

ARBORICULTURAL IMPACT ASSESSMENT (AIA) REPORT

Applicant: Hyecorp Pty Ltd Application Number: SSD-73277714

Site Address: 37 Archer Street Chatswood

Project Name: Mixed use development with infill affordable housing,

Chatswood

Site Inspection Date: 1 December 2023

Report Date: 5 May 2025

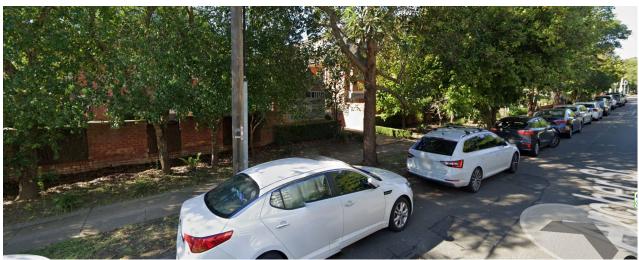


Image 1: Archer Street frontage showing tree lined street. Google image capture date June 2021.

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1 Executive summary

Executive Summary

This Arboricultural Impact Assessment Report has been prepared by Margot Blues (Consulting Arborist) to accompany a detailed State Significant Development Application (SSDA) for the development of a mixed use residential tower with infill affordable housing at 37 Archer Street, Chatswood NSW 2067. The site consists of attached townhouses within a large rectangular lot and basement carparking. The legal description of the site is outlined in Table 1 below.

Property Address	Title Description
37 Archer Street, Chatswood NSW 2067	SP 38065
Project Site Area	2,201m ²

Table 1 Legal Description

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-73277714) dated 12 July 2024 specifically Item No 8 being Trees and Landscaping, specifically Assess the number, location, condition and significance of trees to be removed and retained and note any existing canopy coverage to be retained onsite - Arboricultural Impact Assessment.

This Arboricultural Impact Assessment provides an evaluation of the likely impact to 46 trees located on and adjacent to the subject site as a result of the proposed development, inclusive of associated building and basement footprints, bulk earthworks, hard paving areas, stormwater and flood management works and landscaping. A summary of those tree is included below, with a description of their retention value and nominated retention/removal status under this proposal.

Based on the plans supplied, it is recommended that:

- 1. 5 trees to be retained and protected: Trees 1, 2, 3, 4 (street trees) 27, (private tree on neighbouring property) and
- 2. 41 trees to be removed: Trees 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 39a, 40, 41, 42, 43, 44, 45, 47, 48, 49.



Tree Assessment Summary

Retain/Remove	Identified Reten	tion Values		Number of
	High	Medium	Low	Trees
Retain &	4 trees	Nil	1 tree	5 trees
Protect	Trees 1, 2, 3, 4		Tree 27	
Remove	2 trees	3 trees	36 trees	41 trees
	Trees 47, 48	Trees 5, 6, 7	Trees 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 39a, 40, 41, 42, 43, 44, 45, 49	
TOTAL		1	1	46 TREES

Table 2: Tree Assessment Summary.

- Tree sensitive methods of construction for inground service installation and connection beneath the Archer Street street trees is required for the protection and preservation of Council trees. The Fire Hydrant Booster Assembly, in particular, is to be located at the front of the building and connect to the existing Sydney Water supply. Protective measures include ground penetrating radar, underground boring and/or hydrovac excavation. Open trenching through tree roots cannot occur.
- Project arborist to supervise all works within the Tree Protection (TPZ and Structural Root Zones (SRZ) of the four Archer Street street trees.
- As per the Australian Standard AS4970-2009 Protection of trees on development sites, tree protection fencing is required around the Archer Street street trees and retained throughout all site activities including demolition. Fencing to be removed once construction and landscaping works have been completed. Fencing is not to block the pedestrian footpath or roadway at any time.
- Archer Street street trees T3 and T4: Minimal pruning possibly required for eastern canopy extent allowing for pile rig boom operation. All pruning shall be undertaken in accordance with AS4373-2007 *Pruning of amenity trees*.
- Replacement tree planting along the Bertram Street frontage a minimum of two (2) trees as specified by Council and/or Crepe Myrtles in line with Willoughby Council's Street Tree Master Plan 2014.



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2 Introduction

The application seeks consent for the demolition of existing structures on the site and the development of residential apartments (including affordable housing), commercial office space, food and beverage uses and retail tenancies with servicing areas and parking contained within the building's basement. A publicly accessible through site-link is also proposed providing a direct connection between Archer and Bertram Streets and allowing opportunities for outdoor dining and passive recreation.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 12 July 2024 and issued for the SSDA (SSD-73277714). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Item	Description of Requirement	Documentation
8. Trees and Landscaping	Assess the number, location, condition and significance of trees to be removed and retained and note any existing canopy coverage to be retained onsite.	Arboricultural Impact Assessment.
	Provide a detailed site-wide landscape plan, that:	
	details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage (as a percentage of the site area).	
	provides evidence that opportunities to retain significant trees have been explored and/or informs the plan.	
	demonstrates how the proposed development would contribute to long term landscape setting in respect of the site and	

SEARS requirement Table 8: . Darker grey shading highlighting scope of works – arboriculture.

