



WAVERLEY
COUNCIL

Tree Management Guidelines

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Related policies/documents	<ul style="list-style-type: none"> - Waverley Development Control Plan - Waverley Local Environment Plan - Waverley Environment Action Plan - Street Tree Masterplan 2008 - Waverley Tree Management Guidelines - Tree and Vegetation Vandalism Policy - Significant Tree Register - Community Strategic Plan 2022-32 - Plans of Management - Urban Canopy Cover Strategy - Public Domain Technical Manual - Drain Blockage Guidelines 2022

Related forms	<ul style="list-style-type: none">- Tree Permit Application- Review of Tree Determination- Off-Set Tree Planting Application

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1. Introduction/Background

The creation of this document is in response to the 2021 Tree Management Policy review and updates to the revised Tree Management Policy. Recommendations were made to streamline the Tree Management Policy and to separate the technical aspects of tree management and create a guidelines document.

The new structure is based on the Tree Management Policy serving as a framework document, which purpose and objectives will be achieved through the implementation of these guidelines through best arboriculture practice for tree management functions.

This guideline will assist in providing detailed information on all facets of tree management on both public and private land within the Waverley Local Government Area (LGA) and is to be used as a reference document by Council Officers, contractors, property owners, strata managers and developers in relation to all tree management and maintenance procedures.

2. Scope/Purpose

Waverley Council recognises the importance of trees and their role as a key contributor to a high-quality urban environment. The guidelines apply to all trees located in the LGA.

We are committed to maintaining the trees we have, improving their maintenance and protection and increasing the level of urban tree canopy cover.

To protect these valuable community assets, Waverley Council has adopted a suite of tree management documents that include, Tree Management Policy, Street Tree Masterplan, Significant tree Register and Public Domain Technical Manual.

Specific tree management and preservation controls are contained in Part B3 of the Waverley Development control Plan 2012.

This guideline in association with the other suite of documents listed above will assist in providing detailed information on all facets of tree management on both public and private land within the LGA.

3. Key Local Issues

3.1 Tree Preservation Legislation and Tree Assessment

Waverley Council has a legal obligation to preserve trees and vegetation under the provisions of the NSW Planning and Assessment Act 1979.

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 works together with the Biodiversity Conservation Act 2016 and to create a framework for the regulation of clearing of native vegetation in NSW.

The SEPP (Biodiversity and Conservation) 2021 applies to the Sydney and Newcastle metropolitan areas, including the Waverley LGA, and to all other land in NSW that is zoned for urban purposes or

for environmental conservation/ management under the Standard Instrument – Principal Environmental Plan.

The management of trees on development sites is regulated by the SEPP (Biodiversity and Conservation) 2021 and the Waverley Development Control Plan (DCP). The Waverley DCP sets out the requirements for tree preservation under Part B3 - Tree Preservation.

3.2 Tree Assessment

In Waverley, assessment of both public and private trees for pruning or removal is based on

a) Visual Tree Assessment (VTA)

Visual Tree Assessments (VTA), a widely accepted arboriculture assessment to determine the current health, structural integrity, useful life expectancy and visible damage to the tree. This will provide a consistent approach in determining pruning applications, root pruning and tree removal. It does not include specialised assessments such as tree decay, aerial inspection, pathology diagnosis of any pests or diseases or risk assessment.

b) Landscape Significance Assessment (LSA)

A tree(s) contribution to the landscape character. i.e. is the tree visually prominent and does it contribute to the character and local identity of the area. Other factors include the tree's age, size, or uniqueness.

Additional criteria used in assessing a tree, can also form part of assessment

- The effect on the health of the tree from proposed branch or root pruning
- Any contribution the tree makes to the natural landscape or scenic value of the land or the locality
- The tree's intrinsic value to public amenity
- The cultural value of the tree (its status as a landmark specimen and in defining local streetscape and character, its historical status, listing on the Waverley Significant Tree Register
- The occurrence (or lack of) other vegetation and whether appropriate replacement species can be planted
- Any contribution the tree makes to the local ecosystem and biodiversity
- The characteristics and history of a particular species
- Ill health, such as allergies, where specific evidence is provided by an expert in the relevant medical field (Dermatologist or Allergist) and a link between the ailment and the species is reasonably established
- Traffic hazard in proximity to a roadway intersection, driveway or pedestrian walkway
- Whether there is a severe obstruction of sunlight to a window as prescribed by minimum development standards for solar amenity
- Whether a tree is causing structural damage to a building, water main or sewer
- Whether a tree should be replaced with a more suitable species given its proximity to services such as overhead power lines

Often, applications for private tree removal may be based on a history of problems or hazards not evident at the time of inspection e.g. damage to buildings; blocked sewers; previously fallen branches; etc.

It is the applicant's responsibility to provide sufficient information and background to support the application. This information may be in the form of a report from a consulting arborist, licensed plumber, pest controller or structural engineer depending on the nature of the problem.

If there is insufficient information the application may be refused or deferred until further evidence is supplied. Several applications for tree removal are received by Council because of a perceived danger of branch or trunk failure. In assessing a tree for removal on grounds it is dangerous an evidence-based assessment as detailed above is used.

Refer to Appendices section for information on supporting documents.

3.3 Tree Selection

Tree planting to reflect local character

It is important that the selection and maintenance of trees contribute to and support the local character of a particular site. In certain streets an avenue of trees may help to define and enhance existing heritage, environmental and architectural features.

The Waverley Street Tree Masterplan recognises these values and continues to support the use of locally indigenous and native trees.

Native versus Exotic

The definition of a native tree species is generally interpreted as one that would have been growing in Waverley at the time of European settlement. However, it also interpreted as

- Endemic (in other words, found only in this specific location)
- Locally indigenous (found in Waverley prior to European settlement but can be extended to include Sydney's eastern suburbs)
- Native (broadly found in Australia).
- Exotic plant species that is non-native. Introduced into an area where it does not occur naturally

Council actively promotes locally indigenous planting by

- Identifying appropriate locally indigenous tree species in its Street Tree Masterplan
- Using locally indigenous tree species through forward planning and providing tube stock of less common Sydney species
- Trialling locally indigenous shrubs as street and park trees
- Developing an education program for residents to promote locally indigenous species
- Favouring locally indigenous tree species in all Development Control Plans, Plans of Management and Strategic Plans
- Encouraging residents to use native nurseries.

However, it is also recognised that on occasions exotic trees may be the only suitable choice in particular planting situations and that the planting policy should, incorporate a degree of flexibility in relation to planting non-indigenous and sometimes deciduous species in identified selected areas,

especially in heritage areas, commercial zones and in instances where issues of solar access need to be considered.

3.4 Street Tree Planting by Residents

We encourage residents who want to plant street trees to contact Council. Tree Officers will inspect the site and identify a suitable tree for the location if feasible.

It is important to work with Council when seeking to plant a street tree, as some trees are not suitable in certain locations and may, for example, limit sight lines, Inconsistency of trees in the streetscapes or damage to services and infrastructure.

Trees planted on Council property become Council responsibility and the legacy of such tree problems may not become evident for up to 10 or more years. When notified of street trees planted without Council authorisation, we will consult and discuss with residents to reach a suitable outcome by looking at options such as pruning or transplanting. However, if there are no alternatives, we will reserve the right to remove inappropriately planted trees and replant, where possible, with a more suitable tree consistent with the street tree masterplan.

3.5 Trees and Views

Many residential suburbs of Waverley enjoy beautiful views of the ocean, Sydney Harbour and the City landscape. Obscuring these views by trees on public or private land can be an issue amongst the community.

