16 STORK AVENUE BELMONT

ARBORICULTURAL REPORT

PREPARED BY: [redacted] (DIPLOMA OF ARBORICULTURE)

MAY 8, 2026

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1 CONTACT DETAILS

1.1 Assessing arborist

In accordance with Australian Standard 4970-2025 (Protection of trees on development sites) and AS4373-2007 (Pruning of amenity trees) the Project Arborist is a competent person who can carry out tasks such as tree and impact assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification.

The competent person fulfilling Project Arborist responsibilities is suitably experienced and competent in arboriculture. This person will have an Australian Qualification Framework Level 5, Diploma of Arboriculture or equivalent, and be able to perform the tasks required by AS4970-2025.

Assessing company	ATC Land Management
Assessing Arborist	[redacted]
Phone	[redacted]
E-mail	
Qualifications	Diploma of Arboriculture
QTRA License	9764 (Find a QTRA User – QTRA)

2 INTRODUCTION

2.1 Brief

Prepared by: ATC Land Management

ATC Land Management was commissioned to prepare a comprehensive Arboricultural Report for two trees located at 16 Stork Avenue, Belmont—one in the front yard and one in the rear. This report provides a detailed assessment of each tree's health and structural integrity, evaluates their long-term viability, and outlines specific management recommendations.

2.2 Scope

This is an Arboricultural Health and Condition Report which is a formal document prepared by a qualified arborist to evaluate the physical state, safety, and lifespan of a tree.

Unlike a simple visual check, these reports are data-driven documents often required for legal compliance, property development, or insurance purposes.

2.2.1 Key components of the report:

A standard professional report typically breaks down into the following sections:

Tree Identification and Inventory

The arborist assigns each tree a reference number and records its basic data:

- Species: Both common and botanical names.
- Dimensions: Height, canopy spread, and DBH (Diameter at Breast Height).

Physiological Health Assessment

This evaluates the "vitality" of the tree—how well it is functioning biologically.

- Foliage: Colour, density, and size of leaves.
- Growth: Extension growth of the branches.
- Pests/Disease: Presence of wood-boring insects, fungi, or pathogens.

Structural Condition Assessment

This focuses on the "mechanics" of the tree—is it likely to fall or break.

- Trunk Integrity: Signs of decay, hollows, or "included bark" (weak branch attachments).
- Root Zone: Evidence of soil heaving, severed roots, or fungal fruiting bodies at the base.
- Canopy: Deadwood, crossing branches, or previous poor pruning cuts (like "topping").

Useful Life Expectancy (ULE)

The arborist provides an estimate of how much longer the tree can realistically remain in the landscape before it becomes a liability or dies. This is usually categorized as:

- Long: 40+ years
- Medium: 15–40 years
- Short: 5–15 years

Hazard and Risk Rating

If the tree is near a "target" (a house, road, or playground), the arborist calculates the risk of failure using systems like TRAQ (Tree Risk Assessment Qualification) or QTRA (Quantified Tree Risk Assessment).

2.3 Methodology

Site assessed: May 8, 2026

Assessed by: [redacted] for ATC Land Management

2.3.1 Assessment methods:

- **Visual Tree Assessment (VTA):** The trees were assessed from the ground using industry accepted VTA methods, focusing on observable signs of health, structure, and stability.
- Diameter measurements: Stem diameters were measured at breast height (DBH), at stem base (DAB), and at other required stem heights using a DBH tape.
- Limitations: No aerial assessments (rope and harness, drone) or below-ground investigations (non-destructive root assessment) were conducted.

2.3.2 Tree evaluation:

- **Health and condition:** Tree health, structure, and condition were evaluated using standardized descriptors (refer to **Appendix A** for details).

2.3.3 Industry Standards:

- **AS 4373-2007:** This Australian Standard provided guidance for recommendations regarding acceptable pruning practices for amenity trees.
- **AS 4970-2025:** This standard informs recommendations related to tree protection on development sites.

