



Arboricultural Impact Assessment

119 Hudson Parade Clareville



**Prepared by Alex Austin
For
askerrobertson design and construction
June 2025**

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1 Summary

Alex Austin, an AQF level 8 Arborist, was commissioned Mia Asker from askerrobertson design and construction to complete Arboricultural Impact Assessment (AIA) of the trees that could be impacted by the proposed garage development works at 119 Hudson Parade Clareville.

The site inspection was completed on the 21st March 2025 where Five (5) trees within and in proximity to the proposed development area were inspected and are now subject to this report. This document and data have been prepared in accordance with Australian Standard 4970: 2025 *Protection of trees on development sites*. The trees subject to this report have been mapped and placed on the proposed plans. The complete tree data table is listed in the appendix.

The site is a residential block which has established garden and mature trees. Council trees are close to the boundary. The site slopes to the west. The existing garage of sandstone block is collapsing. The site is listed as having Terrestrial Biodiversity.

The tree assessment revealed;

- Three (3) High (A) Retention Value trees numbered 2, 3 & 4
- Two (2) Moderate (B) Retention Value trees numbered 1 & 5

Tree number 5 is an exempt species and may be removed without council permission. Two (2) Trees numbered 1 & 2 are located on Council land and must be protected from the works.

The proposed development works include demolition of the existing garage structure, excavation and the construction of a new double garage, wider vehicle crossing, steps and landscaping.

The design has carefully considered the location of site trees, and no excavation or construction works are proposed within the Structural Root Zones (SRZ's) of trees to be retained. Excavation encroachments to Notional Root Zones (NRZ's) of trees to be retained have been minimised.

Tree 2 *Corymbia maculata* (Spotted Gum) is a large tree located on council land right next to the project area. Tree 2 is 2.2m from the existing garage. Tree 2 has a proposed 21% NRZ encroachment which is considered major under section 3.3.6 of AS 4970:2025. Demolition is required in the SRZ, however, the construction works have been carefully considered and are located outside the SRZ. The existing garage already consumes 11.6% of the TPZ of Tree 2 which results in a minor 9.4% increase in NRZ encroachment.

Trees 3, 4 & 5 have proposed NRZ encroachments of 13.1 % (Tree 3), 10.6% (Tree 4) and 10.9% (Tree 5) which is considered moderate under section 3.3.5 of AS 4970:2025. Demolition is required in the SRZ of Tree 3 however, the construction works have been carefully considered and are located outside the SRZ of all three (3) trees.

Trees 3, 4 & 5 are not expected to have their viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.

Three (3) trees numbered 2, 3 & 4 require sensitive demolition and excavation methods with Project Arborist supervision. Trees 1 & 5 are suitable for generic Tree Protection fencing. No impact to the viability of the trees nominated for retention is anticipated if the tree protection specifications are applied as per the guidance in this report.

To ensure the Five (5) trees nominated for retention remain viable during and post construction, tree protection measures including the engagement of a project arborist, tree protection fencing, tree protection signage, a restriction of activities within Tree Protection Zones (TPZ's) and compliance reporting, must be incorporated into the project.

A Tree Protection Plan has been prepared and can be located in the Appendix.

This document must be used in its entirety and further questions are to be directed to:

Alex Austin



AQF Level 8 Arborist

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3 Document Details

Version Number	Date	Description
001	25/06/2025	Draft for review
002	25/06/2025	Final

4 Background

The site inspection was completed on the 21st March 2025 where Five (5) trees within and in proximity to the proposed development area were inspected and are now subject to this report. This document and data have been prepared in accordance with Australian Standard 4970: 2025 *Protection of trees on development sites*. The trees subject to this report have been mapped. The complete data table is listed in the appendix.

4.1 Reviewed Documents

The following documents were assessed as part of this report;

- Site Plans by askerroberston design and construction dated 18/06/2025

4.2 Aims and Objectives

- Determine the Retention Value and required area for each tree to be protected and remain viable during and post construction.
- Identify and reduce potential conflicts between subject trees and site development by providing accurate information on the area required for tree retention and methods/techniques suitable for tree protection during construction.
- Encroachments to the TPZs are to be minimized prior to construction.
- Works within the defined Tree Protection Zone shall utilize special measures to avoid or minimize adverse impacts on trees.
- Provide information on restricted activities within the area nominated for tree protection, as well as suitable construction methods to be adopted during construction.
- The trees to be retained must be protected from all other demolition, excavation, and construction activities.

4.3 Tree Health and Condition

The inspection of the trees was made from the ground and involved inspection of the external features only. No invasive, diagnostic or laboratory testing was carried out.

Tree height and canopy spread were estimated and trunk diameter (DBH) and Diameter at Root Crown (DRC), have been measured with a diameter tape where applicable.

Data including species, age class, health, structure, landscape significance, defect and life expectancy were recorded. Tree species were identified using available seed and fruit during the site inspection.

All photographs were taken at the time of the site inspection by the inspecting arborist. Photographs have been altered for brightness and/or cropped only.

Tree assessment and recommendations in this report are based on the condition of the trees at the time of inspection. As the trees continue to age and decline, further assessment, particularly from a hazard management perspective may be necessary. Site conditions and weather events may also change the condition of the trees from the time of inspection.

4.4 Notional Root Zone, Tree Protection Zone and Structural Root Zone

Calculating the **Notional Root Zone (NRZ)**. The radius of the NRZ is calculated for each tree by multiplying its diameter at standard height (DSH) by 12.

Radius of the NRZ = DSH × 12; where

- DSH = trunk diameter measured at 1.4 m above ground
- The radius of the NRZ is measured from the centre of the stem.
- The NRZ for palms, cycads, tree ferns and the like, is not calculated but shall not be less than 2 m.
- Any NRZ radius shall not be less than 2 m nor greater than 15 m. Clause 3.3 of AS 4970:2025 details the methods to produce the TPZ based on the NRZ.

The NRZ is the starting point for determining the TPZ. The TPZ should be determined using the considerations and encroachments discussed in section 3.3.2 of AS 4970:2025.

The **Tree Protection Zone (TPZ)** is defined as the specified zone above and below ground and at given offsets from the trunk set aside to protect a tree's roots and crown where these might be damaged by development.

The **Structural Root Zone (SRZ)** is a notional area required for tree stability. A larger area is required to maintain a viable tree. The SRZ shall be calculated when major encroachment (greater than 20 %) into an NRZ is proposed. SRZ locations and dimensions may be included on arboriculture documentation.

Many factors affect the size of the SRZ (e.g. tree height, crown area, soil type, soil moisture). Natural or built structures, such as rocks and footings, can also influence the SRZ. An indicative SRZ radius

can be determined from the trunk diameter measured immediately above the root buttress using the following formula.

$$\text{SRZ radius} = (D \times 50) 0.42 \times 0.64$$

Root investigation can provide more information on the extent of these roots.

4.5 NRZ Encroachments

4.5.1 Minor NRZ encroachment

The proposed encroachment is considered minor if it is less than or equal to 10 % of the area of the NRZ, has not had recent NRZ encroachments and is outside of the SRZ (see section 3.4). Generally, it is unlikely that there will be a significant impact to tree health, longevity or structure. Tree protection should be implemented during site works. To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable.

4.5.2 Moderate NRZ encroachment

The proposed encroachment is considered moderate if it is greater than 10 % and less than or equal to 20 % of the area of the NRZ and is outside of the SRZ (see Clause 5.3). A project arborist shall be engaged to review the proposed impact and undertake any other necessary investigation to address the factors listed in Clause 3.3.2 of AS 4970:2025 to demonstrate how the tree will remain viable. This may be through the implementation of suitable design measures and construction controls to mitigate impacts during the development process.

