Tree Assessment and Arboricultural Report:

Lindum Vale, Mickleham

Prepared for MAB Corporation

December 2014

Biosis offices

AUSTRALIAN CAPITAL TERRITORY

Canberra

Floor 1, Unit 3, 38 Essington Street
Mitchell ACT 2911

Phone: (02) 6241 2333
Fax: (03) 9646 9242
Email: canberra@biosis.com.au

NEW SOUTH WALES

Sydney

Unit 14 17-27 Power Avenue
Alexandria NSW 2015

Phone: (02) 9690 2777
Fax: (02) 9690 2577
Email: sydney@biosis.com.au

Wollongong

8 Tate Street
Wollongong NSW 2500

Phone: (02) 4229 5222
Fax: (02) 4229 5500
Email: wollongong@biosis.com.au

QUEENSLAND

Brisbane

Suite 4 First Floor, 72 Wickham Street
Fortitude Valley QLD 4006

Phone: (07) 3831 7400
Fax: (07) 3831 7411
Email: brisbane@biosis.com.au

VICTORIA

Ballarat

506 Macarthur Street
Ballarat VIC 3350

Phone: (03) 5331 7000
Fax: (03) 5331 7033
Email: ballarat@biosis.com.au

Melbourne (Head Office)

38 Bertie Street
Port Melbourne VIC 3207

Phone: (03) 9646 9499
Fax: (03) 9646 9242
Email: melbourne@biosis.com.au

Wangaratta

16 Templeton Street
Wangaratta VIC 3677

Phone: (03) 5721 9453
Fax: (03) 5721 9454
Email: wangaratta@biosis.com.au

Document information

Report to:	MAB Corporation Pty. Ltd.
Prepared by:	Dean Simonsen
Biosis project no.:	17916

File name: 17916.Lindum Vale Mickleham.Aboricultural Assessment-Updated report.DFT01.20141211

Citation: Biosis 2014. Tree Assessment and Aboricultural Report: Lindum Vale, Mickleham: Simonsen, D. Biosis Pty Ltd, Melbourne. Project no. 17916

Document control

Version	Internal reviewer	Date issued
Draft version 01	AJH	11/12/14

Acknowledgements

Biosis acknowledges the contribution of the following people and organisations in undertaking this study:

- MAB – Chris Engert.

Contents

Disclaimer

This report has been prepared exclusively for the use of the client and may not be used for any purpose by other persons.

All due care and diligence has been exercised to obtain all information from reliable sources. However, Biosis can neither guarantee nor be responsible for information provided by other parties.

This report and any opinions, advice or recommendation expressed or given in it, are based on those items outlined in the project brief or the information obtained at the time of inspection by Biosis and referred to in the report. The client should rely on the report, and on its content, only to that extent.

In no event will Biosis be liable for any lost revenue or profits, or for special, indirect, consequential or incidental damage (however caused and regardless of theory of liability) arising out of or related to use of information in this report.

The report must be read in its entirety. Alteration of any part of the report not undertaken by Biosis invalidates the entire report.

All observations made represent the author's professional opinion at the time of inspection only. Biosis' fee is in no way conditional upon the reporting of a stipulated result, specified value, nor upon any finding to be reported.

All information provided within this report relates to the conditions of the trees or plants observed at the time of inspection.

Except where stated within the report, all observations and assessments are conducted by visual inspection at ground level only.

This report is not intended as, and does not represent legal advice and should not be relied upon to take the place of such advice.

Biosis is not responsible in any way for implementing any recommendations outlined within this report.

1 Assignment

1.1 Scope of Works

- An inspection of four sites:
  - 1960 Mickleham Road, Mickleham – 62.92 ha ("Lindum Vale" 1).
  - 2040 Mickleham Road, Mickleham – 78.83 ha ("Lindum Vale" 2).
  - 1920 Mickleham Road, Mickleham – 0.6ha (Grgic property and former Mickleham Post Office site).
  - 1990 Mickleham Road, Mickleham – 0.4ha (Denise Cocking property).
- Trees to be assessed are greater than 3m in height, with one or a few main stems (as per AS 4970).
- The following tree attributes were collected for each tree/group:
  - Tree species and common name.
  - Tree origin.
  - Tree dimensions; including canopy height, width and trunk diameter (DBH).
  - Tree age class.
  - Tree condition (health and structural integrity).
  - Useful Life Expectancy.
  - Suitability for retention (None, Low, Moderate and High).

1.2 Table One: Supplied Documents

Table 1. Supplied documents.

Title	Author	Drawing/ Ref. no.	Dated
Scar Tree location shapefile and Draft Location Map – Lindum Vale	Ecology and Heritage Partners	3979_Map01_ScarTrees	10/10/2012
Arborist Report – Corner of Mickleham Road and Mt Ridley Road, Mickleham	R & T Tree Services	14634	14/7/2003
Existing Tree Plan – Cocking Land, Lot 7 & 8 Mickleham Road, Mickleham	Dalton Consulting Engineers	10386TP Rev A	18/8/08
Tree Assessment and Arboricultural Report: Lindum Vale, Mickleham	Biosis Pty Ltd	17916	April 2014

2 Methods

2.1 The sites were first inspected on the 27th, 28th and 29th of March 2014.

2.2 On request by council a follow-up inspection was carried out on the 11th of December.

2.3 All trees were visually inspected from the ground. The visual inspection was undertaken using a systematic approach as outlined by Coder (1990).

2.4 The trees were assessed to determine age, condition, health, structure Retention Value and Useful Life Expectancy according to the criteria outlined in Appendix One.

2.5 Crown width was paced and tree height was measured with a Laser Rangefinder. Trunk diameter (DBH) was measured at 1.4m above ground level.

2.6 Photographs of the site were taken at the time of the first inspection.

3 Observations

3.1 Site description

3.1.1 The parent titles consisted of agricultural land with scattered remnant and indigenous trees.

3.1.2 The central house site (Denise Cocking's) had plantings of mostly Australian native trees. The Old Post Office site had a mix of Australian native and exotic trees, with several mature exotic trees around the Post Office building including Monterey Cypress (*Hesperocyparis macrocarpa*), Monterey Pines (*Pinus radiata*) and Dutch Elms (*Ulmus* x *hollandica*). Vegetation at the Lindum Vale Homestead site was predominantly mature rows of Monterey Cypress (*Hesperocyparis macrocarpa*) and Sugar Gum (*Eucalyptus cladocalyx*).

3.2 Development proposal

3.2.1 The sites are proposed to be redeveloped as a residential area.

3.3 Tree population

3.3.1 273 individual trees and 14 tree groups were assessed within each of the sites as per Table 2 below. Tree details are outlined in Appendix Three, with tree locations in Appendix Two.

Table 2. Trees per site.

Sites	Number of trees
Lindum Vale 1	90
Lindum Vale 2	113
Grgic property & former Mickleham Post Office	53
Denise Cocking property	31

3.4 Age of assessed trees

3.4.1 Table Three: Age class of assessed trees. The 19 trees that were collapsed and dead (as a result of fire) have not been assigned an age class.

Table 3. Age classes of assessed trees.

Retention value	Number of trees
Juvenile	3
Semi-mature	65

Mature	193
Senescent	7
Collapsed/Dead trees	19
Total	287

3.5 Fire damaged trees

3.5.1 A fire (approximately six weeks prior to the first inspection) had affected most of the site. Many of the assessed trees displayed foliage scorch affecting most of the crown and 19 trees had completely collapsed as a result of fire within the trunk. As no significant rain had fallen since the fire, a follow up inspection was carried out approximately nine months after the fire.

During the first inspection, in most cases, it appeared that the heat of the fire had caused foliage on affected trees to be scorched, but not burnt. Epicormic regrowth was observed on many affected trees, but it was generally sparse. Where trees had experienced severe crown scorching, the distribution and vigour of epicormic regrowth was assessed to estimate the potential of the tree to recover from the fire event. Trees that were assessed as may not being able to recover were typically those that had complete crown scorching and had very sparse regrowth. Trees that were though to be able to recover typically had a portion of the crown that had not been scorched or displayed regrowth of reasonable vigour.

Comparing the results of the first and second assessments, it would seem that some RRG trees have regenerated better and others have fared worse. It should be made clear that I do not think any of the trees have recovered. The trees are in a temporary phase, by attempting to recover by generating masses of epicormic shoots. I believe this new foliage is giving a false sense of improvement or health to those that might be examining the trees from a distance. It is clear from closer observations of the trees that the original living branches have receded and masses of short epicormic shoots have developed on the stems and trunks. The scorched branches are dead and they will not regenerate. I observed epicormic shoots trying to establish flower buds, which may indicate a last ditch attempt to fruit, seed and germinate.

There is also a patch of *Eucalyptus microcarpa* (Grey Box) in the north western section of 1960 Mickleham Road. This species has not responded to the impacts of the fire very well and their recovery is very doubtful across the site. There are a few odd specimens that might be considered.

Table four below details the original estimates of assessed trees that may or may not recover compared to the results of the follow-up inspection.

3.6 Useful Life Expectancy (ULE) values of assessed trees

3.6.1 The severely fire affected trees have not been assigned a Useful Life Expectancy range as their potential lifespan is largely unknown at this stage.

3.6.2 Table Four: ULE Values of assessed trees. The 19 trees that were collapsed and dead (as a result of fire) have not been assigned a ULE.