Tree Officers will not prune a tree to facilitate a view. View pruning will only be considered where it is requested to retain a previously established view and there is a history of the identified tree(s) being pruned to restore the pre-existing view.

Trees can often improve and frame views and are usually an aesthetic element in the view itself.

Where a private view is likely to be affected by the planting or replacing of trees in a street or park, Council will continue its policy that no individual exclusively owns a view, but rather that the amenity provided by trees outweighs the amenity of views.

New planting in public open spaces will always consider the impact on views and species will be selected and placed to frame and complement views in consultation with residents.

3.6 Tree and Vegetation Vandalism

Vandalism of public and private trees and vegetation not only affects adjacent neighbours but also whole streetscapes. The wider community also suffers through the gradual attrition of mature trees from the urban landscape.

Council presently responds to incidents of tree and vegetation vandalism by

- Investigating all reports and gathering information
- Sending notification letters to residents requesting further information Vandalism attack on a mature street tree
- Erecting signs in streets and parks highlighting the damage

- Prosecuting through the courts wherever possible

Part B3 – Tree Preservation of the Waverley Development Control Plan sets out penalties for vandalism to trees and vegetation on public and private property. The Waverley Tree and Vegetation Vandalism Policy outlines procedures for responding to attacks on trees.

Council encourages residents to report tree and vegetation vandalism.

Refer to Council's Tree and Vegetation Vandalism Policy for more detailed information.

3.7 Public Domain Tree Removal and Notification

Where substantial or prominent trees may need to be removed, Council policy is to notify adjacent residents two weeks prior scheduled removal.

The tree identified for removal is marked with appropriate high visibility tape and an accompanying sign explaining why the tree is being removed, the planned date of removal and the replacement tree species where possible.

Occasionally, trees need to be removed immediately for public safety reasons e.g. storm damage or if their condition becomes hazardous. Notification of adjacent residents of the reasons for emergency removal of street trees and the timing of planting a replacement tree will occur as soon as possible after removal.

4. Trees on Public land

This section of the guidelines is to be used for all activities relating to trees on public land (public trees). Public trees are those trees located on land managed by Waverley Council Tree Officers, including street trees, park trees, and trees within other natural areas such as bushland reserves and coastal reserves

Please contact Council's customer service for all public tree related activity requests.

4.1 Tree Maintenance Works

All public tree maintenance works are to be undertaken by qualified Council Officers and contractors in accordance with relevant Australian Standards and best practice requirements. The following information is provided to direct overall maintenance activities.

Pruning is an effective way to help manage urban trees and may be used in the following circumstances

- Low branches near footpaths and roads
- Routine maintenance to remove defects such as dead branches, crossing branches
- Canopy thinning within tree tolerances to allow for street lighting and solar access
- Storm damage
- Sight lines clearances for signs and traffic lights

Pruning practices are aimed principally at preserving the overall health and vigour of the tree.

Council's tree management guidelines are consistent with the Australian Standard AS4373 – Pruning of Amenity Trees; Workcover Code of Practice – Amenity Tree Industry; and Work Health and Safety requirements.

Pruning clearances for street trees to provide safe access for pedestrians, vehicles and properties, street trees are pruned to the following maximum clearances

- Pedestrian access to 2.5 metres
- Vehicle access at kerbside of 3.5 metres increasing to 4.5 metres at the centre of the road
- Branches overhanging into properties to be 3 metres clear of roof structure. Trees are pruned to Australian Standards 4373 – Pruning of Amenity Trees to maintain tree structure, health, and condition



4.2 Requests for Tree Pruning or Removal

Requests for pruning or removal of public trees are investigated by the Tree Operations team. Council's qualified arborists conduct inspections using the methods of Visual Tree Assessment (VTA) and Landscape Significance Assessment (LSA) as described in 3.2 of the guideline's documents.

Additional criteria used in assessing public trees for pruning or removal may include

- The health, condition, and structure of the tree
- The pruning history of the tree e.g. previous pruning in response to branch failure
- Location of the tree in relation to buildings and structures
- The tree's amenity value to the area e.g. streetscape
- Whether the tree forms part of an avenue planting; habitat corridor
- The suitability of the species to the location

The shedding of leaves, fruit or flowers is not considered sufficient reason for excessive pruning or removal of a street tree.

4.3 Pruning for Clearance of Electricity Wires/Powerlines

Pruning under electricity cables to the minimum clearances is authorised under Section 48 of the Electricity Supply Act 1995 and Electricity Supply (Safety and Network Management) Regulation 2014.

Both acts effectively overrule council-originated Tree Preservation Orders or Development Control Plans and other environmental planning instruments, excluded are State heritage or protection orders.

Pruning works within three metres of power lines can only be carried out by suitably qualified personnel.

Residents and community are encouraged to contact Ausgrid or your service provider if you require pruning to public or street trees that impact overhead powerlines or your service lead.

4.4 Tree Issues

Street trees are planted along road reserves and verges, laneways and occasionally footpaths and in the road itself, usually chosen for their shade and visual appeal.

However, at times, there can be conflict between trees and the urban environment.

Where damage to public spaces including footpaths and streets is suspected to have been caused by street tree roots, residents are asked to contact Council's Customer Service Centre to and request further investigation.

Suspected Damage to Private Wastewater or Stormwater Network

Tree roots will not enter a private wastewater or stormwater network that is intact and not leaking. Unfortunately, many properties in Waverley have old terracotta pipes that have degraded, subsided or have perished jointing seals. If a pipe has subsided or a seal has broken the repair of these pipes is considered a maintenance issue and the responsibility of the property owner to repair (refer to Waverley Council's Drain Blockage Guidelines).

Suspected Damage to Property Infrastructure

If damage to private property infrastructure is suspected to have been caused by street tree roots, property owners are asked to contact Council with supporting evidence to substantiate the alleged damage.

An initial inspection is then made by the Tree Operations Supervisor from outside the premises to determine if street tree roots may be the cause of the damage.

If the area of damage is located within the property, the owner is required to show proof of the presence of tree roots. This may involve excavating or exposing the affected area to show if tree roots are present, what size the roots are, and their exact location.

This is standard procedure due to

- Many residences are structurally very old with shallow or non-existent footings to foundations and old earthenware drainage pipes

- Wastewater and stormwater lines or foundations may have collapsed due to deterioration or subsidence and not from tree root damage
- Other trees on the resident's or neighbour's property may be the cause of damage
- All liability disputes require an onus of proof which remains with the property owner

Removal of a street tree is only undertaken as a last resort and only if the tree is assessed as not being a valuable part of the streetscape and only if there are no feasible alternatives or if all previous treatments have failed to abate the nuisance.

Council will continue its current policy of requiring proof of property damage where street trees are alleged to have damaged private property.

4.5 Street Tree Planting and Replacement

Council undertakes annual tree planting programs and residents are encouraged to contact Council to request a tree.

To ensure successful street tree planting provides the maximum benefits to the community the following considerations are critical in tree selection and planting

Site planning and design

Sufficient space is provided above and below ground avoiding utilities and structures and canopy spread free from interference with structures to allow a tree to reach its mature height and width with minimal pruning.

Sufficient root space and crown volume

There is enough soil volume available for future root growth and minimal disturbance to infrastructure.

Tree selection

Species are selected from the Street Tree Masterplan that meet the physical and environmental constraints of the site and quality tree stock are used. Priority should be given to flowering trees that attract birds.

Planting season

Planting can be undertaken at various times but is best undertaken from Autumn through to Winter when lower air temperatures greatly reduce the stress on the newly planted trees, and soil temperatures are highest to encourage root activity. Summer planting is not recommended due to high temperatures with potential extremes and increased resource requirements i.e. additional watering and maintenance.

