

Township Street and Park Tree Management Plan

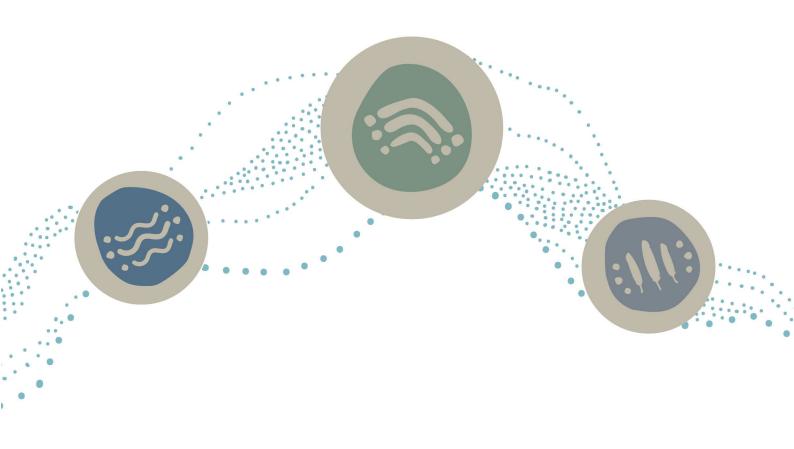


Acknowledgment of Country

Macedon Ranges Shire Council acknowledges the Dja Dja Wurrung, Taungurung and Wurundjeri Woi Wurrung Peoples as the Traditional Owners and Custodians of this land and waterways. Council recognises their living cultures and ongoing connection to Country and pays respect to their Elders past, and present.

Council also acknowledges local Aboriginal and/or Torres Strait Islander residents of Macedon Ranges for their ongoing contribution to the diverse culture of our community.

Artwork by Taungurung artist Maddi Moser



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Vision

That Macedon Ranges is renowned for the character of its tree lined streets and townships, and the amenity and value that township street and park trees provide.

Executive Summary

This Plan builds on the MRSC <u>Township Street and Park Tree Management Policy</u> and outlines the practical implementation of the Policy.

The Macedon Ranges environment is enhanced by its tree-lined streets and avenues that form an integral part of the Shire's appeal. Microclimates, with varying rainfall and temperature, across the Shire not only allow for a diverse range of trees to be grown, but also offer the opportunity to establish areas with selected species that provide a sense of identity.

This Plan aims to maximise the benefits of trees, which includes carbon sequestration, oxygen, cooling, shade and habitat provision, increased biodiversity, increased property values, noise and pollution absorption, improved mental health and reduced rainfall runoff; and to generate community interest in maintaining a healthy public tree population across the Shire.

There are more than 35,000 street trees within the townships of Macedon Ranges Shire, having an estimated amenity value in excess of \$100 million and therefore an effective tree management system is required. This Tree Management Plan will deliver consistent and effective management of the Shire's street and park trees.

Within the Shire, many trees have heritage and conservation values. It is imperative that these values are recognised and managed accordingly.

To perpetuate the Macedon Ranges' street and park tree heritage in the long term and to respond to a changing climate, Council is progressively planning for and committing to tree planting programs based on the principle of selecting the most appropriate species for a given location – that is, "right tree, right place". The species selection process is outlined in Section 3 of Councils Street Tree Preferred Species List and includes a definition of the key criteria.

This Plan does not include rural roadside vegetation management or trees located on private property. The management of rural roadside vegetation is covered under Council's Road Management Plan 2021 and Council's Roadside Conservation Management Plan 2021.



Tree Management Objectives

- Value the importance of public trees and the role they play in contributing to the unique character, amenity and liveability of the Shire
- Minimise risks to the community by cost effectively managing and maintaining public trees using best practice arboriculture techniques and practices
- Document and standardise processes and procedures to ensure consistency in tree management decisions made by MRSC
- Protect existing trees from construction, development and event activities
- Define the circumstances under which public trees may be removed
- Establish new trees to increase the tree population and MRCS's canopy cover.

Related Documents

- Electric Line Clearance Management Plan
- Road Management Plan 2021
- > Roadside Conservation Management Plan 2021
- Preferred Species for Street Trees

Tree Protection

During all construction and development works, existing Council tree assets to be retained must be protected in accordance with the Australian Standard AS4970–2009 *Protection of trees on development sites* and section 3.1 Tree Protection of the *Township and Park Tree Management Policy*.

An endorsed Planning Permit or Asset Protection Permit may require the preparation and submission of a Tree Protection Management Plan (TPMP) as per AS4970-2009 for Council approval. A bond, based on the tree(s) amenity value as calculated using the methodology in **Appendix A** may be required to be held against the Council approved TPMP for the duration of the works. Should any damage occur to any Council tree as a direct result of development works, Council may withhold part, or all, of the bond.

Further information on tree protection is available in <u>Appendix D</u> Tree Protection Zone (TPZ) fact sheet.

Tree Protection for Community Events

Trees that may be impacted by a community event will require a Tree Protection Plan for Council approval. Event organisers shall contact Council's Open Space Unit for any relevant information. A bond maybe imposed on event organisers to ensure trees are protected during an event. The bond shall be retained based on the tree(s) amenity value as calculated using the methodology in **Appendix A** and may be required to be held for the duration of the event, or as per the approved Tree Protection Plan. Should any damages occur to any trees as a direct result of any activities associated with the event, Council may withhold part, or all, of the bond depending on the extent of the damage.



Tree Planting

Tree planting is to be in accordance with section 3.2 of the *Township and Park Tree Management Policy*. Trees for new and replacement plantings will be selected from Council's Preferred Tree Species List for Street Trees for tree planting programs. Council will develop a tree planting and replacement program that will facilitate the longevity and diversity of the municipality's street and park trees. At present, Council's annual tree planting program is made up from vacant site information, resident tree requests, capital projects and tree replacements.

The following criteria will be applied for replacement tree planting:

- The sites of all trees removed from the streetscape will be assessed and if the site is suitable the tree will be replaced at a future planting season in accordance with Council's <u>Township Street and Park Tree Management Policy</u>. The Shires annual tree planting program is between May and September, though subject to seasonal conditions may be approved outside of this period by the Open Space unit with a tree establishment and management plan.
- Individual tree requests by residents must be fully assessed for suitability. If deemed
 appropriate, the request will be placed on the street tree planting list for action for a future
 planting season subject to budget constraints.

