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ARBORICULTURE IMPACT ASSESSMENT REPORT

Proposed Development

2-10 Faunce Street West Gosford

Prepared for: Urbis.

Prepared by Mr Michael Sleeth AQF5 arborist.

18 July 2024
(REF: URB09)

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CONTENTS

Proposed Works..... 2
The Site 2
Methodolgy..... 2
Tree Condition And Life Expectancy..... 3
Tree Significance..... 3
Development Planning And Tree Protection Zones 3
Tree Protection Measures 5
Conclusion..... 6
Recommendations..... 6
Tree Protection Plan..... 7
Tree Plans..... 22

Tables

Table 1 – Useful Life Expectancy (ULE) (Barrell, 2009) 3
Table 2-SULE table 6
Table 3-Retain/Remove chart. 6

Figures

Figure 1 – Site location. 1
Figure 2- Proposed Development Layout 2
Figure 4 - Cinnamomum camphora (Camphor laurel) on the nature strip of the site. 3
Figure 3 - Cinnamomum camphora (Camphor laurel) on site..... 3
Figure 5 - Typical diagram of a tree protection zone and structural root zone of a tree. 4
Figure 7- Hydro-vacuum excavation 4
Figure 6 - Examples of Hydro-vacuum excavation..... 4
Figure 8 - Vacuuming. 4
Figure 9 - Examples of Vacuum truck required. 4
Figure 10 - Encroachment. 4
Figure 11 - Examples of trunk, branch, and ground protection as per AS 4970-2009 ... 5
Figure 12 – Example signage for tree protection..... 6
Figure 13– Examples of tree protection fencing..... 6
Figure 14- Webbing tree protection fencing. 6
Figure 15 - Location of tree protection fencing..... 7

Attachments

Attachment 1 – Tree Assessment Data Table..... 8
Attachment 2 – Tree Significance Criteria..... 20
Attachment 3 – Tree Retention Value – Priority Matrix 20
Attachment 4 – Tree Az Categories..... 21
Attachment 5 – Tree Plans - ULE Plan, AZ Plan and Retain and Remove Plan 25



Figure 1 – Site location.



The proposed development at Faunce and Young Streets, West Gosford consists of 13 lots as seen in Figure 1.

Street trees identified for removal are not proposed for removal as part of this application. The removal of the street trees is shown for assessment purposes not for approval. A separate approval will be obtained under section 138 of the Roads Act 1993 for the removal of the street trees identified for removal.

The site is opposite the Gosford Entertainment complex owned by racing New South Wales.

The site is used as a parking ground during events, monthly. The remaining parts of the site consist of unmaintained heavy shrubs including lantana and black berry, along with saplings of *Casuarina glauca* and *Camphor laurel*.

The following survey and assessments were undertaken on Wednesday, 30 November 2022 and also Thursday, 1 December 2022 with respect to each tree.

The assessments conducted in this report adhere to the guidelines outlined in the Australian Standard AS4970-2009 – Protection of Trees on Development Sites, and the terminology used is consistent with this standard.

The survey and assessments were conducted during multiple visits on Wednesday, 30 November 2022 and also Thursday, 1 December 2022 with respect to each tree inspected.

The assessment process considered the following aspects for each of 142 trees:

- Comprehensive site assessment
- Identification of all assessed trees on the property, including their species, size, overall condition, and location.

Structural integrity evaluation

- Careful examination of each tree from the ground to assess its structural integrity.
- Evaluation of the trunk, branches, and identification of any signs of decay or damage.
- Assessment of the tree's stability, considering factors that may affect its health and condition.

Measurement

- **Basal and diameter at breast height (DBH)** using a DBH measuring tape. An assessment was undertaken to assess the determination of canopy spread, height and vigour.

Health and useful life expectancy assessment

- An assessment was undertaken to evaluate each tree's health and a determination of its Useful Life Expectancy (ULE rating) was made.

Significance assessment

- The Significance assessment was undertaken using the STARS methodology.

Tree retention and removal plans

Each tree was assessed to identify:

- Impact on the trees by the proposed development works.
- Development of plans for tree retention and removal.

Tree tagging and location plotting.

The method for tagging trees involves:

- Attachment of a metal tag embossed with a unique tree number (e.g., T001, T002, etc.) to each tree.
- Use of a handheld Trimble GPS unit to plot the location of each tree, considering GPS accuracy at the time of survey.

By following this methodology, a comprehensive Arboriculture Impact Assessment was conducted, providing detailed information about the trees on the property and their potential interactions with the proposed development.



Note: Works within the road reserve are shown for assessment purposes only and not for approval.

TREE CONDITION AND LIFE EXPECTANCY

Condition

The assessment of tree condition is undertaken by visual inspection of the tree and takes into account the condition of the roots, trunk, branches, foliage, previous pruning, pests, disease, nesting hollows, fauna scratching's, previous damage and the surrounding environment that may influence the condition of the tree.

Useful life expectancy (ULE)

The condition information is used to determine the Useful Life Expectancy (ULE) of each tree and takes into account the age of the tree, the life span of the species, local environmental conditions, recent climactic conditions, estimated life expectancy, the location of the tree and safety of persons and property.

The ULE methodology takes into account whether a tree can be retained with an acceptable level of risk based on the information available at the time of inspection. A ULE assessment is not static as it relates to the tree's health and the surrounding conditions. Whilst it is recognised that changes to the tree's condition will affect the assessment, changes to the surrounding environment may result in changes to the ULE assessment.

Table 1 – Useful Life Expectancy (ULE) (Barrell, 2009)

Category	Description
1	Long: Life span greater than 40 years
2	Medium: Life span from 15 to 40 years
3	Short: Life span from 5 to 15 years
4	Remove: Should be removed within 5 years

TREE SIGNIFICANCE

Environmental significance

Trees need to be considered with regard to the overall environment and are subject to specific legislation such as:

- Biodiversity Conservation Act (NSW) 2016,
- Environmental Protection and Biodiversity Conservation Act (Commonwealth) 1999,
- Biosecurity Act (NSW) 2015, and
- Environmental Pest Species.

Biodiversity Conservation Act (NSW) 2016

The Schedules of the BC Act_list a number of species, populations and ecological communities that are classified as critically endangered, endangered, or vulnerable. Where a site is not Biodiversity Certified, the proposal typically needs to be assessed by a biodiversity development assessment report (BDAR) to accompany a development proposal. The proposal may require offsetting through the Biodiversity Offset Scheme if a) the proposal impacts biodiversity lands mapped by DPIE, b) the proposal impacts above nominated threshold areas, or c) a test of significance identifies a significant impact. The subject site is not Biodiversity Certified.

Environmental Protection and Biodiversity Conservation Act (Commonwealth) 1999

The Schedules of the EPBC Act list a number of species and ecological communities that are classified as critically endangered, endangered, or vulnerable. The EPBC Act requires the preparation of an impact assessment if an activity or development is likely to have an effect on species or ecological communities listed in the schedules of the EPBC Act.

Biosecurity Act (NSW) 2015

There are a number of pest or exotic species that are listed within specific regions within the NSW Biosecurity Act. These listings contain detailed descriptions of each listed species, their habitat and reproductive attributes and the recommended control or eradication methods as well as actions required with regard to reporting, transport, or sale of each species.

Environmental Pest Species

There are a number of environmental pest species that are not listed in the BC Act (2016), the EPBC Act (1999), or the Biosecurity Act (2015). These species commonly cause problems within or adjacent to developed or urban areas. These species can have aggressive, fast growing, or fast reproduction attributes which replaces other species. They can have destructive root systems which cause damage to pipes, structures, foundations, and services. Some environmental pest species can be undesirable within natural bushland areas by degrading and / or dominating habitats and reducing natural biodiversity. Environmental pest species are not classified as noxious but are recognised by Councils and other authorities as pest species and in many cases are exempt from protection under Council's Tree Preservation Orders.

Cinnamomum camphora (Camphor laurel) is in abundance on site.



Figure 3 - Cinnamomum camphora (Camphor laurel) on site



Figure 4 - Cinnamomum camphora (Camphor laurel) on the nature strip of the site.

SIGNIFICANCE TREE ASSESSMENT RATING SYSTEM (STARS)

The Institute of Australian Consulting Arboriculturists (IACA) has introduced the Significance of a Tree Assessment Rating System (STARS) to evaluate the landscape significance of trees. This rating system employs structured qualitative criteria to aid in determining the retention value of a tree. The STARS Assessment consists of two phases. The initial phase involves assessing tree attributes categorised as High, Medium, or Low. Following this, Attachment 3 – Tree Retention Value – Priority Matrix is utilised to establish priorities for removal and retention.

For a comprehensive understanding of STARS, refer to Attachment 2 – Tree Assessment Rating System (STARS), which provides a detailed overview of the methodology. The integration of this system into the tree report underscores our commitment to a thorough and standardised assessment, ensuring that tree significance is comprehensively recognised and integrated into broader environmental and community considerations.

Landscape Significance

The significance of a tree regarding the landscape is generally assessed as one of the following:

- Significant – Prominent from a broad landscape perspective.
- High – Prominent from a neighbourhood perspective
- Medium – prominent from adjacent areas surrounding the site, and
- Low – prominent from a site perspective only.

Once the landscape significance of an individual tree has been assessed, its retention value can be determined. The landscape rating for each tree can be located in Attachment 1 – Tree Assessment Data Table.

Visual significance

Visual significance is evaluated by comparing specific tree attributes to the average values of other trees within the broader vicinity. A tree that surpasses the average measurements for attributes such as height, girth, or canopy spread is classified as 'of Visual Significance.' Additionally, the assessment of a particular tree's visual significance may consider other parameters, including girth, canopy spread, overall health, aesthetic appearance, or its location (e.g., atop a hill or serving as the centrepiece of a formal garden). These parameters can also be considered in combination, such as a tree exhibiting exceptional height, broad spread, and excellent form in a prominent location.

