Appendix 8 – Arborist report

Hygge Property – Preliminary Arboricultural Tree Assessment Report

Location: Wombat Park, 4719 Midland Hwy, Daylesford
Client: Hygge Property
Date: 18 February 2022

Xylem TreeCare Pty Ltd
Level 1 / 7 Ocean St, Maroochydore QLD 4556
Phone: 07 5443 1704 / E-mail: admin@xylemtrees.com.au

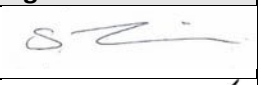
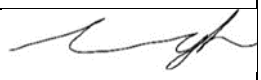
RESPONSIBLE TREE MANAGEMENT

Table of Contents

1. Quality Information

Document: Wombat Park, 4719 Midland Hwy, Daylesford, Tree Assessment
Date: 18 February 2022
Prepared by: Marty Waugh
Reviewed by: Sam Bianchi

Table 1- Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
1	18/02/2022	Reviewed	Sam Bianchi Senior Consulting Arborist	
2	18/02/2022	Draft report sent to the client	Marty Waugh Consulting Arborist	

2. Disclaimer

Xylem TreeCare (including its subsidiaries and the directors, officers, employees, representatives, servants or agents of Xylem TreeCare and its subsidiary) ("**Xylem TreeCare**") is in the business of advising on matters of Environmental, Arboricultural and Vegetation Management ("**the Expertise**"). Xylem TreeCare has been engaged by Hygge Property ("**the Client**") to prepare a Tree Assessment Report ("**the Subject**") to identify trees within the subject area and to provide a current tree assessment based on tree health and structure. ("**the Purpose**"). Xylem TreeCare has prepared such a report which is dated 18th February 2022 ("**the Report**").

This Disclaimer is given by Xylem TreeCare in relation to the following matters:

- The Expertise.
- Xylem TreeCare's instructions as to the Subject of the Report.
- Xylem TreeCare's instructions as to the Purpose of the Report.
- Xylem TreeCare's instructions as to the identity of the Client.
- The use by the Client of the Report.
- Reliance on the Report by the Client.

Reference in this disclaimer to the Client incorporates any entity, director, officer, representative, employee, servant or agent of the Client insofar as, where any such person or entity seeks to or does act in reliance on the Report, such reliance is made with an express acceptance and acknowledgment of the following disclaimers and conditions:

1. It is expressly acknowledged by the Client that the Report, and any other material or advice provided to the Client by Xylem TreeCare:

- Is selective in that it is current only at the time of preparation or provision, relevant only to the Subject and the Purpose and based on instructions provided by the Client to Xylem TreeCare and may be subject to updating, expansion, revision, correction and amendment upon the provision of further or different instructions or through the lapse of time.

- The Report does not or may not purport to be the sole basis for any decision-making process embarked upon by the Client who should, wherever necessary, seek independent professional advice on legal, financial, or other relevant matters not within the Expertise.
- Xylem TreeCare has not independently reviewed, verified or audited any of the material in the instructions provided by the Client to Xylem TreeCare, and the Client acknowledges that insofar as the findings of the Report are reliant on instructions provided by the Client to Xylem TreeCare, no representation nor warranty, express or implied, as to the accuracy, reasonableness or completeness of the Report is made by Xylem TreeCare, which expressly disclaims any and all liability for or based upon or relating to any use of the instructions provided by the Client to Xylem TreeCare.
- Where the Report contains or refers to information or advice provided by third parties, obtained by way of instructions from the Client or otherwise, no representation or warranty, express or implied, is made in relation to the accuracy, reasonableness or completeness of such information.
- Insofar as the Report makes any forward-looking statements or predictions, the Client acknowledges that such statements or predictions are the subjects of inherent uncertainty, and the Client will make its independent assessment of the Report or such statements, in terms of reliance to be placed thereon.
- Is confidential and for the Client's use only and not to be supplied to any third party under any circumstances without the prior written permission of Xylem TreeCare.
- Is not to be electronically stored or transmitted in any form without the prior written permission of Xylem TreeCare.
- It is further expressly acknowledged that:
- In no circumstances, may the Client use the Report for anything other than the Purpose, or rely on it in any way other than in relation to the Subject unless the prior written permission of Xylem TreeCare is obtained.
- Notwithstanding the generality of any of the preceding disclaimers, acknowledgments and conditions, the Client expressly acknowledges that it will not use the Report in relation to any court or other legal proceedings of any kind without first obtaining the prior written consent to do so of Xylem TreeCare.
- The Client carries out its independent investigations in relation to any reliance to be placed on the Report be that reliance of a commercial, financial, developmental, environmental, or other types of reliance.

The client's receipt of the report, information, or other material in relation to the report is an express acknowledgment and acceptance of the foregoing.

3. Executive Summary

Xylem TreeCare has been engaged by Jason Webster – Development Manager, to conduct a tree survey and document all trees within the proposed subdivision envelope at 4719 Midland Hwy, Daylesford. On the 9th February and 11th February 2022, a site inspection was undertaken by a Xylem TreeCare representative. Vegetation was assessed for arboricultural value including Useful Life Expectancy (ULE) and tree origin. Recommendations were made with considerations in maintaining and protecting local biodiversity. All trees within the subject area, except for one native *Eucalyptus viminalis*, were identified and assessed as being exotic species and not endemic to Australia and therefore do not support local biodiversity. Twenty *Fraxinus angustifolia subsp. angustifolia* and three *Castanea sativa* form part of an existing honour planting, and although not native is considered highly significant and all attempts to minimise impacts and long-term health to these trees must be implemented in design phases.

4. Purpose

The purpose of this report is to undertake a review of the existing trees within the subject area before future development. At the time of the assessment, the type of future construction and potential impacts from such construction are unknown to Xylem TreeCare Pty Ltd. It is recommended that a subsequent Arboriculture Impact Assessment (AIA) be undertaken once construction designs have been established and before construction.

4.1. Project requirements

Undertake an audit of all trees within the subject area.

- Spatially locate and GPS plot all individual trees and provide a unique identifier (Tree ID)
- Provide the current condition of each tree.
- Provide general information i.e., Botanical name, dimensions i.e., height, canopy spread and DBH
- Calculate the Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) of individual trees
- Identify tree origin
- Identify tree significance

4.2 Site Information

The site is located to the North of the Midland Highway (A300) and Raglan Street is adjacent to the South. Much of the Southern part of the subject area is relatively flat and is lined by an Avenue of honour planting. The Western section of the subject area has a minor to moderate slope and is the location of the proposed drainage reserve. The site consists of mostly mature exotic species endemic to the Northern hemisphere. Figure 1 shows the boundaries of the subject areas.

Figure 1, Subject Area – Supplied by Niche Planning Studio

5. Method

This assessment has been undertaken using a ground-based visual assessment. An Eos Arrow 100 GNSS receiver and range finder were utilised to increase data accuracy when required. The trees have been assessed for arboricultural value using tree attributes and assessing the overall condition.

5.1 Limitation of Assignment

- Information obtained from publicly available databases has been used in the preparation of this report. The accuracy of information obtained from such sources cannot be guaranteed and has not been verified.
- The hybridisation of flora species can cause an intermediate or incomplete form of morphological features and thereby affect the accuracy of field identification.
- Seasonal variation influences the presence of flowering and fruiting in flora species and thereby can affect the accuracy of field identification. Seasonal variation was not captured during the field assessment due to the short duration of the assessment.
- At the time of assessment, no information has been made available regarding existing and/ or proposed underground services other than those visible above ground.

- Xylem TreeCare has not undertaken any of the following items which may impact tree health
  - Soil analysis
  - Below-ground root analysis
  - Aerial inspection

5.2 Consulting Arborist

Table 2- Staff qualifications

Staff Member	Qualifications	Experience	Project Involvement
Marty Waugh **Consulting Arborist**	Graduate Certificate in Arboriculture – Melbourne University	Marty has been working within the Horticulture and Arboriculture industries for 12 years; 4 years as Consulting Arborist	Marty will be responsible for compiling reports and drawings to client specifications.
Phillip Nahed **Consulting Arborist**	Graduate Certificate in Arboriculture – Melbourne University	Phillip has been working within the tree industry for the past 7 years and has been a Consulting Arborist for the past 4 years.	Phillip will be responsible for undertaking on-site assessments.