To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable.

4.5.3 Major NRZ encroachment

The proposed encroachment is considered major if it is greater than 20 % of the area of the NRZ or inside the SRZ. The project arborist shall be engaged to explore alternative designs with the design team and/or demonstrate that the tree will remain viable. Relevant factors listed in Clause 3.3.2 of AS 4970: 2025 should also be considered.

For assessment of major encroachment a more detailed investigation is necessary. This can include research such as root investigation, soil analysis, historical records of the tree or site, relevant literature and examples of similar encroachments. To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable.

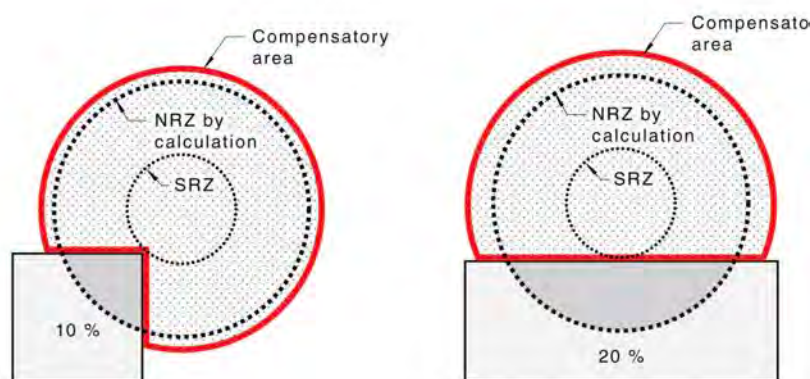


Figure 1: Example NRZ encroachments which are acceptable. (Source: AS 4970:2025)

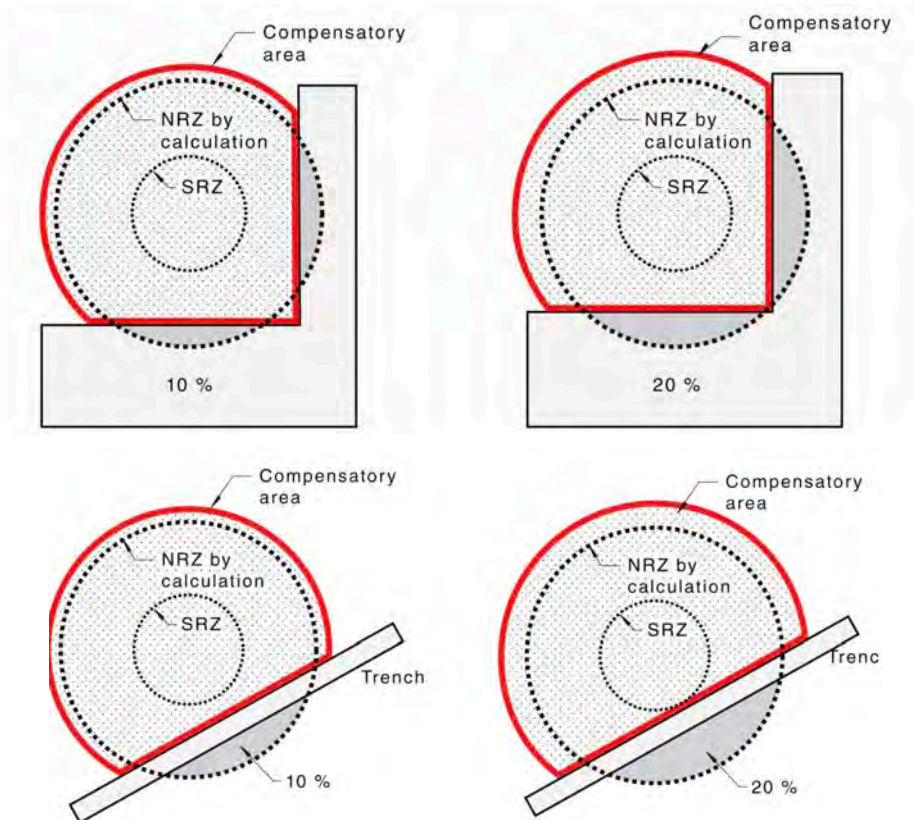


Figure 2: Example NRZ encroachments which are acceptable. (Source: AS 4970:2025)

○ Retention Value

The retention value method used is based on the IACA Significance of a Tree, Assessment Rating System (STARS) (IACA 2010)©. The retention value method used is a simplified rating system consisting of 4 categories as a summary of the survey's cascading process. The retention value considers the trees health and structure, age class, defects, life expectancy and significance in the landscape.

- Priority or Retention **(High - A - Green)** -These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone. Considerable efforts should be made to retain these trees.
- Consider for Retention **(Medium – B (Blue))** These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted. Reasonable efforts should be made to retain these trees.
- Consider for Removal **(Low- C –Grey)** These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
- Priority for Removal **(Remove – R- Red)** -These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

5 Site Details

5.1 Northern Beaches Local Government Area.

The site is located in the Northern Beaches Local Government Area.

5.2 Zoning

The site is zoned C4: Environmental Living under the Pittwater Local Environmental Plan 2014.

5.3 Biodiversity and Conservation SEPP

The subject trees are protected by the State Environmental Planning Policy (Biodiversity and Conservation SEPP) 2021. Trees proposed for removal or pruning, are covered by the SEPP unless they are considered an imminent danger to life and property (by a AQF Level 5 or above Arborist) and require a permit to be issued by Council.

5.4 Terrestrial Biodiversity

The site is listed as having Terrestrial Biodiversity in the E planning spatial viewer. The removal of any native vegetation will most likely trigger ecological assessment, reporting and offsetting.



Figure 3: The biodiversity values map. (Source: SEED 2025).

5.5 Hunter Coast Lowland Spotted Gum Moist Forest

The species identified in this report form part of The Hunter Coast Lowland Spotted Gum Moist Forest (PCTID3234)(Previously known as Pittwater Spotted Gum Forest). This plant community is listed as an Endangered Ecological Community in the Sydney Basin Bioregion listed under The Biodiversity Conservation Act (2016) (NSW). The site is mapped as containing this Plant Community Type.

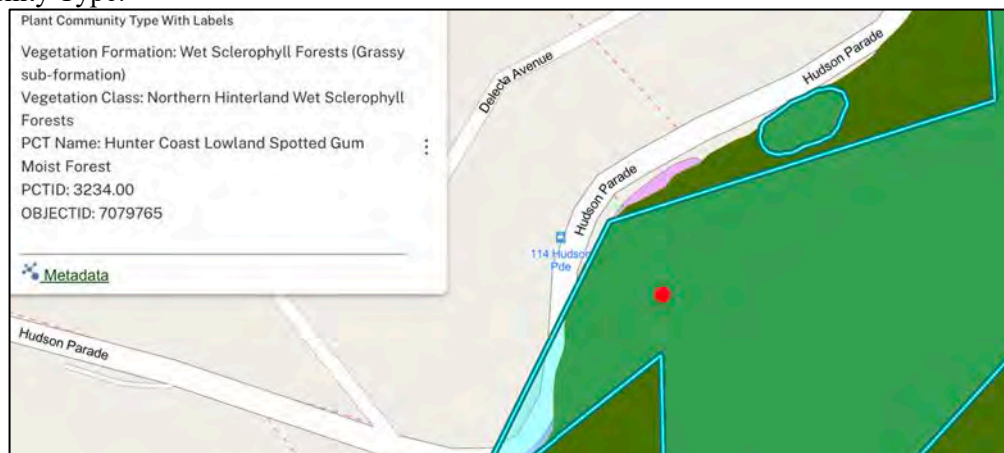


Figure 4: Depicts the mapped Hunter Coast Lowland Spotted Gum Moist Forest on the site. (Source: SEED 2024).