The criteria for categorising trees based on their visual significance are typically as follows:

- **Rating 3: High Significance Rating:** Typically native, however not limited to, trees with a height exceeding 20 meters, a canopy spread greater than 15 meters, and a diameter at breast height (DBH) exceeding 60 cm. These are often large, emergent trees that prominently stand out.
- **Rating 2: Moderate Significance:** Typically, but not limited to, trees with heights ranging from 10 to 20 meters, canopy spreads between 5 to 15 meters, and a DBH in the range of 20 to 50 cm. These trees are typically prominent, characterised by a substantial canopy spread.
- **Rating 1: Low Significance:** Typically, but not limited to, trees with heights up to 10 meters, canopy spreads exceeding 5 meters, and a DBH greater than 20 cm, but not meeting the criteria for high or moderate significance. This also may include all exotic species and or weed species.

This classification system helps in recognising and preserving trees that hold visual importance within their surroundings, contributing to the overall aesthetics and environmental quality of the area.

All tree data can be sourced in the tree Data table.

Habitat trees

A habitat tree assessment was not undertaken, however in general, if any hollows are observed in specific trees during the AIA, generally they are noted in the tree data table. In the AIA site assessment.

Habitat trees play a vital role in fostering biodiversity and maintaining ecological balance within ecosystems. These trees, often characterised by the presence of cavities or hollows, provide essential shelter and nesting sites for a wide range of wildlife species. These hollows serve as a safe haven for birds, mammals, insects, and even reptiles, offering protection from predators and harsh environmental conditions. Old and mature trees are more likely to develop these hollows, making them invaluable reservoirs of life in various landscapes.

The importance of habitat trees extends beyond individual species, influencing entire ecosystems. The hollows within these trees create microhabitats that can support entire communities of organisms. Birds like owls, parrots, and kookaburras, along with possums, bats, and various insects, all rely on these hollows for nesting, roosting, and breeding. By providing these sanctuaries, habitat trees contribute to population stability and genetic diversity, which are critical factors in ensuring long-term species survival.

DEVELOPMENT PLANNING AND TREE PROTECTION ZONES

Tree protection setbacks

Development footprints which impact on more than 10% of a Tree Protection Zone (TPZ) will usually require the removal of that tree. Development footprints shall be located away from retained trees such that adequate clearances are provided for the Tree Protection Zone (TPZ) and there is nil encroachment upon the Structural Root Zone (SRZ).

Disturbance within the TPZ can be detrimental to the tree's root system and in turn affect the stability, health, and condition of the tree.

Major encroachments into tree protection zones

Where the proposed development activity is greater than the 10% loss of TPZ area (m2), the activity is considered to be a major encroachment into the TPZ.



2–10 Faunce Street, West Gosford	18 July 2024 (REF-URB09)	Page 3 of 24
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Where major encroachments are to occur within the TPZ of trees intended to be retained, it must be demonstrated that the works or activities will not have any significant impact upon the health and condition of the tree. To demonstrate this, detailed root mapping investigation by non-invasive methods may be necessary. Other factors such as age class, health, vigour, trunk lean, disturbance tolerance of the species, and building design may need to be taken into account in the arboriculture assessment.

Where major encroachments are proposed to occur into the TPZ then the Structural Root Zone (SRZ) of the tree will also be taken into account and avoided if possible.

Where trees have multiple trunks, an assessment needs to consider the number and diameter of each trunk. Based upon the *Australian Standard for Protection of Trees on Development Sites*, AS 4970-2009, the Diameter at Breast Height (DBH) of multi-trunk trees is calculated by:

$$DBH = \sqrt{(DBH_1)^2 + (DBH_2)^2 + (DBH_3)^2}$$

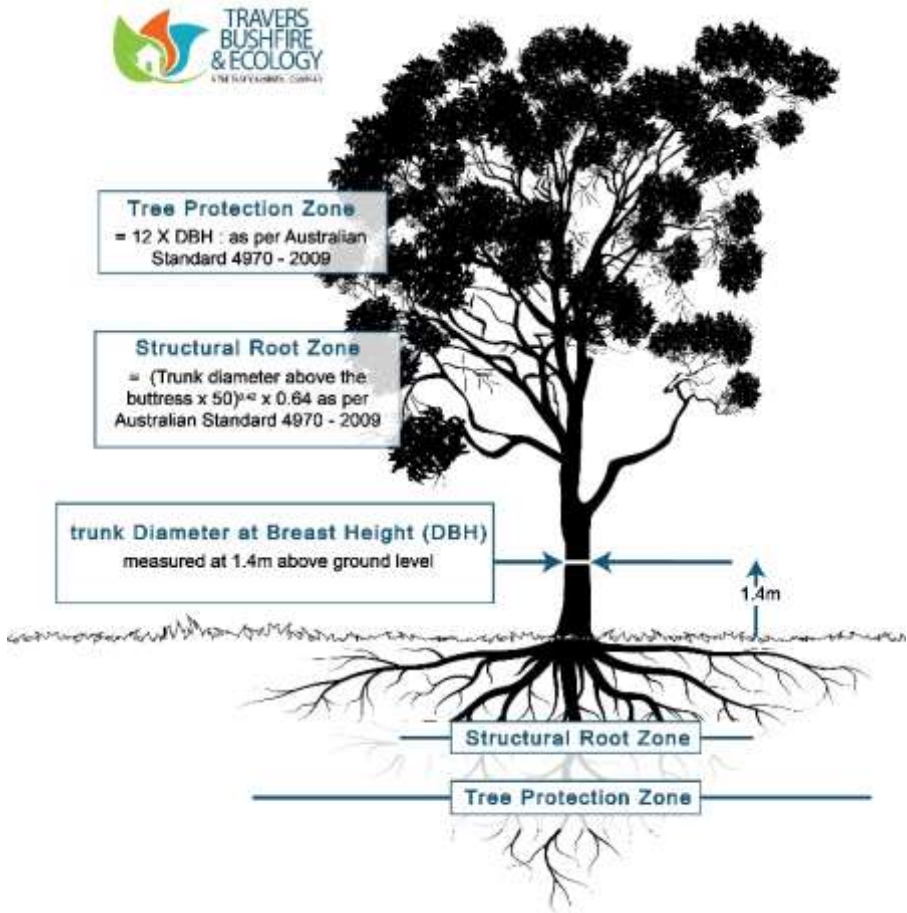


Figure 5 - Typical diagram of a tree protection zone and structural root zone of a tree. (Source: AS 4970-2009)

DEVELOPMENT CONSTRUCTION AROUND TREES

Construction Methods

For effective tree preservation during construction activities, it is crucial to implement a comprehensive strategy that includes the identification and marking of Tree Protection Zones (TPZ) around each tree on the site. This ensures a clear demarcation to safeguard the trees throughout the construction process. Additionally, employing selective construction methods is essential, utilising lightweight machinery, hand tools, and alternative construction techniques to minimise ground disturbance within TPZ and reduce the impact on root systems.

When designing retaining walls along site boundaries, collaboration with an engineer is paramount. The design should not only prioritise stability but also harmonise with the natural environment, considering the lay of the land. The choice of construction materials plays a significant role in this process, as selecting materials that are both structurally sound and visually compatible with the surrounding landscape contributes to the overall success of the project.

To address potential issues related to water buildup behind retaining walls, it is essential to incorporate proper drainage systems. These systems help prevent water

accumulation, thereby minimising the potential impact on tree roots and ensuring the long-term stability of the retaining structures. Also, if applicable to the project, incorporating terracing into the design of retaining walls can be beneficial. Terracing helps minimise visual impact, providing an aesthetically pleasing solution while also distributing loads evenly, further supporting the preservation of the natural environment.

Construction Tools and Implementation

When conducting manual excavation near trees, it is imperative to employ meticulous methods that prioritise the safeguarding of tree roots. Hand digging, utilising tools such as shovels and spades, allows for the gradual removal of soil around the tree, exposing roots with care. Air spading, employing compressed air to gently blow away soil, is particularly effective in urban environments, minimising the risk of damage to delicate roots. Root collar excavation focuses on the area around the tree's root collar, revealing the root flare without causing harm to the critical root zone.

For precision in handling small roots, hand-held tools like root pruners or saws can be used to make precise cuts, minimising the overall impact on tree health. This practice should only be conducted by a qualified arborist. Hydro-vacuum excavation involves using water pressure to loosen soil, followed by vacuuming it away, reducing the risk of root injury. Hand grubbing requires meticulous manual removal of soil around roots to prevent tearing or damage.

To further protect tree roots during excavation, the use of protective matting or padding, such as plywood or rubber mats, helps distribute weight and minimizes soil compaction. After excavation, backfilling with a mix of soil and organic matter, along with the application of mulch, serves to protect roots and promote moisture retention.

It is crucial to consistently prioritise the preservation of the root system, adhering to arboriculture best practices to minimise the potential for damage. Seeking consultation with a certified arborist before initiating excavation work around trees is advisable to ensure the well-being of the tree.



Figure 6 - Examples of Hydro-vacuum excava Figure 7- Hydro-vacuum excavation.



Figure 8 - Vacuuming. Figure 9 - Examples of Vacuum truck required. Source photos 4,5,6 and 7 TREX service excavations. Website

DEVELOPMENT DESIGN AND TREE PROTECTION ZONES.

Where trees are proposed for retention, the development footprint must avoid the TPZ around trees. This TPZ is set aside for the protection of the tree (or group of trees) as it is essential for the stability and longevity of the tree/s. Existing soil levels should be retained within the TPZ. The TPZ is often delineated by a temporary fence during the construction phase of the project.

Based upon the *Australian Standard for Protection of Trees on Development Sites* (AS 4970-2009), the radius of the TPZ for a single tree is calculated as: TPZ = 12 x DBH.

Developments within the tree protection zone

Minor encroachments into tree protection zones

Based upon AS4970-2009 some minor development encroachments can occur within the calculated TPZ provided that:

- No more than 10% of the area (m²) of the TPZ is removed.
- The area to be removed is outside the SRZ, and
- The area (m²) to be removed or disturbed is compensated by increasing the TPZ radius in other directions so that there is no net loss in area (m²) of the original calculated Tree Protection Zone (TPZ).