Whole of street plantings or landscaping will be made in conjunction with Council's Capital Works Budget and Tree Planting Budget. Succession planting to maintain character and to ensure significant avenues of trees provide amenity for future generations will be factored into annual planting programs Performance of newly planted trees is highly dependent on the quality of the tree stock at the time of planting. Tree stock sourced for Council will meet the criteria specified in the Australian Standard AS2303:2015 *Tree stock for landscape use*. All tree stock must be in a sound and healthy condition and be self-supporting.

Council will develop, and implement where appropriate, a range of engineering solutions, for instance; greater use of engineered planting pits; using in-road cut-outs or pits for planting where nature strip conditions limit planting; and, explore alternatives to standard power lines in key streets, such as Aerial Bundled Cabling or undergrounding of power.

Elm Trees

Major new plantings that are susceptible species to Elm Leaf Beetle will be avoided. Alternative genera and species with the same aesthetic characteristics will be used.

Only individual Elm trees in avenues will be replaced with the same or similar species to maintain integrity of the avenue.

Tree Planting Guidelines

Appropriate site selection is crucial to the long-term success of each street tree and the amenity of the streetscape. A poorly positioned tree can cause property and infrastructure damage and diminish the streetscape's visual appeal.



Planting sites should be selected to allow for functional limitations imposed by the street environment while complementing the existing streetscape.

Priority for tree planting will be given to:

- Where there are areas with lack of trees and shade
- High profile or high use areas
- New developments
- Vacant sites identified through audits
- Sites where trees have been removed.

Street Trees approved by Council shall be planted in accordance with the setback from infrastructure distances provided in **Appendix F** and as follows:

- Where practical, a minimum one tree in front of every property, and as near as possible to the centre of the property
- In a position that will allow clear vision at intersections even at mature size
- Away from trees already planted on private property that may interfere with the streetscape
- In a position that will not cause sight problems from driveways.

Standardising of street tree spacing shall be undertaken where practical to ensure an even spacing between each tree throughout the street.

Council will utilise various sized trees in its planting program. Advanced and semi-advanced stock will be used for street tree planting and tube stock will be used for revegetation plantings. Early maintenance of any tree is paramount for its cost-effective future maintenance.

Council requires the following early maintenance procedures for new plantings:

- Formative pruning (AS4373–2007)
- Irrigation (with more frequent application during summer)
- Staking, with Council approved staking method only
- Mulch, but not directly adjacent to the stem
- Water Wells or similar approved watering retention system.

Species Selection

Where inspections indicate that replacement trees are required or new planting opportunities are identified, species selection will be as outlined in Section 3 of Council's Preferred Species for Street Trees list. This document provides a matrix containing an in-depth checklist of the key selection criteria, including design/aesthetic, biological and functional characteristics, to ensure Council plants 'the right tree in the right place'.

Selection of street tees will aim to:

- Characterise a particular precinct, town or park
- Enhance local biodiversity and provide habitat for native fauna
- Provide scale to a streetscape or park



- Add to the character of the streetscape
- Soften the impact of the hard landscape
- Provide contrasts of shape, colour, and form etc.
- Provide protection from the natural elements
- Provide a visual barrier against the built form
- Filter environmental pollutants (where demonstrated by research)
- Aid in guiding the flow of traffic or pedestrians
- Be climatically suitable for the location, now and in the future.

Street trees should not:

- Obstruct sight lines at intersections, crossings or signs
- Exhibit poor structural characteristics
- Be susceptible to substantial pests and diseases
- Have fruits or berries which are poisonous or have major asthma-causing characteristics and are unable to be managed through maintenance activities.

Council will use its Preferred Tree Species (under development) List matrix whenever carrying out new plantings to select the most appropriate tree for the location based on the guiding principle 'right tree, right place'. Selection will consider site suitability, aesthetic, functional and environmental attributes, diversity and resilience and the potential to contribute to the predominant or preferred landscape character rather than any individual's preference. The multitude of climatic zones, and existing character in the Shire will require flexibility with chosen species. Exotic, native and indigenous/endemic species can be used to complement a given landscape.

If a significant or dominant stand of trees is present and the trees are suitable, then the theme will be continued. Otherwise, a new selection will be made.

An onsite assessment will be made by Council's Arborist to ensure the species selected is consistent with the Policy.

Streetscape Design and Continuity

Differences in requirements between residential and industrial streetscapes must be considered. In some areas, trees may not be warranted.

When selecting streetscape species for both replacement and new planting, Council will consider the area's visual, physical and functional components and its interrelationship with surrounding areas.

The following streetscape design objectives will be considered:

- Formality to unify a given area
- Character to enhance the features of the streetscape that contribute to its existing character. The selected species should also enhance the history of the built environment
- Scale to avoid variation in size and achieve a balanced scale between the trees and streetscape.



As the selection of street trees can be subjective, Council will consider whether the proposed street tree species will enhance its surrounding area, as well as establish and grow successfully.

To achieve the aim of Council in enhancing the parks, streetscapes and biodiversity, planting plans may be developed and designed in consultation with residents and include an assessment of the park/street and all its features.

The diversity of the tree planting program will be improved by analysing the tree database and climate impacts. Diversity for a resilient tree population may include: a mix of exotic and native species; a diversity of family groups, genus or species; and, a diversity of age classes across the municipality.

Setbacks and clearances from street and park infrastructure for street tree and park or reserve tree planting are found in **Appendix F**.

All new plantings will comply with relevant planning requirements, including Bushfire Management Overlays.

Tree Management and Maintenance

The management and maintenance standards of Council's tree assets shall balance the need to maintain and enhance tree canopy cover with public safety. Tree management and maintenance is to be in accordance with section 3.3 of the <u>Township Street and Park Tree Management Policy</u> and the <u>Road Management Plan 2021</u>.

Council, on an ongoing basis, will continue to review and assess tree assets for the purpose of protection with the relevant authorities (i.e. Electricity providers).

Council acknowledges that street trees can, in some circumstances, conflict with other landscape and infrastructure elements, whilst recognising that the streetscape is an essential part of a pleasant functional environment. Every attempt must be made to protect all established trees against damage through any works associated with underground or construction services.

Processes for assessing any impact to tree assets by development infrastructure are outlined at **Appendix B** and **Appendix C**.

All new planting undertaken will be in accordance with Council's street tree planting program, park masterplans and other tree planting initiatives. This includes planting in response to customer requests or from Council's Arboriculture representative's recommendations. The adjacent resident will be informed about new street tree planting.

