Mansfield Shire Council

Tree Management Plan

2023

Acknowledgement of Traditional Custodians

Mansfield Shire Council acknowledges the Taungurung people as the traditional owners of the land upon which our Shire is located. We pay our respects to the Taungurung elders, past, present and future and extend that respect to all Aboriginal and Torres Strait Islander peoples.



Table of Contents

	1
Acknowledgement of Traditional Custodians	2
1. Executive Summary	5
2. Definitions	6
3. Relevant Acts, Standards and Documents	7
3.1 Acts	7
3.2 Australian Standards	7
3.3 Council Documents	8
3.4 Other Documents	8
4. Purpose	8
5. Scope	8
6. Review	8
7. Extent of Council Responsibility	9
7.1 Urban Trees	9
7.2 Rural Trees	9
8. Areas with Partial Coverage and Areas Not Covered	10
8.1 Crown Land	10
8.2 Utility Services and Electrical Line Clearance	10
8.3 Private or Body Corporate Land	10
8.4 Arterial Roadside Tree Maintenance	10
9. Planting, Maintenance and Replacement	11
9.1 Proactive Maintenance	11
9.2 Reactive Maintenance	11
9.3 Maintenance Restrictions	12
9.4 Trees of Significance	12
9.5 Removal of significant trees	12
9.6 Managing Pests and Disease	13
10. Appeal Relating to Tree Removal and Maintenance	14
11. Tree Risk Management	15
11.1 Guiding Principles	15
11.2 Introduction and Principles of Tree risk management	
11.3 Quantified Tree Risk Assessment (QTRA)	16



11.4 Inspections and Risk Assessment for Urban Areas	
11.5 Inspections and Risk Assessment Regime for Rural Areas	21
11.6 Modes of Inspection	21
11.6.1 Urban Areas	21
11.6.2 Rural Roads	21
11.7 Proactive Inspections by Risk Rating Areas	
11.7.1 Urban	22
11.7.2 Rural Roads	22
11.7.3 Mitigating Immediate Risks	22
12. Property Damage Caused by Trees	23
13. Community Consultation	23
14. Force Majeure/Exceptional Circumstances	23
Appendix 1: Road Maintenance Envelope	24
Appendix 2: Workflow Chart (Customer Request System)	25
Appendix 3: Maps of Town Boundaries and High Risk Areas	



1. Executive Summary

This document provides the Mansfield Shire Council with clear management directives towards tree management, and particularly the maintenance and risk management of tree assets growing on Council owned and managed land, which also covers trees within managed roads and other reserves in the Mansfield Shire.

It works in consideration with historical values, current requirements, and future objectives.

The value of trees within the environment is widely accepted as high, due to their positive contribution towards maintaining the Shire's sustainability, community health and atmosphere. Collectively, trees add value to our landscapes by softening the harsh lines of buildings, complimenting architecture, improving biodiversity, providing privacy, and lowering the ground temperature surrounding treed areas. The understanding of the role that trees play in our environment has led to an increase in the veneration of trees and they can evoke strong passions.

Tree scape values.

- Improve air quality and catch dust and pollutants
- Provide shade and shelter in extreme heat and light rain
- Compliment Environmentally Sustainable Building Design thermal qualities
- Tree canopy microclimates reduce reflective heat
- Lower the impacts of storm water runoff, i.e., soil loss, flooding, pollution
- Filter polluted water
- Wildlife habitat and corridors
- Increase biodiversity
- Aesthetically please character of a town
- Historical / cultural recognition
- Increase economic value of housing and residential avenues
- Lower energy consumption and cost

Council recognises that despite their benefits, the existence of trees in public areas can create an element of risk to the public, property and services through limb loss or complete failure. There are extensive costs in relation to new plantings, including uplifting and formation pruning along with weight reduction and associated maintenance works for larger trees with high access requirements. Trees can have significant impacts on infrastructure including drainage, construction projects, roads, footpaths, playgrounds, and buildings.

This Plan details the management strategies that Mansfield Shire Council has in place to ensure the longevity and quality of trees within the Shire's urban and rural environments, as well as the risk management practices that are utilised to protect the community.