Table 4. ULE Value of assessed trees based on first and second assessments.

ULE	Number of Trees	
	Initial assessment	Follow-up assessment
Collapsed/dead trees	19	19
Removed trees (stumps)	-	11
Fire damaged – May not recover	40	-
Fire damaged – May recover	95	-
<1 year	33	50
1-5 years	2	9
6-10 years	6	17
11-20 years	21	102
21-30 years	8	13
31-60 years	63	54
60+ years	-	12
Total	287	287

3.7 Retention Values of assessed trees

3.7.1 Most of the assessed trees were assigned retention values of Low or None due to recent fire damage or poor structure. Trees with poor structure usually displayed multiple past limb failure events.

3.7.2 In the initial assessment, trees that were fire damaged, but may recover were assigned a Retention Value of Low. Trees that were fire damaged and may not recover have been assigned a Retention Value of None. These assessments were reviewed during the subsequent assessment and results are presented in the table below.

3.7.3 Arboricultural assessments combine tree condition factors with functional and aesthetic characteristics in the context of an urban landscape. They deliberately ignore ecological values because the expertise required for these ratings is different. Many trees have ultimately received 'Low' retention values because of their poor structure, combined with their poor health. Trees with poor or worse structure often have higher ecological values. Trees with a retention value of Low might well be considered in a restricted access environment; but this would be a risk that council needs to consider as the ultimate caretaker and owner of the trees.

3.7.4 Table Five: Retention Values of assessed trees.

Table 5. Retention Value of assessed trees based on first and second assessments, December 2014.

	Number of trees	
Retention value	**Initial Assessment**	**Follow-up assessment**
High	11	5
Moderate	28	41
Moderate -low	8	-
Low	146	155
None	94	67
Dead	-	19
Total	**287**	**287**

3.8 Scar Trees

3.8.1 Locations of 7 previously identified Scar Trees within the agricultural portion of the site was provided by MAB Corporation. This information was matched to trees within this assessment. Based on the December assessment, the retention value of the 7 Scar Trees is outlined below:

3.8.2 Table Six: Retention Value of Scar Trees

Table 6. Retention Value of Scar Trees based on second inspection, December 2014.

Scar Tree ID	ID #	Retention Value of scar tree
2	11	None
3	7	Low
5	45	None
6	28	None
7	104	Low
9	210	None
10	59	Low

3.9 Photos of Trees taken in March, 2014

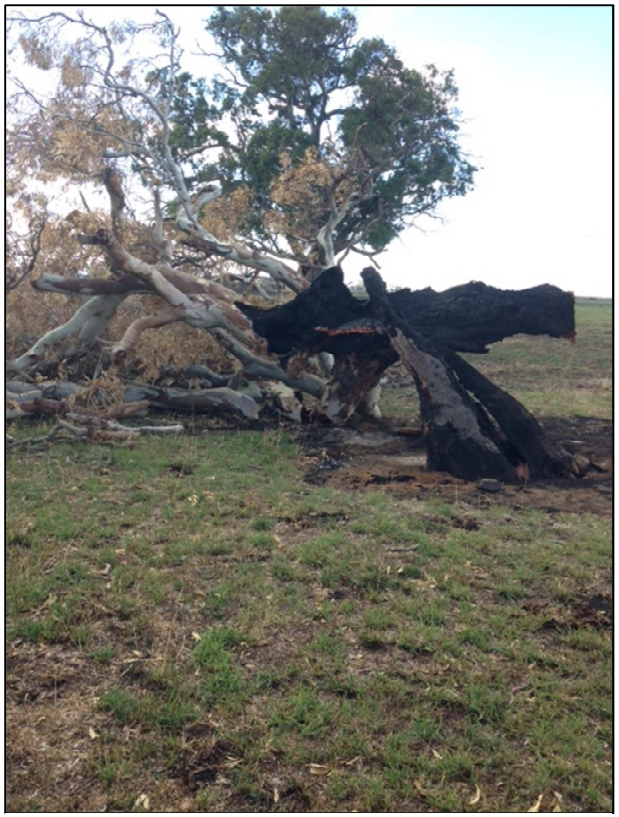


Photo 1. One of the trees that had collapsed and died as a result of the fire.

Photo 2. A mature River Red Gum with some epicormic growth at the top of the crown (indicated)

Photo 3. Epicormic growth on a lower branch of a River Red Gum.

Photograph 4 shows a River Red Gum with the entire crown scorched by fire.

Photograph 5 shows a River Red Gum with only minor scorching of the lower crown.

4 Tree Management

4.1 Fire recovery

Moore (2010) states that the effect of fire on thin, smooth-barked eucalypts (such as River Red Gum) can be devastating, as they lack an insulating and protective bark layer. It is possible that although most trees have exhibited some regrowth, there may be significant portions of the crown that may have been killed by fire. Furthermore, Dalton (1990) states: "*Eucalyptus camaldulensis* is very fire sensitive and even low intensity fires may cause cambial injury (Dexter, 1978). Fire kills regeneration and even mature trees are susceptible if the fire is intense enough since *E. camaldulensis* lacks a lignotuber. Fire will cause damage to the butt, lowering the value of the timber and predisposing tree to fungal and insect attack".

The likelihood of survival for most of the trees won't be known for many years. It will depend on a raft of variables including climate, the susceptibility of weakened trees to other pest or predators, how the trees may respond to drought or the impact of scorching northerlies on tender epicormic leaves. I expect that most trees have almost exhausted their reserves by growing the flushes of epicormic shoots. A further stress (abiotic or biotic) will tip many of the trees into a mortality spiral, if they are not there already. There will also be dieback and failure of major branches because static versus dynamic mass ratios have been severely disrupted.

Trees that do survive will require significant canopy restoration work. This will primarily involve the removal of deadwood and the formative pruning of epicormic shoots to establish a new crown. This will be a costly and lengthy process. Apart from these pruning works, trees will require corrective pruning to address defective structure. The structure of most trees remains poor or worse, and this will remain so irrespective of the health of the trees.

My general view on the RRG conservation management approach to the site would be to maximise tree retention in groups or clumps as far as possible with general consideration to the health ratings, Useful Life Expectancy ratings and retention values.

4.2 Tree maintenance pruning

4.2.1 Any trees to be retained within the context of a residential development should be provided appropriate maintenance pruning that includes deadwood removal. Any pruning should be undertaken by a suitably qualified and experienced arborist according to AS 4373-2007 (Pruning of Amenity Trees).

4.3 Tree Risk Management and Exclusion Zones

4.3.1 Many of the assessed trees, particularly the River Red Gums, displayed multiple past major limb failure events and the potential for harm from future limb failure requires management.

4.3.2 Anecdotal evidence would also suggest that mature, remnant eucalypts retained within development sites may shed branches in an unpredictable fashion, most likely as a result of changes to the trees' growing environment.

4.3.3 Management of the potential risk associated with limb failure can be managed through Exclusion Zones. An Exclusion Zone significantly reduces risk by discouraging potential targets from entering

a potential limb failure zone. An exclusion zone should extend to the estimated tree fall distance (a radial distance equal to tree height plus 10% (Hayes, 2007)).

4.3.4 The canopy spread of each tree should also be surveyed and should be considered along with the Tree Protection Zone. It is advisable to avoid structures, paths and roads beneath the canopy of retained trees. A similar approach is adopted in the City of Whittlesea (see: http://goo.gl/NWqsSX).

4.3.5 Discouraging access within Exclusion Zones can be achieved through:

- Ensuring all public facilities such as roads, paths, tables, seats and play equipment are outside the Exclusion Zone.
- Ensuring all building envelopes are outside the Exclusion Zone.
- Eliminating lawn areas under the crown and planting dense shrubs within the Exclusion Zone.
- Installing low fencing or bollards at the edge of the Exclusion Zone.

5 Tree Protection (From A S 4970 – Protection of Trees on Development Sites)

5.1 Tree protection zones

5.1.1 A tree protection zone (TPZ) is the principal means of protecting trees on a development site. The TPZ is a combination of the root area and the crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

5.1.2 TPZ's are outlined for trees in Appendix Three.

5.2 Determining the TPZ

5.2.1 The radius of the TPZ is calculated for each tree by multiplying its DBH x 12, where DBH = trunk diameter at 1.4m above ground.

5.2.2 The TPZ radius is measured from the centre of the stem at ground level.

5.2.3 A TPZ should not be less than 2m nor greater than 15m (except where crown protection is required).

5.3 Variation to the TPZ

5.3.1 If the proposed encroachment is less than 10% of the area of the TPZ and is outside the Structural Root Zone (SRZ), detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.

5.3.2 If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ, the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. This may require root investigation by non-destructive methods and consideration of other site and species factors.

5.4 Crown protection

5.4.1 Tree crowns may be damaged by machinery. The TPZ may need to be extended to include additional protection of the above ground parts of the tree.

5.4.2 Where crown protection is required, it will usually be located at least one metre outside the perimeter of the crown.

5.4.3 Further details including explanatory figures are contained within AS 4970-2009.

5.5 Activities recommended within the TPZ include:

5.5.1 Mulching. Mulch should be applied within the entire TPZ area to a depth of 75mm. The mulch should comprise a graded hardwood material with a nominal particle size of 20mm. Existing grass or weeds may require spraying prior to mulch application.

5.5.2 Irrigation, aeration, fertilisation and other approved beneficial practices. Any irrigation should be subject to a soil moisture analysis.