6. Observations

Wombat Park

Tree ID	Species	Common Name	Height (m)	Spread (m)	Health	Structure	TPZ (m)	SRZ (m)
4	*Eucalyptus viminalis*	Manna Gum	35	20	Fair	Good	15	4.8
5	*Cedrus atlantica*	Atlas Cedar	25	17	Good	Good	15	4.1
6	*Cedrus deodara*	Himalayan Cedar	29	15	Good	Good	15	3.9
7	*Cedrus atlantica*	Atlas Cedar	26	23	Good	Good	15	4.0
8	*Cedrus deodara*	Himalayan Cedar	27	23	Good	Good	15	4.0
9	*Cedrus atlantica*	Atlas Cedar	20	23	Fair	Good	15	4.1
10	*Cedrus deodara*	Himalayan Cedar	27	15	Good	Good	15	4.0
11	*Cedrus atlantica*	Atlas Cedar	21	27	Good	Good	15	4.2
12	*Cedrus deodara*	Himalayan Cedar	22	19	Good	Good	15	3.9
13	*Cedrus atlantica*	Atlas Cedar	19	17	Good	Good	15	4.2
14	*Cedrus deodara*	Himalayan Cedar	22	15	Fair	Good	13.9	3.6
15	*Cedrus atlantica*	Atlas Cedar	22	20	Good	Good	15	3.9
16	*Cedrus deodara*	Himalayan Cedar	24	14	Good	Good	15	4.0
17	*Cedrus atlantica*	Atlas Cedar	24	19	Good	Good	15	4.0
18	*Cedrus deodara*	Himalayan Cedar	23	16	Good	Good	15	4.1
19	*Cedrus deodara*	Himalayan Cedar	30	17	Good	Good	15	4.1
20	*Cedrus atlantica*	Atlas Cedar	21	17	Fair	Fair	15	4.3
21	*Cedrus deodara*	Himalayan Cedar	26	18	Good	Good	15	3.8
22	*Cedrus atlantica*	Atlas Cedar	22	25	Good	Fair	15	4.2
23	*Cedrus deodara*	Himalayan Cedar	22	20	Good	Good	15	3.8
24	*Cedrus atlantica*	Atlas Cedar	24	20	Good	Fair	15	4.1
25	*Cedrus deodara*	Himalayan Cedar	26	15	Good	Good	15	3.9
26	*Cedrus atlantica*	Atlas Cedar	25	19	Good	Good	15	4.0
27	*Cedrus deodara*	Himalayan Cedar	27	15	Good	Good	15	4.1
28	*Cedrus atlantica*	Atlas Cedar	22	21	Good	Good	15	4.1
29	*Pseudotsuga menziesii*	Douglas Fir	19	7	Poor	Good	10.6	3.3
30	*Pseudotsuga menziesii*	Douglas Fir	24	18	Fair	Good	14	3.5
31	*Pseudotsuga menziesii*	Douglas Fir	24	11	Fair	Good	11	3.3
32	*Pseudotsuga menziesii*	Douglas Fir	3	1	Good	Good	2	1.5

Midland Highway Avenue of Honour

Tree ID	Species	Common Name	Height (m)	Spread (m)	Health	Structure	TPZ (m)	SRZ (m)
1	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Fair	6.6	2.7
2	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	7	5	Good	Fair	4	2.2
3	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	11	Good	Good	6.5	2.8
33	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	12	8	Good	Good	2.9	2.0
34	*Castanea sativa*	Sweet Chestnut	7	8	Good	Good	3.1	2.2
35	*Castanea sativa*	Sweet Chestnut	8	7	Good	Fair	8	3.0
36	*Castanea sativa*	Sweet Chestnut	7	7	Fair	Good	5.3	2.6
37	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	10	Good	Good	4.7	2.5
38	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	19	20	Good	Good	13.1	2.5
39	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	9	Fair	Good	6.2	2.5
40	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	16	17	Good	Good	10.4	3.1
41	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	13	Good	Good	5.9	2.5
42	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	12	17	Good	Good	8	2.9
43	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	13	8	Fair	Good	5.5	2.6
44	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	8	Good	Good	5.8	2.5
45	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	10	Good	Good	5.9	2.5
46	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	14	15	Good	Good	8.6	3.0
47	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	8	6	Good	Good	6	2.5
48	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	8	6	Fair	Good	5.2	2.5
49	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Good	7.3	2.6
50	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Good	6.8	2.5
51	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	10	11	Good	Good	7.6	2.7
52	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	7	8	Good	Good	7.2	2.6

6.1. Tree Condition

There are 52 individual trees within the subject area, 29 within Wombat Park and 23 along Midland Highway Avenue of Honour. Figure 2 show a total of five individual genera within the impacted subject area. For additional tree information, refer to APPENDIX A and APPENDIX B.

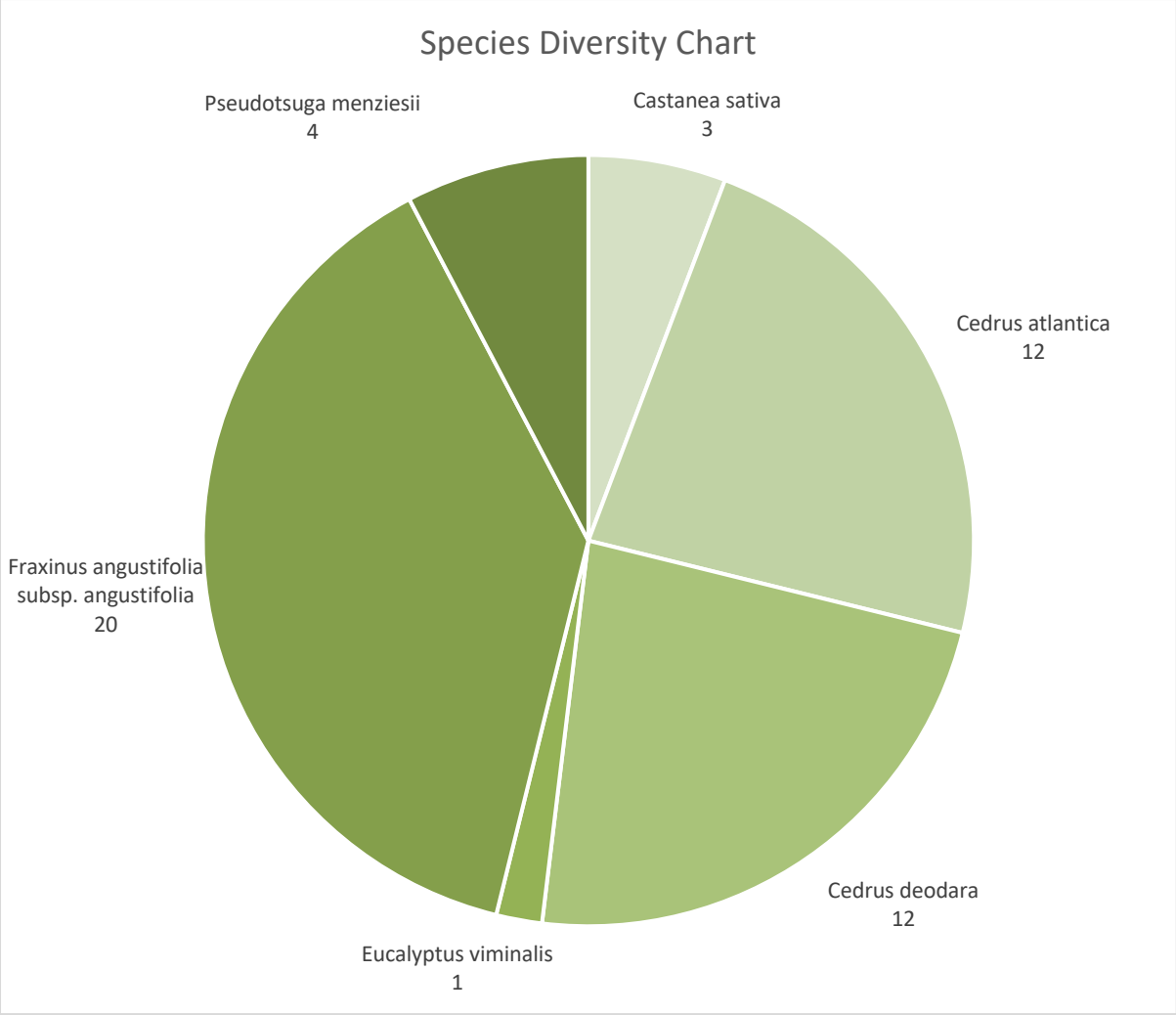


Figure 2, Tree Species Diversity within the subject area

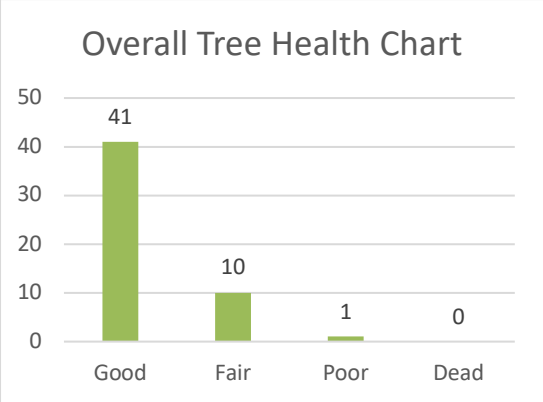


Figure 3, Tree Health Graph within the subject area

The current health of the tree population is considered good (41) with ten trees being considered fair and 1 being poor.