2. Definitions

Arborist	A person with a Certificate 3 in Arboriculture as a minimum and two years of relevant industrial experience. Consultant arborist must have a minimum diploma level qualification.
Tree Management	The tree management responsibilities defined within this document are
Responsibilities	applicable only to those areas directly under the delegated
Responsibilities	responsibility of Mansfield Shire Council.
Tree	
Tree	A tree is a woody plant with generally a single erect perennial trunk at
	least 75 millimetres in diameter at breast height (DBH). Most trees
	have definitely formed crowns of foliage and attain heights in excess of
<u> </u>	four (4) metres.
Street Tree	A tree located within an urban area that has at least a half of its base
	located within a road verge/road reserve and less than a half in private
	property and/or that is located on a road reserve within the 50 kms or
	less speed limit zones.
Urban Trees	Trees according to the Mansfield Planning Strategy that exist in Main
	Service Centre, Towns and Townships
Rural Trees	Trees located on the road reserve which have not been planted by Council or
	trees for which Council has not assumed responsibility – typically rural roads
	and unused road reserves.
Hazardous Tree	Defined as trees that have a defect that may cause injury or property
	damage if not removed such as:
	Structurally Unsound - Bifurcation with high chance of failure within
	the next five (5) years, excessive borer activity, dying or dead.
	Exposed Roots - Having a high potential as a trip hazard (provided
	no remedial action is possible).
	 Trees Causing Major Damage - Where tree branches/roots are
	causing significant damage to Council, utility, or private
	infrastructure and where this has the potential to increase
	significantly.
	 Inappropriately Located - tall tree species with structural defects
	under power lines; a tree leaning over road/paths/property whose
	form cannot be corrected by pruning or other arboricultural
D'-1	methods.
Risk	This will be tailored to the definition from the QTRA.
High Risk Areas	As defined in Township maps (Appendix 3), an area in which Mansfield
	Shire Council is the responsible authority or the designated committee
	of management and is of high use by the public on either a regular or
	one-off basis. These areas include but are not limited to;
	 shopping precincts
	 schools and kindergarten precincts
	public parks and playgrounds
	swimming pool reserves
	 recreation and sports facilities
	 carparks and footpaths
	 reserves
	 other areas outside Township areas as deemed by Council



	 other land parcels that are high use and are the responsibility of the Mansfield Shire Council
Medium Risk Areas	An area within the townships maps which Mansfield Shire Council is the responsible authority or the designated committee of management and is outside of the high use areas (stated above).
Low Risk Areas	An area outside township maps in which Mansfield Shire Council is the responsible authority or the designated committee of management not including any rural parcels nominated in high or medium risk zones.
Open Space	Refers to land that is publicly accessible and provided for community benefit.
Reserve	Includes bushland, parks, gardens, reserves, playgrounds, ovals, and other areas such as water retention locations.
Road	A public or private street, road, or thoroughfare to which public access is available on a continuous or substantially continuous basis to vehicles or pedestrians or both and includes a bridge, viaduct or subway, or an alley, laneway, or walkway.

3. Relevant Acts, Standards and Documents

3.1 Acts

- Local Government Act 2020
- Road Management Act 2004 (VIC)
- Road Safety Act 1986
- Occupational Health and Safety Act 2004 (VIC)
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Flora and Fauna Guarantee Act 1988 (FFG Act)
- Catchment and Land Protection Act 1994
- Environment Effects Act 1978
- Wildlife Act 1975
- Aboriginal Heritage Act 2006
- Heritage Act 1995
- Planning and Environment Act 1987
- Agricultural and Veterinary Chemicals (Control of Use) Act 1992
- Fences Act 1968

3.2 Australian Standards

- AS 4373 2007 Pruning of Amenity Trees
- AS4970 2009 Protection of Trees on Development Sites
- AS 2303 2015 Tree Stock for Landscape Use
- AS ISO 31000:2009 Risk management



3.3 Council Documents

- Mansfield Shire Council Plan 2021 2025
- Community Initiated Project Policy
- Community Engagement Policy
- Mansfield Environment Strategy
- Mansfield Shire Council Street Tree Policy 2021
- Mansfield Shire Council Road Management Plan 2020
- Mansfield Shire Council Road Register 2017
- Mansfield Shire Council Roadside Conservation Management Plan 2014
- Mansfield Shire Planning Strategy 2022

3.4 Other Documents

- The Infrastructure Design Manual
- Operational Responsibility for Public Roads Code of Practice (Vic Roads)
- Procedure to rely on the Road safety exemption in planning schemes (DELWP)
- Mansfield Planning Scheme

4. Purpose

To detail how Council deal with trees in respect to inspections, assessments and management of all trees Council is responsible for. Council will serve in the best interest of the whole Shire by delivering quality services and representing the community in wider situations.

5. Scope

The Plan applies to all trees on streets, roads, reserves, and public open spaces that Council has management responsibility for and applies to all developers, builders, service providers, Council facility tenants, residents, civil contractors, event organisers and Council officers undertaking activities in proximity to Council trees.

Trees excluded from this plan are those on:

- Private property
- VicRoads managed land
- DEECA and Parks Victoria managed land
- Other land which Council does not have responsibility for.

6. Review



This Tree Management Plan will be reviewed every four years and any revisions will be subject to community consultation and Council approval processes. The Plan may also be reviewed sooner based on emerging advice, audit, or investigation outcomes. Council may undertake internal or third-party reviews at any time to safeguard the management systems that are in place for the delivery of the levels of service adopted by council.

7. Extent of Council Responsibility

This Plan extends to the following areas where Council has a maintenance or authority responsibility.

7.1 Urban Trees

In accordance with this document and with reference to its purpose, Mansfield Shire will undertake proactive inspection, assessment, and action with respect to the trees within its urban areas defined as Main Service Centre, Town, or Township as per the Mansfield Planning Strategy (see Appendix 3 for maps). This includes recreational and public spaces, mitigating the risk to the community through loss of limbs or from total failure which can result in property damage, injury, or loss of life. The Council is responsible for implementing processes and systems to achieve a proactive urban approach and inspection of trees as set out in this plan.

