Arborist Report

Client: Gardenia Glen Pty Ltd

Address: 73 Robert Street,

106 Collinson Street & 15 Sparsholt Street, TENAMBIT N.S.W 2323

Bradley Magus

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Table of Contents

1.0 Executive Summary

- Abacus Tree Services have been requested to undertake a site inspection on twenty seven (27) trees in relation to the proposed development at 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit. The applicant proposes to undertake a multi dwelling residential development as outlined in Appendix 1. In order for the development to proceed in its current format will require the removal of Trees 1 – 18, 20, 23 & 25 - 27. Trees 19, 22 & 24 can be retained and incorporated into the development. Conditions and recommendations are outlined in section 7 of the report.

2.0 Arborist Details

Bradley Magus **Contact Details:** P.O Box 333 Newcastle 2300 Ph: 0425 203 049 Email: abacustrees@gmail.com or bradmagus1@bigpond.com Web: www.abacustreeservices.com	**Qualifications** 1. Diploma Horticulture (1993) 2. Bachelor of Horticulture Science (1996) 3. Masters Land Economics (2002) 4. Diploma Horticulture (Arboriculture) (AQF 5) 2007 (Dux) 5. International Society of Arboriculture Certified Arborist (2007) 6. QTRA Assessor – 2011 & 2013

2.1 Introduction

Abacus Tree Services was commissioned by Gardenia Glen Pty Ltd to assist in the preparation of an arborist report. An assessment was made on twenty seven (27) trees located within the confines of 73 Robert Street, Tenambit, 106, 110 & 116 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit. There is in total twenty seven (27) trees located 73 Robert Street, Tenambit, 106, 110, 116 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit that were assessed as per the applicant's instructions.

The purpose of this report is to provide information and guidance to the applicant in relation to twenty seven (27) trees only. The information in this report is to be used in correlation with other reports identified by Maitland City Council and will provide Maitland City Council with a framework for determining the development application (D.A).

This report and its recommendations are based upon a physical site inspection undertaken on the 7 January & 20 February 2025 & 14 November 2026.

The photographs included in this report were taken at the time of the inspection on the 7 January & 20 February & 14 November 2026.

2.2 Aims of this report/Procedure

The aim of this report is to assess the health and condition of twenty seven (27) trees (Trees 1 - 27). The condition of the trees was assessed from ground level using the VTA (Visual Tree Assessment) method as outlined by Mattheck & Breloer (1999). The following criteria will be assessed within this report –

- An assessment of the dimensions (age, class, height and Diameter at Breast Height (D.B.H)
- An assessment of the health and condition of the trees; an assessment of the Useful Life Expectancy (U.L.E)
- Compilation of an appropriate report detailing the results of the above assessments
- Trees earmarked for retention to be assessed as per Australian Standards 4970-2009
- Hazard Rating, Recommendations for each tree

The (U.L.E) method of tree assessment, as outlined by Jeremy Barrell (1999) has been adopted within this report. U.L.E categories give an indication of the useful life expectancy anticipated for the tree that has been adopted for this report. Several factors are considered in determining this rating such as species, location, age, condition and health of the tree. The five U.L.E categories are outlined in detail within Appendix 2.

3.0 Disclaimer

This assessment has been prepared for the exclusive use of the applicant (Gardenia Glen Pty Ltd), for the preparation of a development application submission. Information in this report relates to twenty seven (27) trees (Trees 1 – 27) within the premises of 73 & 79 Robert Street, Tenambit, 106, 110 & 116 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit only and should not be used in conjunction with any other property.

This assessment was carried out from the ground, and covers what was reasonably able to be assessed and available to the assessor at the time of the inspection. The assessor carried out no aerial inspections. Information contained in this report covers only the trees that were examined and reflects the condition of the trees at the time of the inspection; furthermore the inspection was limited to a visual examination of the subject trees without dissection, excavation, probing or coring. Trees are living things and there condition will change over time. Therefore there is no guarantee that problems or deficiencies of the subject tree may not arise in the future.

3.1 Site Map

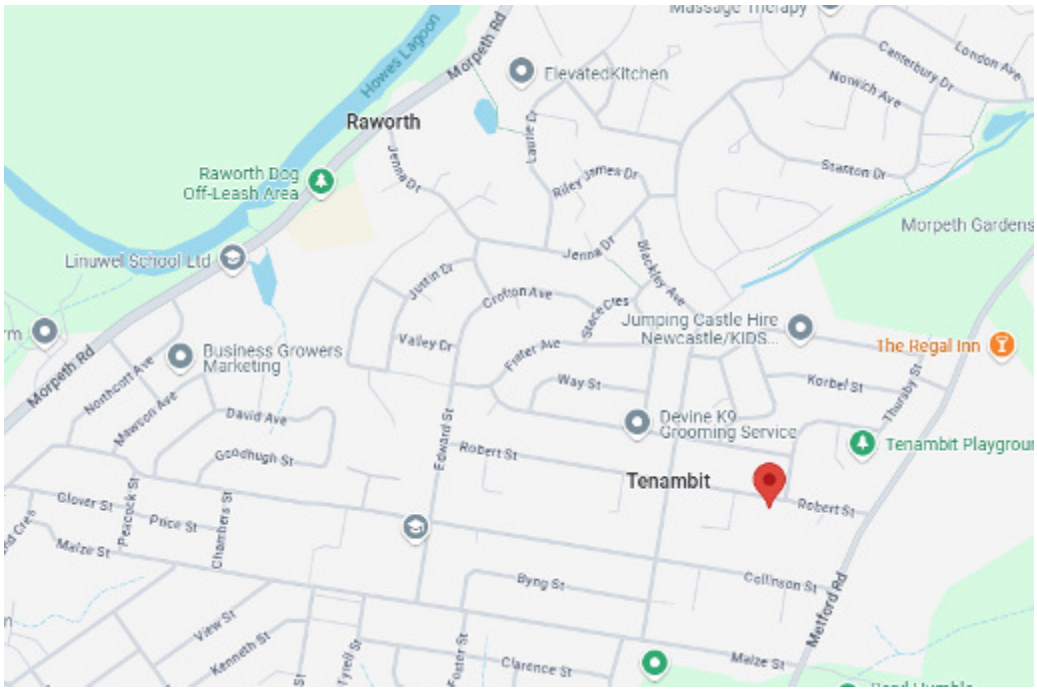


Figure 1
Location: The proposed development is located at 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit
Source: www.googlemaps.com.au

3.2 Site Description

The proposed development is located at 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit. The site is located in the municipality of Maitland Council. The species on site has been assessed against the requirements set out in Maitland Council's s Local Environmental Plan (2011) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2011) (Part B.5 – Tree Management) I have assessed the property against Schedule 5 (Environmental Heritage) within Maitland LEP. The property is not listed in accordance with Part 1 (Heritage Items) and/or Part 2 (Heritage Conservation Area).