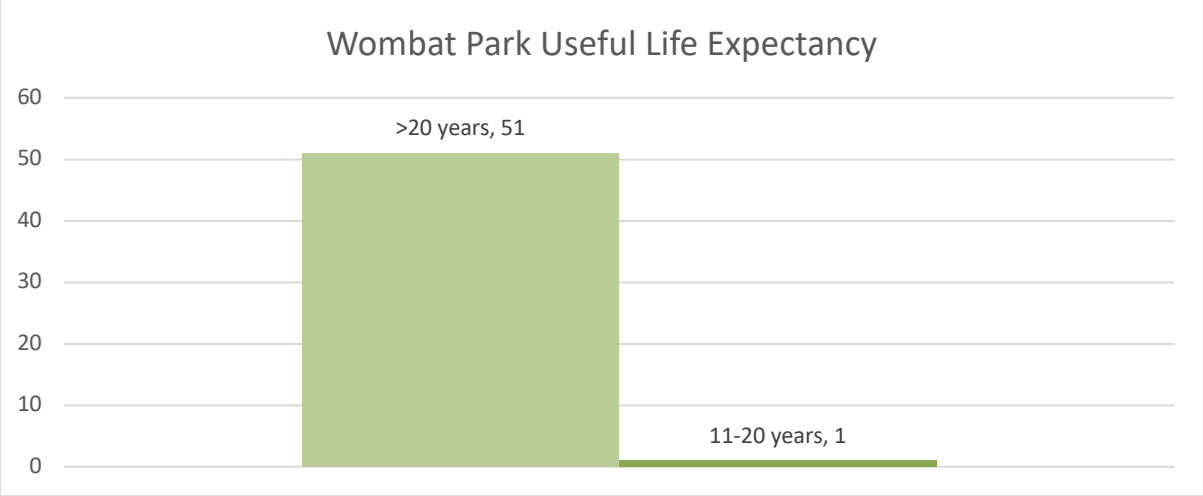


Figure 4, Tree ULE within the subject area

The Useful Life Expectancy (ULE) of the tree population shows 51 trees with a ULE of >20years, and one tree with a ULE between 11-20 years.

7. Recommendations

It is recommended that if development impacts on any retained tree TPZ's, an Arboricultural Impact Assessment (AIA) and an associated Tree Management Plan (TMP) be developed once construction plans are finalised to minimise impact to the current tree population and provide the best tree management techniques to ensure long term tree viability.

7.1 Wombat Park Recommendations

Tree 11

Tree 11 (*Cedrus deodara*) is proposed for removal to accommodate a site entrance and 14m wide public access road. The mature exotic species is in good health with good structure and has a useful life expectancy of >20 years. The contractors undertaking the removal should hold a minimum AQF level 3 in arboriculture and be under the supervision of an AQF level 5 or higher arborist.

Trees 10, 12 and 38

Specific design considerations should be made to the proposed site entrance and 14m wide public access road to ensure trees 10, 12 *(Cedrus atlantica)* and tree 38 (*Fraxinus angustifolia subsp. angustifolia*) are not adversely affected by the removal of tree 11 (*Cedrus deodara*) and the construction of the access road. All excavation should be avoided by building up the soil and constructing above natural grade. If construction is required within the tree protection zones of the subject trees, a maximum of 10% encroachment into the TPZ would be allowed but an offset must be demonstrated per AS 4970-2009 (refer to APPENDIX A for TPZ dimensions). Tree sensitive construction techniques such as an air-spade or hydro vacuum excavation can only be undertaken under project arborist direction and at a pressure not greater than 400psi to ensure root cambium remains intact.

Tree 4

This *Eucalyptus viminalis* is a mature native species, assessed to have no major defects visible. This specimen provides significant canopy cover and is a dominant tree in the landscape and should be retained.

Trees 29-31

These three mature *Pseudotsuga menziesii* specimens are assessed as being in fair and poor health, however, they all have a good structure with some deadwood and hangers throughout their canopies, these trees should be retained.

Trees 33-52

a) These trees, a mixture of *Fraxinus angustifolia subsp. angustifolia* and *Castanea sativa* specimens form part of the Avenue of Honour on Midland Highway frontage, these trees are to be retained. A project arborist should be on-site to supervise and provide advice for all works undertaken within the stated tree protection zone of these subject trees.

In addition, the following activities are not to be undertaken within TPZs:

Activities restricted within the TPZ

AS4970-2009 Protection of trees on development sites, Section 4 Tree Protection Measures outlines that the following activities are to be avoided within the TPZ:

- Machine excavation including trenching.
- Excavation for silt fencing.
- Cultivation.
- Storage.
- Preparation of chemicals, including preparation of cement products.
- Heavy vehicles and plant.
- Refuelling.
- Dumping of waste.
- Washdown and clearing of equipment.
- Placement of fill.
- The lighting of fires.
- Soil level changes.
- Temporary or permanent installation of utilities and signs, and
- Physical damage to the tree.

8. Conclusion

Careful consideration must be given to the recommendation throughout this document. All recommendations have been derived by applying the tree protection measures per Australian Standards, AS4970-2009 Protection of Trees on Development Sites. Any alterations of this plan must be approved by the site Arborist or a minimum AQF level 5 consultant or equivalent.

9. References

Australian Standards. (2010). AS 4970 - 2009, Protection of trees on development sites. *Amendment No.1 (March 2010)*. Sydney, New South Wales, Australia: Standards Australia.

Ellis.M. (2018). Quantified Tree Assessment Risk Assessment - User Manual, Version 5. Macclesfield, Great Britton: QTRA.

Harris, R. C. (2004). *Arboriculture: Integrated management of landscape trees, shrubs and vines, 4th Edition.* New Jersey, USA: Prentice Hall.

Hitchmough, J. (1994). *Urban Landscape Management.* Chatswood, NSW: Inkata Press.

K.D, C. (n.d.). *Construction Damage Assessments.* Retrieved from University of Gorgia: http://www.forestry.uga.edu/warnell/service/library/for96-039a/index.html

Matheny, N. &. (2004). A Photographic Guide to Evaluation of Hazard Trees in Urban Areas, second edition. United States of America: Inernational Society of Arboriculture.

Mattheck, C. &. (1994). *The body language of trees.* London, UK: The Stationary Office.

Hepburn Shire Council - Planning permit PA 2504 - 15 July 2021

10.1 APPENDIX A – Tree Data Detailed

Tree ID: 1
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154198
Northing: -37.340755
Datum: GDA1994 MGA Zone 55

Height (m): 9
Spread (m): 10
Tree Protection Zone (m): 6.60
Structural Root Zone (m): 2.69
DBH (mm): 550

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Trunk damage and heartwood decay.

Tree ID: 2
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154094
Northing: -37.340750
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 4.00
DBH (mm): 330

Spread (m): 5
Structural Root Zone (m): 2.18

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Trunk damage and heartwood decay.

Structure: Fair

Tree ID: 3
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.153924
Northing: -37.340725
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 6.50
DBH (mm): 540

Spread (m): 11
Structural Root Zone (m): 2.78

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Minor heartwood decay.

Structure: Good

Tree ID: 4
Botanical Name: *Eucalyptus viminalis*
Common Name: Manna Gum
Easting: 144.157590
Northing: -37.339229
Datum: GDA1994 MGA Zone 55

Height (m): 35
Tree Protection Zone (m): 15.00
DBH (mm): 2280

Spread (m): 20
Structural Root Zone (m): 4.84

Age: Mature
Useful Life Expectancy: >20 years
Origin: Native

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 5
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.158110
Northing: -37.339285
Datum: GDA1994 MGA Zone 55

Height (m): 25
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.12
DBH (mm): 1680

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 6
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157988
Northing: -37.339368
Datum: GDA1994 MGA Zone 55

Height (m): 29
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.90
DBH (mm): 1340

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

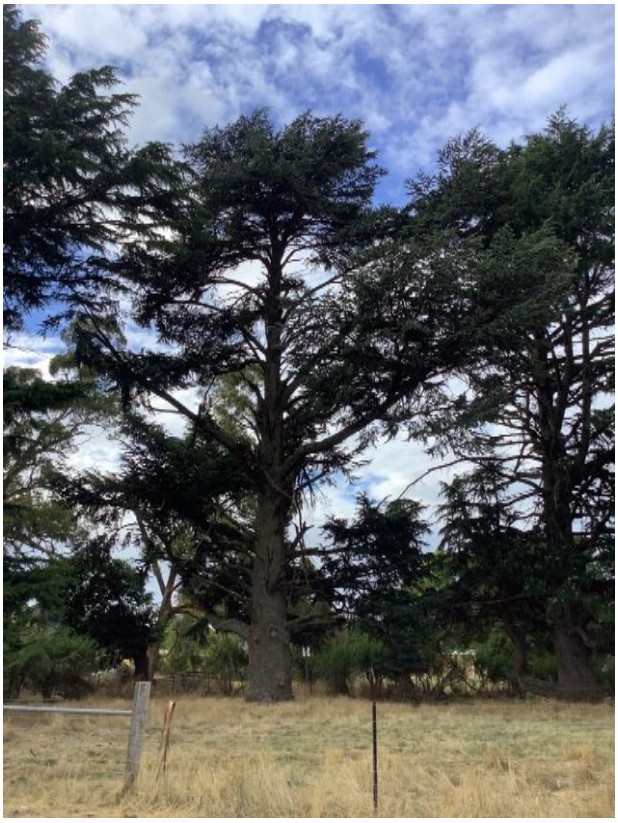
Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 7
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157850
Northing: -37.339442
Datum: GDA1994 MGA Zone 55

