

Tree Management Procedure

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Responsible Division	Infrastructure
Related Documents	Alexandrina Council By-law No.2 – Local Government Land Australian Standard 4970 & 4973 Alexandrina Council Community Strategic Plan Environmental Action Plan Land Division Guidelines Roadside Vegetation Management Plan Tree Management Policy Tree Canopy Baseline Study (2022)
Applicable Legislation	<i>Local Government Act 1999, section 221(2)(e)</i> <i>Planning, Development and Infrastructure Act 2016 (SA)</i> <i>Electricity Act 1996 (SA)</i> <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> <i>Heritage Places Act 1993 (SA)</i> <i>Highways Act 1926 (SA)</i> <i>Local Government Act 1999 (SA)</i> <i>National Parks and Wildlife Act 1972 (SA)</i> <i>Native Vegetation Act 1991 (SA)</i> <i>Natural Resources Management Act 2004 (SA)</i> <i>Road Traffic Act 1961 (SA)</i> <i>Water Industry Act 2012 (SA)</i>

1. Purpose and Principles

The purpose of this Procedure is to provide a guiding framework for the making of decisions in regard to planting, maintenance, conservation, assessment, valuation and removal of trees on Council land. This procedure applies to all trees under the care, control and management of Council to ensure that Councils' approach to tree management across the Council district is:

- undertaken in a consistent and transparent manner;
- fair, equitable and achieves the best possible outcomes for the community;
- consistent with Councils' legislative obligations;
- consistent with Councils' Tree Management Policy, the strategic, corporate and financial directions.

All relevant application forms (Attachment A) will be published on Councils' website.

2. Liability

LOCAL GOVERNMENT ACT 1999 - SEC 245

245—Liability for injury, damage or loss caused by certain trees



- (1) A council is not liable for any damage to property which results from:
 - (a) the planting of a tree in a road; or
 - (b) the existence of a tree growing in a road (whether planted by the council or not)

- (2) However, if:
 - (a) the owner or occupier of property adjacent to the road has made a written request to the council to take reasonable action to avert a risk of damage to property of the owner or occupier from the tree; and
 - (b) the council has failed to take reasonable action in response to the request, the council may be liable for any damage to property that would have been averted if the council had taken reasonable action in response to the request.

3. Definitions

In this Procedure, unless the contrary intention appears, these words have the following meaning:

‘Council’ means Alexandrina Council and includes any member of Council staff acting under delegation.

‘Council land’ means any land owned by Council or which is under Council’s care, control and management including community land, road reserves, and land that is excluded from community land classification. Such as parks and gardens, urban biodiversity reserves, rural reserves, urban streets and rural roads.

‘Extreme Nuisance’ means effects caused by the presence of a tree that a party considers unreasonable but is not considered unacceptable by Council Staff.

‘Individual’ means any person and includes contractors, Elected Members, employees, ratepayers, residents and volunteers of Alexandrina Council.

‘Pest tree’ means any plant declared for control under the *Natural Resources Management Act 2004*, or any tree identified as an environmental pest.

‘Pre-European Landscape’ means the tree species and landscape character that prevailed prior to European settlement.

‘Roadside’ means the strip of land between the road formation and the boundary of the road reserve.

‘Significant Impact’ means the effects on a party that are either a culmination of minor factors over time or a major impact at a particular time, that causes unacceptable personal or financial hardship to parties affected.

‘Tree’ means a perennial woody plant with a defined canopy greater than two and a half metres (2.5 m) in height at optimum maturity.

‘Verge’ means the area of land located between the roadside kerb and the footpath.

4. Tree Planting

4.1 Development of new subdivisions (including two for one subdivisions):

- 4.1.1 Within new subdivisions, veteran trees, habitat trees, remnant native vegetation and other sites of high biodiversity should be protected and incorporated into appropriately designed open space allocations. If no such areas exist,

developers will be encouraged to create new natural landscapes or habitat areas as part of their open space allocation.

