ARBORICULTURAL REPORT

10-12 LOFTS AVENUE, KEW

14 August 2024

PREPARED BY

Kylie May

Consultant Arborist

B.AppSci(RurTech) *UQ*

GDipUHort *MELB*

JOHN PATRICK

LANDSCAPE ARCHITECTS

ENVIRONMENTAL HORTICULTURISTS

LANDSCAPE HERITAGE CONSULTANTS

CONSULTANT ARBORISTS

JOHN PATRICK LANDSCAPE ARCHITECTS PTY LTD

324 Victoria Street, Richmond, VIC 3121, Australia

T +61 3 9429 4855 E admin@johnpatrick.com.au

F +61 3 9429 8211 W www.johnpatrick.com.au

CONTENTS

1 INTRODUCTION

1.1 John Patrick, consulting arborists, have been engaged by Methodist Ladies College to prepare an arboricultural report for 10-12 Lofts Avenue, Kew to accompany planning application documents for the site.

2 OBJECTIVES

2.1 The intent of this report is to:

- Assess the condition of trees within the subject site and those neighbouring that may be impacted by the proposed development and estimate the extent of any impact.
- Identify any trees worthy of retention and provide preliminary arboricultural advice to assist in their protection and retention.

2.2 The report will include the following.

- Botanic / Common names
- Tree Location
- Canopy width and height
- DBH (trunk diameter)
- Tree health & structure condition
- Useful Life Expectancy (ULE)
- Tree Protection Zones (TPZ's) in accordance with AS-4970
- Arboricultural value
- Other tree characteristics of consideration.

3 METHODOLOGY

3.1 The site was visited on the 7th October 2022 and a visual assessment of the subject trees was undertaken from ground level. Each tree was assigned an identification number for reference purposes, denoted on the attached Tree Location and Impact Assessment Plan (Section 5).

3.2 Site trees identified with a DBH of 150mm or less were not assessed in this report unless rare or of unusual attributes.

3.3 No aerial or diagnostic testing was undertaken as part of this assessment.

3.4 The DBH of trees was measured using a diameter tape measure at 1.4m above ground level in accordance with AS-4970. Where access directly to the trees was not possible DBH was estimated.

3.5 Heights and widths of canopies were estimated.

4 OBSERVATIONS

EXISTING CONDITIONS

4.1 The subject site is located on the eastern side of Lofts Avenue. Currently it exists as two residential sites, each with a single storey, weatherboard dwelling. The existing gardens consists of mostly exotic species to the boundaries or adjacent to the dwellings, surrounding areas of central lawn.

VEGETATION CONTROLS

4.2 An internet search of VicPlan reveals that the site is not covered by any overlays pertaining to vegetation protection of the Boroondara Council Planning Scheme.

4.3 The City of Boroondara Tree Protection Local Law 2016 applies to the site. Under this law:

> A person must not without a ***Permit***:
>
> (a) remove, ***Prune***, ***Damage***, kill or destroy or direct, authorise or allow to be removed, ***Pruned, Damaged***, killed or destroyed a ***Significant Tree***.
>
> (b) carry out, or direct, authorise or allow to be carried out, any ***Works*** within the ***Tree Protection Zone*** of a ***Significant Tree***.
>
> (c) remove, ***Damage***, kill or destroy or direct, authorise or allow to be removed, ***Damaged***, killed or destroyed a ***Canopy Tree***.
>
> (d) carry out, or direct, authorise or allow to be carried out any ***Works*** within the ***Structural Root Zone*** of a ***Canopy Tree.***[1]
>
> (e) remove, ***Damage***, kill or destroy or direct, authorise or allow to be removed, ***Damaged***, killed or destroyed a tree required to be planted as a condition of a ***Permit***.