The subject property has also been assessed against the SEPP Policy (Biodiversity and Conservation) 2021. This property or council area is not listed as being within Part 2 (Section 2.3) of the SEPP (Biodiversity and Conservation) 2021. All councils have items of local government and state heritage significance. These items are found in the NSW heritage website. The subject property has been assessed against the Heritage NSW database. In accordance with Heritage NSW listed items there are no listings (Items listed by Local Government & State Agencies) for the subject property. This also includes no trees of heritage significance for the subject property.

The site is gently undulating with the immediate area being dominated by residential houses. The nearest major arterial road is Metford Road. Trees 1 - 27 are located within the subject properties identified 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit within close proximity to the subject properties & proposed development.

4.0 Tree Schedule

Species & dimension requirements on Pages 9 & 10. This page intentionally left blank

Tree No	Scientific Name	Common Name	DBH (MM)	Height (M)	AGE CLASS	Vigour	SPREAD N.E.S.W.	ULE	Comments
1	Jacaranda mimisifolia	Jacaranda	260,160, 170,220	8	YM	D	6,5,4,7	2d	4 main leaders, Symmetrical, LCR = 95 – 100%
2	Jacaranda mimisifolia	Jacaranda	190,165	5.5	YM	D	4,3,2,2	2d	Bifurcated at ground level, Symmetrical, LCR = 95 – 100%
3	Glochidion ferdinandi	Cheese Tree	MS (180)	6.5	YM	G	2,2,2,1	2a	Symmetrical, LCR = 95 – 100%
4	Glochidion ferdinandi	Cheese Tree	MS (540)	11	M	G	6,5,3,4	2a	Symmetrical, LCR = 95 – 100%
5	Liquidambar styraciflua	Liquidambar	350	9	YM	G	2,3,2,3	2a	Symmetrical, LCR = 95 – 100%
6	Liquidambar styraciflua	Liquidambar	270	9	YM	G	4,3,3,3	2a	Symmetrical, LCR = 95 – 100%
7	Liquidambar styraciflua	Liquidambar	300	9	YM	G	4,3,3,3	2a	Symmetrical, LCR = 95 – 100%
8	Liquidambar styraciflua	Liquidambar	335	10	YM	G	4,3,4,4	2a	Symmetrical, LCR = 95 – 100%
9	Liquidambar styraciflua	Liquidambar	335	9	YM	G	4,3,4,4	2a	Symmetrical, LCR = 95 – 100%
10	Liquidambar styraciflua	Liquidambar	260	9	YM	G	5,3,4,3	2a	Symmetrical, LCR = 95 – 100%
11	Callistemon viminalis	Bottlebrush	MS (240)	4	M	G	3,2,4,2	2d	Symmetrical, LCR = 95 – 100%
12	Brachychiton acerifolius	Illawara Flame Tree	160	5	SM	G	2,1,2,1	2d	Symmetrical, LCR = 95 – 100%
13	Liquidambar styraciflua	Liquidambar	MS (440)	9	YM	G	4,4,3,3	2d	Symmetrical, LCR = 95 – 100%
14	Jacaranda mimisifolia	Jacaranda	120,90	5	SM	G	1,2,2,2	2a	Symmetrical, LCR = 95 – 100%
15	Jacaranda mimisifolia	Jacaranda	130	5	SM	G	3,1,2,2	2a	Symmetrical, LCR = 95 – 100%
16	Tecoma stans	Yellow Elder	MS (280)	5	YM	G	2,2,3,2	3d	Symmetrical, LCR = 95 – 100%
17	Platanus x acerifolia	London Plane	MS (370)	9	YM	G	4,3,6,4	2d	2.4 metres to E boundary, Symmetrical, LCR = 95 – 100%
18	Ulmus parvifolia	Chinese Elm	MS (210)	6.5	YM	G	3,3,4,5	2d	Symmetrical, LCR = 95 – 100%
19	Lophostemon confertus	Brushbox	MS (620)	14	M	G	5,5,4,5	2d	Neighbours' tree, Symmetrical, LCR = 95 – 100%. E metres to back boundary.
20	Alnus jorullensis	Mexican Alder	160	8.5	YM	G	2,2,3,2	2a	Symmetrical, LCR = 95 – 100%
21	Callistemon viminalis	Bottlebrush	210	4.5	M	G	2,1,1,2	2d	Symmetrical, LCR = 95 – 100%. Tree 21 is located near the side boundary

22	Callistemon salignus	Weeping Bottlebrush	330	7.5	M	G	4,5,3,3	2d	Symmetrical, LCR = 95 – 100%
23	Grevillea robusta	Silky Oak	380	12	M	G	4,4,4,3	2d	Symmetrical, LCR = 95 – 100%
24	Glochidion ferdinandi	Cheese Tree	445	9.5	M	G	5,5,5,4	2a	Located 0.80 metres to boundary fence, Symmetrical, LCR = 95 – 100%
25	Grevillea robusta	Silky Oak	425	16	M	G	4,4,4,3	2d	Symmetrical, LCR = 95 – 100%
26	Citrus x sinensis	Orange Tree	60,55, 185	4	OM	F	2,1,1,1	4a	Symmetrical, LCR = 95 – 100%
27	Callistemon viminalis	Bottlebrush	240	5	YM	G	3,3,2,2	2a	Symmetrical, LCR = 95 – 100%

Key:

Age class: Young = Y, Semi mature = SM, Mature = M, YM = Young Mature, Over mature = OM
DBH = Diameter at Breast Height LCR = Live Crown Ratio
Vigour = E = Excellent, G = Good, F = Fair, P = Poor, D = Dead, Do = Dormant
LDW = large deadwood over 40mm, MDW = Minor deadwood less than 40mm
N = north, E = east, W = west, S = south MS = multiple Stems
ULE = Useful Life Expectancy (See appendix 2 for guidelines)
MS = Multiple Stems S = Shrub
MC = Maitland Council
SRZ = Structural Root Zone TPZ = Tree Protection Zone NRZ = Notional Root Zone

4.1 Trees & Impact on Development

Trees are living organisms and their root systems play an integral role in stability and providing nutrient storage as well as water uptake. The majority of tree roots for Dicotyledons occur within the first metre of the soil. Therefore construction works can have a profound effect on their health and longevity as well as their structural stability. Tree distances from excavation works must be taken into consideration at the planning stage to ensure that the tree is not damaged.

There are several main factors that occur at the construction phase that can have a negative impact on the trees health and stability. These practices can include but are not limited to –

- Parking of vehicles and heavy machinery within the drip line of the tree.
- Stockpiling of materials within the drip line of the tree.
- Excavating within the drip line and damaging the structural root system.
- Raising soil levels in and around the base of the tree therefore reducing the trees ability for gaseous exchange.
- Damage to the tree due to heavy machinery and equipment resulting in large bark tears or loss of branches and scaffolds.

To reduce the effects of construction it is imperative to provide an area underneath the tree where no works are undertaken. The area where supervised works are undertaken is referred to as the structural root zone (SRZ). The S.R.Z/T.P.Z is an area where no to minimal activities listed above should occur. All trees require an S.R.Z/T.P.Z and will vary from species to species but for the purposes of this report the Australian Standards 4970 has now been adopted.

In conclusion the Australian Standards like similar methods for protecting trees is only a guide. To ensure the health and longevity of trees within construction sites it is imperative to provide a large protection zone taking into consideration that the tree will also grow over time. The greater area that can be put aside where no works occur will aid in the preservation of the tree. The activities listed above should be kept to a minimum and encroachment within the SRZ/TPZ will require the supervision by a qualified AQF 5 arborist. These impacts will be taken into consideration in the discussion & recommendations section of this report.

5.0 Discussion & Compliance to Australian Standards 4970 – 2025, 4373 – 2007 & Rural Fire Service (RFS) 10:50 Code

Abacus Tree Services has been approached by Gardenia Glen Pty Ltd to undertake an arborist (assessment) report on trees that come under the requirements of Maitland City Council DCP (Part B.5 – Tree Management) & trees that will be affected by the proposed development. There are twenty seven (27) trees that have been assessed within the subject properties identified as 73 Robert Street, Tenambit, 106, 110 & 116 Collinson Street, Tenambit. Trees 1 – 18, 20, 21, 23, 25, 26 & 27 are located within the confines of the subject property. Tree 19 is located within the backyard of 110 Collinson Street, Tenambit. Trees 22 & 24 are located inside the backyard of 116 Collinson Street, Tenambit. The applicant proposes to construct a multi-unit residential development within the subject properties identified as 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit (Appendix 1).

Abacus Tree Services has relied upon the sketch drawings provided by Delfs Lascelles (Drawing number – Revision B) to formulate distances and setbacks in accordance with Australian Standards 4970 – 2025. I have relied upon this information to be true and accurate. Any changes to the sketching and drawings will require the calculations to be reassessed in accordance with Australian Standards 4970 – 2025.

The table below represents the S.R.Z (Structural Root Zone) and TPZ (Tree Protection Zone) figures based on Australian Standards 4970 - 2025. AS 4970 – 2025 uses NRZ (Notional Root Zone) that replaces TPZ. The formula and final calculations are the same for TPZ and NRZ.

Tree No	SRZ (metres)	NRZ (metres)
1	2.78	4.92
2	1.72	3.00
3	1.72	2.16
4	2.67	6.48
5	2.26	4.20
6	2.15	3.24
7	2.14	3.60
8	2.28	3.96
9	2.24	4.02
10	2.08	3.12
11	1.86	2.88
12	1.63	2.00
13	2.45	5.28
14	1.50	2.00
15	1.50	2.00
16	2.01	3.36
17	2.38	4.44
18	1.91	2.52
19	2.85	7.44
20	1.65	2.00
21	1.82	2.52
22	2.22	3.96
23	2.32	4.56
24	2.45	5.34
25	2.48	5.10
26	1.55	2.00
27	1.91	2.88

All trees require a S.R.Z and a T.P.Z (NRZ) with Australian Standards 4970- 2025 being used as a guideline. Tree 1 has been given an SRZ and NRZ of 2.78 & 4.92 metres in accordance with Australian Standards 4970 - 2025. Tree 1 is located inside the development footprint of Unit 10. In order to construct the proposed development will require the removal of Tree 1. Tree 1 is earmarked for removal before commencement of building works on site.

Figure 3 – showing the location of Trees 1 & 2.

Tree 2 has been given an SRZ and NRZ of 1.72 & 3.00 metres in accordance with Australian Standards 4970 - 2025. Tree 2 is located inside the proposed building footprint (Unit 9). In order to construct the development will require the removal of Tree 2. Tree 2 is earmarked for removal before commencement of building works on site.

Tree 3 has been given an SRZ and NRZ of 1.72 & 2.16 metres in accordance with Australian Standards 4970 - 2025. Tree 3 is located inside the proposed building footprint (Unit 8). In order to construct the development will require the removal of Tree 3. Tree 3 is earmarked for removal before commencement of building works on site.

Tree 4 has been given an SRZ and NRZ of 2.67 & 6.48 metres in accordance with Australian Standards 4970 - 2025. Tree 4 is located inside the proposed building footprint (Unit 8). In order to construct the development will require the removal of Tree 4. Tree 4 is earmarked for removal before commencement of building works on site.

Figure 4 – showing the location of Trees 3 & 4.