- 4.1.2 As per Alexandrina Councils' "Land Division Guidelines", Developers must plant one street tree per allotment minimum, where practicable and will be responsible for maintaining all such trees for a minimum of 12 months, after which maintenance obligations will be handed over to Council.
- 4.1.3 Land Division of less than 20 created lots - The Applicant shall contribute funds for one tree per created lot, to Council for the future provision of street trees by Council and an additional cost for 12 months maintenance of each tree as per Alexandrina Councils' "Land Division Guidelines".
- 4.1.4 The tree species and location are to be decided in consultation with Council, should be preferably native tree species and be of local provenance where appropriate, as part of the approvals process for sub-division design.
- 4.1.5 Where alignments for a driveway are planned or can be foreseen, tree locations should be chosen to avoid conflict. On blocks with narrow street frontage where a tree planted in the centre of the block is likely to interfere with any driveway cross-over alignment, off-centre alignment or planting on property boundaries will be required.
- 4.1.6 Planting location should conform to the "Land Division Guidelines".
- 4.1.7 Trees damaged, removed, or not maintained in good condition should be identified by Council staff conducting a handover inspection at the end of the 12-month maintenance period and must be replaced by the developer at their own cost prior to handover to Council.
- 4.2 Increased plantings on Council land will occur in line with Alexandrina's Community Strategic Plan A2040, the availability of resources, Council's capacity to maintain all trees planted to establishment, and the provisions of Part 9 of the Tree Management Policy.
- 4.3 All requests for the planting of trees on verges or other open space must be submitted to Council in writing using the applicable form; Customer Action request, Application for a 221 permit (Alteration of Road Application Type 1) or via the Development Application process for consultation and consideration by Council.
- 4.4 In urban streets and township parks and gardens, Council will plant trees in accordance with the outcomes of the Tree Canopy Baseline Study (2022), relevant Town Maintenance Themes, indigenous plant species as per Council's Trees Species Planting List, SA Power Networks Powerline Friendly Species List and the Water Industry Regulation 13a and 13b (2012). Species selection will be guided by the existing or desired character and use of the area, climatic conditions, potential impacts on infrastructure and public safety, the need to minimise pruning due to powerlines and the minimisation of ongoing maintenance requirements.
- 4.5 In urban biodiversity reserves and rural areas, Council will plant trees in accordance with site-specific management plans, work plans, and species lists. Species selection in these areas will give primary consideration to restoring the pre-European Landscape and the availability of local provenance planting stock.



- 4.6 Trees or other vegetation must not be planted on Council land without prior written approval from Council (refer Clause 9.25.4 of Alexandrina Council By-Law No. 2 – Local Government Land (2016) and section 221(2)(e) of the *Local Government Act 1999*). Individuals or organisations wishing to plant trees or other vegetation on Council land and verges (including parks, reserves, urban streets, and rural roads) must submit a written application (section 221 Alteration of Road Application Type 1).
- 4.7 Where a tree or other vegetation has been planted on Council land without prior written approval and the Team Leader of Open Space and Buildings, Horticultural Technical Officer, Environmental Project Officer, or Parks and Gardens Supervisor is of the view that the species or location of the planting is inappropriate, Council may order the individual or organisation responsible to remove the planting(s). If the direction is not complied with in a timely manner, Council may remove the planting(s) and recover the costs of such work from the individual or organisation responsible (refer clauses 9.25.4 and 12 of Alexandrina Council By-Law No. 2 – Local Government Land (2016) and section 262 of the *Local Government Act 1999*).
- 4.8 Where the planting of trees or other vegetation on a road may have a significant impact on local residents, nearby businesses or other stakeholders, Council will ensure that consultation occurs as per the requirements of Council's Public Consultation Policy (refer section 232 of the *Local Government Act 1999*).
- 4.9 Where reasonably practicable, Council will prioritise plantings in locations from where trees were originally removed and in accordance with the outcomes of the Tree Canopy Baseline Study (2022) and the Tree Planting Strategy that will be developed following the Tree Canopy Study.

5. Tree Maintenance

- 5.1 Council is responsible for the management and maintenance of all trees on Council land, including those that have been planted by residents on Council verges. Residents and ratepayers are not authorised to prune remove or treat with chemicals, any trees on Council land without prior written approval from Council. Non-compliance may result in penalties (refer clauses 9.23.1 and 12 of Alexandrina Council By-Law No. 2 – Local Government Land (2016) and sections 221(2) (e) and 262 of the *Local Government Act 1999*).
- 5.2 Council will develop and implement proactive tree maintenance standards and programs for our urban and rural trees. Requests from individuals or organisations for Council trimming or pruning of trees can be made in writing or by lodging a Customer Action Request over the phone. All such requests will be systematically recorded, considered, inspected, assessed and prioritised against the tree risk matrix by Council Staff before any action is undertaken. Where necessary a report by an independent arborist may be sought.
- 5.3 In urban areas, all pruning of Council trees will be undertaken in accordance with Australian Standard AS4373 Pruning of Amenity Trees, and industry best practice. Pruning and maintenance will be undertaken to enhance amenity (i.e. to establish a structure amenable to the species, site location and planting purpose), to maintain tree

health, longevity, manage risk, to maintain traffic clearances (both vehicular and pedestrian) and maintain vision for safe vehicle operation.