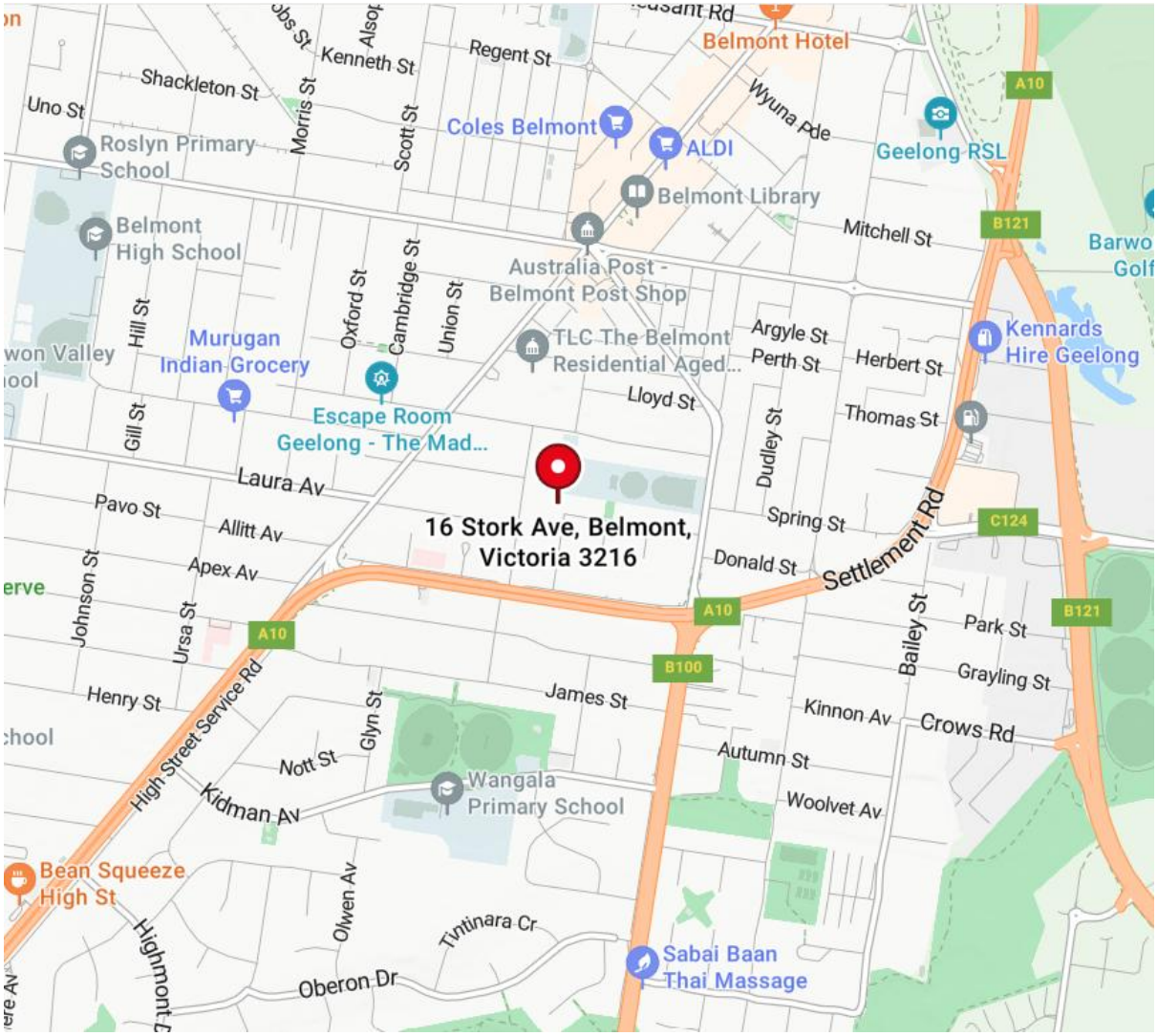
2.3.4 Site history:

- Information on historical site conditions was gathered from online resources such as Street View (Google Maps) and Nearmap to supplement the on-site assessment.