5.6 Suburb Map



Figure 5: Map of Suburb showing site location (Source: Sixmaps 2025).

5.7 Aerial Image

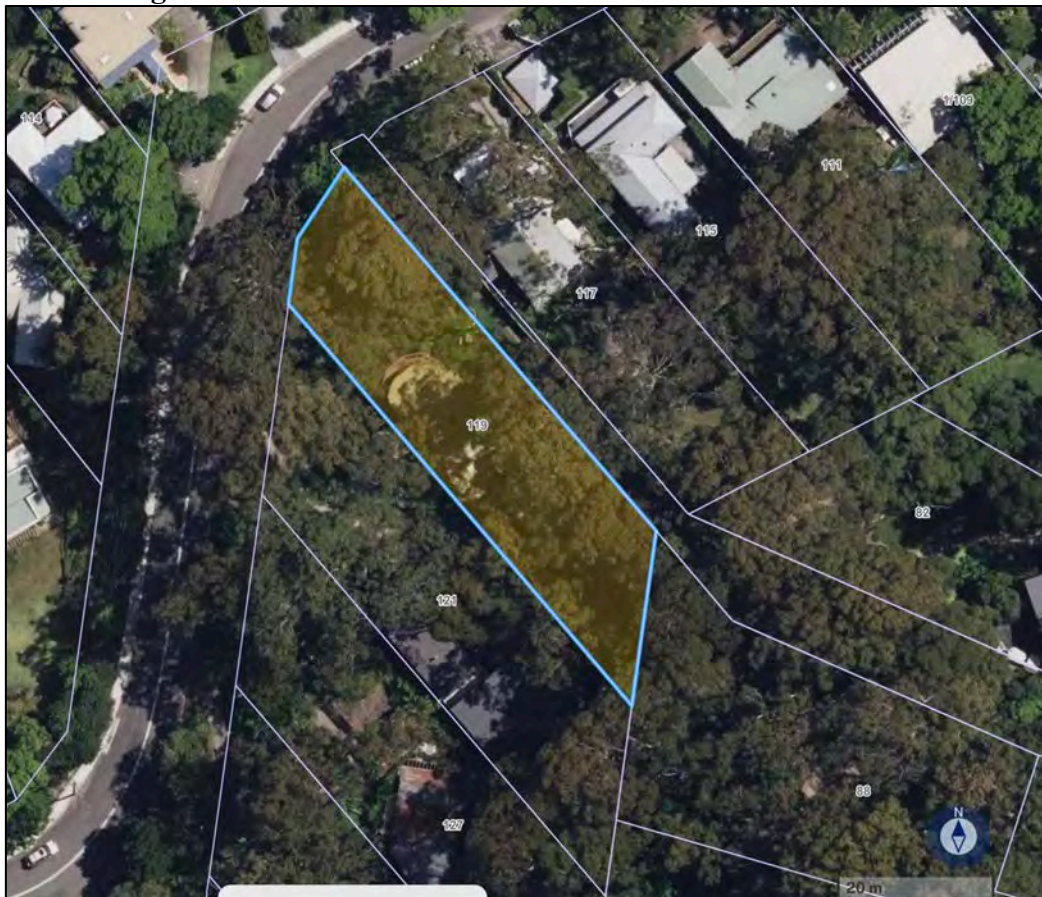


Figure 6: Aerial image of the site showing boundaries. (Source: Sixmaps 2025)

5.8 Site conditions

The site is a residential block which has established garden and mature trees. Council trees are close to the southern boundary. The site slopes to the west. The existing garage of sandstone block is collapsing.



Figures 7 & 8: The site viewed from across the road (Left) and the existing garage and cross over. (Right). (Source: 21st March 2025).



Figures 9 & 10: The existing garage with collapsing sandstone walls (Left) and the roof of the existing garage surrounded by gardens. (Right). (Source: 21st March 2025).

6 Tree Survey

The site inspection was completed on the 21st March 2025 where Five (5) trees within and in proximity to the proposed development area were inspected and are now subject to this report. This document and data have been prepared in accordance with Australian Standard 4970: 2025 *Protection of trees on development sites*. The trees subject to this report have been mapped. The complete data table is listed in the appendix.

The tree assessment revealed;

- Three (3) A Retention Value trees numbered 2, 3 & 4
- Two (2) (B) Retention Value trees numbered 1 & 5

Tree number 5 is an exempt species and may be removed without council permission.

Two (2) Trees numbered 1 & 2 are located on Council land and must be protected from the works.

6.1 Tree Location Map

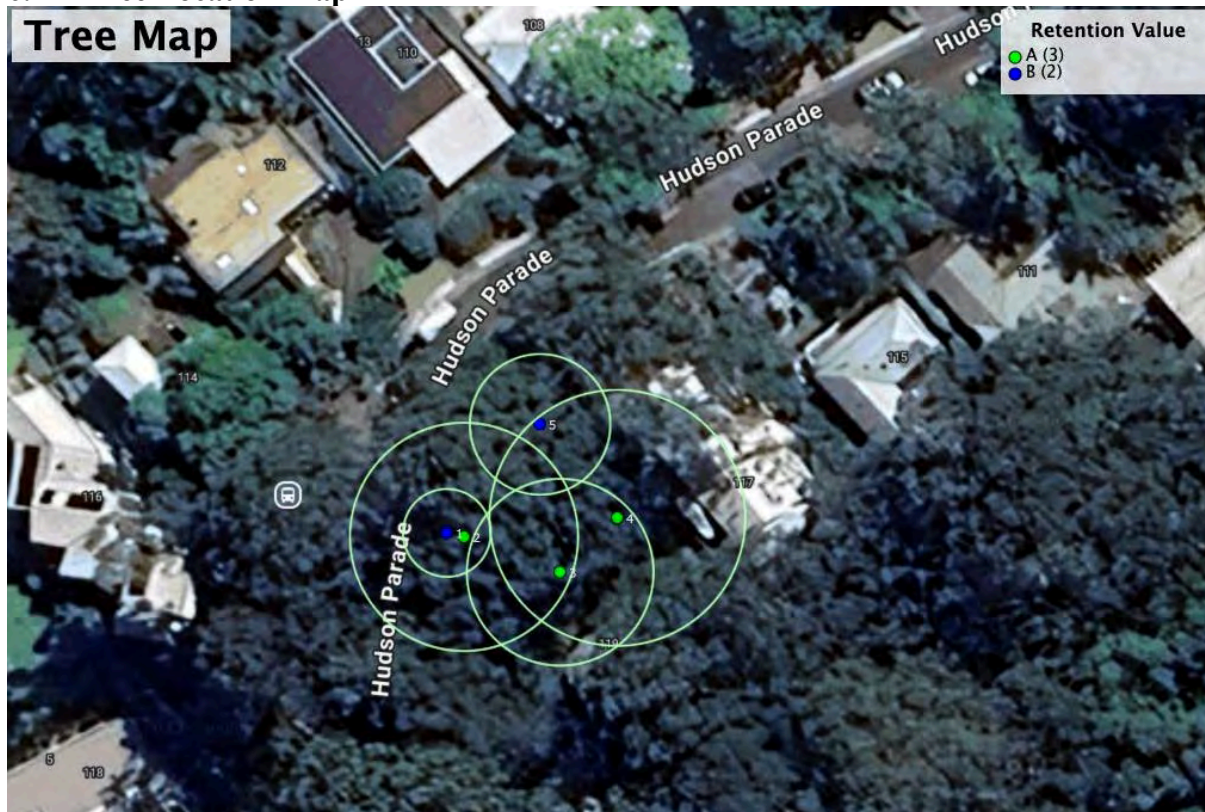


Figure 11: The Tree location map can be observed. See appendix for the larger image. (Source: Tree Plotter 2025).

