group
Grand Total			20 + 4 groups

4 Permit requirements

As shown in Figure 12, the precinct is divided evenly between City of Hume and Mitchell Shire with the precinct boundary running east to west along Gunns Gully Road. As seen in Figure 11, the majority of the land is in an Urban Growth Zone (UGZ), though the entire Melbourne Water site occupying the southwest portion of the site is Public Zoning (PUZ1). Smaller sections of the precinct are covered by Farm Zoning (FZ) north of Gunns Gully Road, Urban Flood Zone (UFZ) affecting a narrow section of land midway along the northern boundary and the Hume Freeway corridor is covered by Transport Zoning (TRZ2).

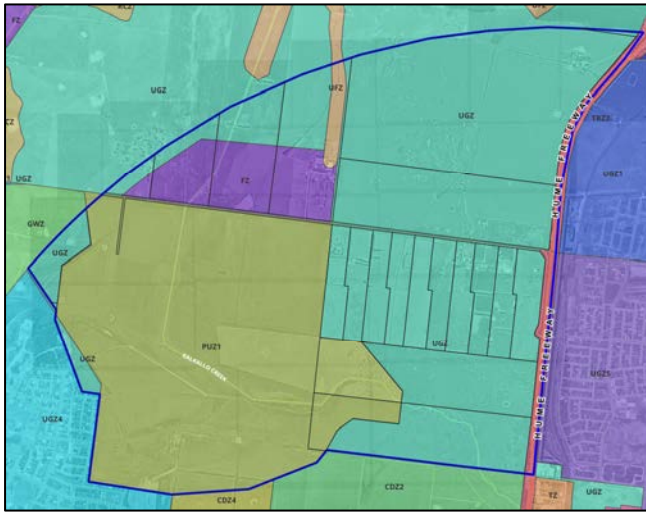


Figure 11. Zoning composition across study area.

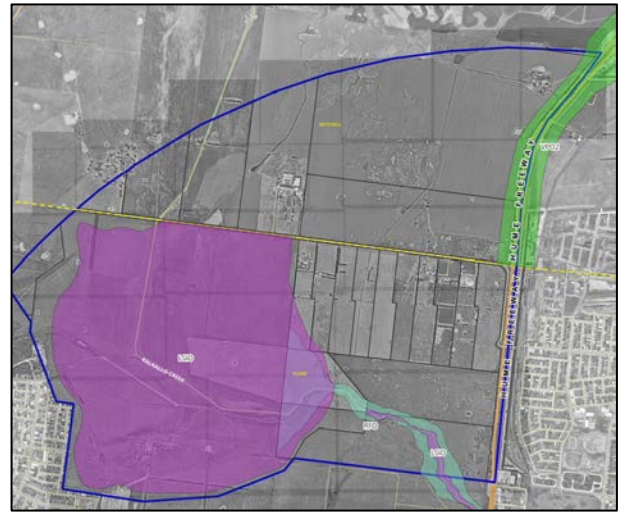


Figure 12. Locations of VPO2 relative to study area.

A Vegetation Protection Overlay (VPO2) is the only overlay pertaining to vegetation affecting part of the study area, which falls within Mitchell Shire (Figure 12).

Mitchell Shire

- VPO2 relates to Freeway Environs Protection. Under the overlay a permit is required to remove, destroy or lop and native vegetation. Various exemptions apply, including:
 - Dead or exotic vegetation
 - Vegetation that is to be removed, destroyed or lopped that was either planted or grown as a result of direct seeding for Crop raising or Grazing animal production.
 - Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by or on behalf of the Head, Transport for Victoria on land in a Transport Zone, or in a Public Acquisition Overlay if the Head, Transport for Victoria is the acquiring authority, to construct or maintain transport system infrastructure.

Tree controls would also apply to Victorian Native trees under Clause 52.17 – Native Vegetation. Permitted clearing of Native Vegetation-Biodiversity Assessment Guidelines, Clause 52.17 of the local planning scheme is applicable to sites greater than 4,000 m² in area.

As shown in Figure 13, 29 trees and 6 groups (comprising mostly *Eucalyptus camaldulensis*) were identified as naturally occurring, indigenous vegetation and would trigger permit and offset requirement under 52.17.

Planted trees are generally exempted from permit required under 52.17, although exemptions to 52.17 do not apply to native vegetation that has been planted or managed with public funding for the purpose of land protection or enhancing biodiversity, unless the removal, destruction or lopping of native vegetation is in accordance with written permission of the agency (or its successor) that provided the funding. Under this definition, any of the groupings containing Victorian native vegetation that had been planted with public funding (i.e. the groups of trees growing along the Hume Freeway) may also trigger permit requirement under 52.17.

Clause 52.37 – ‘Canopy trees’ of the Planning Scheme does not apply to trees in the precinct under current zoning, although this should be reviewed if the land is rezoned to Mixed Use Zone, Township Zone,

Residential Growth Zone, General Residential Zone, Neighbourhood Residential Zone, or Housing Choice and Transport Zone.

Table 6 summarises permit requirements under the above overlay and 52.17 requirements:



Figure 13. Showing locations of trees identified as 'indigenous' in the study.

Table 6. Trees triggering permit requirement under various planning frameworks.

LGA	Planning framework	Trees	Groups	Total
Hume	52.17	115, 129, 130, 131, 132, 145	-	6 trees
Mitchell	VPO2	103,104	G49, G50, G51, G52	2 trees, 4 groups
	52.17	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 52, 53, 54, 55, 56, 57, 59, 60, 61, 64, 65, 138	G2, G3, G26, G28, G29, G31	23 trees & 6 groups

5 Property summary

Tables 7 & 8 summarise each of the assessed properties by counting trees of relatively high arboricultural or landscape value, those with identified habitat values and those triggering permit requirement under the VPO within Mitchell Shire, as well as trees triggering permit requirement under Clause 52.17.

As seen, properties 1 & 2 contain the bulk of significant trees, although properties 4, 5, 6, 8, 9 & 14, along with the Hume Freeway corridor also contained significant vegetation.

Tables 7 & 8. Counts of High and Mod.A arb rated trees, Very High and High Landscape value groups, along with trees and groups with hollows and triggering permit requirements at each property.

Trees					
Property	High	Mod.A	Hollows	52.17	VPO2
1	4	3	-	7	-
2	4	2	-	4	-
3	-	-	-	-	-
4	1	-	3	11	-
5	-	2	5	-	-
6	-	2	10	1	2
7	-	-	-	-	-
8	1	-	1	1	-
9	-	6	-	4	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-
13	-	-	-	-	-
14	-	1	1	1	-
15	-	-	-	-	-
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
Roadside	-	-	-	-	-
Grand Total	10	16	20	29	2

Tree groups					
Property	Very high	High	Hollows	52.17	VPO2
1	1	1	-	1	-
2	1	-	-	1	-
3	-	-	1	-	-
4	-	4	5	4	-
5	-	-	1	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	2	-	-
9	-	-	-	-	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-
13	-	-	-	-	-
14	-	-	-	-	-
15	-	-	1	-	-
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
Roadside	-	6	-	-	4
Grand Total	2	11	10	6	4

6 Discussion and recommendations

This report provides preliminary arboricultural advice to planners and designers including information on whether trees are worthy or unworthy of being a constraint on future site development. In the absence of specific site design plans, it is not appropriate to speculate on which trees are most appropriate for retention beyond the general guide provided by the arboricultural ratings, Landscape value and ULE attributed to each tree feature. Retention suitability will be dependent on the proposed landscape setting in which trees are intended to be retained. The following recommendations are provided for consideration in the design process.

In terms of **arboricultural rating**:

- High and Moderate rated trees are generally most suitable for retention (with Mod-A, Mod-B and Mod-C providing further distinction in terms of tree quality, size and/or amenity value). Sufficient space should be allocated within the design where possible to adequately protect the recommended NRZ and minimise construction encroachment.
- Trees of Low arboricultural value should not compromise reasonable design intent. Some of these trees were low rated due to diminutive size and could be retained as established tree resources, while those trees with health or structural deficiencies should generally be considered for removal or retained as habitat stumps based on sound arboricultural opinion.

- Trees rated Very Low were either dead stags or were in poor condition and should be removed or crown reduced and retained as habitat stumps.

In terms of **Landscape value**

- Very high rated trees and groups have exceptional landscape presence, due to size, form, presence and/or character. They are usually well suited to their setting and are likely to be held in high regard by the surrounding community as natural landmarks. Any intention to remove such trees is likely to be met with resistance by a range of stakeholders.
- High rated trees have better than typical landscape appeal and are likely to have been established for at least 30 years. These trees should be retained where possible and may, in time, develop into Very high rated trees.
- Medium rated trees are average in terms of landscape appeal. They have modest presence but may have potential to establish into trees of higher value. In general medium rated trees could be retained to preserve existing canopy levels, although their removal should not preclude reasonable design intent.
- Low and Very low rated trees have little landscape appeal and should generally be removed and replaced in the context of site redevelopment.

ULE is also a useful tool for categorising trees on their suitability within a redevelopment:

- Trees attributed >40 years present the best options as established landscape features while those categorised with 21 to 40 years are also well suited as part of a moderate to long term landscape strategy.
- Some of those with 11-20 years of ULE were exhibiting health issues and are expected to have heightened sensitivity to external pressures such as drought, soil compaction, disease and site changes. These trees may require remedial input such as mulching or irrigation within their root zones if they are intended to be retained as landscape features.
- Most of the trees with lower ULEs (less than 10 years) could be retained as established tree resources (for shade, amenity, landscape or ecological value) but would be expected to deteriorate in condition over the short to medium term and consequently will likely require ongoing monitoring and maintenance to mitigate risks to surrounding targets, especially those in high use areas.

Soil types

The study area has three soil types with alluvial floodplain soils in the western part of the precinct and heavier basaltic clay soil types from the centre through to the eastern extents (Figure 14). The heavier soils are expected to have relatively low fertility and significant stone inclusions, while the floodplains are likely to be fertile but would experience periods of inundation and waterlogging.

- Alluvial terrace deposits (Qa2). Described as 'Gravel, sand, silt: variably sorted and rounded, generally unconsolidated; dissected to form terraces higher than Qa1, alluvial floodplain deposits'.
- Newer Volcanic Group – Stony Rises Basalt (Neo2). Described as 'Tholeiitic to alkalic basalt, basanite: youngest flows with little weathering or soil development (stony rises and hummocky

lava flows)'. This indicates a heavy basaltic clay soil type with relatively low fertility and significant stone inclusions.

- Newer Volcanic group – Basalt flows (Neo). Described as Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay

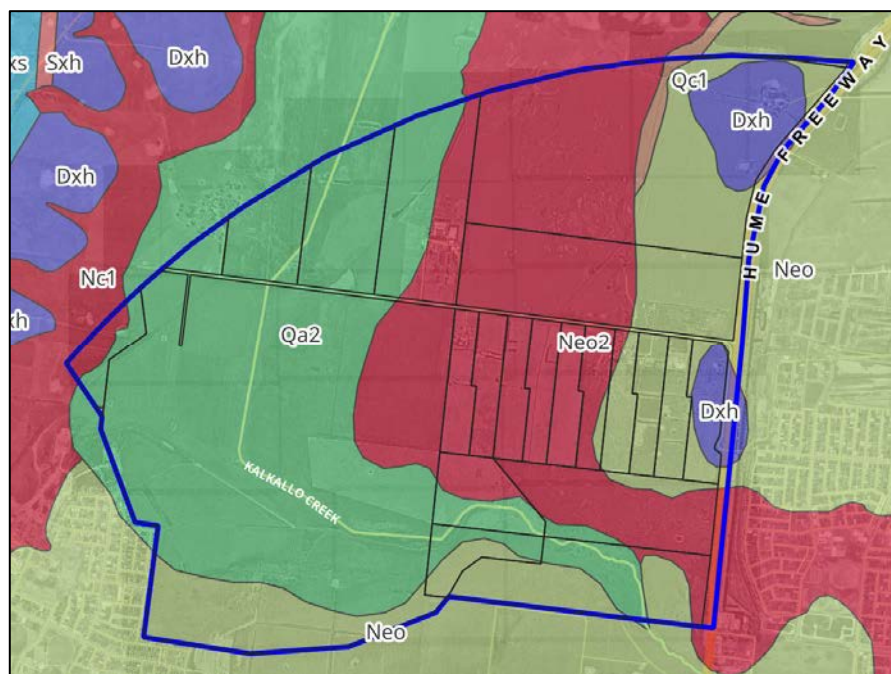


Figure 14. Soil types within precinct (Seamless Geology Victoria, 2014 Edition).

Species selection

In general terms, a mixed native and exotic species palette is recommended in order to maintain strong genetic diversity while providing a suite of aesthetic and environmental benefits. Recommended species are provided at Table 9. Designers should also refer to Hume Species List (2025) and Mitchell Shire Council Preferred Tree Species List (2025) prior to selecting species for planting within the PSP area.

In general, larger exotic broadleaves (such as oaks, ash, elms, poplars, locusts) provide maximum benefits in terms of cooling and shading, while many will also provide the aesthetic appeal of autumnal colour. While the higher canopy and shading coverage is desirable along roadsides through hot periods, the large volume of leaf-litter in the cooler months requires ongoing maintenance. Their use in park settings is ideal, due to their high levels of shading, aesthetic appeal and relatively low nuisance.

Native trees have appeal in terms of attracting biodiversity, maintaining natural heritage and aesthetic appeal in terms of seasonal flowering, and attractive bark, leaves and fruit. Conversely, some native eucalypts have a propensity for sudden limb loss, and many can also reduce the utility of the surrounding landscape by suppressing desirable grasses and attracting undesirable insects (e.g. ants, spiders, bees etc.).

Fire

The ability to withstand and repel fire should also be considered within the species palette. Trees with the best fire-retardant properties are those which have soft leaves with a high moisture content, smooth and non-peeling barks, low volatility oils in their foliage and those that effectively suppress grasses and understorey. In general, this includes most deciduous trees and some evergreens from the sub-tropics and rain forests. Trees

that create or retain lots of dry dead branches and debris, have loose flaky bark, have dense, fine foliage with a low moisture content should be avoided (Moore, 2020).

All plants, whether they are exotic or Australian, will burn when subjected to sufficient heat. Different fire conditions have varying effects at different times on the same species. Selecting fire resistant/retardant species will not guarantee safety in a bush fire, although, if correctly sited, they can complement fire management plans for individual homes by serving as a wind break, absorbing and deflecting radiant heat from the fire and acting as a barrier to flying sparks and embers.

Trees and landscapes must be part of a complete fire planning system and ongoing diligence in managing your site. Site management includes maintaining trees in a healthy condition, for example keeping soil moist, pruning out dead wood and cleaning up debris and leaf litter.

Species strategy

The following broad strategy is recommended:

- Favour use of indigenous trees in the land surrounding Kalkallo Creek. River Red Gums (*Eucalyptus camaldulensis*) and Swamp Gums (*Eucalyptus ovata*) are expected to naturally recruit in these areas, though should be supplemented with other indigenous species, especially where recruitment is less vigorous. *Leptospermum lanigerum* (Woolly-tea tree) should also be planted in the southeastern part of the precinct, surrounding Kalkallo Creek.
- Use a mixed palette of indigenous, native and exotic in other parts of the precinct. Consider non-eucalypt and/or smaller natives or exotic broadleaf trees in areas of anticipated high occupancy. Use mixed native and exotic trees in parkland. Natives should generally be planted in mulched garden beds, while exotics are better suited to the lawn/open space areas.
- Favour fire resistant/retardant species at the bush/urban interface and in urban areas. Species more susceptible to fire are better suited to natural settings such as along the creekline and in planted beds within reserved. Buffer zones should be created between areas with fire prone species and populated areas.
- Best practice planting and post-planting care are essential for successful tree establishment.
 - Select good nursery stock.
 - Plant trees in cooler months.
 - Irrigate frequently for the first two years after plantings, especially during summer months and dry spells. Infrequent deep watering is preferable compared with shallow frequent irrigation.
 - Ensure best practice tree planting techniques are followed. Guidelines should be provided by the tree nursery.
 - A layer of mulch should be established around the sapling to help retain moisture and prevent competition from other plants. The mulch should be approximately 50-100mm in depth and a small gap should be established between the mulch layer and the tree to prevent development of decay around the root buttress (see Figure 15 below).

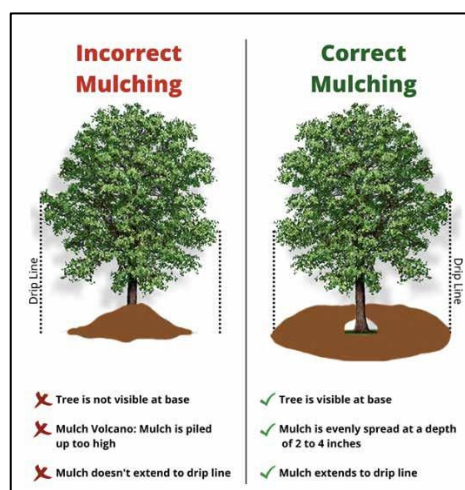


Figure 15. Correct and incorrect mulching around trees.

- A program of formative pruning should be undertaken to prevent the development of structural defects.

Table 9. Recommended species for planting in NFP.

Species	Origin	Open space / street tree	Comments
<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous	Open space	Dominant species in study area. Plant widely, especially in floodplain.
<i>Eucalyptus ovata</i> (Swamp Gum)	Indigenous	Open space	Plant in low occupancy settings given propensity for decay and limb failure. Favourable conditions around Kalkallo Creek and floodplain.
<i>Eucalyptus viminalis</i> (Manna Gum)	Indigenous	Open space	Likely to thrive in floodplain.
<i>Eucalyptus melliodora</i> (Yellow Box)	Indigenous	Open space	Not identified in study area but indigenous to broader area. Large, attractive eucalypt. Formative prune out acute branch attachments.
<i>Eucalyptus microcarpa</i> (Grey Box)	Indigenous	Open space	Not identified in study area but indigenous to broader area. Large canopy tree. Attracts biodiversity.
<i>Eucalyptus polyanthemos</i> (Red Box)	Indigenous	Open space	Not identified in study area but indigenous to broader area. Medium sized, attractive eucalypt.
<i>Eucalyptus leucoxylon</i> 'Rosea' (Yellow Gum)	Australian native	Open space / street tree	Can tolerate irregular waterlogging.
<i>Eucalyptus sideroxylon</i> (Red Ironbark)	Native	Open space / street tree	Large eucalypt species. Attractive bark and flowers. Cultivar 'Rosea'. Formative prune out acute branch attachments.
<i>Angophora costata</i> (Smooth-barked Apple)	Native	Open space / street tree	Large gum. Attractive bark, flowers, fruits.
<i>Corymbia maculata</i> (Spotted Gum)	Native	Open space / street tree	Commonly planted in urban environments. Hardy. Tall, upright form. Fire resistant/retardant.
<i>Ficus macrophylla</i>	Native	Open space	Large spreading form. Fire resistant/retardant. May struggle on heavy soils.

Species	Origin	Open space / street tree	Comments
<i>Brachychiton populneus</i> (Kurrajong)	Native	Open space	Bottle shaped trunk, green glossy leaves. Inconspicuous white flower. Medium to large tree, depending on soil conditions.
<i>Zelkova serrata</i> (Japanese Elm)	Exotic deciduous	Open space / street tree	Medium sized broadleaf. Autumnal colour. Cultivar 'Green Vase' suitable for use as street tree. Fire resistant/retardant.
<i>Celtis australis</i> (European Nettle Tree)	Exotic deciduous	Open space / street tree	Attractive medium sized shade tree. Highly adaptable and hardy. Weed potential so do not plant in environmentally sensitive areas. Fire resistant/retardant.
<i>Gleditsia triacanthos</i> (Locust)	Exotic deciduous	Open space	Attractive and hardy medium-sized tree. Filtered light. Lime green foliage. High amenity value in park settings. Cultivar 'Sunburst' provides semi-weeping habit. Fire resistant/retardant.
<i>Platanus orientalis</i> (Oriental Plane Tree)	Exotic deciduous	Open space / street tree	Hardy shade tree. Large canopy. High tolerance of pruning and root zone disturbance. Potentially triggers allergies. Fire resistant/retardant.
<i>Nyssa sylvatica</i> 'Forum' (Black Tulepo)	Exotic deciduous	Street tree	Narrower form. Good autumn colour. Fast growing. Fire resistant/retardant.
<i>Fraxinus pennsylvanica</i> (Green Ash)	Exotic deciduous	Open space / street tree	Medium sized tree. Dense canopy. Cultivar 'Urbanite' a good street tree. Fire resistant/retardant.
<i>Ulmus parvifolia</i> (Chinese Elm)	Exotic deciduous	Open space / street tree	Autumnal colour, ornamental bark. Cultivar 'InSpire' suitable for use as street tree. Fire resistant/retardant.
<i>Quercus acutissima</i> (Saw Tooth Oak)	Exotic deciduous	Open space / street tree	Medium sized shade tree. Attractive foliage. Fire resistant/retardant.
<i>Quercus canariensis</i> (Algerian Oak)	Exotic deciduous	Open space	Large broadleaf tree. High amenity value park tree. Fire resistant/retardant.
<i>Quercus phellos</i> (Willow Oak)	Exotic deciduous	Open space / street tree	Autumnal colour. Pyramidal form. Fire resistant/retardant. Potential nuisance from acorns. Tolerant of drought and frost.

Other considerations

Arboricultural impact assessment (AIA) is recommended for all retained trees during the design phase of any proposed site redevelopment. All components of the tree assessment (including health, structural rating, Arb. rating, ULE, works recommendations, presence of habitat hollows, specific comments, height and canopy spread) should be reviewed in the context of introducing built elements to the site, especially for components that attract moderate to high usage (e.g. playgrounds, park equipment, areas of access/egress, roads, carparks and buildings).