'Urban' Areas

- Main Service Centre: Mansfield
- Town: Bonnie Doon
- Township: Jamieson, Merton, Goughs Bay and Merrijig

Council will take a risk management approach with inspection and maintenance of trees in an urban setting.

This proactive approach to urban areas will be independent of reactive actions associated with tree failure during storms or other emergency response.

7.2 Rural Trees

<u>Within a road reserve on road register</u>: Council has no responsibility or liability for proactively managing any trees outside the road maintenance envelope, as outlined in Appendix 1, unless a previous risk has been raised and a plan is in place to manage that tree.

<u>Within an unused road reserve / or other reserve</u>: Council has no obligation or liability for proactively managing any trees on unused road reserves or other unmanaged reserves that are deemed to be council owned unless a previous risk has been identified and is now being managed under a maintenance schedule.



8. Areas with Partial Coverage and Areas Not Covered

8.1 Crown Land

Within Mansfield Shire there are trees which are located on Crown Land which is managed by other authorities including Department of Energy, Environment and Climate Action, Goulburn Murray Water and Parks Victoria. Any required maintenance or issues raised with Council will be forwarded to the responsible authority. Any existing management agreements will be considered.

8.2 Utility Services and Electrical Line Clearance

The relevant service providers of water, gas, sewer, telecommunications, and power are responsible for the maintenance of its infrastructure regarding trees.

8.3 Private or Body Corporate Land

A private street or private land parcel is the responsibility of the private landowner or body corporate. This includes responsibility for:

Footpaths and overhanging vegetation

Vegetation (including fallen limbs/trees) that obstruct footpaths and roads

8.4 Arterial Roadside Tree Maintenance

The Department of Transport and Planning is the responsible coordinating authority for arterial roads. These include Freeways as well as Declared Arterial and Non-Declared Arterial State Roads.

For Arterial roadsides in an urban area, the municipal council of the municipal district in which the road is located is the responsible authority where the speed limit is 60kph or less.



9. Planting, Maintenance and Replacement

Tree planting should be done in a programmed and sustainable manner, leading to an approach that is environmentally and economically sound. Having the appropriate combination of species and age diversity are an integral part of a sustainable tree population, achieving long term stability and landscape character.

Council must be consulted and give approval for any tree planting within streets, open spaces and reserves it manages or will take control of, as Council will ultimately become responsible for their maintenance and any problems that may arise.

Street trees will be planted in line with Mansfield Shire Council's Tree Planting Plan (under development).

9.1 Proactive Maintenance

In accordance with Table 8 and 9, Council will undertake scheduled inspections of identified riskbased areas. A qualified arborist will examine the trees for any structural faults, disease, or anything that may compromise the integrity of the tree.

All inspections will be recorded on a log that will include:

- Location and species of the tree
- Any integrity issues
- Probability of failure and likely consequences of failure.

If mitigation works are required, they will be carried out in accordance with *Table 10 – Maintenance Targets and Response Times*.

Other proactive activities may include, but not limited to:

- Removal of dead, hazardous, and declining trees
- Removal of deadwood
- Formative pruning
- Canopy lifting or reduction
- Removal of hanging, broken or diseased branches
- Stump removal
- Removal of redundant tree guards, stakes, and surrounds
- Maintaining required clearances from properties.

In line with Council's Road Management Plan, vegetation within the "road maintenance envelope" is managed as per section 107 of the Road Management Act 2004. This scope is defined in Appendix 1.

9.2 Reactive Maintenance

Council will carry out reactive inspections in relation to a tree or trees that are under their management. The following situations will trigger a reactive inspection:

A Council employee identifies an issue,



- A member of the community raises an issue, or
- An incident has occurred.

Inspections will be carried out according to the timeframes outlined in Table 10 and incidents will be logged according to the Workflow Chart in Appendix 2. Mansfield Shire will carry out reactive inspections in accordance with this document and with reference to its purpose, and where trees pose an immediate risk to either persons or Council assets, they will be made safe and/or removed as soon as possible.

Where a tree in a rural setting, on a boundary line, does not pose an immediate risk to persons or Council assets, and is outside the road maintenance envelope, Council may recommend the owner of the adjacent land obtain an arborist's report (at their own cost) on the health and recommendations for the tree.

If a qualified arborist's report identifies a hazardous tree that is likely to fail in a shorter timeframe than it would take to apply for and be issued with a Planning Permit for its removal, the applicant may apply to Council to remove the tree. The applicant will require a "Works Within A Road Reserve Permit" and the fee for this will be waived. An arborists report must be submitted to the Manager Field Services / Environment Officer for approval for removal. All documentation and approvals must be attached to the original file created for the initial inspection.

If a qualified arborist's report identifies a hazardous tree that is **NOT** likely to fail in a shorter timeframe than it would take to apply for and be issued with a permit for its removal, the applicant will be required to put in a planning application under *Mansfield Planning Scheme 52.17 – Native Vegetation*. The applicant will require a "Works Within A Road Reserve Permit" from Council. An arborists report must be submitted with any planning application for removal of native vegetation. All documentation and approvals must be attached to the original file created for the initial inspection.

Reactive maintenance is independent of actions associated with tree failure during storms and other emergency responses.