4.4 For the purposes of this Local Law, A ‘Significant Tree’ is defined as a tree in Council’s Significant Tree Study, where as a ‘Canopy Tree’ is defined as any tree:

(a) with a total trunk circumference of 110cm or more measured at a point 1.5 metres along the trunk’s length from the closest point above ground level; or

(b) if multi-stemmed, with a total trunk circumference of all its trunks of 110cm or more measured at a point 1.5 metres along the trunks’ lengths from the closest point above ground level; or

(c) with a trunk circumference of 150cm or more measured at ground level.

Note: It is recommended that vegetation controls be confirmed with the local authority prior to any tree removal.

TREE INFORMATION

4.5 A total of eleven trees or tree groups were assessed including nine trees or tree groups within the subject site and two trees within the road reserve or neighbouring properties. Information on these can be found in the following table.

TREE DATA

Tree No.	Botanic Name	Common Name	Size (m) HXW	DBH CALC	DBH (cm)	TPZ (m)	Age	Health	Structure	ULE (Yrs.)	Arb Value	Comments
1	*Albizia julibrissin*	Silk Tree	5 x 6	20 / 12	23	2.8	Mature	Dead	Poor	0	Nill	Dead
2	*Citrus japonica*	Cumquat	3 x 2	15	15	2.0	Mature	Poor	Fair	0-5	Low	Heavily possum browsed
3	*Cupressus arizonica*	Arizona Cypress	4 x 2	18	18	2.2	Semi-Mature	Good	Fair	5-10	Low	2 young trees. Measurement of largest
4	*Camellia japonica*	Camellia	3 x 3	20	20	2.4	Mature	Good	Fair	10-20	Low	
5	*Fraxinus angustifolia* subsp. *angustifolia*	Desert Ash	10 x 7	28 / 32	43	5.1	Mature	Good	Poor	5-10	Low	Weedy species. Codominant from 1m with narrow union.
6	*Callistemon* sp.	Bottlebrush	5 x 4	Multi	Multi	3.5	Mature	Fair	Fair	5-10	Low	Neighbouring tree. Brick wall just inside boundary
7	*Nerium oleander*	Oleander	7 x 7	Multi	Multi	2.5	Mature	Good	Poor	0-5	Low	Large, overgrown shrub
8	*Nerium oleander*	Oleander	4 x 4	Multi	Multi	2.5	Mature	Good	Poor	0-5	Low	Large, overgrown shrub
9	*Cotoneaster glaucophylla*	Cotoneaster	5 x 5	Multi	Multi	3.5	Mature	Poor	Poor	0-5	Low	Over-mature, overgrown shrub.
10	*Cordyline australis*	Cabbage Tree	5 x 1	20	20	2.4	Mature	Fair	Fair	0-5	Low	Group of 5. Measurements of largest.
11	*Fraxinus angustifolia* subsp. *angustifolia*	Desert Ash	12 x 12	52	52	6.2	Mature	Good	Fair	10-20	Medium	Street tree. Canyon pruned for power lines.

TREE IMAGES

Image 1: Tree 1

Image 2: Trees 2, 3, 4 (right to left)

Image 3: Tree 5

Image 4: Trees 6 and 7

Image 5: Trees 8, 9 10

Image 6: Tree 11

5 DISCUSSION

5.1 The following plans have been reviewed and form the basis of the following impact assessment:

- Concept Plan: Architectus Melbourne, REV D 14/08/2024.

5.2 This report assumes that the levels, dimensions and drawings provided by the architects named within this report are correct as these have been used as the basis for this impact assessment.

SITE TREES

5.3 Tree 1 is a dead exotic self-germinated weed proposed to be removed.

5.4 The works proposed to the front of the site are restricted to the construction of a driveway which extends between the two dwellings through to the rear of the site. This will require the removal of Tree 3, a pair of Arizona Cypress. These trees are below the size that requires a permit for their removal under Boroondara's Tree Protection Local Law.

5.5 Tree 4 a Camellia has no new TPZ encroachments the proposed path is in the location of existing pedestrian paths and driveways within te site.