Detailed planting specifications can be found in Waverley Council Public Domain Technical Manual.

Replacement

The majority of urban trees have a life span of between 20 to 80 years due to the constraints of growing in a built-up residential environment. Many of our mature trees are reaching the stage where they are dying or in decline due to age, poor quality soils, pollution stress, tree root damage or a combination of some or all of these factors.

Trees may also need to be removed for a variety of reasons from vandalism, poor species performance, damage to underground utilities that can't be repaired etc. Often though, it is because they are over-mature and naturally start to decline and may become hazardous.

The Public Domain Tree Asset Database will inform Council on strategic and operational decision making, and prioritising resources for managing current tree assets. New technologies in tree inventory management will also assist Council in identifying and managing crucial green infrastructure assets.

Occasionally, residents may request a replacement tree is not planted. Consideration will only be given for not planting where there is

- Sightline restrictions
- History of damage to underground services that are unable to be repaired adequately to allow for replacement tree planting
- Insufficient clearance from underground (and overhead) utilities

4.6 Public Consultation and Notification

Whenever healthy public trees require substantial pruning or removal, particularly if it will affect the visual appeal of streetscapes or adjacent properties, residents will be notified a minimum of two prior to schedule of works.

4.7 Vehicle Access and Crossovers

Vehicle access and driveways can sometimes generate issues relating to mature and established street trees.

Street tree planting is co-ordinated to be sited close to property boundaries and at sufficient distance from potential crossover locations.

However, applications for crossovers and driveways may sometimes conflict with street trees.

Council will assess each application on merit and promote alternatives to vehicle crossovers where they require removal or damage to mature verge trees.

4.8 Trees in Parks

Refers to all trees situated within Council's parks, reserves, publicly owned sportsgrounds and bushland and drainage reserves. It covers Council-owned land and Crown Land administered by Council. Waverley's public open space includes

- 'natural' areas (including bushland, foreshore, cliff-face and watercourse)
- Sportsgrounds
- Parks and reserves
- Areas of general community use

Some of the main issues concerning trees in parks are similar to those of street trees, namely maintaining open views, species and selection, over-pruning, and integrating trees with pedestrian and habitat corridors.

Maximise aesthetics and amenity in parks

Planting trees within open public spaces should improve the appearance of an area and contribute to its overall amenity. The design principles for trees in parks should maximise screening, shade, and biological diversity.

Mature and significant trees can also define the character and usage of parks.

To improve the recognition of the value of park trees Council should

- Undertake a condition survey of all park trees and determine a hierarchy of maintenance of parks and reserves and target high-use sites
- Recognise high value trees through listing as heritage items or as significant trees
- Ensure high-use parks and reserves receive a higher level for maintenance of trees
- Provide opportunities for tall growing species in larger parks. In future design of public space every attempt will be made to take advantage of existing mature trees and to incorporate indigenous species from local seed stock wherever possible

Remnant vegetation and habitat corridors

Remnant vegetation or bushland is taken to be the original (pre – 1788) native vegetation which has survived to this day. It includes both undisturbed and disturbed vegetation. It also includes remnant vegetation which has colonised disturbed areas, where there was no vegetation for a period. The native plant species that grow within these remnants are referred to as indigenous. Remnant vegetation does not include native species that have been planted or introduced to the area.

Habitat corridors are areas where vegetation provides sufficient habitat features to allow wildlife to move from one area to another.

The Part B3 – Biodiversity provision of the Waverley DCP recognises the importance of these areas with maps showing their location and development controls to protect and enhance the remaining areas.

Only 5.9 hectares of remnant bushland remain in the Waverley LGA concentrated mainly on the coast and in fragmented areas away from the coast. Parks and open space are an integral part of wildlife and bird habitat, and every opportunity should be taken to increase biodiversity within the LGA.

When linked areas of open space or ‘habitat corridors’ are planted with native and locally indigenous tree shrub and groundcover species they provide a habitat of sufficient size to support small native fauna, especially when integrated with the understorey of shrubs and groundcovers naturally associated with that vegetation community.

These habitat corridors should work towards linking areas of remnant vegetation, beach parks and adjacent public open space, pocket parks, schools and other institutional sites where there is opportunity for planting trees, shrubs and groundcovers.

The biodiversity maps in the appendices section of the Waverley DCP show the remaining native fauna habitat patches and identify existing and potential habitat corridors. Ideally, many parks within Waverley and in particular coastal parks should be integrated into this corridor system.

Plans of management

The Local Government Act 1993 requires that all community land (as defined under the Act) is the subject of a plan of management. The majority of Council's parks and reserves are classified as community land and therefore require plans of management.

A tree management plan is integral to a park plan of management and provides effective management strategies for the maintenance and conservation of park trees. The plan should also provide long term strategies for tree removal and replacement consistent with the vision for the park.

5. Trees on Private Land

Trees on private land are found on land belonging to residents, commercial enterprises, community groups, private institutions such as hospitals and churches, and state and federal government agencies like schools and local government.

For any tree related activity on your property, please refer to important criteria in section 5.1 below before applying for a Tree permit application.

To sustain canopy cover across the LGA, Council requires the appropriate management of private trees to maximise the useful life of the trees and that suitable replacement planting is undertaken when trees are removed.

Trees on private land are valued and treasured because they

- Provide privacy
- Help to soften unattractive buildings or outlooks
- Provide natural cooling
- Enhance wildlife corridors
- Contribute to the character of the area

'Leafy' suburbs are recognised as desirable and attractive places to live, and trees can significantly enhance residential property values.

5.1 Part B3 – Landscaping, Biodiversity and Vegetation Preservation of the Waverley Development Control Plan

Part B3 – Tree Preservation of the Waverley Development Control Plan (DCP) was formed under the provisions of The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B & C SEPP). The B & C SEPP repeals the provisions of the Local Environmental Plan for tree preservation and the previous Tree Preservation Order (TPO) of 1993.

An application is required to do work on any part of a tree above or below ground. This applies to any tree listed on the Waverley Register of Significant Trees, or listed as a heritage item, forms part of a heritage item or located in a Heritage Conservation Area (HCA) or

- a) has a height of three (3) metres or more, or
- b) has a canopy spread of three (3) metres or more, or
- c) has a trunk diameter of more than 300mm, measured at ground level

If you think your tree may fall into the HCA category, please submit a tree permit application in the first instance. However, after initial assessment by Council's Tree Management Officer, you may be advised to submit a Development Application. For more detailed information refer to section 7.0 Heritage and Significant tree.

All approved tree work must be carried out by minimum AQF Level 3 arborist in accordance with AS 4373-2007 Pruning of amenity trees.

Exempt trees

The trees listed in the table below are documented in the DCP and listed exempt, therefore they do not require a permit for removal. However, Council must be notified a minimum of seven days prior to removing any exempt trees.

Botanic name	Common name
<i>Celtis sinensis</i>	Hackberry
<i>Citrus spp</i>	Citrus
<i>Ligustrum sinense</i>	Narrow leaved Privet
<i>Ligustrum lucidum</i>	Broad leaved Privet
<i>Nerium oleander</i>	Oleander
<i>Olea africana</i>	Wild or African Olive
<i>Salix spp</i>	Willows
<i>Syagrus romanzoffianum</i>	Cocos Palms
<i>Toxicodendron spp</i>	Rhus tree

Despite any other provisions in this DCP, clearing of vegetation is exempt from the requirement to obtain a Vegetation Clearing Permit in the following circumstances:

- Pruning of a hedge (refer to Definitions) by no more than 20 per cent of its height or width in any 12 month period
- Removal of dead branches; palm fronds or palm fruit
- Pruning of branches from electricity wires as required by the Electricity Supply (Safety and Network Management) Regulation 2014
- Remedial pruning or removal to make a tree safe in response to severe storm damage or sudden branch failure. Evidence of the tree's condition (e.g. arborist or SES report) must be produced at Council's request if required. Replacement native trees must be planted if tree/s are removed
- Works carried out by state or federal government departments or authorities under current legislative requirements

- If Council is satisfied that the vegetation is dying or dead and is not required as the habitat of native animals

Tree assessment

One of Council's qualified arborists will inspect the tree(s) and undertake a Visual Tree Assessment (VTA).