9.3 Maintenance Restrictions

Any works undertaken outside the scope of this plan will require written consent from Council. All State and local planning requirements regarding vegetation removal must be adhered to. A Planning Permit will be required for community or Council requests that fall outside of the Tree Management Plan and/or outside any exemptions. The applicant should seek a Planning Permit and any other relevant permissions at their cost via submission to Council.

9.4 Trees of Significance

There are a number of trees protected under the Mansfield Planning Scheme - 42.02 Vegetation Protection Overlay and 43.01 Heritage Overlay, and their associated schedules.

9.5 Removal of significant trees

A General Manager or delegated officer may authorise the removal of a tree identified as significant in order to avoid unreasonable risk or damage where a tree is assessed by a qualified arborist and confirmed hazardous.

Where a tree is identified as an immediate hazard, removal may be authorised by the Asset Inspector (with appropriate Arboriculture certification) or delegated officer and undertaken



immediately.

9.6 Managing Pests and Disease

Trees are prone to a number of pests and diseases which can compromise the health and structural integrity of a tree. Mansfield Shire has a significant number of elm, oak, plane and ash trees that are regularly monitored and treated for certain pests and diseases such as elm beetle and phytophthora.

Termites are a native species that form part of the natural environment and perform an important role in the ecosystem. Only a dozen or so are known to cause damage from the hundreds of species of termites in Australia. Mansfield Shire is a Declared Termite Area and there are building requirements in place to minimize the impact of termite damage. In the event that it is suspected a tree may contain termites, the following with Council approval can be undertaken:

- The drilling or boring of Council trees to ascertain the presence of termites and a written report of findings.
- The chemical treatment of Council trees against termites from a licensed service provider (Council requires a written report of treatment for its records).
- The removal of Council trees that are deemed structurally compromised as a preventative measure against termites in accordance with the relevant legislation including the provisions of the planning scheme.



10. Appeal Relating to Tree Removal and Maintenance

Residents or other interested parties may appeal to Council's tree management decision on Council managed land.

If a resident insists on the removal or retention of a tree despite advice and assurances from the Supervisor Parks and Gardens or delegated officer(s) that the contrary or an alternative is more appropriate, this request must be in writing and addressed to the Manager Field Services. Following receipt of the written request, the Manager Field Services shall initiate the following appeal process:

- Council's arborist will provide a brief 'objective over-view' report to the Manager Field Services that describes the arboricultural issues concerning the tree removal or retention.
- Following a site inspection, the Manager Field Services will either base their decision upon the information contained within the report from an Arborist; or
- Determine to obtain an independent report from a qualified arborist to confirm the arboricultural issues.

When considerable community concern is expressed following notification of a tree management decision, the responsible officer will refer the matter to the General Manager Infrastructure and Planning.

Tree management decisions in a road reserve, park, or reserve (subject to statutory constraints) may be authorised by the Manager Field Services or Environment Officer where on the individual merits of the situation it is considered appropriate. These situations would involve judgment based on a combination of the related arboricultural issues combined with such factors as social, technical, economic, or environmental considerations.

In situations where the delegated officer does not support tree management decisions, the delegated officer will advise the resident in writing.



11. Tree Risk Management

11.1 Guiding Principles

A key reason for tree management is to control the risks to the community. The risk associated with trees is a combination of the location and condition of the tree and the public or asset use in the vicinity of the tree. Management of the risk needs to take these factors into account. The Risk Management approach is based on the three-step process:

- 1. Inspection of the asset
- 2. Identify any defects which may affect the structural integrity of the tree
- 3. Implement the appropriate action within the required response time

11.2 Introduction and Principles of Tree risk management

A primary issue confronting the community is how to manage an extensive tree resource, both from an ecological / landscape perspective and from a public safety standpoint of ensuring that reasonable care is taken to manage the risks associated with trees.

The Mansfield Shire manages vast numbers of trees over a large area and within many varied landscape contexts. In most cases, the sheer quantity of trees prohibits an individual tree assessment approach. The time involved in the inspection procedure and the works generated from such inspections would be extensive and prohibitively expensive for the community.

Consequently, a broader, systematic, and proactive approach to tree assessment is required that prioritises works on hazard trees based on the establishment of tree risk. A tree risk management program provides a systematic process for scheduling and inspecting trees, enables the prioritisation of works based on perceived risk, and allows judicial use of community resources.

Tree risk management within the Mansfield Shire encompasses a broad range of tree related issues. This section of the Tree Management Plan addresses the overall notion of tree asset inspection and management. Varying types of risk associated with trees and the Mansfield Shire processes for addressing these issues are included in other sections of the document, for example tree removal, tree pruning, pest infestation, tree planting and root and infrastructure conflicts.

To effectively identify and manage risks Council will:

- Use a formal risk assessment program in general conformity with the process set out in AS/NZS 31000:2009
- Use tree management practices and procedures as laid out in AS/NZS 31000:2009
- Document all Council tree incidents, actions and works and incorporate within Council's Customer Request System
- Document all tree incident reports in Council's Customer Request System and refer to delegated officer as soon as is practical
- Review by Council's Manager Field Services of all tree incidents and document proposed actions in response.
- Incorporate tree risk management issues and information into a tree asset database (under development).
- Refer all works and events likely to impact on, or be affected by, Council trees, to Council's



Manager Field Services.