6.2 Three (3) High (A) High Retention Value trees

Trees in this category are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 *Protection of trees on development sites*. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.. Key Examples include;

6.2.1 Tree 2 *Corymbia maculata* (Spotted Gum) – Council Tree

Tree 2 *Corymbia maculata* (Spotted Gum) is a large tree located on council land right next to the project area. Tree 2 is 2.2m from the existing garage. Tree 2 dominates the landscape and has a long life expectancy of 40+ years. Tree 2 has a NRZ of 11.8m radius and a SRZ of 3.51m radius.



Figures 12 & 13: Tree 2 can be observed in the landscape (Left) and the location of the trunk next to the existing garage wall (Right). (Source: 21st March 2025).

6.2.2 Tree 3 *Corymbia maculata* (Spotted Gum)

Tree 3 *Corymbia maculata* (Spotted Gum) is a large site tree located next to the project area. Tree 3 is 2.3m from the existing garage. Tree 3 has a long life expectancy of 40+ years. Tree 3 has a NRZ of 9.72m radius and a SRZ of 3.28m radius.



Figure 14: Tree 3 can be observed in the landscape (Source: 21st March 2025).

6.2.3 Tree 4 *Corymbia maculata* (Spotted Gum)

Tree 4 *Corymbia maculata* (Spotted Gum) is a large site tree located next to the project area. Tree 4 has a long life expectancy of 40+ years. Tree 4 has a NRZ of 13.32m radius and a SRZ of 3.68m radius.



Figures 15 & 16: Tree 4 can be observed in the landscape (Left) and the location of the trunk next to the existing path(Right). (Source: 21st March 2025).

6.3 Two (2) Medium (B) Retention Value trees

These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered. Reasonable efforts should be made to retain these trees. Key examples include;

6.3.1 Tree 1 *Angophora floribunda* (Rough-barked Apple Myrtle) – Council tree

Tree 1 *Angophora floribunda* (Rough-barked Apple Myrtle) is a small tree located on council land right next to the project area. Tree 1 is 2.3m from the existing garage wall. Tree 1 has a suppressed form and has a medium life expectancy of 15-40 years. Tree 1 has a NRZ of 4.57m radius and a SRZ of 2.34m radius.



Figure 17: Tree 1 can be observed in the landscape (Source: 21st March 2025).

6.3.2 Tree 5 *Jacaranda mimosifolia* (Jacaranda)

Tree 5 *Jacaranda mimosifolia* (Jacaranda) is a medium sized tree next to the project area. The tree is a species which is exempt in the Northern beaches LGA. The tree has average structure due to suppressed form. Tree 5 has a medium life expectancy of 15-40 years. Tree 5 has a NRZ of 7.32 m radius and a SRZ of 2.78 m radius.



Figures 18 & 19: Tree 5 can be observed in the landscape (Left) and the location of the trunk next to the existing path / bin area. (Right). (Source: 21st March 2025).

7 Proposed Works.

7.1 Existing layout

The site has an existing single garage and cross over. The existing garage is located within the SRZ of Council Tree 2 and site Tree 3.



Figure 20: The existing layout. (Source: Site Plans by askerroberston design and construction dated 18/06/2025)

7.2 Proposed Layout

The proposed development works include the demolition of the existing garage, excavation and the construction of a new double garage with wider crossover and landscaping.

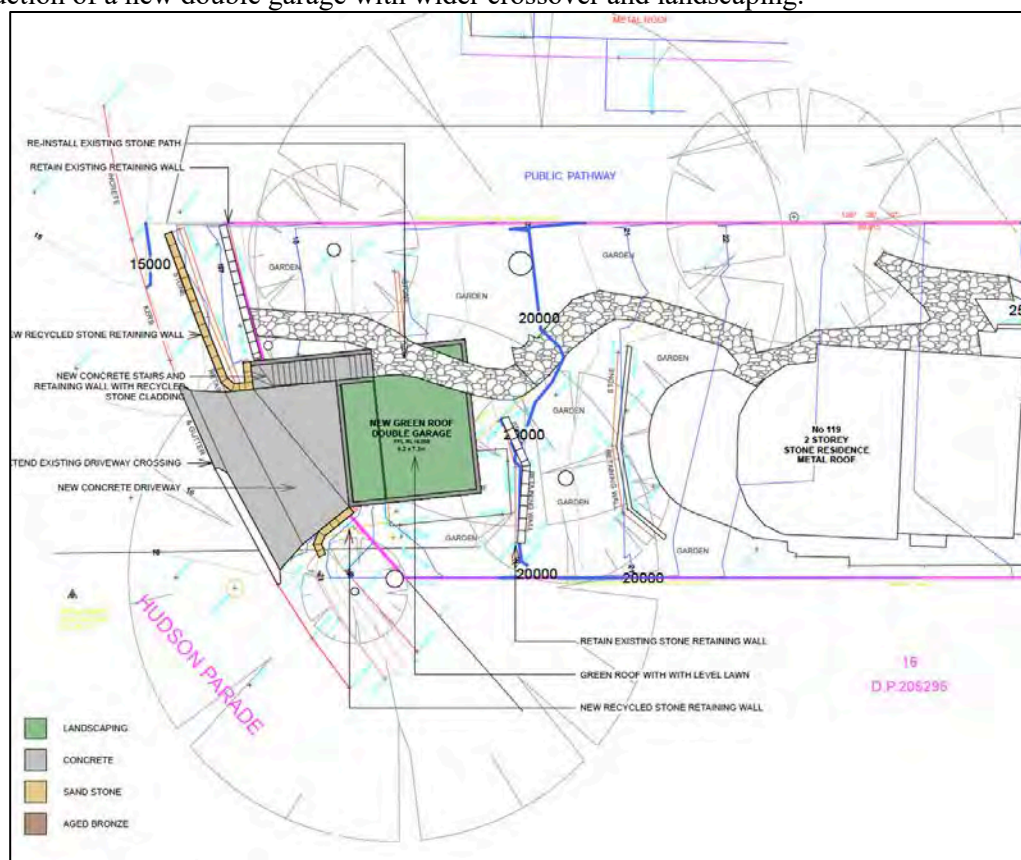


Figure 21: The proposed development area and shape. (Source: askerroberston design and construction dated 18/06/2025)

8 Impact from Proposed Works

8.1 Five (5) Trees to be Retained

Five (5) Trees will be retained if the tree protection measures in the report are adhered to.

All Five (5) trees numbered 9, 14, 15, 26 & 27 have NRZ encroachments.

No trees have SRZ encroachments by excavation or construction.

No impact to the viability of the trees to be retained is anticipated if the tree protection specifications are applied as per the guidance in this report.

