

## **Street and Reserve Trees Protocols**

### **Objective**

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The City of Subiaco recognises the environmental and aesthetic contribution that street, park and reserve trees make to the continuing development and presentation of streetscapes, by preserving and enhancing the 'Urban Forest' character of the City.

The objectives of this protocol are to –

- Preserve and enhance the 'Urban Forest' character of the City, assist in achieving the objectives of the City's Public Open Space in a Drying Climate, Sustainability and Resilience Plan, Greening Strategy and Wildlife Plan and to ensure the City is not exposed to an increase in legal risks for public liability claims by virtue of diminished standards.
- Select, plant, maintain and protect street trees which: provide valuable habitat for the fauna associated with the Perth metropolitan area; and which enhance both existing and future streetscapes, parks and reserves.
- Create a setting in sympathy with the function and appearance of the adjacent land uses, a safe and comfortable environment, while recognising the heritage value of old and significant trees.
- Ensure development considers and accommodates trees where it is possible and practical to do so.
- Ensure the community receives all the economic, environmental, social and health benefits trees provide.

### **Scope**

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This protocol applies to all trees that are owned or managed by the City of Subiaco, Elected Members, City employees, residents, property owners, consultants, contractors, developers and event organisers are all expected to comply with the protocol.

A City tree includes any tree which has the majority (>50%) of its trunk growing from council land, such trees shall be referred to as City trees.

### **Protocol**

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#### **Urban Forest**

The City of Subiaco manages approximately 15,000 street, park and reserve trees and recognises the importance of trees in creating functional and attractive streets and reserves within the urban environment. The City is committed to planning, planting, establishing and maintaining all City trees.

Street trees provide many benefits that have both economic and intangible benefits. While they improve land values they also purify air, their foliage filters noise and reduces its intrusion into domestic areas, they play a role in modifying the effects of climate, encourage visitors, contribute to a sense of seasonal change and provide habitat for the fauna associated with the Perth metropolitan area.

The aim of this protocol is to:

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1. Provide clear policy to ensure a consistent approach towards the provision of street trees in the City of Subiaco
2. Increase the City's tree canopy cover reducing the urban heat island effect, improve air quality and contribute to greening corridors through proactive planting programs
3. Preserve, protect and increase the long term viability of City trees on verges and in reserves through tree protection and maintenance programs
4. Provide safe, cool and green access ways for pedestrians, cyclists and vehicles
5. Reinforce, preserve and enhance the character of our suburbs
6. Direct the most appropriate species and planting techniques for the many potential tree sites in Subiaco - 'the right tree for the right location'
7. Increase canopy coverage on verges and reserves
8. Improve street tree establishment and survival rates
9. Guide the maintenance and management of existing and new trees to ensure that they survive and thrive in the harsh urban conditions.

To effectively promote the City's goals, all City trees, will be:

- Protected from any activity, including development, that threatens their health and/or longevity
- Protected from infrastructure conflict, where possible, with priority given to the relocation of infrastructure away from trees to reduce the potential for immediate or future damage
- Prioritised when considering applications for new developments so that potential conflicts with City trees will be addressed before an application is approved for planning, construction/building and verge related permits. Provide clear guidelines to ensure a consistent approach towards the provision of street trees in the City of Subiaco
- The City prioritises tree retention and will only consider removal when no other reasonable design alternative exists. In the improbable occasion that no reasonable design alternative exists, tree removal must be approved by council

## Street Tree Selection

Street tree selection and management needs to be undertaken in the long term interest of the community as a whole, not in response to the short term preferences of individuals. Wherever possible, trees indigenous to the area will be planted. Where indigenous trees cannot be chosen, the species selection must integrate with the existing streetscape and support the City's strategic objectives.

The streets of Subiaco have often been planted with each street having a consistent theme contributing to many mature avenues of trees within the municipality. Where a street or a section of a street displays a uniform theme, it is proposed to retain that theme and identify that species as the preferred species for the street. Where a street or section of a street has an identifiable theme, but not a consistent theme, it is proposed that the dominant species be identified and any other as the two preferred tree species for that street, or section of street. Where a street has no identifiable theme, it is proposed that two preferred tree species be identified for that street.

A systematic process that identifies aesthetic and environmental objectives, considering site limitations, climate factors, physical characteristics and availability of street trees, both native and exotic, has been used to derive a street tree master plan which identifies suitable species for new and replacement planting. Based on this master plan the City will determine the appropriate street tree/s for each location.