- 2.1.1 This report does not address Landscaping as included in Table 8 SEARS requirement.
- 2.1.2 The report's aim was to:
 - Address Item 8 of the SEARS requirement as per paragraph 2.1.1.
 - Determine construction impact to trees within and surrounding the site for retention or removal consideration.
 - Assign tree retention values to trees.
- 2.1.3 Information supplied and relied upon for the preparation of this report included:
 - Architectural suite of plans by Fuse Architects (Issue A SSDA 20/03SEARS (Planning Secretary's Environmental Assessment Requirements) issued for project SSD-73277714 dated 12 July 2024 NSW Government document requirement.
 - EBIS guidelines on report structure.
 - Survey by LTS dated Revision C dated 11/04/2025.



• Sydney Water - Asset Creation Developer Process – Instructions and technical requirements for drillers.

2.2 The Site

- 2.2.1 The site is located at 37 Archer Street, Chatswood within the Willoughby Local Government Area (LGA). The site is legally described as SP 38065 and has an area of 2,201m2. The existing development includes two buildings (multi-unit housing) of up to three storeys in height which accommodate a total of 14 dwellings. The existing development includes an inground swimming pool fronting Archer Street and single level of basement parking which is accessed from Bertram Street. Pedestrian entries are available from Bertram and Archer Street. Vegetation within the site includes planter boxes through the central circulation spaces and established trees around the site's perimeter. Street trees, comprising native species, along the site's western frontage form part of an attractive and distinctive avenue of trees.
- 2.2.2 The site is situated on the southern edge of the Chatswood CBD. The immediately surrounding area has been zoned for more intensive development and is intended to support mixed use development including high density residential uses. The existing character of the area is evolving.
- 2.2.3 The urban context surrounding the site is characterised by a mix of residential, commercial, and retail uses. The surrounding locality is described below:
- 2.2.4 North: The site is bounded to the north by low scale residential development including townhouses and single dwelling properties. This land is zoned to support high-rise mixed use development including buildings with heights up to RL246.8m. Along Archer Street proposals for mixed use towers have been lodged for properties at 51-55 Archer Street and 57-61 Archer Street.
- 2.2.5 East: The site is bound to the east by Bertram Street which comprises a two-way local road and borders the western edge of the South Chatswood Heritage Conservation Area. A locally listed heritage item at 34 Neridah Street is situated directly opposite.
- 2.2.6 South: A development application for a 14-storey mixed use development has been lodged for 31-44 Archer Street which is situated immediately to the south of the site. This area provides a transition to low scale residential uses contained within the South Willoughby Conservation Area located on the southern side of Johnson Street. There is a locally significant heritage item at 27 Archer Street.
- 2.2.7 West: To the west the site is bound by Archer Street which comprises a four-lane classified road. Existing development on Archer Street comprises medium density residential towers of 7 storeys and higher. The area has been zoned for taller buildings of up to 90m. Further to the west is the Chatswood transport interchange and Pacific Highway, linking to the CBD and wider Greater Sydney region.
- 2.2.8 The site benefits from excellent access to public and active transport and is within walking distance of the Chatswood Interchange, which provides rail and metro connections to North Sydney, Macquarie Park, and the Sydney CBD. Bus services run along Archer Street and provide connections to Chatswood and Crows Nest.



3 Methodology

- 3.1.1 Trees were assessed, in December 2023, using the Visual Tree Assessment (VTA) methodology derived by Mattheck and Breloer (1994) encompassing the biological and mechanical characteristics as presented.
 - Biological assessment included leaves (volume and colour); the presence of pests and diseases, canopy dieback, deadwood and epicormic growth.
 - Tree mechanics included assessment of structural stability, previous pruning and any damage/disturbance which may have occurred.
- 3.1.2 Tree height and canopy width were estimated.
- 3.1.3 Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) have been calculated as per AS4970-2009 *Protection of trees on development sites*. Measurements were achieved with the aid of a builder's tape measure and supplied drawings scaled.
- 3.1.4 In accordance with AS4970-2009 (Section 3.3.2) a minor encroachment is less than 10% of the area of the TPZ and is outside the SRZ detailed root investigations should not be required. A major encroachment is where encroachment exceeds 10% and is outside the SRZ. The project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.
- 3.1.5 TPZ considerations (Section 3.3.4) of AS4970-2009 includes but not limited to:
 - Location and distribution of the roots
 - The potential loss of root mass
 - Tree species and tolerance to root disturbance
 - Age, vigour and size of the tree
 - Tree lean
 - Soil characteristics and volume, topography and drainage
 - The presence of existing or past structures or obstacles affecting root growth
 - Design factors
- 3.1.6 Appendix 1: Tree Data.
- 3.1.7 Appendix 2: Tree identification and construction impact.
- 3.1.8 Appendix 3: Photographs.
- 3.1.9 Appendix 4: Significance Rating. Tree retention values have been assessed based on the IACA Significance of a Tree, Assessment Rating System (STARS) methodology.
- 3.1.10 This report is considered limited to what could reasonably be seen from ground level and expresses no commentary on changes which may have, or will, impact the trees or their environment outside the scope of works.



4 Results

Site Trees

Thirty nine (39) trees were located within the subject site, including Trees 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 39a, 40, 41, 42, 43, 44, 45, 49.

Council Trees

Six (6) street trees were located within street verges fronting the site, including Trees 1, 2, 3, 4, 47 and 48.

Neighbouring Trees

One (1) neighbouring tree (tree 27) is located within 5 metres of the site boundary and was surveyed as part of this assessment. Note: exempt trees have been excluded from the assessment, these trees are identified in Appendix 2.

The majority of existing site trees were exotic species in moderate/poor health and condition. With the exception of trees T5, T6, T7, all scored a "low" retention value given their small size and falling below the Council's prescribed height and width threshold or were "Exempt" listed. The growing environment and/or horticultural management of most trees was sub-optimal.