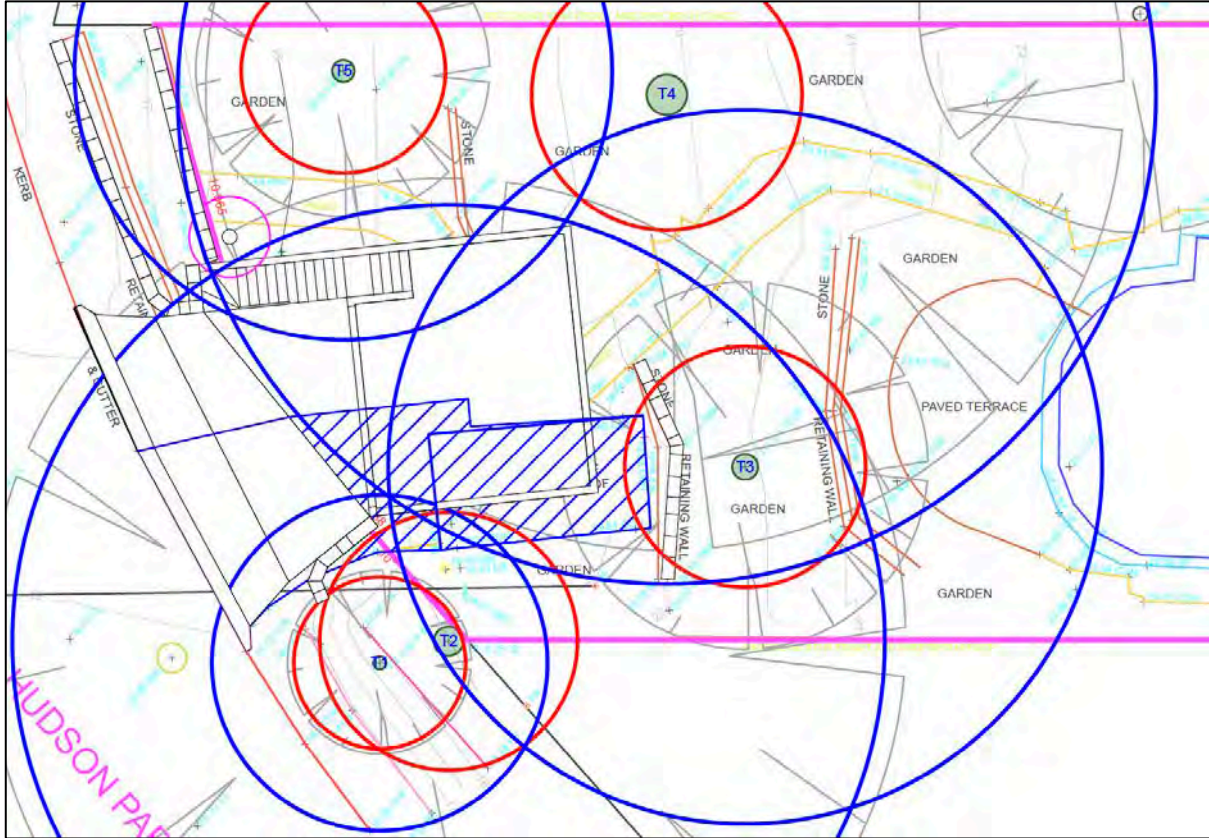


Figure 22: The plan depicting the existing garage and proposed double garage with SRZ's and NRZ's overlaid. (Source: Site Plans by askerroberston design and construction dated 18/06/2025)

8.1.1 Tree 1 *Angophora floribunda* (Rough-barked Apple Myrtle) – Council tree

Tree 1 *Angophora floribunda* (Rough-barked Apple Myrtle) is a small tree located on council land right next to the project area. Tree 1 is 2.3m from the existing garage wall. Tree 1 has a proposed 9.5% TPZ encroachment which is considered minor under section 3.3.4 of AS 4970:2025. The remainder of the TPZ inside the site which is outside the proposed footprint must be fenced and protected from construction activities.

Tree 1 is not expected to have its viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.

8.1.2 Tree 2 *Corymbia maculata* (Spotted Gum) – Council Tree

Tree 2 *Corymbia maculata* (Spotted Gum) is a large tree located on council land right next to the project area. Tree 2 is 2.2m from the existing garage. Tree 2 has a proposed 21% NRZ encroachment which is considered major under section 3.3.6 of AS 4970:2025. Demolition is required in the SRZ, however, the construction works have been carefully considered and are located outside the SRZ. When reviewing AS 4970:2025 section 3.3.2 NRZ encroachment considerations the following factors are relevant;

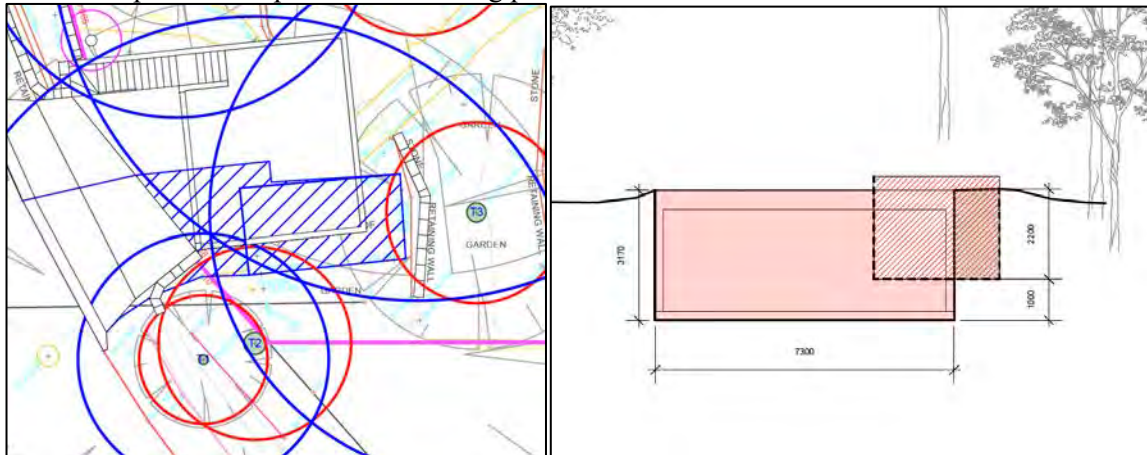
(b) *The potential loss of root mass resulting from the encroachment: number and size of roots.* The existing garage already consumes 11.6% of the TPZ and is likely to be restricting root growth to the north.

(k) *The presence of existing or past structures or obstacles affecting root growth..* The existing garage already consumes 11.6% of the TPZ of Tree 2 which results in a minor 9.4% increase in NRZ encroachment and is likely to be restricting root growth to the north.

No excavation or construction works are planned in the SRZ.

Project Arborist supervision of demolition in the SRZ and the proposed excavation is required. The remainder of the TPZ inside the site which is outside the proposed footprint must be fenced and protected from construction activities.

Tree 2 is not expected to have its viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.