Residents must not plant trees in Council owned or managed land. Any such tree planting is unauthorised and will be removed by Council.

Documented cultural and heritage significance will be considered when managing the Shire's tree assets.



Council managed trees adjacent to roads will be managed in accordance with Council's Road Management Plan 2021 and Council's Roadside Conservation Management Plan 2021.

Tree Clearance Pruning

Every endeavour shall be made to maintain all trees in a healthy and safe condition.

All tree pruning will be in accordance with Australian Standard AS4373–2007 *Pruning of amenity trees*.

Clearances between the trees and power lines will be maintained in accordance with Council's Electric Line Clearance Management Plan and the Electricity Safety (Electric Line Clearance) Regulations 2020 (as amended from time to time), Schedule 1 – Code of Practice for Electric Line Clearance. Council is responsible for power-line clearance works within the declared areas of Kyneton and Gisborne. All other townships are non–declared areas and are the responsibility of the power distributer (Powercor and Jemena).

Property owners are responsible for clearance around the service lines within their property.

The following clearances need to be maintained for the Safety of vehicles and pedestrians:

- 4 metres over driveways
- 3 metres over footpaths and walkways.

For road carriageway clearances, refer to Council's Road Management Plan 2021.

The clearances above will apply to established trees only. Young trees could be damaged by pruning to the above guidelines.

Pruning of council owned trees outside of the property boundary is not permitted.

Tree Inspections

Parks and Open Space

Proactive inspections of trees at Council owned and managed sites will be carried out routinely, achieving a 4-year cyclic inspection program. More frequent inspections may be undertaken based on location and risk level, i.e. kindergartens, pools, playgrounds and power line clearance. The data collected from these inspections will be recorded in Council's Tree Inventory database.

Reactive inspections of Council tree assets resulting from customer requests, whether internal or external, will be actioned in accordance with Council's Customer Service Charter. Customer requests that identify any trees posing an immediate risk to public safety will be actioned as a priority as soon as reasonably practicable. The data collected from these inspections will be recorded in Council's Tree Inventory database. All inspection data is currently recorded in Council's customer request system.



Inspections associated with Electric Line Clearance (ELC) will be undertaken routinely under contract in accordance with Council's <u>Electric Line Clearance Management Plan</u> and any other statutory requirements.

Bushland/Conservation Reserves

Trees overhanging paths, tracks, shelters, seats, signs, play spaces and other high target potential infrastructure will be inspected on a proactive cyclic basis, with the intention of achieving a 3-year cyclic inspection program. The primary focus for tree inspections is to identify risk to the public within target areas and provide recommendations for risk mitigation. All other trees are managed on a reactive basis through observation and Customer Requests.

Tree Works

When planning tree maintenance works, the following factors require consideration:

- The tree's natural life span and its useful life expectancy (ULE)
- Public safety
- Future tree replacement.

Prior to undertaking maintenance works or removal, an arboricultural assessment will be carried out using internationally recognised Visual Tree Assessment (VTA) and/or risk assessment methods such as Tree Risk Assessment Qualification (TRAQ) or Quantified Tree Risk Assessment (QTRA). These methods will determine what work is required and the reasons for this work, or the trees retention value.

When Council trees are assessed as requiring removal as per 3.5 Tree Removal of the Policy, they will be removed and replaced in future planting seasons where the site is deemed suitable for replacement.

Pruning

Once a tree is established, pruning is its major ongoing maintenance requirement.

Pruning of all trees should be as minor as possible.

Trees will be pruned to achieve the following specific goals and requirements:

- Manage risk to the public
- Maintain tree health
- Maintenance of required site and structural clearances (i.e. Road Management Plan).

All pruning works shall comply with AS4373–2007 Pruning of amenity trees.

Tree Surgery

The term "Tree Surgery" covers only "corrective and repair treatments" to trees. The cost of any such work must be balanced with the cost of the amenity value of the tree. In the case of badly damaged trees, a decision will be required on whether to remove or retain the tree.



"Cabling and Bracing" should be carried out only if the tree needs to be artificially supported for safety reasons. Annual inspections of this work are needed to ensure its ongoing viability. This work must be incorporated into an annual maintenance program.

Crown Lifting – Visibility – Clearance

All Council managed township street trees will be maintained in accordance with Council's Road Management Plan 2021 or as amended.

Trees shall be maintained to the clearances as outlined in **Appendix F** and **Appendix G**.

Overhead Service and Structure Clearance

This procedure shall consist of reducing height or spread or both of a street tree by not more than 25%; and, shall be applied to trees only when such work is necessary to ensure safety of overhead wires/lights etc.

Alternatives to tree pruning of structural branches under power lines in the short term should be sought, where possible, by pursuing a variation to the Code.

Council will work with supply companies to pursue aerial bundling or undergrounding of lines, where possible and affordable. This will be assessed on a cost benefit basis. Regarding aerial bundling of cables, a further consideration needs to be the presence of other overhead wires i.e. high voltage, which still requires achieving of clearance distances. This can negate the benefit and investment in bundling cables. Refer also to the Electricity Safety (Electric Line Clearance) Regulations 2020 and Council's annual Electric Line Clearance Management Plan.

Council will have input with planning bodies to minimise impact on trees. In the event of any development proposed in the Tree Protection Zone (TPZ), all trees will be protected in accordance with AS 4970-2009 *Protection of Trees in Development Sites*.

All works are to be carried out by qualified staff and must comply with AS4373–2007 *Pruning of amenity trees*.

Mulch

Mulch is not only highly beneficial in the establishment of newly planted trees but improves the health of established mature trees.

Mulch of natural timber chip may be applied to established trees at a minimum radius of one metre, or in some cases up to the dripline to create a protection zone from mower damage. This chip mulch is to be aged wherever possible. However, fresh chipped mulch may be used from time to time but never incorporated into the soil.

Mulch will be loosely laid at maximum 150mm depth to allow settling to 75-100mm with the root flare kept exposed at all times to prevent decay.

Pests and Disease

All visible/known major pests and diseases are to be reported to Council's Open Space unit for appropriate action. Council's Arborist will carry out an inspection as required.



All tree pests or diseases that pose a threat to the tree health will be reported by Council's Arborist immediately to the Exotic Plant Pest Hotline on 1800 084 881. Where more details are required, a report with photos of the suspected pest and damage and the pest's location will be sent to plant.protection@ecodev.vic.gov.au. Chemical treatments may be considered for the control of pests and disease. Any works carried out must be done with consideration of public and user safety.