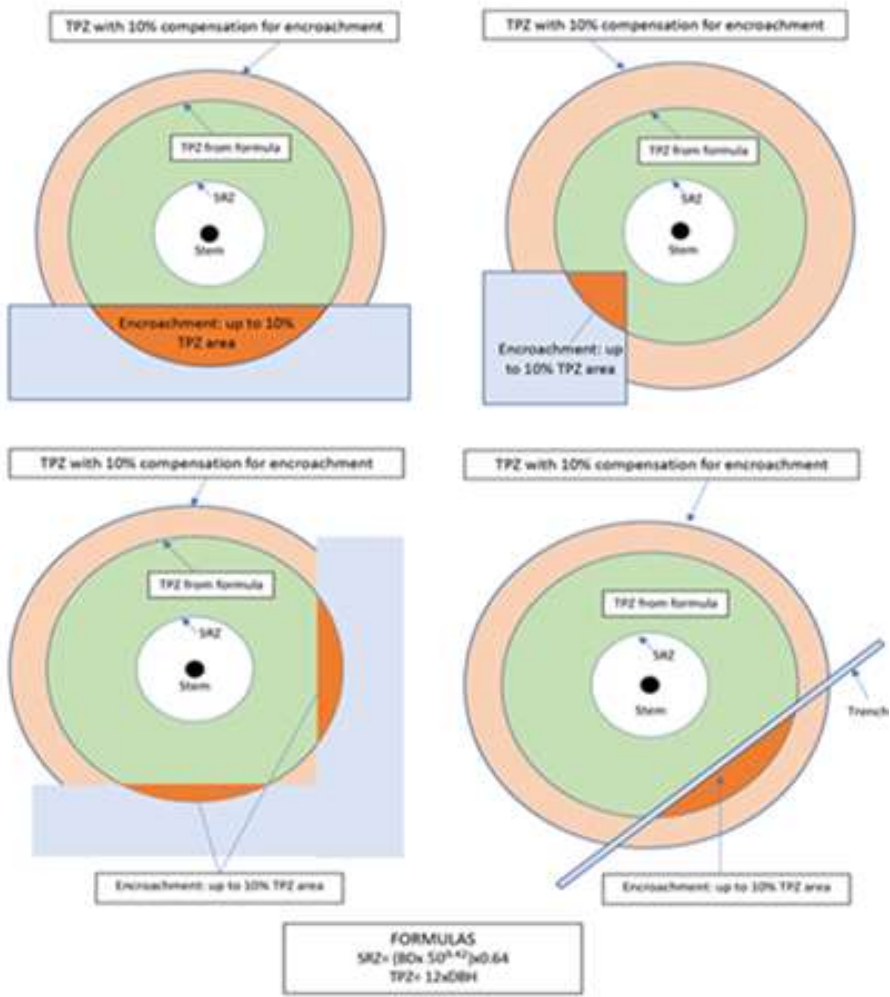


Figure 10 - Encroachment. (Source AS 4970-2009)



2–10 Faunce Street, West Gosford

18 July 2024
(REF-URB09)

Page 4 of 24

TREE PROTECTION MEASURES

To determine the SRZ and TPZ, the following is applied in accordance with Australian Standard AS 4970 – 2009 – Amendment 1-2010.

The tree protection zone (TPZ) radius is measured by the DBH x 12 (Australian Standard AS 4970 – 2009), where the DBH is the trunk diameter measured at 1.4 m above the ground. A TPZ should not be less than 2 m or greater than 15 m (except where crown protection is required). Clause 3.3 covers variations to the TPZ. The TPZ of palms, other monocots, cycads and tree ferns should not be less than 1 m outside the crown projection.

The structural root zone (SRZ) is the area which is required to maintain a tree’s stability. The SRZ is measured as:

SRZ radius = (BD × 50)^{0.42} × 0.64 where BD is the basal trunk diameter, in metres, measured above the root buttress. If BD is 50 cm, then the SRZ would be 2.47 m.

During the survey, DBH was measured for each tree to allow for TPZ to be calculated should the tree be retained as part of the future landscaping.

The SRZ and TPZ calculated for each of the trees assessed within the study area are provided in Attachment 1.

When working in close proximity of any tree to be retained or the nominated TPZ located within or adjacent to potential development areas, the following general management principles should be adopted:

- earthworks around subject trees are to be undertaken in the presence of an AQ5-certified arborist who may provide additional on-site advice.
- machine digging within the root mass of the subject tree (or trees) is to be minimised and, where possible, replaced by hand digging.
- any exposed roots of the subject tree should be wrapped and protected during exposure and be replaced in a similar position prior to disturbance.
- inspection of retained trees by an AQ5-certified arborist should be conducted annually to 3 years after development completion.

Any retained tree on site will require protection both during and after development construction, applying the following tree protection guidelines:

The following guidelines are proposed in relation to any trees that may be retained within or adjacent to the proposed works area:

- i. Installation of a TPZ will be required surrounding any retained tree or group of trees. This TPZ can generally be provided by preserving an area equivalent to that shown in Attachment 1. A SRZ will apply to all retained trees in close proximity to work areas. No more than 10% of the TPZ should be impacted by earthworks with no infiltration into the SRZ. The TPZ is to be compensated elsewhere on the impacted tree to compensate for the loss of small areas of the TPZ. This is achieved by increasing the TPZ to an equivalent area to the area of impacted TPZ (Figure 4).
- ii. Trees to be retained, and in close proximity to any works, are to be protected by temporary fencing. Such temporary fencing can be constructed from plastic mesh, post and wire or temporary chain link fence panels. All fence posts and supports are to be located clear of the roots and have sufficient strength to support the fence without bending or collapsing. TPZs in close proximity to proposed works are to be marked and sign posted. The protection fencing is not to be removed or altered without the approval an appointed arborist. TPZ fencing is to be inspected on a regular basis and maintained in good condition.
- iii. All trees nominated for removal are to be removed only after the temporary fencing of the trees to be retained has been completed and prior to any construction activity or bulk earthworks. Approved tree removal operations in the vicinity of retained trees are to be undertaken in a manner that avoids canopy or root damage and / or soil compaction to any TPZ associated with any retained tree. Such works should be supervised by a qualified arborist.
- iv. Stumps are to be ground not dozed or dug out unless they impact on the installation of services, roads or building works.
- v. All excavation including but not limited to trenches, footings and major earth movement are to be avoided within TPZs.
- vi. Stockpiling materials and soils within TPZs are to be avoided.
- vii. All machinery and vehicles are to be excluded from TPZs during all operations.
- viii. Where the proposed works are likely to cause excessive dust generation, the tree is to be protected with shade cloth on the tree protection fence to minimise dust collection on the leaves.
- ix. The following activities prohibited within TPZs includes but is not limited to:
 - machine excavation (including trenching)
 - excavation for silt fencing
 - cultivation
 - storage
 - preparation of chemicals, including cement products
 - parking of vehicles or plant
 - refuelling

- dumping of waste
 - refuelling
 - wash down or cleaning of equipment
 - placement of fill
 - lighting of fires
 - soil level changes
 - temporary or permanent installation of signs
 - Physical damage to trees.
- x. Any works undertaken within TPZs are to be supervised and certified (photographed and documented) by a qualified arborist.
 - xi. Where advised by the arborist, trunk, and branch protection (Figure 5) is to be installed to a minimum height of 2 m using materials and positioning as advised by an appointed arborist.
 - xii. Where advised by the arborist, other temporary root protection measures (Figure 13) such as thick mulch (50-100 mm deep) or crushed rock below rumble boards, are to be installed to prevent root damage and soil compaction within the TPZ.
 - xiii. Scaffolding is to be erected outside of the TPZ, where unavoidable, protection measures are to be specified by the appointed arborist.
 - xiv. All services are to be routed outside of the TPZ. Where not possible the arborist will specify directional drilling (at least 600 mm deep) or manual excavation to avoid impacted on the in-situ roots subject to the works and potential root damage.
 - xv. If pruning is required it is to be undertaken by an arborist in accordance with AS4373 to prevent structural damage, disease, and poor form.

General tree protection measures during construction

Prior to earthworks or construction, the removal of the trees identified for removal should be undertaken with particular attention given to ensure that no damage occurs to any part of the retained trees such as canopy foliage, branches, trunk or SRZ.

Prior to demolition or earthworks, secure protective fencing is to be erected around individual trees or groups of trees that have been identified as being retained. This fencing shall be located no closer than the extent of the TPZ of each retained tree (refer to the Tree Retention and Removal Plan). Where the structure to be demolished is within the TPZ the protective fencing shall be aligned to be a maximum of 0.5 m away from the structure to be demolished.

Where the approved construction footprints encroach into the TPZ, protective fencing must be aligned no further than 0.5 m away from the proposed structure or footprint.

The purpose of the fencing is to protect the tree roots, trunk, and branches, and to minimise detrimental impacts on the trees during demolition and construction. Fencing shall be 1.8 m high chain mesh material securely fixed to steel supporting posts with top and bottom strainer top or steel pipe rails. Chain-link fencing panels are acceptable but must have connectors top and bottom to each adjoining panel.

The site supervisor shall ensure that at all times during site works that no activities, stockpiles, storage, disposal of materials, vehicle access or vehicle and machinery parking shall take place within the areas encompassed by the tree protection fencing. The site supervisor shall also ensure that the protective fences remain secure throughout the development work period.

Construction scaffolding can be erected within the tree protection fencing provided that each of the weight distribution points are spread over a minimum of 2 m² and these points are over existing soil levels to avoid soil compaction.

Trees shall be inspected at regular intervals by the project arborist or at critical stages during the demolition and construction stages to identify signs of stress and recommend remedial action such as mulching and irrigation.

Specific excavation for services that require critical fall (e.g., sewer, stormwater) may be undertaken within the tree protection fencing provided that trenching is dug using hand tools, thrust or directional boring or vacuum excavation, and tree roots are not severed unless they spatially conflict with the installed pipes. This work within the tree protection fencing must be carried out under the instructions from an experienced and suitably qualified project arborist.

