



# Urban Tree Management Plan



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Council documents are amended from time to time, therefore you should not rely on a printed copy being the current version.

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# 1. Purpose

This Plan provides a rationale and framework for an equitable, transparent and consistent approach to the management of urban trees by Swan Hill Rural City Council (Council).

# 2. Context

The protection of existing trees and enhancement of trees is pivotal to Swan Hill Rural City Council's Vision of a prosperous and healthy community enjoying quality facilities and services.

The innumerable environmental, economic and social benefits provided by trees contribute to a livable town which supports human health and wellbeing whilst enhancing the character of our urban areas and townships.

As urban development increases and vegetation on private land diminishes, the provision and protection of trees in the public realm will become increasingly important.

# 3. Scope

This plan applies to all public trees listed on Council's Tree Asset Register that are on land owned or managed by Swan Hill Rural City Council within all urban boundaries, townships and along roadsides in speed limit zones of up to and including 70 kilometres per hour.

This plan is applicable to all developers, builders, service providers, residents, contractors, event organisers and internal works units undertaking activities in proximity to municipal trees.





Figure 1: Swan Hill Rural City Council Municipality.

Trees **excluded** in this plan but may be covered by other policies and legislation include;

- Trees on private property
- Trees on rural roadsides
- Roadsides managed by VicRoads / Regional Roads Victoria
- Public trees in National, State or Regional parks or on land managed by DELWP or Parks Victoria
- Bushland and natural reserves

## 4. Plan Objectives

This plan is intended to:

- Support and enhance the management of urban trees within the Swan Hill Rural City Council Municipality.
- Standardise processes and procedures to ensure consistency in tree management decisions made by the Swan Hill Rural City Council.
- Value the contribution that urban trees make to the livability and character of Swan Hill Rural City Council.
- Assist in Councils mission to adopt work practices and implement policies that reduce our environmental impact, advocate for the protection of our environment and fulfill our regulatory obligations.
- Protect existing trees from construction and development activities.
- Define the circumstances under which public trees may be removed.

## 5. Strategic Areas

The Swan Hill Rural City Council Tree Management Plan is divided into eight key areas;

1. Tree Protection
2. Tree Removal
3. Tree Valuation
4. Tree Asset Management
5. Tree Selection and Planting
6. Tree Roots and Infrastructure
7. Fauna
8. Community Engagement

## 5.1. Tree Protection

Trees are dynamic living organisms that require specific environmental conditions in order to maintain life, health and value as a community asset. Trees consist of crowns, stems and roots and damage sustained to one part will compromise the function of the tree as a whole. If trees are to be adequately retained and protected, these requirements must be considered and met during all stages of development.

Trees will be protected from construction works and other activities that threaten their health and stability. All construction, works, events and development activities in proximity to Council trees and trees shown on any endorsed plans to be retained must abide by the following requirements:

- Removal of trees will not occur unless approved by the Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer – Works or their delegate.
- Trees may not be pruned in any form and branches or roots may not be removed, unless authorised by the Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator or delegate. Any pruning undertaken on Swan Hill Rural City Council trees must conform to *AS 4373 Pruning of Amenity Trees* and only be undertaken by adequately accredited and insured personnel.
- Swan Hill Rural City Council trees shall be protected from construction and works activities in accordance with Australian Standard AS 4970- *Protection of trees on development sites*.
- Care will be taken at all times to ensure no damage is sustained to tree stems, crowns and roots.
- Any exemptions to these requirements must be approved by Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator, Development Manager or their delegate.

### Tree Protection Zones

A Tree Protection Zone (TPZ) may be requested to be established in accordance with Australian Standard AS 4970- *Protection of trees on development sites* for the duration of any works in proximity to a Swan Hill Rural City Council tree or tree shown on an endorsed plan to be retained.

### Root pruning

Roots are responsible for the uptake of water and nutrients and for anchoring and supporting the tree in the ground. Root pruning is generally discouraged as the long-term impacts are not always predictable.

Any root pruning must be approved by Director Infrastructure, Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator, Development Manager or Senior Environment Officer or their delegate.

Where root pruning is unavoidable, all cuts will be clean cut using sharp tools such as secateurs, pruners, handsaws or specialised equipment.

Under no circumstances can roots be ripped or pulled by machinery.

## Events

Parks and public open spaces provide the perfect venue and backdrop to a diverse array of community events and activities. Trees provide valuable amenity and much needed shade, especially over the warmer months, however can sustain damage from activities that occur around them.

Common ways that trees can be injured during events include;

**Compaction** of the soil profile in which the space between soil particles is reduced, limiting the amount of air and water available to tree roots. If occupation beneath trees is frequent enough to damage the lawn, then it is likely that tree roots are also being damaged. Compaction is especially problematic on silty soils or during wet weather. If occupancy of vehicles or other equipment beneath trees cannot be avoided, there are many products available that will distribute loads and therefore reduce the amount of soil compaction sustained.

**Mechanical damage and injury** to trees from vehicles, conflicts with equipment, unauthorised pruning and from tethering or fixing equipment and objects to trees.