3 SITE DETAILS

3.1 Site address

The subject site is located at 16 Stork Avenue, Belmont, Victoria, 3216.

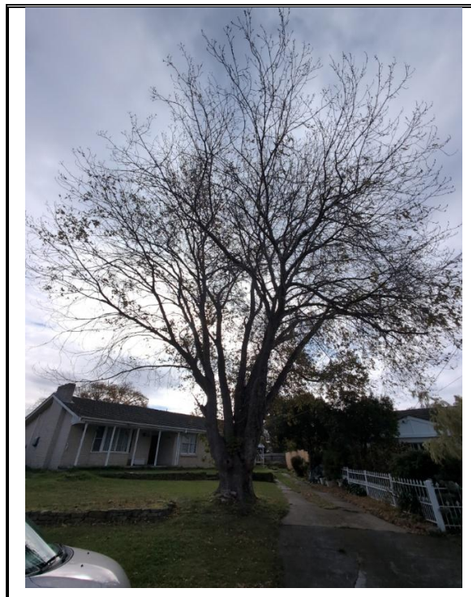


4 TREE DETAILS

4.1 Indicative tree locations

4.2 Table of data

Num	Genus	Species	Location	Clause 52.37 (Canopy Trees)	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
1	Acer	saccharinum	Subject Property	Yes	13 m	15 m	131 cm	412 cm	116 cm	3.5 m	15.0 m	Large sections of decay in trunk, main leaders have poor stem attachments, history of limb failure, dieback in canopy, lifting driveway	Fair	Poor	Over Mature	Short
2	Ulmus	glabra	Subject Property	Yes	11 m	13 m	80 cm	251 cm	110 cm	3.4 m	9.6 m	Main leaders have poor stem attachments, heavy decay at base, decay in main leader, poor stem attachment in upper canopy	Fair	Poor	Mature	Medium



Tree 1

Tree 2

5 VEGETATION CONTROLS

The site is subject to a clause that impose mandatory vegetation controls related to tree retention and removal. Compliance with these controls is a non-negotiable prerequisite for obtaining a planning permit.

The key compliance mechanisms applicable to the site are:

- **Clause 52.37 (Canopy Trees):** This clause governs the removal or lopping of large canopy trees, ensuring that significant vegetation providing amenity and environmental benefits is protected.

5.1 Clause 52.37 (Canopy Trees)

All proposed tree works on the subject property, including removal and pruning, are governed by a specific set of requirements and potential exemptions as outlined in Clause 52.37 (Canopy Trees) of the relevant planning controls. This section details the criteria that must be met to ensure compliance.

5.1.1 Meaning of terms:

In clause 52.37:

canopy tree means a tree that has:

– a height of more than 5 metres above ground level; and

– a trunk circumference of more than 0.5 metres, measured at 1.4 metres above ground level;

and

– a canopy diameter of at least 4 metres;

boundary canopy tree means a canopy tree if any part of its trunk is within:

– 6 metres of the narrowest street frontage of a lot; or

– 4.5 metres of the rear boundary of a lot;

new canopy tree means a canopy tree proposed to be planted. It must be a species and type that will, at maturity, have:

– an expected height of at least 6 metres above ground level; and

– an expected canopy diameter of at least 4 metres.

5.1.2 Permit requirement:

A permit is required to remove, destroy or lop a canopy tree in the Mixed Use Zone, Township Zone, Residential Growth Zone, General Residential Zone, Neighbourhood Residential Zone, and Housing Choice and Transport Zone.

This does not apply:

If the table of exemptions in clause 52.37-8 specifically states that a permit is not required. To the removal, destruction or lopping of a canopy tree (other than a boundary canopy tree) identified for assessment in an application to which clause 54, 55, 57 or 58 applies and the tree is not removed, destroyed or lopped until the permit is issued.