11.3 Quantified Tree Risk Assessment (QTRA)

The Quantified Tree Risk Assessment system (QTRA) quantifies three components of the tree failure risk:

- 1. Target Evaluation
- 2. Impact Potential
- 3. Probability of failure

The product of these component probabilities is referred to as the 'Risk of Significant Harm'.

A risk of significant harm or death of 1/10,000 is considered by some authorities to be the limit of acceptable risk to the public at large. Using the 1/10,000 limit, a risk of death exceeding 1/10,000 requires remedial action to reduce the risk (unless the risk is limited to a selective individual or group - such as a tree owner, who may choose to accept a greater or lesser risk).

Additionally, the tree might offer benefits that could be set against the risk of harm. The 1/10,000 threshold is not intended to be applied with absolute rigidity but necessarily includes a degree of flexibility and an informed judgement call to be made in each situation.

TARGET EVALUATION

A target is anything of value that could be harmed in the event of tree failure. Frequent assessment of trees and of associated risks may be essential in areas of high public access or where trees are within striking range of people or valuable property. Conversely, in locations without property and having very low public access, the survey and assessment of tree hazards may be unnecessary. Therefore, the nature of the target beneath or adjacent to a tree should dictate the level of risk assessment that is required.

IMPACT POTENTIAL

A small dead branch of less than 10mm diameter is unlikely to cause significant harm even in the case of direct contact with a target, whilst on average a falling branch with a diameter greater than 150mm is likely to cause harm in the event of contact with all but the most robust target.

The increased potential for injury in relation to the size of tree or branch is proportional to a degree, yet the tree or branch will reach a size where the increased severity of injury is no longer proportional to the increase in size. Similarly, most property likely to be affected by tree failure can incur only a limited level of damage before further damage is likely to be inconsequential, i.e., when it is beyond economic repair.

PROBABILITY OF FAILURE

The Probability of Failure component of the system provides five ranges. Each range represents a range of probability of failure occurring within a year, expressed as a ratio calculated from the upper value of that range. Probability of failure will ordinarily be recorded in the tree survey schedules as a range 1 to 5 (see Table 1 below) but may be more accurately evaluated and recorded as a ratio where circumstances dictate.

Risk of Harm = Target x Impact Potential x Probability of Failure

= a risk of death exceeding 1/10,000 requires remedial action to reduce the risk



Target Range	Property (repair or replacement costs)	Human (not in vehicles)	Vehicle Traffic (number per day)	Ranges of Value (probability of occupation or fraction of \$3,000,000)
1	Very high value \$3,000,000 – >\$300,000	Occupation: Constant – 2.5 hours/day Pedestrians & cyclists: 720/hour – 73/hour	26,000–2,700 @ 110kph 28,000–2,900 @ 100kph 31,000–3,200 @ 90kph 32,000–3,300 @ 80kph 36,000–3,700 @ 70kph 42,000–4,300 @ 60kph 47,000–4,800 @ 50kph	1/1 – >1/10
2	High value \$300,000 – >\$30,000	Occupation: 2.4 hours/day – 15 min/day Pedestrians& cyclists: 72/hour – 8/hour	2,600 – 270 @ 110kph 2,800 – 290 @ 100kph 3,100 – 320 @ 90kph 3,200 – 330 @ 80kph 3,600 – 370 @ 70kph 4,200 – 430 @ 60kph 4,700 – 480 @ 50kph	1/10 – >1/100
3	Moderate - high value \$30,000 – >\$3,000	Occupation: 14 min/day – 2 min/day Pedestrians & cyclists: 7/hour – 2/hour	260 – 27 @ 110kph 280 – 29 @ 100kph 310 – 32 @ 90kph 320 – 33 @ 80kph 360 – 37 @ 70kph 420 – 43 @ 43kph 470 – 48 @ 50kph	1/100 -> 1/1,000
4	Moderate value \$3,000 – >\$300	Occupation: 1 min/day – 2 min/week Pedestrians & cyclists: 1/hour – 3/day	26 – 4 @ 110kph 28 – 4 @ 100kph 31 – 4 @ 90kph 32 – 4 @ 80kph 36 – 5 @ 70kph 42 – 5 @ 60kph 47 – 6 @ 50kph	1/1,000 - >1/10,000
5	Low value \$300 – >\$30	Occupation: 1 min/week – 1 min/month Pedestrians & cyclists: 2/day – 2/week	3 – 1 @ 110kph 3 – 1 @ 100kph 3 – 1 @ 90kph 3 – 1 @ 80kph 3 – 1 @ 70kph 4 – 1 @ 60kph 5 – 1 @ 50kph	1/10,000 – >1/100,000
6	Very low value \$30 – \$2	Occupation: <1 min/month – 0.5 min/year Pedestrians & cyclists: 1/week – 6/year	None	1/100,000 — 1/1,000,000

Table 1: Target Ranges for Property, Pedestrians and Vehicles



17

Impact potential range	Size of tree part likely to impact target	Impact Potential
1	> 450mm dia.	1/1 – > 1/2
2	450mm dia. – 260mm dia.	1/2 -> 1/8.6
3	250mm dia. – 110mm dia.	1/8.6 ->1/82
4	100mm dia. – 25mm dia.	1/82 -> 1/2,500

Table 2: Size of Tree Part Likely to Impact Target

* Range 1 is based on a diameter of 600mm.