Height (m): 26
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.04
DBH (mm): 1550

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy



Tree ID: 8
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157744
Northing: -37.339528
Datum: GDA1994 MGA Zone 55

Height (m): 27
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.96
DBH (mm): 1460

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 9
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157630
Northing: -37.339597
Datum: GDA1994 MGA Zone 55

Height (m): 20
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.06
DBH (mm): 1560

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 10
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157503
Northing: -37.339669
Datum: GDA1994 MGA Zone 55

Height (m): 27
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.99
DBH (mm): 1430

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 11
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157387
Northing: -37.339740
Datum: GDA1994 MGA Zone 55

Height (m): 21
Tree Protection Zone (m): 15.00
DBH (mm): 1800

Spread (m): 27
Structural Root Zone (m): 4.24

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 12
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157262
Northing: -37.339827
Datum: GDA1994 MGA Zone 55

Height (m): 22
Tree Protection Zone (m): 15.00
DBH (mm): 1320

Spread (m): 19
Structural Root Zone (m): 3.89

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 13
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157139
Northing: -37.339885
Datum: GDA1994 MGA Zone 55

Height (m): 19
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.18
DBH (mm): 1630

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 14
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157003
Northing: -37.339981
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 15
Tree Protection Zone (m): 13.90
Structural Root Zone (m): 3.63
DBH (mm): 1160

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 15
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156905
Northing: -37.340040
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.86
DBH (mm): 1320

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 16
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156768
Northing: -37.340122
Datum: GDA1994 MGA Zone 55

Height (m): 24
Tree Protection Zone (m): 15.00
DBH (mm): 1390

Spread (m): 14
Structural Root Zone (m): 3.98

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 17
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156637
Northing: -37.340197
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 19
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.02
DBH (mm): 1480

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 18
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156533
Northing: -37.340270
Datum: GDA1994 MGA Zone 55

Height (m): 23
Spread (m): 16
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.14
DBH (mm): 1460

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 19
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156287
Northing: -37.340420
Datum: GDA1994 MGA Zone 55

Height (m): 30
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.07
DBH (mm): 1430

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 20
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156160
Northing: -37.340492
Datum: GDA1994 MGA Zone 55

Height (m): 21
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.33
DBH (mm): 1700

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

---

Tree ID: 21
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156038
Northing: -37.340570
Datum: GDA1994 MGA Zone 55

Height (m): 26
Tree Protection Zone (m): 15.00
DBH (mm): 1290

Spread (m): 18
Structural Root Zone (m): 3.83

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 22
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155907
Northing: -37.340637
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 25
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.19
DBH (mm): 1690

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

---

Tree ID: 23
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.155789
Northing: -37.340715
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.75
DBH (mm): 1350

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 24
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155672
Northing: -37.340796
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.09
DBH (mm): 1660

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

---

Tree ID: 25
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.155536
Northing: -37.340778
Datum: GDA1994 MGA Zone 55

Height (m): 26
Tree Protection Zone (m): 15.00
DBH (mm): 1480

Spread (m): 15
Structural Root Zone (m): 3.89

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 26
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155073
Northing: -37.340728
Datum: GDA1994 MGA Zone 55

Height (m): 25
Spread (m): 19
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.96
DBH (mm): 1500

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 27
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.154947
Northing: -37.340705
Datum: GDA1994 MGA Zone 55

Height (m): 27
Tree Protection Zone (m): 15.00
DBH (mm): 1650

Spread (m): 15
Structural Root Zone (m): 4.13

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 28
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.154822
Northing: -37.340698
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 21
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.13
DBH (mm): 1560

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 29
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.154825
Northing: -37.340561
Datum: GDA1994 MGA Zone 55

Height (m): 19
Tree Protection Zone (m): 10.60
DBH (mm): 880

Spread (m): 7
Structural Root Zone (m): 3.31

Age: Mature
Useful Life Expectancy: 11-20 years
Origin: Exotic

Health: Poor
Comment: Deadwood throughout canopy

Structure: Good

Tree ID: 30
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.154867
Northing: -37.340420
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 18
Tree Protection Zone (m): 14.00
Structural Root Zone (m): 3.53
DBH (mm): 1170

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Psyllid infestation and deadwood throughout canopy

Tree ID: 31
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.155092
Northing: -37.339213
Datum: GDA1994 MGA Zone 55

Height (m): 24
Tree Protection Zone (m): 11.00
DBH (mm): 920

Spread (m): 11
Structural Root Zone (m): 3.27

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: Deadwood throughout canopy

Structure: Good

Tree ID: 32
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.155069
Northing: -37.339353
Datum: GDA1994 MGA Zone 55

Height (m): 3
Tree Protection Zone (m): 2.00
DBH (mm): 50

Spread (m): 1
Structural Root Zone (m): 1.50

Age: Young
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Juvenille tree in good health.

Structure: Good

Tree ID: 33
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156839
Northing: -37.340176
Datum: GDA1994 MGA Zone 55

Height (m): 12
Tree Protection Zone (m): 2.90
DBH (mm): 240

Spread (m): 8
Structural Root Zone (m): 2.00

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 34
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.158300
Northing: -37.339331
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 3.10
DBH (mm): 260

Spread (m): 8
Structural Root Zone (m): 2.15

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 35
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.157979
Northing: -37.339552
Datum: GDA1994 MGA Zone 55

Height (m): 8
Spread (m): 7
Tree Protection Zone (m): 8.00
Structural Root Zone (m): 2.98
DBH (mm): 670

Age: Over-mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Hollow stem. Minimal crown sail effect. Appears stuctually sound currently.

Tree ID: 36
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.157844
Northing: -37.339635
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 5.30
DBH (mm): 440

Spread (m): 7
Structural Root Zone (m): 2.55

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 37
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157771
Northing: -37.339643
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 4.70
DBH (mm): 390

Spread (m): 10
Structural Root Zone (m): 2.51

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 38
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157279
Northing: -37.339967
Datum: GDA1994 MGA Zone 55

Height (m): 19
Tree Protection Zone (m): 13.10
DBH (mm): 1090

Spread (m): 20
Structural Root Zone (m): 2.46

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 39
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157155
Northing: -37.340049
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 6.20
DBH (mm): 520

Spread (m): 9
Structural Root Zone (m): 2.53

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 40
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157022
Northing: -37.340139
Datum: GDA1994 MGA Zone 55

Height (m): 16
Tree Protection Zone (m): 10.40
DBH (mm): 870

Spread (m): 17
Structural Root Zone (m): 3.12

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 41
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156874
Northing: -37.340218
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 5.90
DBH (mm): 490

Spread (m): 13
Structural Root Zone (m): 2.53

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 42
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156727
Northing: -37.340307
Datum: GDA1994 MGA Zone 55

Height (m): 12
Spread (m): 17
Tree Protection Zone (m): 8.00
Structural Root Zone (m): 2.92
DBH (mm): 670

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Historic tearout, appears stuctually sound

Tree ID: 43
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156583
Northing: -37.340398
Datum: GDA1994 MGA Zone 55

Height (m): 13
Tree Protection Zone (m): 5.50
DBH (mm): 460

Spread (m): 8
Structural Root Zone (m): 2.59

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 44
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156441
Northing: -37.340485
Datum: GDA1994 MGA Zone 55

Height (m): 9
Tree Protection Zone (m): 5.80
DBH (mm): 480

Spread (m): 8
Structural Root Zone (m): 2.49

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 45
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156322
Northing: -37.340558
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 5.90
DBH (mm): 490

Spread (m): 10
Structural Root Zone (m): 2.47

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Trunk wound with associated decay.

Structure: Fair

Tree ID: 46
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156207
Northing: -37.340636
Datum: GDA1994 MGA Zone 55

Height (m): 14
Spread (m): 15
Tree Protection Zone (m): 8.60
Structural Root Zone (m): 3.01
DBH (mm): 720

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Basal wound with some decay but adequated callusing visible.