Tree 5 has been given an SRZ and NRZ of 2.26 & 4.20 metres in accordance with Australian Standards 4970 - 2025. Tree 5 is located inside the proposed driveway leading to Unit 22. In order to construct the proposed development will require the removal will require the removal of Tree 5. Tree 5 is earmarked for removal before commencement of building works on site.

Tree 6 has been given an SRZ and NRZ of 2.15 & 3.24 metres in accordance with Australian Standards 4970 - 2025. Tree 6 is located inside the proposed building footprint (Unit 22). In order to construct the development will require the removal of Tree 6. Tree 6 is earmarked for removal before commencement of building works on site.

Figure 5 – showing the row of Liquidambar that have been previously planted. This type of species has a low landscape significance. This type of species is considered a weed in several council areas.

Tree 7 has been given an SRZ and NRZ of 2.14 & 3.60 metres in accordance with Australian Standards 4970 - 2025. Tree 7 is located inside the proposed building footprint (Unit 20). Tree 7 is situated at the edge of the proposed development. In order to construct the development will require the removal of Tree 7. Tree 7 is earmarked for removal before commencement of building works on site.

Tree 8 has been given an SRZ and NRZ of 2.28 & 3.96 metres in accordance with Australian Standards 4970 - 2025. Tree 8 is located inside the proposed building footprint (Unit 20). In order to construct the development will require the removal of Tree 8. Tree 8 is earmarked for removal before commencement of building works on site.

Tree 9 has been given an SRZ and NRZ of 2.24 & 4.02 metres in accordance with Australian Standards 4970 - 2025. Tree 9 is located inside the proposed building footprint (Unit 19). In order to construct the development will require the removal of Tree 9. Tree 9 is earmarked for removal before commencement of building works on site.

Figure 6 – showing the location of Trees 6 – 10. Trees 6 – 9 will be located inside the building footprint.

Tree 10 has been given an SRZ and NRZ of 2.08 & 3.12 metres in accordance with Australian Standards 4970 - 2025. Tree 10 is located inside the proposed building footprint (Unit 18). In order to construct the development will require the removal of Tree 10. Tree 10 is earmarked for removal before commencement of building works on site.

Tree 11 has been given an SRZ and NRZ of 1.86 & 2.88 metres in accordance with Australian Standards 4970 - 2025. Tree 11 will be located inside the proposed hardstand area associated with the walkway that leads to the communal open space. In order to construct the proposed walkway will require the removal of Tree 11. Tree 11 is earmarked for removal before commencement of building works on site.

Figure 7 – showing the location of Tree 11. Tree 11 will be located inside the proposed walkway associated with the communal open space. In order to construct the proposed walkway will require the removal of Tree 11.

Tree 12 has been given an SRZ and NRZ of 1.63 & 2.00 metres in accordance with Australian Standards 4970 - 2025. Tree 12 is located inside the proposed building footprint (Unit 23). In order to construct the proposed development will require the removal of Tree 12. Tree 12 is earmarked for removal before commencement of building works on site.

Figure 8 – showing the location of Tree 12.

Tree 13 has been given an SRZ and NRZ of 2.45 & 5.28 metres in accordance with Australian Standards 4970 - 2025. Tree 13 is located inside the proposed building footprint (Unit 23). In order to construct the proposed development will require the removal of Tree 13. Tree 13 is earmarked for removal before commencement of building works on site.

Figure 9 – showing the location of Tree 13. Tree 13 is identified as a Liquidambar. This species has low landscape significance. Tree 13 is earmarked for removal to construct the proposed development

Tree 14 has been given an SRZ and NRZ of 1.50 & 2.00 metres in accordance with Australian Standards 4970 - 2025. Tree 14 is located inside the proposed outdoor deck area associated with the development (Unit 24). In order to construct the proposed outdoor area will require the removal of Tree 14. Tree 14 is earmarked for removal before commencement of building works on site.

Tree 15 has been given an SRZ and NRZ of 1.50 & 2.00 metres in accordance with Australian Standards 4970 - 2025. Tree 15 is located inside the proposed building footprint (Unit 25). In order for the development to proceed in its current format will require the removal of Tree 15. Tree 15 is earmarked for removal before commencement of building works on site.

Figure 10 – showing the location of Trees 14 & 15

Tree 16 has been given an SRZ and NRZ of 2.01 & 3.36 metres in accordance with Australian Standards 4970 - 2025. Tree 16 is located inside the proposed building footprint (Unit 26). In order for the development to proceed in its current format will require the removal of Tree 16. Tree 16 is earmarked for removal before commencement of building works on site.

Figure 11 – showing the location of Tree 16

Tree 17 has been given an SRZ and NRZ of 2.38 & 4.44 metres in accordance with Australian Standards 4970 - 2025. Tree 17 is located on the edge of the parking associated with Unit 28 and the other side is the refuse collection. Both areas will be in hardstand area. In order to construct the proposed parking and refuse area will require the removal of Tree 17. Tree 17 is earmarked for removal before commencement of building works on site.

Figure 12 – showing the location of Trees 10, 17, 18 & 20.

Tree 18 has been given an SRZ and NRZ of 1.91 & 2.52 metres in accordance with Australian Standards 4970 - 2025. Tree 18 is located inside the proposed driveway and associated hardstand. In order to construct the proposed internal road will require the removal of Tree 18. Tree 18 is earmarked for removal before commencement of building works on site.

Tree 19 has been given an SRZ and NRZ of 2.85 & 7.44 metres in accordance with Australian Standards 4970 - 2025. Tree 19 is located in the neighbour's backyard as noted in Figure 13. Tree 19 is located 2.4 metres to the back boundary fence. The proposed development is located 4.00 metres to the back boundary fence. This leaves a total distance of 6.40 metres from the trunk to the development. AS 4970 – 2025 indicates that the TPZ radius is taken from the centre of the trunk. This leaves a distance of 6.73 metres from the centre of the trunk to the proposed development. The overall loss of NRZ has been calculated at 1.73% that complies with AS 4970 – 2025. This is based on the proviso that no change to the soil profile occurs from the trunk to the proposed development. If this can be achieved will allow the retention of Tree 19. All services are to remain outside the TPZ up to the proposed development. Tree 19 is earmarked for retention.