Figures 23 & 24: The layout depicting the existing garage and proposed double garage within the NRZ of Tree 2 (Left) and the cut and fill plan depicting the existing and proposed garage outlines. (Right). (Source: Site Plans by askerroberston design and construction dated 18/06/2025)

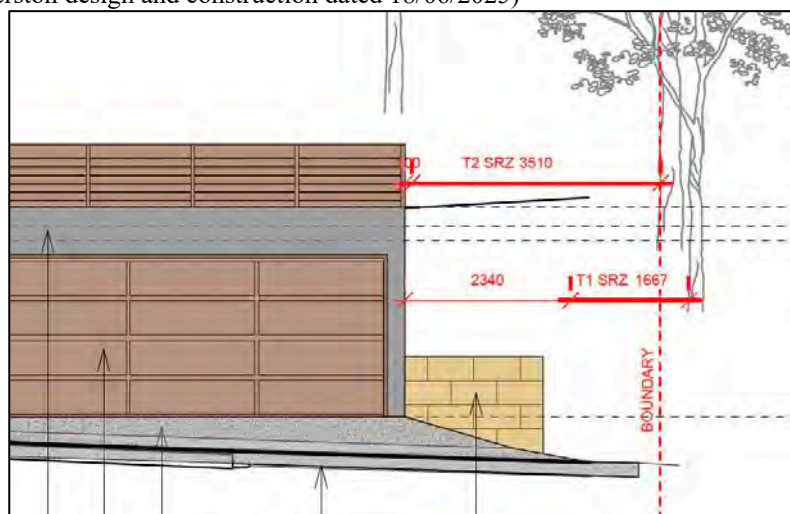


Figure 25: The SRZ for Tree 2 is not impact by the proposed excavation or construction works. The proposed retaining wall is also set outside the SRZ as seen above. (Source: Site Plans askerroberston design and construction dated 18/06/2025).

8.1.3 Tree 3 *Corymbia maculata* (Spotted Gum)

Tree 3 *Corymbia maculata* (Spotted Gum) is a large tree located on site next to the project area. Tree 3 is 2.3m from the existing garage. Tree 3 has a proposed 11.8 % NRZ encroachment which is considered moderate under section 3.3.5 of AS 4970:2025. Demolition is required in the SRZ, however, the construction works have been carefully considered and are located outside the SRZ. When reviewing the section 3.3.4 TPZ encroachment considerations of AS 4970:2025, the following factors are relevant;

(b) *The potential loss of root mass resulting from the encroachment: number and size of roots.* The existing garage already consumes 8.6% of the TPZ

(k) *The presence of existing or past structures* The existing garage already consumes 8.6% of the TPZ.

Project Arborist supervision is required for the demolition in the SRZ.

No excavation or construction works is planned in the SRZ.

The remainder of the TPZ inside the site which is outside the proposed footprint must be fenced and protected from construction activities.

Tree 3 is not expected to have its viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.



Figures 26 & 27: The layout depicting the existing garage and proposed double garage within the NRZ of Tree 3 (Left) and the cut and fill plan depicting the existing and proposed garage outlines. (Right). (Source: Site Plans by askerroberston design and construction dated 18/06/2025)

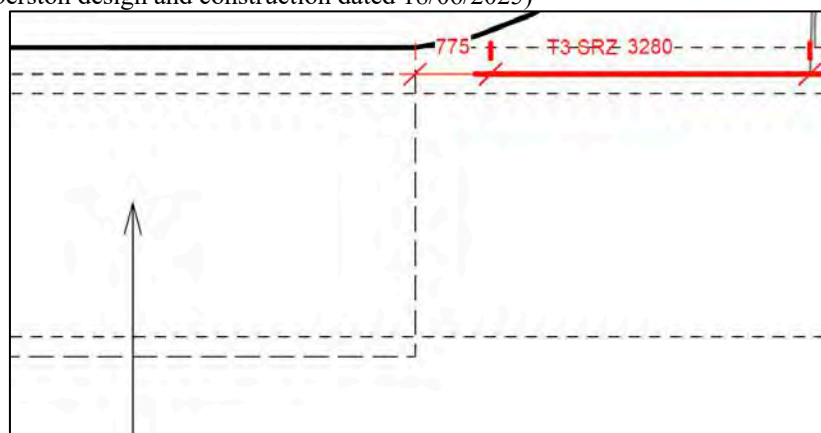


Figure 28: The SRZ for Tree 3 is not impact by the proposed excavation or construction works.. (Source: Site Plans by askerroberston design and construction dated 18/06/2025)

8.1.4 Tree 4 *Corymbia maculata* (Spotted Gum)

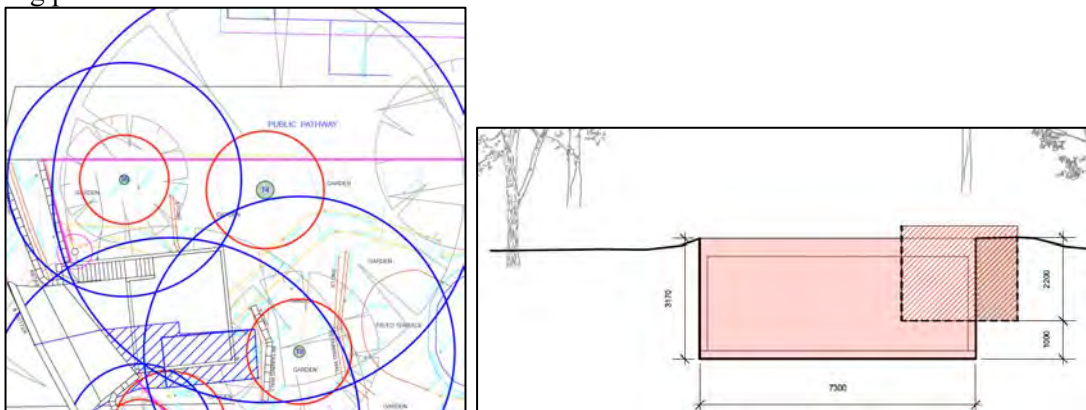
Tree 4 *Corymbia maculata* (Spotted Gum) is a large tree located on site next to the project area. Tree 4 is 2.3m from the existing garage. Tree 3 has a proposed 10.6 % NRZ encroachment which is considered moderate under section 3.3.5 of AS 4970:2025. Excavation and construction are proposed in the NRZ. The location of the works have been carefully considered and are located outside the SRZ.

When reviewing section 3.3.4 TPZ encroachment considerations of AS 4970:2025, the following factors are relevant;

(K) *The presence of existing or past structures.* The existing garage already consumes 8.1% of the TPZ.

Project Arborist supervision of the proposed excavation is required. The remainder of the TPZ inside the site which is outside the proposed footprint must be fenced and protected from construction activities. .

No excavation or construction works is planned in the SRZ and Tree 4 is not expected to have its viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.



Figures 29 & 30: The layout depicting the existing garage and proposed double garage within the NRZ of Tree 4 (Left) and the cut and fill plan depicting the existing and proposed garage outlines. (Right). (Source: Site Plans by a skeroberton design and construction dated 18/06/2025)

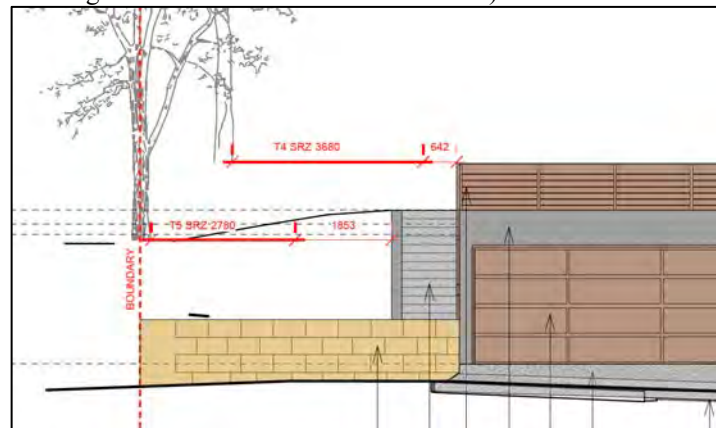


Figure 31: The SRZ for Tree 4 is not impact by the proposed excavation or construction works.. (Source: Site Plans by a skeroberton design and construction dated 18/06/2025).