Tree ID: 47
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154371
Northing: -37.340769
Datum: GDA1994 MGA Zone 55

Height (m): 8
Tree Protection Zone (m): 6.00
DBH (mm): 500

Spread (m): 6
Structural Root Zone (m): 2.53

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 48
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154516
Northing: -37.340797
Datum: GDA1994 MGA Zone 55

Height (m): 8
Tree Protection Zone (m): 5.20
DBH (mm): 430

Spread (m): 6
Structural Root Zone (m): 2.47

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 49
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154659
Northing: -37.340807
Datum: GDA1994 MGA Zone 55

Height (m): 9
Tree Protection Zone (m): 7.30
DBH (mm): 610

Spread (m): 10
Structural Root Zone (m): 2.59

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 50
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154772
Northing: -37.340830
Datum: GDA1994 MGA Zone 55

Height (m): 9
Spread (m): 10
Tree Protection Zone (m): 6.80
Structural Root Zone (m): 2.49
DBH (mm): 570

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Heavily pruned for powerline clearances

Tree ID: 51
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154926
Northing: -37.340834
Datum: GDA1994 MGA Zone 55

Height (m): 10
Spread (m): 11
Tree Protection Zone (m): 7.60
Structural Root Zone (m): 2.65
DBH (mm): 630

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Heavily pruned for powerline clearances.

Tree ID: 52
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.155044
Northing: -37.340848
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 7.20
DBH (mm): 600

Spread (m): 8
Structural Root Zone (m): 2.63

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

10.2 APPENDIX B – Tree Data

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
1	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	550	Mature	>20 years	6.6	2.7	Good	Fair	Trunk damage and heartwood decay.	Retain	144.1542	-37.34076
2	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	7	5	330	Semi Mature	>20 years	4	2.2	Good	Fair	Trunk damage and heartwood decay.	Retain	144.15409	-37.34075
3	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	11	540	Mature	>20 years	6.5	2.8	Good	Good	Minor heartwood decay.	Retain	144.15392	-37.34073
4	*Eucalyptus viminalis*	Manna Gum	Native	35	20	2280	Mature	>20 years	15	4.8	Fair	Good	No major defects visible	Retain	144.15759	-37.33923
5	*Cedrus atlantica*	Atlas Cedar	Exotic	25	17	1680	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15811	-37.33929
6	*Cedrus deodara*	Himalayan Cedar	Exotic	29	15	1340	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15799	-37.33937
7	*Cedrus atlantica*	Atlas Cedar	Exotic	26	23	1550	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15785	-37.33944

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
8	*Cedrus deodara*	Himalayan Cedar	Exotic	27	23	1460	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout canopy	Retain	144.15774	-37.33953
9	*Cedrus atlantica*	Atlas Cedar	Exotic	20	23	1560	Mature	>20 years	15	4.1	Fair	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15763	-37.3396
10	*Cedrus deodara*	Himalayan Cedar	Exotic	27	15	1430	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.1575	-37.33967
11	*Cedrus atlantica*	Atlas Cedar	Exotic	21	27	1800	Mature	>20 years	15	4.2	Good	Good	Multiple hangers and deadwood throughout the canopy	Remove	144.15739	-37.33974
12	*Cedrus deodara*	Himalayan Cedar	Exotic	22	19	1320	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15726	-37.33983
13	*Cedrus atlantica*	Atlas Cedar	Exotic	19	17	1630	Mature	>20 years	15	4.2	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15714	-37.33989
14	*Cedrus deodara*	Himalayan Cedar	Exotic	22	15	1160	Mature	>20 years	13.9	3.6	Fair	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.157	-37.33998
15	*Cedrus atlantica*	Atlas Cedar	Exotic	22	20	1320	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15691	-37.34004

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
16	*Cedrus deodara*	Himalayan Cedar	Exotic	24	14	1390	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15677	-37.34012
17	*Cedrus atlantica*	Atlas Cedar	Exotic	24	19	1480	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15664	-37.3402
18	*Cedrus deodara*	Himalayan Cedar	Exotic	23	16	1460	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15653	-37.34027
19	*Cedrus deodara*	Himalayan Cedar	Exotic	30	17	1430	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15629	-37.34042
20	*Cedrus atlantica*	Atlas Cedar	Exotic	21	17	1700	Mature	>20 years	15	4.3	Fair	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15616	-37.34049
21	*Cedrus deodara*	Himalayan Cedar	Exotic	26	18	1290	Mature	>20 years	15	3.8	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15604	-37.34057
22	*Cedrus atlantica*	Atlas Cedar	Exotic	22	25	1690	Mature	>20 years	15	4.2	Good	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15591	-37.34064
23	*Cedrus deodara*	Himalayan Cedar	Exotic	22	20	1350	Mature	>20 years	15	3.8	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15579	-37.34072

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
24	*Cedrus atlantica*	Atlas Cedar	Exotic	24	20	1660	Mature	>20 years	15	4.1	Good	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15567	-37.3408
25	*Cedrus deodara*	Himalayan Cedar	Exotic	26	15	1480	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15554	-37.34078
26	*Cedrus atlantica*	Atlas Cedar	Exotic	25	19	1500	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15507	-37.34073
27	*Cedrus deodara*	Himalayan Cedar	Exotic	27	15	1650	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15495	-37.34071
28	*Cedrus atlantica*	Atlas Cedar	Exotic	22	21	1560	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15482	-37.3407
29	*Pseudotsuga menziesii*	Douglas Fir	Exotic	19	7	880	Mature	11-20 years	10.6	3.3	Poor	Good	Deadwood throughout canopy	Retain	144.15483	-37.34056
30	*Pseudotsuga menziesii*	Douglas Fir	Exotic	24	18	1170	Mature	>20 years	14	3.5	Fair	Good	Psyllid infestation and deadwood throughout the canopy	Retain	144.15487	-37.34042
31	*Pseudotsuga menziesii*	Douglas Fir	Exotic	24	11	920	Mature	>20 years	11	3.3	Fair	Good	Deadwood throughout canopy	Retain	144.15509	-37.33921

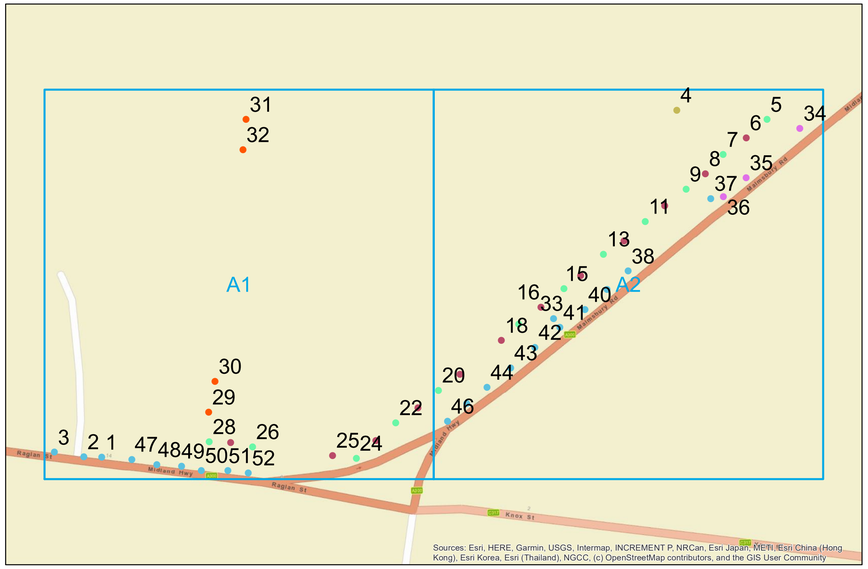
Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
32	*Pseudotsuga menziesii*	Douglas Fir	Exotic	3	1	50	Young	>20 years	2	1.5	Good	Good	Deadwood throughout canopy	Retain	144.15507	-37.33935
33	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	12	8	240	Semi Mature	>20 years	2.9	2.0	Good	Good	No major defects visible	Retain	144.15684	-37.34018
34	*Castanea sativa*	Sweet Chestnut	Exotic	7	8	260	Semi Mature	>20 years	3.1	2.2	Good	Good	No major defects visible	Retain	144.1583	-37.33933
35	*Castanea sativa*	Sweet Chestnut	Exotic	8	7	670	Over-mature	>20 years	8	3.0	Good	Fair	Hollow stem	Retain	144.15798	-37.33955
36	*Castanea sativa*	Sweet Chestnut	Exotic	7	7	440	Mature	>20 years	5.3	2.6	Fair	Good	No major defects visible	Retain	144.15784	-37.33964
37	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	10	390	Mature	>20 years	4.7	2.5	Good	Good	No major defects visible	Retain	144.15777	-37.33964
38	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	19	20	1090	Mature	>20 years	13.1	2.5	Good	Good	No major defects visible	Retain	144.15728	-37.33997
39	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	9	520	Mature	>20 years	6.2	2.5	Fair	Good	No major defects visible	Retain	144.15716	-37.34005

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
40	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	16	17	870	Mature	>20 years	10.4	3.1	Good	Good	No major defects visible	Retain	144.15702	-37.34014
41	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	13	490	Mature	>20 years	5.9	2.5	Good	Good	No major defects visible	Retain	144.15687	-37.34022
42	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	12	17	670	Mature	>20 years	8	2.9	Good	Good	No major defects visible	Retain	144.15673	-37.34031
43	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	13	8	460	Mature	>20 years	5.5	2.6	Fair	Good	No major defects visible	Retain	144.15658	-37.3404
44	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	8	480	Mature	>20 years	5.8	2.5	Good	Good	No major defects visible	Retain	144.15644	-37.34049
45	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	10	490	Mature	>20 years	5.9	2.5	Good	Good	No major defects visible	Retain	144.15632	-37.34056
46	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	14	15	720	Mature	>20 years	8.6	3.0	Good	Good	No major defects visible	Retain	144.15621	-37.34064
47	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	8	6	500	Mature	>20 years	6	2.5	Good	Good	No major defects visible	Retain	144.15437	-37.34077