Any intention to retain trees should be reviewed by a TRAQ or QTRA certified arborist, who can provide input on how to best manage the trees in the context of the risk they pose to perceived targets. Designing (building and landscaping) to deter use of areas directly under fall zones is usually the most effective way to minimise risks from trees with higher likelihood of branch failure. Arboricultural input such as pruning and cabling can

also be considered although these forms of risk mitigation will vary in efficacy from tree to tree and should be secondary to mitigation via design.

Several groupings of trees of the same species, similar size, age and condition growing in close proximity to one-another existed on the site. The close grown nature of the trees influences the growth habit of each tree and as such the trees are best managed as a group. Fragmentation of the group can expose the individual trees to potential damage from newly exposed forces such as altered wind patterns, sun exposure and soil disturbance.

The design should ensure appropriate growing space for the retained trees and new plantings is allocated. New plantings and younger retained trees will increase in size over the coming years and if infrastructure is constructed too close there will be potential for damage to occur from root activity. Designers can consider using a combination of structural soils, soil cells, permeable pavement and porous concrete to increase the available growing environment for tree roots under paved surfaces. Using these types of treatments are likely to increase the likelihood of successful tree establishment while minimising conflicts between roots and infrastructure.

Tree selection should give due consideration to the clearance requirements associated with truck movements. Where trees are retained in proximity to road networks or parking areas, canopy height and lateral spread must be evaluated to ensure compliance with minimum clearance standards for B-double truck operations. A vertical clearance of not less than 4.5 metres should be maintained, with sufficient horizontal clearance also provided to enable the safe passage of these vehicles. Where necessary, selective pruning or ongoing management should be undertaken to achieve and sustain these clearances while safeguarding tree health and structural integrity.

Any retained tree must not be damaged by redevelopment activities, i.e. tree canopy and root zones must be either avoided or managed appropriately by a suitably qualified arborist (in accordance with AS4970-2025 and AS4373). In general, no greater than 10% of a tree's NRZ can be encroached by the design or construction activities, unless it is demonstrated that the NRZ incursion is not likely to result in major root or canopy loss. Major NRZ encroachments (i.e. >20% of total NRZ) are likely to require advanced investigation such as non-destructive root investigation (NDRI) to help properly inform the project arborist.

Civil regrading works (fill or cut) must not occur within the designated NRZ of any retained trees unless under consultation with a qualified arborist.

No form of trenching for installation of underground services is permitted within the nominated NRZ areas for any retained trees without prior consultation with a suitably qualified arborist, as the risk of severing roots vital to the stability and continued sustainability of the trees can occur. Alternatives to trenching underground services include horizontal directional drilling (boring) or hydro excavation under arborist supervision.

7 Conclusions

160 trees and 133 tree groups (with approximately 3150 trees) were assessed within the study area, which comprised approximately 987ha of land in the Merrifield North PSP. Most of the trees in the study area were planted natives and exotics with one significant patch of remnant River River Red Gums close to the western boundary. Native permit requirements under Clause 52.17 would apply to 23 trees and 6 groups in Mitchell Shire and 6 trees City of Hume. Furthermore, 2 trees and 4 groups in Mitchell Shire would trigger permit requirement under VPO2.

All trees were attributed an arboricultural rating that reflects their individual retention value. 10 trees were High rated and were the most outstanding tree features in the study area in terms of size and/or quality, although the 16 trees rated Moderate A were also of relatively high quality and both should also be prioritised for retention. Those rated Moderate B (39 trees) and Moderate C (54 trees) are also suitable for retention although carried less landscape presence, and/or had accumulating defects and may require higher levels of arboricultural input, if retained. Trees with a Low (35 trees) or Very low (6 trees) rating were usually of limited arboricultural value due to either small size, short life expectancy, being inappropriate species (generally environmental weeds) and/or due to poor quality. Trees rated Low or Very low due to poor health or structure should generally be considered for removal unless bearing some other inherent value (e.g. landscape, ecological, cultural or historical). Such trees can usually be retained in the landscape alongside some form of hazard management such as exclusion landscaping or habitat pruning, depending on the intended site use around the tree(s). Planners should review habitat values, origin, trunk diameter and comments before listing a tree for removal.

Groups are best summarised in terms of Landscape value. The 2 trees of Very high landscape value and 11 of High landscape value were the standout groupings and provide significant levels of landscape amenity to the precinct. The 80 medium rated groups are generally suitable to retain but are closer to typical and their retention should generally not preclude reasonable design intent. Groups of Low to Very low value should generally be removed in the context of site development.

Protection zones must be considered when planning and constructing around retained trees. Tree protection measures should be installed around trees adjacent to construction/landscaping activities. AS4970-2025 NRZs should be allocated to all trees.

Tree protection guidelines attached as Appendix 5 are provided as guidelines for use during site activities.

I am available to answer any questions arising from this report.

No part of this report is to be reproduced unless in full.

Signed



Harry Webb – MSc (botany) Grad. Cert. Arb.
Consultant Arborist

P: 03 9870 7700
E: harry.webb@treelogic.com.au

Abbreviations

Abbreviation	Definition
Arb.	Arboricultural
AS	Australian Standard
DSH	Diameter at standard height (cm)
ESO	Environmental Significance Overlay
Mod.	Moderate
NDD	Non-destructive digging
NDRI	Non-destructive root investigation
NRZ	Notional root zone (m)
PSP	Precinct Structure Plan
QTRA	Quantified Tree Risk Assessment
SRZ	Structural root zone (m)
TPZ	Tree protection zone
TRAQ	Tree Risk Assessment Qualification
ULE	Useful life expectancy (years)
VPO	Vegetation Protection Overlay

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Appendix 1: Tree Assessment Table

Refer to the following 8 pages.

- DSH = Diameter at Standard Height (measured 1.4m above ground unless otherwise stated)
- ULE = Useful Life Expectancy
- Arb. rating = arboricultural rating
- AS NRZ = Australian Standard Notional Root Zone
- SRZ = Structural Root Zone
- NRZ & SRZ measurements are radius in metres from the centre of the trunk per AS 4970-2025.
- Group dimensions and characteristics are average values.

Definitions of the descriptor categories used in the assessment can be seen in Appendix 4.

Tree ID	Species	Common Name	Age	Origin	DSH (cm)	HxW(m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Recommended works	Tree access	Property ID	LGA	Overlays	NRZ (m radius)	SRZ (m radius)
1	<i>Eucalyptus spathulata</i>	Swamp Mallet	Maturing	Australian native	60	16x12	Fair	Poor	Mod-C	Medium	6 to 10	Major past failures	None viewed	None required	est.	1	Mitchell		7.2	2.8
2	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	100	20x24	Good	Fair	High	Very high	>40		None viewed	None required	est.	1	Mitchell		12	3.4
3	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	75	20x20	Good	Fair	Mod-A	High	>40		None viewed	None required	est.	1	Mitchell		9	3.1
4	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	95	20x24	Fair to Poor	Fair	Mod-A	Very high	21 to 40		None viewed	None required	est.	1	Mitchell		11.4	3.4
5	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	120	22x24	Good	Fair	High	Very high	>40		None viewed	None required	est.	1	Mitchell		14.4	3.7
6	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	90	20x20	Fair to Poor	Fair	Mod-A	Very high	21 to 40		None viewed	None required	est.	1	Mitchell		10.8	3.3
7	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	90	20x18	Fair	Fair	High	Very high	21 to 40		None viewed	None required	est.	1	Mitchell		10.8	3.3
8	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	100	20x22	Good	Fair	High	Very high	>40		None viewed	None required	est.	1	Mitchell		12	3.4
9	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	90	16x20	Good	Fair	High	Very high	>40		None viewed	None required	est.	2	Mitchell		10.8	3.3
10	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	85,40,40	20x24	Good	Fair	High	Very high	>40		None viewed	None required	est.	2	Mitchell		12.3	3.5
11	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	75,45	18x20	Good	Fair	High	Very high	>40		None viewed	None required	est.	2	Mitchell		10.5	3.1
12	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	90	18x20	Fair	Fair	High	Very high	>40		None viewed	None required	est.	2	Mitchell		10.8	3.3
13	<i>Eucalyptus viminalis</i>	Manna Gum	Early-mature	Victorian native	60	16x12	Good	Fair	Mod-A	Medium	21 to 40		None viewed	None required	est.	2	Mitchell		7.2	2.8
14	<i>Eucalyptus viminalis</i>	Manna Gum	Early-mature	Victorian native	70	16x14	Good	Fair	Mod-A	Medium	21 to 40		None viewed	None required	est.	2	Mitchell		8.4	3
15	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	30	8x5	Good	Fair	Mod-B	High	>40		None viewed	None required	est.	4	Mitchell		3.6	2.3
16	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	30	8x5	Fair	Fair to Poor	Mod-C	Medium	>40		None viewed	None required	est.	4	Mitchell		3.6	2.3
17	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	20	8x3	Fair	Fair	Mod-C	Medium	>40		None viewed	None required	est.	4	Mitchell		2.4	2
18	<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Semi-mature	Exotic deciduous	25	8x4	Fair	Fair to Poor	Mod-C	Medium	21 to 40		None	None required	est.	4	Mitchell		3	2.1
19	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	55	17x10	Fair	Fair	Mod-B	High	>40		None	None required	accessed	4	Mitchell		6.6	2.8
20	<i>Eucalyptus melliodora</i>	Yellow Box	Early-mature	Victorian native	45,40,20,20	17x11	Fair	Fair to Poor	Mod-B	High	>40		None	None required	accessed	4	Mitchell		8	3.1
21	<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Early-mature	Exotic deciduous	35	12x4	Fair	Fair to Poor	Mod-B	Medium	21 to 40		None	None required	est.	4	Mitchell		4.2	2.4
22	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	30	13x6	Fair	Fair to Poor	Mod-C	Medium	>40	Trunk wounds.	None	None required	accessed	4	Mitchell		3.6	2.3
23	<i>Eucalyptus globulus</i>	Southern Blue Gum	Early-mature	Australian native	35	14x7	Good	Fair to Poor	Mod-B	Medium	>40		None	None required	accessed	4	Mitchell		4.2	2.4
24	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	35	14x8	Fair	Fair to Poor	Mod-C	Medium	>40	Co-dominant stems.	None viewed	None required	est.	4	Mitchell		4.2	2.4
25	<i>Eucalyptus globulus</i>	Southern Blue Gum	Early-mature	Australian native	35	14x8	Fair	Fair	Mod-B	Medium	>40		None viewed	None required	est.	4	Mitchell		4.2	2.4
26	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	12,10	15x5	Fair to Poor	Fair to Poor	Low	Low	21 to 40		None	None required	accessed	4	Mitchell		2	1.8
27	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	30,30	15x10	Fair	Fair to Poor	Mod-B	High	>40	Station paddock all measurements est. Rocks around base	None viewed	None required	est.	4	Mitchell		5.1	2.5
28	<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Early-mature	Exotic deciduous	10,10,8,8,8,8	10x6	Fair	Poor	Low	Medium	1 to 5	Cluster likely self seeded or stump sprout.	None	None required	est.	4	Mitchell		2	2.5
29	<i>Prunus cerasifera</i>	Cherry-plum	Maturing	Exotic deciduous	20,14,11	15x8	Fair	Fair to Poor	Low	Low	6 to 10	Basal decay. @1m.	None	None required	accessed	4	Mitchell		3.2	2
30	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Semi-mature	Exotic deciduous	11	7x4	Fair	Fair	Low	Low	>40		None	None required	accessed	4	Mitchell		2	1.7
31	<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Maturing	Exotic deciduous	50	15x6	Fair	Fair to Poor	Mod-C	Medium	21 to 40		None	None required	est.	4	Mitchell		6	2.7
32	<i>Populus nigra 'Italica'</i>	Lombardy Poplar	Semi-mature	Exotic deciduous	10	8x2	Poor	Fair to Poor	Low	Low	<1		None	None required	est.	4	Mitchell		2	1.5
33	<i>Crataegus monogyna</i>	May	Early-mature	Exotic deciduous	6,5,5	4x5	Good	Fair to Poor	Mod-C	Medium	21 to 40		None	None required	est.	4	Mitchell		2	1.7
34	<i>Acacia pycnantha</i>	Golden Wattle	Early-mature	Victorian native	13,12	7x7	Fair	Fair to Poor	Mod-C	Low	11 to 20		None	None required	accessed	4	Mitchell		2.1	1.8
35	<i>Eucalyptus viminalis</i>	Manna Gum	Maturing	Victorian native	50	15x13	Fair	Fair	Mod-B	Medium	>40	Measured with tape due to loose bark.	Deep loose bark	None required	accessed	4	Mitchell		6	2.9
36	<i>Acacia melanoxylon</i>	Blackwood	Semi-mature	Victorian native	15,13,12	6x10	Poor	Poor	Very Low	Very low	<1		None	None required	accessed	4	Mitchell		2.8	1.9
37	<i>Eucalyptus viminalis</i>	Manna Gum	Early-mature	Victorian native	49,40	14x13	Fair	Fair to Poor	Mod-B	Medium	21 to 40	Deadwood (>50mm), co-dominant stems. Measured with builders tape at 1.2m.	None	None required	accessed	4	Mitchell		7.6	2.7
38	<i>Callistemon citrinus</i>	Crimson Bottlebrush	Early-mature	Victorian native	5,5,5,5,4	4x5	Fair to Poor	Fair to Poor	Low	Low	1 to 5		None	None required	accessed	4	Mitchell		2	1.8
39	<i>Melaleuca armillaris</i>	Bracelet Honey-myrtle	Maturing	Victorian native	25,20	7x12	Fair	Poor	Low	Low	6 to 10		None	None required	accessed	4	Mitchell		3.8	2.4
40	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	20	6x6	Fair	Fair to Poor	Low	Low	6 to 10	Limb wounds, main leader lost. @1m.	None	None required	accessed	4	Mitchell		2.4	1.9
41	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	38	15x7	Poor	Fair to Poor	Low	Low	1 to 5	Dieback - major (>50%). @1m.	None	None required	accessed	4	Mitchell		4.6	2.4
42	<i>Cupressus macrocarpa</i>	Monterey Cypress	Maturing	Exotic conifer	110	13x19	Fair to Poor	Fair to Poor	Mod-C	Medium	21 to 40	Past branch failure. Dsh est at 0.2m.	None	None required	accessed	4	Mitchell		13.2	3.6
43	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Early-mature	Australian native	25	15x12	Fair	Poor	Mod-C	Low	11 to 20	Partly suppressed - crown bias. NE.	None	None required	accessed	4	Mitchell		3	2.1
44	<i>Eucalyptus globulus</i>	Southern Blue Gum	Early-mature	Australian native	49	15x12	Fair to Poor	Fair	Low	Low	11 to 20	Tip dieback.	None	None required	accessed	4	Mitchell		5.9	2.7
45	<i>Eucalyptus sp.</i>	Gum Tree	Early-mature	Australian native	30,30	16x8	Fair	Fair to Poor	Mod-C	Medium	21 to 40	Co-dominant stems, tip dieback.	None	None required	accessed	4	Mitchell		5.1	2.4
46	<i>Cupressus macrocarpa</i>	Monterey Cypress	Maturing	Exotic conifer	110	15x15	Fair to Poor	Fair to Poor	Low	Low	11 to 20	Dieback - moderate (30-50%).	None	None required	accessed	4	Mitchell		13.2	3.5
47	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	35	9x9	Fair	Fair	Mod-B	Medium	>40	No access stallion.	None	None required	est.	4	Mitchell		4.2	2.4

Tree ID	Species	Common Name	Age	Origin	DSH (cm)	HxW(m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Recommended works	Tree access	Property ID	LGA	Overlays	NRZ (m radius)	SRZ (m radius)
48	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	30	8x8	Fair	Fair to Poor	Low	Low	6 to 10	Self seeded no access, est	None	None required	est.	4	Mitchell		3.6	2.3
49	<i>Quercus robur</i>	English Oak	Maturing	Exotic deciduous	92	14x14	Fair	Fair	Mod-B	High	>40		None	None required	accessed	4	Mitchell		11	3.3
50	<i>Quercus robur</i>	English Oak	Early-mature	Exotic deciduous	35	10x11	Fair	Fair	Mod-B	Medium	>40	No access stallion.	None	None required	est.	4	Mitchell		4.2	2.4
51	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	41,25	12x13	Fair	Fair to Poor	Mod-C	Low	11 to 20	Metal bin around trunk.	None	None required	est.	4	Mitchell		5.8	2.5
52	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous	38	12x8	Fair	Fair to Poor	Mod-C	Medium	>40	Crossing branches.	None	None required	accessed	4	Mitchell		4.6	2.4
53	<i>Eucalyptus sp.</i>	Gum Tree	Maturing	Indigenous	65	15x5	Dead	Fair to Poor	Low	Medium	<1		Hollows (large)	None required	est.	4	Mitchell		7.8	2.9
54	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous	24,19	12x8	Fair	Fair to Poor	Mod-C	Medium	>40		None	None required	accessed	4	Mitchell		3.7	2.4
55	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	22	9x4	Fair	Fair	Mod-C	Medium	>40		None	None required	accessed	4	Mitchell		2.6	1.8
56	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	15	4x4	Fair	Fair to Poor	Mod-C	Low	11 to 20		None viewed	None required	est.	4	Mitchell		2	1.8
57	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	19,18	9x6	Fair	Fair to Poor	Mod-C	Medium	>40		None	None required	accessed	4	Mitchell		3.1	2.1
58	<i>Hakea salicifolia</i>	Willow-leaved Hakea	Maturing	Australian native	10,10,10,8,8	5x5	Fair to Poor	Fair to Poor	Mod-C	Low	6 to 10		None	None required	accessed	4	Mitchell		2.1	1.7
59	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	102	21x10	Fair	Fair	High	High	>40		None	None required	accessed	4	Mitchell		12.2	3.5
60	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	32,22	10x15	Fair	Fair to Poor	Mod-C	Medium	>40		None viewed	None required	est.	4	Mitchell		4.7	2.3
61	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	20	8x6	Fair to Poor	Fair to Poor	Mod-C	Low	11 to 20		None	None required	accessed	4	Mitchell		2.4	1.9
62	<i>Cupressus sempervirens</i>	Italian Cypress	Early-mature	Exotic conifer	23	8x5	Fair	Fair	Mod-C	Medium	>40		None	None required	accessed	4	Mitchell		2.8	2
63	<i>Cupressus sempervirens</i>	Italian Cypress	Early-mature	Exotic conifer	35	8x8	Fair	Fair	Mod-C	Medium	>40		None	None required	accessed	4	Mitchell		4.2	2.4
64	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	12	6x4	Fair to Poor	Fair	Low	Low	11 to 20		None	None required	accessed	4	Mitchell		2	1.6
65	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	10,8	8x4	Fair	Fair to Poor	Mod-C	Low	>40		None	None required	accessed	4	Mitchell		2	2.1
66	<i>Cupressus macrocarpa</i>	Monterey Cypress	Early-mature	Exotic conifer	25,20,15	8x7	Fair	Fair to Poor	Mod-C	Medium	>40	no access.	None viewed	None required	est.	4	Mitchell		4.2	2.3
67	<i>Cupressus macrocarpa</i>	Monterey Cypress	Semi-mature	Exotic conifer	25	7x5	Fair	Fair to Poor	Mod-C	Low	11 to 20	Partly suppressed - crown bias.	None	None required	accessed	4	Mitchell		3	2.1
68	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	25	13x11	Dead	Fair to Poor	Very Low	Very low	<1		Deep loose bark	None required	accessed	4	Mitchell		3	2.1
69	<i>Callistemon viminalis</i>	Weeping Bottlebrush	Early-mature	Australian native	10,8,8	6x5	Good	Fair to Poor	Mod-C	Low	11 to 20		None	None required	accessed	4	Mitchell		2	1.8
70	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Early-mature	Australian native	44	16x11	Fair	Fair to Poor	Mod-C	Medium	11 to 20	Past branch failure, limb wounds, trunk wounds.	None	None required	accessed	4	Mitchell		5.3	2.6
71	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Early-mature	Australian native	40	8x8	Fair	Fair to Poor	Mod-C	Medium	11 to 20	Deadwood (>50mm), past stem failure.	None	None required	accessed	4	Mitchell		4.8	2.3
72	<i>Grevillea robusta</i>	Silky Oak	Semi-mature	Australian native	16	8x4	Fair	Fair to Poor	Mod-C	Low	21 to 40	Hangers, basal wounds.	None	None required	accessed	4	Mitchell		2	1.9
73	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	78	22x13	Fair to Poor	Poor	Low	Medium	1 to 5	Significant decay and degraded wood in main trunk.	Cracks/fissures	Habitat pruning	accessed	5	Mitchell		9.4	3.1
74	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	68	17x15	Poor	Poor	Very Low	Low	1 to 5	In irreversible decline. Hollow trunk.	Cracks/fissures	None required	accessed	5	Mitchell		8.2	3
75	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	66	15x12	Fair	Fair to Poor	Mod-C	Medium	11 to 20	Past failures of two central leaders. Bee hive. Tear wound with decayed wood down to base.	Hollows (spouts)	None required	accessed	5	Mitchell		7.9	2.9
76	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	97	14x15	Fair to Poor	Fair to Poor	Mod-C	Medium	11 to 20	Deadwood. Birdlife.	Cracks/fissures	None required	accessed	6	Mitchell		11.6	3.4
77	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	56	9x6	Dead	Poor	Very Low	Low	<1		Cracks/fissures	None required	accessed	6	Mitchell		6.7	2.7
78	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	60	12x6	Poor	Poor	Low	Low	1 to 5		Hollows (small)	None required	accessed	6	Mitchell		7.2	2.8
79	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	77	13x10	Poor	Fair to Poor	Low	Medium	6 to 10		Cracks/fissures	None required	accessed	6	Mitchell		9.2	3.1
80	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	75	16x16	Fair to Poor	Poor	Low	Medium	6 to 10	Hollows. Decay. Bee hive.	Hollows (small)	Habitat pruning	accessed	6	Mitchell		9	3.1
81	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	73	18x16	Fair to Poor	Fair to Poor	Low	Medium	6 to 10	Dead secondary leader	Hollows (small)	None required	accessed	6	Mitchell		8.8	3.1
82	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	91	19x16	Dead	Fair to Poor	Very Low	Medium	<1		Hollows (large)	Habitat pruning	accessed	6	Mitchell		10.9	3.3
83	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	101	21x16	Fair to Poor	Fair to Poor	Low	Medium	6 to 10	Failure wounds on limbs and trunk. Minor decay. Past failures from major and minor limbs. Ground logs.	Hollows (small)	None required	accessed	6	Mitchell		12.1	3.5
84	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	101	21x18	Fair	Fair to Poor	Mod-B	High	11 to 20	Hollow in primary leader. Deadwood.	Hollows (large)	None required	accessed	6	Mitchell		12.1	3.5
85	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	90	15x14	Fair	Fair to Poor	Mod-B	Medium	21 to 40		Hollows (small)	None required	accessed	6	Mitchell		10.8	3.3
86	<i>Quercus robur</i>	English Oak	Maturing	Exotic deciduous	43,36,18,17	12x14	Good	Fair	Mod-A	High	>40		None	None required	accessed	6	Mitchell		7.4	2.8
87	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Early-mature	Australian native	44,25	14x13	Fair	Fair	Mod-B	Medium	21 to 40		None	None required	accessed	6	Mitchell		6.1	2.6
88	<i>Fraxinus angustifolia</i>	Desert Ash	Semi-mature	Exotic deciduous	22	9x8	Good	Fair	Low	Low	21 to 40	Weed species	None	None required	accessed	6	Mitchell		2.6	1.9
89	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	54	14x14	Good	Fair	Mod-B	Medium	>40	Past powerline clearance	None	None required	accessed	6	Mitchell		6.5	2.7
90	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	51,31	16x15	Fair	Fair	Mod-B	Medium	21 to 40	Past powerline clearance	None	None required	accessed	6	Mitchell		7.2	2.8
91	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Early-mature	Australian native	40	12x9	Poor	Poor	Low	Low	1 to 5		None	None required	accessed	6	Mitchell		4.8	2.5