5.6 Activities prohibited within the TPZ include:

- Machine excavation including trenching.
- Excavation for silt fencing.
- Cultivation.
- Storage or parking of vehicles or plant.
- Preparation of chemicals, including preparation of cement production.
- Refuelling or dumping of waste.
- Wash down and cleaning of equipment.
- Placement of fill or other soil level changes.
- Lighting of fires.
- Temporary or permanent installation of utilities or signs.
- Physical damage to trees.

5.7 Tree protection fencing

5.7.1 Tree protection fencing (TPF) should be erected prior to any demolition, grading or construction activities commencing and should remain in place to final landscaping works are completed.

5.7.2 TPF must be provided at the perimeter of the TPZ. Where the tree's crown overhangs the TPF, the extent of the fencing should be increased to extend 1m past the edge of the crown (See Section 5.4). For trees surrounded by hard surfacing (such as street trees) the fencing should be located at the edge of the permeable tree plot area or at the edge of the nature strip.

5.7.3 Further details including explanatory figures are contained within AS 4970.

6 The Proposed Development

6.1 The interaction between established trees and development can be complex. The effective management of vegetation on a development site requires a well-planned and pragmatic approach by all parties.

The nature of development generally requires that open space is reduced within a site and consequently, conflict sometimes exists between the design and existing vegetation. The design process should consider the condition and suitability of all vegetation within the site for retention. However, efforts to retain individual trees should only be commensurate with their appraised value.

The development design should be informed by the Retention Values and ULE values as outlined in Section 3.6 and 3.7.

The vegetation located in the 3 small parcels of land where houses exist would be considered insignificant and irrelevant to design planning. This is apart from Tree 152 (*Eucalyptus camaldulensis*), mature tree with Moderate retention value.

Trees to be retained should be provided appropriate Tree Protection Zones as outlined in Section 5. Further arboricultural advice may be required to assess the impact of the proposed development to individual trees, particularly where TPZs are proposed to be modified or encroached by development activities (Arboricultural Impact Assessment as per AS 4970-2009).

7 Summary

7.1 The assessed sites consisted of agricultural land and three house allotments along Mickleham Road. Most of the assessed trees were scattered throughout the agricultural area.

7.2 The sites were initially aboriculturally assessed in March 2014 with a follow-up assessment carried out in December 2014.

7.3 The results of the 287 trees and tree groups assessed within the sites are presented in Appendix Three.

7.4 A fire (approximately 6 weeks prior to the first inspection) had affected most of the site. Many of the assessed trees displayed foliage scorch affecting most of the crown and 19 trees had completely collapsed as a result of fire within the trunk.

7.5 In both the first and second assessments, most of the assessed trees were assigned retention values of Low or None due to fire damage or poor structure. Trees with poor structure usually displayed multiple past limb failure events.

7.6 The potential for severely fire affected trees to recover from fire damage was initially estimated at the time of the first assessment and re-assessed nine months later. A revision of initial tree assessments is provided including their retention values and useful life expectancies.

7.7 Some trees received an improved health score after the second assessment while the rating of many trees declined.

7.8 All trees to be retained should be provided appropriate arboricultural management such as deadwood pruning. Many of the assessed trees, particularly the River Red Gums, displayed multiple past major limb failure events and the potential for harm from future limb failure requires risk management. Risk management can be achieved through the implementation of Exclusion Zones as outlined in Section 4.3

7.9 TPZ areas should be established prior to the commencement of any demolition or construction works within the site. TPZ guidelines are outlined in Section 5.

8 References

Coder, K. 1990. Risk assessment: Systematic evaluation process, University of Georgia.

Dalton, K. 1990. Managing our river red gums. Soil Conservation Service of New South Wales, Sydney.

Hayes, E. 2007. *Evaluating Tree Defects*, Fourth Edition, Safetrees, LLC, Rochester MN.

Moore, G, 2010. Wildfire, Tree Management, and the Arborist. Part One: Wildfire and Urban Trees, Arborist News Volume 19, Number 6. International Society of Arboriculture.

Appendices

Appendix 1: Tree Assessment Criteria

1. DBH is calculated from the measured trunk circumference at 1.4m above ground level or at an alternative location if required (in accordance with AS 4970-2009).

2. Crown height describes the height of the tree in metres from ground level.

3. Crown width describes the crown spread across the widest axis.

4. Health is based on the expected crown condition of a typical tree of the species within the given locality. It assigns a broad description of the health and vigour of the tree.

Good	Displaying above-average condition
Fair	Normal condition for the species, some minor deficiencies may be present.
Fair to Poor	Between Fair and Poor
Poor	Displaying obvious deficiencies, such as chronic dieback
Very Poor	Between Poor and Dead
Dead	

5. Structural Condition is a summary of the structural integrity of the tree based on a visual assessment. It assigns a broad description of the structure and stability of the tree.

Good	no or only minor defects
Fair	typical structure for the species, some remediable defects may be present
Fair to Poor	Between Fair and Poor
Poor	Major defects present
Very Poor	Between Poor and failed, may be a hazard.
Failed	

6. Age

Juvenile	Recently established or being established. Has been planted within the landscape less than 5 years.
Semi-mature	Still rapidly increasing in size. Yet to reach its expected size within the location.
Mature	Reduced growth. Approaching typical maximum size for the tree in Melbourne.
Senescent	In the process of senescing. Some evidence of crown dieback and reducing

	overall size.

7. Origin describes the natural origin of the species – Indigenous (native to the local area), Victorian native, Australian native or Exotic (not native to Australia)

8. Retention value is adapted from BS5837:2005 – Cascade chart for tree quality assessment. The retention value is applied to the tree in the context of the proposed land use.

High retention value	• Trees in such a condition as to be able to make a substantial contribution (a minimum of 30 years is suggested). • Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue). • Trees of particular visual importance (e.g. avenues or other arboricultural features assessed as groups). • Trees of significant historical, commemorative or other value (e.g. veteran trees).
Moderate retention value	• Trees in such a condition as to make a significant contribution (a minimum of 20 years is suggested). • Trees that might be included in the high category, but may be downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage). • Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features, or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality.
Low retention value	• Trees currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm. • Low category trees will usually not be retained where they would impose a significant constraint on development. However, young trees with a stem diameter of less than 150 mm could be considered for relocation.
No Retention value (None)	• Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. • Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that have a serious hazard potential (this may consider the context of any proposed development). • Trees that are dead or are showing signs of significant, immediate and

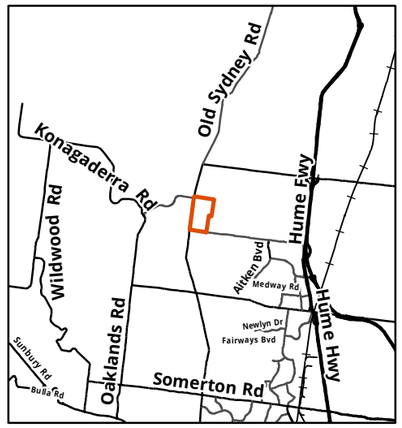
	irreversible overall decline. • Trees that are environmental weeds.

9. Useful Life Expectancy (ULE)

ULE	Typical characteristics
<1 year	Tree may be dead or mostly dead. Tree may exhibit major structural faults. Tree may be an imminent failure hazard.
1-5 years	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).
6-10 years	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.
11-20 years	Tree not showing symptoms of chronic decline, but growth characteristics are likely to be reduced (bud development, extension growth etc.). Tree may be over-mature and senescing.
21-30 years	Trees displaying normal growth characteristics. Tree may be growing in restricted environment (e.g. Streetscapes) or may be in late maturity.
31-60 years	Semi-mature and mature trees exhibiting normal growth characteristics. Juvenile trees in streetscapes.
61+ years	Juvenile and semi-mature trees exhibiting normal growth characteristics in parks or open space.

Appendix 2: Tree Location Plan

See Figures 1 to 4.



Legend

- Study Area
- Properties
- Scar trees

Tree

Retention value

- High
- Moderate
- Low
- None
- Dead tree

Tree groups

Tree retention value

- Moderate
- Moderate-low
- Low
- None

Figure 1: Tree locations

0 70 140 210 280 350

Metres

Scale: 1:7,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

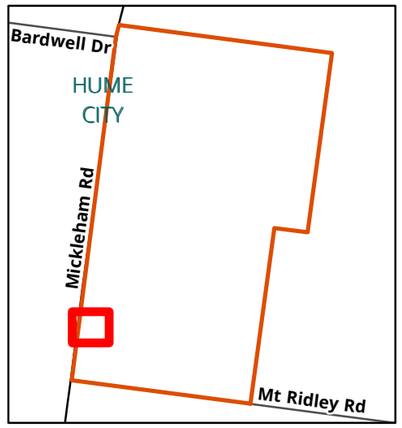
N

biosis

Biosis Pty Ltd

Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Matter: 17916,
Date: 12 December 2014,
Checked by: AJH, Drawn by: JMS, Last edited by: smitchell
Location:P:\17900s\17916\Mapping
17916_F1_Trees



Legend

- Study Area
- Properties

Tree

Retention value

- Moderate
- Low
- None
- Dead tree

Tree groups

Tree retention value

- Moderate
- Low

Figure 2: Tree locations - 1920 Mickleham Road, Mickleham – 0.6ha (Grgic property and former Mickleham Post Office site)