5.6 Tree 5 a Desert Ash of poor structure and subsequently Low Arboricultural Value is proposed to be removed.

5.7 Tree 7 is proposed to be retained.

5.8 There is no encroachment into the TPZ of Tree 7, Oleander.

5.9 Trees 8, Oleander, 9, Cotoneaster and 10, Cabbage Tree are all proposed to be removed. These are all of low arboricultural value and not worthy of retention. Trees 8 and 9 will require a permit for their removal under Boroondara's Tree Protection Local Law.

NEIGHBOURING TREES

5.10 It is proposed to widen the existing crossover adjacent to Tree 11 a Desert Ash by approximately 1000mm and subsequently it will encroach to within approximately 3.4m from the tree. This is only an additional 2.4% encroachment to the 1.8% of the existing crossover.

ts.

5.11 A Telstra pit that is currently located within the TPZ of Tree 11 is proposed to be relocated to accommodate the extended crossover. Plans do not indicate where this will be relocated to, but it is recommended it be relocated outside the TPZ of this tree.

5.12 There are no proposed encroachments into the TPZ of Tree 6, a neighbouring Bottlebrush.

5.13 If any boundary fences are to be replaced, it is recommended that any section of the new fences that pass through the TPZ of trees to be retained be of light-weight construction with post holes hand dug and relocated if necessary to avoid major roots. It is also recommended that all landscape areas within the TPZ of trees to be retained be maintained at existing grades.

6 CONCLUSION

6.1 A total of eleven trees or tree groups were assessed, comprising nine within the subject site and two within the road reserve or neighbouring properties.

6.2 Site trees 3, 8, 9 and 10 will require removal to accommodate the new driveway and storage bin area. Tree 1 is to be removed because it is dead. These have been assessed as having anil or low arboricultural value.

6.3 Trees 8 and 9 require a permit for their removal under Boroondara Council's Tree Protection Local Law.

6.4 Other trees within the front setback can be retained or removed as desired.

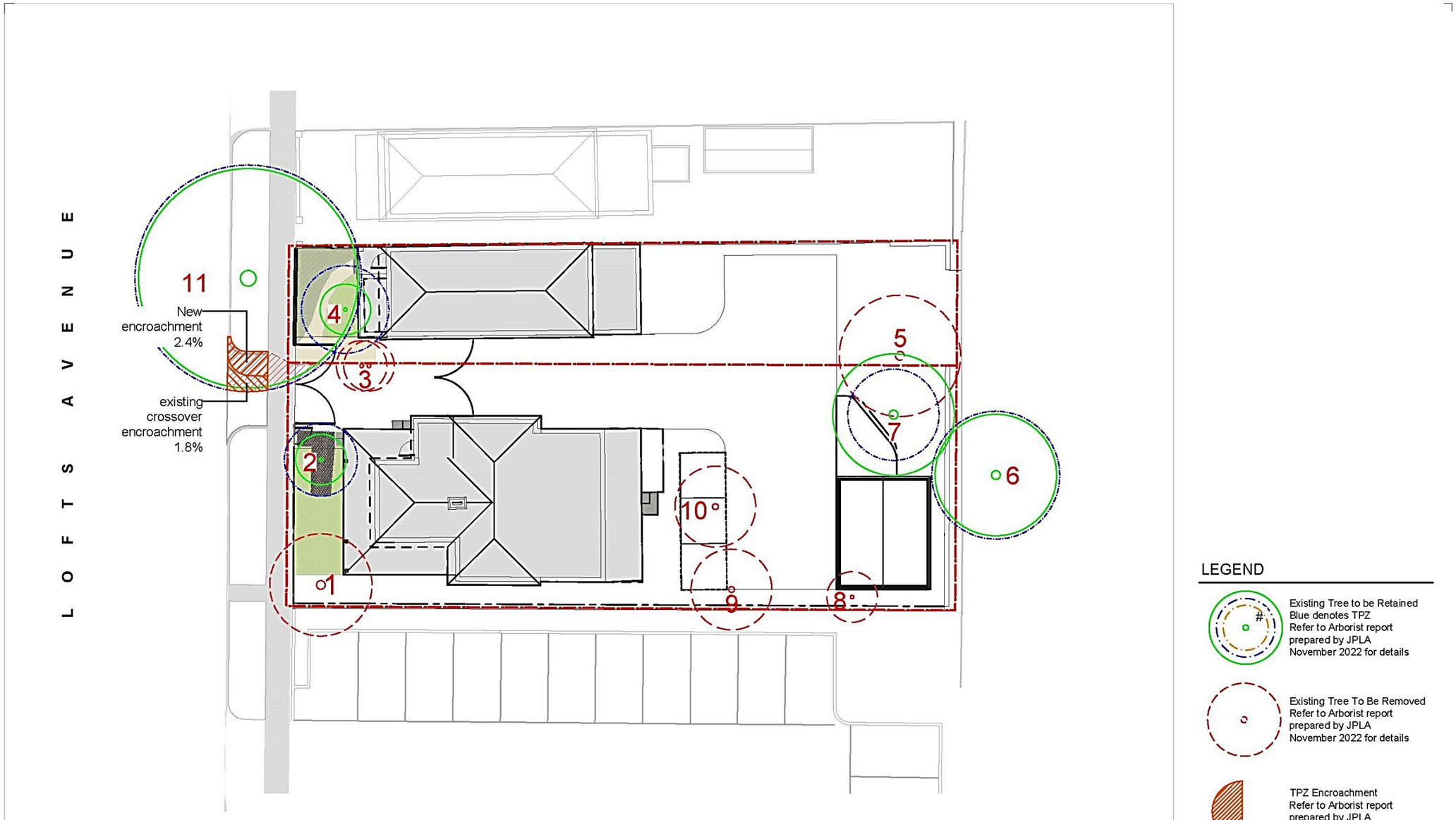
6.5 Tree 5 is proposed to be removed. It is a weedy Desert Ash of Low Arboricultural Value and not worthy of retention.