Less common is the **spill of chemicals or liquids** into the soil or the **scorching** of tree canopies due to the proximity of outdoor heaters and exhausts.

In addition to the tree protection criteria listed above, the following must be applied to all events and activities held in proximity to trees;

1. There should be no vehicular movement or placement of sheds/large infrastructure beneath the drip-line of a public tree except where ground-protection, such as track mats or similar, has been implemented.
2. Equipment, decorations and signage must not be tied to, tethered to, nailed to, suspended from or placed within tree crowns, branches or stems.
3. Care will be taken at all times to avoid damage to tree crowns, branches and stems.
4. Trees must not be pruned in any form to facilitate access or activities unless permission from Council has been sought prior to the event.
5. Outdoor heaters and exhausts must be placed no less than 2 metres from any part of a tree.
6. Refueling, cleaning of equipment and emptying of liquid waste may not occur under the dripline of any tree.

Person(s) or organisations found to have failed to comply with these and any other directions outlined in this plan may be prosecuted in accordance with Swan Hill Rural City Council Local Law No. 2.

## Tree Protection Management Plans

In instances where works or activities by contractors and other external parties cannot be undertaken within the parameters outlined in the abovementioned tree protection requirements, a Tree Protection Management Plan (TPMP) may be requested to be prepared and implemented prior to the commencement of the project.

1. The Tree Protection Management Plan (TPMP) must be prepared in accordance with Australian Standard AS 4970- *Protection of trees on development sites*.
2. The TPMP will assess the impacts of activities on public trees, recommend mitigation efforts to minimise identified impacts and identify methodologies to guide works and activities through all stages of a project.
3. A project arborist may be required to oversee all works near trees for the duration of works.
4. The TPMP must be endorsed by Council's Environment Officer or delegate prior to commencement of the works.
5. The Principal Contractor will be responsible for the implementation of the TPMP by all contractors and personnel onsite.
6. Any exemptions to these requirements must be approved by Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator, Development Manager, Senior Environment Officer or their delegate.

## 5.2. Tree Removal

Trees, like all living things grow, age and eventually die. Swan Hill Rural City Council will manage and monitor all public trees throughout their lifecycle and remove and replace them as appropriate. Whilst tree removal is a last resort management option, public safety always takes priority.

Trees may not be removed unless approved by the Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer - Works or delegate.

Waste and debris generated from tree maintenance activities will be disposed of as directed by the Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator or delegate, including mulch and firewood and will not be offered to residents or businesses unless approved by the Director Infrastructure, Works Manager, Senior Technical Officer – Works.

### Tree removal criteria

Tree removal **shall not be considered** in the following instances;

- a. If the tree is considered healthy and structurally sound.
- b. If there is a safe and practical means for tree retention.
- c. For solar access.
- d. For unjustified property or infrastructure damage claims.
- e. To reduce leaf, fruit and litter debris.
- f. For causing minor allergenic and irritant responses.
- g. To minimise obstructions of advertising signage and desired views.
- h. For awnings, verandas and other projections over public open space.
- i. To reduce the impact from any bird/bat/other animal waste or noise.
- j. For superficial bushfire risk.
- k. If the tree/s provides an important biodiversity function such as recognised high conservation road reserves.
- l. For personal aesthetic preference.

- m. Trees listed as a 'significant tree' on either the Swan Hill Rural City Council or National Trust registers.

Any exemption to the above must be approved by the Swan Hill Rural City Council CEO, Director Infrastructure or Works Manager.

The removal of trees **may be considered** under the following instances;

- a. All hazardous trees will be removed as soon as reasonably practicable.
- b. Trees that are unviable, have a high probability of failure, or are structurally unsound.
- c. Any tree deemed dead, dying, in severe decline or approved by the Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator or delegate.
- d. For justified Council property or infrastructure damage approved by the Works Manager, Senior Technical Officer - Works or delegate.
- e. In the case of works and development, only once practical design solutions to retain the tree have been exhausted.
- f. A tree that has a defect requiring action that cannot be rectified without removal of the tree and approved by the Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer – Works or Park and Gardens Coordinator.
- g. For pest, disease and biosecurity reasons that cannot be managed with the tree *in situ*.
- h. The tree is registered weed specie for a particular location.
- i. Trees proven to be causing damage to private infrastructure or services where all interventions to retain the tree have been exhausted.
- j. Trees that are recognised as inducing severe allergenic or toxic responses following written confirmation from a registered medical practitioner and authorisation from the Council CEO or Infrastructure Director.
- k. As part of a Council project, whole street upgrade or capital works program which will result in a net increase in or improvement to green space that could not be achieved with the tree/s *in situ*.
- l. Trees that do not meet specific objectives of the approved street theme, a masterplan or a management plan for a location in which they are located.
- m. Non-indigenous trees within natural or bushland reserves that are considered weedy or incompatible with the conservation values of that reserve.
- n. Trees listed as a 'significant tree' on either the Swan Hill Rural City Council or National Trust registers may only be removed following authorisation from the Council CEO or Infrastructure Director.

In every instance, the on-going health and retention of the tree in the landscape will be given priority.