To the removal, destruction or lopping of a canopy tree (other than a boundary canopy tree) if the site is developed with an existing dwelling.

6 VEGETATION PERMIT REQUIREMENTS

The following table details the permit requirements for each subject tree, determined by assessing compliance against Clause 52.37 (Canopy Trees).

Num	Genus	Species	Location	Clause 52.37 (Canopy Trees)	Height	Span	Stem circumference @ 1.4 m
1	Acer	saccharinum	Subject Property	Yes	13 m	15 m	412 cm
2	Ulmus	glabra	Subject Property	Yes	11 m	13 m	251 cm

7 OBSERVATIONS

The following section provides a detailed breakdown of the specific defects identified during the visual inspection of the subject trees. This assessment utilizes Visual Tree Assessment methodology to identify physiological abnormalities and structural weaknesses. By analyzing these defects through a biomechanical lens, we can evaluate how the tree's self-optimizing

growth patterns have responded to internal decay and external stressors. The observations below highlight the critical areas where the trees' structural integrity is compromised.

7.1 Tree 1: Front yard

Species: Acer saccharinum

Defect Type	Location	**Risk Implication**
Extensive trunk decay	Main trunk	Significant reduction in structural integrity and increased likelihood of stem failure under loading conditions.
Poor stem attachments	Main leaders	Weak unions reduce canopy stability and increase the risk of structural failure during high wind events.
History of limb failure	Upper canopy	Indicates ongoing structural instability and elevated likelihood of future branch failure.
Canopy dieback	Outer canopy	Declining physiological condition and reduced canopy vitality consistent with an over-mature specimen.
Driveway lifting from root activity	Root zone	Ongoing conflict with surrounding infrastructure resulting in surface displacement and increased maintenance requirements.
Over-mature age class	Entire tree	Reduced long-term retention suitability and increased susceptibility to structural and physiological decline.

7.1.1 Trunk decay:

The tree exhibits extensive decay within the main trunk, which has compromised its primary structural support. This internal degradation results in a significant reduction in structural integrity, greatly increasing the likelihood of total stem failure, especially when the tree is subjected to wind or weight loading.

The structural risk in *Acer* species (Maples) is significantly amplified by their biological classification as weak compartmentalisers. Unlike species that can effectively wall off decay, Maples often struggle to contain the spread of wood-decay fungi, leading to rapid internal degradation.

The failure of CODIT in Acer

The CODIT model (Compartmentalization of Decay in Trees) describes how a tree creates four "walls" to isolate pathogens. In many *Acer* species these walls are biologically "porous":

- **Wall 4 (The barrier zone):** This is the most critical wall, formed by the cambium after injury to protect new wood. In Maples, Wall 4 is often thin or easily breached. Once fungi bypass this layer, the decay moves from the older heartwood into the newer sapwood, rapidly shrinking the residual wall thickness (the healthy shell of wood supporting the tree).
- **Vertical spread:** *Acer* species possess large, open vessels that allow decay to travel vertically with minimal resistance. This results in long columns of internal rot that may extend several meters above and below the original entry point (such as a pruning wound or a bark tear).