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The street tree protocols recognises that while preferred species have been identified, in consideration of relevant factors there are occasions where previously unknown factors need to be considered when identifying the appropriate species for an area. Where it is identified that the adjacent property owner has a justifiable reason why the tree species identified for that location is not suitable, an alternative will be selected consistent with this protocol. Personal dislike of a tree species, tree litter or perceived problems associated with a particular species is not considered justifiable reasons to deviate from the protocols. Although there are disadvantages associated with street trees, a proper design and selection process maximise the advantages.

### **Tree Planting and Maintenance**

The City is responsible for the planting of all City trees as identified under its annual programs which include community tree planting, street tree planting (replacement and renewal) and requests from residents. On application to the City, residents may be permitted to plant a verge tree in front of their properties. The selection of tree species is determined by the City. Ownership and maintenance of the street tree becomes the responsibility of the City. Tree planting is generally carried out in the winter months to aid in the establishment of trees.

### **Street Orientation**

The objective for all streetscapes is the creation of a balanced avenue effect within the streetscape, which supports environmental considerations including habitat creation, biodiversity which reduces the impact of climate. Street tree selection guidelines are based on the characteristics of an established tree. A distinction is made between east-west and north-south aligned streets to take advantage of solar access benefits in winter from deciduous trees. A further distinction is made between east-west aligned streets which have a broad verge (depth) and east-west aligned streets which have a narrow verge. Street tree selection for the northern verge of east-west aligned streets may, at the request of the adjacent resident, include evergreen species which support habitat creation and biodiversity.

#### **East-West Aligned Streets (narrow verge)**

- Retain the existing predominate species where it satisfies the selection criteria
- Southern Verge: Tree selections that provide summer shade and are winter deciduous in Subiaco conditions
- Northern Verge: Tree selections that provide summer shade and are either winter deciduous or evergreen in Subiaco conditions.

#### **East-West Aligned Streets (broad verge)**

- Retain the existing predominant species where it satisfies the selection criteria
- Both evergreen and deciduous to be considered suitable where the tree is a sufficient distance from the street building line to allow solar access.

#### **North-South Aligned Street**

- Retain the existing predominant species where it satisfies the selection criteria
- Both evergreen and deciduous to be considered suitable, with a preference for evergreen species.

### **Street Tree Planting**

Street tree planting / replacement planting is undertaken to:

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- Ensure a minimum of one tree is planted in the verge adjacent to each residential property, including new developments
- Address missing trees or gaps within the streetscape
- Replace dead street trees that have been removed
- Meet resident requests for new street trees.

Where new street trees are proposed to be planted, the City will write to the adjacent residential property to advise them that a street tree planting opportunity has been identified. Where two (2) species have been identified in the street tree master plan, the resident will have a choice between the nominated species (if the nominated species are available). The final determination of species will be made by the City.

### **Unauthorised Street Tree Planting**

Street trees planted without the City's approval are considered unauthorised plantings. An unauthorised street tree planting shall constitute any one of the following:

- A tree planted without an application to the City;
- A tree planted of an inappropriate species for verge planting; and
- A tree planted out of alignment in relation to the City's verge planting specifications.

Where an unauthorised street tree planting is identified, the City shall determine whether the planting will be retained or removed, dependent upon its conformity to the City's planting specifications. Ownership and maintenance of the unauthorised street tree becomes the responsibility of the City.

### **Commercial Precinct Streetscape Upgrading**

Commercial streetscape upgrading will generally occur as a result of:

- Road reconstruction programs
- Town planning schemes
- Streetscape enhancement programs.

Where a significant number of street trees in a designated commercial precinct are to be replanted at any one time, or where a complete streetscape modification is proposed, active and effective public engagement in the planning process will be encouraged.

A concept plan will be prepared in accordance with this protocol and submitted to Council for approval in principle. The proposal will then be made available to the public for a specified period for comment, which may include a public meeting. Notice of the proposal (inclusive of its estimated cost), comment period and any public meeting will be publicised so that all interested residents have a chance to comment. Residents in the vicinity will be notified in writing. Following the public consultation phase, the proposal will be re-submitted to Council, detailing comments and/or modifications submitted through the process. Following adoption by Council, affected residents will be notified in writing of the plan.

### **Street Tree Watering**

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The City is responsible for the post planting watering of all newly planted street trees until the trees are established. Residents/owners are encouraged to water street trees to assist in the establishment of the street tree.

### Tree Pruning

The City is responsible for the pruning of City trees. Unauthorised tree pruning of any City tree is prohibited under the *Activities and Thoroughfares and Public Places Local Law 2014*. Trees will be pruned according to the Australian Standard for Pruning of Amenity Trees AS/4970.