Building offset

- Archer Street boundary Basement excavation is 6 metres inwards from the front boundary. Paving to be installed at front of building.
- Bertram Street boundary Basement excavation is 6 metres inwards from the rear boundary excluding driveway and stairs. Paving to be installed at rear of building.
- The basement mezzanine level is set back 3 metres from the boundary below which basement excavation extends almost to the side boundaries.

4.1 Construction impact to the street trees

4.1.1 The development impact upon each tree based on the proposal:

Tree ID	Species	Comment	Recommendatio n
		Location: Council Verge Archer Street frontage	Retention Value: High
		Construction impact: Low (4.1% of total TPZ area) as per AS4970-2009.	Retain and protect
T1	Lophostemon confertus Brushbox	Accessible ramp from footpath and will require approximately 250mm excavation plus loose permeable paving (excavation approximately 200mm).	Underground boring for Hydrant booster Valve connection.
		Fire Hydrant Booster Value located outside TPZ and requires connection with mains water supply Trenching through roots to be avoided.	

Mob: 0414 991122



	Hannilia	Location: Council Verge Archer Street frontage	Retention Value: High
T2	Harpulia pendula Tulipwood	Construction impact: Low (5.5% of total TPZ area) as per AS4970-2009.	Retain and protect
		Permeable paving plus sub base compaction. Excavation approximately 200mm.	
	Lophostemon	Location: Council Verge Archer Street frontage	Retention Value: High
Т3	confertus Brushbox	Construction impact: High (12.2% of total TPZ area) as per AS4970-2009.	Retain and
		External stairs and permeable paving plus sub base compaction. Slight excavation within TPZ.	protect
	Lophostemon	Location: Council Verge Archer Street frontage	Retention Value: High
T4	confertus Brushbox	Construction impact : Nil (0% of total TPZ area) as per AS4970-2009.	Retain and protect
		Tree and TPZ falls outside construction zone.	
		Location: Council Verge Bertram Street frontage	Retention Value:
		Footpath narrow.	High Removal
		Construction impact: High (27.5% of total TPZ	required
	Robinia	inclusive of SRZ) due to inground services (gas and electricity stairs and building entry access).	
T47	pseudoacacia Black Locust	Assumed tight turning circle required for truck	
	Diack Locust	and trailer; perimeter hoarding and site sheds potentially elevated above ground level. Canopy	
		extensively impacted by construction activities	
		and extends approximately 7 metres across roadway.	
		The tree cannot be adequately protected.	
	Robinia	Location: Council Verge Bertram Street frontage	Retention Value:
T48	pseudoacacia	High: trunk falls within the footprint of vehicular	High
110	Black Locust	entry i.e. crossover.	Removal required.
		Retention is not possible	1

Table 3: Construction impact to each street tree based on the proposed.



4.2 Construction impact to remaining trees

Of the remaining 40 trees, one tree is retainable whilst the remaining 39 trees require removal due to an unacceptable level of construction impact.

Tree ID	Falling within the front and rear 6 metre boundary offset	Falling within the proposed zone of excavation
	T5, T6, T7, T8, T9, T10, T11, T12, T13, T16, T17, T35, T36, T41, T42, T43.	T14, T18, T19, T20, T21, T22, T23, T25, T26, T28, T29, T30, T31, T32, T33, T34, T38, T39, T39a, T40, T44, T45, T49.

Table 4 Site trees requiring removal due to proposed site changes.

Tree ID	Neighbouring tree RETAINABLE	
	T27 (45 Archer St)	

Table 5: Neighbouring trees retainable.

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5 DISCUSSION

Based on the proposal, the significant site disturbance does not permit the retention of any tree within the site.

For trees within the site and under the significance rating (Appendix 4 – Priority Matrix) trees T5, T6 and T7 scored a "medium" retention value and should be considered for retention however their retention is less critical than the "high" value trees. These three trees are not retainable as their retention will adversely affect the proposed building design and no other alternatives are available. The remaining trees scored a "low" retention significance and defined as - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.

Street trees – Bertram Street frontage.

Assessment has concluded that both trees are unretainable. T48 falls within the proposed driveway and T47 impacted by construction inclusive of civil traffic movement accessing the site. The narrow width of the Bertram Street footpath (2 metres wide) limits offset distances between trunk and boundary construction (1.7m – measured from trunk centre). This tree will be subject to demolition, excavation, inground services and civil traffic – truck and trailer accessing the site will require canopy clearance and a tight turning circle. The extent of impact to this tree's TPZ is high as per AS4970-2009 calculated at 27% of total TPZ incursion. The long term successful retention of T47 cannot be assured.

Site sheds

As confirmed, the site sheds are to be placed towards the Bertram Street boundary. Placement in this area offers addition protection for the Archer Street street trees by limited site movement within their TPZ. It is anticipated further pruning requirements for site sheds will impact T47.

Archer Street street trees

Archer Street supports an historical and thematic planting of Brush Box and Tulipwood species – all appeared mature and in good health and condition. These trees offer significant visual and environmental amenity. The four trees at the front of the site form part of this uniform planting.

The Fire Hydrant Booster assembly will be located at the front of the complex (Archer Street) and connected to the existing Sydney Water supply. The installation and connection of pipes require tree sensitive methods of construction e.g. ground penetrating radar, underground boring and/or hydrovac excavation. Open trenching through tree roots cannot occur. Any ground works within the TPZ of these street trees must be supervised by the project arborist, for the preservation of street tree roots (tree health and stability).