Table 3: Probability of Failure

Probability of failure range	Probability of failure percentage	Probability ratio
1	>10% - 100%	1/1 -> 1/10
2	> 1% - 10%	1/10 -> 1/100
3	> 0.1% - 1%	1/100 -> 1/1,000
4	> 0.01% - 0.1%	1/1,000 -> 1/10,000
5	> 0.001% - 0.01%	1/10,000 -> 1/100,000
6	> 0.0001% - 0.001%	1/100,000 -> 1/1,000,000
7	> 0.00001% - 0.0001%	1/1,000,000 -> 1/10,000,000

Table 4: Risk Likelihood

Frequency	Description	
	The tree has significant supporting root damage, removal of significant	
Certain	adjacent supporting tree, signs of recent tree movement, unsupported split	
	trunk, unsupported fractured branch, hanging branch	
	The tree shows signs of over weighted limbs, significant disease, root	
Likely	damage, removal of adjacent supporting tree, supported split trunk,	
	supported fractured branch	
Probable	Mature to aged tree in declining condition, and/or structure and/or diseas	
FIUDADIE	apparent, showing potential branch drop	
Improbable	The tree appears healthy, but is of a type or condition to potentially develop	
Improbable	minor branch drop of live or dead wood	
No Detectable	The tree appears healthy, no apparent sign of disease or damage, or is of	
Threat	a size, species, or condition likely to pose a threat	



Severity	Description
	The tree is in an area high in people or vehicular traffic or near major
Extreme	assets and is of a size, species, or condition, or showing signs of significant
EXILEME	movement, root or structural damage, or disease and where its failure is
	likely to cause significant injury or damage
Serious	The tree is in an area high in people or vehicular traffic or near significant
assets where it does pose a threat	
Moderate	The tree is in a grassed area with minimal people or vehicular traffic or
Moderate	near significant assets where it may pose a threat
Minor The tree is out of the way and unlikely to be near people, or veh	
	or significant assets where it may pose a threat

Table 5: Risk Consequences

Table 6: Risk Rating

	Certain	Likely	Probable	Improbable	No Detectable Threat
Extreme	Critical	Urgent	High	Medium	Medium
Serious	Urgent	High	Medium	Medium	Low
Moderate	High	Medium	Medium	Low	Very Low
Minor	Medium	Medium	Low	Very Low	Negligible

Table 7: Treatment Approach

Probability of failure range	Risk	Suggested treatment approach
1 – Unacceptable Risks will not ordinarily be tolerated	Critical	Control the risk Remedial tree works required as soon as possible
2 – Unacceptable Risks will not ordinarily be tolerated	Urgent	Control the risk Remedial tree works required as soon as possible
3 – Unacceptable Risks will not ordinarily be tolerated	High	Control the risk Remedial tree works required as soon as possible
4 – Unacceptable (where imposed on others) Risks will not ordinarily be tolerated	Medium	Control the risk Review the risk Remedial tree works required
5 – Tolerable (by agreement)	Low	Control the risk unless there is broad stakeholder agreement to tolerate it, or the tree has exceptional value Review the risk



Probability of failure range	Risk	Suggested treatment approach
Risks may be tolerated if those exposed to the risk accept it, or the tree has exceptional value		Remedial tree works if required
6 – Tolerable (where imposed on others) Risks are tolerable if as low as reasonably practicable	Very Low	Assess costs and benefits of risk control Control the risk only where a significant benefit might be achieved at reasonable cost Review the risk Remedial tree work if required
7 – Broadly Acceptable Risk is already as low as reasonably practicable	Negligible	No action currently required Review the risk Remedial tree works if required

11.4 Inspections and Risk Assessment for Urban Areas

Council's urban trees are inspected and assessed on a regular basis. The frequency of inspections is determined by the location of the trees and their potential for public risk. Inspections and risk assessments are conducted according to the standardised and documented procedure. Tree inspection intervals are detailed below:

Table 8: Inspection Targets

Inspection Type	High Risk Areas	Medium Risk Areas	Low Risk Areas
Identified tree defect inspection	Annually	Every 2 years	Every 4 years
Proactive tree condition inspection	Every 2 years	Every 4 years	As required

Inspection of tree assets is to identify defects and act to reduce the risk of injury and to prevent or minimise failure and thereby lessen the physical and financial impact on the community.

All trees located on Council managed land in urban areas will be inspected by a suitably qualified arborist to determine the useful life expectancy and ongoing management of the tree based on the assessment of the following:

- Tree characteristics and health
- Genus, species, and common name
- Site conditions
- Condition/Hazard rating recorded as either: Defect with high priority
- Defect with medium priority
- Defect with low priority
- No defect
- Description of tree defects (if any) and action required.