All access within the tree protection fencing for temporary and permanent works must be carried out under the instruction of an experienced and suitably qualified project arborist.

Tree protection fencing must remain in a functional condition throughout the demolition and construction works and can only be removed to allow for works identified in the landscape plan.

Landscape works in the vicinity of retained trees must be sympathetic to tree retention and existing ground levels within the TPZ. The natural ground contours and depth within TPZs located outside of the construction or earthworks footprint must remain unchanged.



2–10 Faunce Street, West Gosford

18 July 2024
(REF-URB09)

Page 5 of 24

Any tree damage that occurs to trees or tree roots during site works is to be treated by an experienced and suitably qualified arborist. Where branch pruning works are required, all pruning works including the removal of deadwood are to be undertaken in accordance with Australian Standard AS 4373-1996 – Pruning of Amenity Trees and the work is to be undertaken by an experienced and suitably qualified arborist.

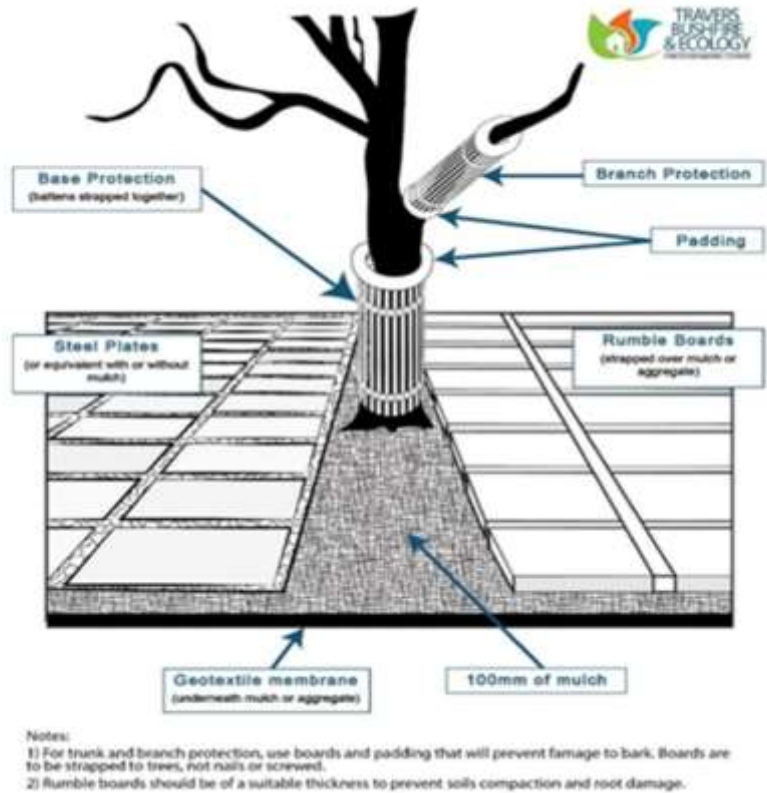


Figure 11 - Examples of trunk, branch, and ground protection as per AS 4970-2009

Tree protection fencing

Temporary tree protection fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works (including demolition and bulk earthworks). Once erected, protective fencing must not be removed or altered without approval by the project arborist. The fencing is to be fully secured to restrict access onto the protected root zone.

AS 4687 specifies applicable fencing requirements. Installed construction fencing on the recommended alignment of the TPZ fencing can be installed as part of the protective fencing.

For construction crews, signage identifying the TPZ shall be placed at 10 m intervals along the TPZ barrier fencing. These signs will face towards the development site and shall have lettering that complies with AS 1319. These signs will also specify the severe penalties for harming the TPZ in any way.

TPZ barrier fencing is to be inspected on a regular basis and maintained in good condition. Any works within the mapped TPZs is to be supervised (for excavation works) or under the direction of an AQ5 qualified arborist to limit damage to root zones and to install additional root, trunk, and branch protection measures.



Figure 12 – Example signage for tree protection.



Figure 13– Examples of tree protection fencing.



Figure 14-Webbing tree protection fencing.

CONCLUSION

In summary, the comprehensive evaluation, carried out in accordance with the Australian Standard AS 4970-2009, has yielded valuable insights into the 142 trees situated within the designated development zone at the intersection of Faunce and Young Street in West Gosford. Notably, 87 trees have been identified for removal on the site and 3 off sites, due to factors such as design encroachment and their classification as weed species. street trees identified for removal are not proposed for removal as part of this application. The removal of the street trees is shown for assessment purposes not for approval. A separate approval will be obtained under section 138 of the Roads Act 1993 for the removal of the street trees identified for removal.

For a more in-depth understanding of each tree's status, please refer to Attachment 1 – Tree Assessment Data Table. Additionally, the retain-remove chart below provides a clear percentage-based overview of the retain and remove figures for the site.

To enhance preservation efforts and align with sustainable practices, it is strongly recommended to incorporate Hydro-vacuum excavation as the preferred method for the construction of the retaining wall. Hydro-vacuum excavation, with its non-invasive nature and precision, would significantly reduce the risk of harm to tree roots, especially given the sensitivity of the site with numerous retained trees.

It is crucial to underscore those trees identified under the Biosecurity Act (NSW) 2015, specifically *Cinnamomum camphora* (Camphor laurel), will be removed from the site. Majority of council-managed trees are slated for retention. While Trees128,131,132 and 133 are Council managed cluster of trees situated at the two entrances of the design, will impact from the development, they are the only council tree requiring removal.

Tree 110, located in the northwest corner, and Tree 123 on the eastern boundary both exhibit an encroachment level exceeding 10%. However, the impact on these trees is mitigated by the topography of the land. They are expected to remain unaffected and viable for retention in the long term, thanks to the implementation of construction methods and the confirmation that the lay of the land will minimally impact their roots from the proposed retaining wall. This strategic approach of selective retention and removal aligns with the commitment to preserving the local tree canopy while responsibly addressing the requirements of the proposed development. It is noteworthy that the lay of the land, particularly on the eastern end of the site, would ensure mitigation of encroachment into root zones. This natural topography contributes to minimising potential impacts on the trees during the development process.

Importantly, all retained trees are viable for the long term; however, they will require protection during construction. This consideration underscores the commitment to ensuring the health and longevity of the retained trees, emphasising the need for protective measures during the development process so that the trees can remain viable for the future.

In summary, this thorough assessment, guided by AS 4970-2009 standards, underscores the careful consideration given to tree preservation, with a focus on retaining council-managed trees and mitigating the impact on significant species within the proposed development site. It is noteworthy that, as per the prescribed standards for sustainable tree preservation, incorporating Hydro-vacuum excavation further aligns with these preservation efforts, promoting responsible construction practices. These construction techniques will partially mitigate the impact on trees that may experience minor encroachment.

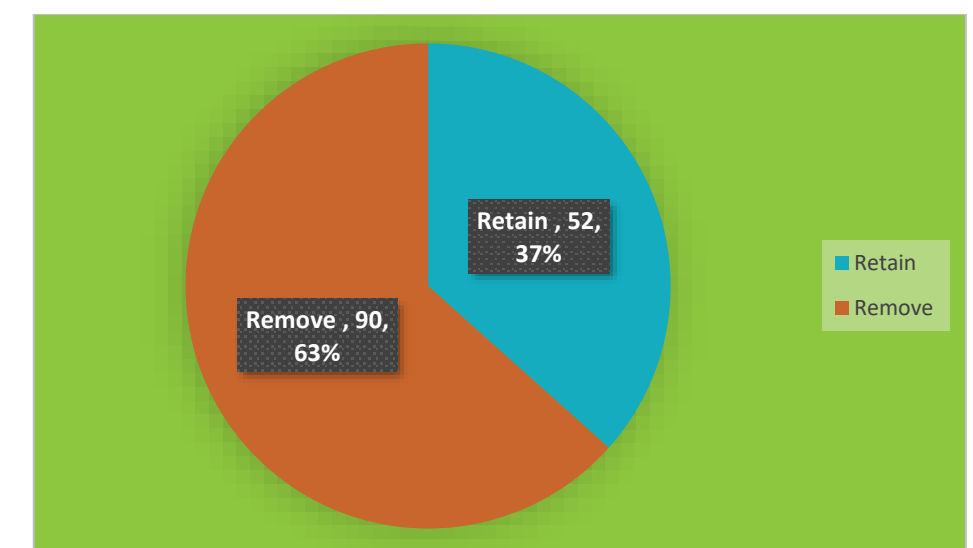
Table 2-SULE table.

	SULE Rating	Landscape Significance.	Medium Landscape Significance.	High Landscape Significance
Condition	SULE 1	19	72	10
	SULE 2	19	2	0
	SULE 3	8	0	0
	SULE 4	12	0	0

RECOMMENDATIONS

Based on the comprehensive Arboriculture Impact Assessment conducted in accordance with the Australian Standard AS 4970-2009 for the property at the corner of Faunce and Young Street, West Gosford, several key recommendations are proposed. Firstly, it is advised to proceed with the removal of identified trees earmarked for removal, taking into consideration ecological impact and design constraints. Additionally, a systematic approach for the removal of identified weed species should be implemented, with proper disposal methods and adherence to environmental regulations. During the construction phase, the development of a comprehensive Tree Protection Plan (TPP) is crucial to safeguard all retained trees, utilising appropriate barriers, fencing, and signage. Establishing a long-term maintenance program for all retained trees is recommended to ensure their viability, including regular monitoring, pruning, and necessary remedial actions. Community engagement to communicate the importance of tree preservation and regular monitoring and reporting of retained trees' health are essential. Ongoing consultation with local authorities, adherence to Biosecurity Act (NSW) 2015 requirements, and engagement with a qualified arborist for continuous guidance throughout the development process are also advised. These recommendations aim to balance development objectives with the preservation of the local tree canopy, ensuring compliance with standards and regulations while promoting sustainable arboriculture practices.

Table 3-Retain/Remove chart 87 on site.