0 5 10 15 20 25

Metres

Scale: 1:500 @ A3

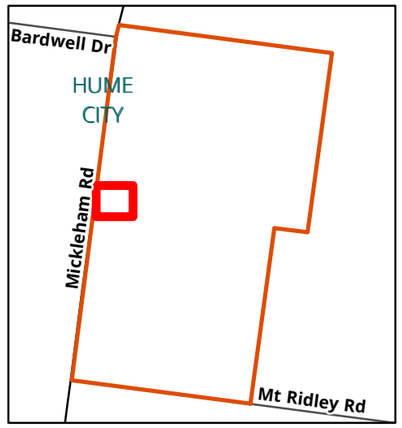
Coordinate System: GDA 1994 MGA Zone 55

N

Biosis Pty Ltd

Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Matter: 17916,
Date: 12 December 2014,
Checked by: AJH, Drawn by: JMS, Last edited by: smitchell
Location:P:\17900s\17916\Mapping
17916_F2_Trees_Detail1



Legend

- Study Area
- Properties

Tree

Retention value

- Low
- None
- Dead tree

Tree groups

Tree retention value

- None

Figure 3: Tree locations, 1990 Mickleham Road, Mickleham – 0.4ha (Denise Cocking property)

0 5 10 15 20 25

Metres

Scale: 1:500 @ A3

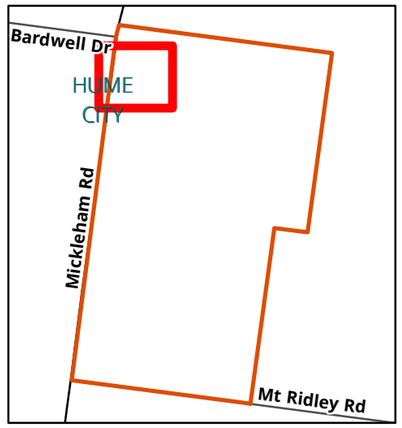
Coordinate System: GDA 1994 MGA Zone 55

N

Biosis Pty Ltd

Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Matter: 17916,
Date: 12 December 2014,
Checked by: AJH, Drawn by: JMS, Last edited by: smitchell
Location:Q:\Templates\Biosis ARC templates\17916_F3_Trees_Detail2



Legend

- Study Area
- Properties

Tree

Retention value

- Low
- None

Tree groups

Tree retention value

- Moderate-low
- Low
- None

Figure 4: Tree locations, part of 2040 Mickleham Road, Mickleham – 78.83 ha ("Lindum Vale" 2)

0 10 20 30 40 50

Metres

Scale: 1:1,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

N

Biosis Pty Ltd

Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Matter: 17916,
Date: 12 December 2014,
Checked by: AJH, Drawn by: JMS, Last edited by: smitchell
Location:P:\17900s\17916\Mapping
17916_F4_Trees_Detail3

Appendix 3: Tree Assessment Data – December 2014

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
1	*Eucalyptus camaldulensis*	River Red Gum	141	14	25	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	Some epicormics, OVEREXTENDED BRANCHES	15.00
2	*Eucalyptus camaldulensis*	River Red Gum	103	16	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Some epicormics. Major limb failure	12.36
3	*Eucalyptus camaldulensis*	River Red Gum	106	10	15	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	12.72
4	*Eucalyptus camaldulensis*	River Red Gum	106	16	16	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Very sparse epicormics	12.72
5	*Eucalyptus camaldulensis*	River Red Gum	129	13	15	Poor	Poor	Mature	Indigenous	Low	11-20 years	Very sparse epicormics. MAJOR LIMB FAILURES	15.00
6	*Eucalyptus camaldulensis*	River Red Gum	126	17	16	Very Poor	Poor	Mature	Indigenous	Low	1-5 years	Very sparse epicormics	15.00
7	*Eucalyptus camaldulensis*	River Red Gum	131	13	16	Fair to Poor	Poor	Mature	Indigenous	Low	11-20 years	Scar Tree, Sparse epicormics.MAJOR LIMB FAILURES	15.00
8	*Eucalyptus*	River Red	107	13	17	Poor	Poor	Mature	Indigenous	Low	6-10	Very sparse epicormics.	12.84

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years	MAJOR LIMB FAILURES	
9	*Eucalyptus camaldulensis*	River Red Gum	38	9	7	Fair to Poor	Fair	Semi-mature	Indigenous	Low	21-30 years	Some epicormics.	4.56
10	*Eucalyptus camaldulensis*	River Red Gum	113	15	12	Very Poor	Poor	Mature	Indigenous	Low	6-10 years	Some epicormics. Major limb failure	13.56
11	*Eucalyptus camaldulensis*	River Red Gum	141	16	20	Very Poor	Very Poor	Mature	Indigenous	None	<1 years	Scar Tree, Very sparse epicormics. MAJOR LIMB FAILURES	15.00
12	*Eucalyptus camaldulensis*	River Red Gum	134	13	17	Very Poor	Very Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. MAJOR LIMB FAILURES	15.00
13	*Eucalyptus camaldulensis*	River Red Gum	138	14	25	Poor	Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	15.00
14	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
15	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
16	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
17	*Eucalyptus*	River Red				Dead	Failed		Indigenous			Collapsed and dead	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum											
18	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
19	*Eucalyptus camaldulensis*	River Red Gum	126	13	18	Poor	Very Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. MAJOR LIMB FAILURES	15.00
20	*Eucalyptus camaldulensis*	River Red Gum	116	17	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	13.92
21	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
22	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
23	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
24	*Eucalyptus camaldulensis*	River Red Gum	74	12	6	Poor	Very Poor	Mature	Indigenous	None	<1 years	Sparse epicormics. Major limb failure	8.88
25	*Eucalyptus camaldulensis*	River Red Gum	116	14	23	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	Crown recovering.MAJOR LIMB FAILURES. MAJOR DEADWOOD	13.92
26	*Eucalyptus*	River Red	111	14	17	Good	Poor	Mature	Indigenous	Moderate	31-60	Major limb failure	13.32

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years		
27	*Eucalyptus camaldulensis*	River Red Gum	114	14	20	Poor	Poor	Mature	Indigenous	Low	21-30 years	Sparse epicormics. Major limb failure	13.68
28	*Eucalyptus camaldulensis*	River Red Gum	130	10	9	Dead	Failed	Mature	Indigenous	None	<1 years	Scar Tree, COLLAPSED AND DEAD	
29	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
30	*Eucalyptus camaldulensis*	River Red Gum	91	13	20	Fair to Poor	Poor	Mature	Indigenous	Moderate	31-60 years	Some epicormics.	10.92
31	*Eucalyptus camaldulensis*	River Red Gum	82	11	15	Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	Epicormics.	9.84
32	*Eucalyptus camaldulensis*	River Red Gum	100	11	12	Poor	Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	12.00
33	*Eucalyptus camaldulensis*	River Red Gum	114	10	16	Dead	Failed	Mature	Indigenous	None	<1 years	COLLAPSED AND DEAD	
34	*Eucalyptus camaldulensis*	River Red Gum	120	15	20	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	MAJOR LIMB FAILURES	14.40
35	*Eucalyptus camaldulensis*	River Red Gum	112	13	24	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	21-30 years	Epicormics. LIMB FAILURES	13.44

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
36	*Eucalyptus camaldulensis*	River Red Gum	112	15	14	Poor	Poor	Mature	Indigenous	Low	11-20 years	Very sparse epicormics. MAJOR LIMB FAILURES	13.44
37	*Eucalyptus camaldulensis*	River Red Gum	140	14	15	Fair to Poor	Very Poor	Mature	Indigenous	None	1-5 years	Major limb failure, MOST LIMBS	15.00
38	*Eucalyptus camaldulensis*	River Red Gum	108	17	20	Poor	Fair	Mature	Indigenous	Moderate	21-30 years	Sparse epicormics. MAJOR LIMB FAILURES	12.96
39	*Eucalyptus camaldulensis*	River Red Gum	84	12	15	Poor	Fair	Mature	Indigenous	Low	11-20 years	Some epicormics.	10.08
40	*Eucalyptus camaldulensis*	River Red Gum	120	15	25	Poor	Poor	Mature	Indigenous	Low	11-20 years	Epicormics. MAJOR LIMB FAILURES	14.40
41	*Eucalyptus camaldulensis*	River Red Gum	120	16	24	Poor	Poor	Mature	Indigenous	Low	11-20 years	MAJOR LIMB FAILURES	14.40
42	*Eucalyptus camaldulensis*	River Red Gum	114	12	19	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	13.68
43	*Eucalyptus camaldulensis*	River Red Gum	102	15	14	Very Poor	Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics.	12.24
44	*Eucalyptus camaldulensis*	River Red Gum	125	15	17	Poor	Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	15.00
45	*Eucalyptus*	River Red				Dead	Failed		Indigenous			Scar Tree, Collapsed and	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum										dead	
46	*Eucalyptus camaldulensis*	River Red Gum	130	16	10	Dead	Failed	Mature	Indigenous	None	<1 years	COLLAPSED AND DEAD	
47	*Eucalyptus camaldulensis*	River Red Gum	192	13	17	Poor	Poor	Senescent	Indigenous	Low	11-20 years	Thin crown. Major limb failure	15.00
48	*Eucalyptus camaldulensis*	River Red Gum		13	17	Dead	Failed		Indigenous			Collapsed and dead	
49	*Eucalyptus camaldulensis*	River Red Gum	91	11	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Epicormics. Major limb failure	10.92
50	*Eucalyptus camaldulensis*	River Red Gum	107	10	26	Very Poor	Very Poor	Mature	Indigenous	Low	6-10 years	Sparse epicormics. Major limb failure	12.84
51	*Eucalyptus camaldulensis*	River Red Gum	100	12	20	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	12.00
52	*Eucalyptus camaldulensis*	River Red Gum	132	15	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	15.00
53	*Eucalyptus camaldulensis*	River Red Gum	123	10	12	Very Poor	Failed	Mature	Indigenous	None	<1 years	Almost dead. Major limb failure	14.76
54	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
55	*Eucalyptus camaldulensis*	River Red Gum	92	8	12	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	11.04
56	*Eucalyptus camaldulensis*	River Red Gum	114	14	19	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	MAJOR LIMB FAILURES	13.68
57	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
58	*Eucalyptus camaldulensis*	River Red Gum	121	9	15	Poor	Poor	Mature	Indigenous	None	<1 years	Sparse epicormics. Major limb failure, Dead head	14.52
59	*Eucalyptus camaldulensis*	River Red Gum	114	12	17	Poor	Poor	Mature	Indigenous	Low	11-20 years	Scar Tree, Sparse crown. Major limb failure	13.68
60	*Eucalyptus camaldulensis*	River Red Gum	95	13	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Very sparse epicormics. MAJOR LIMB FAILURES	11.40
61	*Eucalyptus camaldulensis*	River Red Gum	90	11	14	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	10.80
62	*Eucalyptus camaldulensis*	River Red Gum	104	14	14	Poor	Very Poor	Mature	Indigenous	None	6-10 years	Very sparse epicormics. Major limb failure. BASAL DECAY	12.48
63	*Eucalyptus camaldulensis*	River Red Gum	89	12	15	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	10.68