The City undertakes required pruning on street trees based on a quarterly visual tree assessment and on an as required basis. Street tree pruning may fulfil any of the following requirements, as determined by the City:

- To remove vegetation causing a potential hazard to pedestrians, cyclists, road traffic, or damage to buildings or structures;
- Ensure sightlines near road intersections, driveways, crossovers and footpaths are maintained;
- To remove dead, dying, diseased or pest infested limbs and branches or abnormal growth;
- To prune low growing branches that impede parking control signage and or street signs; and
- To clear the canopy from overhead power lines, electrical feeder lines to individual properties and other essential services.

Following requests from residents for tree pruning, the City will conduct a site inspection to determine if pruning is required. The resident/occupant will be informed of the outcome following the site inspection.

### Tree Removal

The City is responsible for the removal of City trees. Unauthorised tree removal of any City tree is not permitted. It is recognized that each street tree exists in its own right and has a different and individual place in the street. Of equal importance is its role in relation to the rest of the streetscape, the precinct and the City. The preservation of existing street trees is of prime importance and practical techniques are to be used to maintain the health of trees.

The City is authorised to remove a street tree under the following circumstances:

- The tree is damaged, post mature and diseased or in decline and no further remedial techniques are appropriate;
- Causing damage to property, public utilities and the cost of ongoing remedial works becomes uneconomic and there is no further alternative solution;
- Causing immediate safety hazard to the public or poses a serious health risk;
- The tree is dead;
- The tree has been assessed by the City as structurally unsound;
- The tree is an unauthorised street or reserve tree;
- The tree has been affected by infrastructure works and the tree cannot be retained; and
- Where trees to be removed have been identified in a property development plan that has been approved by council. The replacement trees must be of an appropriate size and species determined by the City.

Where a tree is removed by the City, the City will replace the tree in the same location if possible.

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If a tree is removed without authorisation by another party, the City may seek to recover all related costs for unauthorised tree removal, pruning or damage.

Where street trees are proposed to be removed / replaced, the adjacent residential property will be advised that tree removal will be undertaken and that the tree will be replaced in the next planting season.

### **Tree Pruning and Removal Requests**

The City will investigate and respond to all tree pruning and removal requests. The following are not considered to be sufficient or justifiable reasons for the pruning or removal of City trees:

- The tree species is disliked
- The tree is too large in size
- The tree attracts birdlife or other fauna
- The tree shape or structure is not liked
- The tree is an inconvenience during development works
- The tree is in the way of verge development
- Shading of lawns, pools etc.
- The tree produces natural debris, which includes the dropping of leaf, flowers, fruit, nuts, bark, etc.
- The tree is perceived as dangerous
- A perceived danger that a tree might fall in a storm.

### **Development Sites**

The protection of trees is vital to retaining our City's character and environment. Trees grow in a delicate balance with their environment and any changes to that balance must be minimized if the tree is to remain in a healthy state and fulfil its potential. It is rarely possible to repair stressed and injured trees, so damage needs to be avoided during all stages of development and construction.

Street and reserve trees need to be protected at development sites in order to preserve the amenity of streetscapes. Where development or other activities have the potential to impact City trees, a bond for the protection of the tree may be held by the City prior to the commencement of development. The bond will be held for the duration of the works.

No branches or tree roots from the City's trees are to be cut without the authorisation of the City's arborist. Branches or roots approved for cutting are to be cut in accordance with the appropriate arboricultural standards by City staff.

The developer/contractor and property owner shall protect the City's street trees from any damage that may be caused by the scope of works covered by the development for the duration of the works.

A street tree is an asset forming part of the verge infrastructure. As such, the City actively seeks to protect street trees adjacent to development sites using the following guidelines:

- If any inaccurate information presented to the City as part of a development application results in a tree being pruned or removed, the required setback being impeded, unauthorised removal or pruning of a tree, the City will recover the full costs associated with the works from the applicant

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- If a street tree is damaged, declines or dies as a result of the development then costs for pruning, removal and/or replacement of the tree may be recovered from the owner / developer
- If a tree needs to be removed or, is removed without authorisation, the applicant will be required to reimburse the City the full costs associated with the tree removal, pruning and replacement value based on the Helliwell System of tree valuation.