Note street trees identified for removal are not proposed for removal as part of this application. The removal of the street trees is shown for assessment purposes not for approval. A separate approval will be obtained under section 138 of the Roads Act 1993 for the removal of the street trees identified for removal.



2–10 Faunce Street, West Gosford

18 July 2024
(REF-URB09)

Page 6 of 24

ARBORICULTURE IMPACT ASSESSMENT REPORT

TREE PROTECTION PLAN

Tree Identification:

- Identify and mark all significant trees within the construction area.
- Include information on species, health status, and structural condition.

Exclusion Zone:

- Establish an exclusion zone around each significant tree, extending beyond the canopy drip line.
- No construction activities or storage allowed within this zone.

Protective Fencing (Figure 15):

- Install a sturdy, visible fence around the exclusion zone.
- Utilise orange safety fencing or similar material.
- Clearly display warning signs about the importance of tree protection.

Excavation Methods:

- Utilise hand excavation methods within the exclusion zone to prevent root damage.
- Minimise soil compaction by using low-impact equipment.
- Implement careful grading techniques to avoid disruption to the root system.

Root Protection:

- Prior to excavation, consult with an arborist to identify critical root zones.
- Implement root pruning only under the guidance of a qualified arborist.
- Apply a root barrier to protect roots within the construction area.

Mulching:

- Apply a layer of organic mulch around the base of each tree within the exclusion zone.
- Mulch helps retain soil moisture, regulates temperature, and protects roots from compaction.

Retaining Wall Design:

- Design the retaining wall with consideration for the existing topography and tree locations.
- Ensure the design minimises the need for extensive excavation or grading near trees.

Material and Equipment Storage:

- Place construction materials and equipment outside the exclusion zone.
- Designate a separate area for storage to avoid potential damage to roots.

Monitoring and Inspection:

- Regularly inspect trees for signs of stress or damage.
- Adjust construction methods if any issues are identified.
- Engage an arborist for periodic assessments and recommendations.

Contingency Plan:

- Develop a contingency plan to address unforeseen challenges or changes in construction plans.
- Ensure flexibility to adapt methods to protect trees based on evolving circumstances.

Compliance:

- Monitor and ensure compliance with the Tree Protection Plan throughout the construction process
- Non-compliance may result in fines or legal consequences.

Communication:

- Maintain open communication with construction personnel, subcontractors, and arborists.
- Educate all involved parties about the importance of tree protection.

Post-Construction Care:

- Implement post-construction care measures, including additional mulching and possible fertilisation.
- Monitor trees for an extended period after construction to assess their recovery.

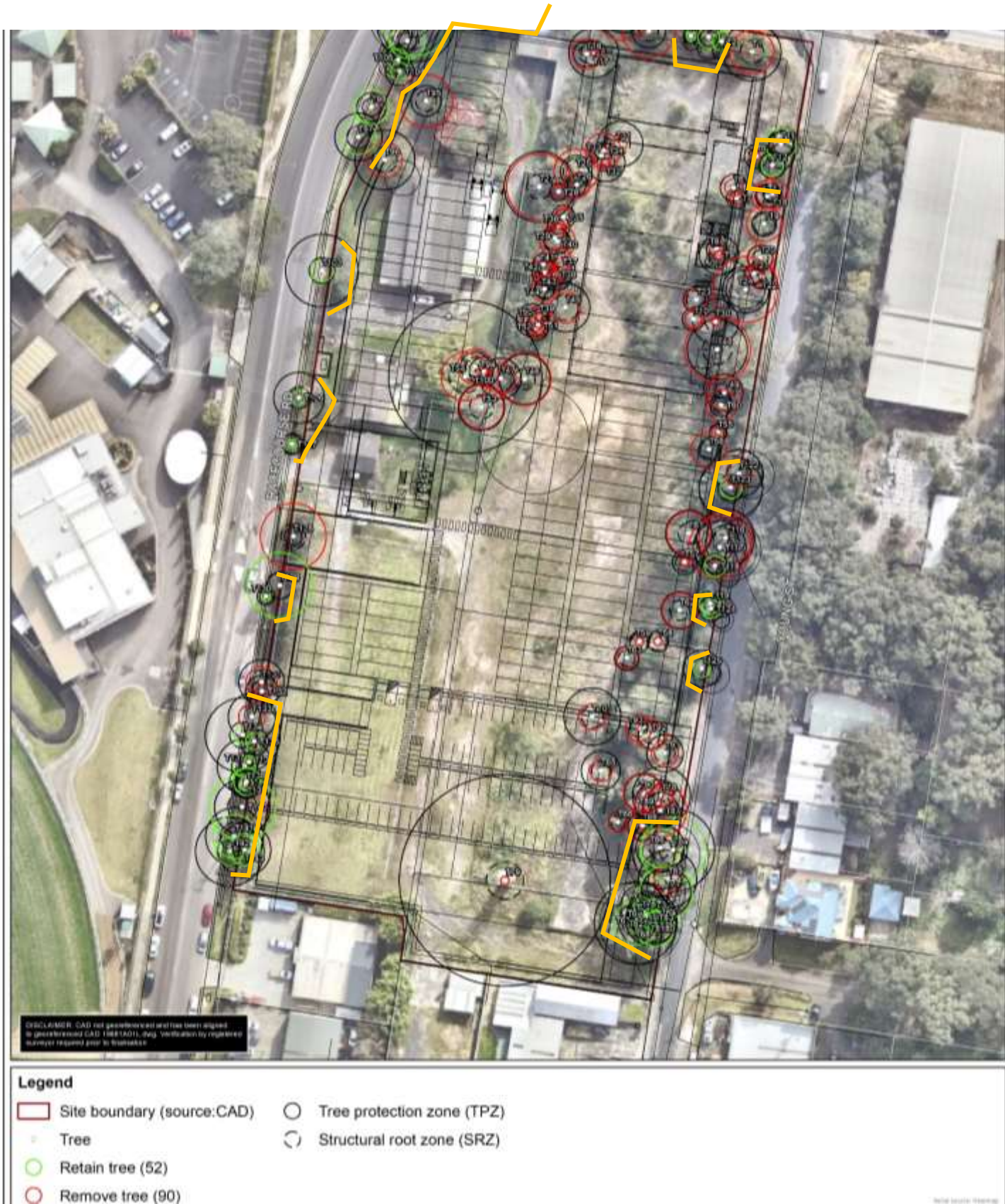


Figure 15 - Location of tree protection fencing.

ATTACHMENT 1 – TREE ASSESSMENT DATA TABLE

Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T001	Camphor laurel	<i>Cinnamomum camphora</i>	0.55	60	6	10	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	6.600	2.670	Remove	Weed	right on fence line
T002	Cheese tree	<i>Glochidion ferdinandi</i>	0.17	25	4	4	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	2.040	1.849	Retain		next to fence, multi stem
T003	Cheese tree	<i>Glochidion ferdinandi</i>	0.70	62	6	5	50	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Very low	2.000	2.707	Retain		tree split down trunk, dead lower branches
T004	Cheese tree	<i>Glochidion ferdinandi</i>	0.15	16	3	2	70	2c - 40+yrs but others more suitable	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	2.000	1.533	Retain		other trees adjacent are bigger and taking sunlight. others may benefit from removal
T005	Coast banksia	<i>Banksia integrifolia</i>	0.22	24	5	2	85	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.640	1.817	Remove	Footprint	growing on a slight angle due to slope
T006	Cheese tree	<i>Glochidion ferdinandi</i>	0.25	30	4	4	85	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.000	1.996	Remove	Footprint	no tag, estimated thick weeds at base
T007	Swamp oak	<i>Casuarina glauca</i>	0.19	21	8	3	80	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.280	1.718	Remove	Footprint	some lower dead branches, otherwise good overall
T008	Camphor laurel	<i>Cinnamomum camphora</i>	0.19	20	6	3	85	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Very low	2.280	1.683	Remove	Health/condition	weed, tree located directly behind is under size
T009	Camphor laurel	<i>Cinnamomum camphora</i>	0.37	40	9	2	50	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Very low	4.440	2.252	Remove	Health/condition	dead, dry leaves
T010	Swamp oak	<i>Casuarina glauca</i>	0.21	28	11	4	85	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.520	1.939	Remove	Footprint	overall good
T011	Cheese tree	<i>Glochidion ferdinandi</i>	0.23	87	8	7	0	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Low	2.760	3.121	Retain		
T012	Cheese tree	<i>Glochidion ferdinandi</i>	0.24	80	7	5	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Low	2.880	3.013	Retain		not tagged



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
TO13	Cheese tree	<i>Glochidion ferdinandi</i>	0.21	64	7	7	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Low	2.520	2.744	Remove	Health/condition	suckers
TO14	Camphor laurel	<i>Cinnamomum camphora</i>	0.32	38	8	12	88	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Medium	Medium	3.840	2.204	Remove	Footprint	
TO15	Camphor laurel	<i>Cinnamomum camphora</i>	0.35	51	10	12	88	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Medium	Medium	4.200	2.494	Remove	Footprint	
TO16	Camphor laurel	<i>Cinnamomum camphora</i>	0.25	25	12	7	88	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Medium	Medium	3.000	1.849	Remove	Footprint	down bank
TO17	Camphor laurel	<i>Cinnamomum camphora</i>	0.47	67	12	0.5	0	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	5.640	2.797	Remove	Weed	not tagged down bank
TO18	Sweet pittosporum	<i>Pittosporum undulatum</i>	0.17	21	5	7	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Low	2.040	1.718	Remove	Footprint	
TO19	Camphor laurel	<i>Cinnamomum camphora</i>	0.23	45	8	8	77	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	2.760	2.366	Remove	Weed	
TO20	Parramatta wattle	<i>Acacia parramattensis</i>	0.23	24	10	6	55	3b - 15+yrs but unsafe/nuisance	Z3 Unprotected species for other reasons	15-40yrs	Low	Low	2.760	1.817	Remove	Footprint	
TO21	Swamp oak	<i>Casuarina glauca</i>	0.19	23	12	4	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.280	1.785	Remove	Footprint	
TO22	Black wattle	<i>Acacia decurrens</i>	0.22	47	7	6	32	3b - 15+yrs but unsafe/nuisance	Z3 Unprotected species for other reasons	5-15yrs	Low	Low	2.640	2.410	Remove	Footprint	2 trees together
TO23	Swamp oak	<i>Casuarina glauca</i>	0.24	35	14	5	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.880	2.129	Remove	Footprint	
TO24	Swamp oak	<i>Casuarina glauca</i>	0.44	200	15	15	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	5.280	4.428	Remove	Footprint	group of trees offset not tagged on bank
TO25	Camphor laurel	<i>Cinnamomum camphora</i>	0.30	75	12	10	66	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	3.600	2.933	Remove	Weed	epicormic weed