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
64	*Eucalyptus camaldulensis*	River Red Gum	120	14	15	Poor	Very Poor	Mature	Indigenous	Low	6-10 years	Sparse crown. Major limb failure	14.40
65	*Eucalyptus camaldulensis*	River Red Gum	134	2	15	Dead	Failed	Mature	Indigenous	None	<1 years	COLLAPSED AND DEAD	
66	*Eucalyptus camaldulensis*	River Red Gum	96	13	16	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. MAJOR LIMB FAILURES	11.52
67	*Eucalyptus camaldulensis*	River Red Gum	132	16	25	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure. Mistletoe	15.00
68	*Eucalyptus camaldulensis*	River Red Gum	121	13	19	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	Thin crown. LIMB FAILURES	14.52
69	*Eucalyptus camaldulensis*	River Red Gum	85	13	17	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Thin crown. Major limb failure	10.20
70	*Eucalyptus camaldulensis*	River Red Gum	108	11	20	Fair to Poor	Fair	Mature	Indigenous	Moderate	60+ years	Thin crown.	12.96
71	*Eucalyptus camaldulensis*	River Red Gum	99	13	19	Poor	Poor	Mature	Indigenous	Low	21-30 years	Thin crown. Major limb failure	11.88
72	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
73	*Eucalyptus*	River Red	87	12	22	Fair to	Fair to	Mature	Indigenous	Low	11-20	Sparse epicormics.ROOT	10.44

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum				Poor	Poor				years	PLATE FAILURE	
74	*Eucalyptus camaldulensis*	River Red Gum	87	12	23	Fair to Poor	Very Poor	Mature	Indigenous	Moderate	31-60 years	Self-propping, Root plate failure	10.44
75	*Eucalyptus camaldulensis*	River Red Gum	132	15	14	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	15.00
76	*Eucalyptus camaldulensis*	River Red Gum	76	14	13	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. MAJOR LIMB FAILURES	9.12
77	*Eucalyptus camaldulensis*	River Red Gum	94	13	17	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. MAJOR LIMB FAILURES,MAJOR DEADWOOD	11.28
78	*Eucalyptus camaldulensis*	River Red Gum	93	8	9	Poor	Very Poor	Mature	Indigenous	Low	11-20 years	Epicormics. Major limb failure, MAJOR TRUNK DECAY	11.16
79	*Eucalyptus camaldulensis*	River Red Gum	90	12	15	Poor	Poor	Mature	Indigenous	Low	11-20 years	Epicormics. Major limb failure	10.80
80	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
81	*Crataegus sp.*	Hawthorn	25	5	4	Poor	Fair	Mature	Exotic deciduous	None	<1 years	Weed	3.00

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
82	*Eucalyptus camaldulensis*	River Red Gum	148	10	20	Fair to Poor	Fair to Poor	Mature	Indigenous	High	31-60 years	OVEREXTENDED BRANCHES. MAJOR DEADWOOD	15.00
83	*Eucalyptus camaldulensis*	River Red Gum	90,89	12	23	Fair to Poor	Fair	Mature	Indigenous	High	31-60 years		15.00
84	*Eucalyptus camaldulensis*	River Red Gum	103	16	20	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	60+ years	LIMB FAILURES	12.36
85	*Eucalyptus microcarpa*	Grey Box	66	14	18	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	21-30 years	Fire damaged	7.92
86	*Eucalyptus microcarpa*	Grey Box	79	15		Poor	Very Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics and crown. Trunk CAVITY decay	9.48
87	*Eucalyptus camaldulensis*	River Red Gum	94	12	16	Fair to Poor	Fair	Mature	Indigenous	Moderate	31-60 years		11.28
88	*Eucalyptus camaldulensis*	River Red Gum	79	13	15	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	Sparse epicormics. Limb failure	9.48
89	*Eucalyptus camaldulensis*	River Red Gum	143	14	20	Poor	Very Poor	Mature	Indigenous	None	<1 years	Sparse epicormics. Extensive trunk decay. INTERNAL TRUNK FIRE	15.00
90	*Eucalyptus*	River Red	143	16	21	Poor	Poor	Mature	Indigenous	Low	11-20	Sparse crown. Major limb	15.00

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years	failure	
91	*Eucalyptus microcarpa*	Grey Box	112	19	16	Very Poor	Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. SEVERE DECLINE	13.44
92	*Eucalyptus microcarpa*	Grey Box	75	14	19	Poor	Fair to Poor	Mature	Indigenous	Low	1-5 years	Very sparse epicormics. SEVERE DECLINE	9.00
93	*Eucalyptus camaldulensis*	River Red Gum	92	11	18	Very Poor	Fair to Poor	Mature	Indigenous	Low	6-10 years	Some epicormics.	11.04
94	*Eucalyptus microcarpa*	Grey Box	75	13	15	Poor	Fair to Poor	Mature	Indigenous	Low	6-10 years	Very sparse epicormics.	9.00
95	*Eucalyptus microcarpa*	Grey Box	92	12	16	Very Poor	Poor	Mature	Indigenous	Low	1-5 years	Very sparse epicormics. MAJOR LIMB FAILURES	11.04
96	*Eucalyptus microcarpa*	Grey Box	76	15	15	Very Poor	Poor	Mature	Indigenous	Low	6-10 years	Sparse crown.	9.12
97	*Eucalyptus microcarpa*	Grey Box	98	16	19	Poor	Very Poor	Mature	Indigenous	Low	1-5 years	Sparse crown. Major limb failure	11.76
98	*Eucalyptus microcarpa*	Grey Box	67	14	17	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. MAJOR LIMB FAILURES	8.04
99	*Eucalyptus camaldulensis*	River Red Gum	74	13	15	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. MAJOR LIMB FAILURES	8.88

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
100	*Eucalyptus camaldulensis*	River Red Gum	114	15	23	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	13.68
101	*Eucalyptus microcarpa*	Grey Box	98	17	19	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	11.76
102	*Eucalyptus camaldulensis*	River Red Gum	114	13	23	Fair to Poor	Poor	Mature	Indigenous	Moderate	31-60 years	Sparse epicormics. Major limb failure	13.68
103	*Eucalyptus microcarpa*	Grey Box	93	17	19	Very Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	11.16
104	*Eucalyptus microcarpa*	Grey Box	79	11	17	Poor	Very Poor	Mature	Indigenous	Low	1-5 years	Scar Tree, Very sparse crown. Trunk wounds	9.48
105	*Eucalyptus microcarpa*	Grey Box	121	20	19	Poor	Fair	Mature	Indigenous	Low	11-20 years	Sparse crown.	14.52
106	*Eucalyptus microcarpa*	Grey Box	94	16	15	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	11.28
107	*Eucalyptus microcarpa*	Grey Box	72	15	13	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	8.64
108	*Eucalyptus microcarpa*	Grey Box	48	11	11	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	5.76
109	*Eucalyptus*	River Red	107	12	20	Poor	Fair	Mature	Indigenous	Moderate	21-30	Epicormics.	12.84