A pest control inventory is to be kept and all pest and disease control recorded.

Pests or diseases such as Elm Leaf Beetle will continue to be controlled in co-operation with other surrounding municipalities and authorities. Council has a proactive control program for Elm Leaf Beetles (Elm trees) in place to minimise the effects of these pests for trees on Council managed land across the Shire.

Dutch Elm Disease could decimate the Shire's Elm population as it has done in the Northern Hemisphere and New Zealand. Any suspected outbreak of Dutch Elm Disease must be reported immediately to the Exotic Plant Pest Hotline on 1800 084 881.

Tree Roots and Infrastructure

Council does not undertake proactive maintenance of tree root systems. When a potential impact to public or private property is identified, the property owner must provide evidence to Council of any alleged root impact to private infrastructure. Council will subsequently undertake an inspection to determine the likelihood of tree root invasion and potential interventions to prevent ongoing damage. Non-destructive techniques and or tree root species identification may be used to assist in determining the cause of the problem.

Installation of a Root Barrier

If determined necessary and appropriate to avoid potential damage from public trees, root barriers between 600–1200 mm deep may be installed. The depth is determined by site inspections from a Council arborist or approved arboriculture consultant; and depends on actual site conditions and the tree species involved.

Checking for all underground services is a pre-requisite prior to commencement of any works.

The TPZ and SRZ of the tree must be taken into consideration.

Root inhibitor may be considered where it is deemed appropriate. If so, the root inhibitor Casoron is to be incorporated into the trenches upon backfilling.

Tree Root Pruning

Tree root pruning is to be implemented by a qualified arborist and in accordance with AS4373–2007. If roots are severed or removed, the following steps must be taken:

- Prune the root with as little damage as possible
- Remove only the amount of root that is necessary.



Any root pruning or root barrier procedure must be recorded.

Tree Removal

Council tree assets must only be removed in accordance with section 3.5 Tree Removal of the Policy.

Trees are living organisms with a finite lifespan that are susceptible to pests, disease and other environmental stressors. Council therefore follows a clear and fair process to accurately assess tree removals. Any trees that are removed shall be replaced where possible in order to maintain the appearance and consistency of the street or reserve. The replacement species will follow the selection criteria outlined above at Tree Planting.

When Council has agreed to the removal of a tree on grounds other than safety, all residents within the immediate vicinity of the tree will be notified. The criteria for tree removal are detailed in the Policy and below at Tree Removal Criteria. Any objections will be assessed by Council's Arborist.

If a Council tree asset is required to be removed to facilitate development infrastructure works the process outlined at **Appendix A** and **Appendix B** must be applied.

If a Council-owned tree is removed by any person without Council authorisation, as per the *General Purpose and Amenity Local Law No.10* (2013), that person or persons will be required to meet the full cost of its amenity value, its replacement and its maintenance during establishment (as determined by **Appendix A**).

If Council is considering the removal of multiple street trees in the same street or park for any reason, the following factors must be considered:

- The contribution of the plantings to the overall streetscape
- The maintenance requirements of the trees in question
- Whether removal complies with the tree removal criteria of Section 3.5 of the Policy
- Potential damage from roots to services above and below ground
- The overall condition of the trees
- The replacement species
- The significance of the existing trees
- Residents in the vicinity of the removals require consultation and notification
- Residents will be given 10 days to seek clarification and to make objection or comment
- If an objection is received, the matter will be re-evaluated, and objectors consulted before any action is taken.

Tree Removal Criteria

Tree removal will occur only if one or more of the criteria listed below are met in an assessment by a qualified arborist.

The removal of individual street and park trees will only be approved when:



- removal is the only option to mitigate a high or extreme risk; or
- the tree is dead or in decline and unlikely to recover and has no habitat value; or
- the tree is causing damage to infrastructure or property and there is no reasonable option to otherwise resolve the issue; or
- the tree is affected by development and all alternate design options have been exhausted.
 Removal will occur if the applicant (internal or external) agrees to pay all costs, including
 removal, replacement and the value of the tree being removed as calculated by the Shire's
 methodology (Tree Valuation in MRSC). All monies collected will be used to improve street
 and park tree amenity; or
- the tree is unable to be maintained to meet Electricity Safety (Electric Line Clearance)
 Regulations 2020 (as amended from time to time) and other relevant statutory
 requirements; or
- the removal of the tree is required to facilitate renewal of a street or park and all design options have been exhausted; or
- a trees' form and health are not performing to expectation and that this is not the outcome
 of interference by external parties, i.e. damaging a tree to facilitate its removal; or
- where a park tree is recommended for removal, consideration will be given to its suitability for retention as a habitat tree, subject to required safety pruning; or
- the tree causes a severe allergy that substantially diminishes quality of life:
 - the applicant must supply medical evidence from a specialist dermatologist or clinical immunologist/allergy specialist demonstrating the cause and effect between the tree and the allergy; or
- it must also be demonstrated that the tree is the sole cause of the allergy and that removal of the tree would prevent the reaction; or
- in some cases, street trees may be removed to facilitate a whole street upgrade which will
 result in a net increase in or improvement to the streetscape that could not be achieved by
 retention of existing trees.

Trees will not be removed on the basis that they are alleged to cause the following perceived issue:

- Drop leaves, bark, fruit or twigs
- Provide habitat for insects, small mammals or birds and any resultant mess
- Might harbour termites
- Induce allergies unless a specialist's medical certificate (as identified above) is provided demonstrating cause and effect between the tree and the allergy
- Do not satisfy an individual's species preference
- Block solar access and views
- Hinder the growth of nearby plants
- "Might" cause damage in future as outlined above, damage to infrastructure by a tree
 must be demonstrated to the Responsible Authority.



Resident requested Tree Removal Process

Residents may submit a request for a tree to be considered for removal due to safety or other concerns. A written or customer service request must be submitted to Council for a tree within Council owned or managed land to be considered for removal.

Once the request is received an investigation will be carried out by Council's Arborist and action decided in the context of Tree Removal criteria (Section 3.5 of the Policy).

- Objections must be submitted in writing within ten (10) business days of the decision being made
- Council's Arborist will assess the objections and respond to the objector/s with the final outcome. If the objector/s is still not satisfied the matter will be referred to the Manager Open Space and Recreation
- If no objections are received, the removal of tree will commence
- In the case of an immediate or unacceptable risk, the tree will be removed without a formal notification process.