Figure 13 – No change in the soil profile is to occur from the trunk to the proposed development inside the NRZ.

Tree 20 has been given an SRZ and NRZ of 1.65 & 2.00 metres in accordance with Australian Standards 4970 - 2025. Tree 20 is located 0.4 metres to the proposed internal footpath that leads to the communal open space. AS 4970 – 2025 indicates that the NRZ is taken from the centre of the trunk. This leaves a spatial separation of 0.71 metres to the proposed path and associated civil works. The overall loss of TPZ has been calculated at 43.93% that doesn't comply with AS 4970 – 2025. The incursion into the SRZ on one side has been calculated at 75.09% that will lead to loss of structural integrity. The remaining sections of the SRZ/NRZ will be altered due to civil and benching works required to levels the site for the communal open space and front yards of Units 17 & 18. Tree 20 is earmarked for removal before commencement of building works on site.

Tree 21 has been given an SRZ and NRZ of 1.82 & 2.52 metres in accordance with Australian Standards 4970 - 2025. Tree 21 has been removed since the last inspection. .

Figure 14 – Tree 21 was located in the backyard of the neighbour's property. Tree 21 was less than 3 metres in height. Tree 21 has been removed since the last tree inspection.

Tree 22 has been given an SRZ and NRZ of 2.22 & 3.96 metres in accordance with Australian Standards 4970 - 2025. Tree 22 is located in the neighbour's backyard as outlined in Figure 15. Tree 22 is located 0.30 metres to the corner boundary that connects both properties. There is also 2.50 metres of canopy overhang into the subject property. The proposed development is outside the NRZ. In order to retain Tree 22 will require no change in the soil profile within the subject property for 2.73 metres from the centre of the trunk. This will require no change in the soil profile within the subject property for 2.31 metres. The proposed development and layout will allow the offset of 2.31 metres. In order to protect the canopy it is extended to 2.50 metres. An offset of 2.50 metres is to be achieved inside the subject property. This includes no change to the soil profile inside this section of the TPZ. If this can be achieved will allow the retention of Tree 22. Tree 22 is earmarked for retention.

Figure 15 – showing the location of Tree 22. No change in the soil profile is to occur for 2.50 metres inside the NRZ. The hashed area also represents the proposed fencing that is to be erected before all civil and building works take place on site.

Tree 23 has been given an SRZ and NRZ of 2.32 & 4.56 metres in accordance with Australian Standards 4970 - 2025. Tree 23 is located inside the proposed building footprint (Unit 3). In order for the development to proceed in its current format will require the removal of Tree 23. Tree 23 is earmarked for removal before commencement of building works on site.

Figure 16 – showing the location of Trees 23 & 25. Trees 23 & 25 are located in the subject property. Tree 24 as shown would require major pruning works back to the boundary fence,

Tree 24 has been given an SRZ and NRZ of 2.45 & 5.34 metres in accordance with Australian Standards 4970 - 2025. Tree 24 is located in the backyard of the neighbour's property as outlined in Figure 17. Tree 24 is located 0.8 metres to the back boundary fence as indicated in Figure 17. The proposed visitor car parking is located 0.90 metres to the boundary fence. This leaves a separation of 1.70 metres to the proposed visitor parking. AS 4970 – 2025 indicates that the TPZ is taken from the centre of the trunk. This leaves a distance of 1.91 metres from the centre of the trunk to the proposed civil works. The loss of TPZ has been calculated at 27.72% that doesn't comply with AS 4970 – 2025. The canopy protrudes into the subject property by 4.0 metres. The pruning works would be in the vicinity of 20 - 25%. This is considered moderate pruning works. In order to retain Tree 24 will require a suspended slab construction or similar method of construction. Tree 24 is earmarked for retention.

Tree 25 has been given an SRZ and NRZ of 2.48 & 5.10 metres in accordance with Australian Standards 4970 - 2025. Tree 25 is located inside the proposed car parking bays. In order to construct the proposed car parking bays will require the removal of Tree 25. Tree 25 is earmarked for removal.

Figure 17 – Tree 24 will require major pruning works due to the location to the proposed visitor car parking.

Tree 26 has been given an SRZ and NRZ of 1.55 & 2.00 metres in accordance with Australian Standards 4970 - 2025. Tree 26 is located inside the proposed building footprint (Unit 5). In order for the development to proceed in its current format will require the removal of Tree 26. Tree 26 is identified as a small orange tree. Tree 26 is in an over mature phase of its life cycle. Tree 26 is earmarked for removal before commencement of building works on site.

Figure 18 – showing the location of Tree 26

Tree 27 has an SRZ and NRZ of 1.91 & 2.88 metres in accordance with AS 4970 – 2025. Tree 27 appears to be located in the subject property as outlined in Figure 19. Tree 27 will be located inside the proposed hardstand area. In order to construct the proposed hardstand will require the removal of Tree 27. Tree 27 is earmarked for removal.

Figure 19 – showing the location of Tree 27.

6.0 Conclusions

- Abacus Tree Services has been approached by Gardenia Glen Pty Ltd to undertake an arborist (assessment) report on trees that come under the requirements of Maitland City Council DCP (Part B.5 – Tree Management) & trees that will be affected by the proposed development. There are twenty seven (27) trees that have been assessed within the subject properties identified as 73 Robert Street, Tenambit 106, 110 & 116 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit. Trees 1 – 18, 20, 21, 23, 25, 26 & 27 are located within the confines of the subject properties. Tree 19 is located within the backyard of 110 Collinson Street, Tenambit. Trees 22 & 24 are located inside the backyard of 116 Collinson Street, Tenambit. The applicant proposes to construct a multi-unit residential development within the subject properties identified as 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit (Appendix 1). Trees 1 - 27 have been assessed in accordance with Australian Standards 4970 – 2025.

- The subject properties are identified as 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit. The site is located in the municipality of Maitland Council. The species on site has been assessed against the requirements set out in Maitland Council's s Local Environmental Plan (2011) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2011) (Part B.5 – Tree Management) I have assessed the property against Schedule 5 (Environmental Heritage) within Maitland LEP. The property is not listed in accordance with Part 1 (Heritage Items) and/or Part 2 (Heritage Conservation Area).