The pile rig should minimally impact the canopies of the Archer Street street trees due to the proposed 6 metre excavation setback. At the time of inspection trees T3 and T4 had a canopy spread of 6 metres east of their trunks.



Neighbouring trees

The development impact is moderate for T27 (Crepe myrtle). The tree is retainable given the 3 metre setback of the uppermost basement level.

6 CONCLUSION

6.1 Tree retention/removal

- All trees within the site are non-retainable given the extent of site change.
- Neighbouring tree T27 (*Lagerstroemia indica* Crepe Myrtle protected tree) is close to the northern side boundary and is retainable given the 3 metre offset distance.
- Bertram Street street trees (T47 and T48 both Robinia pseudoacacia Black Locust) are unretainable due to the unacceptable levels of construction impact being driveway (T28) and excavation including inground service connection, site shed positioning and civil machinery accessing the property requiring height clearances and a tight turning circle for truck and trailers.
- Archer Street street trees (4 trees) are retainable and require tree protection prior to site work commencement. Tree sensitive methods of construction are required for the inground service connections Fire Hydrant Booster Valve in particular for tree preservation including roots.
- Minimal pruning possibly required for Archer Street street trees for pile rig operation.

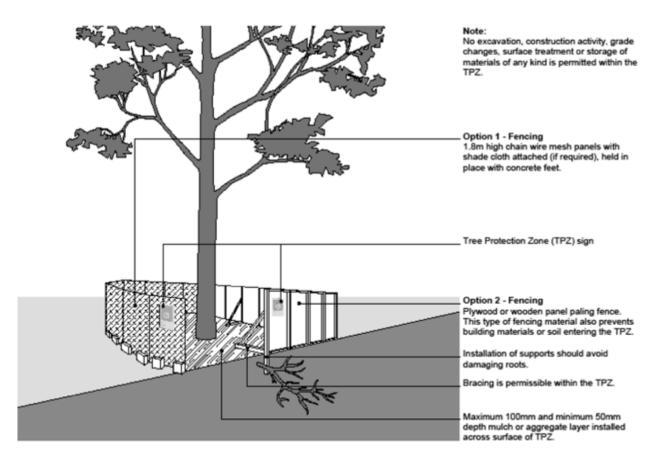
7 Recommendations

- Retain or remove trees as described in 6.1 above.
- Tree protection required for the four street trees Archer Street frontage and T27. Tree protection to be installed in accordance with AS4970-2009.
- Inground services around the Archer Street street trees require tree sensitive methods of construction e.g. underground boring/hydrovac/ground penetrating radar for service connections.
- Civil access is to be via Bertram Street.
- Pruning for clearance purposes pile rig to be undertaken in accordance with AS4373-2007 *Pruning of amenity trees*. All pruning works shall be undertaken by a suitably qualified arborist (AQF 3 minimum). The minimum amount of foliage only to be removed for clearance purposes.
- Two replacement trees to be planted in the council verge Bertram Street frontage once construction is completed. Replacement trees Crepe Myrtles in line with Willoughby Council's Street Tree Masterplan 2014 and the limited footpath width.



8 Tree Protection Plan

- 8.1.1 The four Archer Street street trees and T27 are to be retained and protected protective fencing.
- 8.1.2 Protective fencing is required throughout construction and installed prior to any site activities including demolition.
- 8.1.3 Tree protection fencing shall consist of 1.8m high chain mesh fencing and to be placed around the trunks. The fencing in this instance must not block the footpath or roadway. The four trees could be individually fenced or collectively.
- 8.1.4 The purpose of the fencing is to prohibit construction activities and/or damage to the tree. Stockpiling of construction materials or parking within the drip zone of the tree shall not occur at any time.