Method of Removal

Trees being removed are to be cut to ground level. The removal process must be undertaken by qualified arborists with a minimum Australian Qualifications Framework level 3 in accordance with all relevant standards and codes.

All stumps awaiting removal must be highlighted with spray paint to alert the public of any tripping danger.

Dead Trees

Dead trees that become brittle and hazardous are to be removed as soon as possible. The cause of death should be ascertained where disease or human intervention is suspected. All dead trees require assessment by a qualified arborist prior to removal.

Hazardous Trees

Trees can develop hazards through poor form, borer damage, root problems, storm damage, etc. Where an inspection and risk assessment identify that a tree poses an unacceptable level of risk that cannot be mitigated to an acceptable level using arboriculture practices, its removal must be prompt. Details and records of the removal must be kept.

Tree removal will occur as a priority where there is an immediate risk to the public or property to ensure public safety. Additionally, trees assessed by Council's qualified Arborists as being an immediate risk to public safety are exempt from the requirement for a Planning Permit.

Removal of trees that are of an immediate risk will be undertaken as soon as practicable and therefore any nearby affected residents may not be notified.



Trees allegedly causing Structural Damage

From time to time, the roots or branches of trees owned by the Council may be alleged to result in harm to structures such as fences, retaining walls, driveways, pipes and paths or even vehicles. However, Council's ownership of the tree does not create an automatic liability in the event of a tree causing damage. There must be some demonstrated act or omission of negligence by Council.

To formally submit a claim, claimants are required to complete a <u>Claims Form</u> online. To enable us to efficiently process your claim, please also provide the appropriate supporting documentation as outlined through the claims process.

Removal for Infrastructure Development

When an application is made for a tree's removal for infrastructure development or a new vehicle crossover, the criteria for removal shall be the same as in Section 3.5 Tree Removal of the Policy. However, when no other site is available for the infrastructure and the tree is in good condition and suited to its location, removal may be approved provided that the cost of the tree's amenity value, its removal, replacement and any other works which may be associated with are to be borne by the applicant.

The process for requesting removal for infrastructure development or new vehicle crossovers is outlined at **Appendix B** and **Appendix C**.

Disputes

When an objection is received, the removal works will be suspended until an appropriate Officer examines the objection(s) and a final decision is made. If a resolution is not achieved, the matter will be referred to Council's Manager Open Space and Recreation for determination. The designated Council Officer will advise the objector in writing of the final decision.

Community Engagement

- All community engagement activities will be governed by Macedon Ranges Shire Council's Community Consultation Framework.
- The community will be informed and consulted about all major projects involving tree removal and planting and any other specialised projects that involve urban trees.
- 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 size of the tree, the number of trees being impacted and the visual impact of proposed works.
- Community engagement may include direct contact with the customer, letters to immediately affected residents, signage on site and via information on the Council's website.
- Macedon Ranges Shire Council will assess customer requests regarding township trees in line within the parameters of the Customer Service Charter.
- All customer service requests will be responded to in accordance with Macedon Ranges Shire Council's Customer Service Charter.



Tree Planting Requests

Individual customer tree planting requests will be followed up with the customer directly as per Council's Customer Service Charter.

Council will inform and/or consult residents of entire streetscape upgrades.

Council's annual tree planting program will be available on the Council's website.

All public trees that are removed will be replaced as close as practically possible to the site of removal, subject to compliance with policy requirements. Planting of replacement trees may not necessitate customer engagement.

Tree Maintenance Activities

For customer service requests, Council's Arborist will, at the time of assessment, allocate a timeframe for any required works based on the urgency, risk and severity of the matter. This information is generally passed on to the customer in the form of a letter unless specified otherwise. Depending on the volume of tree works at any one given time, it may not possible to give an exact date and time for specific works.

Tree Removal

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.

Council may notify the community of unauthorised works and undertake site specific responses following tree poisoning, vandalism or prohibited tree removal.



APPENDICES

Appendix A – Tree Amenity Valuation

Where a Council owned or managed tree is approved for removal or required by Council to be removed for development, construction, or works. The associated cost of the tree's removal, replacement and amenity valuation shall be paid by the developer (internal or external) or their representative prior to its removal. The same method applies to trees that have been damaged or vandalised and their retention is no longer viable. The parties responsible for the damage will be required to pay all costs.

The costs associated with removal of a public tree in the Macedon Ranges Shire include:

A – Amenity Value	Calculated in accordance with the Council's adopted Amenity Value Formula
B - Removal Costs	The sum of the fees incurred by the Council for physically removing the tree
C – Re-instatement Costs	The cost of all works required to replace the loss of vegetation from the landscape

A – Amenity Value

The following formula has been prepared to assist with calculating the monetary amenity value of a tree in the Macedon Ranges Shire Council. This formula is based on the City of Melbourne's Amenity Value Formula and has been modified for application in the Macedon Ranges.

Base Value (\$)

The basic monetary value of a tree was taken from the internationally accepted table of values devised by the American Council of Tree and Landscape Appraisers and the International Society of Arboriculture, which in the base year of 2018 is \$AUD 14.07 per square centimetre of trunk basal area. Young trees with a trunk diameter of less than 6 centimetres do not attract an amenity value charge. Base value will increase annually in line with CPI.

Note: A tree amenity value will not be charged in the following circumstances:

Trees that are dead, except in cases of intentional vandalism or poisoning

Trees that have a useful life expectancy of less than 3 years

Where a tree is a declared weed species in a particular location

Trees proven to be causing damage to private infrastructure or services where all interventions to retain the tree have been exhausted.