Decay dynamics and structural risk

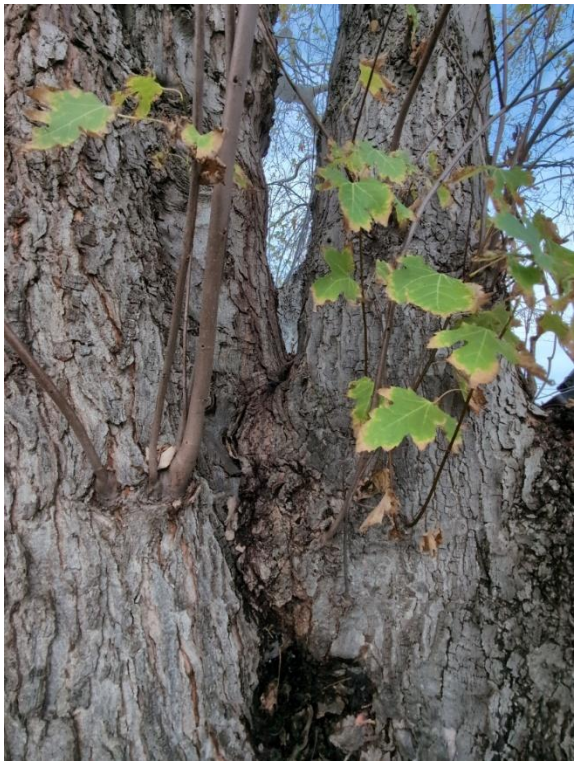
- **Low resistance to wood-rotting fungi:** Maples are highly susceptible to both "white rot" (which consumes both lignin and cellulose) and "soft rot". White rot is particularly dangerous because it destroys the lignin—the "glue" that provides compressive strength. This turns the trunk into a brittle or "pulpy" structure that cannot support the weight of the canopy.
- **Synergistic failure with weak unions:** When the decay mentioned above occurs near the "fault lines" of poorly attached stem unions, the risk of failure increases exponentially. The decay softens the wood at the pivot point of the union, meaning the tree loses the ability to withstand the "lever arm" effect during high winds.
- **Concealed defects:** Because Maples often prioritize "putting on a show" with vigorous canopy growth even while the interior is hollow, the level of risk is frequently underestimated. Often the internal decay is far more advanced than the external appearance suggests.

Loading and total stem failure

- **Loss of torsional strength:** A trunk with extensive internal decay loses its ability to resist "torsion" (twisting). In a storm, the canopy acts like a sail; if the central cylinder of the trunk is decayed and the species cannot compartmentalize that spread, the trunk can "buckle" or "twist-snap" even if the outer shell appears intact.

Figure 1 - Failure wound that has introduced decay into upper canopy

Figure 2 - Large pocket of decay at main leaders point of attachment



7.1.2 Stem attachments:

Observation of the main leaders reveals poor stem attachments characterized by weak unions. These compromised attachment points reduce the overall stability of the canopy and present a heightened risk of structural failure or branch shedding during high-wind events.

Poorly attached stem unions, commonly involving included bark, represent a critical structural defect where the traditional biological bond between stems is absent. In a healthy union, interlocking wood fibres create a bridge that distributes mechanical stress across the joint. In contrast, these weak unions are defined by a physical separation where bark, rather than structural wood, occupies the junction.

The mechanics of weak unions

- **Lack of interlocking fibre:** In stable branch attachments, the wood of the branch and the trunk interweave at the union. Poorly attached stems (often codominant stems of similar diameter) grow against one another, and their respective cambiums (growth layers) produce bark that becomes trapped or "included" between them. This prevents the formation of a unified wood-to-wood bond (Bartlett Tree Experts).
- **The wedge effect:** As each stem increases in girth, the trapped bark acts as an internal wedge. Instead of reinforcing the union, the radial growth of each stem exerts outward pressure, effectively pushing the stems apart and concentrating stress at the very base of the union.
- **V-Shaped vs. U-Shaped junctions:** Structural stability is often assessed by the shape of the union. Wide, "U-shaped" junctions typically indicate strong wood-to-wood connection with a visible branch bark ridge. Narrow, "V-shaped" junctions are high-risk indicators where the inward-folding bark signals a lack of internal structural integrity.

Structural "fault lines" and loading

- **Compromised loading capacity:** Under loading conditions—such as wind, or the weight of a wet canopy—stems act as levers. In a strong union, the stress is absorbed by the interlocking fibres. In a "fault line" union, the lack of connective tissue means the junction cannot effectively distribute torque, making it highly susceptible to longitudinal splitting.
- **Compensatory growth (Bulging):** In some cases, the tree attempts to stabilize a weak union by producing extra wood (ribs or bulges) on the outside of the joint. Research suggests that

unions *without* these bulges are often closer to failure, as the tree has not yet developed any compensatory reinforcement.