### 5.3. Tree Valuation

When the removal of a public tree is deemed necessary for construction, development or works, all costs associated with its removal and replacement must be paid by the property owner, contractor, utility or developer prior to removal.

#### Tree Removal Costs

The costs associated with the removal of a public tree include:

A. Tree Amenity Value	Calculated in accordance with the method approved by an Authorised Council Officer.
B. Removal Costs	Costs associated with the removal of the tree including stumps, disposal of debris, advertising and any community engagement.
C. Tree Replacement Costs	Costs associated with the suitable replacement of the tree being removed. The level of reinstatement required will be determined by Swan Hill Rural City Council and include a 24-month maintenance period or period as approved by the Director Infrastructure, Senior Environment Officer, Works Manager, Senior Technical Officer – Works or Parks and Gardens Coordinator. Opportunities to improve soil conditions and increased water capture shall be explored.

A Tree amenity value (A.) will not be charged in the following instances;

- a. Trees that are dead (except in cases of intentional vandalism or poisoning).
- b. Trees with a useful life expectancy (ULE) of less than two years.
- c. Where the tree is a declared weed species for a particular location.
- d. Trees that have been assessed by a qualified arborist that pose a medium, high or very high level of residual risk in accordance with Swan Hill Rural City Council's risk management framework (Based on *Australian Standard for Risk Management ISO 31000:2009*).
- e. Trees proven to be causing damage to private infrastructure or services where all interventions to retain the tree have been exhausted.

#### Bonds

Swan Hill Rural City Council may impose bonds on contractors, developers and event organisers where necessary, to ensure the adequate protection of all trees to be retained. The bond or bank guarantee amount will be the combined amenity, removal and replacement value determined in accordance with this plan. The bond or bank guarantee will be held for the duration of the works.

## 5.4. Tree Asset Management

Swan Hill Rural City Council will ensure that its high standard maintenance regime is continued and strengthened and that it provides adequate resources for ongoing urban tree management. Swan Hill Rural City Council will regularly update tree maintenance standards and procedures to ensure they reflect legislative requirements and industry best practice.

### Tree Data

Swan Hill Rural City Council has a register of trees for which it is responsible. Swan Hill Rural City Council tree management is linked to this inventory and allows for the details of all tree works and inspections to be recorded, providing evidence that Swan Hill Rural City Council satisfactorily maintains its urban tree population.

To maintain the integrity and content of the asset inventory and works program;

1. All trees considered to be tree assets are to be recorded in the register.
2. The tree register is to be updated no greater than every five years to ensure that the content is current and relevant.
3. Swan Hill Rural City Council staff and contractors will update electronic information as required including adding trees planted by a third party and recording trees that have been removed.

### Tree Pruning

Swan Hill Rural City Council undertakes pruning of street and park trees as part of its proactive, reactive and electrical line clearance programs.

1. All tree pruning on urban trees will be in accordance with AS 4373 *Pruning of Amenity Trees*.
2. All tree pruning on Swan Hill Rural City Council trees outside of the Proactive Tree Management program must be approved by the Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator or delegate.
3. No more than 30 per cent of the total tree crown will be removed at any one time.
4. Swan Hill Rural City Council shall not allow pruning of trees under the following circumstances;
  - a. For solar access.
  - b. To reduce leaf, fruit and litter debris.
  - c. For causing minor allergenic and irritant responses.
  - d. To minimise obstructions of advertising signage and desired views.
  - e. For awnings, verandas and other projections over public open space.
  - f. To reduce the impact from any bird / bat / other animal waste or noise.
  - g. For personal aesthetic preference.

Any exemption to the above must be approved by the Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager or Senior Technical Officer - Works.

## Proactive maintenance

Swan Hill Rural City Council's Proactive Tree Management Program aims to provide the necessary maintenance of tree assets as described by this plan. Activities covered in the scope of works for the Proactive Tree Management Program are included in Appendix 1. Each tree asset should be inspected and serviced by experienced staff or contractors.

1. Trees in council managed major parks and major recreation facilities in Swan Hill and Robinvale will be inspected on a more regular basis and works programmed accordingly. A list of nominated parks and recreation facilities is included in Appendix 2.
2. All Council trees within Swan Hill's and Robinvale's urban area will be inspected and works programmed both;
  - a. Annually for Swan Hill trees under electric lines as part of the Electrical Line Clearance Management Plan, and
  - b. At least once every three years as part of the Proactive Tree Management program.
3. All rural town maintenance zones will be inspected and works programmed at least once every five years.

## Significant Trees

Council manages many noteworthy trees that are captured on Council's Significant Tree Register and/or the National Trust's Register of Significant Trees. Some of these trees may be over-mature and nearing the end of their natural life. In recognition of the contribution that these trees make to Swan Hill Rural City Council's cultural and environmental heritage, Swan Hill Rural City Council's Planning and Development Department will afford these trees extra attention to manage their mortality and prolong their presence for as long as practical.

## Electrical Line Clearance

Council will maintain clearances around overhead electric lines in compliance with the *Electrical Safety Act 1998*, *Electricity Safety (Electric Line Clearance) Regulations 2015* and the Swan Hill Rural City Council Electric Line Clearance Management Plan.