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years		
110	*Eucalyptus microcarpa*	Grey Box	88	16	15	Poor	Poor	Mature	Indigenous	Low	6-10 years	Very sparse epicormics. MAJOR TRUNK WOUND	10.56
111	*Eucalyptus microcarpa*	Grey Box	112	19	17	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	13.44
112	*Eucalyptus camaldulensis*	River Red Gum	89	13	13	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	60+ years	Sparse epicormics. ACUTE BRANCH ATTACHMENTS	10.68
113	*Eucalyptus camaldulensis*	River Red Gum	148	15	23	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	60+ years	Sparse crown. MAJOR LIMB FAILURES	15.00
114	*Eucalyptus camaldulensis*	River Red Gum	113	15	17	Fair	Poor	Mature	Indigenous	Moderate	60+ years	Major limb failure	13.56
115	*Eucalyptus camaldulensis*	River Red Gum	60	11	12	Fair to Poor	Fair	Mature	Indigenous	Moderate	60+ years		7.20
116	*Eucalyptus camaldulensis*	River Red Gum	30	9	6	Fair	Fair	Semi-mature	Indigenous	Moderate	60+ years		3.60
117	*Eucalyptus camaldulensis*	River Red Gum	78	14	17	Fair	Fair	Mature	Indigenous	High	60+ years		9.36
118	*Eucalyptus*	River Red	74,67	14	20	Fair	Fair	Mature	Indigenous	High	60+		11.98

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years		
119	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
120	*Melaleuca armillaris*	Bracelet Honey-myrtle	40	5	6	Dead	Poor	Mature	Victorian Native	None	<1 years	STUMP	
121	*Lagunaria patersonia*	Norfolk Island Hibiscus	10	5	2	Poor	Poor	Semi-mature	Australian native	Low	<1 years		2.00
122	*Eucalyptus* sp.	Gum Tree	42	7	8	Fair	Poor	Mature	Australian native	Low	21-30 years		5.04
123	*Eucalyptus sideroxylon*	Red Ironbark	28	6	4	Fair to Poor	Fair to Poor	Semi-mature	Victorian Native	Low	6-10 years	Acute branching	3.36
124	*Eucalyptus conferruminata*	Bald Island Marlock	19	5	7	Dead	Stump	Semi-mature	Australian native	None	0	REMOVED	
125	*Melaleuca armillaris*	Bracelet Honey-myrtle	38	4	7	Dead	Stump	Semi-mature	Victorian Native	None	0	REMOVED	
126	*Euca sp. (same as 123)*	Gum Tree	16	6	5	Dead	Poor	Semi-mature	Australian native	None	<1 years		

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
127	*Eucalyptus sideroxylon*	Red Ironbark	23,18	6	5	Fair	Fair to Poor	Semi-mature	Victorian Native	Low	11-20 years		3.50
128	*Hakea sericea*	Silky Needle-bush	22	4	4	Dead	Poor	Semi-mature	Australian native	None	<1 years	DEAD	
129	*Eucalyptus sp.*	Gum Tree	18	6	4	Dead	Poor	Semi-mature	Australian native	None	<1 years	DEAD	
130	*Eucalyptus nicholii*	Narrow-leaved Peppermint	41	7	6	Poor	Poor	Semi-mature	Australian native	None	<1 years		4.92
131	*Eucalyptus camaldulensis*	River Red Gum	38	10	10	Fair to Poor	Poor	Semi-mature	Planted Indigenous	Low	<1 years	Branch failure	4.56
132	*Eucalyptus sp.*	Gum Tree	10	5	3	Dead	Stump	Semi-mature	Australian native	None	0	REMOVED	
133	*Eucalyptus sp.*	Gum Tree	18	4	3	Dead	Stump	Semi-mature	Australian native	None	0	REMOVED	
134	*Eucalyptus sp.*	Gum Tree	16	4	3	Dead	Stump	Semi-mature	Australian native	None	0	REMOVED	
135	*Eucalyptus sp.*	Gum Tree	12	6	5	Dead	Poor	Semi-mature	Australian native	None	<1 years	DEAD	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
136	*Melaleuca armillaris*	Bracelet Honey-myrtle	45	4	8	Dead	Poor	Semi-mature	Victorian Native	None	<1 years	DEAD	
137	*Grevillea robusta*	Silky Oak	22	6	4	Poor	Fair to Poor	Semi-mature	Australian native	Low	11-20 years		2.64
138	*Prunus xdomestica*	European Plum	19	3	3	Dead	Stump	Semi-mature	Exotic deciduous	None	0	REMOVED	
139	*Fraxinus angustifolia*	Narrow-leaved Ash	25	4	3	Dead	Stump	Semi-mature	Exotic deciduous	None	0	REMOVED	
140	*Fraxinus angustifolia*	Narrow-leaved Ash	25	5	4	Dead	Stump	Semi-mature	Exotic deciduous	None	0	REMOVED	
141	*Fraxinus angustifolia*	Narrow-leaved Ash	20	4	4	Dead	Stump	Semi-mature	Exotic deciduous	None	0	REMOVED	
142	*Fraxinus angustifolia*	Narrow-leaved Ash	23	4	4	Poor	Poor	Semi-mature	Exotic deciduous	None	<1 years		2.76
143	*Callistemon viminalis*	Weeping Bottlebrush	27	4	4	Fair	Fair	Mature	Australian native	Low	11-20 years	Lopped	3.24
144	*Hakea sericea*	Silky Needle-bush	26	4	7	Fair	Poor	Mature	Australian native	Low	1-5 years		3.12

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
145	*Hakea salicifolia*	Willow-leaved Hakea	45	3	4	Very Poor	Poor	Mature	Australian native	None	<1 years		5.40
146	*Callistemon viminalis*	Weeping Bottlebrush	30	3	4	Dead	Poor	Mature	Australian native	None	<1 years		
147	*Hakea salicifolia*	Willow-leaved Hakea	45	3	3	Dead	Poor	Mature	Australian native	None	<1 years		
148	*Callistemon viminalis*	Weeping Bottlebrush	25	4	2	Dead	Poor	Semi-mature	Australian native	None	<1 years		
149	*Cupressus macrocarpa*	Monterey Cypress	131	6	15	Fair to Poor	Poor	Mature	Exotic conifer	Low	6-10 years	Asymmetric crown. Past power line clearance pruning	15.00
150	*Pinus radiata*	Monterey Pine	48	8	10	Poor	Poor	Senescent	Exotic conifer	None	<1 years	Past power line clearance pruning	5.76
151	*Pinus radiata*	Monterey Pine	61	10	6	Poor	Fair to Poor	Senescent	Exotic conifer	None	<1 years	Past power line clearance pruning	7.32
152	*Eucalyptus camaldulensis*	River Red Gum	107	11	21	Fair	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	CROWDED BRANCH STRUCTURE	12.84
153	*Eucalyptus*	River Red	13	6	4	Fair	Fair	Semi-	Planted	Low	31-60		2.00

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum						mature	Indigenous		years		
154	*Fraxinus angustifolia*	Narrow-leaved Ash	14	4	3	Fair	Fair	Semi-mature	Exotic deciduous	None	31-60 years		2.00
155	*Ulmus procera*	English Elm	19	6	5	Fair	Fair to Poor	Semi-mature	Exotic deciduous	None	21-30 years	Suckers	2.28
156	*Prunus xdomestica*	European Plum	15	5	4	Fair	Fair	Semi-mature	Exotic deciduous	Low	11-20 years		2.00
157	*Prunus xdomestica*	European Plum	21	6	5	Fair	Poor	Semi-mature	Exotic deciduous	None	11-20 years		2.52
158	*Prunus xdomestica*	European Plum	22	5	3	Fair	Fair	Semi-mature	Exotic deciduous	Low	11-20 years		2.64
159	*Eucalyptus camaldulensis*	River Red Gum	21	8	5	Fair	Fair	Semi-mature	Planted Indigenous	Low	60+ years	PLANTED	2.52
160	*Prunus xdomestica*	European Plum	25	4	3	Fair	Poor	Semi-mature	Exotic deciduous	Low	11-20 years		3.00
161	*Crataegus laevigata*	English Hawthorn	30	4	4	Fair	Poor	Semi-mature	Exotic deciduous	None	11-20 years	Weed	3.60
162	*Eucalyptus microcarpa*	Grey Box	38	12	9	Fair	Fair to Poor	Semi-mature	Planted Indigenous	Low	31-60 years	Bifurcated with included bark	4.56

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
163	*Eucalyptus microcarpa*	Grey Box	24	9	6	Fair	Fair	Semi-mature	Planted Indigenous	Moderate	31-60 years		2.88
164	*Eucalyptus gomphocephala*	Tuart	31,29	10	9	Fair	Fair to Poor	Semi-mature	Australian native	Low	31-60 years		5.09
165	*Eucalyptus microcarpa*	Grey Box	48	12	12	Fair	Fair	Mature	Planted Indigenous	Moderate	31-60 years		5.76
166	*Eucalyptus leucoxylon*	Yellow Gum	58	11	18	Fair	Fair	Mature	Victorian Native	Moderate	31-60 years		6.96
167	*Eucalyptus sideroxylon*	Red Ironbark	18	7	3	Fair	Fair	Semi-mature	Victorian Native	Low	11-20 years		2.16
168	*Eucalyptus sideroxylon*	Red Ironbark	15	5	3	Fair	Fair to Poor	Semi-mature	Victorian Native	Low	11-20 years		2.00
169	*Eucalyptus globulus*	Tasmanian Blue Gum	17,17	5	5	Fair	Poor	Semi-mature	Victorian Native	Low	11-20 years		2.88
170	*Eucalyptus sp.*	Gum Tree	13	4	2	Dead	Fair to Poor	Semi-mature	Australian native	None	<1 years		
171	*Eucalyptus microcarpa*	Grey Box	33,32	15	11	Fair	Fair to Poor	Mature	Planted Indigenous	Low	11-20 years	Bifurcated at base	5.52
172	*Eucalyptus sp.*	Gum Tree	37,23	11	11	Fair	Fair to	Mature	Australian	Low	11-20		5.23