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
TO26	Tea tree	Melaleuca alternifolia	0.18	55	7	6	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.160	2.575	Remove	Footprint	vine invasion
TO27	Liquidambar	Liquidambar styraciflua	0.67	67	8	15	44	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	>40yrs	Low	Low	8.040	2.797	Remove	Footprint	in decline offset not tagged on bank vine invasive
TO28	Cheese tree	Glochidion ferdinandi	0.16	17	8	3	55	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	5-15yrs	Low	Low	2.000	1.572	Remove	Footprint	suppressed in decline not tagged
TO29	Tea tree	Melaleuca alternifolia	0.23	55	8	5	55	1b - 40+ w remedial care	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.760	2.575	Remove	Footprint	vine invasive
T030	Swamp oak	Casuarina glauca	0.43	45	10	2	50	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Very low	5.160	2.366	Remove	Footprint	in decline, offset on bank - on access to tag
T031	Camphor laurel	Cinnamomum camphora	0.43	40	8	3	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	5.160	2.252	Remove	Footprint	weed, others would be better, weeds climbing tree
T032	Cheese tree	Glochidion ferdinandi	0.36	30	7	2	60	3c - 15+yrs but others more suitable	A2 Minor defects that could be addressed by remedial care	15-40yrs	Low	Low	4.320	1.996	Remove	Footprint	no tag, offset, heavily weed infested
T033	Cheese tree	Glochidion ferdinandi	0.33	45	6	4	85	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	2.366	Remove	Footprint	weeds surrounding base, no tag, offset due to unstable slope
T034	Cheese tree	Glochidion ferdinandi	0.32	30	7	8	70	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	1.996	Remove	Footprint	weeds weighing down branches (lantana)
T035	Tea tree	Melaleuca alternifolia	0.22	25	7	4	70	2c - 40+yrs but others more suitable	A2 Minor defects that could be addressed by remedial care	15-40yrs	Low	Low	2.640	1.849	Remove	Footprint	top of tree completely covered in weeds, heavy weeds at base
T036	Tea tree	Melaleuca alternifolia	0.21	22	4	3	70	2c - 40+yrs but others more suitable	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.520	1.752	Remove	Footprint	heavy weed, vine invasive
T037	Tea tree	Melaleuca alternifolia	0.24	35	9	4	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.880	2.129	Remove	Footprint	heavy weed



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T038	Tea tree	Melaleuca alternifolia	0.31	30	9	4	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	3.720	1.996	Remove	Footprint	heave weed infection
T039	Tea tree	Melaleuca alternifolia	0.20	23	6	5	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.400	1.785	Remove	Footprint	heavy weed
TO40	Tea tree	Melaleuca alternifolia	0.24	76	6	8	77	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.880	2.949	Remove	Footprint	vine
TO41	Camphor laurel	Cinnamomum camphora	0.21	25	11	5	77	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	2.520	1.849	Remove	Weed	
TO42	Tea tree	Melaleuca alternifolia	0.20	35	7	5	66	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.400	2.129	Remove	Footprint	vine
TO43	Tea tree	Melaleuca alternifolia	0.25	40	6	5	77	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	3.000	2.252	Remove	Footprint	vine
TO44	Tea tree	Melaleuca alternifolia	0.19	35	7	6	77	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.280	2.129	Remove	Footprint	vine
TO45	Cheese tree	Glochidion ferdinandi	0.46	77	7	7	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	5.520	2.965	Remove	Footprint	2 trees
TO46	Camphor laurel	Cinnamomum camphora	0.48	46	7	12	77	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Medium	Medium	5.760	2.388	Remove	Footprint	
TO47	Camphor laurel	Cinnamomum camphora	0.39	76	7	7	77	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	4.680	2.949	Remove	Weed	
TO48	Camphor laurel	Cinnamomum camphora	0.57	100	14	15	77	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	6.840	3.309	Remove	Weed	group of trees not tagged on cliffs
TO49	Turpentine	Syncarpia glomulifera	0.35	40	17	8	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.200	2.252	Remove	Footprint	on bank not tagged
T050	Cheese tree	Glochidion ferdinandi	0.31	35	8	5	60	4c - Dangerous from structural defects	Z5 Severe damage/structural defects, high risk failure	<5yrs	Low	Low	3.720	2.129	Remove	Footprint	structural defects, split from base, leaning

Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T051	Tea tree	Melaleuca alternifolia	0.22	22	8	4	70	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.640	1.752	Remove	Footprint	heavy weeds
T052	Camphor laurel	Cinnamomum camphora	0.21	27	6	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.520	1.910	Remove	Footprint	some weeds,
T053	Lemon-scented scented gum	Corymbia citriodora	0.44	63	13	10	95	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	5.280	2.726	Remove	Footprint	good overall
T054	Camphor laurel	Cinnamomum camphora	1.45	130	7	11	60	2b - 40+yrs but unsafe/nuisance	Z3 Unprotected species for other reasons	>40yrs	Low	Low	17.40	3.695	Remove	Weed	weed species, otherwise good
T055	Black wattle	Acacia decurrens	0.15	25	6	3	85	2b - 40+yrs but unsafe/nuisance	Z3 Unprotected species for other reasons	>40yrs	Low	Very low	2.000	1.849	Remove	Weed	weed species
T056	Camphor laurel	Cinnamomum camphora	0.20	30	12	8	75	2b - 40+yrs but unsafe/nuisance	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	2.400	1.996	Remove	Weed	weed species
T057	Black wattle	Acacia decurrens	0.23	30	9	2	60	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	>40yrs	Low	Low	2.760	1.996	Remove	Weed	in decline, no tag due to gully in front
T058	Coast banksia	Banksia integrifolia	0.20	30	10	2	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.400	1.996	Remove	Footprint	competition from adjacent trees
T059	Coast banksia	Banksia integrifolia	0.19	28	8	2	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.280	1.939	Remove	Footprint	competition from adjacent trees, weeds at base, heavy blackberry, no tag
TO60	Black wattle	Acacia decurrens	0.21	25	12	7	10	3b - 15+yrs but unsafe/nuisance	Z3 Unprotected species for other reasons	15-40yrs	Low	Low	2.520	1.849	Remove	Footprint	
TO61	Coast banksia	Banksia integrifolia	0.44	45	12	10	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	5.280	2.366	Remove	Footprint	
TO62	Coast banksia	Banksia integrifolia	0.35	40	16	8	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.200	2.252	Remove	Footprint	off set not tagged



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
TO63	Coast banksia	<i>Banksia integrifolia</i>	0.23	26	8	5	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.760	1.879	Remove	Footprint	
TO64	dead stag		0.24	27	6	2	0	4a - Dead/dying/declining/suppressed	Z3 Unprotected species for other reasons	<5yrs	Low	Very low	2.880	1.910	Retain		
TO65	Lemon-scented gum	<i>Corymbia citriodora</i>	0.37	33	11	5	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.440	2.077	Remove	Footprint	not tagged
TO66	Rough-barked apple	<i>Angophora floribunda</i>	0.18	18	11	4	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.160	1.611	Remove	Footprint	
TO67	Rough-barked apple	<i>Angophora floribunda</i>	0.78	76	18	10	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High		9.360	2.949	Retain		
TO68	Rough-barked apple	<i>Angophora floribunda</i>	0.19	22	11	3	66	1a - 40+ structurally sound	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	1.752	Retain		suppressed
TO69	Rough-barked apple	<i>Angophora floribunda</i>	0.22	26	10	6	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care		Medium	High	2.640	1.879	Retain		
T070	Rough-barked apple	<i>Angophora floribunda</i>	0.54	50	11	6	70	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	6.480	2.474	Remove	Footprint	inclusion at base, minor deadwood
T071	Rough-barked apple	<i>Angophora floribunda</i>	0.42	48	6	4	70	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	5.040	2.431	Retain		weeds, competition from adjacent trees
T072	Rough-barked apple	<i>Angophora floribunda</i>	0.15	18	10	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	1.611	Retain		competition from adjacent tree
T073	Rough-barked apple	<i>Angophora floribunda</i>	0.26	33	8	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	3.120	2.077	Retain		competition from adjacent trees, minor weeds
T074	Rough-barked apple	<i>Angophora floribunda</i>	0.21	24	11	2	0	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Very low	2.520	1.817	Retain		dead, dry leaves
T075	Rough-barked apple	<i>Angophora floribunda</i>	0.23	30	10	3	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.760	1.996	Retain		competition from adjacent trees