6.6 Tree 7 an Oleander is to be retained which has no TPZ encroachment.

6.7 Tree 11 has an increased encroachment of 2.4% for the widening of the crossover. All other encroachments are existing due to the pr4esent paths and driveway. Any roots located during the widening of the crossover should be cut cleanly by a sharp implement and not ripped out by machinery.

6.8 The proposed works are not expected to negatively impact any neighbouring trees.

7 TREE IMPACT ASSESSMENT PLAN



LEGEND

- Existing Tree to be Retained (#) — Blue denotes TPZ. Refer to Arborist report prepared by JPLA November 2022 for details
- Existing Tree To Be Removed. Refer to Arborist report prepared by JPLA November 2022 for details
- TPZ Encroachment. Refer to Arborist report prepared by JPLA November 2022 for details

NOTE: Refer to IAP for details

	REVISION	DATE	BY
A	To Client Request	2024 08 14	MR / CN
B	To Client Request	2024 08 15	CY

NOT FOR CONSTRUCTION

CLIENT
Methodist Ladies College

PROJECT
MLC Sports Precinct Redevelopment
10-12 Lofts Avenue, Kew

DRAWING
Impact Assessment Plan for Town Planning

SCALE	1:200 @ A3
DATE	AUG 2024
DRAWN	CN/FW
CHECKED	KM
JOB NO	22-613
DWG NO	22-613

8 DESCRIPTORS

Tree Number:

Refers to the identification number for reference purposes, denoted on the Tree Data and Tree Survey Plan.

Botanical Name:

Botanical name of species, based on nomenclature and spelling in Spencer, R 1995, *Horticultural flora of South Eastern Australia* (vols. 1-5), University of NSW Press, Sydney. Where Eucalyptus spp. are not found in this source, nomenclature is based on Euclid: Eucalypts of Australia, 2006, Centre for Australian National Biodiversity Research (CANBR). Eucalypt subspecies information is also based on this source.