- **Dynamic loading risks:** During storms, wind creates dynamic, oscillating loads. Because these stems often have a high aspect ratio (they are nearly equal in size), they move independently rather than as a single unit. This independent swaying can cause the included bark to act as a pivot point, leading to sudden, catastrophic failure.

Figure 3 - Poor stem attachments

7.1.3 Limb failure history:

There is clear evidence of previous limb failure within the upper canopy. This history serves as a critical indicator of ongoing structural instability, suggesting an elevated probability of future branch failures as the tree continues to age.

7.1.4 Canopy dieback:

The outer canopy is currently experiencing dieback, which signals a decline in the tree's physiological condition. This loss of canopy vitality is consistent with an over-mature specimen that is no longer able to sustain its full crown.

Figure 4 - Large section of canopy dieback

7.1.5 Root activity:

In the root zone, active root growth has caused the lifting of the adjacent driveway. This ongoing conflict with the surrounding infrastructure has resulted in significant surface displacement, necessitating increased maintenance and presenting a long-term management challenge.

7.1.6 Age class:

The specimen is classified as over-mature, affecting the tree in its entirety. This advanced life stage reduces its suitability for long-term retention on the site, as the tree is now increasingly susceptible to both structural failure and rapid physiological decline.

7.2 Tree 2: Back yard

Species: *Ulmus glabra*

Defect Type	Location	**Risk Implication**
Heavy basal decay	Base of trunk	Advanced structural deterioration within critical load-bearing areas, reducing overall tree stability.
Decay within main leader	Primary scaffold leader	Reduced structural reliability and increased likelihood of partial canopy failure.
Poor stem attachments	Main leaders	Weak unions compromise canopy structure and increase the potential for stem failure under loading conditions.
Poor stem attachments	Upper canopy	Increased likelihood of limb failure during adverse weather events or canopy loading.

7.2.1 Basal decay:

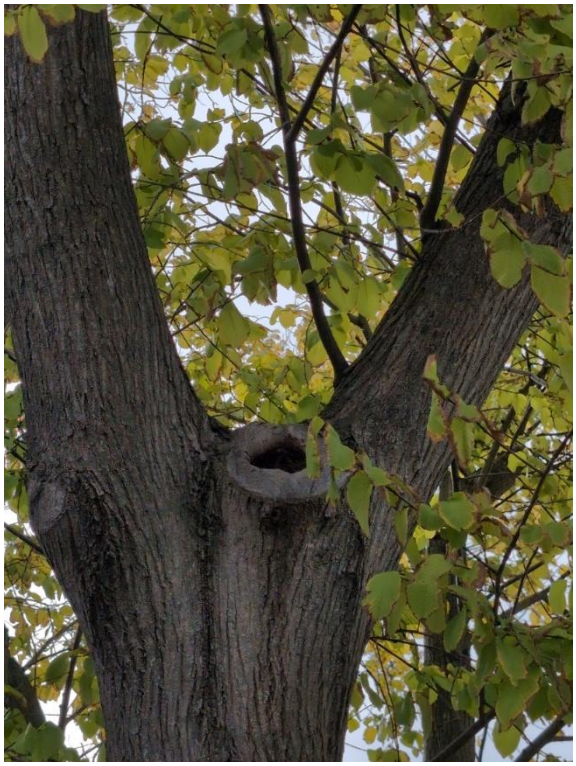
The tree exhibits heavy decay at the base of the trunk, which is the most critical load-bearing region of the specimen. This advanced structural deterioration significantly compromises the tree's anchorage and overall stability, creating a high risk of total failure as the base can no longer effectively support the weight and leverage of the upper structure.