This is a widely accepted Arboricultural assessment based on the current health, structural integrity, useful life expectancy and visible damage to the tree. Additional criteria are also taken into consideration including

- Landscape significance including consideration of the ecological, cultural and amenity value of trees
- The effect on the health of the tree from pruning
- Whether the tree shows poor form and shape/vigour typical of the species
- Its location within 3 metres of a residence, main building or other significant structure
- The occurrence (or lack of) other vegetation nearby and whether appropriate replacement species can be planted
- Whether the tree is the identified cause of structural damage to a building, ancillary structure, water main or sewer and if all alternative options of remedying the damage have been considered

After assessment, the application will either be

- a) Approved, or approved with conditions
- b) Pending, awaiting further information or supporting evidence from the applicant, or
- c) Refused, or refused with conditions

Any application for tree removal should be accompanied with supporting information and evidence such as documented and photographic history of branch failures, the weather conditions at the time of the branch failure, wastewater blockages etc.

Presenting this evidence with the initial application can be helpful as it will provide a more complete history of the tree. If no or insufficient evidence is presented it may result in the refusal of the application.

Further information on when consent may be granted or refused can be found in Tree Assessment and Part B3 – Tree Preservation of the Waverley DCP.

Offset tree planting

When permission is granted to remove trees on private land, it is a condition of removal that a tree or trees of equivalent or larger canopy size when mature with a minimum pot size of 45 litres is planted in the ground, on the property. Audit checks of replacement plantings will be carried out by Council.

However, if there is insufficient planting space on site to accommodate a mature tree of similar dimensions, the applicant will be asked to contribute to offset planting on public land. Generally, for every tree removed, the replacement of a minimum of three (3) off-site trees will be required. The applicant will be charged for the planting and a 12 month maintenance program for a tree as per Council's Fees and Charges. The fee may vary depending on the size, prominence, maintenance period and location of the tree to be removed.

Arborists and 'other' specialist reports

Supporting evidence for the removal or pruning of a tree(s) may require a report from a consulting arborist (AQF Level 5) where

- Major work or removal is proposed on heritage listed or significant trees or trees considered prominent in a heritage conservation area
- There is insufficient evidence to support the removal of a tree as assessed against the above criteria

Council may request the applicant provide an arborist's report for more complex tree assessments such as an aerial inspection, root mapping or identification, fungal or pest problems or internal diagnostic assessment.

Further supporting evidence may also be required from a structural engineer or licensed plumber if buildings or underground services are affected.

Refer to Appendices for specialised report requirements.

Reviewing a tree decision

Under the Environmental Planning and Assessment Act (1979) an applicant may ask Council to review the determination of the application.

If they are dissatisfied with Council's assessment of their tree, they can submit an application for Review of Tree Determination within six (6) months of the date of the determination.

The application must include

- Additional information not available at the time of the original inspection
- A report from a consulting arborist (AQF Level 5) with any additional reports requested by Council relevant to the stated problem i.e. a structural engineer or licensed plumber report

The review of the original determination will then be conducted by another AQF level 5 Council Tree Office with Arboricultural qualifications. Should the review uphold the original determination an applicant has the right to appeal to the Land and Environment Court within six (6) months of the determination date.

Penalties

Any work carried out on trees without approval or not in accordance with an approval will be dealt with in accordance with the relevant legislation. This may result in a formal warning, penalty infringement notices or legal action through either the Local Court or the Land and Environment Court.

Where a person is guilty of an offence involving the destruction of or damage to a tree or vegetation, the court dealing with the offence may, in addition to or in substitution for any pecuniary penalty imposed or liable to be imposed, direct that person to

- a) Remedially prune damaged trees
- b) Plant new trees and vegetation and maintain those trees and vegetation to a mature growth/or minimum height of five (5) metres, and
- c) Provide security for the performance of any obligation imposed under points a) and b) above

5.2 Tree Disputes Between Neighbours

An application to prune overhanging branches or remove trees from a neighbouring property must have the ~~signature~~ written consent of the owner of the tree(s).

Council does not have the regulatory powers to compel neighbours to prune or remove trees that may be causing damage or a nuisance to their neighbour, nor can Council mediate in disputes.

Conflict over the management of private trees on neighbouring properties is the responsibility of both neighbours to discuss and resolve.

Residents are firstly advised to contact their local Community Justice Centre to seek mediation. If that avenue is unsuccessful, they can make an application to the Land and Environment Court under the Tree (Disputes between Neighbour's) Act 2006.

Tree disputes are usually heard on site by a Commissioner of the Court who has the powers to make orders that remedy, restrain or prevent damage to a neighbouring property or injury to a person from a neighbour's tree. The Court also has the powers to award compensation order rectification of damage caused by a neighbour's tree.

This act only applies to tree on private property and not Council owned trees.

5.3 Trees on Strata or Company Titled Properties

For trees located on the common property of a residential flat building or townhouse, the application must be from either the Owners Corporation or the managing agent together with either the minutes of a meeting or signed letter from the majority of the owners consenting to the work.

5.4 Private Trees Overhanging Council Property

Where private trees overhang Council property, footpaths or roadways, the maintenance of the tree is regarded as the owner's responsibility and the owner should undertake pruning when requested. If the owner does not comply with a request, an order for the pruning of overhanging branches can be issued under Council's by-laws.

6. Trees on Development Sites

The management of trees on development sites is regulated by The State Environmental Planning Policy (Biodiversity and Conservation) 2021 and the Waverley DCP. The SEPP (B & C) regulates the removal of native vegetation on both urban land, and land zoned for environmental conservation/management that does not require development consent.

The SEPP (B & C) applies to the Sydney and Newcastle metropolitan areas, including the Waverley LGA, and to all other land in NSW that is zoned for urban purposes or for environmental conservation/ management under the Standard Instrument – Principal Environmental Plan.

Within the Waverley DCP – B3: Tree Preservation provides guidelines for the protection of trees on development sites

When submitting a development application, the following Council objectives apply

- Developments should be designed to minimise or avoid potential conflict between trees and structures
- Existing prominent trees should be retained and incorporated as part of the design
- Development must not result in the loss of tree canopy
- Existing and future tree growth both above and below ground must be a consideration when building close to a tree
- Trees identified to be retained are to be protected in accordance with Australian Standard AS 4970 – Protection of Trees on Development Sites
- Arboricultural Impact Assessments are required for trees with moderate or high retention values that may be impacted by a proposed development

To maintain Waverley's urban canopy cover, where trees are approved for removal, sufficient landscape area and deep soil planting areas must remain to allow for replanting of replacement trees.

A Landscape Plan must be submitted showing the locations of tree species, other proposed plants species, any existing trees and vegetation to be maintained and the area of the canopy on the Landscape Plan when plantings are mature.

All approved tree work must be carried out by minimum AQF Level 3 arborist in accordance with AS 4373-2007 Pruning of amenity trees.

6.1 Location of Trees on Site Plans

All trees located on site must be shown on the site plan submitted with the development application. This includes trees on adjacent properties and any street or public trees within four metres of the site boundary.