Clearance from trees over roads and footpaths are outlined in Council's Road Management Plan.

Wherever possible, all pruning for electrical line clearance within the urban declared area will adhere to AS 4373 Pruning of Amenity Trees.

## Reactive works and requests for maintenance

Tree maintenance activities are frequently required outside of the Proactive Tree Management such as after severe weather events, as a result of a change in tree condition or in response to customer requests.

Council will assess customer requests regarding urban trees in line within the parameters of this plan and all customer service requests will be responded to in a timely manner.

The Swan Hill Rural City Council also has specific responsibilities under the *Emergency Management Act 1986* in response to and recovery from emergencies such as storms, fires and floods within the Swan Hill Municipality.

In circumstances where tree works are required to be carried out in an emergency situation, the employee on duty or representative on site will be entitled to exercise discretion about what works are carried out in the prevailing conditions.

## Tree Inspections

There are many types of tree inspections that are required as part of the tree management program. Types of inspections may include tree risk assessments, tree planting requests, customer service requests, tree health assessments and routine inspections as part of a maintenance cycle.

Council shall implement a proactive urban tree asset inspection program based on risk.

All inspections of Council trees undertaken by Council staff and/or approved Contractors;

- Must be undertaken by a suitably qualified arborist or trained person.
- Shall be recorded in Council's tree asset register and/or maintenance database.

## Pests and Disease

The Swan Hill Rural City Council will monitor and treat pest and disease incursions that threaten urban trees as appropriate and as resources permit.

The Victorian State Government is responsible for matters of biosecurity including minimising the impacts associated with the entry, establishment and spread of invasive plants, pests and diseases.

## 5.5. Tree Selection and Planting

Investment in quality tree stock and industry best-practice planting techniques is essential for giving a tree the best chance of fulfilling its long-term intended function. A combination of planning, site preparation, quality stock selection and on-going maintenance is essential for successful tree establishment and for avoiding costly interventions at a later date.

Selection of tree species shall be guided by the list contained in this plan. Existing themes within a street must be considered and matched where appropriate. The approved tree list shall only have tree species removed or added with the approval of the Works Manager, Senior Technical Officer - Works and the Parks and Gardens Coordinator.

Urban tree planting will be programmed through the following avenues:

- Council's Parks and Gardens annual plans
- Masterplans – Riverfront & Recreation Reserves
- Community plans
- Coordination with infrastructure improvements works program; and
- Community requests.

In order to maximise the environmental benefits that trees provide, large canopy trees may be planted wherever conditions allow.

Council will continue to seek new tree planting opportunities in appropriate locations to maximise tree canopy cover and deliver associated environmental, social and economic benefits.

Council will plant the most appropriate tree species for a given location based on site suitability, aesthetic, functional and environmental attributes and the potential to contribute to the predominant or preferred landscape character.

All new tree plantings should have a maintenance period of 24 months (or period as approved by the Works Manager, Parks and Gardens Coordinator or Senior Technical Officer – Works) post planting to aid establishment.

Residents are not permitted to plant trees on Council managed land without permission by the Works Manager, Parks and Gardens Coordinator, Senior Technical Officer - Works or delegate and a works within road reserve permit may be required. Trees that do not meet the objectives of this plan shall be removed.

Council will not plant tree species that are environmental weeds in our region.

Council shall take preventative measures to minimise future conflicts between tree roots and infrastructure. Such preventative measures may include;

- Pursuing the relocation of infrastructure and utilities away from trees.
- The adoption of technologies such as Water Sensitive Urban Design, structural soils, contiguous tree root trenches.
- Coordinating capital works, streetscape and street tree renewal cycles wherever possible.
- Considered tree species selection and placement.

## 5.6. Tree Roots and Infrastructure

Trees are an integral part of the urban fabric and an understanding of tree root behavior in urban areas is essential for minimising conflicts between trees and other infrastructure.

Trees have horizontal root structures that are typically found within the top metre of the soil profile. Tree roots are opportunistic and will proliferate where below-ground conditions of water, oxygen, nutrients and temperature are favorable. Frequently, construction techniques employed for the installation of civil infrastructure and services can in fact create favorable conditions for tree root growth such as gravel footings and gaps between joins of kerbs and pavers. Condensation on the lower surface of pavers due to variations in cooling can also provide moisture for tree roots.

Conflicts between tree roots and infrastructure are generally classified into three areas;

### **Direct damage to light-built structures:**

Direct damage is the distortion of built structures due to the exertion of pressure on the structure as the tree grows. Such structures include brick fences, low walls, crossovers and paths. Damage is caused when the intruding root expands as it grows, exerting outwards pressure on the structure. In order to cause damage, the weight of the structure must be less than the expansion pressure of the root.

Light structures will age and deteriorate regardless of the presence of tree roots and tree root activity generally gets a disproportional amount of the blame. Frequently, tree roots will exploit an existing crack or fault.