Tree ID	Species	Common Name	Age	Origin	DSH (cm)	HxW(m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Recommended works	Tree access	Property ID	LGA	Overlays	NRZ (m radius)	SRZ (m radius)
92	<i>Prunus sp.</i>	Almond, Cherry, Peach, Plum	Maturing	Exotic deciduous	12,10,10	4x6	Fair	Fair	Low	Low	11 to 20		None	None required	accessed	6	Mitchell		2.2	1.8
93	<i>Prunus sp.</i>	Almond, Cherry, Peach, Plum	Maturing	Exotic deciduous	12,12,10	4x6	Fair	Fair	Low	Low	11 to 20		None	None required	accessed	6	Mitchell		2.4	1.8
94	<i>Melaleuca styphelioides</i>	Prickly-leaved Paperbark	Early-mature	Australian native	16,14,12,10	6x5	Fair	Fair	Mod-C	Low	21 to 40		None	None required	accessed	6	Mitchell		3.2	2.1
95	<i>Eucalyptus occidentalis</i>	Swamp Yate	Early-mature	Australian native	61	15x12	Fair	Fair	Mod-A	High	21 to 40		None	None required	accessed	6	Mitchell		7.3	2.8
96	<i>Gleditsia triacanthos</i>	Honey Locust	Semi-mature	Exotic deciduous	17,17,10	8x8	Fair	Fair	Mod-B	Medium	21 to 40		None	None required	accessed	6	Mitchell		3.1	2
97	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	40	8x7	Poor	Fair	Low	Low	1 to 5		None	None required	accessed	6	Mitchell		4.8	2.5
98	<i>Melaleuca linariifolia</i>	Snow in Summer	Early-mature	Australian native	14,14,10,10	4x5	Fair to Poor	Fair	Mod-C	Low	11 to 20		None	None required	accessed	6	Mitchell		2.9	2
99	<i>Eucalyptus viminalis</i>	Manna Gum	Semi-mature	Victorian native	30,25,16	12x11	Poor	Fair to Poor	Very Low	Low	<1		None	None required	accessed	6	Mitchell		5.1	2.5
100	<i>Eucalyptus polyanthemos</i>	Red Box	Semi-mature	Victorian native	34	12x8	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	accessed	6	Mitchell		4.1	2.3
101	<i>Eucalyptus melliodora</i>	Yellow Box	Semi-mature	Victorian native	32	13x8	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	accessed	6	Mitchell		3.8	2.3
102	<i>Corymbia citriodora</i>	Lemon-scented Gum	Semi-mature	Australian native	22,22,16	13x10	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	accessed	6	Mitchell		4.2	2.2
103	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	20,18	11x8	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	accessed	6	Mitchell	VPO2	3.2	2.1
104	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	40	13x10	Fair	Fair	Mod-C	Medium	>40		None	None required	accessed	6	Mitchell	VPO2	4.8	2.4
105	<i>Ulmus procera</i>	English Elm	Maturing	Exotic deciduous	55,33,27	10x10	Fair to Poor	Fair	Low	Low	11 to 20	Suckering. Weed potential.	None	None required	accessed	5	Mitchell		8.4	2.9
106	<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	Semi-mature	Australian native	35	10x8	Fair to Poor	Fair	Mod-C	Medium	11 to 20		None	None required	accessed	5	Mitchell		4.2	2.4
107	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous (planted)	95	18x19	Good	Fair	Mod-A	High	>40	Previous failures. Limbs becoming over extended	None	None required	accessed	5	Mitchell		11.4	3.4
108	<i>Pinus radiata</i>	Monterey Pine	Maturing	Exotic conifer	81	16x14	Fair	Fair	Mod-B	Medium	21 to 40	Low canopy West	None	None required	accessed	5	Mitchell		9.7	3.2
109	<i>Eucalyptus botryoides</i>	Southern Mahogany	Semi-mature	Victorian native	34	9x7	Good	Fair	Mod-B	Medium	21 to 40		None	None required	accessed	5	Mitchell		4.1	2.3
110	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	145	24x17	Fair	Fair to Poor	Mod-A	High	21 to 40	Minor dieback. Multi stemmed form. Surface roots. Deadwood. Decay in central leader.	None	None required	accessed	5	Mitchell		15	3.9
111	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	97	20x17	Fair to Poor	Fair to Poor	Mod-B	Medium	11 to 20		Hollows (small)	None required	accessed	5	Mitchell		11.6	3.4
112	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	113,42	22x15	Fair to Poor	Fair to Poor	Mod-B	Medium	11 to 20	Previous failures. Deadwood. Beehive. Trunk and limb wounds. Large failure wound from past stem failure lower southern trunk. Basal decay spreading up to Western limbs, both dead. Bee hive.	Hollows (small)	None required	accessed	5	Mitchell		14.5	3.7
113	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	105	15x12	Fair to Poor	Poor	Low	Low	1 to 5	Large wound with decay lower trunk.	None	None required	accessed	5	Mitchell		12.6	3.5
114	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	57	16x14	Fair	Fair to Poor	Mod-C	Medium	11 to 20		Bird's nest	None required	accessed	8	Hume		6.8	2.8
115	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	90	17x21	Fair	Fair	High	High	>40		None	None required	accessed	8	Hume		10.8	3.3
116	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	63	14x12	Fair to Poor	Fair	Mod-B	Medium	11 to 20	Livestock compaction around base of tree. Deadwood.	None	None required	accessed	8	Hume		7.6	2.7
117	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	45	14x8	Fair to Poor	Fair	Mod-B	Medium	11 to 20	Livestock compaction around base of tree	None	None required	accessed	8	Hume		5.4	2.5
118	<i>Pinus radiata</i>	Monterey Pine	Maturing	Exotic conifer	55	15x13	Fair	Fair	Mod-B	Medium	21 to 40		None	None required	est.	9	Hume		6.6	2.8
119	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Early-mature	Australian native	50	15x13	Fair	Fair	Mod-B	Medium	21 to 40		None viewed	None required	est.	9	Hume		6	2.7
120	<i>Pinus radiata</i>	Monterey Pine	Maturing	Exotic conifer	60	15x15	Fair	Fair	Mod-B	Medium	11 to 20		None	None required	est.	9	Hume		7.2	2.8
121	<i>Eucalyptus melliodora</i>	Yellow Box	Semi-mature	Victorian native	30,15	12x8	Fair	Fair	Mod-B	Medium	21 to 40		None viewed	None required	est.	9	Hume		4	2.3
122	<i>Eucalyptus melliodora</i>	Yellow Box	Early-mature	Victorian native	50	12x11	Fair	Fair	Mod-B	Medium	21 to 40		None viewed	None required	est.	9	Hume		6	2.7
123	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	60	16x14	Fair	Fair	Mod-A	Medium	21 to 40	View of tree obscured by cypress windrow	None viewed	None required	est.	9	Hume		7.2	2.8
124	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	60	16x14	Fair	Fair	Mod-A	Medium	21 to 40	View of tree obscured by cypress windrow	None viewed	None required	est.	9	Hume		7.2	2.8
125	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	60	16x14	Fair	Fair	Mod-A	Medium	21 to 40	View of tree obscured by cypress windrow	None viewed	None required	est.	9	Hume		7.2	2.8
126	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous (planted)	70	16x14	Fair	Fair	Mod-A	Medium	21 to 40	View of tree obscured by cypress windrow	None viewed	None required	est.	9	Hume		8.4	3
127	<i>Cupressus macrocarpa</i>	Monterey Cypress	Maturing	Exotic conifer	90	17x18	Fair	Fair	Mod-A	Medium	21 to 40	View of tree obscured by cypress windrow	None viewed	None required	est.	9	Hume		10.8	3.3
128	<i>Eucalyptus melliodora</i>	Yellow Box	Semi-mature	Victorian native	18	14x6	Fair	Fair to Poor	Low	Low	11 to 20		None viewed	None required	est.	9	Hume		2.2	1.9
129	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	24	7x6	Good	Fair	Mod-C	Low	>40		None viewed	None required	est.	9	Hume		2.9	2.1
130	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	18	14x6	Fair	Fair	Low	Low	21 to 40		None viewed	None required	est.	9	Hume		2.2	1.9
131	<i>Eucalyptus camaldulensis</i>	River Red Gum	Early-mature	Indigenous	65	13x15	Good	Fair	Mod-A	High	>40	Naturally recruited saplings around tree	None viewed	None required	est.	9	Hume		7.8	2.9
132	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous	18	8x6	Fair	Fair	Mod-C	Low	>40		None viewed	None required	est.	9	Hume		2.2	1.9
133	<i>Eucalyptus melliodora</i>	Yellow Box	Maturing	Victorian native	65	16x14	Fair	Fair to Poor	Mod-B	Medium	11 to 20	Aff. Viewed from opposite boundary.	None viewed	None required	est.	9	Hume		7.8	2.9
134	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	50	14x7	Fair to Poor	Fair to Poor	Low	Medium	6 to 10		None viewed	None required	est.	10	Hume		6	2.7
135	<i>Eucalyptus botryoides</i>	Southern Mahogany	Maturing	Victorian native	70	17x10	Fair to Poor	Fair to Poor	Low	Medium	6 to 10		None viewed	None required	est.	10	Hume		8.4	3
136	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	75	19x16	Fair	Fair to Poor	Mod-B	Medium	21 to 40	Trunk wound with cavity at 3 to 4 m.	None viewed	None required	est.	10	Hume		9	3.1

Tree ID	Species	Common Name	Age	Origin	DSH (cm)	HxW(m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Recommended works	Tree access	Property ID	LGA	Overlays	NRZ (m radius)	SRZ (m radius)
137	<i>Cupressus sempervirens</i>	Italian Cypress	Maturing	Exotic conifer	42	9x10	Good	Fair	Mod-B	High	>40		None	None required	accessed	11	Hume		5	2.7
138	<i>Acacia mearnsii</i>	Late Black Wattle	Maturing	Indigenous	40	8x9	Good	Fair	Mod-C	Medium	11 to 20		None viewed	None required	est.	6	Mitchell		4.8	2.4
139	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Early-mature	Exotic deciduous	19,19,15,12	7x10	Fair	Fair	Mod-B	High	>40		None	None required	accessed	11	Hume		4	2.4
140	<i>Quercus sp.</i>	Oak	Semi-mature	Exotic deciduous	40	8x8	Fair	Fair	Mod-B	Medium	>40		None	None required	est.	13	Hume		4.8	2.5
141	<i>Eucalyptus sp.</i>	Gum Tree	Early-mature	Australian native	55	16x13	Fair	Fair	Mod-B	Medium	21 to 40		None viewed	None required	est.	13	Hume		6.6	2.8
142	<i>Pinus radiata</i>	Monterey Pine	Maturing	Exotic conifer	80	8x13	Fair	Fair	Mod-B	Medium	11 to 20		None	None required	est.	14	Hume		9.6	3.2
143	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	60,45	18x15	Fair	Poor	Low	Medium	6 to 10	Failures. Wounds. Deadwood. Recent stem failure.	Hollows (large)	None required	est.	14	Hume		9	2.8
144	<i>Eucalyptus cladocalyx</i>	Sugar Gum	Maturing	Australian native	75	18x15	Fair	Fair to Poor	Mod-C	Medium	11 to 20	Past limb failures	None viewed	None required	est.	14	Hume		9	3.1
145	<i>Eucalyptus camaldulensis</i>	River Red Gum	Maturing	Indigenous	75	15x17	Fair	Fair	Mod-A	High	>40		None viewed	None required	est.	14	Hume		9	3.1
146	<i>Phoenix canariensis</i>	Canary Island Date Palm	Semi-mature	Exotic palm	50	6x7	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	est.	15	Hume		4.5	2.7
147	<i>Phoenix canariensis</i>	Canary Island Date Palm	Semi-mature	Exotic palm	50	6x7	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	est.	15	Hume		4.5	2.7
148	<i>Phoenix canariensis</i>	Canary Island Date Palm	Semi-mature	Exotic palm	50	4x7	Fair	Fair	Low	Low	21 to 40		None	None required	est.	15	Hume		4.5	2.7
149	<i>Phoenix canariensis</i>	Canary Island Date Palm	Semi-mature	Exotic palm	50	6x7	Fair	Fair	Mod-C	Medium	21 to 40		None	None required	est.	15	Hume		4.5	2.7
150	<i>Phoenix canariensis</i>	Canary Island Date Palm	Maturing	Exotic palm	70	9x8	Fair	Fair	Mod-B	Medium	21 to 40		None	None required	est.	15	Hume		5	3
151	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	30	12x9	Fair	Fair to Poor	Mod-C	Medium	11 to 20		None viewed	None required	est.	15	Hume		3.6	2.3
152	<i>Corymbia maculata</i>	Spotted Gum	Semi-mature	Victorian native	30	12x8	Fair	Fair	Mod-C	Medium	11 to 20		None viewed	None required	est.	15	Hume		3.6	2.3
153	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	30	10x8	Fair	Fair	Mod-C	Medium	11 to 20		None viewed	None required	est.	15	Hume		3.6	2.3
154	<i>Cupressus macrocarpa</i>	Monterey Cypress	Semi-mature	Exotic conifer	30	10x8	Fair	Fair	Mod-C	Low	11 to 20		None viewed	None required	est.	16	Hume		3.6	2.3
155	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	30	12x9	Poor	Fair to Poor	Low	Low	6 to 10		None viewed	None required	est.	16	Hume		3.6	2.3
156	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	30	10x7	Fair to Poor	Fair	Low	Low	6 to 10		None viewed	None required	est.	16	Hume		3.6	2.3
157	<i>Eucalyptus sp.</i>	Gum Tree	Semi-mature	Australian native	30	10x7	Fair	Fair	Mod-C	Medium	21 to 40		None viewed	None required	est.	16	Hume		3.6	2.3
158	<i>Eucalyptus camaldulensis</i>	River Red Gum	Semi-mature	Indigenous (planted)	40	12x10	Fair	Fair	Mod-B	Medium	21 to 40		None viewed	None required	est.	16	Hume		4.8	2.5
159	<i>Cupressus macrocarpa</i>	Monterey Cypress	Semi-mature	Exotic conifer	45	12x10	Fair	Fair	Mod-C	Medium	21 to 40		None viewed	None required	est.	16	Hume		5.4	2.6
160	<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	Maturing	Exotic deciduous	30,30,20,20,20	7x8	Fair	Fair	Mod-B	Medium	21 to 40		None	None required	est.	18	Hume		6.6	2.3

Tree ID	Primary species	Common Name	Other species	Age	Origin	Type	No. prim ary	No. other	No. total	DSH (cm)	Height (m)	Width (m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Tree access	Property	LGA	Overlays	AS NRZ (m radius)
G1	<i>Eucalyptus spathulata</i>	Swamp Mallet	NA	Semi-mature	Planted native	Single species native	3	0	3	60 to 80	18	16	Fair	Fair	Mod.A	High	21 to 40	Past powerline clearance. Past failures.	None viewed	Est.	1	Mitchell		8.4
G2	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Semi-mature	Indigenous	Single species indigenous	6	0	6	80 to 120	20	20	Good	Fair	High	Very high	>40		None viewed	Est.	1	Mitchell		12
G3	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Early-mature	Indigenous	Single species indigenous	4	0	4	80 to 120	20	20	Good	Fair	High	Very high	>40		None viewed	Est.	2	Mitchell		12
G4	<i>Pinus radiata</i>	Monterey Pine	NA	Semi-mature	Planted exotic	Single species exotic	8	0	8	25 to 45	9	8	Fair to poor	Fair	Mod.C	Medium	11 to 20	Hangers, previous failures. Failure wounds with varying levels of decays. Some cavities and hollows.	None	Est.	2	Mitchell		4.2
G5	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Eucalyptus botryoides</i>	Maturing	Planted native	Multi-species native	9	2	11	45 to 75	16	14	Fair to poor	Fair to poor	Mod.C	Medium	11 to 20		Hollows (small)	Accessed	3	Mitchell		7.2
G6	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Early-mature	Planted exotic	Single species exotic	30	0	30	30 to 70	14	10	Poor	Fair to poor	Low	Low	6 to 10		None	Accessed	3	Mitchell		6
G7	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Semi-mature	Planted exotic	Single species exotic	5	0	5	35 to 50	14	10	Fair	Fair	Mod.B	Medium	21 to 40		None	Est.	2	Mitchell		5.1
G8	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Early-mature	Planted exotic	Single species exotic	50	0	50	25 to 40	10	6	Fair to poor	Fair	Mod.C	Medium	11 to 20		None	Est.	2	Mitchell		3.9
G9	<i>Cupressus sp.</i>	Cypress	NA	Semi-mature	Planted exotic	Single species exotic	12	0	12	25	8	4	Fair to poor	Fair to poor	Low	Low	6 to 10		None	Accessed	4	Mitchell		3
G10	<i>Cupressus sp.</i>	Cypress	NA	Semi-mature	Planted exotic	Single species exotic	12	0	12	25	8	4	Fair to poor	Fair to poor	Low	Low	6 to 10		None	Accessed	4	Mitchell		3
G11	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Acacia sp., Cupressus sp.</i>	Semi-mature	Mixed native & exotic	Multi-species mixed native & exotic	52	41	93	10 to 40	5 to 10	3 to 4	Fair	Fair to poor	Mod.C	Medium	>40		None	Accessed	4	Mitchell		3
G12	<i>Cupressus macrocarpa</i> 'Goldcrest'	Golden Monterey Cypress	<i>Melaleuca styphelioides</i> , <i>Cupressus sempervirens</i>	Semi-mature	Mixed native & exotic	Multi-species mixed native & exotic	1	11	12	40 to 100	12	10	Fair	Fair to poor	Low	Medium	21 to 40		Multiple	Accessed	4	Mitchell		8.4
G13	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Eucalyptus leucoxylon</i> , <i>Eucalyptus viminalis</i> , <i>Eucalyptus melliodora</i>	Semi-mature	Planted native	Multi-species native	6	10	16	10 to 60	5 to 16	3 to 10	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	4	Mitchell		4.2
G14	<i>Eucalyptus viminalis</i>	Manna Gum	<i>Eucalyptus melliodora</i> , <i>Eucalyptus camaldulensis</i> , <i>Cupressus lusitanica</i>	Semi-mature	Planted native	Multi-species native	7	9	16	10 to 50	4 to 14	2 to 8	Fair	Fair to poor	Mod.B	Medium	>40	Past stem failure.	None	Accessed	4	Mitchell		3.6
G15	<i>Cupressus macrocarpa</i> 'Goldcrest'	Golden Monterey Cypress	<i>Melaleuca styphelioides</i> , <i>Cupressus lusitanica</i>	Early-mature	Planted exotic	Multi-species mixed native & exotic	5	11	16	40 to 100	12	10	Fair	Fair to poor	Mod.C	Medium	21 to 40		None	Accessed	4	Mitchell		8.4
G16	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Eucalyptus viminalis</i> , <i>Eucalyptus leucoxylon</i>	Early-mature	Planted native	Multi-species native	8	2	10	10 to 60	9 to 14	3 to 8	Fair	Fair	Mod.B	Medium	>40		None	Accessed	4	Mitchell		4.2
G17	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Eucalyptus viminalis</i> , <i>Eucalyptus melliodora</i>	Early-mature	Planted native	Multi-species native	5	3	8	8 to 45	3 to 12	3 to 10	Fair	Fair to poor	Mod.C	Low	>40		None	Accessed	4	Mitchell		3.18
G18	<i>Cupressus sp.</i>	Cypress	NA	Semi-mature	Planted exotic	Single species exotic	5	0	5	25	8	4	Poor	Poor	Low	Very low	<1		None	Accessed	4	Mitchell		3
G19	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Eucalyptus leucoxylon</i>	Semi-mature	Planted native	Multi-species native	17	5	22	10 to 60	3 to 15	2 to 9	Fair	Fair to poor	Mod.B	High	>40		None	Accessed	4	Mitchell		4.2
G20	<i>Cupressus macrocarpa</i> 'Goldcrest'	Golden Monterey Cypress	<i>Melaleuca styphelioides</i>	Semi-mature	Mixed native & exotic	Multi-species mixed native & exotic	4	3	7	40 to 110	9 to 10	6 to 9	Fair	Fair to poor	Mod.C	Medium	21 to 40	Melaleuca fair health, 1xCupresses poor health.	None	Accessed	4	Mitchell		9
G21	<i>Cupressus lusitanica</i>	Mexican Cypress	NA	Semi-mature	Planted exotic	Single species exotic	3	0	3	13	6	2	Fair	Fair	Low	Low	11 to 20		None	Accessed	4	Mitchell		2
G22	<i>Cupressus macrocarpa</i> 'Goldcrest'	Golden Monterey Cypress	<i>Melaleuca styphelioides</i>	Semi-mature	Mixed native & exotic	Multi-species mixed native & exotic	6	1	7	45 to 120	11	8	Fair	Fair to poor	Mod.C	Medium	11 to 20		None	Accessed	4	Mitchell		9.9
G23	<i>Eucalyptus camaldulensis</i>	River Red Gum	<i>Eucalyptus leucoxylon</i> , <i>Eucalyptus viminalis</i> , <i>Eucalyptus melliodora</i> , <i>Eucalyptus sp.</i>	Maturing	Planted native	Multi-species native	4	8	12	10 to 45	3 to 14	3 to 9	Fair to poor	Fair to poor	Low	Low	11 to 20		Deep loose bark	Accessed	4	Mitchell		3.3
G24	<i>Cupressus sp.</i>	Cypress	<i>Eucalyptus camaldulensis</i> , <i>Eucalyptus leucoxylon</i>	Young	Mixed native & exotic	Multi-species mixed native & exotic	4	19	23	10 to 35	6 to 10	4 to 8	Fair	Fair to poor	Mod.C	Medium	21 to 40		None	Accessed	4	Mitchell		2.7
G25	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Maturing	Planted native	Single species native	3	0	3	15 to 20	9 to 12	6	Fair	Fair	Mod.C	Medium	>40		None	Accessed	4	Mitchell		2.1
G26	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Young	Indigenous	Single species indigenous	4	0	4	20 to 30	10 to 13	6	Fair	Fair to poor	Mod.C	Medium	>40		None	Accessed	4	Mitchell		3
G27	<i>Yucca sp.</i>	Yucca	NA	Maturing	Planted exotic	Single species exotic	6	0	6	70 to 100	5	8	Fair	Fair	Mod.C	Medium	11 to 20		None	Accessed	4	Mitchell		10.2
G28	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Semi-mature	Indigenous	Single species indigenous	30	0	30	3 to 20	3 to 9	1 to 5	Fair	Fair to poor	Mod.C	Low	>40		None	Accessed	4	Mitchell		2
G29	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Semi-mature	Indigenous	Single species indigenous	35	0	35	7 to 25	3 to 11	2 to 5	Fair	Fair to poor	Mod.C	Medium	>40		None	Accessed	4	Mitchell		2
G30	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Early-mature	Planted exotic	Single species exotic	13	0	13	80 to 120	14 to 16	8 to 13	Fair to poor	Fair to poor	Mod.C	Low	6 to 10	Past branch failure, past limb failure, past stem failure.	None	Accessed	4	Mitchell		12
G31	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Semi-mature	Indigenous	Single species indigenous	5	0	5	5 to 20	2 to 10	5 to 7	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	4	Mitchell		2
G32	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Maturing	Planted native	Single species native	11	0	11	5 to 20	4 to 9	3 to 5	Fair	Fair	Mod.C	Medium	>40		None	Accessed	4	Mitchell		2
G33	<i>Eucalyptus saligna</i>	Sydney Blue Gum	<i>Eucalyptus leucoxylon</i> , <i>Eucalyptus camaldulensis</i> , <i>Acacia sp., Allocasuarina littoralis</i> , <i>Eucalyptus sp., Melaleuca armillaris</i>	Maturing	Planted native	Multi-species native	14	54	68	15 to 50	4 to 18	3 to 12	Fair	Fair to poor	Mod.B	Medium	>40		Multiple	Accessed	4	Mitchell		3.9
G34	<i>Eucalyptus melliodora</i>	Yellow Box	<i>Eucalyptus polyanthemos</i> , <i>Eucalyptus viminalis</i> , <i>Eucalyptus camaldulensis</i> , <i>Eucalyptus globulus</i> , <i>Grevillea robusta</i>	Semi-mature	Planted native	Multi-species native	12	23	35	10 to 65	4 to 17	4 to 8	Fair	Fair to poor	Mod.B	High	>40		None	Accessed	4	Mitchell		4.5