ee Protection Fencing Not to Scale
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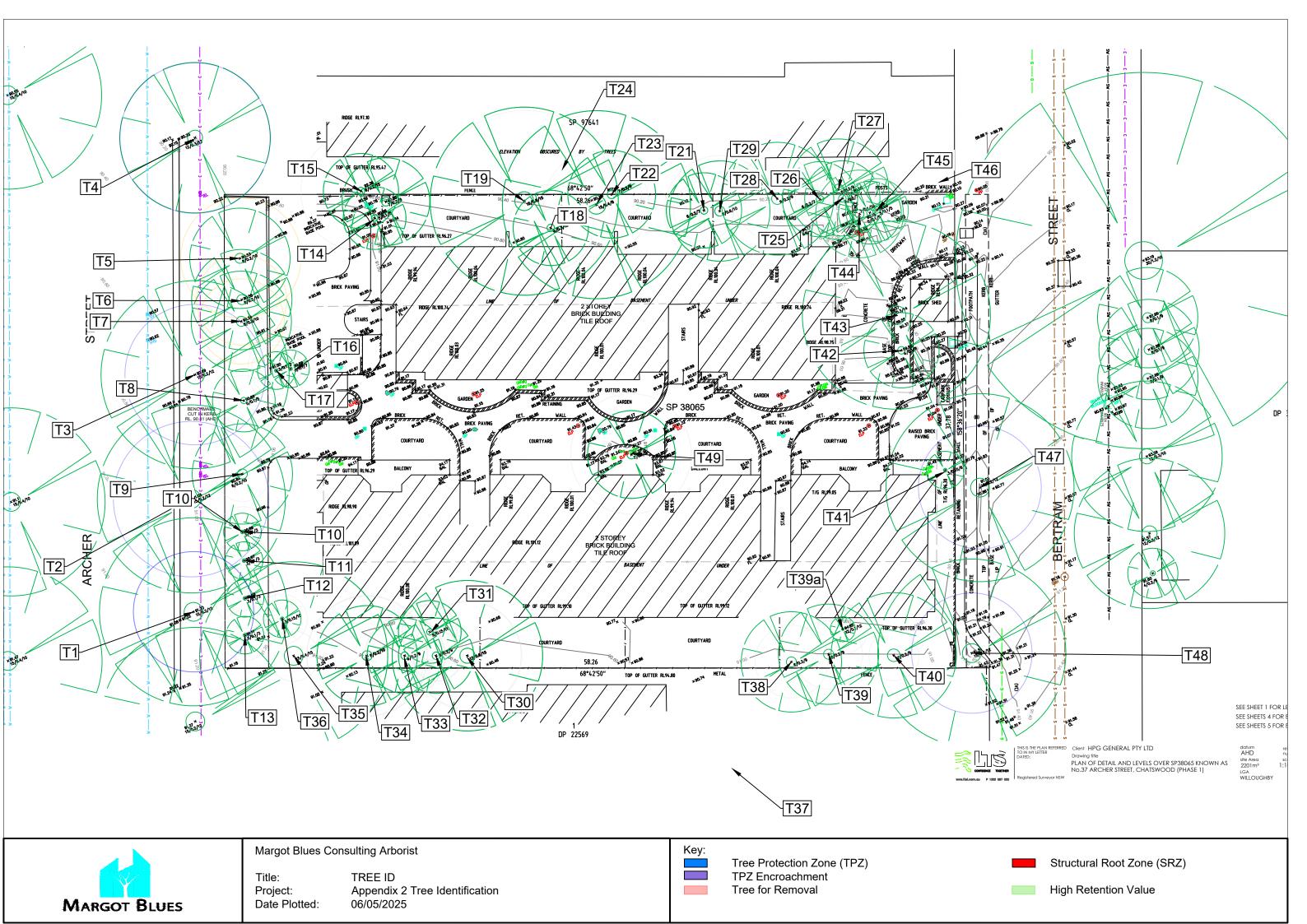
Figure 1: Examples of protective fencing in accordance with the Australian Standard AS4970-2009.

			Арре	endix	1: Tr	ee Data	a Sun	nmary	/ - 37 Aı	rcher S	treet (Chats	wood	- Assessed 1/12/2023		
Tree ID	Species	Height (m)	Canopy dims n/s in metres	DBH (cm)	DGL (cm)	Foliage condition	Maturity	Trunk type	Canopy Balanced	Stability	Vigour	Canopy deadwood	Significance value	Notes as at the time of inspection	TPZ (M) Radius	SRZ (M) Radius
^T1	Lophostemon confertus Brushbox	8	6	40	43	Good	Mature	Single	Balanced	Appears stable	Good	<5%	High	Street tree: single trunk to 1.6 then x 2. Tree typical of species.	4.8	2.3
^T2	<i>Harpulia pendula</i> <i>T</i> ulipwood	8	10 N/S 5 E	52	60	Good	Mature	Single to 0.3m	Maj. N/S	Appears stable	Good	<5%	High	Street tree: multi trunked tree. Single trunked to 0.3 m above ground. Pruning to 2 metres noted.	6.2	2.7
^T3	Lophostemon confertus Brushbox	12	10 N/S 6 E	47	60	Good	Mature	Single	Maj. N/S	Appears stable	Good	<5%	High	Street tree: good health and condition and form typical of species.	5.6	2.7
^T4	Lophostemon confertus Brushbox	10	9 N/S 6E	50	60	Good	Mature	Single	Maj. N/S	Appears stable	Good	<5%	High	Street Tree: good health and condition and form typical of species.	6.0	2.7
T5	Syzygium floribundum Weeping Lilli Pilli	8	6	40	45	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Medium	Front boundary of property Archer St. No problems seen and typical form for species.	4.8	2.4
Т6	Syzygium floribundum Weeping Lillie Pilli	8	5	30	38	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Medium	Front boundary of property Archer St. No problems seen and typical form for species.	3.6	2.2
Т7	Syzygium floribundum Weeping Lilli Pilli	4	5	28	30	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Medium	Front boundary of property Archer St. No problems seen and form typical form for species.	3.4	2.0
Т8	Magnolia grandiflora Bull bay	3	3.5	10	12	Fair/poor	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Poor specimen. Tree health and vigour fair/poor. High competition from surrounding larger trees.	1.2	1.4
Т9	Magnolia grandiflora Bull bay	6	4	18	20	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Tree in good health and condition has more above ground space and light.	2.2	1.7
T10	Koelreuteria paniculata Chinese Flame Tree	3	3	13	16	Fair	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Tree in fair health and condition; Tree has been topped historically and not structurally poor.	1.5	1.5
T11	Dracaena sp	3	0.5	16	20	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Form typical for species.	1.9	1.7
T12	Dracaena sp	3	1	20	20	Good	Mature	Single to 1 m	Balanced	Appears stable	Good	<5%	Low	Form typical for species.	2.4	1.7
T13	Koelreuteria paniculata Chinese Flame Tree	3	3	15	16	Good	Mature	Single to 0.8m	Balanced	Appears stable	Good	<5%	Low	Tree in fair health and condition; Tree has been topped historically and not structurally poor.	1.8	1.5
T14	Camellia sasanqua Camellia	3	2	10	12	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Form typical for species.	1.2	1.4