### **Indirect damage - Subsidence and heave from soil moisture variations:**

Subsidence and heave of foundations and built structures are the result of soil moisture changes over time. Indirect damage is most common in clay soils due to the shrink/swell nature of the soil as it dries out or absorbs water. The shrinking effect of the soil that leads to subsidence of structures can be exacerbated by the water demands of surrounding vegetation. Although surrounding vegetation does influence the water balance of the soil to some extent, there are many factors that can contribute to foundation movement including soil type, prolonged periods of drought, leaking pipes and changes in soil hydrology from an increase in impermeable surfaces. In general, if the foundations of a structure are deeper than where tree roots exist and can extract moisture, damage from tree roots is unlikely.

It can be expected that all residential properties within the municipality have or will eventually have a tree in the nature strip in front of the property and therefore new dwellings, structures and concrete slabs should be designed and constructed accordingly.

### **Damage to Sewers, Pipes and Drains:**

Leaking pipes as a result of poor construction, old earthenware and cracked and faulty joints can create a moisture gradient that encourages roots to proliferate in the direction of the pipe. For tree roots to enter a pipe there would need to be a pre-existing fault or leak as trees do not actively 'search' for water. In some rare instances, root growth can displace pipes (direct damage) causing them to break.

It is the responsibility of the property owner to maintain drains and pipes to the legal point of discharge. Root intrusion can be avoided by ensuring that all joints are watertight and fitted correctly and pipes are manufactured from watertight materials such as PVC rather than earthenware.

Council's procedure regarding each of these types of damage is addressed below.

1. Council will not remove public trees for unjustified claims of damage from tree root activity.
2. Claims for indirect property damage should be accompanied by a report from a qualified geotechnical or structural engineer that implicates tree root damage and also considers soil type and the age and type of footings of the structure.
3. Should infrastructure damage be attributed to roots of a public tree an appropriate remedial solution will be sought. Such remedial solutions may include;
  - Realignment of paths.
  - Selective root pruning.
  - Casting concrete kerbs *in situ*.
  - Ramping and bridging over existing tree roots.
  - Increasing the tree planting/plot area.
  - The installation of tree root barriers.
4. Tree removal will only be considered should no practical arboricultural solution be found and if the damage is solely attributed to that tree.
5. In the case of indirect damage, the potential of soil heave as a result of tree removal or tree root barrier installation must also be considered.
6. Once alerted to existing conflicts between infrastructure, Council will investigate in accordance with MAV's guidelines for tree root damage claims.
7. Should tree removal be deemed necessary by the Works Manager, Senior Technical Officer – Works, Parks and Gardens Coordinator or delegate, a replacement tree should be planted as close as practically possible to the tree being removed. Every effort will be taken to ensure that the replacement tree will not result in similar damage in the future.

## 5.7. Fauna

Urban trees create important habitat for a diverse range of native fauna and therefore can be either positively or negatively impacted by routine tree management activities.

In recognition of the contribution that urban trees make to biodiversity, Council will;

1. Endeavour to relocate native fauna that will be displaced from routine tree management activities where it is possible and reasonable to do so;
2. In accordance with the tree removal and pruning criteria listed in this plan, trees will not be removed or pruned to reduce the impact of waste or noise from any bird or other animal.

### **Habitat trees**

Hollows provided by large old trees provide critical habitat for many species that are typically not present in younger trees. Eucalypts for example will generally not start forming hollows until they are over a century old and are therefore extremely difficult to replace once they are removed.

Hollow bearing trees that meet the criteria for removal as outlined in this plan will be made safe and retained as habitat trees wherever it is safe, practical and appropriate to do so.

### **Termites**

Termites are native species and part of the natural environment where they play important ecosystem functions. Out of the hundreds of species of termites in Australia, only a dozen or so are known to cause damage to property.

Trees that contain termites are not necessarily compromised as the termites will feed on the heartwood (deadwood) and not the living tissues the tree requires for growth and stability. Removal of a tree with termites may in fact increase the chance of damage to property as, once the tree or food source is removed, termites will seek out a new food source which may include timber in and around the home.

The Swan Hill Rural City Council is in a declared termite area and it is the responsibility of property owners to ensure that their property is suitably protected.

Any request to have a Council tree inspected or removed for termites will be undertaken in accordance with the inspection and tree removal criteria outlined in this plan. Council will not allow;

1. The drilling or boring of trees to ascertain the presence of termites.
2. The removal of Council trees as a preventative measure against termites.

Any exemption to the above must be approved by the Swan Hill Rural City Council CEO, Director Infrastructure, Works Manager, Senior Technical Officer – Works or Parks and Gardens Coordinator.

## 5.8. Community Engagement

1. The community shall be informed about major projects involving multiple tree removal's and planting and any other specialised projects that involve Council trees.
2. The type and extent of community engagement will vary depending on the impact of the works on the local community and will be determined in accordance with a number of factors including; the prominence of the location, the significance of the tree, the number of trees being impacted and the visual impact of proposed works.
3. Community engagement may include direct contact with the customer, letters to immediately affected residents, signage on site and/or via information on the Council website or social media platforms.
4. The Swan Hill Rural City Council will assess customer requests regarding urban trees in line within the parameters of this plan.
5. All customer service requests will be responded to in a timely manner.
6. The Swan Hill Rural City Council may notify the community of unauthorised works and undertake site specific responses following tree poisoning, vandalism or prohibited tree removal. Those may include erection of temporary or permanent signs.
7. The Swan Hill Rural City Council may notify adjoining property owners of the removal of large trees from residential streets.
8. Removal of trees that are hazardous will be undertaken as soon as reasonably practicable and therefore it may not be possible to provide a period of notification.