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
48	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	8	6	430	Mature	>20 years	5.2	2.5	Fair	Good	No major defects visible	Retain	144.15452	-37.3408
49	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	610	Mature	>20 years	7.3	2.6	Good	Good	No major defects visible	Retain	144.15466	-37.34081
50	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	570	Mature	>20 years	6.8	2.5	Good	Good	No major defects visible	Retain	144.15477	-37.34083
51	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	10	11	630	Mature	>20 years	7.6	2.7	Good	Good	No major defects visible	Retain	144.15493	-37.34083
52	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	7	8	600	Mature	>20 years	7.2	2.6	Good	Good	No major defects visible	Retain	144.15504	-37.34085

10.3 APPENDIX C – Detailed Maps

The map below accurately depicts the Tree Protection Zones (yellow circles) and Structural Root Zones (red circles) of all trees within the proposed development area. Any construction work (including the movement of machinery) within the yellow circles should be avoided unless directed by the Project Arborist. Approved tree protection fencing should be erected at the perimeterof retained trees TPZ's. If excavation is required within TPZ's, construction techniques such as vacuum excavation or air spade may be undertaken under the direction of the Project Arborist. Incursions of up to 10% should be allowed by the discretion of the Project Arborist if an offset can be demonstrated per AS4970-2009. Any excavation and construction within the red circles of the SRZ can structurally compromise tree stability and long-term tree health and may require removal if the design cannot avoid incursion into these areas.



Overview Map

Detailed Map

Botanical Name

- Castanea sativa
- Cedrus atlantica
- Cedrus deodara
- Eucalyptus viminalis
- Fraxinus angustifolia subsp. angustifolia
- Pseudotsuga menziesii
- HyggeProperty_Daylesford_WombatPark_SRZ
- HyggeProperty_Daylesford_WombatPark_TPZ
- HyggeProperty_Daylesford_WombatPark_Grids
- World Imagery

hygge property

Wombat Park

Tree Management Project

Xylem TreeCare Pty Ltd
A.B.N: 13 640 958 532
Floor 1, 7 Ocean Street
Maroochydore QLD 4558

Ph: 1300 550 953
www.xylemtrees.com

Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

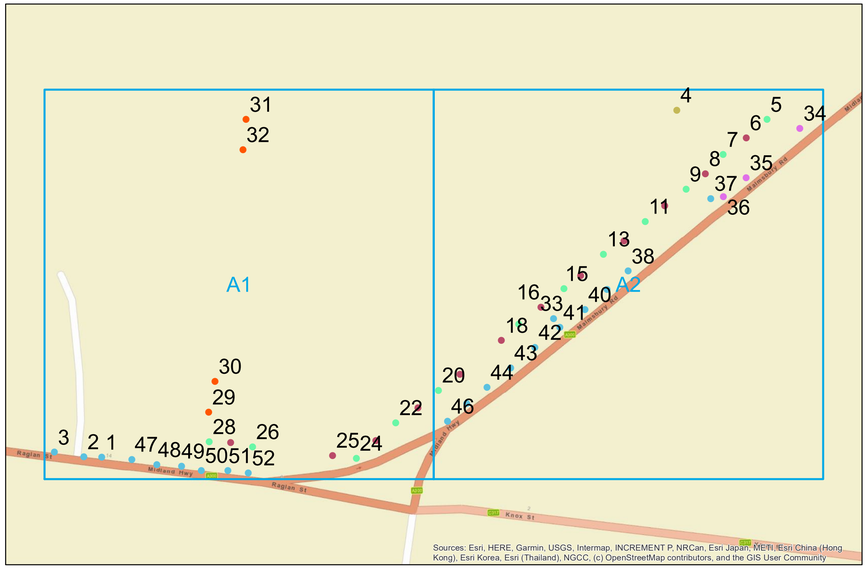
Sheet No.
Overview Map

4719 Midland Highway Daylesford

Drawn By: Nikita Starcevich

Checked by: Sam Bianchi

Date: 16th February 2022



Overview Map

Detailed Map

Botanical Name

- Castanea sativa
- Cedrus atlantica
- Cedrus deodara
- Eucalyptus viminalis
- Fraxinus angustifolia subsp. angustifolia
- Pseudotsuga menziesii
- HyggeProperty_Daylesford_WombatPark_SRZ
- HyggeProperty_Daylesford_WombatPark_TPZ
- HyggeProperty_Daylesford_WombatPark_Grids
- World Imagery

hygge property

Wombat Park

Tree Management Project

Xylem TreeCare Pty Ltd
A.B.N: 13 640 958 532
Floor 1, 7 Ocean Street
Maroochydore QLD 4558

Ph: 1300 550 953
www.xylemtrees.com

Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

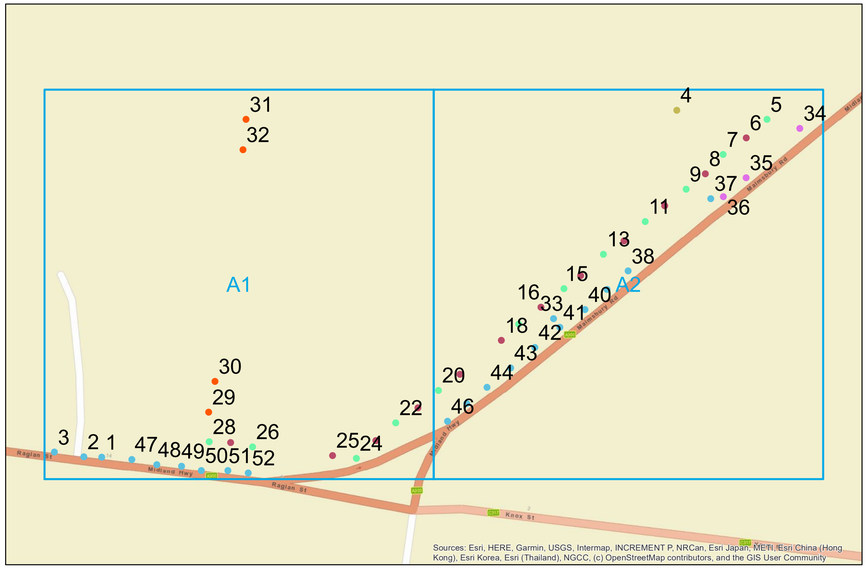
Sheet No.
Map A1

4719 Midland Highway Daylesford

Drawn By: Nikita Starcevich

Checked by: Sam Bianchi

Date: 16th February 2022



Overview Map

Detailed Map

Botanical Name

- Castanea sativa
- Cedrus atlantica
- Cedrus deodara
- Eucalyptus viminalis
- Fraxinus angustifolia subsp. angustifolia
- Pseudotsuga menziesii
- HyggeProperty_Daylesford_WombatPark_SRZ
- HyggeProperty_Daylesford_WombatPark_TPZ
- HyggeProperty_Daylesford_WombatPark_Grids
- World Imagery

hygge property

Wombat Park

Tree Management Project

Xylem TreeCare Pty Ltd
A.B.N: 13 640 958 532
Floor 1, 7 Ocean Street
Maroochydore QLD 4558

Ph: 1300 550 953
www.xylemtrees.com

Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

4719 Midland Highway Daylesford

Drawn By: Nikita Starcevich

Sheet No.
Map A2

Checked by: Sam Bianchi

Date: 16th February 2022

10.4 APPENDIX D – Tree Protection Guidelines- AS4970-2009 Protection of Trees on Development Sites

Tree preservation during construction

Tree Root Systems

It is important to understand the extent of root development of an average tree growing in optimum growing conditions, to be able to establish the requirements of the individual tree during the construction activity. As with all things growing in nature there are exceptions to the rule however as a generalisation the majority of growth is contained within the top 600mm of soil with the majority of their absorbing roots being in the upper 150mm of soil (Harris 2004).

A common misconception is that root systems only grow to the extent of the trees dripline; Zimmermann and Brown, 1971; Perry, 1982 state; roots of trees in the open often extend two to three times the radius of the crown, therefore consideration for the extent of a root system and the potential impact caused by excavation be given well outside the trees dripline.