- The subject properties identified as 73 Robert Street, Tenambit, 106 Collinson Street, Tenambit & 15 Sparsholt Street, Tenambit are not located in a Rural Fire Service (RFS) 10:50 area. Therefore all trees have been assessed in accordance with council requirements with no exemptions under RFS 10:50 legislation. The search was undertaken on the 26 March 2026. Rules and regulations in relation to the RFS 10:50 can change and it is therefore up to the applicant to ensure they comply with the 10:50 code and any updates that may occur.

- Protection fencing for Trees 19, 22 & 24 (3 in total) has been considered to protect the root plate inside the subject property. The boundary fence will act as a barrier and will minimise damage to the canopy. Additional fencing will be required to protect the minimal offset of NRZ. Trees 19, 22 & 24 will require retention in accordance with Australian Standards 4970 – 2025.

- Trees 19, 22 & 24 have the potential for future growth and therefore the canopy and root plate have the potential for future growth. All measures have been taken to minimise damage to the proposed buildings and hardstand areas however future growth has the potential to cause damage to the proposed buildings and/or hardstand areas.

- The applicant has therefore assessed all trees within 5 metres of the proposed development. This includes all trees on neighbouring properties within 5 metres of the proposed development. The applicant has assessed all trees necessary for the development to meet the requirements of Maitland Council DCP (Part B.5) & Australian Standards 4970 – 2025.

- In order for the development to proceed in its current format will require the removal of Trees 1 – 18, 20, 23 & 25 - 27 (23 in total). This includes all trees inside the proposed development, hardstand areas and those that do not pass the requirements of AS 4970 – 2025. Tree 21 was a small tree that has been removed since the last inspection. Tree 19, 22 & 24 (3 in total) can be retained and incorporated into the development. Conditions and recommendations in relation to retained trees will be outlined in section 7 of the report.

7.0 Recommendations

- It is recommended that Gardenia Glen Pty Ltd embark on a management program for twenty seven (27) trees (Trees 1 – 27) before commencement of the proposed building and constructions works as follows:

- It is recommended that Trees 1 – 18. 20, 23, & 25 - 27 (23 in total) be removed immediately (before commencement of building works) by a qualified arborist (minimum certificate 2 in arboriculture). It is recommended that professional indemnity and public liability insurances be current and sighted before commencement of works begin. The level of cover has to be one in agreement between Gardenia Glen Pty Ltd and the arborist.

- It is recommended that Tree 19, 22 & 24 (3 in total) be retained and incorporated into the development. It is recommended that the existing boundary fence be retained inside the TPZ. New fences if required, are to be constructed without the needs for strip footings. Footings can be used for fences with a minimum span of 1.8 metres and a diameter no greater than 150mm. A lintel system or similar is to be used to be built up from natural ground levels. No change in the soil profile is to occur inside the subject property for 2.33 metres (minimum) inside the NRZ (Tree 19). No change in the soil profile is to occur inside the subject property for 2.50 metres (minimum) inside the NRZ (Tree 22). This is a 2.33 & 2.50 metre exclusion zone from the back boundary fence inside the NRZ. This includes no change to the soil profile or organic layer. This area is to be fenced off before any civil works take place on site.

- Tree 24 is to have no change in the soil profile from the trunk to the proposed car parking bays. The car parking bays are to be a suspended slab or similar method of construction inside the TPZ. The applicant is to retain natural ground levels underneath the suspended slab or similar method of construction. Footings are to be hand dug (shovel) to the required depth. Footings are to be no greater than 200 – 220mm in diameter. Finding roots greater than 50 – 60mm in diameter will require the footing to be dug in an alternative location. It is recommended that final footing placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate. The preferred option is to maintain existing fencing inside the NRZ only as this will provide no disturbance to the root plate inside the SRZ/NRZ. It is recommended to prune Tree 24 a maximum of 20 - 25% in accordance with AS 4373 – 2007.

- It is recommended that pilot holes for proposed fences inside the NRZ (Trees 19, 22 & 24) be undertaken before commencement of construction works to determine the footing locations. It is recommended that no structural roots greater than 50 - 60mm in diameter be pruned. Upon finding roots greater than 50 - 60mm will require the footing to be dug in an alternative location. All pilot holes/footings are to be dug by hand (shovel) to the required depth. It is recommended that final footing placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate. The preferred option is to maintain existing fencing inside the NRZ only as this will provide no disturbance to the root plate inside the SRZ/NRZ.

- It is recommended that the existing grass be retained inside the section of NRZ to protect the trees during construction works. This includes the 2.33 & 2.50 metres of NRZ (minimum) from the back boundary fence. Removal of the grass inside the designated NRZ is to be undertaken at the landscaping phase after completion of all building and hardstand areas. Removal of the grass and replacement grass is to be undertaken by non-mechanised methods.