Tree ID	Primary species	Common Name	Other species	Age	Origin	Type	No. prim ary	No. other	No. total	DSH (cm)	Height (m)	Width (m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Tree access	Property	LGA	Overlays	AS NRZ (m radius)
G35	<i>Eucalyptus globulus</i>	Southern Blue Gum	<i>Eucalyptus saligna</i> , <i>Eucalyptus melliodora</i> , <i>Allocasuarina littoralis</i> , <i>Eucalyptus polyanthemos</i> , <i>Melaleuca armillaris</i>	Maturing	Planted native	Multi-species native	3	17	20	10 to 60	5 to 17	4 to 10	Fair	Fair to poor	Mod.B	High	>40		Bird's nest	Accessed	4	Mitchell		4.2
G36	<i>Eucalyptus globulus</i>	Southern Blue Gum	<i>Eucalyptus saligna</i> , <i>Eucalyptus viminalis</i> , <i>Acacia baileyana</i> , <i>Acacia floribunda</i> , <i>Callistemon viminalis</i> , <i>Eucalyptus sp.</i>	Young	Planted native	Multi-species native	1	12	13	12 to 60	5 to 16	4 to 12	Fair	Fair to poor	Mod.B	High	>40		None	Accessed	4	Mitchell		4.32
G37	<i>Eucalyptus occidentalis</i>	Swamp Yate	<i>Eucalyptus melliodora</i> , <i>Eucalyptus goniocalyx</i> , <i>Acacia floribunda</i> , <i>Allocasuarina littoralis</i> , <i>Melaleuca ericifolia</i>	Maturing	Planted native	Multi-species native	2	14	16	10 to 45	5 to 17	4 to 11	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	4	Mitchell		3.3
G38	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Semi- mature	Planted exotic	Single species exotic	6	0	6	40 to 100	13	10	Fair to poor	Poor	Low	Very low	6 to 10	In irreversible decline.	None	Accessed	4	Mitchell		8.4
G39	<i>Cupressus macrocarpa</i> 'Goldcrest'	Golden Monterey Cypress	NA	Maturing	Planted exotic	Single species exotic	7	0	7	40 to 100	11	10	Fair to poor	Fair to poor	Low	Low	11 to 20	1x dead, 1x irreversible decline.	None	Accessed	4	Mitchell		8.4
G40	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Cupressus macrocarpa</i> 'Goldcrest', <i>Eucalyptus camaldulensis</i>	Maturing	Mixed native & exotic	Multi-species mixed native & exotic	11	2	13	40 to 100	7 to 16	7 to 12	Fair to poor	Poor	Low	Low	6 to 10		Fauna/birdlife	Accessed	4	Mitchell		8.4
G41	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Maturing	Planted exotic	Single species exotic	16	0	16	50 to 90	9 to 17	10	Fair to poor	Fair to poor	Low	Low	1 to 5		None	Accessed	4	Mitchell		8.4
G42	<i>Fraxinus angustifolia subsp. angustifolia</i>	Desert Ash	<i>Eucalyptus cladocalyx</i> 'Nana', <i>Melaleuca armillaris</i>	Maturing	Mixed native & exotic	Multi-species mixed native & exotic	5	4	9	40	10	9	Fair	Fair to poor	Low	Very low	1 to 5	Weed infested. Eucalypts in poor condition	None	Accessed	6	Mitchell		4.8
G43	<i>Eucalyptus cladocalyx</i> 'Nana'	Bushy Sugar Gum	NA	Young	Planted native	Single species native	5	0	5	50 to 75	15	14	Fair	Fair to poor	Mod.C	Medium	11 to 20	Area used for storing dead branches logs etc	None	Accessed	6	Mitchell		7.5
G44	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Semi- mature	Planted exotic	Single species exotic	22	0	22	35	9	6	Fair to poor	Fair	Low	Low	6 to 10	Cyprus canker	None	Accessed	6	Mitchell		4.2
G45	<i>Melaleuca styphelioides</i>	Prickly-leaved Paperbark	<i>Eucalyptus camaldulensis</i> , <i>Eucalyptus leucoxyton</i> , <i>Corymbia citridora</i>	Maturing	Planted native	Multi-species native	12	7	19	15 to 45	9	8	Fair	Fair	Mod.B	Medium	21 to 40		None	Accessed	6	Mitchell		3.6
G46	<i>Eucalyptus camaldulensis</i>	River Red Gum	NA	Maturing	Planted native	Single species native	6	0	6	40	12	9	Fair	Fair	Mod.B	Medium	21 to 40		None	Accessed	6	Mitchell		4.8
G47	<i>Melaleuca styphelioides</i>	Prickly-leaved Paperbark	NA	Maturing	Planted native	Single species native	5	0	5	35	6	5	Fair	Fair	Mod.C	Medium	11 to 20		None	Accessed	6	Mitchell		4.2
G48	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Maturing	Planted exotic	Single species exotic	50	0	50	30 to 50	12	7	Fair	Fair	Mod.B	Medium	21 to 40		None	Accessed	6	Mitchell		4.8
G49	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Eucalyptus leucoxyton</i> , <i>Melaleuca sp.</i> , <i>Allocasuarina verticillata</i> , <i>Eucalyptus sp.</i>	Semi- mature	Planted native	Multi-species native	10	35	45	15 to 70	43221	43160	Fair	Fair	Mod.B	High	21 to 40		None viewed	Est.	roadside	Mitchell	VPO2	5.1
G50	<i>Eucalyptus sp.</i>	Gum Tree	<i>Melaleuca sp.</i>	Maturing	Planted native	Multi-species native	20	10	30	15 to 60	14	8	Fair	Fair	Mod.B	High	21 to 40		None viewed	Est.	roadside	Mitchell	VPO2	4.5
G51	<i>Eucalyptus sp.</i>	Gum Tree	<i>Melaleuca sp.</i>	Semi- mature	Mixed native & exotic	Multi-species mixed native & exotic	25	5	30	15 to 55	110	8	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	roadside	Mitchell	VPO2	4.2
G52	<i>Eucalyptus sp.</i>	Gum Tree	<i>Allocasuarina sp.</i> , <i>Acacia sp.</i>	Maturing	Planted native	Multi-species native	20	18	38	15 to 65	15	12	Fair	Fair	Mod.B	High	21 to 40		None viewed	Est.	roadside	Mitchell	VPO2	4.8
G53	<i>Eucalyptus cladocalyx</i>	Sugar Gum	NA	Early- mature	Planted native	Single species native	35	0	35	30 to 60	12	10	Fair to poor	Fair to poor	Mod.C	Medium	11 to 20	Eastern end in poor health	None viewed	Est.	neighbourin g	Mitchell		5.4
G54	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Early- mature	Planted exotic	Single species exotic	10	0	10	45	12	8	Fair	Fair	Mod.B	Medium	21 to 40		None	Accessed	5	Mitchell		5.4
G55	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Semi- mature	Planted exotic	Single species exotic	16	0	16	35 to 80	15	12	Fair to poor	Fair	Mod.B	Medium	11 to 20	Early stages Cypress canker	None	Accessed	5	Mitchell		6.9
G56	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Eucalyptus botryoides</i>	Semi- mature	Mixed native & exotic	Multi-species mixed native & exotic	4	1	5	50 to 80	14	12	Fair to poor	Fair to poor	Low	Low	6 to 10		None	Accessed	5	Mitchell		7.8
G57	<i>Eucalyptus saligna</i>	Sydney Blue Gum	<i>Eucalyptus sp.</i>	Semi- mature	Planted native	Multi-species native	4	4	8	40	14	8	Poor	Fair to poor	Low	Low	1 to 5	Four dead trees	None	Accessed	5	Mitchell		4.8
G58	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Pinus radiata</i>	Semi- mature	Mixed native & exotic	Multi-species mixed native & exotic	25	10	35	20 to 80	16	12	Fair	Poor	Mod.C	Medium	11 to 20	Past coppicing. several hangers, previous failures, failure wounds.	Hollows (small)	Accessed	5	Mitchell		6
G59	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Semi- mature	Planted exotic	Single species exotic	16	0	16	40 to 80	12	8	Fair	Fair	Mod.B	Medium	11 to 20		None	Accessed	5	Mitchell		7.2
G60	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Semi- mature	Planted exotic	Single species exotic	30	0	30	40 to 70	10	8	Fair to poor	Fair	Mod.C	Medium	11 to 20	Minor dieback	None	Accessed	5	Mitchell		6.6
G61	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Maturing	Planted exotic	Single species exotic	100	0	100	50 to 100	15	13	Poor	Fair to poor	Low	Low	1 to 5	Most affected by Cypress canker. approximately 20% dead	Bird's nest	Accessed	8	Hume		9
G62	<i>Eucalyptus cladocalyx</i>	Sugar Gum	NA	Maturing	Planted native	Single species native	16	0	16	25 to 65	15	15	Poor	Fair to poor	Low	Low	6 to 10	Birds nests in multiple trees. Kites seen in vicinity.	Fauna/birdlife	Accessed	8	Hume		5.4
G63	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Maturing	Planted exotic	Single species exotic	80	0	80	35	12	8	Fair to poor	Fair	Mod.C	Medium	6 to 10	Early stages Cypress canker	None viewed	Est.	9	Hume		4.2
G64	<i>Fraxinus 'Raywood'</i>	Claret Ash	NA	Early- mature	Planted exotic	Single species exotic	10	0	10	30	8	5	Fair	Fair	Mod.C	Medium	21 to 40		None	Est.	9	Hume		3.6
G65	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Maturing	Planted exotic	Single species exotic	10	0	10	30	10	6	Fair	Fair	Low	Low	11 to 20		None viewed	Est.	9	Hume		3.6
G66	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Semi- mature	Planted exotic	Single species exotic	30	0	30	35	12	8	Poor	Fair to poor	Low	Low	6 to 10	Cyprus canker	None	Est.	9	Hume		4.2
G67	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	20	0	20	45	12	10	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	9	Hume		5.4
G68	<i>Fraxinus sp.</i>	Ash	<i>Quercus sp.</i>	Semi- mature	Planted exotic	Multi-species exotic	3	3	6	35	10	8	Fair	Fair	Mod.B	Medium	21 to 40	View of trees obscured by cypress windrow	None	Est.	9	Hume		4.2
G69	<i>Pinus radiata</i>	Monterey Pine	<i>Eucalyptus botryoides</i>	Semi- mature	Mixed native & exotic	Multi-species mixed native & exotic	30	15	45	20 to 70	14	8	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	9	Hume		5.4

Tree ID	Primary species	Common Name	Other species	Age	Origin	Type	No. prim ary	No. other	No. total	DSH (cm)	Height (m)	Width (m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Tree access	Property	LGA	Overlays	AS NRZ (m radius)
G70	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Semi-mature	Planted exotic	Single species exotic	80	0	80	35	12	8	Poor	Fair to poor	Low	Low	1 to 5	Cypress canker	None	Est.	9	Hume		4.2
G71	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Cupressus macrocarpa</i>	Semi-mature	Planted exotic	Multi-species exotic	20	0	20	20 to 50	9	5	Fair to poor	Fair	Low	Low	6 to 10	Cypress canker	None	Est.	9	Hume		4.2
G72	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i> , <i>Unknown conifer</i>	Semi-mature	Planted exotic	Multi-species exotic	20	10	30	20 to 50	10	6	Fair to poor	Fair	Low	Low	11 to 20		None	Est.	10	Hume		4.2
G73	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i> , <i>Eucalyptus sp.</i>	Maturing	Planted exotic	Multi-species exotic	20	20	40	30 to 60	15	12	Fair to poor	Fair	Mod.C	Medium	11 to 20	Some dieback. Reduced foliage density.	None viewed	Est.	10	Hume		5.4
G74	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i>	Maturing	Planted exotic	Multi-species exotic	10	15	25	20 to 70	14	8	Fair to poor	Fair to poor	Low	Low	6 to 10		None viewed	Est.	10	Hume		5.4
G75	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Fraxinus angustifolia</i>	Young	Planted exotic	Multi-species exotic	6	1	7	20 to 80	6 to 10	6 to 10	Fair	Fair	Mod.B	Medium	>40		None	Accessed	11	Hume		6
G76	<i>Pinus radiata</i>	Monterey Pine	<i>Fraxinus angustifolia</i> , <i>Eucalyptus sp.</i>	Maturing	Mixed native & exotic	Multi-species mixed native & exotic	1	2	3	11 to 69	7 to 13	4 to 12	Fair	Fair to poor	Mod.C	Medium	21 to 40	Euc no fruit or buds.	None	Accessed	11	Hume		4.8
G77	<i>Pinus radiata</i>	Monterey Pine	NA	Early-mature	Planted exotic	Single species exotic	6	0	6	30 to 40	14	8	Fair	Fair	Mod.B	Medium	>40		None	Accessed	11	Hume		4.2
G78	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i>	Maturing	Planted exotic	Multi-species exotic	3	9	12	30 to 50	11 to 16	8 to 10	Fair	Fair	Mod.B	Medium	>40		None	Accessed	11	Hume		4.8
G79	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i> , <i>Cupressus macrocarpa</i> 'Goldcrest'	Semi-mature	Planted exotic	Multi-species exotic	3	15	18	25 to 45	8 to 15	6 to 8	Fair	Fair	Mod.B	Medium	>40		None	Accessed	11	Hume		4.2
G80	<i>Pinus radiata</i>	Monterey Pine	NA	Semi-mature	Planted exotic	Single species exotic	8	0	8	20 to 45	6 to 15	8 to 1o	Fair	Fair	Mod.C	Medium	>40		None	Accessed	11	Hume		3.9
G81	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Pinus radiata</i>	Semi-mature	Planted exotic	Multi-species exotic	21	2	23	30 to 44	14 to 15	8 to 12	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	11	Hume		4.44
G82	<i>Cupressus macrocarpa</i>	Monterey Cypress	<i>Quercus robur</i> , <i>Pinus radiata</i> , <i>Cupressus macrocarpa</i> 'Goldcrest'	Semi-mature	Planted exotic	Multi-species exotic	27	17	44	10 to 40	8 to 14	6 to 8	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	11	Hume		3
G83	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus macrocarpa</i>	Early-mature	Planted exotic	Multi-species exotic	11	1	12	30 to 40	12	8	Fair	Fair to poor	Mod.C	Low	21 to 40		None	Accessed	11	Hume		4.2
G84	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Maturing	Planted exotic	Single species exotic	8	0	8	30 to 50	8 to 10	8 to 10	Fair	Fair to poor	Mod.C	Medium	21 to 40		None	Accessed	11	Hume		4.8
G85	<i>Pinus radiata</i>	Monterey Pine	NA	Early-mature	Planted exotic	Single species exotic	17	0	17	25 to 40	8 to 11	8 to 12	Fair	Fair	Mod.B	Medium	>40		None	Accessed	11	Hume		3.9
G86	<i>Pinus radiata</i>	Monterey Pine	<i>Cupressus sp.</i> , <i>Prunus sp.</i>	Semi-mature	Planted exotic	Multi-species exotic	1	3	4	15 to 40	5 to 6	6 to 8	Fair	Fair to poor	Mod.C	Low	11 to 20		None	Accessed	11	Hume		3.3
G87	<i>Pinus radiata</i>	Monterey Pine	NA	Semi-mature	Planted exotic	Single species exotic	12	0	12	15 to 50	8 to 11	3 to 10	Fair	Fair to poor	Mod.B	Medium	>40		None	Accessed	11	Hume		3.9
G88	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Maturing	Planted exotic	Single species exotic	15	0	15	30	8	5	Fair to poor	Fair	Low	Low	6 to 10	Cypress canker	None viewed	Est.	13	Hume		3.6
G89	<i>Cupressus sp.</i>	Cypress	<i>Unknown deciduous</i> , <i>Eucalyptus sp.</i>	Maturing	Mixed native & exotic	Multi-species mixed native & exotic	10	14	24	25 to 50	10	8	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	13	Hume		4.5
G90	<i>Eucalyptus globulus</i>	Southern Blue Gum	NA	Early-mature	Planted native	Single species native	50	0	50	20 to 50	16	8	Fair	Fair	Mod.B	Medium	11 to 20		None viewed	Est.	13	Hume		4.2
G91	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Semi-mature	Planted exotic	Single species exotic	10	0	10	30	7	5	Fair	Fair	Low	Low	11 to 20		None	Est.	14	Hume		3.6
G92	<i>Cupressus sp.</i>	Cypress	<i>Eucalyptus sp.</i>	Semi-mature	Mixed native & exotic	Multi-species mixed native & exotic	50	5	55	20 to 50	10	8	Fair to poor	Fair to poor	Low	Low	11 to 20	Cypress canker	None viewed	Est.	14	Hume		4.2
G93	<i>Pinus radiata</i>	Monterey Pine	NA	Early-mature	Planted exotic	Single species exotic	7	0	7	50 to 90	15	15	Fair to poor	Fair to poor	Low	Low	6 to 10		None	Est.	14	Hume		8.4
G94	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Early-mature	Planted exotic	Single species exotic	50	0	50	20 to 40	8	5	Poor	Fair	Low	Low	6 to 10	Cypress canker	None	Est.	14	Hume		3.6
G95	<i>Eucalyptus sp.</i>	Gum Tree	NA	Semi-mature	Planted native	Single species native	20	0	20	20 to 50	15	9	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	14	Hume		4.2
G96	<i>Cupressus sp.</i>	Cypress	NA	Semi-mature	Planted exotic	Single species exotic	4	0	4	50 to 80	13	12	Poor	Poor	Very low	Low	1 to 5		None	Est.	14	Hume		7.8
G97	<i>Eucalyptus sp.</i>	Gum Tree	NA	Semi-mature	Planted native	Single species native	75	0	75	30 to 50	13	8	Fair	Fair	Mod.C	Medium	21 to 40		None viewed	Est.	15	Hume		4.8
G98	<i>Eucalyptus sp.</i>	Gum Tree	NA	Over-mature	Planted native	Single species native	70	0	70	20 to 50	13	9	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	18	Hume		4.2
G99	<i>Eucalyptus cladocalyx</i> 'Nana'	Bushy Sugar Gum	NA	Early-mature	Planted native	Single species native	7	0	7	40 to 70	12	14	Fair	Fair to poor	Mod.C	Medium	11 to 20		Hollows (small)	Est.	15	Hume		6.6
G100	<i>Eucalyptus cladocalyx</i>	Sugar Gum	NA	Early-mature	Planted native	Single species native	6	0	6	30 to 70	15	5	Fair	Fair to poor	Mod.C	Medium	11 to 20		None viewed	Est.	15	Hume		6
G101	<i>Pinus radiata</i>	Monterey Pine	NA	Early-mature	Planted exotic	Single species exotic	10	0	10	40 to 70	15	13	Poor	Fair to poor	Low	Low	1 to 5		None	Est.	15	Hume		6.6
G102	<i>Eucalyptus sp.</i>	Gum Tree	NA	Semi-mature	Planted native	Single species native	10	0	10	20 to 50	15	9	Poor	Fair to poor	Low	Low	1 to 5		None viewed	Est.	15	Hume		4.2
G103	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	50	0	50	20 to 60	15	10	Fair to poor	Fair	Mod.C	Medium	11 to 20	Dieback in approx 20-30%	None viewed	Est.	15	Hume		4.8
G104	<i>Cupressus sp.</i>	Cypress	NA	Over-mature	Planted exotic	Single species exotic	5	0	5	20 to 50	10	9	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	15	Hume		4.2
G105	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	30	0	30	20 to 50	15	9	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	15	Hume		4.2
G106	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Maturing	Planted exotic	Single species exotic	100	0	100	20 to 40	12	4	Fair	Fair	Mod.C	Medium	21 to 40		None viewed	Est.	15	Hume		3.6
G107	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	75	0	75	20 to 50	15	8	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	15	Hume		4.2
G108	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	4	0	4	20 to 30	13	8	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	16	Hume		3
G109	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	3	0	3	20 to 30	13	8	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	16	Hume		3
G110	<i>Eucalyptus sp.</i>	Gum Tree	<i>Cupressus sp.</i>	Maturing	Mixed native & exotic	Multi-species mixed native & exotic	30	5	35	30 to 50	13	8	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	16	Hume		4.8