8.1.5 Tree 5 *Jacaranda mimosifolia* (Jacaranda)

Tree 5 *Jacaranda mimosifolia* (Jacaranda) is a medium sized tree next to the project area. The tree is a species which is exempt in the Northern beaches LGA. Tree 5 has a proposed 10.9 % NRZ encroachment which is considered moderate under section 3.3.5 of AS 4970:2025. Excavation and construction are proposed in the NRZ. The remainder of the TPZ inside the site which is outside the proposed footprint must be fenced and protected from construction activities.

Tree 5 is not expected to have its viability negatively impacted if the tree protection specifications within this report are adopted in the building phase.

9 Tree Protection Specifications

All Five (5) Trees will be retained if the tree protection specifications in this report are adhered to. In order to minimise the impact to the tree nominated for retention, the following measures must be incorporated into the works.

9.1 Project Arborist

An official “Project Arborist” should be commissioned to oversee the tree protection, any works within the TPZ’s and complete compliance certification. The Project Arborist should have minimum five (5) years industry experience in the field of arboriculture.

9.2 Tree Protection fencing

Trees nominated for retention must be fenced as per the fencing method described below and as shown in the attached Tree Protection Plan.

Protective fencing is to be installed as close as practicable from the trunk to the TPZ distances listed in the Tree Data table. Existing site features such as boundary fences will influence the extent of the TPZ fencing. The project arborist is to determine the suitability and extent of the tree protection fencing to be used.

Tree protection fencing must remain intact throughout all proposed construction works and must only be dismantled after the works are complete. The temporary dismantling of tree protection fencing must only be done with the authorisation of the project arborist and/or the responsible authority.

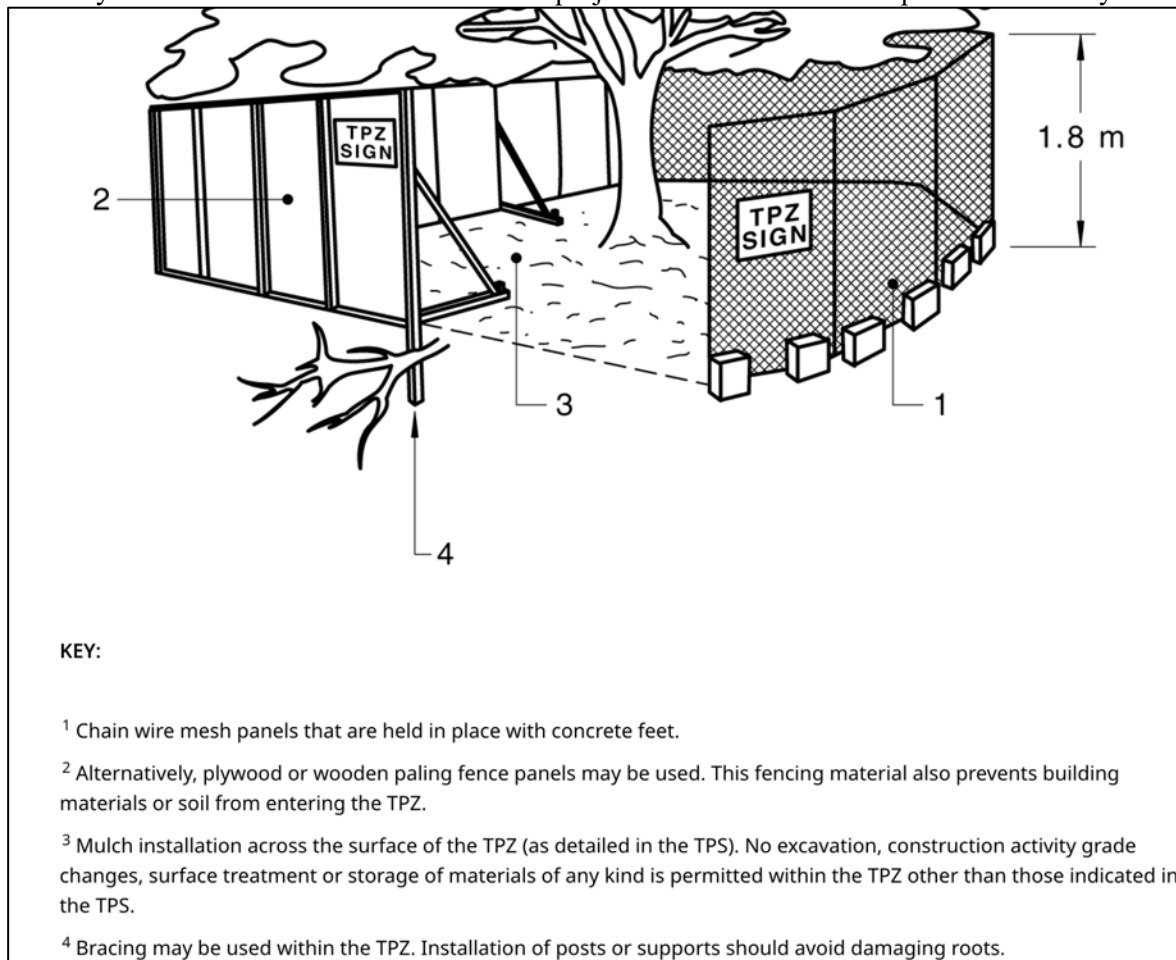


Figure 32: TPZ fencing specification. (Source: AS 4970:2025)

9.3 Tree Protection Signage

The tree protection signage below should be installed at 10m intervals along the Tree Protection Fences.

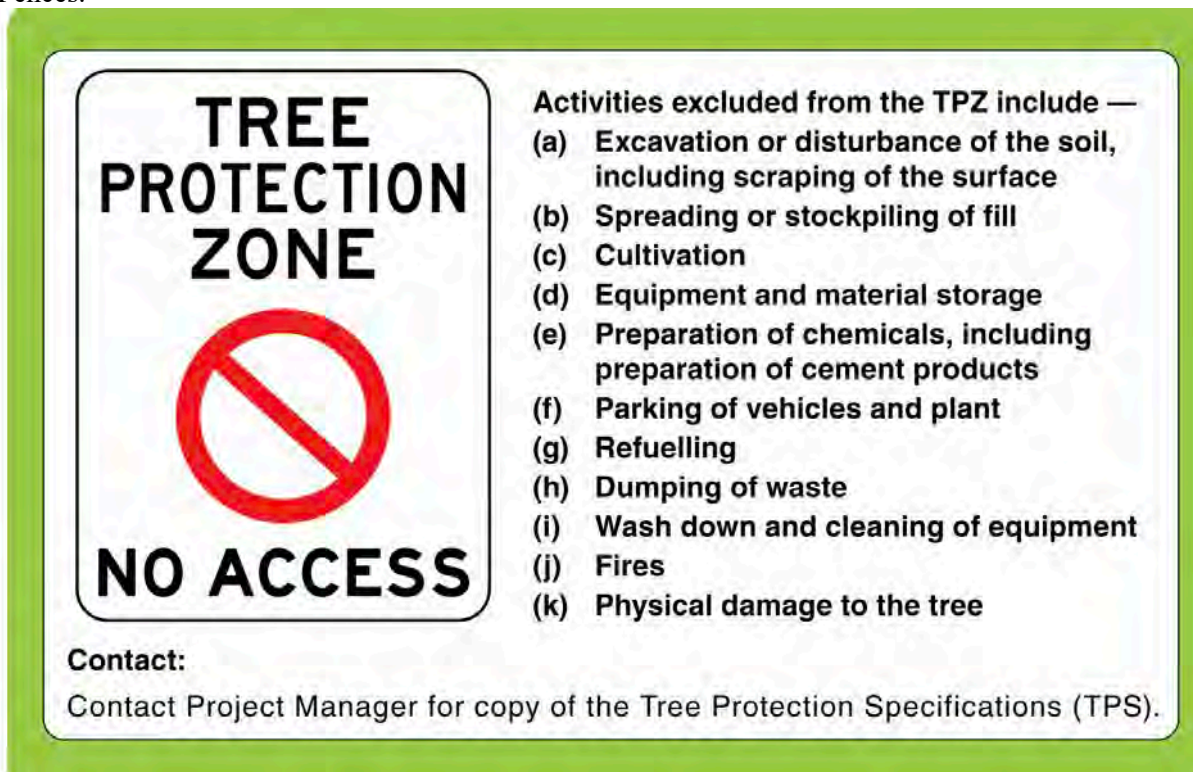


Figure 33: TPZ signage specification. (Source: AS 4970:2025).