While accurate tree identification is attempted, and uncertainties are indicated, some inaccuracies in tree identification may still be present – especially in the case of difficult to determine genera (e.g. *Cotoneaster* and *Ulmus*), and with cultivars which can have similar characteristics.

From time-to-time taxonomists revise plant classification, and name changes are assigned. If it is known names have been revised post the publication of the relevant above listed source, the new nomenclature has been used.

Common Name:

Common names are based primarily on names and spelling used by Spencer in Horticultural Flora of South Eastern Australia (vols 1-5). The source of common names is taken in the following order:

- Single name supplied in Horticultural Flora of South Eastern Australia.
- First in list of names supplied in Horticultural Flora of South Eastern Australia, unless another name in the list is deemed more appropriate.
- Common name as per Costermans, LF 2006, *Trees of Victoria and adjoining areas*; Costermans Publishing, Victoria.
- Most widely used common name if not available in either source previously mentioned.

Common names are provided for thoroughness; the botanical name should be used when referring to the tree taxon.

Age:

Juvenile: Tree has recently been planted and is still in establishment phase. Tree currently makes little contribution to the amenity of the landscape. Trees of this age are possible candidates for relocation during development.

Semi-mature: Tree has established but has not yet developed mature habit. The tree provides some landscape contribution. Tree size would still be expected to increase considerably provided there are no significant changes to existing growing conditions.

Maturing: Tree has developed mature structural habit but has substantial potential to increase in size.

Mature: Tree has or is close to reaching full potential and expected size. Growth rate has slowed; however, the tree does not exhibit any major signs of health or structural weakness due to age.

Over mature: Tree is no longer actively putting out extension growth and is starting to show signs of decline in health due to age. Canopy may thinning and signs of die back in the canopy may be present.

Height: The tree's height in metres

Width: The tree's average canopy width in meters. Variations in canopy width to that stated may be present due to canopy asymmetry.

DBH: The tree's trunk Diameter at Breast Height. Measured at 1.4m above ground level, in accordance with *AS4970 Protection of trees on development sites*, unless specified as having been measured lower. DBH may be estimated or measured, as specified in the report. In the case of multi-stemmed trees,

stem diameter is either listed individually, or a measurement taken at a point lower than the point of stem divergence. In some cases, especially where trees are not considered worthy of retention or stems are too numerous the DBH may simply be listed as 'multi-stemmed'.

Health:

Good: Tree is not stressed and shows no obvious signs of pest or disease. It is free of wounding. Annual growth rate is as would be expected of a healthy specimen in the same area. There are no signs of die back and canopy is dense. Tree maybe partially suppressed by neighbouring trees.

Fair: Tree is showing signs of reduced health. It maybe drought stressed or show partial signs of pest or disease. Foliage density is less than optimal and minor die back may be present. Tree is typical of its species. Remedial works may improve tree health.

Poor: Tree exhibits signs of stress, e.g. sparse canopy and possibly stunted growth. A large number of dead branches or dieback are present. Tree is likely to be significantly affected by pests or disease. Tree often in decline. Remedial works not expected to improve long-term health.

Dead: Tree shows no signs of life and is not growing.

Note on Deciduous Species: Assessment of deciduous species can be problematic, and results may vary depending on the time of year. Descriptor comments in relation to foliage density do not apply to deciduous trees assessed when dormant or entering or exiting dormancy. Time of leaf drop, or bud burst, and extent of bud swell may be considered in the health rating of these trees.

The ratings indicate that certain characteristics listed have, or have not, been observed. Inspections do not assess the entire tree in detail for each characteristic. The comments category should be referred to for further information.

Structure:

As a rule, the structure rating is based on identified faults in tree habit which reduce the structural integrity and may lead to partial or entire tree failure. It must be noted, however, that this is not a full hazard or failure assessment.

Good: Tree appears to have no obvious structural defects which would diminish the tree's structural integrity.