			Appe	endix	1: Tr	ee Dat	a Sun	nmar	y - 37 A	rcher S	treet (Chats	wood	- Assessed 1/12/2023		
Tree ID	Species	Height (m)	Canopy dims n/s in metres	DBH (cm)	DGL (cm)	Foliage condition	Maturity	Trunk type	Canopy Balanced	Stability	Vigour	Canopy deadwood	Significance value	Notes as at the time of inspection	TPZ (M) Radius	SRZ (M) Radius
^T15	<i>Grevillea robusta</i> Silky Oak	17	6	40	48	3 Good	wit	Single	Balanced	Unknown	Good	<5%	Low	Tree located within neighbouring property No 45 Archer Street. Tree listed on exempt species list WDC C.9	4.8	2.4
	,									Appears						
T16	Dracaena sp	4	1	28	40	Good	Mature	Single	Balanced	stable	Good	<5%	Low	Form typical for species.	3.4	2.3
T17	Dracaena sp	3	0.5	14	20	Good	Mature	Twin	Balanced	Appears stable	Good	<5%	Low	Form typical for species.	1.7	1.7
T18	Leptospermum petersonii Lemon Scented Tea Tree	8	3	28	33	3 Fair	Mature	Single	Balanced	Unknown	Fair	<5%	Low	Tree assessed from within neighbouring Unit No 3. No defects of note seen.	3.4	2.1
T19	Radermachera sinica China Doll	10		61	90) Good	Mature	x 3	Maj to N	Unknown	Good	<5%	Low	Tree assessed from within neighbouring Unit No 3. Crossing stems close to ground level	7.3	3.2
T20	Olea europaea Common Olive	7	6	20	23	3 Fair	Mature	Single	Balanced	Unknown	Fair	<5%	Low	Tree assessed from within neighbouring Unit No 3. No defects of note seen.	2.4	1.8
T21	Callistemon endeavour	4	4	20	25	Fair/poor	Mature	Single to 1m	Bias to N/W	Stability suspect	Low	<5%	Low	Decay pocket in main scaffold branch crotch. Strong bias lean to N/W. Poor form and badly pruned.	2.4	1.8
T22	Leptospermum petersonii Lemon Scented Tea Tree	6	5	35	35	5 Fair	Mature	Single to 1m	Bias N	Stability suspect	Medium	<5%	Low	Limited canopy as Fig T23 canopy occupies much of the tree's understorey. Tree stability suspect as large tree planted in a narrow elevated garden. Soil around tree's base has sunk.	4.2	2.1
T23	Ficus benjamina Weeping Fig	6	9	18	20) Good	Mature	Multi	Balanced	Appears stable	Good	<5%	Low	Trunk positioned above the besser brick retaining wall. Tree's location and potential size is totally inappropriate.	2.2	1.7
^T24	Ligustrum lucidum Large Leaf Privet	5	5			Good	Mature		Balanced	Unknown	Good	<5%	Low	Environmental weed and located on adjoining property.	0.0	0.0
T25	Ligustrum lucidum Large Leaf Privet	6	8	17		Good	Semi Mature	v 2	Balanced	Appears stable	Good	<5%	Low	Environmental weed.	2.0	0.0
T26	Ligustrum lucidum Large Leaf Privet	4	3	11		Good	Mature		Balanced	Appears stable	Good	<5%	Low	Environmental weed.	1.3	1.5
	Lagerstroemia indica Crepe Myrtle	6	6	29		Good Good	Mature		All North	Unknown		<5%	Low	Canopy all to the north due to influence of T25 & T26. Nil canopy overhangs the subject site.	3.5	2.1
T28	Ficus sp Fig	8	8	28	28	3 Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Lopped at 2.5 metres. Some bark splitting vertically on main trunk.	3.4	1.9
T29	Leptospermum petersonii Lemon Scented Tea Tree	8	8	37	45	5 Good	Mature	x 2	Maj to N	Appears stable	Good	<5%	Low	Historically topped at 1.8m above ground. Majority of canopy orientates to the north.	4.4	2.4