### **Tree Planting**

Council's annual planting program is made up of individual tree requests, capital projects and tree replacements.

1. Individual customer tree planting requests will be followed up with the customer directly.
2. Council shall inform affected residents of entire streetscape upgrades.
3. Planting of replacement trees may not necessitate customer or community engagement.

### **Tree Maintenance Activities**

For customer service requests, Council's Works Manager, Senior Technical Officer - Works, Parks and Gardens Coordinator, Senior Environment Officer, suitably qualified Arborist or respective delegate will, at the time of assessment, allocate a timeframe for any required works based on the urgency, risk and severity of the defect.

This information is generally passed on to the customer verbally or in the form of a letter or email unless specified otherwise. Depending on the volume of tree works on Council's system at any one given time, it may not be possible to give an exact date and time for specific works.

## Glossary

<b>Authorised Council Officer:</b>	Is a person who has been delegated by Council to perform certain compliance and enforcement duties.
<b>Canopy Types (E, D, S-D):</b>	E = Evergreen, D = Deciduous, S-D = Semi-Deciduous.
<b>Council Tree:</b>	Refers to all public trees that this plan applies including those that are on land owned or managed by the Swan Hill Rural City Council within Council's urban boundary townships and along roadsides in zones up to 70 km/hr.
<b>DBH:</b>	Trunk diameter at breast height. Measured vertically at 1.4m from ground level.
<b>MAV:</b>	Municipal Association of Victoria
<b>National Significant Tree Register:</b>	The National Trusts of Australia have collaborated to create a National Register of Significant Trees. This Register is consistent with their mission to protect and celebrate Australia's heritage.
<b>Noxious Weed:</b>	means; (a) a State prohibited weed; (b) a regionally prohibited weed; (c) a regionally controlled weed; or (d) a restricted weed.
<b>Risk:</b>	The combination of the likelihood of an event and the severity of the potential consequences. In the context of trees, risk is the likelihood of a conflict or tree failure occurring and affecting a target and the severity of the associated consequences.
<b>Swan Hill Rural City Council Significant Tree Register:</b>	Many trees within Swan Hill Rural City Council contain significant scientific, social, historic and amenity attributes. It is the purpose of the significant tree register to provide a framework where significant trees within the municipality can be identified, assessed and afforded appropriate protection. Some of these trees may also be included on the National Trust of Australia (Victoria) Register of Significant Trees.
<b>Suitably Qualified Arborist:</b>	A person who has a minimum qualification of Certificate Level III in Horticulture or Arboriculture, or an equivalent qualification and at least three years field experience in assessing trees.
<b>Trained Person:</b>	A person delegated by the Director Infrastructure, Works Manager, Technical Officer – Works or Parks and Gardens with the appropriate field experience in assessing or conducting tree inspections.
<b>TPZ:</b>	Tree Protection Zone.
<b>Urban:</b>	Is a broad term that covers area within and including the 70km/h speed restriction zone of a town.
<b>Urban Tree:</b>	Is a broad term that covers any tree growing within and including the 70km/h speed restriction zone of a town.
<b>ULE:</b>	Useful life expectancy.
<b>WSUD:</b>	Water Sensitive Urban Design. An environmentally preferable alternative to a traditional urban drainage solution.

# Appendix 1 - Proactive Tree Management

Activities that are covered in the scope of works for the Proactive Tree Management Program include;

1. Removal of dead, dangerous and declining trees;
2. Removal of deadwood;
3. Removal of hanging, broken or diseased branches;
4. Formative pruning;
5. Canopy lifting;
6. Canopy reduction;
7. Stump removal;
8. Removal of mistletoe;
9. Removal of redundant tree guards, stakes and surrounds;
10. Maintaining clearance from roads, footpaths, traffic signs and street lights as per Council's Road Management Plan, clearance requirements; and
11. Maintaining required clearances from properties as deemed appropriate by Council.

All roads in the Swan Hill Rural City Council are managed and maintained in accordance with Council's Road Management Plan.

## Appendix 2 - Nominated places and/or facilities on Council's annual tree inspection cycle

<b>Facility</b>	<b>Address</b>	<b>Locality</b>
Pioneer Settlement	Monash Drive	Swan Hill
Swan Hill Riverside Park	Monash Drive	Swan Hill
Robinvale Recreation Reserve	Latje Road	Robinvale
Ken Harrison Reserve	Yana Street	Swan Hill
Nyah Recreation Reserve	River Street	Nyah
Lake Boga Catalina Public Reserve	Willakool Drive	Lake Boga
Riverside Caravan Park	Monash Drive	Swan Hill
Lake Boga Caravan Park	Murray Valley Highway	Lake Boga
Robinvale Caravan Park	McLennan Drive	Robinvale