## Tree Protection Zone (TPZ) Requirements at Development Sites

A tree protection zone is a specified area above and below ground level that is set aside for the protection of the trees structural root system. The installation of a TPZ around all City trees adjacent the development site must be installed during a development that may impact on the verge trees, to the following conditions:

- The size of the TPZ will be determined by the City, dependent on the size of the tree and verge space available;
- At a minimum, the TPZ will cover two metres by two metres around the tree trunk;
- The TPZ must not obstruct roads or footpaths unless approved alternatives are in place
- No materials are to be stored within the TPZ;
- No vehicles or machines are to be driven or parked within the TPZ;
- If any work is proposed to be undertaken within the TPZ the contractor is to contact Technical Services to arrange a site meeting to discuss the City's requirements; and
- The developer/contractor or property owner shall be responsible for the cost of the TPZ.

## Development Conditions for Crossovers and Driveways

To minimize the risk of tree damage/death a minimum construction clearance of two (2) meters is required from the visible root collar of an existing street tree. Where excavation to a depth greater than 100mm is proposed, the clearance should be greater than three (3) meters from the base of an existing street tree. During the development works temporary protective fencing must be installed for the duration of development (including demolition) at the expense of the developer.

## Boring

If excavation or trenching works are to be undertaken adjacent City trees, a tree protection zone (TPZ) will be determined by the City. Where boring is unavailable, excavation shall be by hand or non-destructive digging.

The table below indicates the recommended boring depths for trees based on trunk diameter:

| Trunk diameter | Minimum Depth to Bore |
|----------------|-----------------------|
| <1000mm        | 800mm                 |
| 1000-1500mm    | 950mm                 |
| >1500mm        | 1100mm                |

## Tree Removal and Replacement at Development Sites

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The City prioritises tree retention on City managed land adjacent to development sites and will only consider removal when no other reasonable design alternative exists. In the event that an approval to commence development is granted by the City, which requires the removal of one or more street trees, the applicant will be required to arrange removal of the tree(s).

Where a tree is to be removed or pruned, the developer / contractor or property owner will be required to meet the costs associated with the pruning or removal and replacement of the tree and will be required to compensate the City for the costs associated with the loss of the tree.

Where street trees are removed as a result of the development process the tree replacement will be in line with this policy and the following conditions:

- Any additional replacement trees that are not able to be planted on the verge adjacent to the development will be planted elsewhere in the City and at the City's discretion;
- Replacement trees must be of an approved species in accordance with the Street Tree Master Plan;
- All replacement trees must be of a size and health that is acceptable to the City; and
- All replacement trees will be planted by the City with the associated costs met by the developer/ applicant.

## Vandalism to City Trees

Members of the community who witness vandalism to City trees are encouraged to report this information. All reported incidents of vandalism will be investigated and responded to appropriately by the City.

## Community Consultation and Involvement

The City values its community's opinion, and encourages consultation and communication in the improvement of its urban forest. As such, the City will endeavour to apply the following practices:

- Increase resident involvement in the ongoing care of its urban forest by hosting community tree planting programs;
- Inform affected residents of street tree plantings and removals through letter drops;
- Prioritise community safety in conducting City tree maintenance works; and
- Raise community knowledge about the benefits of trees and the urban forest through tree information leaflets, the City's web page and local media.

## Definitions

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**Bond** a refundable monetary amount paid to a City trust that is held for the duration of the development

**City Tree** is any tree which has a majority (> 50%) of its trunk growing from Council managed land

**Helliwell System** is a recognised system that allows for a monetary value to be placed on the visual amenity provided by an individual tree asset

**Reserve Tree** is a tree that is located within a park, reserve or natural area

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**Street Tree** is a tree that is located within the road reserve

**Tree** is defined City as a woody perennial plant generally having a single stem or trunk which will grow to a height of approximately 4 metres or more

**Tree Protection Zone (TPZ)** is an area above and below ground that is set aside for protection of tree roots, trunk and crown in order to provide for the viability and stability of a tree that is to be retained at a development site

**Urban Forest** is a population of trees and vegetation growing within an urban setting for the purpose of improving the liveability of that urban setting whilst providing social, economic and environmental benefits to the community as a whole

**Vandalism** means the unlawful destruction, damage or injury to City owned tree assets which can include, but not limited to, poisoning, pruning, causing malicious damage to, removal and/or ringbarking.

**Community** broadly refers to the people living and working in, or visiting, the City of Subiaco.

### Related Sources

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- *Activities in Thoroughfares and Public Places Local Law 2014*
- *Local Government Act 1995*
- *Local Government Property Local Law 2014*
- Public Open Space in a Drying Climate Policy
- Public Open Space Strategy 2014
- Strategic Community Plan 2017-2019
- Street Tree Master Plan
- Sustainability and Resilience Strategy 2016-2021
- Verge Policy
- Wildlife Enhancement Plan 2014-2019