Fair: The tree has one or more obvious structural defects. e.g. dead branches or codominant stems, however the observed defects are unlikely to prevent retention of the tree. Judicious remedial intervention could remove structural defects and improve the structure rating.

Poor: Tree has at least one or more structural defects that remedial intervention cannot rectify without significantly reducing the retention value of the tree. These defects reduce the useful life expectancy of the tree.

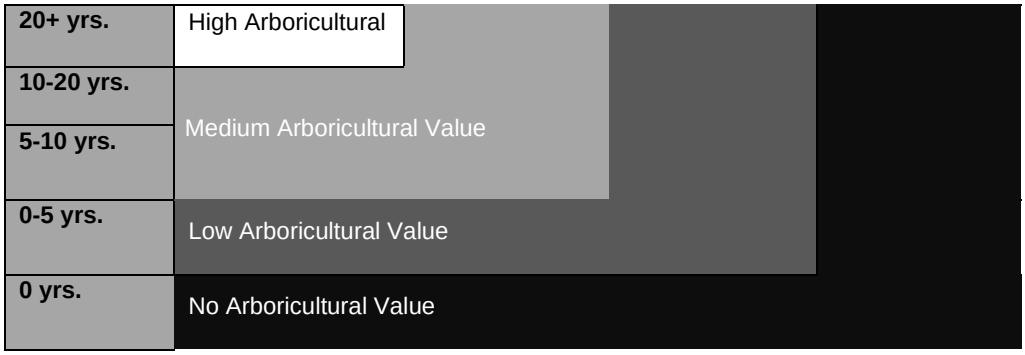
Hazardous: The tree shows one or more structural faults that are prone to failure and present an immediate safety concern. Judicious intervention to remove structural faults and reduce safety risk would leave a tree which is not worthy of retention. These trees should be removed as a high priority.

Arboricultural Value:

The Arboricultural Values shown in the table below are based on the ULE of the tree which considers structure and health ratings and landscape contribution.

The arboricultural value assists in determining the positioning of structures and infrastructure outside the tree's identified TPZ.

ULE	**Landscape Significance**			
	High	Medium	Low	Very Low



ULE: The Useful Life Expectancy of the tree from a health, structure, amenity and weediness viewpoint given no significant changes to the current situation occur. This category is difficult to determine and should be taken as an estimate only. In addition, factors not observed at the time of inspection can lead to tree decline.

- 0 yrs.: Tree should be removed due advanced decline/ dead or hazardous.
- 0-5 yrs. Tree is in decline and has poor health or structural faults which cannot be resolved by intervention. Tree is often over- mature.
- 5-10yrs. Tree of fair health or structure
- 10-20. Semi-mature or mature tree of fair health and structure
- 20+ yrs. Juvenile or semi-mature, or a long-lived species of good health and structure.

TPZ (Tree Protection Zone):

The Tree Protection Zone of the tree, measured as a radial distance in metres from the centre of the trunk. The TPZ is calculated using the method specified in Australian Standard *AS4970-2009 Protection of trees on development sites*. 12 x DBH=TPZ

Recommendation:

i.e. Further exploratory root investigation, alterations to proposed works to allow tree retention.

Comments:

Any additional comments specific to individual tree specimens.

AS4970-2009:

The recognised Australian Standard for the 'Protection of Trees on Development Sites'. It provides guidelines on tree protection and formulas for calculating Tree Protection Zones (TPZs), Structural Root Zones (SRZs) and the Diameter at Breast Height (DBH).

AS-4373-2007:

The recognised Australian Standard for the 'Pruning of Amenity Trees'. This Standard provides guidelines on tree pruning to encourage good health and structure.

Ecological Vegetation Class (EVC):

A type of native vegetation classification that is described through a combination of its floristics, life form and ecological characteristics, and through an inferred fidelity to environment attributes. Each EVC includes a collection of floristic communities (i.e. lower level in the classification that is based solely on groups in the same species) that occur across a biogeographic range, and although differing in species, have similar habitat and ecological processes operating.