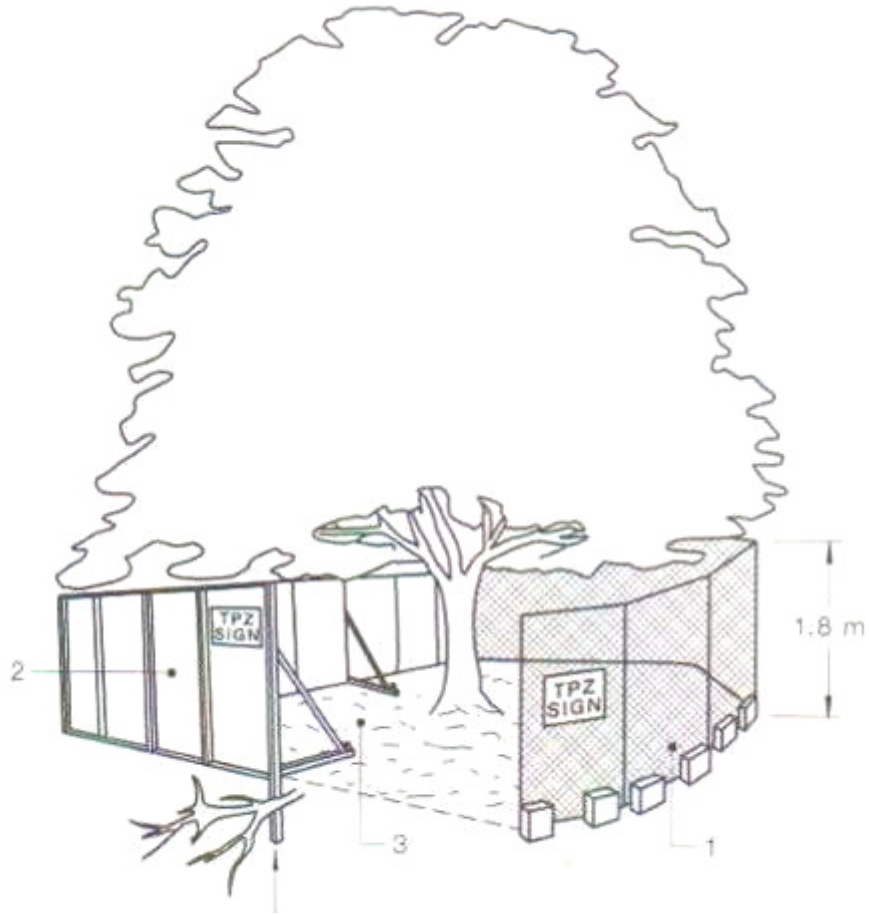
- It is recommended that protection measures be put in place that aid in the preservation of Trees 19, 22 & 24 (3 in total). It is recommended that 1.8 metre inter locking chain wire fencing be installed before commencement of all civil and building works on site as indicated in Figure 20. Protection fencing is to be installed a minimum of 2.33 & 2.50 metres from the back boundary fence inside the NRZ (Trees 19 & 22). Protection fencing is to be erected to the edge of the proposed car parking bays inside the TPZ (Tree 24). The existing grass is to be maintained in this section of the NRZ during all civil and building works. Protection fencing is to be installed before commencement of all civil & building works and remain in place until the release of the occupation certificate.

- It is recommended that all civil contractors that enter the site are made aware of the importance of preserving Tree 19, 22 & 24 and understand the tree protection measures that are put in place to preserve Tree 19, 22 & 24.

- All stockpile and waste sites to be maintained outside the designated NRZ during all times associated with the civil and building works.

- It is recommended that all parking of vehicles and use of machinery be kept outside the designated fenced zones at all times during civil and construction works. No placement or use of machinery is allowed within the designated NRZ fenced area.

- This report is not for publication to the internet and submission of this report in the submission phase set out by Council is to be taken down upon completion of the development application.



- Figure 20 – showing the proposed fencing that is to be put in place before the commencement of building works on site (Trees 19, 22 & 24 only).
  Source: Australian Standards 4970 - 2025

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8.0 References

AS4373-2007 Pruning of Amenity Trees. Standards Australia

AS 4970 – 2009 Protection of trees on development sites

Clark R.J & Matheny N (1998) Trees & Development – A technical guide to Preservation of trees during land development: International Society of Arboriculture

Mattheck C., Breloer, (1999) The Body Language of Trees – a handbook for failure analysis 5th ed., London: The Stationery Office, U.K