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
							Poor		native		years		
173	*Eucalyptus microcarpa*	Grey Box	48	17	8	Fair	Fair	Mature	Planted Indigenous	Moderate	31-60 years		5.76
174	*Eucalyptus microcarpa*	Grey Box	29,27	14	9	Fair	Fair	Mature	Planted Indigenous	Moderate	31-60 years		4.75
175	*Eucalyptus microcarpa*	Grey Box	40	17	10	Fair to Poor	Fair	Mature	Planted Indigenous	Low	11-20 years		4.80
176	*Corymbia maculata*	Spotted Gum	37	13	8	Fair	Fair	Mature	Victorian Native	Moderate	31-60 years		4.44
177	*Eucalyptus microcarpa*	Grey Box	38	15	8	Fair	Fair	Mature	Planted Indigenous	Moderate	31-60 years		4.56
178	*Eucalyptus camaldulensis*	River Red Gum	33	10	6	Fair	Poor	Semi-mature	Planted Indigenous	Low	11-20 years	MAJOR LIMB FAILURES	3.96
179	*Eucalyptus camaldulensis*	River Red Gum	17	6	5	Fair	Fair	Semi-mature	Planted Indigenous	Low	31-60 years		2.04
180	*Eucalyptus camaldulensis*	River Red Gum	8,10	4	3	Fair	Fair to Poor	Semi-mature	Planted Indigenous	Low	21-30 years		2.00
181	*Ulmus xhollandica*	Dutch Elm	33	10	9	Fair to Poor	Poor	Semi-mature	Exotic deciduous	Low	11-20 years		3.96

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
182	*Ulmus xhollandica*	Dutch Elm	86	10	17	Fair to Poor	Fair	Semi-mature	Exotic deciduous	Low	31-60 years	ELB treatment required	10.32
183	*Prunus cerasifera 'Nigra'*	Purple Leaf Cherry Plum	21	7	5	Fair	Fair to Poor	Mature	Exotic deciduous	None	11-20 years	Weed	2.52
184	*Ulmus xhollandica*	Dutch Elm	27,24, 18,16,	8	8	Fair to Poor	Poor	Mature	Exotic deciduous	Low	11-20 years		5.21
185	*Ulmus xhollandica*	Dutch Elm	65	12	14	Fair	Fair	Mature	Exotic deciduous	Low	11-20 years	Trunk wound	7.80
186	*Salix babylonica* var. *pekinensis 'Tortuosa'*	Tortured Willow	40,30	8	7	Poor	Fair to Poor	Semi-mature	Exotic deciduous	None	<1 years		6.00
187	*Eucalyptus sp.*	Gum Tree	7-15	4-5	2-4	Fair	Fair	Juvenile	Australian native	Low	31-60 years	5 trees	15.00
187	*Eucalyptus camaldulensis*	River Red Gum	16	8	3	Fair	Poor	Semi-mature	Planted Indigenous	Low	<1 years	Bifurcated with included bark	2.00
188	*Eucalyptus* sp.	Gum Tree	5-8	3-5	2-3	Fair	Fair	Juvenile	Australian native	Low	31-60 years	4 trees	15.00
188	*Melaleuca armillaris*	Bracelet Honey-	16	7	3	Fair	Poor	Semi-mature	Victorian Native	Low	6-10 years		2.00

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
		myrtle											
189	*Ulmus procera* & *Ulmus xhollandica*	English & Dutch Elm	5-11	3-7	2-5	Fair	Fair	Juvenile	Exotic deciduous	None	11-20 years	40+ suckers	15.00
189	*Callistemon citrinus*	Crimson Bottlebrush	12	7	3	Fair	Fair	Semi-mature	Victorian Native	Low	6-10 years		2.00
190	*Grevillea robusta*	Silky Oak	23	10	4	Fair	Poor	Semi-mature	Australian native	Low	11-20 years	Multiple leaders. MAJOR LIMB FAILURES	2.76
191	*Melaleuca styphelioides*	Prickly-leaved Paperbark	21	6	4	Fair	Fair to Poor	Semi-mature	Australian native	Low	11-20 years	Suppressed	2.52
192	*Melaleuca armillaris*	Bracelet Honey-myrtle	16	5	4	Fair to Poor	Fair to Poor	Semi-mature	Victorian Native	Low	6-10 years		2.00
193	*Eucalyptus camaldulensis*	River Red Gum	18	8	4	Fair	Fair	Semi-mature	Planted Indigenous	Low	31-60 years		2.16
194	*Eucalyptus leucoxylon*	Yellow Gum	8-27	4-6	3-5	Fair	Fair to Poor	Semi-mature	Victorian Native	Low	11-20 years	3 trees	15.00
195	*Prunus cerasifera 'Nigra'*	Purple Leaf Cherry	20	4	6	Fair	Poor	Semi-mature	Exotic deciduous	None	6-10 years	Weed	2.40

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
		Plum											
196	*Melaleuca armillaris*	Bracelet Honey-myrtle	30,25	5	6	Fair to Poor	Poor	Semi-mature	Victorian Native	Low	6-10 years		4.69
197	*Acacia pycnantha*	Golden Wattle	18	5	4	Poor	Poor	Senescent	Victorian Native	None	<1 years		2.16
198	*Acacia pycnantha*	Golden Wattle	22,26	8	8	Poor	Poor	Senescent	Victorian Native	None	<1 years		4.09
199	*Eucalyptus camaldulensis*	River Red Gum	14-24	8-9	3-5	Fair	Fair to Poor	Semi-mature	Indigenous	Low	60+ years	3 trees, 1 is stump resprout	3.00
200	*Eucalyptus leucoxylon*	Yellow Gum	40,30	12	13	Fair to Poor	Fair to Poor	Semi-mature	Victorian Native	Low	11-20 years	Basal wound, previously lopped	6.00
201	*Phoenix canariensis*	Canary Island Date Palm	90	3-5	5-6	Fair	Fair	Semi-mature	Palm	Low	31-60 years	3 palms close together	10.80
202	*Quercus robur*	English Oak	72	10	10	Fair to Poor	Fair to Poor	Mature	Exotic deciduous	Low	31-60 years		8.64
203	*Eucalyptus camaldulensis*	River Red Gum	85	12	18	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Major limb failure	10.20

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
204	*Eucalyptus camaldulensis*	River Red Gum	106	17	25	Poor	Poor	Mature	Indigenous	Low	21-30 years	Epicormics. Major limb failure	12.72
205	*Eucalyptus camaldulensis*	River Red Gum	90	12	10	Poor	Very Poor	Mature	Indigenous	None	<1 years	Sparse epicormics. Major limb failure	10.80
206	*Eucalyptus camaldulensis*	River Red Gum	111	11	19	Poor	Poor	Mature	Indigenous	Low	6-10 years	Very sparse epicormics. INTERNAL TRUNK FIRE	13.32
207	*Eucalyptus camaldulensis*	River Red Gum	100	15	21	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	12.00
208	*Eucalyptus camaldulensis*	River Red Gum	119	15	21	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	14.28
209	*Eucalyptus microcarpa*	Grey Box	101	15	15	Very Poor	Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. VIRTUALLY DEAD	12.12
210	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Scar Tree, Collapsed and dead	
211	*Eucalyptus camaldulensis*	River Red Gum	112	14	22	Very Poor	Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. BASAL DECAY	13.44
212	*Eucalyptus camaldulensis*	River Red Gum	91	9	11	Very Poor	Very Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. Major limb failure	10.92
213	*Eucalyptus*	River Red	104	14	30	Fair to	Fair to	Mature	Indigenous	Moderate	21-30	Sparse epicormics. OVEREXTENDED	12.48

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum				Poor	Poor				years	BRANCHES	
214	*Eucalyptus camaldulensis*	River Red Gum	100	16	22	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	12.00
215	*Eucalyptus camaldulensis*	River Red Gum	115	15	18	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	13.80
216	*Eucalyptus camaldulensis*	River Red Gum	79	10	9	Very Poor	Very Poor	Mature	Indigenous	None	<1 years	Sparse epicormics. Major limb failure	9.48
217	*Eucalyptus camaldulensis*	River Red Gum	116	9	19	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	13.92
218	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
219	*Eucalyptus camaldulensis*	River Red Gum	82	10	21	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	9.84
220	*Eucalyptus camaldulensis*	River Red Gum	25	9	4	Fair	Fair	Semi-mature	Indigenous	Moderate	60+ years		3.00
221	*Eucalyptus camaldulensis*	River Red Gum	76	13	20	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	9.12
222	*Eucalyptus camaldulensis*	River Red Gum	102	12	20	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	OVEREXTENDED BRANCHES	12.24