The site plan must include

- a) The exact location of all trees with each tree numbered
- b) For each tree ID, the common/ scientific name, height, canopy spread, trunk diameter at 1.4 metres above ground level and number of trunks if more than one
- c) The total canopy spread in area
- d) Which trees will be retained, removed, pruned or transplanted
- e) If any trees on neighbouring properties require pruning, then permission must be gained from the owner of the tree(s) and an application to Prune, or Remove Trees on Private Property is then to be presented to Council for processing
- f) If any trees on Council owned land require pruning, the applicant is to supply a tree pruning report from an Arborist with AQF level 5 qualification or above with photos showing the branches that need to be removed
- g) If approval is granted the applicant may prune the tree at their expense, by an experienced Arborist/Horticulturist (with a minimum of the Horticulture Certificate or Tree Surgery Certificate)

Before plans have been developed it is advisable to have a qualified arborist do a pre-DA assessment of trees located on site and any adjacent trees that may be impacted by the development. The assessment must be in accordance with the Australian Standard AS 4970 – Protection of Trees on Development Sites.

The assessment will

- Identify trees with a moderate or high retention value
- Inform and advise of any potential hazards
- Minimise impacts on trees by suggesting appropriate construction methods or design if necessary
- Help ensure the retention and protection of trees
- Minimise delays in the development assessment process The report is to accompany the development application

6.2 Arboricultural Impact Assessment Report

When a proposed development is deemed by Council to have an impact on trees with a moderate to high retention value, the applicant will be required to submit an Arboricultural Impact Assessment report. The report must be prepared by a qualified arborist who has a Diploma of Horticulture (Australian Qualifications Framework Level 5). Please note there is a difference in skill level between an arborist that prunes trees and a consultant arborist.

The report is to include as a minimum

- a) Details and estimates of Tree Protection Zones and Minimum Setback Distances for each numbered tree based on the Australian Standard AS 4970 – Protection of Trees on Development Sites
- b) A separate tree plan clearly showing all trees to be retained/removed/transplanted and each tree numbered
- c) Tree assessment and retention value based on an industry accepted standard
- d) A comprehensive discussion/assessment of the impact of construction works including
 - (i) Details of any soil modification i.e. cut and fill, excavations
 - (ii) Details of any tree pruning for building clearance or tree health
 - (iii) Site works including hoardings; temporary site structures; wash-down areas and vehicle access
 - (iv) Impact of the proposed building structure and location of services
 - (v) Impact from landscape modifications on site trees
 - (vi) Details of any replacement planting
- e) Root mapping report where required
- f) Tree protection specifications and signage
- g) An outline of WHS and tree protection procedures to be followed on site and appropriate induction for all on-site staff and sub-contractors
- h) A post construction tree maintenance/monitoring program which can be used as conditions should the application be approved

All reports must

- Be in accordance with the Australian Standard 4970 – Protection of Trees on Development Sites
- Include recommendations for minimising loss of landscape amenity
- Be thorough, balanced and objective in assessing the impact on the tree's current and future health and condition

6.3 Tree Assessment Criteria

Within a Development Application, the assessment for removal or pruning of trees forms part of the application process.

In evaluating an application to alter or remove a tree, the assessment will consider

- The environmental, cultural and amenity value of the tree
- The effect on the health of the tree from branch and/or root pruning
- Whether the tree shows poor form and shape/vigour typical of the species
- Its location within the construction zone of the proposed building and whether design modifications can be made to minimise damage to the tree's root zone and canopy
- Whether the tree is in a habitat corridor and provides habitat or fauna canopy connectivity
- The evaluation and recommendations of any arborist reports
- The occurrence (or lack of) other vegetation nearby and whether appropriate replacement species can be planted

6.4 Tree Protection on Adjacent Sites

Trees adjacent to the site or within 4 metres of the site and identified as medium to high retention value and potentially impacted by the development process require protection measures in accordance with the Australian Standard AS 4970 (Protection of Trees on Development Sites) during the demolition and construction phases of development.

An Arboricultural Impact Assessment is required to provide recommendations for tree protection.

See appendices for report requirements.

6.5 Tree Bonds

Conditions and/or bonds will be applied where necessary to ensure maintenance procedures are followed for the protection of trees on adjacent public land or for the successful establishment of new trees.

Compliance reporting is required for the duration of the bond. This bond may be wholly or partially forfeited if the tree is structurally damaged or removed during demolition or construction.

6.6 Construction Hoardings

Applications for construction hoardings on public land must show the locations of any tree within 5 metres of the proposed hoarding footprint.

A bond for the protection of trees affected by a proposed hoarding will be imposed and may be forfeited if the tree is damaged or removed during demolition or construction.

6.7 Significant and Heritage Listed Trees in Urban Conservation Areas

Trees listed as heritage, or on the Significant Tree Register or considered prominent in an Urban Conservation area, an Arboricultural Impact Assessment must be submitted with the development application.

In the case of trees listed on the Significant Tree Register, the architectural proposal should aim to integrate the tree with the built form and promote its environmental values.

6.8 Exempt and Complying Development

Minor and small-scale development often does not require development assessment by Council. This type of development is identified as ‘exempt development’ or ‘complying development’.

However, if trees, located on site or adjoining land and protected by Part B3 – Tree Preservation of the Waverley DCP, will be affected by construction or demolition works a separate development application permit application may be required.

6.9 Replacement Plantings

To maintain and potentially increase urban tree canopy cover, replacement planting is a condition of approval for development applications.

Replacement trees must be an advanced approved species and be planted and maintained to maturity. Where there is insufficient space for replanting an advanced tree, the applicant is to provide offset planting on public land. Generally, for every tree removed, the replacement of a minimum of three (3) off-site trees will be required. This will be undertaken by entering into a deed of agreement with Council.

Audit checks of replacement planting will be carried out by Council.

7. Heritage and Significant Trees

Trees in Waverley considered outstanding with the highest cultural, historical, aesthetic or commemorative values on both public and private land are recognised in planning controls as either

- i. **Heritage Trees** – individual/group listing as a heritage item or as part of the landscape or grounds of a listed heritage item
- ii. **Significant Trees** – listed on the Waverley Significant Tree Register (revised 2011)

Heritage Trees

Trees with identified heritage values are recognised and listed in the Waverley LEP Schedule 5 – Environmental Heritage. They include individual trees and groups of trees as well as those that form part of a landscape or garden of a listed heritage property.

Significant Trees

Significant trees are listed on the Waverley Significant Tree Register and protected under the general provisions of Part B3 – Tree Preservation – of the Waverley Development Control Plan.

Council’s Significant Tree Register defines significant trees as ‘those trees that make a major contribution to the everyday landscape and are therefore of special value to the community’.

The aims of the Register are to

- Provide Waverley Council with a framework for the systematic identification and assessment of significant trees
- Provide a database of significant trees for planning, management, conservation and education purposes
- Enable a consistent approach to significant tree assessment based on accepted assessment criteria
- Complement Council's DCP, LEP, the Vegetation SEPP and other relevant planning instruments to increase the level of protection for significant trees
- Assist with the listing of significant trees as heritage items
- Increase community awareness and appreciation of the value and worth of significant trees
- Provide for existing and future landowners to be made aware of significant trees
- Ensure the involvement of the community and other stakeholders. Significant trees are to be found in Council's streets and public parks and on private property. The National Trust's Significant Tree Committee suggests that a significant tree could be any tree
- Of outstanding aesthetic quality
- Outstanding for its large height, trunk diameter or canopy spread
- That is particularly old or venerable
- Which occurs in a unique location or provides a significant contribution to the landscape, streetscape or townscape, including remnant vegetation and important landmark tree
- Associated with a well-known public figure or ethnic group
- Commemorating or having association with an important historical event
- That is rare to an area, e.g. beyond its normal range of distribution or common cultivation, a rare species or variety, an endangered species
- Which exhibits a curious growth form or physical feature, including unusually pruned forms
- Which is of horticultural or genetic value and could be an important source of propagating stock
- Which forms part of a recognised historic garden, park or town

7.1 Protection and Recognition

Waverley Development Control Plan (DCP) – Part B3 – Tree Preservation is the established mechanism for protecting trees and replaces Council's previous Tree Preservation Order (TPO).