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T076	Rough-barked apple	<i>Angophora floribunda</i>	0.40	50	7	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	4.800	2.474	Retain		growing towards road, off centre canopy
T077	Lemon-scented gum	<i>Corymbia citriodora</i>	0.47	57	18	12	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	5.640	2.613	Retain		minor suppression, on the road side
T078	Lemon-scented tea tree	<i>Leptospermum petersonii</i>	0.55	70	11	5	80	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	6.600	2.849	Remove	Footprint	good overall
T079	Poplar	<i>Populus</i> sp.	2.00	180	15	2	75	2b - 40+yrs but unsafe/nuisance	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	24.00	4.236	Remove	Footprint	big, weed, weeds at base
TO80	Rough-barked apple	<i>Angophora floribunda</i>	0.34	36	12	9	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.080	2.155	Retain		
TO81	Rough-barked apple	<i>Angophora floribunda</i>	0.47	50	11	6	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	5.640	2.474	Retain		
TO82	Rough-barked apple	<i>Angophora floribunda</i>	0.25	30	12	6	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	3.000	1.996	Retain		
TO83	Rough-barked apple	<i>Angophora floribunda</i>	0.25	27	6	7	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.000	1.910	Retain		suppressed
TO84	Rough-barked apple	<i>Angophora floribunda</i>	0.78	89	12	15	67	1b - 40+ w remedial care	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	9.360	3.151	Retain		minor decay
T085	Camphor laurel	<i>Cinnamomum camphora</i>	0.55	100	14	6	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	6.600	3.309	Remove	Weed	minor decay, multi stem
TO86	Rough-barked apple	<i>Angophora floribunda</i>	0.46	49	17	9	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	5.520	2.453	Retain		
TO87	Rough-barked apple	<i>Angophora floribunda</i>	0.34	36	11	12	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.080	2.155	Remove	Footprint	not tagged
TO88	Rough-barked apple	<i>Angophora floribunda</i>	0.27	27	12	7	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.240	1.910	Remove	Footprint	not tagged on bank
TO89	Lemon-scented tea tree	<i>Leptospermum petersonii</i>	0.45	47	18	7	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	5.400	2.410	Remove	Footprint	

Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
TO90	Lemon-scented tea tree	<i>Leptospermum petersonii</i>	0.36	42	7	9	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.320	2.299	Remove	Footprint	suppressed not tagged
TO91	Rough-barked apple	<i>Angophora floribunda</i>	0.35	43	12	6	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.200	2.322	Remove	Footprint	
TO92	Rough-barked apple	<i>Angophora floribunda</i>	0.25	26	15	7	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.000	1.879	Remove	Footprint	not tagged on bank
TO93	Coast banksia	<i>Banksia integrifolia</i>	0.25	30	16	6	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.000	1.996	Remove	Footprint	
TO94	Tea tree	<i>Melaleuca alternifolia</i> *	0.28	35	8	8	67	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.360	2.129	Remove	Footprint	
TO95	Lemon-scented tea tree	<i>Leptospermum petersonii</i>	0.29	46	7	12	66	1a - 40+ structurally sound	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Medium	3.480	2.388	Remove	Health/condition Footprint	
TO96	Brushbox	<i>Lophostemon confertus</i>	0.57	67	11	8	1	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	6.840	2.797	Remove	Footprint	
TO97	Camphor laurel	<i>Cinnamomum camphora</i>	0.45	56	10	8	88	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	5.400	2.594	Retain		council land
TO98	Camphor laurel	<i>Cinnamomum camphora</i>	0.55	100	7	8	0	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	2.000	3.309	Retain		council trees group
T099	Rough-barked apple	<i>Angophora floribunda</i>	0.44	54	12	8	55	1a - 40+ structurally sound	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	2.555	Retain		councils' trees power lines
T100	Tea tree	<i>Melaleuca alternifolia</i> *	0.28	30	8	3	70	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Low	3.360	1.996	Remove	Footprint	in decline
T101	Coast banksia	<i>Banksia integrifolia</i>	0.22	30	4	4	70	4c - Dangerous from structural defects	Z6 Instability, i.e. poor anchorage, increased exposure, etc	<5yrs	Low	Low	2.640	1.996	Remove	Footprint	growing on 90-degree angle, vines
T102	Turpentine	<i>Syncarpia glomulifera</i>	0.16	20	7	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	1.683	Remove	Footprint	competition from adjacent tree, and lots of weeds



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T103	Rough-barked apple	<i>Angophora floribunda</i>	0.69	73	8	5	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	8.280	2.900	Retain		heavy on inside due to trimming for powerlines
T104	Cheese tree	<i>Glochidion ferdinandi</i>	0.27	36	4	4	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	3.240	2.155	Retain		close to fence, weeds growing through it
T105	Cheese tree	<i>Glochidion ferdinandi</i>	0.23	21	3	5	75	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.760	1.718	Retain		weeds growing throughout tree
T106	Rough-barked apple	<i>Angophora floribunda</i>	0.35	45	14	5	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	4.200	2.366	Remove	Footprint	on slope, offsetting used, no tag
T107	Rough-barked apple	<i>Angophora floribunda</i>	0.27	25	4	2	70	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	3.240	1.849	Remove	Footprint	grouped 3 trees, all small and next to each other
T108	Turpentine tree	<i>Syncarpia glomulifera</i>	0.15	20	6	4	80	1b - 40+ w remedial care	A2 Minor defects that could be addressed by remedial care	>40yrs	Medium	Medium	2.000	1.683	Remove	Footprint	close to fence, competition from adjacent trees
T110	Rough-barked apple	<i>Angophora floribunda</i>	0.74	85	14	15	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	8.880	3.091	Retain		
T111	Blackbutt	<i>Eucalyptus pilularis</i>	0.80	88	21	10	78	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	9.600	3.136	Retain		powerlines
T112	Blackbutt	<i>Eucalyptus pilularis</i>	0.73	80	21	10	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	8.760	3.013	Retain		Powerlines, Council land
T113	Blackbutt	<i>Eucalyptus pilularis</i>	0.37	37	16	5	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.440	2.180	Remove	Footprint	suppressed
T114	Camphor laurel	<i>Cinnamomum camphora</i>	0.56	100	12	16	66	1a - 40+ structurally sound	Z3 Unprotected species for other reasons	>40yrs	Low	Low	6.720	3.309	Remove	Health/condition Weed	
T115	Coast banksia	<i>Banksia integrifolia</i>	0.59	55	10	6	76	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	7.080	2.575	Remove	Footprint	suppressed
T116	Coast banksia	<i>Banksia integrifolia</i>	0.55	65	15	12	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	6.600	2.762	Retain		
T117	Blackbutt	<i>Eucalyptus pilularis</i>	0.50	78	22	14	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	6.000	2.981	Remove	Footprint	



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
TO118	Coast banksia	<i>Banksia integrifolia</i>	0.23	23	15	5	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.760	1.785	Remove	Footprint	
TO119	Coast banksia	<i>Banksia integrifolia</i>	0.23	15	10	5	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.760	1.492	Retain		
T120	Rough-barked apple	<i>Angophora floribunda</i>	0.50	46	7	7	70	2d - 15-40yrs if remedial care	A2 Minor defects that could be addressed by remedial care	15-40yrs	Medium	Medium	6.000	2.388	Retain		defects, inclusions, low epi growth
T121	Rough-barked apple	<i>Angophora floribunda</i>	0.23	21	2	2	50	4a - Dead/dying/declining/suppressed	Z4 Dead, dying, diseased or declining	<5yrs	Low	Low	2.760	1.718	Retain		
T122	Camphor laurel	<i>Cinnamomum camphora</i>	0.45	58	4	6	75	2c - 40+yrs but others more suitable	A2 Minor defects that could be addressed by remedial care	>40yrs	Low	Low	5.400	2.633	Remove	Weed	weed species, not tagged, assessed via road, dead lower branches, some epi growth
T123	Coast banksia	<i>Banksia integrifolia</i>	0.60	70	15	5	90	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	High	High	7.200	2.849	Retain		huge banksia, some smaller dead branches, overall good
T124	Coast banksia	<i>Banksia integrifolia</i>	0.23	24	9	4	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	2.760	1.817	Retain		
T125	Coast banksia	<i>Banksia integrifolia</i>	0.35	43	9	4	66	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	4.200	2.322	Retain		
T126	Bottlebrush	<i>Callistemon</i> sp.	0.48	50	4	3	55	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	5.760	2.474	Retain		Heavily pruned Powerlines, Council land
T127	Bottlebrush	<i>Callistemon</i> sp.	0.20	31	3	2	22	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	2.400	2.024	Retain		Powerlines, Council land
T128	Swamp oak	<i>Casuarina glauca</i>	0.55	67	7	15	88	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Medium	Medium	3.000	2.797	Remove	Footprint Entrance/Exit	+ group 50+ saplings heavily pruned Powerlines, Council land
T129	Swamp oak	<i>Casuarina glauca</i>	0.67	78	6	15	77	1a - 40+ structurally sound	A1 No significant defects. Requires minimal remedial care	>40yrs	Low	Low	3.000	2.981	Retain		as 128 Powerlines, Council land



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T130	Bottlebrush	<i>Callistemon citrinus</i>	0.15	15	4	2	22	3c - 15+yrs but others more suitable	Z4 Dead, dying, diseased or declining	5-15yrs	Low	Low	2.000	1.492	Retain		Powerlines, Council land
T131	Cheese tree	<i>Glochidion ferdinandi</i>	0.43	67	4	7	33	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	15-40yrs	Low	Low	5.160	2.797	Remove Off site	Footprint Entrance/Exit	Powerlines, Council land
T132	Cheese tree	<i>Glochidion ferdinandi</i>	0.31	50	4	3	33	3c - 15+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	5-15yrs	Low	Low	3.720	2.474	Remove Off site	Footprint Entrance/Exit	Decay, Powerlines, Council land
T133	Cheese tree	<i>Glochidion ferdinandi</i>	0.45	77	4	6	33	3c - 15+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	15-40yrs	Low	Low	5.400	2.965	Remove Off site	Footprint Entrance/Exit	In decline Powerlines, Council land
T134	Rough-barked apple	<i>Angophora floribunda</i>	0.71	78	5	4	33	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	8.520	2.981	Retain		Poor condition\ Powerlines, Council land
T135	Rough-barked apple	<i>Angophora floribunda</i>	0.26	37	4	4	33	2b - 40+yrs but unsafe/nuisance	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	3.120	2.180	Retain		Powerlines, Council land
T136	Cheese tree	<i>Glochidion ferdinandi</i>	0.18	25	3	3	22	3c - 15+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	5-15yrs	Low	Low	2.160	1.849	Retain		Powerlines, Council land
T137	Rough-barked apple	<i>Angophora floribunda</i>	0.52	77	7	5	44	2b - 40+yrs but unsafe/nuisance	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	6.240	2.965	Retain		Powerlines, Council land
T138	Rough-barked apple	<i>Angophora floribunda</i>	0.25	31	3	3	33	2b - 40+yrs but unsafe/nuisance	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	3.000	2.024	Retain		Powerlines, Council land
T139	Cheese tree	<i>Glochidion ferdinandi</i>	0.32	55	3	6	33	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	3.840	2.575	Retain		Powerlines, Council land