Figure 5 - Decay pocket at the base of tree

7.2.2 Main leader decay:

Internal decay has been identified within a primary scaffold leader, directly reducing its structural reliability. This localized weakness undermines the integrity of a major section of the tree, resulting in an increased likelihood of partial canopy failure and the shedding of large-diameter limbs.

Figure 6 - Large pocket of decay in upper canopy



7.2.3 Stem attachments (Primary):

The main leaders are characterized by poor stem attachments, which lack the necessary wood-to-wood connection for long-term stability. These weak unions act as structural "fault lines," compromising the canopy's ability to withstand loading conditions and increasing the potential for significant stem failure.

Figure 7 - Poor stem attachments at base of tree

7.2.4 Stem attachments (Secondary):

Observations of the upper canopy reveal additional poor stem attachments among secondary branches. While smaller in scale than the primary leaders, these compromised unions still present a consistent hazard, particularly during adverse weather events where wind loading is likely to result in limb failure and debris fall.

8 Conclusion

The arboricultural assessment of the subject specimens at 16 Stork Avenue identifies significant structural and physiological limitations. Both trees exhibit critical defects, most notably the extensive decay which has fundamentally compromised the primary load-bearing regions of the structures. These internal voids, coupled with poor stem attachments and a documented history of limb failure, indicate that both trees have reached a state of structural instability that cannot be mitigated through standard maintenance.

- Tree 1 is in an over-mature age class, characterized by canopy dieback and irreversible decline. Its reduced vitality prevents it from producing "response wood" to compensate for its structural weaknesses.
- Tree 2 suffers from heavy basal decay. This advanced deterioration at the base of the trunk compromises the tree's anchorage and overall stability, creating a high risk of limb failure

Additionally, Tree 1 is in direct conflict with site infrastructure, causing significant displacement and lifting of the driveway. Given the high likelihood of failure for both specimens, retention is not considered a viable or safe option.

While the removal of both trees is recommended due to the aforementioned structural defects, they are protected under Clause 52.37 (Canopy Trees) of the Planning Scheme. Consequently, a planning permit must be obtained from the Responsible Authority prior to any removal or site works.

9 APPENDICES

9.1 Appendix A – Tree descriptors

AGE	
Young	Juvenile or recently planted approximately 1-7 years.
Semi Mature	Tree actively growing.
Mature Tree	Has reached expected size in situation.
Over Mature	The tree is over mature and has started to decline. (Senescent)

HEALTH	
Good	The foliage of the tree is entire, with good colour, very little sign of pathogens and of good density. Growth indicators are good i.e. Extension growth of twigs and wound wood development. Minimal or no canopy die back (deadwood).
Fair	Tree is showing one or more of the following symptoms; < 25% dead wood, minor canopy die back, foliage generally with good colour though some imperfections may be present. Minor pathogen damage present, with growth indicators such as leaf size, canopy density and twig extension growth typical for the species in this location.
Poor	Tree is showing one or more of the following symptoms of tree decline; > 25% deadwood, canopy die back is observable, discolored or distorted leaves. Pathogens present, stress symptoms are observable as reduced leaf size, extension growth and canopy density.
Dead or dying	Tree is in severe decline; > 55% deadwood, very little foliage, epicormic shoots, minimal extension growth.

STRUCTURE	
Good	Trunk and scaffold branches show good taper and attachment with minor or no structural defects. Tree is a good example of the species with a well-developed form showing no obvious root problems or pests and diseases.
Fair	Tree shows some minor structural defects or minor damage to trunk e.g. bark missing, there could be cavities present. Minimal damage to structural roots. Trees could be seen as typical for this species.
Poor	There are major structural defects, damage to trunk or bark missing. Co-dominant stems could be present or poor structure with likely points of failure. Girdling or damaged roots obvious. Tree is structurally problematic.
Hazardous Tree	Is an immediate hazard with potential to fail; this should be rectified as soon as possible.