11.5 Inspections and Risk Assessment Regime for Rural Areas

Service inspections are conducted on the road maintenance envelope (Appendix 1) as follows:

Table 9: Inspection Regime – Rural Roads

Classification of Roads	Inspection Regime	
Access and Limited Access Roads	Inspected every twelve (12) months	
Collector Roads	Inspected every six (6) months	
Link Roads	Inspected every three (3) months	

11.6 Modes of Inspection

11.6.1 Urban Areas

The Council or the community (customer) may report the defects with respect to trees on public land. Inspections are performed in three modes as follows:

- 1. Inspection by Council for proactive maintenance (defect inspection)
- 2. Inspection by Council based on customer complaints or reports (reactive inspection)
- 3. Inspection by Council or by independent Arborist (condition inspection)

11.6.2 Rural Roads

Inspections of trees on rural roads are performed in two modes as follows:

- 1. Inspection by Council for proactive maintenance (defect inspection)
- 2. Inspection by Council based on customer complaints or reports (reactive/safety inspection)

Table 10 (below) details response times and targets for urban and rural trees.

	High Risk Area	Medium Risk Area	Low Risk Area
Dangerous Tree Assessment Inspection:	Site Inspection within 24 hrs where practicable	Site Inspection within 2-3 working days	Site Inspection within 7 working days
Dangerous Tree Rectification Action (make safe):	Within 24 hrs where practicable	Within 24 hrs where practicable	Within 48 hrs where practicable
Dangerous Tree Rectification Action (clean up if required):	5 working days	5 working days	10 working days

Table 10: Maintenance Targets and Response Times



11.7 Proactive Inspections by Risk Rating Areas

11.7.1 Urban

High Risk Areas Trees located in high-risk areas will be proactively inspected as per inspection targets

Medium Risk Areas Trees located in medium-risk areas will be proactively inspected as per inspection targets,

Low Risk Areas will be reactively inspected on request, within the timeframes set out in the maintenance targets and response times. It should be noted that rural inspections for canopy clearing will be carried out under the requirements of the Strathbogie Shire Road Management Plan.

Area Risk Levels will be re-assessed every 4 years along with this Plan and will reflect any changes to volume of use/public events or other changes.

11.7.2 Rural Roads

Trees on rural roads are inspected on a reactive basis to address road safety issues in accordance with Council's Road Management Plan, where identified hazardous trees are removed or pruned to maintain the traffic zone (height and width), which also includes canopy clearing.

Council will respond to reports from the community of dangerous trees in rural areas.

11.7.3 Mitigating Immediate Risks

Where immediate risks are identified, Council has an exemption to conduct remediation works under the following circumstances:

- DEECA: Exemptions from requiring a planning permit to remove, destroy or lop native vegetation, 2017
- DEECA Road Safety Exemption: Procedure to rely on the road safety exemption in planning schemes, 2018
- DEECA Road Safety Exemption Written agreement for public authorities and municipal councils, Mansfield Shire Council as of 24th October 2018



12. Property Damage Caused by Trees

Council endeavours to limit potential damage to property through proactive and reactive measures outlined in this document. However, in the instance where Council has no knowledge or record of a tree being a potential risk through internal procedures or external notification, Council is unable to reimburse any costs attributed to the damage caused by a falling tree.

13. Community Consultation

Council has a commitment to communicate with the community and relevant stakeholders about issues that may impact them. It is important to allow the community to understand the reasons behind decisions being made by Council.

With all decisions regarding the removal of trees, in an Urban setting, there will be a minimum consultation via Council's social media platforms (e.g., Facebook and Instagram). This does not include any statutory advertising requirements around native vegetation removal.

At the discretion of Council, higher levels of consultation may be required, and if so, will use the Community Engagement Framework to involve the community in the decision making process.

14. Force Majeure/Exceptional Circumstances

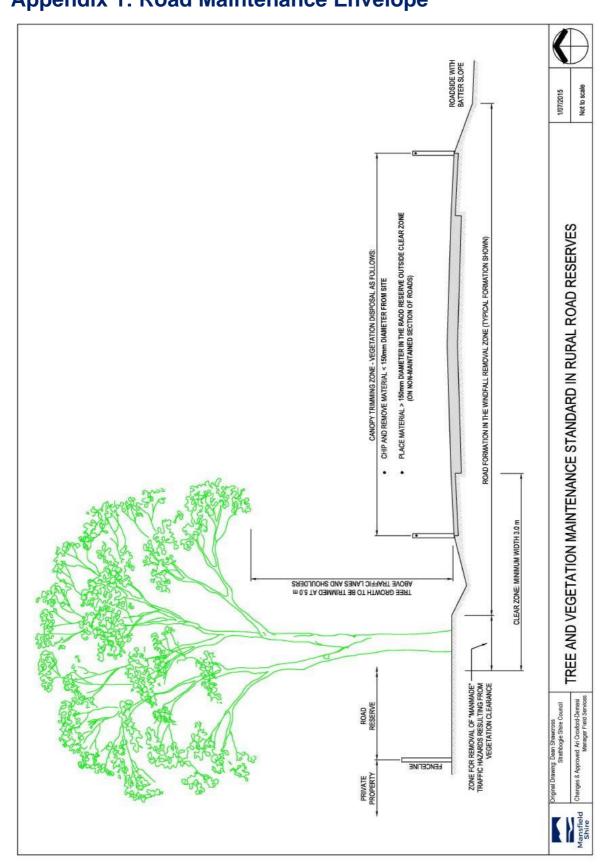
Council will endeavour to meet all its commitments under this Tree Management Plan, unless under exceptional circumstances. Such circumstances include but are not limited to:

- Natural Disasters (e.g., floods, bushfire, storms).
- Significant reduction in financial ability (e.g., economic downturns).
- Prolonged labour shortage (e.g., ill staff, competitive labour market).