Internet Sites

www.googlemaps.com.au

www.heritagensw.gov.au

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www.maitland.nsw.gov.au

www.planningportal.nsw.gov.au

9.0 APPENDIX 1 Site Maps

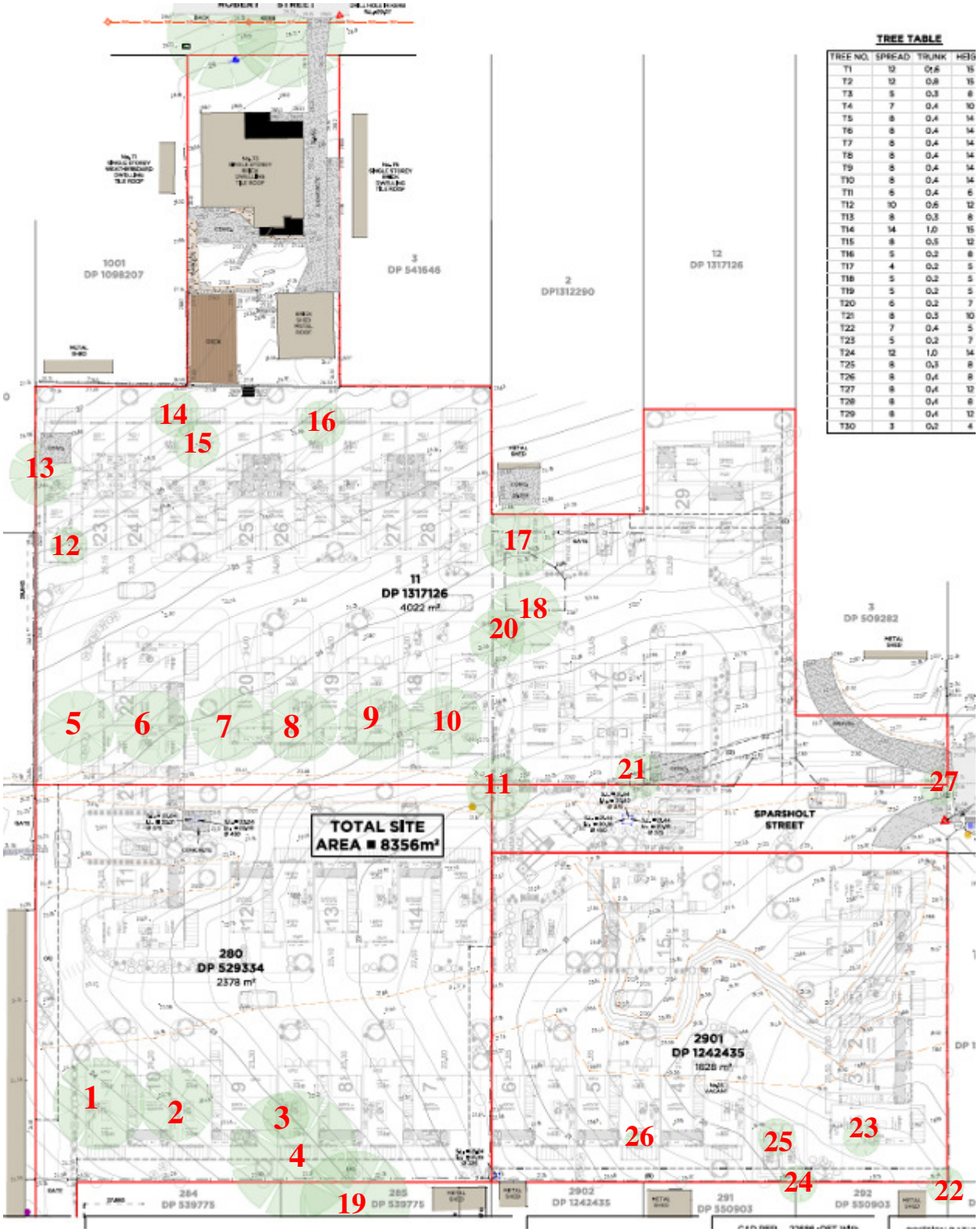

Figure 16 - Close up of the subject property and canopy area of Trees 1 - 21. Not to scale
Source: Delfs

APPENDIX 2 U.L.E (Useful Life Expectancy) Categories and Subgroups

Useful Life Expectancy – Classification

1. Long ULE > 40 Years

a. Structurally sound and can accommodate future growth
b. Long term potential with minor remedial treatment
c. Trees of special significance which warrant extra care

2. Medium ULE of 15-40years

a. Will live between 15 – 40 years
b. Will live for more than 40 years but would be removed for safety or other reasons
c. May live for more than 40 years but will interfere with more suitable specimens and need removal eventually
d. More suitable for retention in the medium term with some remedial care

3. Short ULE of 5-15 years

a. Trees that may only live between 5 – 15 more years
b. May live for more than 15 years but would need removal for safety or other reasons
c. Will live for more than 15 years but will interfere with more suitable specimens or provide space for replacement plantings
d. Require substantial remedial care but are only suitable for short term retention

4. Remove tree within 5 years

a. Dead, dying or seriously diseased
b. Dangerous trees through instability or loss of adjacent trees
c. Structural defects such as cavities
d. Damaged that are clearly not safe to retain
e. May live for more than 5 years but will need replacement to prevent interference or make space for more suitable trees
f. May or are causing damage to structures
g. That will become dangerous

5 Trees suitable to transplant

a. Small trees can be reliably moved or replaced
b. Young trees between 5 – 15 years
c. Trees that have been regularly pruned to control growth

Key	Criteria	Comments
Tree no		
Species	Relates to the twenty one on the site plan	
Remnant /planted Self Sown	May be coded – See Key for details	
Special Significance	A – Aboriginal C- Commemorative Ha- Habitat Hi- Historic M- Memorial R- Rare U- Unique form O- Other	May require specialist knowledge
Age Class	Y- Young- Recently Planted S-Semi mature (<20% of life expectancy M- Mature (20-80% of life expectancy) O- Over mature (>80% of life expectancy)	
Height	In Metres	
Spread	Average diameter of canopy in metres	
Crown Condition	Overall vigour and vitality 0 – Dead 1 – Severe decline (<20% canopy, major deadwood 2 – Declining 20-60% canopy density, twig dieback 3- Average/low vigour (60-90% canopy density, twig dieback) 4- Good (90-100% crown cover, little or no dieback or other problems) 5- Excellent (100% crown cover, no deadwood or other problems	
Failure Potential	Identifies the most likely failure and rates the likelihood that the structural defects will result in failure within the inspection period. 1- Low – Defects are minor (eg dieback of twigs, small wounds with good wound development) 2 – Medium – Defects are present and obvious egg Cavity encompassing 10-25% of the circumference of the trunk) 3 High- Numerous and/or significant defects present (eg cavity encompassing 30-50% of the circumference of the trunk, major bark inclusions) 4- Severe- Defects are very severe (eg fruiting	Requires specialist knowledge

	bodies, cavity encompassing more than 50% of the trunk)	
Size of defective part	Rates the size of the part most likely to fail. The larger the part that fails the greater the potential for damage. 1- Most likely failure less than 150mm in diameter 2- Most likely failure 150-450mm in diameter 3- Most likely failure 450-750mm in diameter 4- Most likely failure more than 750mm in diameter	
Target rating	Rates the use and occupancy that would be struck by the defective part: 1. Occasional use (jogging, cycle track 2. Intermittent use (e.g picnic area, day use parking 3. Frequent use, secondary structure (eg seasonal camping, storage facilities) 4. Constant use structures (year round use for a twenty one of hours each day, residences)	
Hazard rating	Failure potential + size of part + target rating Add each of the above sections for a twenty one out of 12	The final twenty one identifies the degree of risk. The next step is to determine a management strategy. A rating in this column does not condemn a tree but may indicate the need for more investigation and a risk management strategy.
Root Zone	C-Compaction D- Damaged/wounded roots E- Exposed roots Ga- Tree in graded bed Gi- Girdled roots Gr- Grass K-Kerb close to tree L+- Raised soil level L- Lowered soil level M- Mulched	

	Pa- Paving concrete bitumen Pr- Roots pruned O-Other	
Defects	B-Borers C-Cavity D-Decay Dw-Deadwood E-Epicormics I-Inclusions L- Lopped LDCMP- Leaf damage by chewing mouthpiece insects M- Mistletoe/parasites MBA- Multi branch attachments PD- Parrot damage PFS- Previous failure sites S-Splits/Cracks T-Termites TL- Trunk lean TW- Trunk wound O-Other	
Services/adjacent structures	Bs- Bus stop Bu- Building within 3 metres Hvo- High voltage open wire construction Hvb- High voltage bundled (ABC) Lvo- Low voltage open wire construction Lvb- Low voltage bundled (ABC) Na- No services above Nb- No services below ground Si- Signage SL- Street light T- Transmission U- Underground services O- Other	More than one of these may apply