			Арре	endix	1: Tr	ee Dat	a Sum	nmary	/ - 37 Aı	rcher S	treet (Chats	wood	- Assessed 1/12/2023		
Tree ID	Species	Height (m)	Canopy dims n/s in metres	DBH (cm)	DGL (cm)	Foliage condition	Maturity	Trunk type	Canopy Balanced	Stability	Vigour	Canopy deadwood	Significance value	Notes as at the time of inspection	TPZ (M) Radius	SRZ (M) Radius
T30	Robinia pseudoacacia Black Locust	12	9	36	5 40	Good	Mature	x 2	Balanced	Appears stable	Good	<5%	Low	Exempt listed tree Willoughby Council DCP C.9	4.3	2.3
T31	Howea forsteriana Kentia Palm	6	4	18	25	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Typical of the species.	2.2	1.8
T32	Camellia sasanqua Camellia	5	4	14	20	Good	Mature	x 2	Balanced	Appears stable	Good	<5%	Low	No problems seen.	1.7	1.7
T33	Polyspora axillaris Fried Egg Tree	7	6	27	' 30	Good	Mature		Balanced	Appears stable	Good	<5%	Low	Tree viewed from within front garden of No 35 Archer Street. No problems seen. Tree typical for species.	3.2	2.0
T34	Robinia pseudoacacia Black Locust	8	12	40	45	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Exempt listed tree Willoughby Council DCP C.9	4.8	2.4
T35	Leptospermum petersonii Lemon Scented Tea Tree	6	5	10	12	Fair	Mature	Single	Balanced	Appears stable	Fair	<5%	Low	One co-dominant stem pruned. Otherwise in fair health and condition.	1.2	1.4
T36	Leptospermum petersonii Lemon Scented Tea Tree	4	3	8	10	Fair	Semi ma	Unknow	Balanced	Unknown	Fair	<5%	Low	Partial inspection only. Tree viewed from Archer St frontage. Review of lower stem and surrounding environment did not occur.	1.0	1.3
^T37	Persea americana Avocado	4.5	7		50	Good	Mature	x 3	Maj to E	Appears stable	Good	<5%	Low	Tree located within neighbouring property No 35 Archer Street. Approximately 1 metre of canopy extends into 37 Archer St.	0.0	2.5
T38	Cinnamomum camphora Camphora laurel	7	8 E/W 3 N	24	40	Good	Mature	x 4	Balanced	Appears stable	Good	<5%	Low	Exempt species as it is less than 10 metres in height. WDCP C.9	2.9	2.3
T39	Camellia sasanqua Camellia	5	4	13	15	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Typical of the species.	1.6	1.5
T39a	Camellia sasanqua Camellia	3	2	8	10	Good	Semi Mature	Single	Balanced	Appears stable	Good	<5%	Low	Typical of the species.	1.0	1.3
T40	Camellia sasanqua Camellia	5	4	13	15	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Typical of the species.	1.6	1.5
T41	<i>Howea forsteriana</i> Kentia Palm	3.5	3	15	20	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Exempt less than 4 metres in height. WDCP C.9	1.8	1.7
T42	Magnolia grandiflora Bull bay	4	4	12	15	Good	Mature	Single	Maj to S	Appears stable	Fair	<5%	Low	Tree planted in an elevated narrow garden bed besides the garage security door. Species potential size makes in an inappropriate species for its location.	1.4	1.5
T43	<i>Jacaranda mimosifolia</i> Jacaranda	8	12	40	45	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	A large tree located in an elevated narrow planter box close to garage door. Tree inappropriate for its location with retaining wall cracking evident.	4.8	2.4

			Appe	endix :	1: Tr	ee Dat	a Sun	nmary	/ - 37 Aı	rcher S	treet (Chats	wood	- Assessed 1/12/2023		
Tree ID	Species	Height (m)	Canopy dims n/s in metres	DBH (cm)	(cm)	Foliage condition	Maturity	Trunk type	Canopy Balanced	Stability	Vigour	Canopy deadwood	Significance value	Notes as at the time of inspection	TPZ (M) Radius	SRZ (M) Radius
T44	Cinnamomum camphora Camphora laurel	8	6	28	30	Good	Semi Mature	Single	Balanced	Appears stable	Good	<5%	Low	Exempt species as it is less than 10 metres in height. WDCP C.9	3.4	2.0
T45	Callistemon citrinus endeavour	4	6	19	25	Good	Mature	Single	All to East	Appears stable	Fair	<5%	Low	Bias canopy all to east due.	2.3	1.8
^T46	<i>Eriobotrya japonica</i> Loquat	4	5	16	20	Good	Mature	Single	Balanced	Appears stable	Good	<5%	Low	Tree located within neighbouring property 22-28 Archer Street (Bertram St frontage). Tree is listed as Exempt. WDCP C.9. Approval from owners is required should it require removal.	1.9	1.7
^T47	Robinia pseudoacacia Black Locust	8	15	41	40	Good	Mature	Single	Balanced	Appears stable	Good	<5%	High	Street Trees - No exemption applies.	4.9	2.3
^T48	Robinia pseudoacacia Black Locust	8	19	40	45	Good	Mature	Single	Balanced	Appears stable	Good	<5%	High	Street Trees - No exemption applies.		2.4
T49	Olive	3	2	8	10	Good	Semi Mature	Single	Balanced	Appears stable	Good	<5%	Low	Exempt Central courtyard. Elevated Garden bed.	1.0	1.3
	Legend															
	High Retention Trees and all outside the property boundary. Bertram Street: 2 x Street trees are protected			measure ground le	unk diam ed at 1.4m evel. unk diame above ro	n above eter							See Appendix 4			
	Medium Retention trees.															
	Uncoloured low value trees including exempt or weed species.															
	^ Denotes trees outside property boundaries.															





Appendix 3 – Photographs



Photo 1: Private trees Archer Street frontage. Trees T5, T6 and T7 (LHS) photo.



Photo 2: T43 Jacaranda. Inappropriate location for the species.





Photo 3: Typical garden and growing environment currently.



Photo 4: T19: China Doll and typical condition of garden and growing environment.



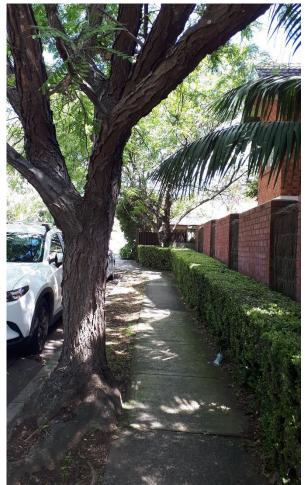


Photo 5: T47 Black locust: Bertram Street frontage. Note narrow footpath. T48 in background.