Where exceptional circumstances prevail and the requirements for this Tree Management Plan cannot be met, pursuant to *Section 83 of the Wrongs Act 1958*, the Chief Executive Officer (CEO) will correspond with the Council Officer in charge of this plan and inform them that some or all of the timeframes and responses in Council's Plan are to be suspended.

Once the events beyond the control of Council have been resolved, or if the events have partly abated, Council's CEO will correspond with the Council Officer responsible for this Tree Management Plan and inform them which parts of Council's Plan are to be re-activated and when this is to occur.





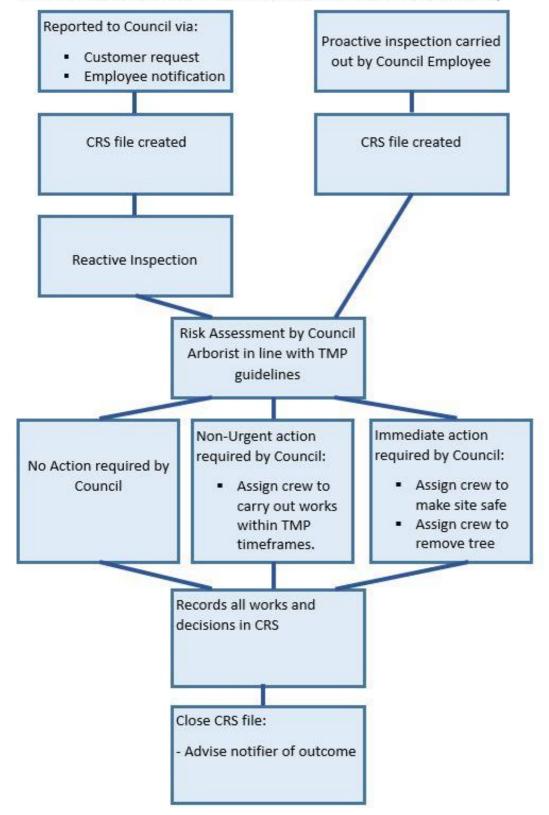
Appendix 1: Road Maintenance Envelope

Mansfield Shire Council Tree Management Plan



Appendix 2: Workflow Chart (Customer Request System)

*Please note "CRS" refers to current Customer Request System being used by Council



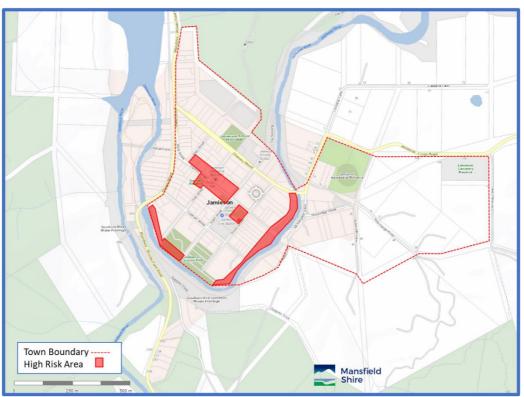


Appendix 3: Maps of Town Boundaries and High Risk Areas

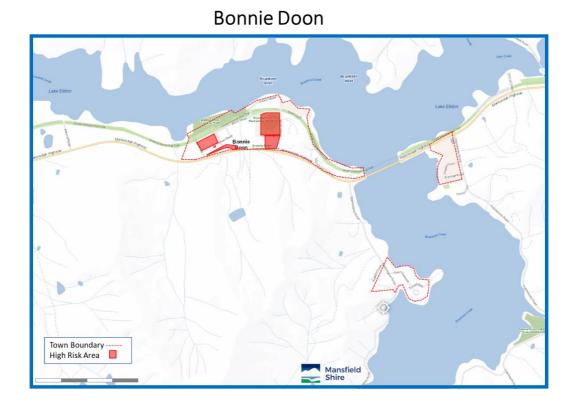


Goughs Bay

Jamieson



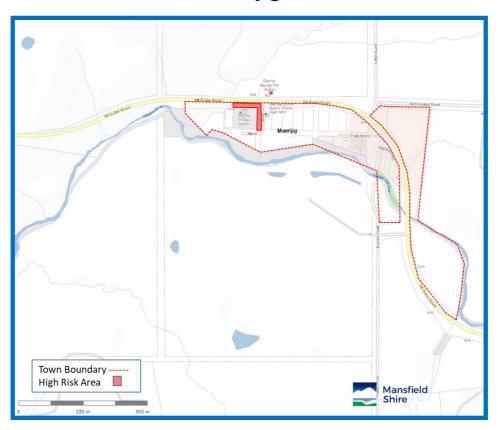




Merton







Merrijig



Mansfield