The Significant Tree Register is an additional tool within the DCP which lists particularly valuable or outstanding trees as defined above and trees listed as heritage are included in the Schedule 5 – Environmental Heritage of the Waverley Local Environment Plan.

In addition to the general requirements of the DCP regarding protection of trees, applications pertaining to heritage listed and significant trees are subject to a more rigorous assessment.

As with all trees protected under Part B3 –Tree Preservation, the intent is that trees should not be pruned, trimmed, removed or lopped where the action will compromise the health or environmental or aesthetic value of the tree. This is more strictly observed in the case of significant and heritage listed trees where often the physical form of the tree is a major factor contributing to its significance.

7.2 Significant and Heritage Trees on Building Sites

A significant or listed heritage tree on, or within, the vicinity of a site may sometimes constitute a constraint on development.

A pre-DA assessment and an Arboricultural Impact Assessment are required for any development that may impact on a significant or heritage tree. The assessment must be in accordance with the Australian Standard AS 4970 – Protection of Trees on Development Sites which sets out guidelines for tree protection and estimating tree protection zones.

Where development is proposed near a listed significant tree or trees, the ‘proposal should aim to integrate the tree with the built form and promote its environmental values’.

7.3 Application for Tree Works on or near a Heritage or Significant Tree

For proposed works on a heritage listed or significant tree or for a development application in proximity to the tree’s root system the following applies

- i. A permit is not required for the removal of minor deadwood for safety reasons or to maintain the health of a tree. However, Council must be notified seven days prior to the commencement of work
- ii. Minor works, including branch removal to a maximum percentage of 10 per cent will require a Tree Permit application with the tree owner’s signature (repeat applications within three years of the first permit will require a development application). Adjacent neighbours will be notified of the permit application if approved
- iii. Major works requiring substantial pruning of branches or roots, or possible removal will require the lodgement of a development application with an Arboricultural Impact Assessment. The report must be from a consulting arborist (AQF Level 5). Notification will follow the same procedures as for all development applications
- iv. Proposed development within the tree protection zone of a significant tree will require lodgement of an Arboricultural Impact Assessment with any development application (see Australian Standard AS 4970 – Protection of Trees on Development Sites)

7.4 Responsibilities

The owner of a tree listed in the Waverley Local Environment Plan Schedule 5 – Environmental Heritage or on the Significant Tree Register is expected to properly maintain and preserve the listed tree.

It is the owner’s responsibility to

- Maintain and preserve the tree(s)
- Apply to Council for any routine pruning work
- Submit an Arboricultural Impact Assessment report for any development application that may impact on the tree protection zone of a heritage or significant tree
- If proposed for removal, lodge a development application for consent, which must include a report from a consulting arborist

8. Roles and Responsibilities

The Director, Assets and Operations will be responsible for the implementation and direction of the Tree Management Guidelines.

9. Definitions

Term	Definition
<i>AS 4373-2007 Pruning of amenity trees</i>	Specifies methods for pruning of trees and gives guidance on correct and uniform practices. Intended for use on amenity trees includes removal of deadwood, crown lifting, formative pruning, reduction pruning (including line clearance), selective pruning, crown thinning and remedial/restorative pruning. It does not address wildlife habitat or tree worker safety.
<i>Biodiversity</i>	Biological diversity (biodiversity) is the variety of life in our environment, including us. It is the different plants, animals, and microorganisms the genes they contain and the ecosystems they form.
<i>Bushcare/bush regeneration</i>	Bushcare is a community-based initiative combining Council resources, community volunteers and trained bush regenerators to restore, protect and enhance remnant bushland areas in Waverley.
<i>Canopy cover</i>	The covering of the earth's surface in any given place or region by the totality of tree and shrub canopies as viewed from above. Often expressed as a percentage and used to measure the urban forest.
<i>Character, Local</i>	The particular characteristics of a place as identified by its built form, vegetation, history and community. Often synonymous with identity.
<i>Controls, Council</i>	Council documents created to control land use within the council area and administered by the Council.
<i>Corridors, habitat</i>	Corridors that join places of habitat suitable for creatures (fauna), and along which they travel in relative safety.
<i>DCP</i>	Development Control Plan. A council-approved document detailing objectives and criteria for the design of the built environment. Unlike a Local Environmental Plan (or LEP), the DCP does not have the legal standing of State legislation.
<i>Establishment</i>	With respect to the planting of flora, the establishment of plants involves the appropriate planting and nurturing of specimens usually until they no longer require extraordinary care or maintenance to survive.

<i>Hazardous tree</i>	For the purpose of this document a hazardous tree is one that has partially fallen or has structural defects (i.e. advanced decay, split trunk) that could result in the immediate danger of the tree falling or collapsing.
<i>Hedge</i>	A group of two or more trees (whether planted in the ground or otherwise) so as to form a hedge and rise to a height of at least 2.5 metres above existing ground level.
<i>Heritage tree</i>	Defined by the Burra Charter as trees ‘worth keeping because they enrich our lives— by helping us understand the past, by contributing to the richness of the present environment and because we expect them to be of value to future generations’.
<i>Imminently dangerous</i>	Trees can become imminently dangerous from a singular event such as a storm or damage from a vehicle. Sometimes they can be structurally unsound due to advanced disease or decay. Signs of evidence include soil heave or cracking, loss of structural roots, root decay, storm damage and structural defects that are obvious and immediately hazardous, such as split and hanging branches.
<i>LEP</i>	Council drafted state legislation which, in similar mode to a DCP, contains objectives for the development of the built environment. It typically contains broad principles, zones of specific types of land use and schedules of such elements as heritage items.
<i>Native fauna</i>	The animal population indigenous to the local area. See ‘native’ trees below.
<i>Native tree</i>	Is generally used here interchangeably with ‘locally indigenous’ which generally means it was found in Waverley prior to European settlement, although it is often extended to include the region of the eastern suburbs of Sydney.
<i>Operational procedures</i>	In relation to trees in Waverley, refers to the establishment, maintenance and repair work carried out by or on behalf of Council with respect to trees or the impact of trees on the environment.
<i>Park tree</i>	Park trees are those found in Waverley’s public open space, including natural areas (such as bushland, foreshore, cliff-face and watercourse), sportsgrounds, reserves and areas of general community use.
<i>Remnant vegetation</i>	Refers to locally indigenous vegetation occurring naturally, either since prior to European development or can be directly traced to pre-European vegetation.
<i>Service provider</i>	Utilities that provide infrastructure such as water, sewerage (wastewater) and telecommunications.