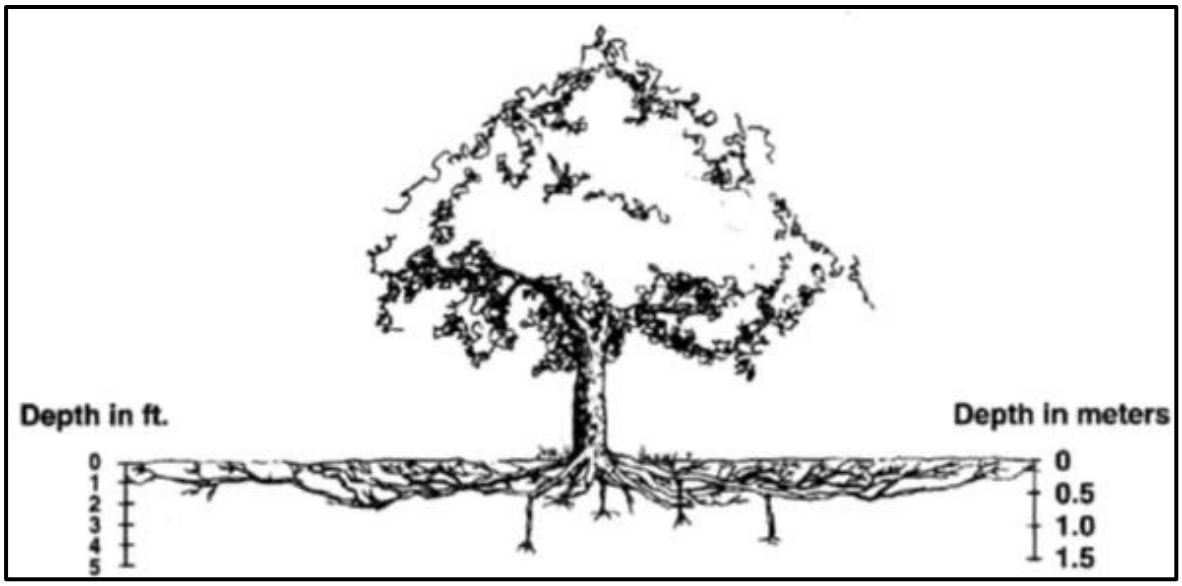


Figure 1- ***Theoretical model of a typical root system. (Harris, Clark and Matheny, 2004)***

Although the above diagram (Figure 1) depicts a root system as being symmetrically dispersed from the trunk, this is not always the case. Tree root direction and symmetry is determined by the growing environment that they find themselves in. Roots will grow towards optimum growing conditions, where there is adequate water, nutrient and oxygen levels. Therefore, root systems will grow to an obstruction e.g. wall, then change directions to find better growing conditions. This may inadvertently cause the root system of a tree to be confined to one side of the tree; this is more evident within an urban environment where more underground obstacles are present. When assessing trees suitability for retention, consideration is required for the presence of underground obstacles and the available growing space of a trees root system.

Tree Protection Zones

Prior to commencing any work on site it important to protect the existing trees from mechanical damage, soil compaction and the introduction of contaminates to the site, this can be achieved by setting up a Tree Protection Zone (TPZ) parameter around the trees.

The Tree Protection Zone (TPZ) has been developed as an industry standard used to determine an area around a tree which is to be protected to ensure the ongoing health of the tree. Trees have a varying ability to tolerate soil and root disturbance; In general a younger actively growing tree will be better able to withstand some

damage to root zones than a slower growing older tree or one that is already under some stress (Trowbridge J. and Bassuk N, 2004). With this in mind AS4970-2009 Protection of trees on development sites has developed a methodology for calculating the TPZ which has an allowance for most trees in most environments. The Tree Protection Zone is calculated using the following calculation

TPZ = DBH x12

Developing a TPZ will require the installation of a physical barrier around the subject tree/s; this can achieved be the instalment of a temporary fence located at the parameter of the calculated TPZ. The installation of TPZ fencing is to prevent potential mechanical damage to the upper canopy, trunk region or root system of the tree; the TPZ is also an area which is designated to prevent certain activities from being undertaken (Refer to Activities restricted within the TPZ).

In some circumstances the installation of temporary fencing may not be appropriate due to either the physical area available e.g. narrow nature-strips or the works to be undertaken are within the designated TPZ. In these circumstances it important to ensure this work is monitored to ensure the impact to the tree is minimised. All monitoring is to be undertaken by a qualified Arborist, the primary role of the Arborist is to monitor the construction, troubleshoot onsite problems relating to tree health and ensure activities restricted within the TPZ are avoided.

Allowable Encroachment into the TPZ

Although not ideal some tolerable encroachment has been allowed for within the TPZ, this is calculated at 10% of the TPZ, however the total amount lost in area needs to be compensated by increasing the remaining TPZ by the total amount lost by the encroachment. The following diagram extracted from AS4970 Protection of trees on development sites, Figure 2- Encroachments within TPZ further explains the allowable encroachment within the TPZ.

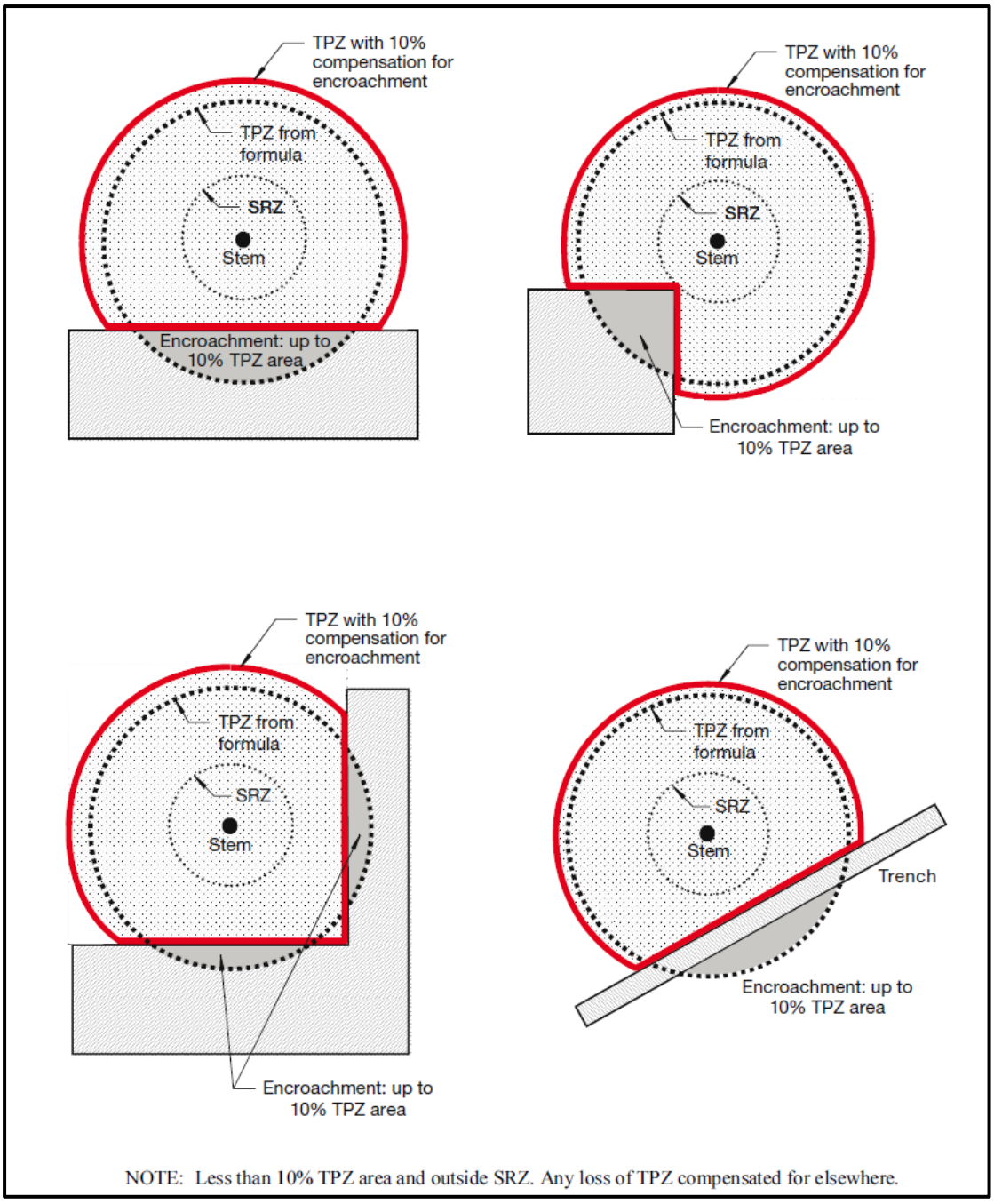


Figure 2- ***Allowable encroachments within the TPZ***

Ground protection

Consideration should be given to tree sensitive measures such as ground protection in areas close to or encroaching into the TPZ. Additional tree protection measures when considering encroachment of TPZ is permanent tree guards to reduce physical damage to the tree structure. Elevating the tree canopy may also be necessary when considering encroachment of the TPZ.

Due to the limited space, available on this site and trees to be retained, encroachment into the TPZ will be required and must be carefully planned and supervised. There should be minimal or no disturbance to existing soil grade under the tree canopy.