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
223	*Eucalyptus camaldulensis*	River Red Gum	107	13	17	Poor	Fair to Poor	Mature	Indigenous	Moderate	21-30 years		12.84
224	*Eucalyptus camaldulensis*	River Red Gum	80	10	16	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	9.60
225	*Eucalyptus camaldulensis*	River Red Gum	74	11	12	Poor	Poor	Mature	Indigenous	Low	11-20 years	Major limb failure. Sparse crown	8.88
226	*Eucalyptus camaldulensis*	River Red Gum	111	12	18	Poor	Poor	Mature	Indigenous	Low	31-60 years	Major limb failure	13.32
227	*Eucalyptus camaldulensis*	River Red Gum	96	15	17	Very Poor	Poor	Mature	Indigenous	Low	11-20 years	Major limb failure. Sparse crown	11.52
228	*Eucalyptus camaldulensis*	River Red Gum	105	13	22	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Trunk cavity	12.60
229	*Eucalyptus camaldulensis*	River Red Gum	93	12	23	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	11.16
230	*Eucalyptus camaldulensis*	River Red Gum				Dead	Failed		Indigenous			Collapsed and dead	
231	*Eucalyptus camaldulensis*	River Red Gum	100	11	16	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Trunk wounds/canker	12.00
232	*Eucalyptus*	River Red	70	6	9	Dead	Failed	Mature	Indigenous	None	<1 years	Dead, collapsed	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum											
233	*Eucalyptus camaldulensis*	River Red Gum	168	11	10	Poor	Very Poor	Mature	Indigenous	None	<1 years	Sparse crown. Major trunk cavity. INTERNAL TRUNK FIRE	15.00
234	*Eucalyptus camaldulensis*	River Red Gum	111	18	27	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	13.32
235	*Eucalyptus camaldulensis*	River Red Gum	97	15	16	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	11.64
236	*Eucalyptus camaldulensis*	River Red Gum	104	9	7	Dead	Failed	Mature	Indigenous	None	<1 years	Very sparse crown. Trunk failure.	
237	*Eucalyptus camaldulensis*	River Red Gum	140	10	7	Very Poor	Failed	Mature	Indigenous	None	<1 years	Very sparse crown. Trunk failure	15.00
238	*Eucalyptus camaldulensis*	River Red Gum	115	15	18	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Sparse crown. Major limb failure	13.80
239	*Eucalyptus camaldulensis*	River Red Gum	118	15	20	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	14.16
240	*Eucalyptus camaldulensis*	River Red Gum	98	15	17	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Sparse crown. Major limb failure	11.76
241	*Eucalyptus*	River Red	119	16	25	Poor	Poor	Mature	Indigenous	Low	11-20	Sparse crown. Major limb	14.28

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years	failure	
242	*Eucalyptus camaldulensis*	River Red Gum	110	13	17	Very Poor	Very Poor	Mature	Indigenous	None	<1 years	Very sparse epicormics. Major limb failure. 95% DEAD	13.20
243	*Eucalyptus camaldulensis*	River Red Gum	120	11	21	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	14.40
244	*Eucalyptus camaldulensis*	River Red Gum	113	13	27	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Very sparse epicormics. OVEREXTENDED BRANCHES	13.56
245	*Eucalyptus camaldulensis*	River Red Gum	96	11	14	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	11.52
246	*Eucalyptus camaldulensis*	River Red Gum	116	16	27	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	13.92
247	*Eucalyptus camaldulensis*	River Red Gum	109	14	15	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	13.08
248	*Eucalyptus camaldulensis*	River Red Gum	122	13	22	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Some epicormics.	14.64
249	*Eucalyptus camaldulensis*	River Red Gum	97	12	23	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	11.64

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
250	*Eucalyptus camaldulensis*	River Red Gum	96	16	22	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. Major limb failure	11.52
251	*Eucalyptus camaldulensis*	River Red Gum	122	17	29	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	14.64
252	*Eucalyptus camaldulensis*	River Red Gum	104	14	23	Fair to Poor	Fair	Mature	Indigenous	Moderate	31-60 years	Sparse crown.	12.48
253	*Eucalyptus camaldulensis*	River Red Gum	126	13	22	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse epicormics. MAJOR LIMB FAILURES	15.00
254	*Eucalyptus camaldulensis*	River Red Gum	76	13	17	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Major trunk wound. MAJOR LIMB FAILURES	9.12
255	*Eucalyptus camaldulensis*	River Red Gum	155	13	17	Fair	Very Poor	Mature	Indigenous	Low	31-60 years	Major limb failure	15.00
256	*Eucalyptus camaldulensis*	River Red Gum	123,111	16	26	Fair to Poor	Poor	Mature	Indigenous	Moderate	31-60 years	MAJOR LIMB FAILURES	15.00
257	*Eucalyptus camaldulensis*	River Red Gum	133	14	24	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	15.00
258	*Eucalyptus camaldulensis*	River Red Gum	77	11	16	Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years		9.24
259	*Eucalyptus*	River Red	103	9	12	Fair	Poor	Mature	Indigenous	Low	31-60	Major limb failure	12.36

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
	camaldulensis	Gum									years		
260	*Eucalyptus camaldulensis*	River Red Gum	118	13	23	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	14.16
261	*Eucalyptus camaldulensis*	River Red Gum	115	15	22	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	13.80
262	*Eucalyptus camaldulensis*	River Red Gum	134	13	30	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure	15.00
263	*Eucalyptus camaldulensis*	River Red Gum	97	12	24	Poor	Poor	Mature	Indigenous	Low	31-60 years	Sparse crown. Major limb failure	11.64
264	*Eucalyptus camaldulensis*	River Red Gum	114	14	23	Poor	Poor	Mature	Indigenous	Low	31-60 years	Sparse crown. Major limb failure	13.68
265	*Eucalyptus camaldulensis*	River Red Gum	100	12	17	Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years		12.00
266	*Eucalyptus camaldulensis*	River Red Gum	130	11	20	Fair to Poor	Poor	Mature	Indigenous	Moderate	31-60 years	MAJOR LIMB FAILURES	15.00
267	*Eucalyptus camaldulensis*	River Red Gum	124	14	20	Fair to Poor	Poor	Mature	Indigenous	Low	31-60 years	Major limb failure	14.88
268	*Eucalyptus camaldulensis*	River Red Gum	120	14		Fair to Poor	Fair to Poor	Mature	Indigenous	Moderate	31-60 years	MAJOR LIMB FAILURES	14.40

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
269	*Eucalyptus camaldulensis*	River Red Gum	105	12	29	Fair	Fair	Mature	Indigenous	High	31-60 years		12.60
270	*Eucalyptus camaldulensis*	River Red Gum	137	10	25	Poor	Poor	Mature	Indigenous	Low	31-60 years	Trunk hollows . Limb failure	15.00
271	*Eucalyptus camaldulensis*	River Red Gum	120	16	24	Poor	Fair to Poor	Mature	Indigenous	Low	11-20 years	Sparse crown.	14.40
272	*Eucalyptus camaldulensis*	River Red Gum	125	16	20	Poor	Poor	Mature	Indigenous	Low	11-20 years	Sparse crown. Major limb failure. TRUNK FAILURE	15.00
273	*Eucalyptus camaldulensis*	River Red Gum	84	11	13	Very Poor	Poor	Mature	Indigenous	Low	1-5 years	Very sparse epicormics. Major limb failure	10.08
274	*Eucalyptus camaldulensis*	River Red Gum	18-24	7-8	3-4	Fair	Fair to Poor	Semi-mature	Indigenous	Low	31-60 years	Planted. 4 trees	3.00

Tree Groups

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
275	*Cupressus macrocarpa*	Monterey Cypress	54-81	11-	12	Fair	Fair to Poor	Mature	Exotic conifer	Low	11-20 years	11-13 height. 5 trees Width 12-19. Retain as group. CYPRESS CANKER. LIMB	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
												FAILURES	
279	*Melaleuca armillaris*	Bracelet Honey-myrtle	20-45	4	4-5	Very Poor	Poor	Semi-mature	Victorian Native	None	<1 years	4 trees	
280	*Melaleuca armillaris*	Bracelet Honey-myrtle	20	4	3-4	Dead	Stump	Semi-mature	Victorian Native	None	0	REMOVED	
281	*Melaleuca armillaris*	Bracelet Honey-myrtle	20-30	3	3-4	Dead	Stump	Semi-mature	Victorian Native	None	0	REMOVED	
282	*Eucalyptus cladocalyx*	Sugar Gum	25-114			Fair to Poor	Very Poor	Semi-mature	Australian native	None	<1 years	29 trees west of hse. Lopped. height 1-17 width 1-13	
283	*Eucalyptus cladocalyx*	Sugar Gum	52-140			Fair	Very Poor	Mature	Australian native	None	<1 years	Lopped at 1m. height 13-15width 5-10	
284	*Eucalyptus cladocalyx*	Sugar Gum	90-97			Poor	Poor	Mature	Australian native	None	<1 years	Lopped at 1m height 1m	
285	*Cupressus macrocarpa*	Monterey Cypress	92-103			Fair to Poor	Fair to Poor	Senescent	Exotic conifer	Low	11-20 years	2 trees, width 5-10 height 13-14 height 7-10 width 11-12. trunk wound.	

ID	Species	Common name	DBH (cm)	Crown Height (m)	Crown width (m)	Health	Structure	Age	Origin	Retention value	ULE	Comment	TPZ (m)
												branch failure.	
286	*Cupressus macrocarpa*	Monterey Cypress	77-172			Fair to Poor	Poor	Senescent	Exotic conifer	Low	1-5 years	10 live trees. most senescent. group to sth of shed height 10-15 width 5-14	
287	*Cupressus macrocarpa*	Monterey Cypress	26-97			Fair to Poor	Fair to Poor	Mature	Exotic conifer	Low	11-20 years	Many trees have structural issues. 18 live trees h9-15 w7-12	