<i>TPO</i>	Tree Preservation Order. Now replaced by Part B3 – Tree Preservation Clause of the Waverley Council’s Development Control Plan 2012.
<i>Tree Protection Zone (TPZ)</i>	<p>A specified area above and below ground and at a given distance from the trunk set aside for the protection of tree’s roots and crown to provide for the viability and stability of a tree to retained where it is potentially subject to damage from development.</p> <p>The Tree protection zone is calculated as 12 x trunk diameter (DBH) when measured at 1.4 metres from ground level. Once calculated this area is to be fenced off as an exclusion zone that is not to be entered.</p> <p>The Australian Standard provides guidelines for how TPZ’s are calculated, how to protect root zones, type of fencing should be used and how the TPZ should be maintained. This document, combined with the Arboricultural advice of a Consulting arborist (AQF level 5) should be consulted when planning any work in the vicinity of trees.</p>
<i>Tree retention values</i>	A significance rating used to determine how retainable a tree/s is to guide the site analysis and site planning stages of development.
<i>ULE</i>	Useful Life Expectancy of a tree. The life expectancy of a tree is defined as how long it is a safe and useful tree. This firstly a result of its age, health, condition, safety and location.
<i>Vegetation Clearing Permit</i>	Application for the removal or pruning of a private tree and also reference as Tree Permit Application.

10. Appendices

10.1 Tree Assessment

Assessment of trees for pruning or removal is evidence based on

- a) Visual Tree Assessment (VTA) of each tree. This is a world-wide Arboricultural industry standard of assessing a tree/s from ground level based on current health, structural integrity, useful life expectancy and visible damage. This method ascertains whether there are grounds for removal or if there is a need for a more detailed inspection of any part of the tree. It does not include specialised assessments such as internal tree decay, aerial inspection, pathology diagnosis of any pests or diseases or risk assessment
- b) Landscape Significance of the tree(s) to the landscape character of the area i.e. is the tree visually prominent and does it contribute to the character and local identity of the area. Other factors include the tree’s age, size, or uniqueness

Often, applications for tree removal may be based on a history of problems or hazards not evident at the time of inspection e.g. damage to buildings; blocked sewers, previously fallen branches, etc.

It is the applicant's responsibility to provide sufficient evidence and background to support the application. This may be in the form of photographs or documented history of the problem or a report from a consulting arborist, licensed plumber, pest controller or structural engineer depending on the nature of the problem. If there is insufficient information the application may be refused or deferred until further evidence is supplied.

10.1.1 When consent may be granted

Taking into account the above, consent may be granted for the following

- Removal of unsuitable or hazardous trees where remedial pruning/treatment will not eliminate the hazard
- Thinning of crowns to preserve solar access, some selective pruning and reduction of the weight of limbs
- Maintenance pruning to remove dead, diseased, dying and defective branches,
- Selective pruning to remove branches causing conflict through encroachment on own or neighbouring buildings
- Root pruning of trees to ameliorate damage to built and natural structures in such a manner as to not compromise the health of trees
- Pruning for service lines
- Lifting of crowns to allow pedestrian or vehicular access
- Pruning for vehicle sight lines, signage and RMS requirements
- Removal of trees in conflict with built structures, where all engineering alternatives have been considered
- For construction or extension of buildings where there is no alternative to maintain the tree/s
- Minimum work to ensure trees remain safe
- Pruning and removal of fruit trees and flowering fruit trees not located on a heritage listed property or the Significant tree register, depending on the species in question.

When granting consent to remove a tree an applicant will generally be required to replace that tree with an advanced approved species which is to be established and maintained for a specified period, especially if the removal of the original tree impacts on neighbours or the streetscape. Random audits of work granted consent will be carried out by Council.

Before planting any replacement tree, it is strongly recommended that the eventual height and size of the tree be considered, particularly in regard to

- Power lines and other services such as water, sewer and drainage lines
- Buildings, walls and pathways
- Sunlight
- Neighbouring properties
- Suitability (trees or shrubs native to the coastal are highly recommended).

10.1.2 When consent may not be granted

Council may not consent to the following work

- Work on trees without owners' or owners' agent's signature on the application

- Removing trees for solar access, leaf, fruit or sap drop, bird or bat droppings, and damage to sewer pipes and built structures (unless all engineering alternatives have been considered)
- Removing trees that are healthy and stable
- Removing or pruning trees for views
- Pruning trees in a manner contrary to the Australian Standard AS4373 Pruning of Amenity Trees
- Pruning work that is outside the tolerance of particular species, for example figs pruned by more than twenty per cent are more susceptible to sunburn
- Tree work for emotive reasons, beyond the scope of the possible reasons given above
- Removing trees because they inhibit grass or garden growth
- Removing trees because of causing allergies, unless the tree can be medically linked to the allergy
- Work which will seriously disfigure or unbalance the tree
- Work which will alter soil levels within the drip line of a tree
- Removing trees because they cause damage to minor ancillary structures such as footpaths and driveways
- Requests to reduce the height of trees
- Pruning to reduce the size of a tree listed on the Register of Significant Trees.

Instances where a formal Council application is not required, provided the applicant submits written Arboricultural advice from an accredited provider, occur when

- The tree is dead
- The tree is a recognised noxious or environmental weed and is not on Council's Register of Significant Trees (see Appendix for list of weeds). The applicant must first seek advice from Council
- The tree is less than five metres in height
- Pruning of dead branches (Council encourages pruning works to be done by a qualified arborist where necessary and in accordance with Australian Standard AS4373 Pruning of Amenity Trees)

**Pruning of branches that are within the set parameters of electric powerlines, as required by Electricity Supply (Safety and Network Management) Regulation 2014 Council encourages pruning works to be done by a qualified arborist where necessary and in accordance with Australian Standard AS4373 Pruning of Amenity Trees). The applicant must first seek advice from Council*

- Pruning and removal of fruit trees and flowering fruit trees not located on a heritage listed property or the Register of Significant Trees. The applicant must first seek advice from Council
- Pruning and reshaping of Cypress Pines not greater than 10 per cent of the whole canopy

10.2 Arboricultural Reports for Tree Permit and Development Applications

Who should prepare an Arborist Report?

The report must be prepared by a qualified arborist who holds the Diploma of Horticulture (Arboriculture) Australian Qualifications Framework of Level 5. Council will consider reports from consulting arborists who are members of either the Institute of Consulting Arborists or

Arboriculture Australia with a demonstrated high level of tree assessment, diagnosis and report writing.

The report is to include a statement from the arborist that their report is an impartial assessment of the tree/s and their condition based on the available evidence and projected outcomes.

What information is required?

The following information is required in the preparation of an arborist's report

- a) The client, specific author (contact and title of qualifications), purpose of report, subject site, date(s) of inspection
- b) Methodology of techniques used in the report
- c) A summary of findings
- d) A site plan showing the location of all relevant trees, numbered to correspond with text in the report. The site plan must accurately show the location of each tree and existing or proposed buildings/structures and above/underground services
- e) A table for each tree detailing
 - (i) Common name and scientific name
 - (ii) Approximate height, age and canopy spread
 - (iii) Diameter at one meter height, and number of trunks if more than one
 - (iv) Condition and structural health of the tree/s, e.g. signs of dieback and other trunk indications, loss of branches, leaves, stunted/distorted growth, wounds, cavities, cracks, included bark/co-dominant branches, pests and diseases and root conditions/issues
 - (v) Hazard assessment of any of the above where relevant
 - (vi) Estimates of the tree's useful life expectancy of the tree using accepted industry methods
- f) A summary and discussion of other relevant tree and site information, e.g. nearby structures; soil and drainage characteristics; habitat, landscape and amenity values; weather exposure; previous human intervention
- g) If pest or disease problems are affecting the health of the tree(s), further expert diagnosis and discussion of treatment may be required
- h) Supporting evidence such as test results, annotated and relevant photographs
- i) Discussion of all available options and the reasons why they are recommended or not recommended, e.g. can services be diverted to avoid root pruning; can a structure be relocated or rebuilt and retain the tree?
- j) Recommended actions and the reasons for their adoption
- k) Resource material to be referenced in an accepted method. References not used in the report are not to be included
- l) Reports from any Resistograph/Tomograph testing must include copies of the charts, be clear and legible and have scientifically supported conclusions

Any report lacking in sufficient detail or applying incorrect analysis or subjective opinion may result in the application being refused or some or all of the recommendations rejected.