The proposed vehicle access should be limited to travel in and out, no parking of vehicles on this site. For all vehicle assess **only traverse on defined surface that consists of Geo-textile fabric and large rock or rumble boards**. This is necessary to limit ground compaction. **The remaining are within the TPZ must be mulched**.

Activities restricted within the TPZ

AS4970-2009 Protection of Trees on Development Sites, Section 4 Tree Protection Measures outlines that the following activities are to be avoided within the TPZ

- Machine excavation including trenching.
- Excavation for silt fencing.
- Cultivation.
- Storage.
- Preparation of chemicals, including preparation of cement products.
- Parking or movement of vehicles and plant.
- Refuelling.
- Dumping of waste.
- Wash down and clearing of equipment.
- Placement of fill.
- Lighting of fires.
- Soil level changes.
- Temporary or permanent installation of utilities and signs, and
- Physical damage to the tree.

Tree root management

Levelling, filling and cutting of soil grades will result in the same types of damage associated with excavating, trenching and soil compaction. Ninety percent of the fine roots that absorb water and minerals are in the upper 150-300mm of soil. This area is the most conducive to root growth as it usually has available space, oxygen, nutrients, and water. Altering the soil level during trenching may either strip away the fine absorbing roots from the soil surface or remove the nutrient-rich topsoil that supplies the basic elements trees require for growth.

Raising or filling grades around trees reduces oxygen diffusion, and exchange, in the rhizosphere. As little as 100mm of soil placed over the established root systems of some species is enough to cause their death. Grade changes to the soil outside the rhizosphere of the tree may also affect water drainage, causing root dieback due to changes in soil moisture content In the situation where roots have been identified and require extraction, it is important that this be undertaken under the direct supervision of a qualified Arborist. The use of earth moving equipment has the potential to cause significant damage not only to the exposed root needing removal but also to major anchorage roots within the SRZ; this is due to the roots being removed, split and compresses vascular tissue away from the target site. Where possible roots should be removed radially from the root zone rather than directly across the root system, this will reduce secondary damage to structural roots- refer to figure 3.

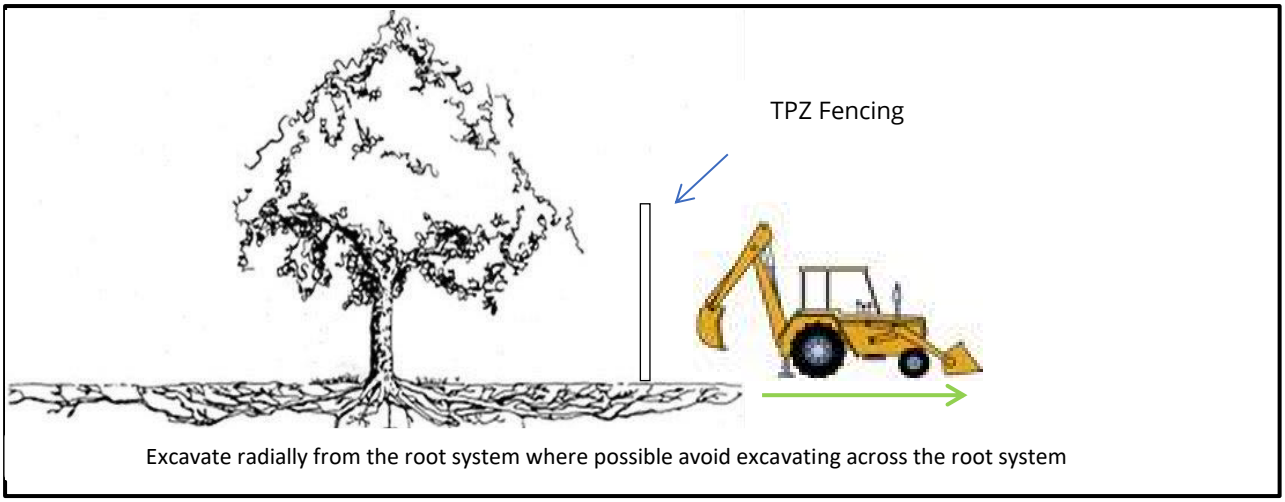


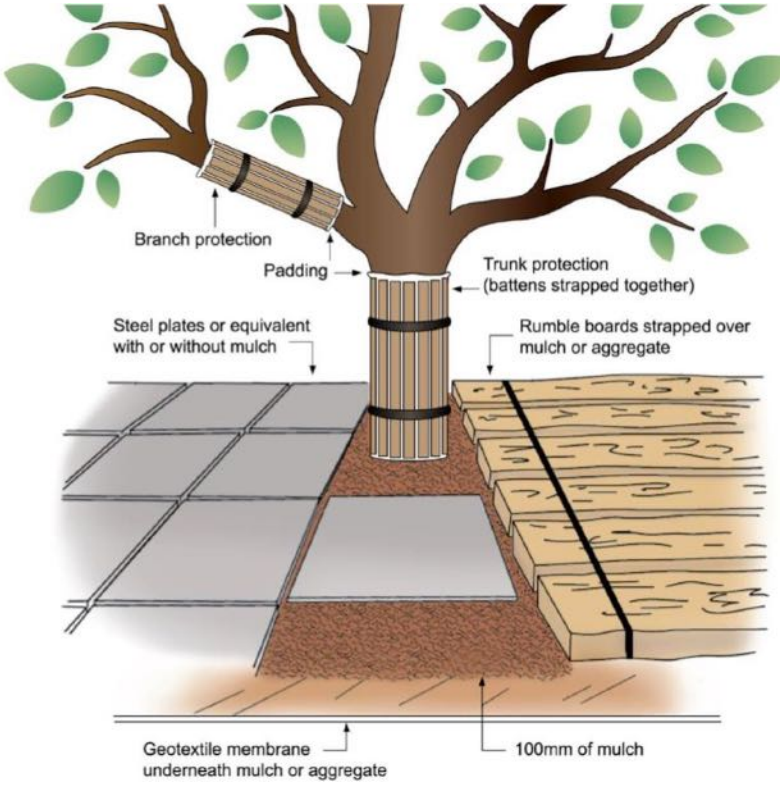
Figure 3- Preferred excavation method

Trunk and Ground Protection

Given that proposed works are often within the TPZs of retained trees, standard protective fencing may not always be a viable method of protection. In these areas trunk protection and ground protection should installed prior to the commencement of works and remain in place after construction works have completed.

Where construction access into the TPZ of retained trees cannot be avoided, the root zone of each tree must be protected using either teel plates or rumble boards strapped over mulch/aggregate until such a time as permanent above ground surfacing (cellular confinement system or similar) is installed as shown in Figure 15.

Trunk and ground protection should be undertaken in accordance with the Australian Standard AS 4790-2009: Protection of Trees on Development Sites as per the image below.



Tree protection fencing

The type of fencing employed to isolate the TPZ is less important than the desired outcome from the fencing. The indicator for successful tree protection fencing will be its ability to deter the entry of heavy equipment and vehicles, and the entry of workers and/or the public into the TPZ.

Where minimum requirements for the fencing are desirable, it should be a minimum of 1.2 - 1.5 metres in height, of chain mesh or like fence with 1.8 metre posts (e.g. treated pine) or like support every 3-4 metres and a top line of high visibility plastic hazard tape- refer to figure 4. The posts should be strong enough to sustain knocks from on-site excavation equipment. On large projects, with large numbers of trees, para-webbing may be used. However, the maintenance of this type of fencing must be enforced regularly. Para-webbing could also be used to isolate groups of trees at the fringe of the work zone to indicate that access is not permitted.

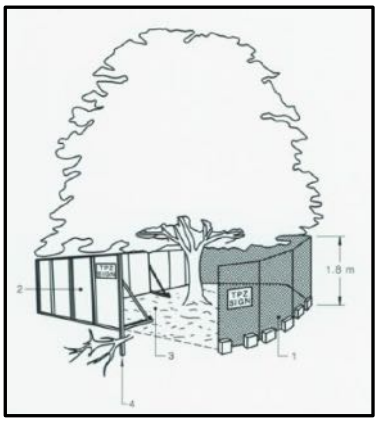


Figure 4- Tree Protection Zone fencing

Legend

1. Chain wire mesh panels with shade cloth (if required) properly secured to the ground.
2. Alternative plywood or wooden paling fence panels
3. Mulch installation across surface of TPZ, no excavation, construction activity, grade change, or storage of materials of any kind are permitted within the TPZ
4. Bracing is permissible within the TPZ. Installation of supports should avoid damaging significant roots. **Direct extract from AS4970-2009**

The tree protection fences should only be removed or shifted by the consent of the site manager in conjunction with the site arborist. In situations where the recommended TPZ encroaches on to a road, path, private property or building, the fencing should extend the maximum distance that is reasonable and practical.

An additional recommendation would be to attach signs to the fencing indicating their purpose and the restrictions applying to the TPZ. Contact details could also be attached to assist persons/contractors seeking information on the TPZ- refer to figure 5.

Example of sign

Figure 5- Tree Protection signage