9.4 Works within TPZ's

All works within the TPZs must be completed by techniques that do not damage tree roots. Excavation works should be undertaken using techniques that are sensitive to tree roots to avoid unnecessary damage. Such techniques include:

- Excavation/demolition by hand
- Excavation/demolition by machine with Arborist supervision
- Excavation using a high-pressure water jet and vacuum truck
- Excavation using an air spade with vacuum truck

Machine excavation is prohibited within the remaining TPZ areas of retained trees unless undertaken at the direct consent from the project arborist and/or the responsible authority.

9.5 Activities Restricted within the TPZ

The following activities are not permitted within the TPZ without Project Arborist assessment and approval.

- Machine excavation without Arborist supervision
- Demolition by machine without Arborist supervision
- Excavation for silt fencing
- Material Storage
- Preparation of chemicals, including preparation of cement products
- Dumping of waste
- Wash down and cleaning of equipment
- Placement of fill
- Soil level changes
- Temporary or permanent installation of services, utilities, or signs
- Physical damage to the tree
- Parking or driving of vehicles/machinery.

9.6 Compliance Inspections & Reports

Inspections should be conducted by the Project Arborist at key points during the construction to ensure that protection measures are being adhered to during construction stages and any decline in tree health or additional remediation measures can be identified.

Tree inspections and compliance reporting by the project arborist is required:

1. Following the installation of the tree protection fencing
2. During any demolition or excavation works within TPZ's of trees to be retained unless specific methodologies are developed and approved by the project arborist
3. Every 2 months during the works to ensure compliance.
4. At the practical completion of the project

Following each inspection, the project arborist shall prepare a brief compliance report detailing the condition of the trees. These reports should contain photographic evidence where required to demonstrate that the protection measures are in place as specified.

Any Non-Compliance Statements shall be submitted to the Project Manager (as well as the clients' nominated representative) if tree protection conditions have been breached. Reports should contain clear remedial action specifications to minimise any adverse impact on any subject tree.

10 Conclusion

This Arboricultural Impact Assessment has provided a detailed analysis of the trees that could be affected by development on the subject site. The requirements for Tree Preservation Zones are in line with AS 4970:2025 *Protection of tree on development sites*. No impact to the viability of the trees nominated for retention is anticipated if the protection measures are applied as per the guidance in this report.

11 References

Australian Standard 4970: 2025 *Protection of trees on development sites*.

British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.

12 Industry Qualifications and Memberships

- AQF Level 5 Consulting Arborist – Ryde Tafe
- AQF Level 8 Consulting Arborist – Melbourne University
- ISA Certified Arborist # AU-0348A
- ISA Professional Member # CSID: 223350
- Tree Risk Assessment Qualification (TRAQ) (Exp Oct 2028)
- Advanced Quantified Tree Risk Assessment Registered User # 3692
- VALID Tree Risk Benefit Management & Assessment Registered User (Exp March 2030)
- Masters of Environmental Law – Sydney University 2018

13 Appendices

13.1 Tree Data

13.2 Tree Protection Plan

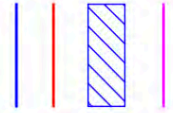
Tree Id	Tree Ownership	Common Name	Botanical Name	Trees In Group	Tree Age	DBH [cm]	Root Crown Diameter [cm]	TPZ Radius [m]	TPZ Area [m2]	SRZ Radius [m]	Height [m]	Canopy Diameter [m]	Health	Structure	Significance	ULE [Yrs.]	Observations	Habitat Features	Arborist Notes	Landscape Significance	Retention Value	NRZ Encroachment Area [m2]	NRZ Encroachment Area [%]	NRZ Encroachment Type	Tree Protection Considerations	Retention Status
1	Council land	Rough-barked Apple Myrtle	<i>Angophora floribunda</i>	1	Semi-Mature	38.08	44	4.57	65.58	2.34	10	8	Good	Average	Amenity value, Ecological	Medium (15-40 years)	Co-dominant stems, Deadwood Minor, Suppressed		Approx 2.3 from wall.	Medium	B	6.2	9.50%	Demolition, Excavation and construction	Tree protection fencing	Retain and Protect
2	Council land	Spotted Gum	<i>Corymbia maculata</i>	1	Mature	99	115	11.88	443.16	3.51	30	25	Excellent	Average	Age/size, Amenity value, Dominant landscape feature, Ecological	Long (>40 years)	Bird browsing damage minor, Deadwood > 60mm, Wound response growth - Good, Wounds - Branches	External marking(s)	2.2 from wall.	High	A	93.7	21	Demolition, Excavation and construction	Arborist supervision of demolition and excavation, Tree protection fencing	Retain and Protect
3	Client site	Spotted Gum	<i>Corymbia maculata</i>	1	Mature	81	98	9.72	296.66	3.28	25	12	Good	Average	Amenity value, Ecological	Long (>40 years)	Bird browsing damage minor, Sap exudation, Wound response growth - Good, Wound(s) - trunk		2.3m from garage rear slab roof.	High	A	35	11.8	Demolition, Excavation and construction	Arborist supervision of demolition and excavation, Tree protection fencing	Retain and Protect
4	Client site	Spotted Gum	<i>Corymbia maculata</i>	1	Mature	111	129	13.32	557.11	3.68	30	24	Good	Good	Age/size, Amenity value, Dominant landscape feature, Ecological	Long (>40 years)	Deadwood > 60mm, Wound response growth - Good, Wound(s) - trunk			High	A	59	10.6	Demolition, Excavation and construction	Arborist supervision of excavation works, Tree protection fencing	Retain and Protect
5	Client site	Jacaranda	<i>Jacaranda mimosifolia</i>	1	Mature	61	66	7.32	168.25	2.78	12	15	Good	Average	Amenity value, Exempt species	Medium (15-40 years)	Co-dominant stems, Suppressed, Unbalanced crown			Medium	B	18.4	10.9	Excavation and construction	Tree protection fencing	Retain and Protect

TPZ

SRZ

EXISTING GARAGE & EXCAVATION
RL 16.20 - RL 17.00

EXISTING CAMELIA TO BE RETAINED



PT.55
D.P.13291

HEAVILY VEGETATED
1 OT SURVEYED

2

L.P.540557
(1000.8m²)



No.119
182-STORY
STONE & CLAD RESIDENCE
METAL ROOF

Tree Protection Fence

Arborist Supervision of
Demolition and Excavation

Scale 1:200

Arborsaw Tree Protection Plan June 2025