Tree ID	Primary species	Common Name	Other species	Age	Origin	Type	No. prim ary	No. other	No. total	DSH (cm)	Height (m)	Width (m)	Health	Structure	Arb. rating	Landscape value	ULE (years)	Comments	Habitat values	Tree access	Property	LGA	Overlays	AS NRZ (m radius)
G111	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	2	0	2	30 to 40	13	8	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	16	Hume		4.2
G112	<i>Eucalyptus sp.</i>	Gum Tree	<i>Cupressus sp.</i>	Over-mature	Mixed native & exotic	Multi-species mixed native & exotic	12	10	22	20 to 60	15	10	Fair to poor	Fair to poor	Low	Low	6 to 10		None viewed	Est.	16	Hume		4.8
G113	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	3	0	3	40 to 60	16	14	Fair	Fair	Mod.A	Medium	21 to 40		None viewed	Est.	16	Hume		6
G114	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	20	0	20	20 to 50	15	10	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	16	Hume		4.2
G115	<i>Cupressus macrocarpa</i>	Monterey Cypress	NA	Maturing	Planted exotic	Single species exotic	3	0	3	20 to 50	13	8	Fair	Fair	Mod.C	Medium	21 to 40		None viewed	Est.	16	Hume		4.2
G116	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	75	0	75	20 to 50	15	8	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	15	Hume		4.2
G117	<i>XCupressocyparis leylandii</i>	Leyland Cypress	NA	Early-mature	Planted exotic	Single species exotic	35	0	35	20 to 40	12	4	Fair	Fair	Mod.C	Medium	21 to 40		None	Est.	16	Hume		3.6
G118	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	10	0	10	20 to 45	12	7	Fair to poor	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	16	Hume		3.9
G119	<i>Eucalyptus sp.</i>	Gum Tree	NA	Semi-mature	Planted native	Single species native	75	0	75	20 to 45	12	7	Fair	Fair to poor	Mod.C	Medium	11 to 20		None viewed	Est.	16	Hume		3.9
G120	<i>Eucalyptus sp.</i>	Gum Tree	NA	Early-mature	Planted native	Single species native	30	0	30	20 to 50	10	9	Fair	Fair	Mod.B	Medium	21 to 40		None viewed	Est.	16	Hume		4.2
G121	<i>Acacia sp.</i>	Wattle Tree	NA	Maturing	Planted native	Single species native	30	0	30	10 to 30	5	4	Fair to poor	Fair to poor	Low	Low	6 to 10		None viewed	Est.	16	Hume		2.4
G122	<i>Eucalyptus sp.</i>	Gum Tree	NA	Maturing	Planted native	Single species native	6	0	6	15 to 35	8	4	Fair to poor	Fair to poor	Low	Low	11 to 20		None viewed	Est.	17	Hume		3
G123	<i>Allocasuarina verticillata</i>	Drooping She-oak	NA	Maturing	Planted native	Single species native	25	0	25	15	5	3	Fair	Fair	Mod.C	Medium	11 to 20	Minor dieback	None viewed	Est.	17	Hume		2
G124	<i>Eucalyptus globulus</i>	Southern Blue Gum	NA	Maturing	Planted native	Single species native	10	0	10	25	14	6	Fair	Fair	Mod.C	Medium	11 to 20	Dieback eastern end	None viewed	Est.	17	Hume		3
G125	<i>Allocasuarina verticillata</i>	Drooping She-oak	NA	Early-mature	Planted native	Single species native	5	0	5	15	7	4	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	17	Hume		2
G126	<i>Eucalyptus globulus</i>	Southern Blue Gum	NA	Maturing	Planted native	Single species native	5	0	5	30	12	5	Fair	Fair	Mod.C	Medium	11 to 20		None viewed	Est.	17	Hume		3.6
G127	<i>Allocasuarina verticillata</i>	Drooping She-oak	<i>Acacia sp.</i>	Semi-mature	Planted native	Multi-species native	20	10	30	10 to 30	8	6	Fair to poor	Fair to poor	Low	Low	11 to 20		None viewed	Est.	17	Hume		2.4
G128	<i>Cupressus sp.</i>	Cypress	NA	Semi-mature	Planted exotic	Single species exotic	13	0	13	20 to 40	8	8	Fair	Fair	Mod.C	Medium	21 to 40		None	Est.	17	Hume		3.6
G129	<i>Eucalyptus sp.</i>	Gum Tree	NA	Semi-mature	Planted native	Single species native	15	0	15	20 to 40	12	8	Fair	Fair	Mod.C	Medium	21 to 40		None viewed	Est.	17	Hume		3.6
G130	<i>Allocasuarina sp.</i>	She-oak	<i>Eucalyptus sp.</i> , <i>Acacia sp.</i>	Early-mature	Planted native	Multi-species native	25	35	60	15 to 40	10	6	Fair to poor	Fair to poor	Low	Low	6 to 10		None viewed	Est.	17	Hume		3.3
G131	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Eucalyptus occidentalis</i> , <i>Melaleuca sp.</i> , <i>Eucalyptus ovata</i> , <i>Eucalyptus occidentalis</i> , <i>Eucalyptus spathulata</i>	Early-mature	Planted native	Multi-species native	5	25	30	15 to 70	5 to 18	5 to 18	Fair	Fair	Mod.B	High	21 to 40		None		roadside	Hume		5.1
G132	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Eucalyptus camaldulensis</i> , <i>Melaleuca sp.</i> , <i>Eucalyptus ovata</i> , <i>Eucalyptus occidentalis</i> , <i>Eucalyptus spathulata</i>	Early-mature	Planted native	Multi-species native	14	65	79	15 to 70	5 to 18	5 to 18	Fair	Fair	Mod.B	High	21 to 40		None		roadside	Hume		5.1
G133	<i>Eucalyptus cladocalyx</i>	Sugar Gum	<i>Eucalyptus leucoxylon</i> , <i>Melaleuca sp.</i> , <i>Eucalyptus ovata</i> , <i>Eucalyptus occidentalis</i> , <i>Eucalyptus spathulata</i>	Semi-mature	Planted native	Multi-species native	15	50	65	15 to 70	5to 18	5 to 18	Fair	Fair	Mod.B	High	21 to 40		None		roadside	Hume		5.1

LEGEND

Trees (arb.rating)

▲ High

◆ Mod-A

● Mod-B

◊ Mod-C

■ Low

▼ Very Low

Protection zones

□ NRZ

□ SRZ

Tree groups (landscape value)

■ Very high

■ High

■ Medium

■ Low

■ Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

Mernfield North PSP

TL REF.

014275

MAP NO.

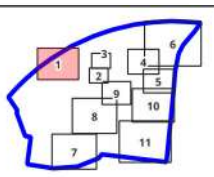
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TREE LOCATION DISCLAIMER

Tree locations are approximate

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TREELOGIC PTY LTD

ABN: 95 080 021 610
TEL: 1300 656 926

11 / 107 Heatherdale

Rd Ringwood, VIC
Australia 3134



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LEGEND

Trees (arb.rating)

- ▲ High
- ◆ Mod-A
- Mod-B
- ◊ Mod-C
- Low
- ▼ Very Low

Protection zones

NRZ

SRZ

Tree groups (landscape value)

- Very high
- High
- Medium
- Low
- Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

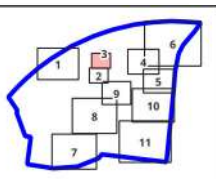
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TREE LOCATION DISCLAIMER
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ABN: 95 080 021 610 Rd Ringwood, VIC
TEL: 1300 656 926 Australia 3134



LEGEND

Trees (arb.rating)

- ▲ High
- ◆ Mod-A
- Mod-B
- ◊ Mod-C
- Low
- ▼ Very Low

Protection zones

NRZ

SRZ

Tree groups (landscape value)

- Very high
- High
- Medium
- Low
- Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

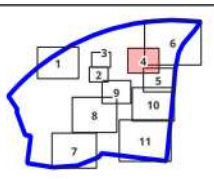
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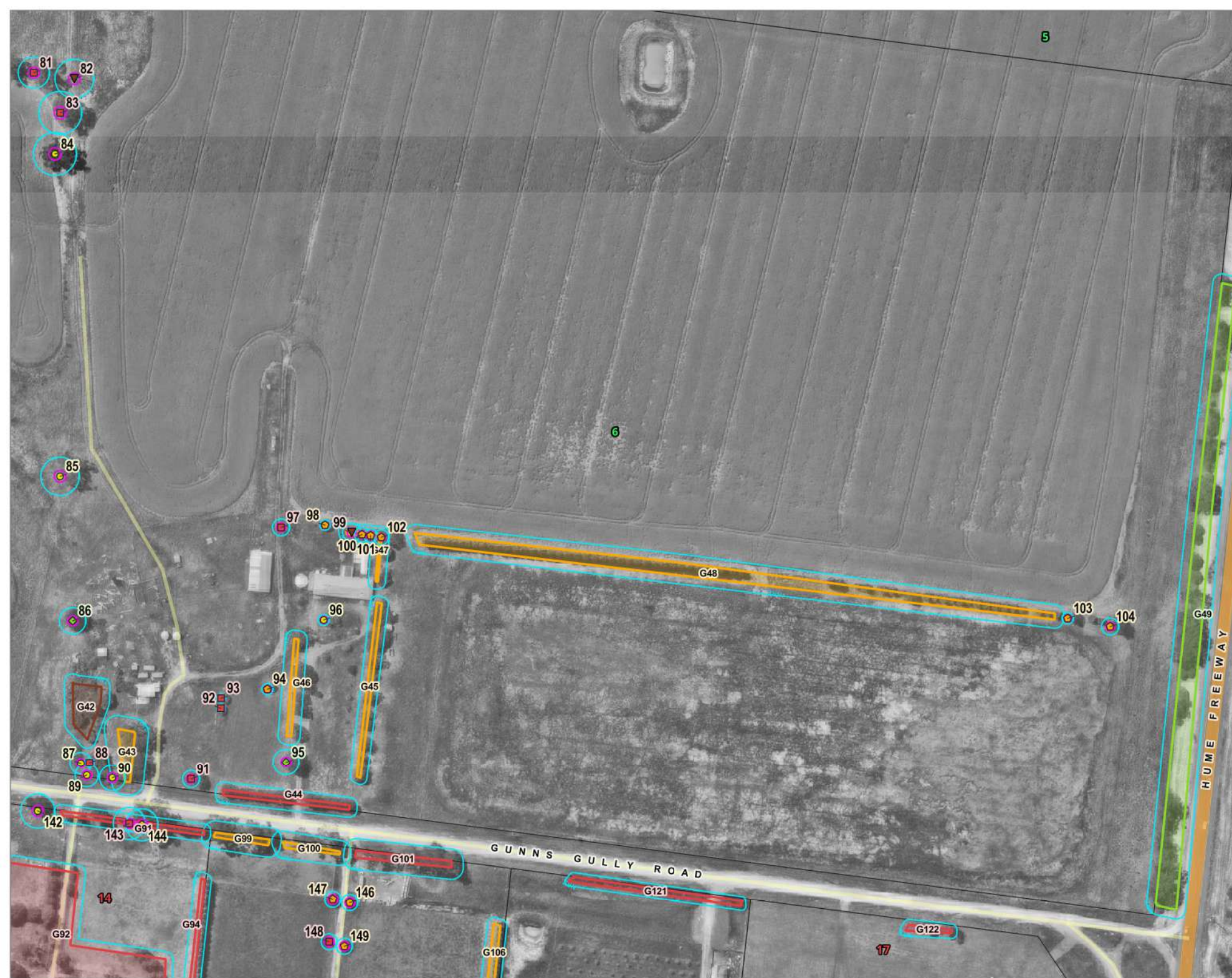
TREE LOCATION DISCLAIMER
Tree locations are approximate

COORDINATE REFERENCE SYSTEM
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TEL: 1300 656 926





LEGEND

Trees (arb.rating)

- ▲ High
- ◆ Mod-A
- Mod-B
- ◆ Mod-C
- Low
- ▼ Very Low

Protection zones

- NRZ
- SRZ

Tree groups (landscape value)

- Very high
- High
- Medium
- Low
- Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

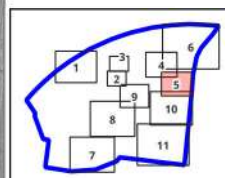
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TREE LOCATION DISCLAIMER
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LEGEND

Trees (arb.rating)

- ▲ High
- ◆ Mod-A
- Mod-B
- ◆ Mod-C
- Low
- ▼ Very Low

Protection zones

- NRZ
 - SRZ
- Tree groups (landscape value)

- Very high
- High
- Medium
- Low
- Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

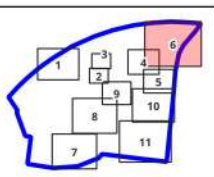
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TREE LOCATION DISCLAIMER
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Australia 3134



LEGEND

Trees (arb.rating)

▲ High

◆ Mod-A

● Mod-B

◊ Mod-C

■ Low

▼ Very Low

Protection zones

□ NRZ

□ SRZ

Tree groups (landscape value)

■ Very high

■ High

■ Medium

■ Low

■ Very Low

APPENDIX 2 TREE LOCATION PLAN

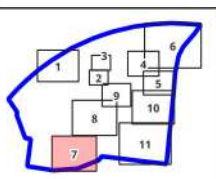
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TREE LOCATION DISCLAIMER
Tree locations are approximate

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Australia 3134





LEGEND

Trees (arb.rating)

▲ High

◆ Mod-A

● Mod-B

◆ Mod-C

■ Low

▼ Very Low

Protection zones

□ NRZ

□ SRZ

Tree groups (landscape value)

■ Very high

■ High

■ Medium

■ Low

■ Very Low

APPENDIX 2 TREE LOCATION PLAN

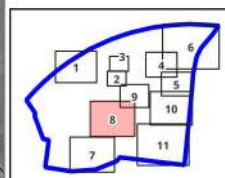
PROJECT
Merrifield North PSP

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TREE LOCATION DISCLAIMER
Tree locations are approximate

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Australia 3134





LEGEND

Trees (arb.rating)

▲ High

◆ Mod-A

● Mod-B

◆ Mod-C

■ Low

▼ Very Low

Protection zones

□ NRZ

□ SRZ

Tree groups (landscape value)

■ Very high

■ High

■ Medium

■ Low

■ Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT

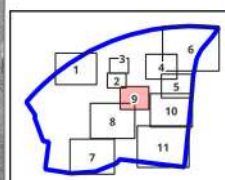
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TREE LOCATION DISCLAIMER
Tree locations are approximate

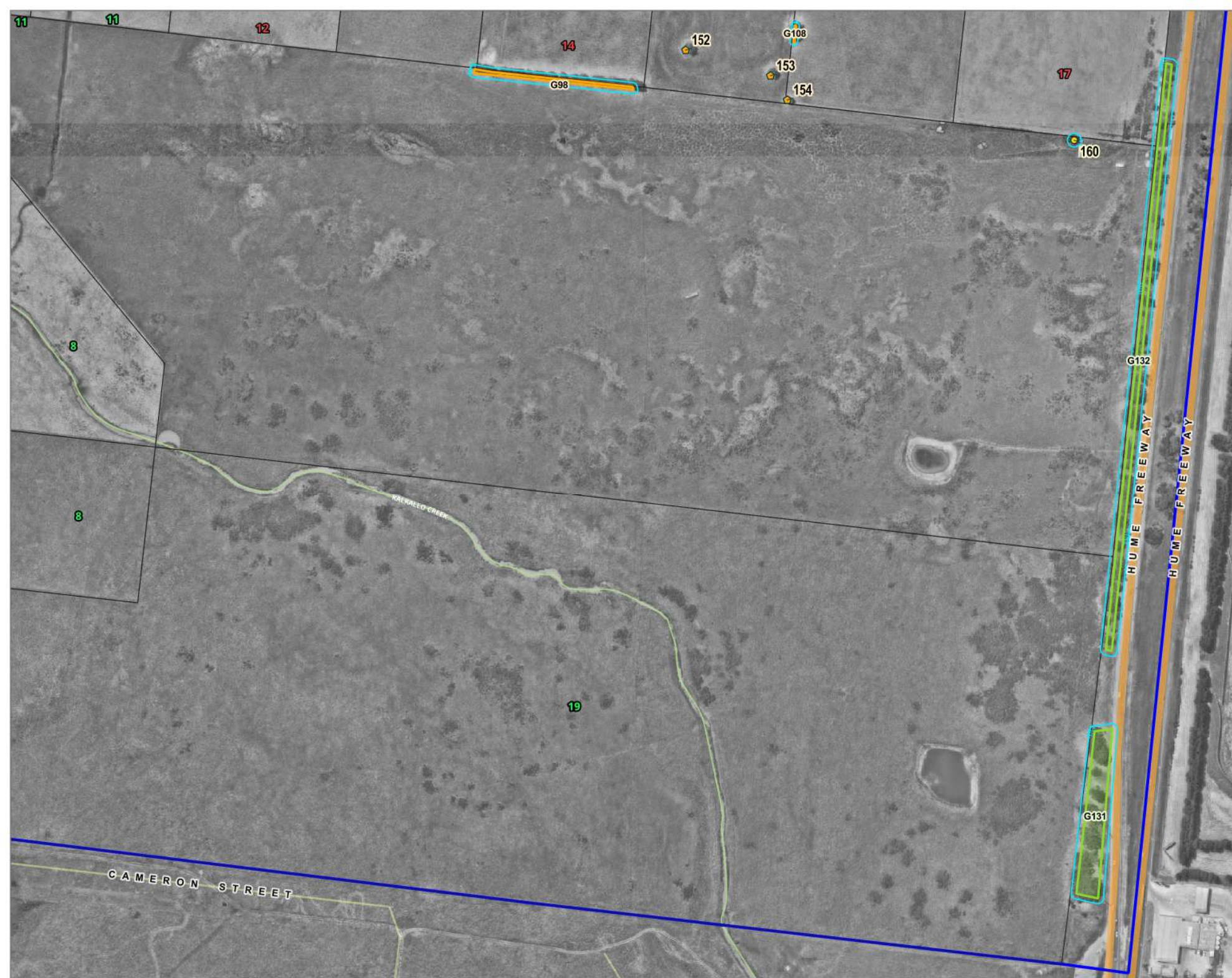
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TREELOGIC PTY LTD 11 / 107 Heatherdale Rd Ringwood, VIC Australia 3134
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TEL: 1300 656 926



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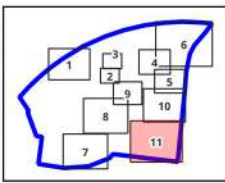


- LEGEND**
- Trees (arb.rating)
- ▲ High
 - ◆ Mod-A
 - Mod-B
 - Mod-C
 - Low
 - ▼ Very Low
- Protection zones
- NRZ
 - SRZ
- Tree groups (landscape value)
- Very high
 - High
 - Medium
 - Low
 - Very Low

APPENDIX 2 TREE LOCATION PLAN

PROJECT
Merrifield North PSP

TL REF. 014275	MAP NO. 11 / 11
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TREE LOCATION DISCLAIMER
Tree locations are approximate.