CONDITION	
Good	Growth is 75-100% of optimum.
Moderate	Growth is 50-75% of optimum.
Moderate Poor	Growth is 25-50% of optimum.
Poor	(a) No recent increase in canopy; size less than 25% of optimum. (b) New growth, but plant less than 10% of optimum. (c) Growth less than 25% of optimum, new leaves but only slight recent increase in canopy size. (d) Growth less than 25% of optimum, major stem resprouting.
Dead	Plant is dead.

USEFUL LIFE EXPECTANCY	
Short	Tree may be dead or mostly dead. Trees may exhibit major structural faults. Tree may be an imminent failure hazard. Excessive infrastructure damage with high-risk potential cannot be remedied. Trees are exhibiting severe chronic decline. Crown is likely to be less than 50% typical density. Crown may be mostly epicormic growth. Dieback of large limbs is common (large deadwood may have been pruned out). Over-mature and senescing. Infrastructure conflicts with heightened risk potential. The tree has outgrown site constraints. The trees is exhibiting chronic decline. Crown density will be less than typical and epicormic growth is likely to be present. The crown may still be mostly entire, but some dieback is likely to be evident. Dieback may include large limbs. Over-mature and senescing or early decline symptoms in short-lived species. Early infrastructure conflicts with potential to increase regardless of management.
Medium	Trees do not show symptoms of chronic decline, but growth characteristics are likely to be reduced (bud development, extension growth etc.). The tree may be over-mature and senescing. Trees display normal growth characteristics. Trees may be growing in restricted environment (e.g. Streetscapes) or may be in late maturity. Semi-mature and mature trees exhibiting normal growth characteristics. Juvenile trees in streetscapes.
Long	Generally juvenile and semi-mature trees exhibit normal growth characteristics in parks or open space. Could also be maturing, long-lived trees. Tree well suited to the site with negligible potential for infrastructure conflicts.

10 REFERENCES

Australian Standard 4970-2025 (Protection of trees on development sites)

Australian Standard 4373-2007 (Pruning of amenity trees)

Vicplan (mapshare.vic.gov.au)

Google Maps

MapBrowser | Nearmap

11 TERMS & LIMITATIONS

Report Integrity:

- This report is a complete and final document prepared by ATC Land Management and must not be altered in any way. Any unauthorized modifications will render the report invalid.

Disclaimer of Liability:

- Trees are living organisms subject to natural processes, environmental changes, and extreme weather events. Our inspection, conducted by qualified personnel, relies on visual assessment of tree health and structure from the ground. While thorough, this method may not detect hidden defects. We cannot guarantee the absolute condition or safety of the trees beyond what's reasonably assessed during the inspection. Regular inspections are recommended, and our staff can advise on the appropriate frequency.

Report Objectivity and Accuracy:

- This report is free from bias and reflects the honest professional opinion of the consulting Arborist, based on the client's provided information and relevant research. All details, information, and recommendations are based on research and referenced where applicable. Without references, determinations are made using the experience and observations of the Certified Arborist who prepared the report.

Limitations of Representation:

- Pictures, diagrams, graphs, and other reference materials within this report are not guaranteed to be perfectly scaled. Measurements and values are made to the best of the Arborist's ability at the time of inspection and report creation.

Interpretation and Discussion:

- Discussions regarding specific points within this report are discouraged as they may be taken out of context. Discussions should focus on the entire report. Similarly, discussions concerning the actions of third parties regarding the trees are not included within the scope of this report.

Governing Law and Dispute Resolution:

- This agreement and the report shall be governed by and construed in accordance with the laws of Victoria, Australia. In the event of a dispute arising from this report, the parties agree to attempt to resolve the dispute amicably through mediation.

Entire Agreement:

- These terms and conditions, together with the Arborist Report, constitute the entire agreement between the parties and supersede all prior or contemporaneous communications, representations, or agreements, whether oral or written.

By accepting this report, the client acknowledges that they have read, understood, and agree to be bound by these terms and conditions.

ATC
LAND MANAGEMENT

0411 246 086

Arboricultural and Environmental Services