10.3 Other/additional Arboricultural information or Reports

Additional Arboricultural information may be required as part of the arborist's report.

10.3.1 Aerial or Canopy Inspection Report

Aerial inspection of the upper trunk and branches of a tree is recommended if decay or poor branch formation is evident or suspected and there is a documented history of branch failure.

The findings of the aerial tree inspection together with photographs are to be included in an arborist report. The report and recommendations must be prepared by an arborist with a minimum qualification of AQF 5 level.

10.3.2 Root mapping Report

Root mapping is the locating and plotting of a tree's roots to determine the size and direction of root growth.

A trench is excavated along a determined line to a specified depth, usually by hand or with the assistance of a hydraulic water or air knife. Any exposed roots must have their location, depth and size and diameter recorded. No roots are to be severed and general root disturbance must be minimised. The excavated soil must be replaced promptly.

The results of the excavation are then analysed to determine the impact that a proposed building/infrastructure/services placement may have on the structural stability or long-term health of the tree/s.

These results must then be collated and presented in report form and include

- A site plan showing the line, length and width of excavation; exact location of tree/s and proposed buildings/structures or underground services
- Photographs of the excavation lines clearly showing their location on the site plan and close up shots of trenches with an article to show scale
- Findings from the results of excavation detailing exact location, depth and size of roots, soil profile, presence of pipes etc.

A root mapping report may be an addition to an arborist report or a separate report. The report must be prepared by an arborist with a minimum qualification of AQF 5.

10.3.3 Tree Transplant Method Statement

If a tree is proposed to be re-located on site, a report must be submitted with the application outlining the methods of transplantation. Council may also stipulate during assessment of any application that a tree be re-located, and a statement be prepared.

The statement must include: If a tree is proposed to be re-located on site, a report must be submitted with the application outlining the methods of transplantation. Council may also stipulate during assessment of any application that a tree be re-located and a statement be prepared.

The statement must include

- A site plan
- Timetable of works
- Details of site preparation including minimising damage to adjacent vegetation
- Transplantation method e.g. machinery to be used, excavation techniques, rootball and crown treatments and stabilisation measures
- Storage: on or off site; details of monitoring and tree care

- Program of monitoring: during transplant process; after care and maintenance stages.

The statement must be prepared by an arborist with a minimum qualification of AQF 5 level.

10.3.4 Tree Monitoring Report

Where required or as listed in a development condition, the site arborist may be asked to provide monitoring or maintenance reports to assess the health and condition of trees on development sites.

This is to include

- A site log showing the date of each inspection, the person who performed the inspection, the tree/s inspected or tested, the maintenance activities performed, any repairs undertaken or required to be undertaken, and any substantial breaches or nonconformances
- The entries in the log book must be signed by the arborist performing the inspection
- Copies of log entries to be submitted monthly
- Where stated, photographs of the tree/s at nominated stages to be submitted. Photographs to include full profile and close-up shots taken from the same location and at the same time of day
- All maintenance to be continued for the stated duration and intervals.

The timing and duration of the reports will be determined according to the likely impact of construction works on the trees to be retained or the maintenance period for newly planted trees or impacted trees.

10.4 Arboricultural Impact Assessment for Trees on Development Sites

Trees on or adjacent to development sites that will be affected by proposed construction works require the following information

- a) Details and estimates of Tree Protection Zones and Minimum Setback Distances for each numbered tree based on the Australian Standard AS 4970 – Protection of Trees on Development Sites
- b) A separate tree plan clearly showing all trees to be retained/removed and each tree numbered
- c) Tree assessment and retention value based on an industry accepted standard
- d) A comprehensive discussion/assessment of the impact of construction works including the
 - (i) Details of any soil modification i.e. cut and fill, excavations
 - (ii) Details of any tree pruning for building clearance or tree health
 - (iii) Site works including hoardings; temporary site structures; wash-down areas and vehicle access
 - (iv) Impact of the proposed building structure and location of services
 - (v) Impact from landscape modifications on site trees
 - (vi) Details of any replacement planting
- e) Root mapping report where required
- f) Tree protection specifications and signage
- g) An outline of WHS and tree protection procedures to be followed on site and appropriate induction for all on-site staff and sub-contractors
- h) A post construction tree maintenance/monitoring program which can be used as conditions should the application be approved.

An impartial assessment of the above impacts with specific recommendations for tree protection must be included in the report or detailed in a separate tree protection plan.

Trees on adjoining properties or public land within 4 metres of the site must also be assessed if construction or site works will occur within their tree protection zones.

10.5 Specialist Report Requirements

10.5.1 Structural Engineers Report

When is a structural engineer's report required?

Supporting evidence in the form of a report may be required from a structural engineer where

- There is alleged damage from tree roots to buildings or major structures
- Alternative design is required to minimise tree root damage to a prominent tree that may be affected by construction works

Who should prepare a report?

Council recommends that a report be prepared by an engineer with tertiary qualifications in structural engineering and a minimum of five years post graduate experience.

What information is required?

The following information is required in the preparation of a report from a structural engineer

- The client, specific author (contact and title of qualifications), purpose of report, subject site, date(s) of inspection
- Methodology of techniques used in the report
- A summary of findings
- A site plan showing the location of all relevant trees, buildings, pathways, underground services etc. The site plan must accurately show the location of each tree
- Detailed site description and site usage
- Detailed description of the footings of the existing or proposed building and whether the footings comply with current building regulations
- Geotechnical information
- Detailed description of methods to isolate building foundations from tree roots
- Discussion of all options available – why they are recommended or not recommended, e.g. can the tree remain with minor modification of building design
- Recommendation of the preferred option and the supporting reasons

Additional Arboricultural information may be required such as a root mapping report or a supporting report from a consulting arborist.

Any report lacking in sufficient detail or applying incorrect analysis or subjective opinion may result in the application being refused or some or all the recommendations rejected.

10.5.2 Licenced Plumbers Report

If tree roots are suspected of contributing to blocked wastewater or stormwater pipes a report from a licensed plumber may be required as supporting evidence.

The report must be a balanced and objective assessment of the problem and is to include

- A clear and legible sewer or stormwater diagram
- Exact site of suspected blockages in relation to location of the tree
- Documented history of previous blockages together with photographic evidence of roots retrieved
- Objective assessment as to the age and condition of the affected pipes
- Balanced and objective discussion of practical methods of preventing further blockages, e.g. replacing affected section of pipeline; re-lining of pipe

10.5.3 Pest and Disease Control Report

If pests or diseases are affecting the health of a tree(s), a report may be required from a licensed pest control operator separately or in conjunction with a consulting arborist.

The report is to include

- Evaluation and discussion of the impact of the pest on the long-term health and structural condition of the tree
- Recommended treatment and management program

10.6 Tree Protection Zones

‘A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree’s roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development’.

The Tree protection zone is calculated as 12 x trunk diameter (DBH) when measured at 1.4 metres from ground level.

Once calculated this area is to be fenced off as an exclusion zone that is not to be entered.

The Australian Standard AS 4970 Protection of Trees on Development Sites provides guidelines for how TPZ’s are calculated, how to protect root zones, type of fencing should be used and how the TPZ should be maintained.

This document, combined with the Arboricultural advice of a Consulting arborist (AQF level 5) should be consulted when planning any work in the vicinity of trees.