2022 Base Values

DBH (cm)	Base Value	DBH (cm)	Base Value	DBH (cm)	Base Value	DBH (cm)	Base Value
<6	NA	54	\$28,801.93	103	\$104,787.27	152	\$231,216.55
6	\$355.58	55	\$29,878.54	104	\$106,831.85	153	\$231,216.55
7	\$483.98	56	\$30,974.91	105	\$108,896.18	154	\$234,248.85
8	\$632.14	57	\$32,091.04	106	\$110,980.27	155	\$237,300.91
9	\$800.05	58	\$33,226.92	107	\$113,084.12	156	\$240,372.71
10	\$987.72	59	\$34,382.55	108	\$115,207.72	157	\$243,464.28
11	\$1,195.14	60	\$35,557.94	109	\$117,351.07	158	\$246,575.61
12	\$1,422.32	61	\$36,753.08	110	\$119,514.18	159	\$249,706.68
13	\$1,669.25	62	\$37,967.98	111	\$121,697.04	160	\$252,857.51
14	\$1,935.93	63	\$39,202.63	112	\$123,899.66	161	\$256,028.08
15	\$2,222.37	64	\$40,457.03	113	\$126,122.03	162	\$259,218.43
16	\$2,528.56	65	\$41,731.19	114	\$128,364.15	163	\$262,428.52
17	\$2,854.51	66	\$43,025.10	115	\$130,626.03	164	\$265,658.37
18	\$3,200.21	67	\$44,338.77	116	\$132,907.67	165	\$268,907.97
19	\$3,565.67	68	\$45,672.20	117	\$135,209.06	166	\$272,177.32
20	\$3,950.88	69	\$47,025.37	118	\$137,530.20	167	\$275,466.43
21	\$4,355.85	70	\$48,398.30	119	\$139,871.10	168	\$278,775.29
22	\$4,780.57	71	\$49,790.99	120	\$142,231.75	169	\$282,103.91
23	\$5,225.04	72	\$51,203.43	121	\$144,612.16	170	\$285,452.28
24	\$5,689.27	73	\$52,635.62	122	\$147,012.32	171	\$288,820.41
25	\$6,173.25	74	\$54,087.57	123	\$149,432.23	172	\$292,208.29
26	\$6,676.99	75	\$55,559.28	124	\$151,871.90	173	\$295,615.93
27	\$7,200.48	76	\$57,050.74	125	\$154,331.33	174	\$299,043.31
28	\$7,743.73	77	\$58,561.95	126	\$156,810.50	175	\$302,490.46
29	\$8,306.73	78	\$60,092.91	127	\$159,309.44	176	\$305,957.36



DBH (cm)	Base Value	DBH (cm)	Base Value	DBH (cm)	Base Value	DBH (cm)	Base Value
30	\$8,889.48	79	\$61,643.64	128	\$161,828.12	177	\$309,442.95
31	\$9,491.99	80	\$63,214.11	129	\$164,366.57	178	\$312,949.36
32	\$10,114.26	81	\$64,804.34	130	\$166,924.76	179	\$316,475.51
33	\$10,756.28	82	\$66,414.33	131	\$169,502.71	180	\$320,021.43
34	\$11,418.05	83	\$68,044.06	132	\$172,100.42	181	\$323,587.11
35	\$12,099.58	84	\$69,693.56	133	\$174,717.88	182	\$327,172.53
36	\$12,800.86	85	\$71,362.80	134	\$177,355.09	183	\$330,777.71
37	\$13,521.89	86	\$73,051.81	135	\$180,012.06	184	\$334,402.64
38	\$14,262.68	87	\$74,760.56	136	\$182,688.78	185	\$338,047.33
39	\$15,023.23	88	\$76,489.07	137	\$185,385.26	186	\$341,711.78
40	\$15,803.53	89	\$78,237.34	138	\$188,101.49	187	\$345,395.97
41	\$16,603.58	90	\$80,005.36	139	\$190,837.47	188	\$349,099.93
42	\$17,423.39	91	\$81,793.13	140	\$193,593.21	189	\$352,823.64
43	\$18,262.95	92	\$83,600.66	141	\$196,368.71	190	\$356,567.09
44	\$19,122.27	93	\$85,427.94	142	\$199,163.96	191	\$360,330.31
45	\$20,001.34	94	\$87,274.98	143	\$201,978.96	192	\$364,113.28
46	\$20,900.17	95	\$89,141.77	144	\$204,813.72	193	\$367,916.00
47	\$21,818.75	96	\$91,028.32	145	\$207,668.23	194	\$371,738.48
48	\$22,757.08	97	\$92,934.62	146	\$210,542.50	195	\$375,580.72
49	\$23,715.17	98	\$94,860.68	147	\$213,436.52	196	\$379,442.70
50	\$8,889.48	99	\$96,806.48	148	\$216,350.29	197	\$383,324.44
51	\$9,491.99	100	\$98,772.05	149	\$219,283.82	198	\$387,225.94
52	\$10,114.26	101	\$100,757.37	150	\$222,237.11	199	\$391,147.19
53	\$10,756.28	102	\$102,762.44	151	\$225,210.14	200	\$395,088.19



Species Factor (S)

A tree is assessed according to its known natural life span and its rate of growth in a particular environment. For example, a long-lived tree will be scored higher than a short-lived tree. Significant features of the tree will also modify how the tree is scored. Judgement regarding species factors must consider how that species performs in the Macedon Ranges and must be made by a qualified arborist.

Group	Characteristics	Example Species	Score
1	trees of short life span (less than 50 years)fast growth rate	Acacia, Callistemon	0.5
2	trees of short life span (less than 50 years)slow growth rate	Pyrus	0.6
3	 trees of medium life span (50–150 years) fast growth rate 	Populus, Liquidambar, Fraxinus, Eucalyptus spp., Corymbia, Angophora, Grevillea, Melaleuca, Casuarina, Hakea, Syzgyium	0.7
4	 trees of medium life span (50–150 years) slow growth rate 	Brachychiton, Jacaranda, Zelkova, Schinus, Phoenix, Melia, Lophostemon, Agonis	0.8
5	trees of long life span (more than 150 years)fast growth rate	Cupressus, Platanus, Ficus, Pinus, Celtis, Eucalyptus camaldulensis	0.9
6	trees of long life span (more than 150 years)slow growth rate	Ulmus, Quercus, Sequoia, Ginkgo, Araucaria, Agathis	1.0
Modifiers	noxious or environmental weeds in the Macedon region	Olea, Prunus, Malus, Pittosporum undulatum, Robinia pseudoacacia, Acacia baileyana, Fraxinus angustifolia, Populus, Pinus radiata, Acacia longifolia, Acer pseudoplatanus, Salix spp.	-0.1
	 listed as a 'significant tree' on the listed under a schedule of the Made a large hollow bearing tree a rare species in the locality a special cultivated variety has special historical, cultural or content 	cedon Ranges planning scheme	+0.1

Macedon Ranges conditions



Aesthetics (A)

The aesthetic value of a tree is determined by the impact on the landscape if the tree were removed. This category is closely tied to the locality factor (L).