## Appendix 3 – Suggested Tree Species

Category 1 – Standard variations for nature strips less than 3 metres						
Scientific Name	Common Name	Height	Canopy Width	Canopy E/D/S-D	Drought Tolerance	Frost Tolerance
<b>Section A</b> - planted under powerlines (species up to 5m or those that can successfully be trimmed to this height)						
<i>Callistemon citrinus</i> 'Kings Park Special'	Crimson Bottlebrush	4m	2m	E	Good	Moderate
<i>Callistemon viminalis</i>	Weeping Bottlebrush	5m	5m	E	High	Moderate
<i>Lagerstroemia indica</i> x <i>L. fauriei</i> (all varieties)	Crepe Myrtle	4m - 8m	3m - 6m	D	Moderate	High
<i>Leptospermum brachyandrum</i>	Weeping Tea Tree	4m	2m	E	High	Good
<b>Section B</b> - planted with no powerlines above. All of the above Section A trees are also suitable for this scenario.						
<i>Acacia aneura</i>	Mulga	10m	4m	E	High	Moderate
<i>Acacia estrophiolata</i>	Desert Ironwood	10m	5m	E	High	Good
<i>Acacia floribunda</i>	White Sallow Wattle	8m	2m - 15m	E	High	Moderate
<i>Acacia microbotrya</i>	Manna Wattle	8m	5m	E	High	Good
<i>Acacia pendula</i>	Weeping Myall	9m	4m	E	High	Good
<i>Acer platanoides</i>	Maple	7m	4m	D	Moderate	High
<i>Agonis flexuosa</i> (all varieties)	Willow Myrtle	7m	5m	E	High	Good
<i>Angophora hispida</i>	Dwarf Apple Gum	7m	5m	E	good	Good
<i>Atalaya hemiglauca</i>	Whitewood or Cattle Bush	6m	4m	E	High	Good
<i>Banksia integrifolia</i>	Coastal Banksia	10m	4m	E	High	Good
<i>Carpinus betulus</i> 'Fastigiata'	Hornbeam	12m	4m	D	Good	High
<i>Corymbia eximia</i> 'Nana'	Dwarf Bloodwood	8m	7m	E	High	Good
<i>Corymbia ficifolia</i> (all varieties)	Flowering Gum	5m – 10m	4m – 8m	E	High	Good
<i>Eucalyptus torquata</i>	Coral Gum	10m	5m	E	High	Moderate
<i>Fraxinus griffithii</i>	Evergreen Ash	6m	4m	E	Good	Moderate
<i>Grevillea striata</i>	Beefwood	7m	5m	E	High	High

<i>Hymenosporum flavum</i>	Native Frangipani	10m	6m	E	High	Moderate
<i>Pistacia chinensis</i>	Chinese Pistachio	8m	6m	D	High	High
<i>Prunus cerasifera</i> 'Oakville Crimson Spire'	Ornamental Plum (Non fruiting)	6m	2m	D	Moderate	High
<i>Pyrus calleryana</i> 'Capital'	Ornamental Pear (Non fruiting)	11m	3m	D	Moderate	High
<i>Santalum lanceolatum</i>	Sandal Wood	7m	4m	E	Good	Moderate
<i>Zelkova serrata</i> (all fastigiata varieties)	Japanese Elm	7m	4m	D	Good	High

### Category 2 – Standard variations for nature strips wider than 3 metres

Scientific Name	Common Name	Height	Width	E/D/S-D	Drought Tolerance	Frost Tolerance
<b>Section A</b> - planted under powerlines (species up to 5m or those that can successfully be trimmed to this height). All Category 1 Section A trees are suitable for this scenario.						
Refer category 1A						
<b>Section B</b> - planted with no powerlines above. All of the above Section A, Category 1 & 2 trees are also suitable for this scenario.						
<i>Acacia aneura</i>	Mulga	10m	4m	E	High	Moderate
<i>Acacia melanoxylon</i>	Blackwood	12m	5m	E	High	Good
<i>Acer platanoides</i>	Maple	7m	4m	D	Moderate	High
<i>Angophora costata</i>	Smooth Barked Apple	20m	5m	E	Good	Moderate
<i>Banksia integrifolia</i>	Coastal Banksia	10m	4m	E	High	Good
<i>Brachychiton rupestris</i>	Queensland Bottle Tree	12m	8m	S-D	High	High
<i>Carpinus betulus</i> 'Fastigiata'	Hornbeam	12m	4m	D	Good	High
<i>Corymbia apparerinja</i>	Ghost Gum	15m	8m	E	High	High
<i>Corymbia maculata</i>	Spotted Gum	20m	10m	E	High	Moderate
<i>Cupaniopsis anacardioides</i>	Tuckeroo	10m	10m	E	High	Moderate
<i>Eucalyptus conferruminata</i>	Bushy Yate	8m	5m	E	High	Moderate
<i>Eucalyptus leucoxylon</i> ssp. <i>Pruinosa</i>	Inland Blue Gum	10m	7m	E	High	Good
<i>Eucalyptus leucoxylon</i> subsp. <i>megalocarpa</i>	Yellow Gum	9m	6m	E	High	Good
<i>Eucalyptus leucoxylon</i> subsp. <i>megaloscarpa</i>	Yellow Gum	9m	6m	E	High	Good