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Short ULE	Short AZ	Expected lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Remove / Retain	Reason for Removal	Comments
T140	Camphor laurel	<i>Cinnamomum camphora</i>	0.53	100	7	15	44	2c - 40+yrs but others more suitable	Z3 Unprotected species for other reasons	>40yrs	Low	Low	6.360	3.309	Retain		Powerlines, Council land 20+ SAPLINGS
T141	Rough-barked apple	<i>Angophora floribunda</i>	0.55	100	5	10	33	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	6.600	3.309	Retain		group trees Powerlines, Council land
T142	Rough-barked apple	<i>Angophora floribunda</i>	0.65	68	5	6	55	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	7.800	2.814	Retain		Powerlines, Council land
T143	Rough-barked apple	<i>Angophora floribunda</i>	0.50	55	6	7	22	2c - 40+yrs but others more suitable	Z10 Poor cond or location with low potential for recovery	>40yrs	Low	Low	6.000	2.575	Retain		Powerlines, Council land



Tree Significance - Assessment Criteria**1. High Significance in landscape**

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- 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;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- 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;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- 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

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- 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

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- 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,
- 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,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.

Environmental Pest / Noxious Weed Species

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

Hazardous/Irreversible Decline

- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- 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.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.



		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					
Legend for Matrix Assessment						
		Priority for Retention (High) - 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 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.				
		Consider for Retention (Medium) - 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.				
		Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.				
		Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.				



ATTACHMENT 4 – TREE AZ CATEGORIES

CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.TreeAZ.com.

Category Z: Unimportant trees not worthy of being a material constraint

- Local policy exemptions:** Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species
- Z1** Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc
 - Z2** Too close to a building, i.e. exempt from legal protection because of proximity, etc
 - Z3** Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc
- High risk of death or failure:** Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure
- Z4** Dead, dying, diseased or declining
 - Z5** Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc
 - Z6** Instability, i.e. poor anchorage, increased exposure, etc
- Excessive nuisance:** Trees that are likely to be removed within 10 years because of unacceptable impact on people
- Z7** Excessive, severe and intolerable inconvenience to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. dominance, debris, interference, etc
 - Z8** Excessive, severe and intolerable damage to property to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. severe structural damage to surfacing and buildings, etc
- Good management:** Trees that are likely to be removed within 10 years through responsible management of the tree population
- Z9** Severe damage and/or structural defects where a high risk of failure can be temporarily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable to adverse weather conditions, etc
 - Z10** Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings, poor architectural framework, etc
 - Z11** Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression, etc
 - Z12** Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance, etc
- NOTE:** Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint

- A1** No significant defects and could be retained with minimal remedial care
 - A2** Minor defects that could be addressed by remedial care and/or work to adjacent trees
 - A3** Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years
 - A4** Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)
- NOTE:** Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

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	1 – Long	2 – Medium	3 – Short	4 – Removal	5 – Moved or Replaced
A	Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk	Trees that appeared to be retainable at the time of assessment for 15 – 40 years with an acceptable level of risk	Trees that appeared to be retainable at the time of assessment for 5 – 15 years with an acceptable level of risk	Trees that should be removed within the next 5 years	Trees which can be reliably removed or replaced
B	Structurally sound trees located in positions that can accommodate future growth	Trees that may only live between 15 and 40 years	Trees that may only live between 5 and 15 years	Dead, dying, suppressed or declining trees through disease or inhospitable conditions	Small trees less than 5 m in height
C	Trees that could be made suitable for retention in the long term by remedial care	Trees that may live for more than 40 years but would be removed for safety or nuisance reasons	Trees that may live for more than 15 years but would be removed for safety or nuisance reasons	Damaged trees through structural defects including cavities, decay, included bark, wounds or poor form	Trees that have been pruned to artificially control growth
D		Trees that could be made suitable for retention in the medium term by remedial care	Trees that require substantial remedial tree care and are only suitable for retention in the short term	Damaged trees that are clearly not safe to retain	
E				Trees that may live for more than 5 years but should be removed to prevent interference with more suitable individuals or to provide space for new plantings	
F				Trees that are damaging or may cause damage to existing structures within 5 years	
G				Trees that will become dangerous after removal of other trees for reasons given in (A) to (F)	

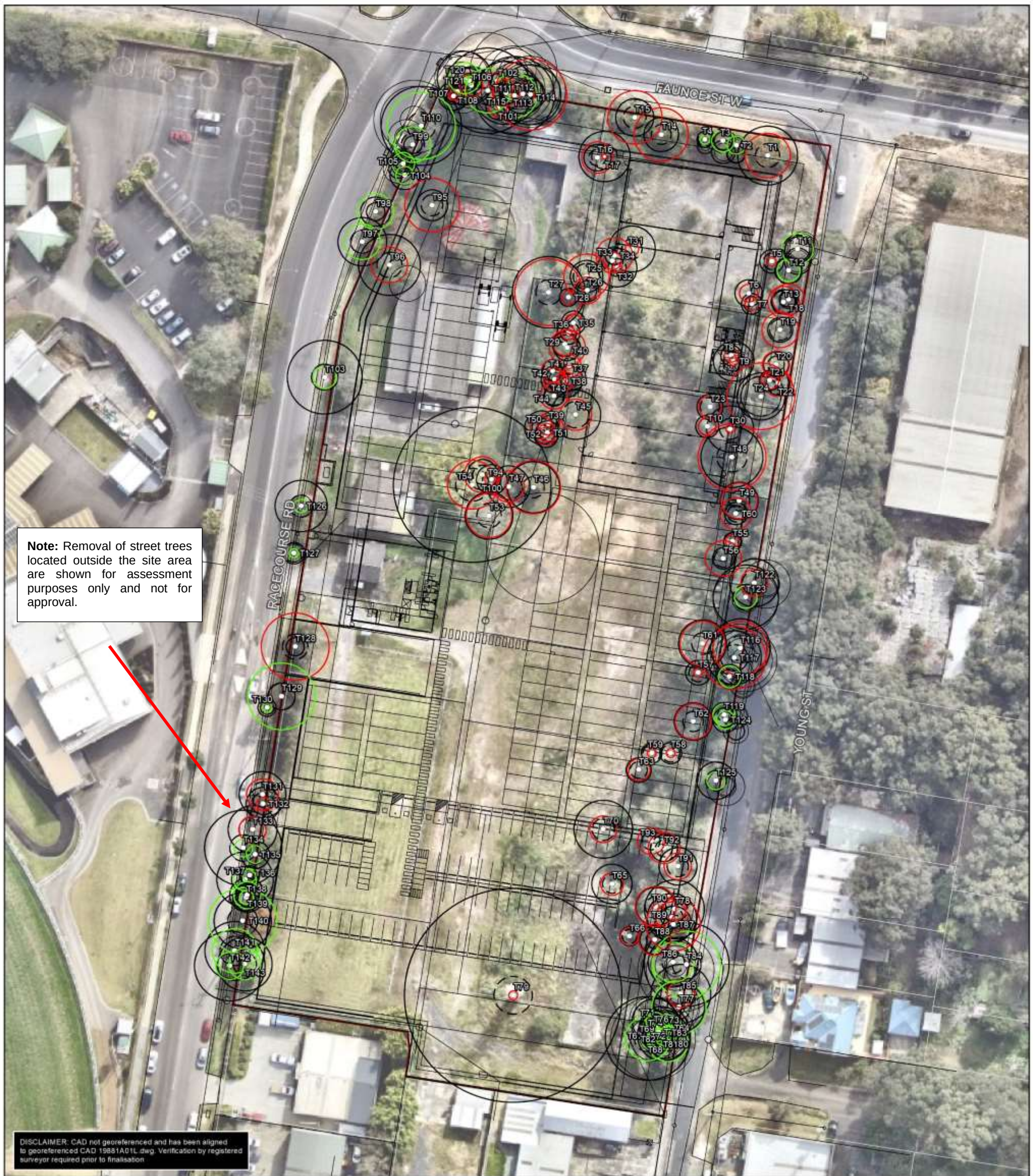


2–10 Faunce Street, West Gosford

18 July 2024
(REF-URB09)

Page 21 of 24

ATTACHMENT 5 - TREE PLANS



Legend

- Site boundary (source:CAD)
- Tree
- Retain tree (52)
- Remove tree (90)
- Tree protection zone (TPZ)
- Structural root zone (SRZ)

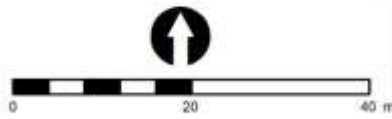


PROJECT & MKD REFERENCE
Faunce & Young St, West Gosford
18URB09_T003

DATE & ISSUE NUMBER
6/02/2024
Issue 1

SCALE & COORDINATE SYSTEM
1:800 @ A3
GDA2020 MGA Zone 56

TITLE
Tree Retention & Removal Plan



Disclaimer: The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features are to be confirmed by a registered surveyor.



Legend

- Site boundary (source:CAD)
- Canopy
- Tree protection zone (TPZ)
- Structural root zone (SRZ)

Aerial source: Newmap

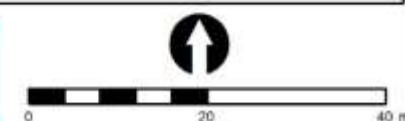


PROJECT & MKD REFERENCE
Faunce & Young St, West Gosford
18URB09_T001

DATE & ISSUE NUMBER
6/02/2024
Issue 1

SCALE & COORDINATE SYSTEM
1:800 @ A3
GDA2020 MGA Zone 56

TITLE
ULE Plan



Disclaimer: The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features are to be confirmed by a registered surveyor.