Aesthetic Factor	Score
Contributes little to the landscape	0.5
One of a group of close plantings	0.6
Wide plantings	0.7
Irregular spacing between trees; regular spacing one side	0.8
Street or pathway plantings, regular spacing both sides	0.9
Solitary feature specimen tree	1.0

Locality (L)

The locality factor is determined by the tree's geographical situation. Trees within an urbanised environment score highest because of the stressful growing environment in which it must survive. As the location becomes more rural, the significance of the tree diminishes.

Locality Factor	Score
In rural areas (outside of townships)	0.50
In a bushland reserve or public open space within a township	0.75
Residential or commercial street in a township	1.00
In a neighbourhood park or garden	1.25
Part of an avenue planting in a township	1.50
Part of a key boulevard or town entrance planting; Park or garden in a town centre	1.75
Primary location within a town centre, main street, or civic space	2.00
Locality (L)	

Tree Condition (C)

The tree condition value is determined by the corresponding total score of the assessment criteria.

Assessment Criteria	Criteria Condition	Score
Trunk	- solid and sound	5
	- sections of bark damaged/ missing	3
	- extensive decay, hollow trunk	1
Growth	- >15 cm twig elongation this season	3
	- 5–15 cm twig elongation	2
	- <5 cm twig elongation	1
Structure	- healthy, stable and sound	5



Assessment Criteria	Criteria Condition	Score
	- some deadwood and dead limbs	3
	- extensive dieback and deadwood	1
Pests and Diseases	- no pest/disease infestation	3
	- minor symptoms of infestation	2
	- advanced symptoms of infestation	1
Canopy Development	- full and balanced canopy	5
	- full but unbalanced canopy	3
	- unbalanced and lacking full canopy	1
Life Expectancy	- >50 years	5
	-10–50 years	3
	- <10 years	1
	Total Condition Score	

Total Score	Tree Condition	Factor
6–9	Very Poor	0.2
10–13	Poor	0.4
14–18	Fair	0.6
19–22	Good	0.8
23–26	Excellent	1.0
Cor		

Amenity Value = Basic Value (\$) x Species (\$) x Aesthetics (A) x Locality (L) x Condition (C)

B - Removal Costs

Costs will be based on the current costs of tree removal. It includes the physical removal of the tree and the stump.

C - Re-instatement Costs

The level of reinstatement required will be determined by Council and will consider the location, significance, biodiversity provision and the amenity of the removed tree. Reinstatement costs will also include a 24-month tree establishment fee and any treatment or Water Sensitive Urban Design (WSUD) measure deemed necessary to establish suitable replacement trees or vegetation.



Total Costs

A. Amenity Value	
B. Removal Costs	
C. Re-instatement Costs	
Total Costs (A+B+C) =	

Appendix B - Tree Assessment Process for Development Infrastructure

Prior to Planning or Asset Protection Permit application

Permit applicants may include Shire residents when applying for new crossover access (APP), or builders and developers, engineering, architect or landscape design consultants when planning for development.

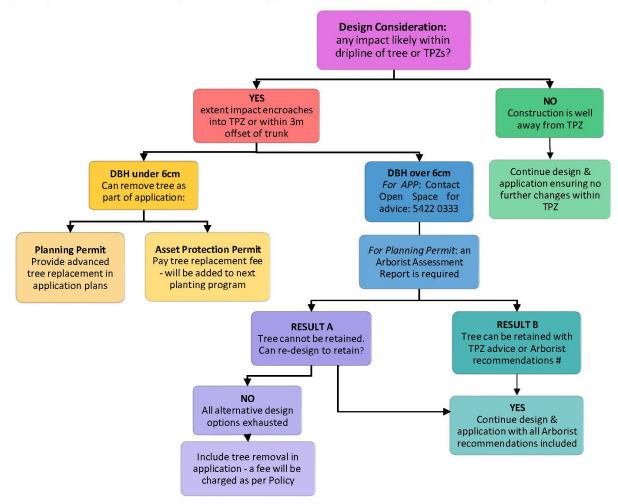
Tree protection is most effective when considered at the earliest stages of design for development.



Impacts to existing trees by development infrastructure include the construction of buildings, paths, driveways or roads, trenching for drainage or services or any other excavation, disturbance or compaction of natural soil within the Tree Protection Zone (TPZ).

Trees are sensitive to disturbance within their TPZ and need to be protected at all stages of a development to ensure they survive. Removal is only considered as a last resort if all other options have been exhausted and is subject to an amenity valuation replacement fee as per Appendix A and the Policy.

TPZ: the trees canopy dripline can be used as a guide only – to calculate an accurate DBH/TPZ and information regarding Arborist assessment reports, refer to Appendix D and *Tree Protection Guidelines for Developments*



The Arborist assessment recommendations may include alternative construction methods or require further investigation e.g. non-destructive root excavation, to determine extent of potential impact.

Note: The information on this fact sheet relates to the *Township Street and Park Trees Management Policy* 2022 only. For information regarding rural roadside trees and/or native vegetation contact Council's Environment Unit on 5422 0333 or at environment@mrsc.vic.gov.au. For information regarding trees on private property contact Council's Planning Department on (03) 5422 0333.



Appendix C - Tree Assessment Process Infrastructure - Capital Works

This information is intended for internal Council departments e.g. engineering designers and project managers, to guide the protection of Council's tree assets during capital works projects – either prior to design or for site works variations during a project. Is also valuable when assessing design plans submitted by consultants.

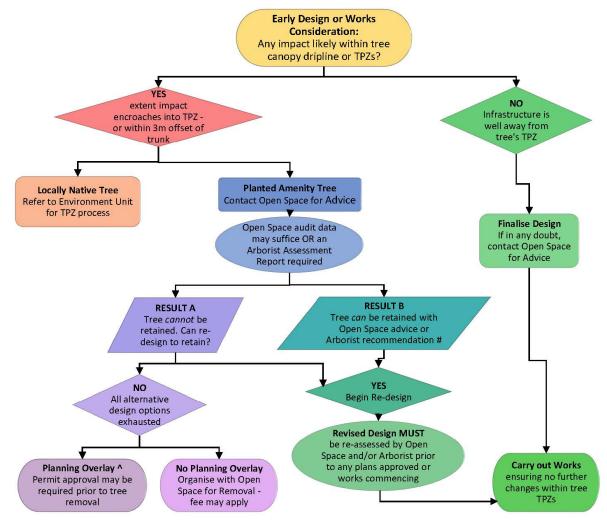
Tree protection is most effective when considered at the earliest stages of design for infrastructure.