<i>Eucalyptus newbeyi</i>	Newbeys Mallee	10m	12m	E	High	Moderate
<i>Eucalyptus polyanthemos</i>	Red Box	12m	5m	E	High	High
<i>Eucalyptus torquata</i>	Coral Gum	10m	5m	E	High	Moderate
<i>Geijera parviflora</i>	Wilga	10m+	10m	E	High	Moderate
<i>Gleditsia triacanthos (all varieties)</i>	Honey Locust	15m	7m	D	Good	High
<i>Grevillea striata</i>	Beefwood	7m	5m	E	High	High
<i>Jacaranda mimosifolia</i>	Jacaranda	10m	8m	D	Good	Good
<i>Lophostemon confertus</i>	Queensland Brush Box	20m	10M	E	Good	Moderate
<i>Pyrus calleryana 'Capital'</i>	Ornamental Pear (Non fruiting)	11m	3m	D	Moderate	High
<i>Ulmus parvifolia</i>	Chinese Elm	13m	6m	D	High	High
<i>Ulmus parvifolia (some varieties)</i>	Chinese Elm	7m	6m	D	High	High
<i>Waterhousea flouribunda</i>	Weeping Lilly Pilli	8m	3m	E	High	Moderate
<i>Zelkova serrata (some varieties)'</i>	Japanese Elm	7m	9m	D	Good	High

**Category 3 – Standard variations for trees is in larger road reserve areas and clear from infrastructure i.e. footpaths, kerb, drainage and powerlines. Trees from all above Categories are suitable for this scenario.**

Scientific Name	Common Name	Height	Canopy Width	Canopy E/D/S-D	Drought Tolerance	Frost Tolerance
<i>Acacia caesiella</i>	Bluebush Wattle	6m	4m	E	High	Good
<i>Acacia cognata</i>	River Wattle	8m	6m	E	High	High
<i>Acacia howittii</i>	Howitts Wattle	8m	5m	E	High	Good
<i>Acacia stenophylla</i>	River Cooba	12m	8m	E	High	High
<i>Acer palmatum (all varieties)</i>	Maple	4m	4m	D	Moderate	High
<i>Allocasuarina torulosa</i>	Dropping sheoak	8m	10m	E	High	Good
<i>Angophora floribunda</i>	Rough-barked Apple	30m	15m	E	Good	Good
<i>Brachychiton populeneus</i>	Kurrajong	15m	m	E	High	High
<i>Brachychiton populneus x acerifolius</i>	'Jerilderie Red'	6m	4m	E	High	High

<i>Casuarina cristata</i>	Belah	6m	4m	E	Good	High
<i>Casuarina cunninghamiana</i>	River She-Oak	20m	5m	E	Good	Good
<i>Corymbia citriodora</i>	Lemon-scented Gum	30m	15m	E	High	High
<i>Corymbia intermedia</i>	Pink Bloodwood	25m	15m	E	Good	Moderate
<i>Corymbia tessellaris</i>	Moreton Bay Ash	25m	15m	E	Good	Moderate
<i>Corymbia tessellaris</i>	Moreton Bay Ash	25m	15m	E	Good	Moderate
<i>Corymbia torelliana</i>	Cadghi Gum	25m	12m	E	High	High
<i>Eremophilla longifolia</i>	Emubush	8m	3m	E	Good	Good
<i>Eucalyptus camaldulensis</i>	River Red Gum	30m	15m	E	Good	High
<i>Eucalyptus mellidora</i>	Yellow Box	30m	25m	E	Good	Good
<i>Eucalyptus redunca</i>	Black Marlock	4m	3m	E	High	Good
<i>Eucalyptus salmonophloia</i>	Salmon Gum	25m	15m	E	High	Good
<i>Eucalyptus sepulcralis</i>	Weeping Gum	5m	1.5m	E	Good	Good
<i>Eucalyptus sideroxylon</i>	Red Ironbark or Mugga Ironbark	25m	15m	E	Good	Moderate
<i>Fraxinus oxycarpa</i> 'Raywoodii'	Claret Ash	15m	12m	D	Good	Good
<i>Grevillea robusta</i>	Silky Oak	20m	14m	E	Good	Moderate
<i>Liquidambar straciflua</i>	Liquidambar	15m	6m	D	Moderate	Good
<i>Magnolia grandiflora</i>	Bull Bay Magnolia	15m	10m	E	Moderate	Good
<i>Melaleuca styphelliodes</i>	Prickly-leaved Paperbark	10m	3m	E	Good	Moderate
<i>Quercus canariensis</i>	Algerian Oak	25m	25m	E	Good	High
<i>Quercus canariensis</i>	Algerian Oak	25m	25m	E	Good	High
<i>Quercus cerris</i>	Turkey Oak	30m	6m	D	Good	Good
<i>Quercus cerris</i>	Turkey Oak	30m	6m	D	Good	Good

The above suggested tree species list shall have tree species removed or added with the approval of the Works Manager, Senior Technical Officer - Works and the Parks and Gardens Coordinator.