Photo 6: T48: Black locust. Tree falls within the proposed driveway accessing the complex.

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Appendix 4 - Significance Rating

IACA Significance of a Tree, Assessment Rating System (STARS)©(IACA 2010)©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree
Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assistin determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria* and *Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on obadjacent a development site. The system uses a scale of *High, Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

Tr∉e Significance - Assessment Criteria

1⊕High Significance in landscape

a. The tree is in good condition and good vigour;

b≒The tree has a form typical for the species;

- c $\stackrel{\mbox{\tiny K}}{\square}$ The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- d. The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- e. The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- f. The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values:
- g. The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in* situ tree is appropriate to the site conditions.

2. Medium Significance in landscape

- a. The tree is in fair-good condition and good or low vigour;
- b. The tree has form typical or atypical of the species;
- c. The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- d. The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street
- e. The tree provides a fair contribution to the visual character and amenity of the local area,
- f. The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ.

3. Low Significance in landscape

- a. The tree is in fair-poor condition and good or low vigour;
- b. The tree has form atypical of the species;
- c. The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- d. The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- e. The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- f. The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* tree is inappropriate to the site conditions,
- g. The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- h. The tree has a wound or defect that has potential to become structurally unsound.

Environmental Pest / Noxious Weed Species

- i. The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- j. The tree is a declared noxious weed by legislation.

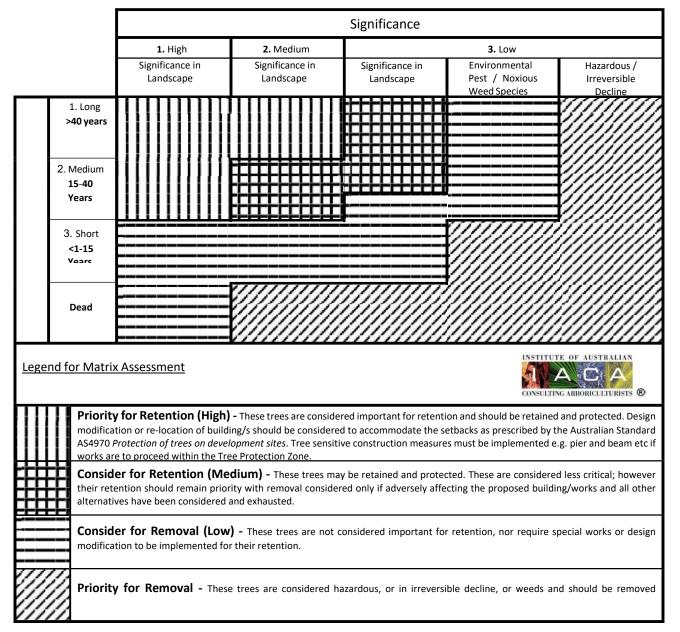
Hazardous/Irreversible Decline

- k. The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- l. The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Table 1.0 Tree Retention Value - Priority Matrix.





USE OF THIS DOCUMENT AND REFERENCING

The IACA Significance of a Tree, Assessment Rating System (STARS) is free to use, but only in its entirety and mustbe cited as follows:

IACA, 2010, IACA Significance of a Tree, Assessment Rating System (STARS), Institute of Australian ConsultingArboriculturists, Australia, www.iaca.org.au

Australia ICOMOS Inc. 1999, The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance, International Council of Monuments and Sites www.icomos.org/australia

Draper BD and Richards PA 2009, Dictionary for Managing Trees in Urban Environments, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, Footprint Green Tree Significance & Retention Value Matrix, Avalon, NSW Australia, www.footprintgreen.com.au



The following example shows the IACA **Significance** of a **Tree,Assessment Rating System** (STARS) used in an Arboricultural report.

Tree Significance

Determined by using the Tree Significance - Assessment Criteria of the *IACA Significance of a Tree, Assessment Rating System* (STARS)© (IACA, 2010), Appendix B.

Trees 14, 16, 17/3, 19 and 20/4 are of high significance with the remaining majority of medium significance and a few of low significance. Tree 14 is significant as a prominent specimen and a food source for indigenous avian fauna. Tree 16 as a non-locally indigenous planting is of good from and prominent *in situ*; Tree 17/3 as a stand of 6 street trees along the Davey Street frontage screening views to and from the site and contiguous with trees in Victoria Park extending the aesthetic influence of the urban canopy to the site. Similarly for Trees 20/4 as street trees in Long Road and Tree 19 as an extant exotic planting as a senescent component of the original landscaping. The trees of low significance are recent plantings as fruit trees – Avocados, and 1 Cootamundra Wattle as a non-locally indigenous tree in irreversible decline and potentially structurally unsound.

Significance Scale

1 –	High
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2 - Medium

3 - Low

Significance Scale	1	2	3
Tree No. / Stand No.	14, 16, 17/3, 19, 20/4	1/1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12/2, 15, 18, 21/5	3, 13, 22

Tree Retention Value

Determined by using the Retention Value - Priority Matrix of the *IACA Significance of aTree, Assessment Rating System* (STARS)© (IACA, 2010), Appendix B.

Retention Value

High – Priority for Retention Medium – Consider for RetentionLow – Consider for Removal Remove - Priority for Removal

Retention Value	High Prorty for Retention	Medium C	Low Consider for Remeval	Remove Promytor Removal
Tree No. / Stand No.	1/1, 5, 17/3*, 19	2, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, 20/4*, 21/5	3, 12/2, 13,	22

^{*} Trees located within the neighbouring property and should be retained and protected.