Impacts to existing trees by capital works/infrastructure projects include the construction of bridges, footpaths, roads, trenching for drainage or services or any other excavation, disturbance or compaction of natural soil within the Tree Protection Zone (TPZ).

Trees are sensitive to disturbance within their TPZ and need to be protected at all stages of construction works to ensure they survive. Removal is only considered as a last resort if all other options have been exhausted and may be subject to an amenity valuation replacement fee as per Appendix A and the Policy.

TPZ: the trees canopy dripline can be used as a guide only – to calculate an accurate TPZ and information regarding Arborist assessment reports, refer to Appendix D and *Tree Protection Guidelines for Developments*



- ^ Planning Overlays may include Heritage, Vegetation Protection, Significant Landscape etc. this can be checked with Planning or Open Space at the Advice stage.
- # The Arborist assessment recommendations may include alternative construction methods or require further investigation, e.g. non-destructive root excavation, to determine extent of potential impact.

Note: The information on this fact sheet relates to the Township Street and Park Trees Management Policy & Plan only. For information regarding rural roadside trees contact the Environment unit.



Appendix D – Tree Protection Zone (TPZ)

For more information about tree protection and types of Arborist Reports refer to the booklet *Tree Protection Guidelines for Developments* available on Council's website and customer service centres: https://www.mrsc.vic.gov.au/Live-Work/Environment/Land-Management/Native-Vegetation

Tree Protection Zone (TPZ)

The Tree Protection Zone (TPZ) is the calculated area above and below ground at a given distance from the trunk to provide for the protection of the tree's roots and canopy during construction works.

The Tree Protection Zone is determined by the diameter of the tree at breast height (DBH). "Breast height" is always 1.4m above ground level.



Figure 2. Tree Protection Zone and example of required fencing

The Australian Standard, Protection of Trees on Development Sites (AS4970 2009) defines a Tree Protection Zone as follows:

The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

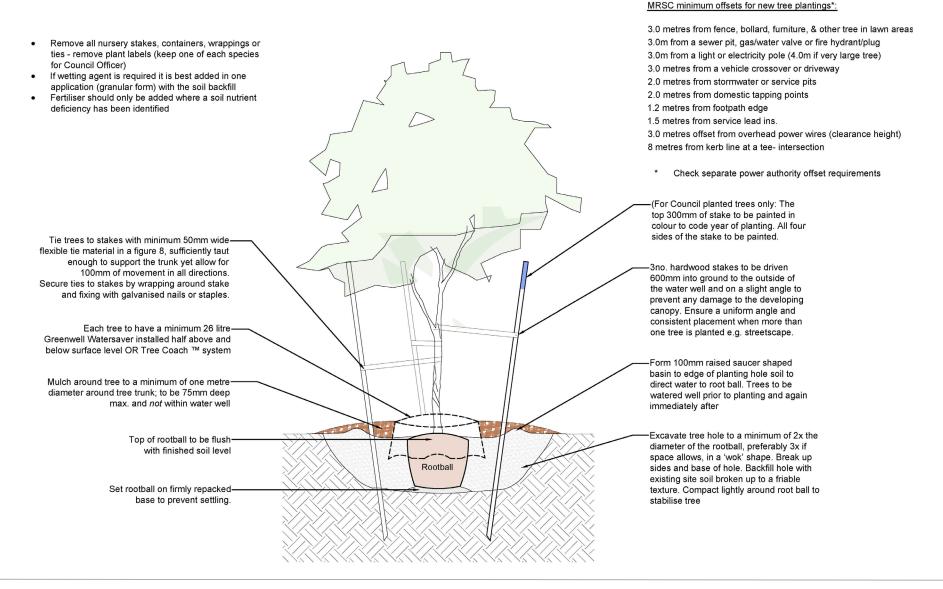
The TPZ incorporates the structural root zone (SRZ).

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

Tree circumference to DBH: measure the circumference of a tree trunk at 1.4m. Then divide the measurement by 3.141592 (Pi). This is the DBH of a tree.



Appendix E – Typical Tree Planting Detail





Appendix F – Minimum setback distances for new tree planting locations

Infrastructure	Minimum setback distance*
Fence, bollard, furniture, other tree in lawn	3.0 m
Pedestrian pathway in reserves	3.0 m
From footpath in nature strip	1.2 m
Sewer pit, gas/water valve, or fire hydrant/plug	3.0 m
Light or electricity pole (4.0m if very large species)	3.0 m
All underground Power Authority assets (not in front of power kiosks)	2.5 m
Vehicle crossover or driveway	3.0 m
Gate	2.0 m
Stormwater outlet or service pits	2.0 m
Service lead ins	1.5 m
Overhead LV power wires (clearance height)	3.0 m
From kerb line and T-intersection	8.0 m

^{*} Distances provided may be subject to change dependent upon the site and species selected.

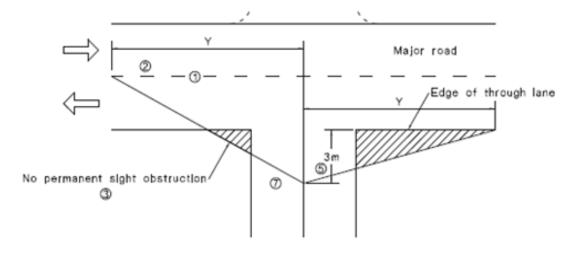


Appendix G – Tree Maintenance for Traffic Sightlines

Trees shall be maintained in accordance with AS 1742 2021 of Manual of Uniform Traffic Control Devices as outlined below:

Street names to be visible from 50 metres in either direction Sight visibility from intersections

Speed Limit	<u>Distance</u>
40 km	40 m
50 km	60 m
60 km	80 m
80 km	120 m
100 km	180 m



Minor road

Major road speed (see Note 4) km/h	Distance along major road: Y, (see Note 6) m
40	20
50	30
60	40
70	55
80	65
90	80
100	95
110	115
120	140



TABLE 2.3
STOPPING SIGHT DISTANCE ON
LEVEL SEALED PAVEMENTS (see Note)

V85, km/h	Stopping sight distance, m
31-40	40
41-50	55
51-60	70
61-70	90
71-80	115
81-90	140
91-100	170
101-110	205
111-120	245
120-130	280

NOTE: This Table has been adapted from Rural Road Design, AUSTROADS, 2003. Values given are based on a reaction time of 2.5 seconds. The source reference should be consulted where conditions are significantly different from a level sealed pavement.

The above works will be carried out only where clearance from the trees is necessary or where growth is likely to impede clearance requirements.