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TREELOGIC PTY LTD
ABN: 95 080 021 610
TEL: 1300 656 926



Tree ID: 1



Species: *Eucalyptus spathulata*
Arb.rating: Mod-C
Landscape value: Medium
Property: 1
Map ref: 1

Tree ID: 3



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: High
Property: 1
Map ref: 1

Tree ID: 5



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 7



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 2



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 4



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 6



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 8



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 1
Map ref: 1

Tree ID: 9



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 2
Map ref: 1

Tree ID: 11



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 2
Map ref: 1

Tree ID: 13



Species: *Eucalyptus viminalis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 2
Map ref: 1

Tree ID: 15



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: High
Property: 4
Map ref: 2

Tree ID: 10



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 2
Map ref: 1

Tree ID: 12



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: Very high
Property: 2
Map ref: 1

Tree ID: 14



Species: *Eucalyptus viminalis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 2
Map ref: 1

Tree ID: 16



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 17



Species: *Eucalyptus camaldulensis*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 19



Species: *Eucalyptus camaldulensis*
 Arb.rating: Mod-B
 Landscape value: High
 Property: 4
 Map ref: 2

Tree ID: 21



Species: *Populus nigra 'Italica'*
 Arb.rating: Mod-B
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 23



Species: *Eucalyptus globulus*
 Arb.rating: Mod-B
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 18



Species: *Populus nigra 'Italica'*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 20



Species: *Eucalyptus melliodora*
 Arb.rating: Mod-B
 Landscape value: High
 Property: 4
 Map ref: 2

Tree ID: 22



Species: *Eucalyptus camaldulensis*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 24



Species: *Eucalyptus camaldulensis*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 25



Species: *Eucalyptus globulus*
Arb.rating: Mod-B
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 27



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: High
Property: 4
Map ref: 2

Tree ID: 29



Species: *Prunus cerasifera*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 31



Species: *Populus nigra 'Italica'*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 26



Species: *Eucalyptus camaldulensis*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 28



Species: *Populus nigra 'Italica'*
Arb.rating: Low
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 30



Species: *Fraxinus angustifolia*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 32



Species: *Populus nigra 'Italica'*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 33



Species: *Crataegus monogyna*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 35



Species: *Eucalyptus viminalis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 37



Species: *Eucalyptus viminalis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 39



Species: *Melaleuca armillaris*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 34



Species: *Acacia pycnantha*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 36



Species: *Acacia melanoxylon*
Arb.rating: Very Low
Landscape value: Very low
Property: 4
Map ref: 2

Tree ID: 38



Species: *Callistemon citrinus*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 40



Species: *Fraxinus angustifolia*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 41



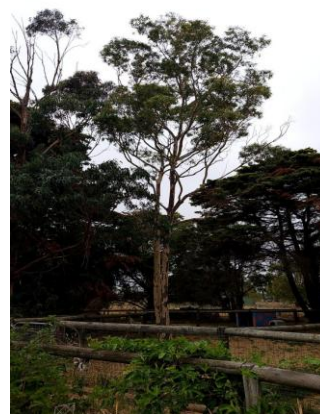
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 Arb.rating: Low
 Landscape value: Low
 Property: 4
 Map ref: 2

Tree ID: 43



Species: *Eucalyptus cladocalyx*
 Arb.rating: Mod-C
 Landscape value: Low
 Property: 4
 Map ref: 2

Tree ID: 45



Species: *Eucalyptus sp.*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 47



Species: *Fraxinus angustifolia*
 Arb.rating: Mod-B
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 42



Species: *Cupressus macrocarpa*
 Arb.rating: Mod-C
 Landscape value: Medium
 Property: 4
 Map ref: 2

Tree ID: 44



Species: *Eucalyptus globulus*
 Arb.rating: Low
 Landscape value: Low
 Property: 4
 Map ref: 2

Tree ID: 46



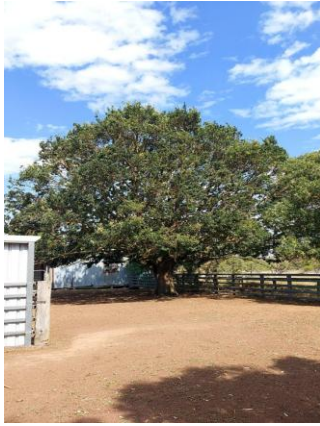
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 Arb.rating: Low
 Landscape value: Low
 Property: 4
 Map ref: 2

Tree ID: 48



Species: *Fraxinus angustifolia*
 Arb.rating: Low
 Landscape value: Low
 Property: 4
 Map ref: 2

Tree ID: 49



Species: *Quercus robur*
Arb.rating: Mod-B
Landscape value: High
Property: 4
Map ref: 2

Tree ID: 51



Species: *Fraxinus angustifolia*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 2

Tree ID: 53



Species: *Eucalyptus* sp.
Arb.rating: Low
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 55



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 50



Species: *Quercus robur*
Arb.rating: Mod-B
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 52



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 54



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 56



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 57



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 59



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: High
Property: 4
Map ref: 3

Tree ID: 61



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 63



Species: *Cupressus sempervirens*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 58



Species: *Hakea salicifolia*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 60



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 62



Species: *Cupressus sempervirens*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 64



Species: *Eucalyptus camaldulensis*
Arb.rating: Low
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 65



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 67



Species: *Cupressus macrocarpa*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 69



Species: *Callistemon viminalis*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 71



Species: *Eucalyptus saligna*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 66



Species: *Cupressus macrocarpa*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 3

Tree ID: 68



Species: *Eucalyptus* sp.
Arb.rating: Very Low
Landscape value: Very low
Property: 4
Map ref: 3

Tree ID: 70



Species: *Eucalyptus saligna*
Arb.rating: Mod-C
Landscape value: Medium
Property: 4
Map ref: 2

Tree ID: 72



Species: *Grevillea robusta*
Arb.rating: Mod-C
Landscape value: Low
Property: 4
Map ref: 3

Tree ID: 73



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Medium
Property: 5
Map ref: 4

Tree ID: 75



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-C
Landscape value: Medium
Property: 5
Map ref: 4

Tree ID: 77



Species: *Eucalyptus botryoides*
Arb.rating: Very Low
Landscape value: Low
Property: 6
Map ref: 4

Tree ID: 79



Species: *Eucalyptus botryoides*
Arb.rating: Low
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 74



Species: *Eucalyptus cladocalyx*
Arb.rating: Very Low
Landscape value: Low
Property: 5
Map ref: 4

Tree ID: 76



Species: *Eucalyptus botryoides*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 78



Species: *Eucalyptus botryoides*
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 4

Tree ID: 80



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 81



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 83



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 85



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 87



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 82



Species: *Eucalyptus cladocalyx*
Arb.rating: Very Low
Landscape value: Medium
Property: 6
Map ref: 4

Tree ID: 84



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: High
Property: 6
Map ref: 4

Tree ID: 86



Species: *Quercus robur*
Arb.rating: Mod-A
Landscape value: High
Property: 6
Map ref: 5

Tree ID: 88



Species: *Fraxinus angustifolia* subsp. *angustifolia*
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 89



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 91



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 93



Species: *Prunus* sp.
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 90



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 92



Species: *Prunus* sp.
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 94



Species: *Melaleuca styphelioides*
Arb.rating: Mod-C
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 95



Species: *Eucalyptus occidentalis*
Arb.rating: Mod-A
Landscape value: High
Property: 6
Map ref: 5

Tree ID: 97



Species: *Eucalyptus camaldulensis*
Arb.rating: Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 99



Species: *Eucalyptus viminalis*
Arb.rating: Very Low
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 101



Species: *Eucalyptus melliodora*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 96



Species: *Gleditsia triacanthos*
Arb.rating: Mod-B
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 98



Species: *Melaleuca linariifolia*
Arb.rating: Mod-C
Landscape value: Low
Property: 6
Map ref: 5

Tree ID: 100



Species: *Eucalyptus polyanthemos*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 102



Species: *Corymbia citriodora*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 103



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 105



Species: *Ulmus procera*
Arb.rating: Low
Landscape value: Low
Property: 5
Map ref: 6

Tree ID: 107



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: High
Property: 5
Map ref: 6

Tree ID: 109



Species: *Eucalyptus botryoides*
Arb.rating: Mod-B
Landscape value: Medium
Property: 5
Map ref: 6

Tree ID: 104



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 5

Tree ID: 106



Species: *Eucalyptus nicholii*
Arb.rating: Mod-C
Landscape value: Medium
Property: 5
Map ref: 6

Tree ID: 108



Species: *Pinus radiata*
Arb.rating: Mod-B
Landscape value: Medium
Property: 5
Map ref: 6

Tree ID: 110



Species: *Eucalyptus botryoides*
Arb.rating: Mod-A
Landscape value: High
Property: 5
Map ref: 6

Tree ID: 111



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: Medium
Property: 5
Map ref: 6

Tree ID: 113



Species: *Eucalyptus botryoides*
Arb.rating: Low
Landscape value: Low
Property: 5
Map ref: 6

Tree ID: 115



Species: *Eucalyptus camaldulensis*
Arb.rating: High
Landscape value: High
Property: 8
Map ref: 7

Tree ID: 117



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 8
Map ref: 8

Tree ID: 112



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: Medium
Property: 5
Map ref: 6

Tree ID: 114



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-C
Landscape value: Medium
Property: 8
Map ref: 7

Tree ID: 116



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 8
Map ref: 8

Tree ID: 118



Species: *Pinus radiata*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 119



Species: *Eucalyptus sideroxylon*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 121



Species: *Eucalyptus melliodora*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 123



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 126

No photo
Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 127



Species: *Cupressus macrocarpa*
Arb.rating: Mod-A
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 120



Species: *Pinus radiata*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 122



Species: *Eucalyptus melliodora*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 124

No photo
Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 125

No Photo
Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: Medium
Property: 9
Map ref: 9

Tree ID: 128



Species: *Eucalyptus melliodora*
Arb.rating: Low
Landscape value: Low
Property: 9
Map ref: 8

Tree ID: 130



Species: *Eucalyptus camaldulensis*
Arb.rating: Low
Landscape value: Low
Property: 9
Map ref: 8

Tree ID: 132



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Low
Property: 9
Map ref: 8

Tree ID: 134



Species: *Eucalyptus botryoides*
Arb.rating: Low
Landscape value: Medium
Property: 10
Map ref: 8

Tree ID: 129



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-C
Landscape value: Low
Property: 9
Map ref: 8

Tree ID: 131



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: High
Property: 9
Map ref: 8

Tree ID: 133



Species: *Eucalyptus melliodora*
Arb.rating: Mod-B
Landscape value: Medium
Property: 9
Map ref: 8

Tree ID: 135



Species: *Eucalyptus botryoides*
Arb.rating: Low
Landscape value: Medium
Property: 10
Map ref: 8

Tree ID: 136



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-B
Landscape value: Medium
Property: 10
Map ref: 8

Tree ID: 138



Species: *Acacia mearnsii*
Arb.rating: Mod-C
Landscape value: Medium
Property: 6
Map ref: 9

Tree ID: 140



Species: *Quercus sp.*
Arb.rating: Mod-B
Landscape value: Medium
Property: 13
Map ref: 10

Tree ID: 142



Species: *Pinus radiata*
Arb.rating: Mod-B
Landscape value: Medium
Property: 14
Map ref: 5

Tree ID: 137



Species: *Cupressus sempervirens*
Arb.rating: Mod-B
Landscape value: High
Property: 11
Map ref: 9

Tree ID: 139



Species: *Fraxinus angustifolia*
Arb.rating: Mod-B
Landscape value: High
Property: 11
Map ref: 9

Tree ID: 141



Species: *Eucalyptus sp.*
Arb.rating: Mod-B
Landscape value: Medium
Property: 13
Map ref: 10

Tree ID: 143



Species: *Eucalyptus cladocalyx*
Arb.rating: Low
Landscape value: Medium
Property: 14
Map ref: 5

Tree ID: 144



Species: *Eucalyptus cladocalyx*
Arb.rating: Mod-C
Landscape value: Medium
Property: 14
Map ref: 5

Tree ID: 146



Species: *Phoenix canariensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 5

Tree ID: 148



Species: *Phoenix canariensis*
Arb.rating: Low
Landscape value: Low
Property: 15
Map ref: 5

Tree ID: 150



Species: *Phoenix canariensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 15
Map ref: 10

Tree ID: 145



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-A
Landscape value: High
Property: 14
Map ref: 10

Tree ID: 147



Species: *Phoenix canariensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 5

Tree ID: 149



Species: *Phoenix canariensis*
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 5

Tree ID: 151



Species: *Eucalyptus sp.*
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 10

Tree ID: 152



Species: *Corymbia maculata*
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 11

Tree ID: 154



Species: *Cupressus macrocarpa*
Arb.rating: Mod-C
Landscape value: Low
Property: 16
Map ref: 11

Tree ID: 156



Species: *Eucalyptus* sp.
Arb.rating: Low
Landscape value: Low
Property: 16
Map ref: 10

Tree ID: 158



Species: *Eucalyptus camaldulensis*
Arb.rating: Mod-B
Landscape value: Medium
Property: 16
Map ref: 10

Tree ID: 153



Species: *Eucalyptus* sp.
Arb.rating: Mod-C
Landscape value: Medium
Property: 15
Map ref: 11

Tree ID: 155



Species: *Eucalyptus* sp.
Arb.rating: Low
Landscape value: Low
Property: 16
Map ref: 10

Tree ID: 157



Species: *Eucalyptus* sp.
Arb.rating: Mod-C
Landscape value: Medium
Property: 16
Map ref: 10

Tree ID: 159



Species: *Cupressus macrocarpa*
Arb.rating: Mod-C
Landscape value: Medium
Property: 16
Map ref: 10

Tree ID: 160



Species: *Fraxinus angustifolia*
Arb.rating: Mod-B
Landscape value: Medium
Property: 18
Map ref: 11

Group ID: G1



Primary species: *Eucalyptus spathulata*
Origin: Planted native
Landscape value: High
Property: 1
Map ref: 1

Group ID: G4



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 2
Map ref: 1

Group ID: G7



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 2
Map ref: 1

Group ID: G10



Primary species: *Cupressus sp.*
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G2



Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Very high
Property: 1
Map ref: 1

Group ID: G5



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: Medium
Property: 3
Map ref: 1

Group ID: G8



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 2
Map ref: 1

Group ID: G11



Primary species: *Eucalyptus camaldulensis*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G3



Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Very high
Property: 2
Map ref: 1

Group ID: G6



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Low
Property: 3
Map ref: 1

Group ID: G9



Primary species: *Cupressus sp.*
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G12



Primary species: *Cupressus macrocarpa* 'Goldcrest'
Origin: Mixed native & exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G13



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G16



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G19



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: High
Property: 4
Map ref: 2

Group ID: G22



Primary species: *Cupressus macrocarpa* 'Goldcrest'
Origin: Mixed native & exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G14



Primary species: *Eucalyptus viminalis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G17



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G20



Primary species: *Cupressus macrocarpa* 'Goldcrest'
Origin: Mixed native & exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G23



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G15



Primary species: *Cupressus macrocarpa* 'Goldcrest'
Origin: Planted exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G18



Primary species: *Cupressus sp.*
Origin: Planted exotic
Landscape value: Very low
Property: 4
Map ref: 2

Group ID: G21



Primary species: *Cupressus lusitanica*
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G24



Primary species: *Cupressus sp.*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G25



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G26



Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Medium
Property: 4
Map ref: 2

Group ID: G27



Primary species: *Yucca sp.*
Origin: Planted exotic
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G28

No photo

Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Low
Property: 4
Map ref: 3

Group ID: G29



Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G30



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 3

Group ID: G31



Primary species: *Eucalyptus camaldulensis*
Origin: Indigenous
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G32



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G33



Primary species: *Eucalyptus saligna*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G34



Primary species: *Eucalyptus melliodora*
Origin: Planted native
Landscape value: High
Property: 4
Map ref: 3

Group ID: G35



Primary species: *Eucalyptus globulus*
Origin: Planted native
Landscape value: High
Property: 4
Map ref: 3

Group ID: G36



Primary species: *Eucalyptus globulus*
Origin: Planted native
Landscape value: High
Property: 4
Map ref: 3

Group ID: G37



Primary species: *Eucalyptus occidentalis*
Origin: Planted native
Landscape value: Medium
Property: 4
Map ref: 3

Group ID: G40



Primary species: *Cupressus macrocarpa*
Origin: Mixed native & exotic
Landscape value: Low
Property: 4
Map ref: 3

Group ID: G43



Primary species: *Eucalyptus cladocalyx*
'Nana'
Origin: Planted native
Landscape value: Medium
Property: 6
Map ref: 5

Group ID: G46



Primary species: *Eucalyptus camaldulensis*
Origin: Planted native
Landscape value: Medium
Property: 6
Map ref: 5

Group ID: G38



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Very low
Property: 4
Map ref: 2

Group ID: G41



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 3

Group ID: G44



Primary species: *Xcupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 6
Map ref: 5

Group ID: G47



Primary species: *Melaleuca styphelioides*
Origin: Planted native
Landscape value: Medium
Property: 6
Map ref: 5

Group ID: G39



Primary species: *Cupressus macrocarpa*
'Goldcrest'
Origin: Planted exotic
Landscape value: Low
Property: 4
Map ref: 2

Group ID: G42



Primary species: *Fraxinus angustifolia*
subsp. *angustifolia*
Origin: Mixed native & exotic
Landscape value: Very low
Property: 6
Map ref: 5

Group ID: G45



Primary species: *Melaleuca styphelioides*
Origin: Planted native
Landscape value: Medium
Property: 6
Map ref: 5

Group ID: G48



Primary species: *Xcupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 6
Map ref: 5

Group ID: G49



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: High
Property: 5
Map ref: 5

Group ID: G52



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: High
Property: 5
Map ref: 6

Group ID: G55



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G58



Primary species: *Eucalyptus cladocalyx*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G50



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: High
Property: 5
Map ref: 6

Group ID: G53



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G56



Primary species: *Cupressus macrocarpa*
Origin: Mixed native & exotic
Landscape value: Low
Property: 5
Map ref: 6

Group ID: G59



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G51



Primary species: *Eucalyptus sp.*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G54



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G57



Primary species: *Eucalyptus saligna*
Origin: Planted native
Landscape value: Low
Property: 5
Map ref: 6

Group ID: G60



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 5
Map ref: 6

Group ID: G61



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Low
Property: 8
Map ref: 7

Group ID: G64



Primary species: *Fraxinus 'Raywood'*
Origin: Planted exotic
Landscape value: Medium
Property: 9
Map ref: 9

Group ID: G67



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 9
Map ref: 9

Group ID: G70



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 9
Map ref: 8

Group ID: G62



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: Low
Property: 8
Map ref: 7

Group ID: G65



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 9
Map ref: 9

Group ID: G68



Primary species: *Fraxinus sp.*
Origin: Planted exotic
Landscape value: Medium
Property: 9
Map ref: 9

Group ID: G71



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Low
Property: 9
Map ref: 9

Group ID: G63



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 9
Map ref: 9

Group ID: G66



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 9
Map ref: 9

Group ID: G69



Primary species: *Pinus radiata*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 9
Map ref: 9

Group ID: G72



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 10
Map ref: 9

Group ID: G73



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 10
Map ref: 9

Group ID: G76



Primary species: *Pinus radiata*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G79



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G82



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G74



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 10
Map ref: 9

Group ID: G77



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G80



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G83



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 11
Map ref: 9

Group ID: G75



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 8

Group ID: G78



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G81



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G84



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G85



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G88



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 13
Map ref:

Group ID: G91



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 14
Map ref: 5

Group ID: G94



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Low
Property: 14
Map ref: 10

Group ID: G86



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 11
Map ref: 9

Group ID: G89



Primary species: *Cupressus sp.*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 13
Map ref: 10

Group ID: G92



Primary species: *Cupressus sp.*
Origin: Mixed native & exotic
Landscape value: Low
Property: 14
Map ref: 10

Group ID: G95



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 14
Map ref: 10

Group ID: G87



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Medium
Property: 11
Map ref: 9

Group ID: G90



Primary species: *Eucalyptus globulus*
Origin: Planted native
Landscape value: Medium
Property: 13
Map ref: 10

Group ID: G93



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 14
Map ref: 10

Group ID: G96



Primary species: *Cupressus sp.*
Origin: Planted exotic
Landscape value: Low
Property: 14
Map ref: 10

Group ID: G97



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G100



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 5

Group ID: G103



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G106



Primary species: *Xcupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G98



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 18
Map ref: 11

Group ID: G101



Primary species: *Pinus radiata*
Origin: Planted exotic
Landscape value: Low
Property: 15
Map ref: 5

Group ID: G104



Primary species: *Cupressus sp.*
Origin: Planted exotic
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G107



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G99



Primary species: *Eucalyptus cladocalyx 'Nana'*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 5

Group ID: G102



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Low
Property: 15
Map ref: 10

Group ID: G105



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G108



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 11

Group ID: G109



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G112



Primary species: *Eucalyptus sp.*
Origin: Mixed native & exotic
Landscape value: Low
Property: 16
Map ref: 10

Group ID: G115



Primary species: *Cupressus macrocarpa*
Origin: Planted exotic
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G118



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G110



Primary species: *Eucalyptus sp.*
Origin: Mixed native & exotic
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G113



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G116



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 15
Map ref: 10

Group ID: G119



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G111



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G114



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G117



Primary species: *XCupressocyparis leylandii*
Origin: Planted exotic
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G120



Primary species: *Eucalyptus sp.*
Origin: Planted native
Landscape value: Medium
Property: 16
Map ref: 10

Group ID: G121



Primary species: *Acacia* sp.
Origin: Planted native
Landscape value: Low
Property: 16
Map ref: 5

Group ID: G124



Primary species: *Eucalyptus globulus*
Origin: Planted native
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G127



Primary species: *Allocasuarina verticillata*
Origin: Planted native
Landscape value: Low
Property: 17
Map ref: 10

Group ID: G130



Primary species: *Allocasuarina* sp.
Origin: Planted native
Landscape value: Low
Property: 17
Map ref: 10

Group ID: G122



Primary species: *Eucalyptus* sp.
Origin: Planted native
Landscape value: Low
Property: 17
Map ref: 5

Group ID: G125



Primary species: *Allocasuarina verticillata*
Origin: Planted native
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G128



Primary species: *Cupressus* sp.
Origin: Planted exotic
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G131



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: High
Property:
Map ref: 11

Group ID: G123



Primary species: *Allocasuarina verticillata*
Origin: Planted native
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G126



Primary species: *Eucalyptus globulus*
Origin: Planted native
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G129



Primary species: *Eucalyptus* sp.
Origin: Planted native
Landscape value: Medium
Property: 17
Map ref: 10

Group ID: G132



Primary species: *Eucalyptus cladocalyx*
Origin: Planted native
Landscape value: High
Property:
Map ref: 11

Group ID: G133



Primary species: *Eucalyptus cladocalyx*

Origin: Planted native

Landscape value: High

Property:

Map ref: 10

Appendix 4: Arboricultural Descriptors (February 2019)

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Note that not all of the described tree descriptors may be used in a tree assessment and report. The assessment is undertaken with regard to contemporary arboricultural practices and consists of a visual inspection of external and above-ground tree parts.

Tree Condition

The assessment of tree condition evaluates factors of health and structure. The descriptors of health and structure attributed to a tree evaluate the individual specimen to what could be considered typical for that species growing in its location under current climatic conditions. For example, some species can display inherently poor branching architecture, such as multiple acute branch attachments with included bark. Whilst these structural defects may technically be considered arboriculturally poor, they are typical for the species and may not constitute an increased risk of failure. These trees may be assigned a structural rating of fair-poor (rather than poor) at the discretion of the assessor.

Diagram 1 provides an indicative distribution curve for tree condition to illustrate that within a normal tree population the majority of specimens are centrally located within the condition range (normal distribution curve). Furthermore, that those individual trees with an assessed condition approaching the outer ends of the spectrum occur less often.

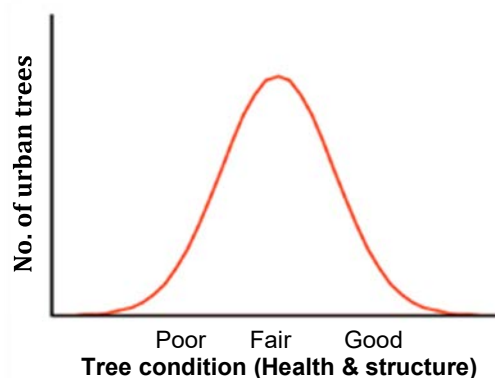


Diagram 1: Indicative normal distribution curve for tree condition

Tree Name

Provides botanical name, (genus, species, variety and cultivar) according to accepted international code of taxonomic classification, and common name.

Tree Type

Describes the general geographic origin of the species and its type e.g. deciduous or evergreen.

Category	Description
Indigenous	Occurs naturally in the area or region of the subject site. Remnant.
Victorian native	Occurs naturally within some part of the State of Victoria (not exclusively) but is not indigenous (component of EVC benchmark). Could be planted indigenous trees.
Australian native	Occurs naturally within Australia but is not a Victorian native or indigenous
Exotic deciduous	Occurs outside of Australia and typically sheds its leaves during winter
Exotic evergreen	Occurs outside of Australia and typically holds its leaves all year round
Exotic conifer	Occurs outside of Australia and is classified as a gymnosperm
Native conifer	Occurs naturally within Australia and is classified as a gymnosperm
Native Palm	Occurs naturally within Australia. Woody monocotyledon
Exotic Palm	Occurs outside of Australia. Woody monocotyledon

Height and Width

Indicates height and width of the individual tree; dimensions are expressed in metres. Crown heights are measured with a height meter where possible. Due to the topography of some sites and/or the density of vegetation it may not be possible to do this for every tree. Tree heights may be estimated in line with previous height meter readings in conjunction with assessor's experience. Crown widths are generally paced (estimated) at the widest axis or can be measured on two axes and averaged. In some instances the crown width can be measured on the four cardinal direction points (North, South, East and West).

Crown height, crown spread are generally recorded to the nearest half metre (crown spread would be rounded up) for dimensions up to 10 m and the nearest whole metre for dimensions over 10 m. Estimated dimensions

(e.g. for off-site or otherwise inaccessible trees where accurate data cannot be recovered) shall be clearly identified in the assessment data.

Trunk diameters

The position where trunk diameters are captured may vary dependent on the requirements of the specific assessment and an individual trees specific characteristics. DBH is the typical trunk diameter captured as it relates to the allocation of tree protection distances. The basal trunk diameter assists in the allocation of a structural root zone. Some municipalities require trunk diameters be captured at different heights, with 1.0 m above grade being a common requirement. The specific planning schemes will be checked to ascertain requirements.

Stem diameters shall be recorded in centimetres, rounded to the nearest 1 cm (0.01 m).

Diameter at Breast Height (DBH)

Indicates the trunk diameter (expressed in centimetres) of an individual tree measured at 1.4m above the existing ground level or where otherwise indicated, multiple leaders are measured individually. Plants with multiple leader habit may be measured at the base. The range of methods to suit particular trunk shapes, configurations and site conditions can be seen in Appendix A of Australian Standard AS 4970-2009 *Protection of trees on development sites*. Measurements undertaken using foresters tape or builders tape.

Basal trunk diameter

The basal dimension is the trunk diameter measured at the base of the trunk or main stem(s) immediately above the root buttress. Used to ascertain the Structural Root Zone (SRZ) as outlined in AS4970.

Health

Assesses various attributes to describe the overall health and vitality of the tree.

Category	Vitality, Extension growth	Decline symptoms, Deadwood, Dieback	Foliage density, colour, size, intactness	Pests and or disease
Good	Above typical. Excellent. Full canopy density	Negligible	Better than typical	Negligible
Fair	Typical vitality. >80% canopy density	Minor or expected. Little or no dead wood	Typical. Minor deficiencies or defects could be present.	Minor, within damage thresholds
Fair to Poor	Below typical - low vitality	More than typical. Small sub-branch dieback	Exhibiting deficiencies. Could be thinning, or smaller	Exceeds damage thresholds
Poor	Minimal - declining	Excessive, large and/or prominent amount & size of dead wood. Significant dieback	Exhibiting severe deficiencies. Thinning foliage, generally smaller or deformed	Extreme and contributing to decline
Dead	N/A	N/A	N/A	N/A

Structure

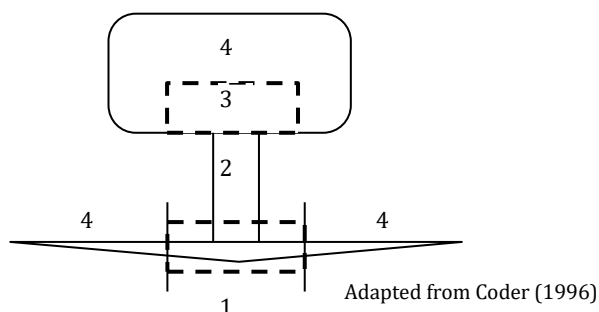
Assesses principal components of tree structure (Diagram 2).

Descriptor	Zone 1 - Root plate & lower stem	Zone 2 - Trunk	Zone 3 - Primary branch support	Zone 4 - Outer crown and roots
Good	No obvious damage, disease or decay; obvious basal flare / stable in ground	No obvious damage, disease or decay; well tapered	Well formed, attached, spaced and tapered. No history of failure.	No obvious damage, disease, decay or structural defect. No history of failure.

Fair	Minor damage or decay. Basal flare present.	Minor damage or decay	Generally, well attached, spaced and tapered branches. Minor structural deficiencies may be present or developing. No history of branch failure.	Minor damage, disease or decay; minor branch end-weight or over-extension. No history of branch failure.
Fair to Poor	Moderate damage or decay; minimal basal flare.	Moderate damage or decay; approaching recognised thresholds	Weak, decayed or with acute branch attachments; previous branch failure evidence.	Moderate damage, disease or decay; moderate branch end-weight or over-extension. Minor branch failure evident.
Poor	Major damage, disease or decay; fungal fruiting bodies present. Excessive lean placing pressure on root plate	Major damage, disease or decay; exceeds recognised thresholds; fungal fruiting bodies present. Acute lean. Stump re-sprout	Decayed, cavities or has acute branch attachments with included bark; excessive compression flaring; failure likely. Evidence of major branch failure.	Major damage, disease or decay; fungal fruiting bodies present; major branch end-weight or over-extension. Branch failure evident.
Very Poor	Excessive damage, disease or decay; unstable / loose in ground; altered exposure; failure probable	Excessive damage, disease or decay; cavities. Excessive lean. Stump re-sprout	Decayed, cavities or branch attachments with active split; failure imminent. History of major branch failure.	Excessive damage, disease or decay; excessive branch end-weight or over-extension. History of branch failure.

Diagram 2: Tree structure zones

1. Root plate & lower stem
2. Trunk
3. Primary branch support
4. Outer crown & roots



Structure ratings will also take into account general branching architecture, stem taper, live crown ratio, crown symmetry (bias or lean) and crown position such as tree being suppressed amongst more dominant trees.

The lowest or worst descriptor assigned to the tree in any column could generally be the overall rating assigned to the tree. The assessment for structure is limited to observations of external and above ground tree parts. It does not include any exploratory assessment of underground or internal tree parts unless this is requested as part of the investigation. Trees are assessed and then given a rating for a point in time. Generally, trees with a poor or very poor structure are beyond the benefit of practical arboricultural treatments.

The management of trees in the urban environment requires appropriate arboricultural input and consideration of risk. Risk potential will consider the combination of likelihood of failure and impact, including the perceived importance of the target(s).

Age class

Relates to the physiological stage of the tree's life cycle.

Category	Description
Young	Sapling tree and/or recently planted. Approximately 5 or less years in location.
Semi-mature	Tree increasing in size and yet to achieve expected size in situation. Primary developmental stage.
Early-mature	Tree established, generally growing vigorously. > 50% of attainable age/size.
Mature	Specimen approaching expected size in situation, with reduced incremental growth.
Over-mature	Mature full-size with a retrenching crown. Tree is senescent and in decline. Significant decay generally present.

Useful life expectancy

Assessment of useful life expectancy provides an indication of health and tree appropriateness and involves an estimate of how long a tree is likely to remain in the landscape based on species, stage of life (cycle), health, amenity, environmental services contribution, conflicts with adjacent infrastructure and risk to the community. It would enable tree managers to develop long-term plans for the eventual removal and replacement of existing trees in the public realm. It is not a measure of the biological life of the tree within the natural range of the species. It is more a measure of the health status and the trees positive contribution to the urban landscape.

Within an urban landscape context, particularly in relation to street trees, it could be considered a point where the costs to maintain the asset (tree) outweigh the benefits the tree is returning.

The assessment is based on the site conditions not being significantly altered and that any prescribed maintenance works are carried out (site conditions are presumed to remain relatively constant and the tree would be maintained under scheduled maintenance programs).

Useful Life Expectancy	Typical characteristics
<1 year (No remaining ULE)	Tree may be dead or mostly dead. Tree may exhibit major structural faults. Tree may be an imminent failure hazard. Excessive infrastructure damage with high risk potential that cannot be remedied.
1-5 years (Transitory, Brief)	Tree is exhibiting severe chronic decline. Crown is likely to be less than 50% typical density. Crown may be mostly epicormic growth. Dieback of large limbs is common (large deadwood may have been pruned out). Major structural defects that cannot be remedied. Tree may be over-mature and senescing. Infrastructure conflicts with heightened risk potential. Tree has outgrown site constraints.
6-10 years (Short)	Tree is exhibiting chronic decline. Crown density will be less than typical and epicormic growth is likely to present. The crown may still be mostly entire, but some dieback is likely to be evident. Dieback may include large limbs. Structural defects present that influence the tree's risk rating, amenity or vitality. Over-mature and senescing or early decline symptoms in short-lived species. Early infrastructure conflicts with potential to increase regardless of management inputs.
11-20 years (Moderate)	Tree not showing symptoms of chronic decline, but growth characteristics are likely to be reduced (bud development, extension growth etc.). Developing structural defects that reduce viability with limited scope for management. Tree may be over-mature and beginning to senesce. Potential for infrastructure conflicts regardless of management inputs.
21-40 years (Moderately long)	Trees displaying normal growth characteristics, but vitality is likely to be reduced (bud development, extension growth etc.). Structural issues relatively minor and manageable with arboricultural input. Tree may be growing in restricted environment (e.g. streetscapes) or may be in late maturity. Semi-mature and mature trees exhibiting normal growth characteristics. Juvenile trees in streetscapes.
>40 years (Long)	Generally juvenile and semi-mature trees exhibiting normal growth characteristics within adequate spaces to sustain growth, such as in parks or open space. Could also pertain to maturing, long-lived trees. No observable major structural defects. Tree well suited to the site with negligible potential for infrastructure conflicts.

Note that ULE may change for a tree dependent on the prevailing climatic conditions, sudden changes to a tree's growing environment creating an acute stress or impact by pathogens.

The ULE may not be applicable for trees that are manipulated, such as topiary, or grown for specific horticultural purposes, such as fruit trees.

There may be instances where remedial tree maintenance could extend a tree's ULE.

Arboricultural Rating

Relates to the combination of assigned tree condition factors, including health and structure (arboricultural merit) and ULE, and conveys an amenity value (An amenity tree can occupy a site that complements its surroundings in a useful manner which culminates in the aid, protection, comfort and emotional response of humans. Adapted from Coder, 2004). Amenity relates to the trees biological, functional and aesthetic

characteristics (Hitchmough, 1994) within an urban landscape context. The presence of any serious disease or tree-related hazards that would impact risk potential are considered.

The arboricultural rating can be used by applying only the main category high, moderate, low or very low without using the sub categories. The sub-categories can assist in differentiating a trees value and/or characteristic in more detail within the specific tree assessment context, such as a development site.

Arboricultural rating			
Category	Description		
High	Exemplary specimen due to multiple factors which could include; good condition and vitality, large size/canopy and prominence in the landscape. Likely to be a very long-term component in the landscape with a long ULE. Other factors that could contribute to a high rating: • Particularly good example of the species; rare or uncommon. • Tree has visual importance as a landscape feature; provides substantial contribution to landscape character. • Tree may have significant ecological or conservation value. • *Tree has historical, commemorative or other distinct social/cultural significance. Trees in this category must be considered for retention and/or incorporated within design proposals.		
Category	Description	Sub category	Description
Moderate	Tree of moderate quality, in fair or typical condition. Tree may have a condition, and or structural problem that will respond to arboricultural treatment. These trees have the potential to be moderate- to long-term components of the landscape (moderate to long ULE) if managed appropriately. The sub-categories relate predominately to age, size and amenity. Trees in this category should be considered for retention and/or incorporated within design proposals.	A	Moderate to large, maturing tree. Suited to the site & contributes to the landscape character. Tree may have conservation or other cultural/social value.
		B	Moderate sized, established tree, > 50% of attainable age/size. Suited to the site & contributes to the landscape character (other attributes covered under 'Moderate' description)
		C	• Young to semi-mature, generally a smaller tree, established, >15 cm DBH, >5 years in the location. Not a dominant canopy. No significant qualities currently but has the potential to become a higher value tree & long-term component of the landscape. Replacement of tree is likely to take up to 6 - 10 years to attain similar attributes. • Semi- to mature tree with accumulating deficiencies and reducing ULE, trending towards Low arboricultural value.
Category	Description		
Low	Unremarkable tree of low quality or little amenity value. Tree in either poor health and/or with poor structure. Short to transitory useful life expectancy (<10 years). • Tree is not prominent in the landscape due to its size or age, such as young trees with a stem diameter below 15 cm. Tree < 5 years in location. These trees are easily replaceable or capable of being transplanted. • Tree (species) is functionally inappropriate to the specific location. Is causing excessive damage/nuisance to adjacent infrastructure or would be expected to be problematic if retained (i.e. palm tree under power lines). • Unremarkable tree of no material landscape, conservation or other cultural value. Not visible from surrounding landscapes. • Tree infected with pathogens that could lead to its decline. • Tree has potential to be an environmental woody weed (may be dependent on location of tree in an urban landscape). • Tree impacting or suppressing trees of better quality. Retention of such trees may be considered if not requiring a disproportionate expenditure of resources for a tree in its condition and location.		
Category	Description		

Very low	Trees of low quality with a brief to no remaining ULE (<5 years). • Tree has either a severe structural defect or health problem or combination that cannot be sustained with practical arboricultural techniques and the loss of the tree or tree part would be expected in the short term. • Tree whose retention would not be viable after the removal of adjacent trees, such as trees that have developed in close spaced groups and would not be expected to adapt to severe and sudden alterations to environmental & site conditions, e.g. removal of adjacent shelter trees. • Small or young tree, <5m in height, <10cm DBH. Easily replaced in short-term or capable of being transplanted. • Acknowledged environmental woody weed species. Tree has a detrimental effect on the environment, for example, the tree has weed potential and is likely to spread into waterways or natural areas if nearby. • Tree infected with pathogens that will lead to decline and has potential to spread to adjacent trees. • Tree is dead (dead tree may offer habitat values) or is showing signs of significant, immediate, and irreversible overall decline. Tree cannot realistically be retained and should be considered for removal.
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Other considerations - Even though a tree may be declining or dead, a tree could be retained for other purposes such as habitat or soil stabilisation. These trees would still need to be managed appropriately to reduce risk.

*A tree may have (attract) a high value by the community for historical, commemorative or other distinct social/cultural significance factors, albeit the tree may not be in good condition. In the context of an assessment, for multiple reasons, but more so for development, if it is a noted 'significant' tree it should receive higher consideration during the planning process.

Trees have many values, not all of which are considered when an arboricultural assessment is undertaken. However, individual trees or tree group features may be considered important community resources because of unique or noteworthy characteristics or values other than their age, dimensions, health or structural condition. Recognition of one or more of the following criteria is designed to highlight other considerations that may influence the future management of such trees.

Significance	Description
Horticultural Value/ Rarity	Outstanding horticultural or genetic value; could be an important source of propagating stock, including specimens that are particularly resistant to disease or exposure. Any tree of a species or variety that is rare.
Historic, Aboriginal Cultural or Heritage Value	Tree could have value as a remnant of a particular important historical period or a remnant of a site or activity no longer in action. Tree has a recognised association with historic aboriginal activities, including scar trees. Tree commemorates a particular occasion, including plantings by notable people, or having associations with an important event in local history.
Ecological Value	Tree could have value as habitat for indigenous wildlife, including providing breeding, foraging or roosting habitat, or is a component of a wildlife reserve. Remnant Indigenous vegetation that contribute to biological diversity

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Appendix 5: Tree Protection Zones

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1. Introduction

To sustain trees on a development site, consideration must be given to the establishment of tree protection zones.

The physical dimensions of tree protection zones can sometimes be difficult to define. The projection of a tree's crown can provide a guide but is by no means the definitive measure. The unpredictable nature of roots and their growth, differences between species and their tolerances, and observable and hidden changes to the trees growing environment, because of development, are variables that must be considered.

Most vigorous, broad canopied trees survive well if the area within the drip-line of the canopy is protected. Fine root density is usually greater beneath the canopy than beyond (Gilman, 1997). If few to no roots over 3cm in diameter are encountered and severed during excavation the tree will probably tolerate the impact and root loss. A healthy tree can sustain a loss of between 30% and 50% of absorbing roots (Harris, Clark, Matheny, 1999), however encroachment into the structural root system of a tree may be problematic.

The structural root system of a tree is responsible for ensuring the stability of the entire tree structure in the ground. A tree could not sustain loss of structural root system and be expected to survive let alone stand up to average annual wind loads upon the crown.

2. Notional Root Zone (NRZ)

Calculation of the NRZ (as defined in Australian Standard AS 4970-2025 *Protection of trees on development sites*) is a theoretical zone that surrounds each tree radially. The NRZ for individual trees is calculated based on trunk (stem) diameter (DSH), measured at 1.4 metres up from ground level. The radius of the NRZ is calculated by multiplying the trees DBH by 12. NRZ distances are measured as a radius from the centre of the trunk at (or near) ground level. The minimum NRZ should be no less than 2m and the maximum no more than 15m radius. The NRZ of palms should be not less than 1.0m outside the crown projection.

Encroachment into the NRZ is permissible under certain circumstances though is dependent on both site conditions and tree characteristics. Minor encroachment, up to 10% of the NRZ, is generally permissible provided encroachment is compensated for by recruitment of an equal area contiguous with the NRZ. Examples are provided in Diagram 1. Encroachment between 10-20% is considered moderate encroachment and is only permissible if it can be demonstrated that after such encroachment the tree would remain viable. Major Encroachment, greater than 20% of the NRZ and/or incursion into the SRZ, may have deleterious effects on tree condition/stability and requires engagement of a project arborist to assist with alternative design options and/or undertake advanced investigations to demonstrate that the tree would remain viable.

Existing infrastructure around some trees may be within the NRZ or root plate radius. The roots of some trees may have grown in response to the site conditions and therefore if existing hard surfaces and building alignments are utilised in new designs the impacts on the trees should be minimal.

The most reliable way to estimate root disturbance is to find out where the roots are in relation to the demolition, excavation or construction works that will take place (Matheny & Clark, 1998). Exploratory excavation prior to commencement of construction can help establish the extent of the root system and where it may be appropriate to excavate or build.

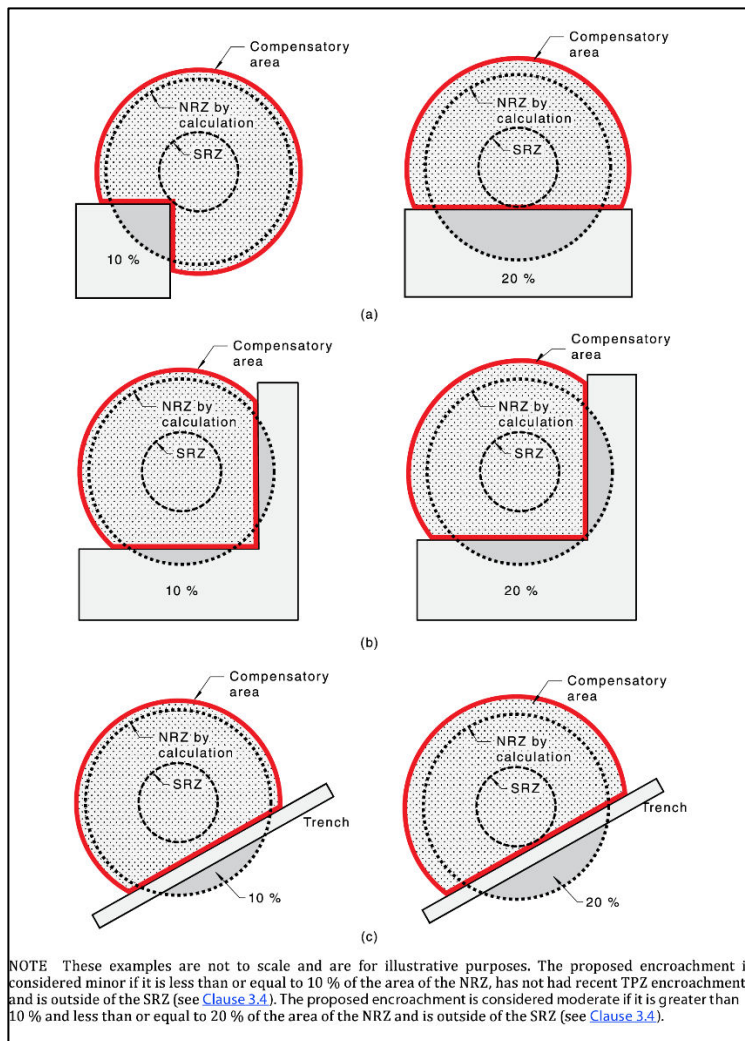


Diagram 1: Examples of minor, moderate and major encroachment into a NRZ. (Extract from: AS4970-2025, Figure 1, p23 of 46)

3. Allocation of tree protection zone (TPZ)

Once it has been established, through an arboricultural assessment, which trees and tree groups are to be retained, the next step will require careful management through the development process to minimise any impacts on the designated trees. The successful retention of trees on any particular site will require the commitment and understanding of all parties involved in the development process.

The most important activity, after determining the trees that will be retained, is the implementation of a TPZ.

The intention of tree protection zones is to:

- mitigate tree hazards;
- provide adequate root space to sustain the health and aesthetics of the tree into the future;
- minimise changes to the trees growing environment, which is particularly important for mature specimens;
- minimise physical damage to the root system, canopy and trunk; and
- define the physical alignment of the tree protection fencing

TPZs are to be allocated to trees being retained within a site redevelopment. The method of allocating a TPZ to a tree will be influenced by the NRZ along with site factors, the tree species, its age, and developed form.

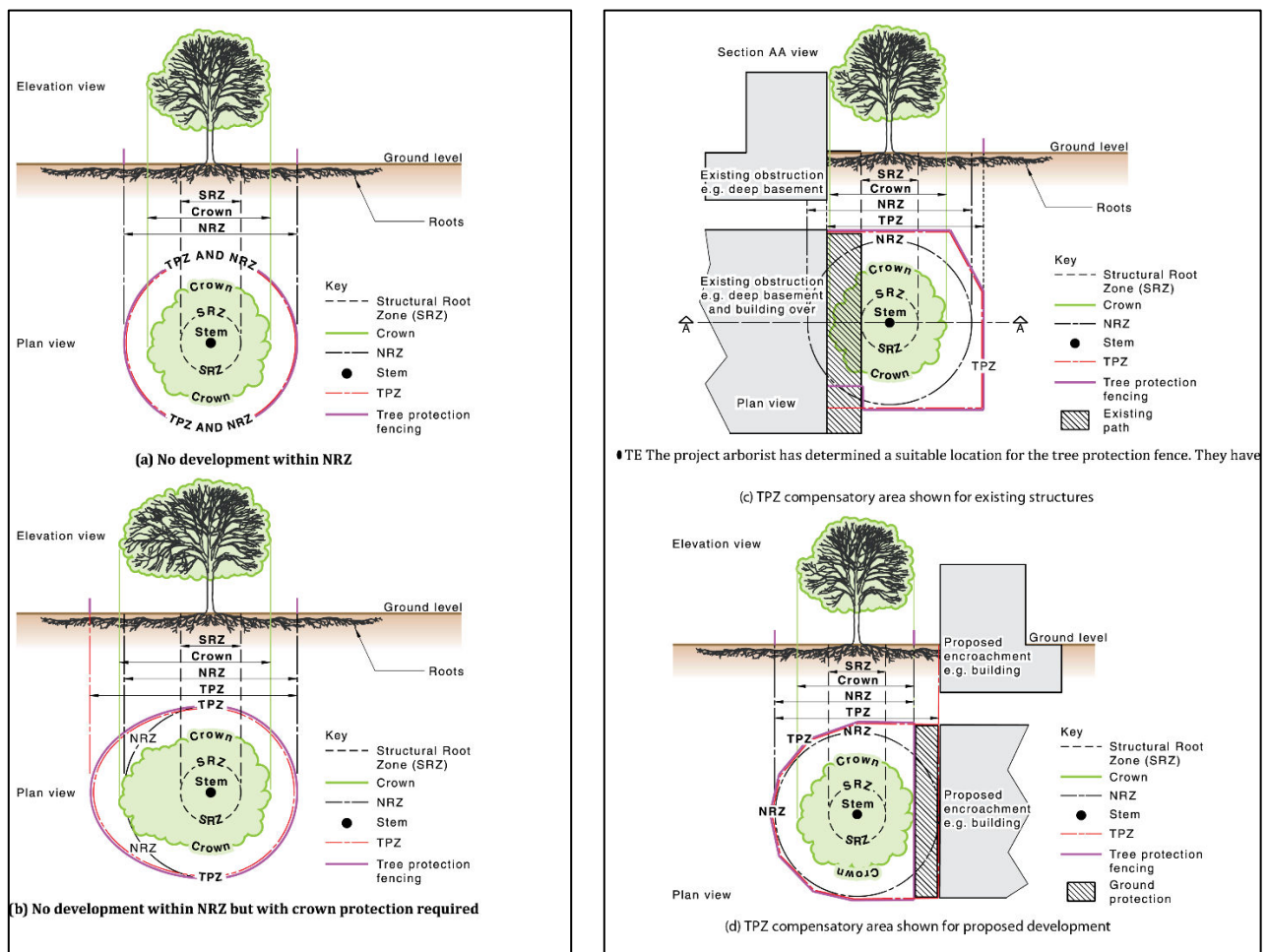
Tree root growth is opportunistic and occurs where the essentials to life (primarily air and water) are

present.

Heterogeneous soil conditions, existing barriers, hard surfaces and buildings may have inhibited the development of a symmetrically radiating root system. The TPZ should factor in site conditions along with any allowed encroachments, and allocate a zone that can realistically be protected and provide sufficient nourishment for the tree's ongoing vitality.

The TPZ should also consider the canopy and overall form of the tree which may require TPZ expanding beyond the NRZ in some areas (e.g. see Diagram 3). If the canopy requires severe pruning to accommodate a building or other works and in the process the form of the tree is diminished it may be worthwhile considering altering the design or removing the tree.

Importantly, the TPZ should account for any allowed encroachment within the NRZ, by allocating a compensatory area equal to the encroachment onto another area contiguous to the TPZ (see Diagrams 1 and 5).



Diagrams 2, 3, 4 & 5. Examples of TPZ establishment in different scenarios (Extract from: AS4970-2025, Figure 3, pp25-26 of 46)

General tree protection guidelines

The most important factors are:

- Prior to construction works the trees nominated for tree works should be pruned to remove larger dead wood. Pruning works may also identify other tree hazards that require remedial works.
- Installation of tree protection fencing. Once the tree protection zones have been determined the next step is to mulch the zone with woodchip and erect tree protection fencing. This must be completed prior to any materials being brought on-site, erection of temporary site facilities or demolition/earth works. The protection fencing must be sturdy and withstand winds and construction impacts. The protection fence should only be moved with approval of the site supervisor. Other root zone protection methods can be incorporated if the TPZ area needs to be traversed.

- Appropriate signage is to be fixed to the fencing to alert people as to importance of the tree protection zone.
- The importance of tree preservation must be communicated to all relevant parties involved with the site.
- Inspection of trees during excavation works.

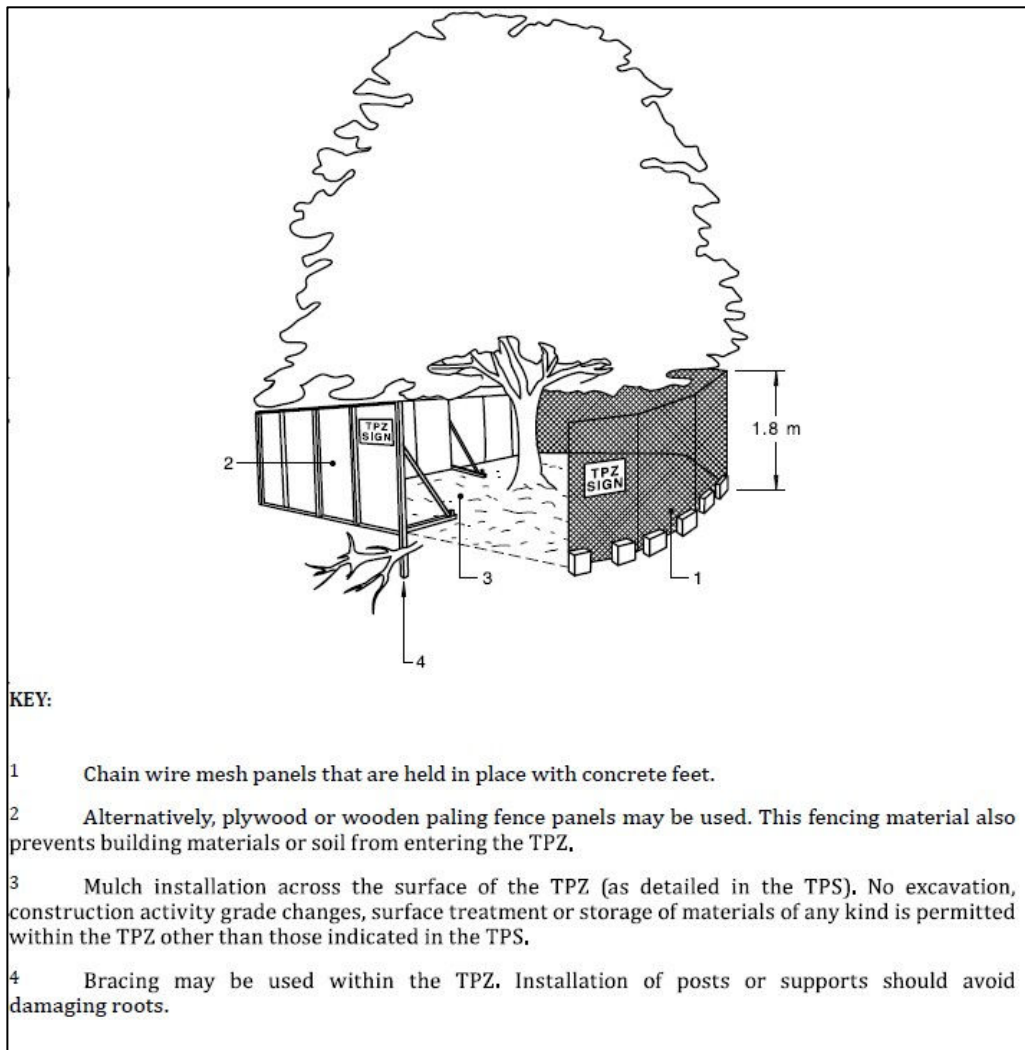


Diagram 6: Protective fencing (Extract from: AS4970-2025, Figure 4, p28 of 46)

Exploratory excavation

The most reliable way to estimate root disturbance is to find out where the roots are in relation to the demolition, excavation or construction works that will take place (Matheny & Clark, 1998).

Exploratory excavation prior to commencement of construction can help establish the extent of the root system and where it may be appropriate to excavate or build. This also allows management decisions to be made and allows time for redesign works if required.

Any exploratory excavation within the allocated NRZ is to be undertaken with due care of the roots. Minor exploration is possible with hand tools. More extensive exploration may require the use of high pressure water or air excavation techniques. Either hydraulic or pneumatic excavation techniques will safely expose tree roots; both have specific benefits dependent on the situation and soil type. An arborist is to be consulted on which system is best suited for the site conditions.

Substantial roots are to be exposed and left intact.

Once roots are exposed decisions can be made regarding the management of the tree. Decisions will

be dependent on the tree species, its condition, its age, its relative tolerance to root loss, and the amount of root system exposed and requiring pruning.

Other alternative measures to encroaching the NRZ may include boring or tunnelling.

How to determine the diameter of a substantial root

The size of a substantial root will vary according to the distance of the exposed root to the trunk of the tree. The further away from the trunk of a tree that a root is, the less significant the root is likely to be to the tree's health and stability.

The determination of what is a substantial root is often difficult because the form, depth and spread of roots will vary between species and sites. However, because smaller roots are connected to larger roots in a framework, there can be no doubt that if larger roots are severed, the smaller roots attached to them will die. Therefore, the larger the root, the more significant it may be.

Gilman (1997) suggests that trees may contain 4-11 major lateral roots and that the five largest lateral roots account (act as a conduit) for 75% of the total root system. These large lateral roots quickly taper within a distance to the tree, this distance is identified as the Structural Root Zone (SRZ). Within the SRZ distance, all roots and the soil surrounding the roots are deemed significant.

No root or soil disturbance is permitted within the SRZ

In the area outside the SRZ the tree may tolerate the loss of one or a number of roots. The table below indicates the size of tree roots, outside the SRZ that would be deemed substantial for various tree heights. The assessment of combined root loss within the NRZ would need to be undertaken by an arborist on an individual basis because the location of the tree, its condition and environment would need to be assessed.

Table 1: Estimated significant root sizes outside SRZ

Height of tree	Diameter of root	Height of tree	Diameter of root
Less than 5m	≥ 30mm	Less than 5m	≥ 30mm
Between 5m - 15m	≥ 50mm	Between 5m - 15m	≥ 50mm
More than 15m	≥ 70mm	More than 15m	≥ 70mm

Ground buffering

Where works are required to be undertaken within the tree root zone, surface, ground buffering and trunk and limb protection must be provided to minimise the potential for soil to become compacted and avoid potential for impact wounds to occur to surface roots, trunk or limbs. Refer below.

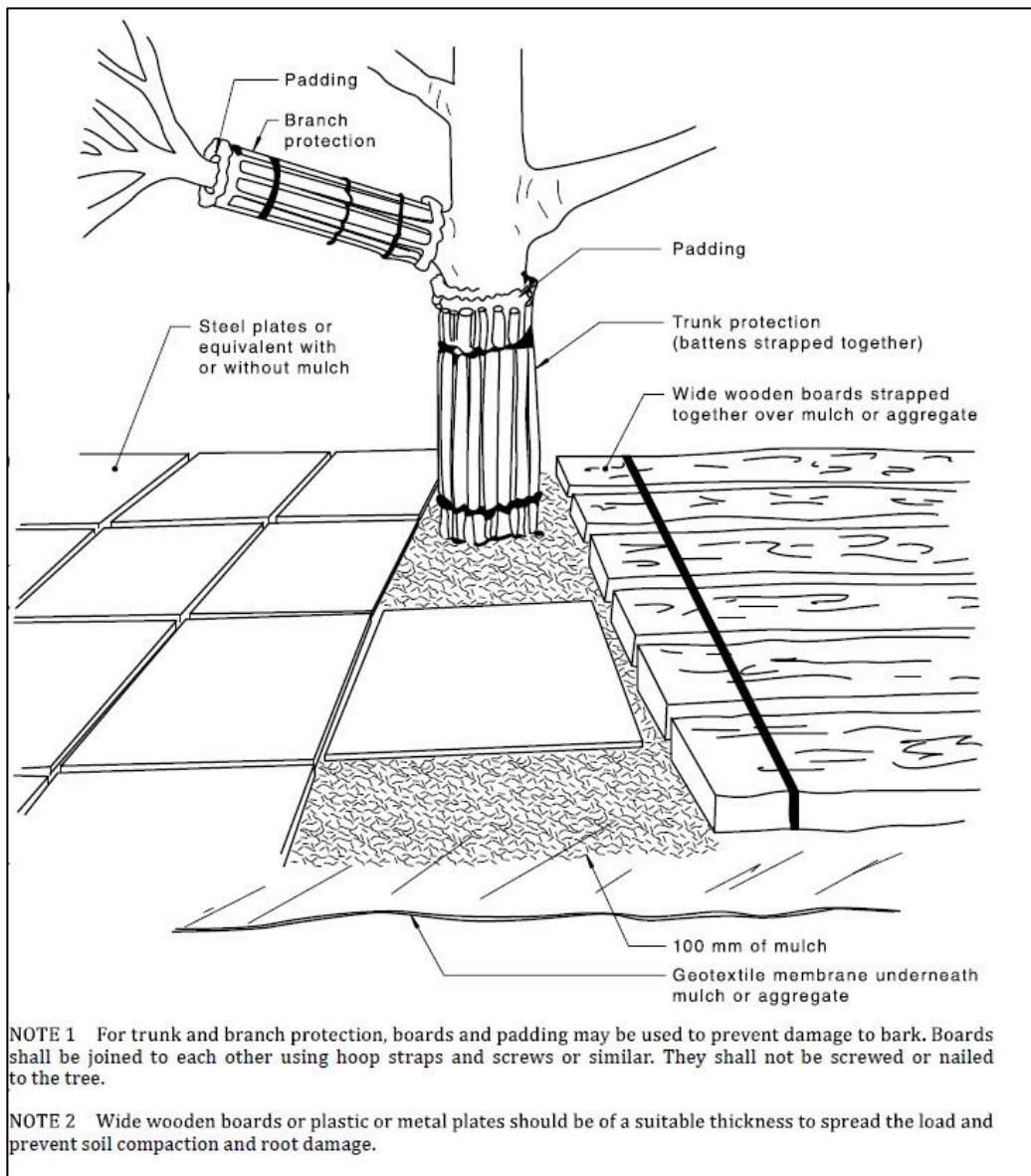


Diagram 7: Examples of ground buffering and trunk and limb protection (Extract from: AS4970-2025, Figure 5, p30 of 46)

Construction Guidelines

The following are guidelines that must be implemented to minimise the impact of the proposed construction works on the retained trees.

- The Tree Protection Zone (TPZ) is fenced and clearly marked at all times. The actual fence specifications should be a minimum of 1.2 - 1.5 metres of chain mesh or like fence with 1.8 meter posts (e.g. treated pine or star pickets) or like support every 3-4 metres and a top line of high visibility plastic hazard tape. The posts should be strong enough to sustain knocks from on site excavation equipment. This fence will deter the placement of building materials, entry of heavy equipment and vehicles and also the entry of workers and/or the public into the TPZ. Note: There are many different variations on the construction type and material used for TPZ fences, suffice to say that the fence should satisfy the responsible authority.
- Contractors and site workers should receive written and verbal instruction as to the importance of tree protection and preservation within the site. Successful tree preservation occurs when there is a commitment from all relevant parties involved in designing, constructing and managing a development project. Members of the project team need to interact with each other to minimise the impacts to the trees, either through design decisions or construction practices. The importance of tree preservation must be communicated to all relevant parties involved with the site.
- The consultant arborist is on-site to supervise excavation works around the existing trees where the TPZ will be encroached.
- A layer of organic mulch (woodchips) to a depth of no more than 100mm should be placed over the root systems within the TPZ of trees, which are to be retained so as to assist with moisture retention and to reduce the impact of compaction.
- No persons, vehicles or machinery to enter the TPZ without the consent of the consulting arborist or site manager.
- Where machinery is required to operate inside the TPZ it must be a small skid drive machine (i.e Dingo or similar) operating only forwards and backwards in a radial direction facing the tree trunk and not altering direction whilst inside the TPZ to avoid damaging, compacting or scuffing the roots.
- Any underground service installations within the allocated TPZ should be bored and utility authorities should common trench where possible.
- No fuel, oil dumps or chemicals shall be allowed in or stored on the TPZ and the servicing and re-fuelling of equipment and vehicles should be carried out away from the root zones.
- No storage of material, equipment or temporary building should take place over the root zone of any tree.
- Nothing whatsoever should be attached to any tree including temporary services wires, nails, screws or any other fixing device.
- Supplementary watering should be provided to all trees through any dry periods during and after the construction process. Proper watering is the most important maintenance task in terms of successfully retaining the designated trees. The areas under the canopy drip lines should be mulched with woodchip to a depth of no more than 100mm. The mulch will help maintain soil moisture levels. Testing with a soil probe in a number of locations around the tree will help ascertain soil moisture levels and requirements to irrigate. Water needs to be applied slowly to avoid runoff. A daily watering with 5 litres of water for every 30 mm of trunk calliper may provide the most even soil moisture level for roots (Watson & Himelick, 1997),

however light frequent irrigations should be avoided. Irrigation should wet the entire root zone and be allowed to dry out prior to another application.

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There can be no guarantees provided for on-going tree safety. It should be noted that not all of the potential structural concerns associated with trees can be eliminated and that there will always be a residual risk following any mitigation works. Also, not all tree defects are observable and extreme weather events are unpredictable. Since trees are complex, living organisms, it is difficult to quantify and precisely measure all variables when inspecting a standing tree for hazard.

Trees should be reassessed on a regular basis; the scheduled period of reassessment will be dependent on the characteristics of the tree, the landscape context and perceived targets, and resources available to maintain them.