- 5.4 Tree trimming on rural roadsides is undertaken to ensure a safe and efficient road system. Any trimming, removal, or other maintenance of native vegetation on rural roads fall under the requirements of the *Native Vegetation Act 1991*.
- 5.5 Native vegetation on roadsides is managed in accordance with Council's Roadside Vegetation Management Plan (RVMP). The RVMP will be regularly reviewed in accordance with legislative requirements under the *Native Vegetation Act 1991*.
- 5.6 Council will generally not undertake the treatment of termites/pests in trees within road reserves as they are considered a natural part of the environment and the treatment of termites/pests in trees/logs will not stop them invading from other sources or properties. It is the landowner's responsibility to take the appropriate action to adequately protect their property from the invasion of termites/pests.
- 5.7 Customer actions regarding tree roots must be directed to the Recreational Services Inspector and trip hazards to the Team Leader Assets and Rapid Response. In the case of a large tree root causing a tripping hazard both the Recreational Services Inspector and Team Leader Assets and Rapid Response should attend and determine the most effective way to minimise the impact of the tree roots on infrastructure. Once assessed, any actions must be recorded in Councils' records management system, a works order raised and the Customer must be notified of the outcome, including estimated timing of any works.

6. Tree roots and Private Property

- 6.1 Roots from large trees may come into contact with buildings and pipes. In cases where the pipes and building footings are properly designed and maintained, tree roots are a secondary issue with faulty infrastructure including; inadequate sewer lines, poor quality construction, seasonal soil shrinkage, changed moisture levels, and soil moisture loss through transpiration generally being the primary cause of damage or blockage.
- 6.2 It is the property owner's responsibility to carry out any required work on private property, Council will undertake any required works on Council land.
- 6.3 Where tree roots, from a Council owned tree, are alleged to be causing damage to a structure, the property owner or resident must provide a written claim including evidence from an independent and qualified expert in a relevant field, as to the cause and extent of the damage. On receiving a complaint or claim a site assessment will be undertaken to investigate the claim and inform the resident of the outcome as per section 5.7 above. If an inspection determines that private infrastructure damage is caused by tree roots Councils' Field Services will work on solutions to reduce the risk of further damage, and any claim for damages must be forwarded to Councils Corporate Risk Officer for processing. All actions are to be documented and entered into Council's Information Management System.
- 6.4 Tree removal will only be considered if no alternative solution can be found. If residents are unsatisfied with Council's response and findings they may consult independent experts, in the relevant field, in order to provide evidence of any damage to Council for further consideration.

7. Vegetation Retention and Protection

- 7.1 As per section 4.1.1, veteran trees, habitat trees, remnant native vegetation and other sites of high biodiversity should be protected and incorporated into appropriately designed open space allocations.
- 7.2 If no open space allocations exist, developers will be encouraged to create new natural landscapes or habitat areas as part of their open space allocation. Where such vegetation exists, within construction sites, activities must be compliant with Australian Standard 4970 – 2009 Protection of trees on Development Sites, including the requirements to erect and maintain protection, prior to and during construction around the vegetation and CRZs (Critical Root Zones).
- 7.3 Council will commit to the creation and maintenance of a Register of Trees of Local Importance for the management and protection of trees and hedges that are considered veterans of the species; contribute to the biodiversity of the region; have a cultural connection to the local community past and present; are an individual or avenue of particular prominence for the region; or have been identified as having other significance as determined by Council.

8. Tree Removal

- 8.1 Trees, whether alive, senescing or dead, have an intrinsic value as habitat and their removal is viewed by Council as undesirable but recognises it may be required on rare occasions. The removal of a tree (other than pest or dangerous trees) will be treated by Council as the option of last resort and pruning being preferable to removal.
- 8.2 The removal of any tree whether it is dead, alive, fallen or standing, on Council land without prior approval from Council is strictly prohibited and proven non-compliance may result in prosecution and penalties (refer clauses 9.23.1 and 12 of Alexandrina Council By-Law No. 2 – Local Government Land (2016), sections 221(2) (e) and 262 of the *Local Government Act 1999* and the *Native Vegetation Act 1991*).
- 8.3 Individuals or organisations seeking removal of a tree from Council land must apply in writing using the applicable form; Customer Action request, Application for a 221 permit (section 221 Alteration of Road Application Type 1) or via the Development Application process, it must state clearly the location, the exact tree and reasons for the request, and photographs, maps or diagrams may be included. All such requests must be brought to the attention of the Horticultural Technical Officer or the Inspector of Parks & Gardens for urban areas and the Environmental Project Officer for all rural areas, to be systematically considered, inspected, assessed and prioritised against the tree risk matrix by Council Staff before any action is undertaken. When the removal of a tree in urban areas is initiated by Council staff, a Tree Risk Assessment Form – Urban must be completed prior to removal or where necessary a report by an independent arborist may be sought.
- 8.4 All tree removals on Council land may be subject to additional legislative approval requirements, including those under the *Native Vegetation Act 1991*, *Natural Resources Management Act 2004*, *Planning, Development and Infrastructure Act 2016*, and/or *Environment Protection and Biodiversity Conservation Act 1999*. Nothing in this policy should be taken as abrogating these legislative approval requirements.
- 8.5 Council staff may approve a tree removal request (at no cost to the applicant) in the following circumstances:

- 8.5.1 the tree poses an unacceptable risk to public safety;
 - 8.5.2 the tree is causing a significant impact to public or private property or infrastructure and alternative methods for minimising the impact will not be effective;
 - 8.5.3 the tree is dead, diseased, damaged, or deformed and cannot be revived to a sustainable condition;
 - 8.5.4 the tree is detrimentally affecting the health of a nearby resident, the request is supported by evidence from a medical specialist, the species of tree is uncommon in the vicinity of the applicant's residence and alternative options for managing the issue are not feasible;
 - 8.5.5 the tree restricts vision for safe vehicle movement and other alternatives such as effective pruning cannot be achieved;
 - 8.5.6 the tree is a pest tree and removal is consistent with Council's established budgetary priorities for the management of pest plants on Council land;
 - 8.5.7 the tree is not identified on Councils' register of Trees of Local Importance, or the National Trust Significant Tree Register; or
 - 8.5.8 tree removal is required to facilitate improvements to Council infrastructure and the infrastructure cannot practicably be redesigned to avoid the need for removal.
- 8.6 Council may require a person requesting the removal of a tree from Council land to provide written evidence for consideration, from an independent and qualified expert in a relevant field, as to the cause and extent of the risk, damage or health problem given as the reason for requesting removal. Council may also choose to seek its own expert advice when considering such a request.
- 8.7 A resolution of Council may authorise the removal of a tree on Council land in circumstances where the tree does not meet any of the removal criteria specified in 8.5 above but is causing an extreme nuisance to community infrastructure (i.e. infrastructure for which council has primary responsibility for maintenance). Council staff are not authorised to approve removal of a tree for this reason in the absence of such a resolution. The report to Council should include assessment from an external arborist and/or suitably qualified Council staff giving consideration to the condition, useful life, and level of risk with management options for the tree(s) proposed for removal. It is Council's intention that delegated staff are able to resolve all other tree removal issues which arise, without the need to seek arbitration from the chamber.
- 8.8 Subject to 8.7, trees that do not meet any of the removal criteria specified in 5.5 will not be removed or substantially pruned for other reasons, including but not necessarily limited to:
- 8.8.1 the tree shades a private garden or solar panel installation;
 - 8.8.2 the tree causes nuisance by way of leaf, fruit or bark shedding;
 - 8.8.3 the tree provides habitat to wildlife that causes nuisance by way of noise, droppings or litter;
 - 8.8.4 the tree obscures or potentially obscures advertising signage; or
 - 8.8.5 the tree obscures or potentially obscures views.

- 8.9 In addition to the provisions for removal of a tree in clauses 8.5 and 8.7, and subject to 8.4, Council staff may on rare occasion approve a tree removal request to enable access to private property (including driveway crossovers) under the following circumstances:
- 8.9.1 If Council staff consider that possible alternative responses (such as the relocation of services and access points, redesign of the proposal, use of an established cross-over if available and pruning rather than removal or relocation of the tree) are not reasonably practicable:
- 8.9.1.1 the cost of removal or relocation will be borne by the proponent in accordance with Council's adopted schedule of fees and charges for Private Works. Alternatively, the proponent may, with the prior consent of Council and subject to conditions imposed by Council, agree to undertake the works themselves; and
- 8.9.1.2 the cost of offsetting the removal with replacement trees will be borne by the proponent in accordance with Council's adopted schedule of fees and charges for Tree Replacement which allows two trees for every one removed as per Tree Management Policy.
- 8.9.2 If Council staff consider that an alternative response (such as the relocation of services and access points, redesign of the proposal, use of an established cross-over if available and/or pruning rather than removal or relocation of the tree) is reasonably practicable:
- 8.9.2.1 the proponent is to be advised of the alternatives to tree removal or relocation that are considered reasonably practicable;
- 8.9.2.2 the cost of removal or relocation will be borne by the proponent in accordance with Council's adopted schedule of fees and charges for Private Works. Alternatively, the proponent may, with the prior consent of Council and subject to conditions imposed by Council, remove or relocate the tree themselves; and
- 8.9.2.3 the cost of offsetting the removal with replacement trees will be borne by the proponent. The fee shall be the "Tree Replacement" fee in Council's adopted schedule of fees and charges, plus 25% of the lost amenity value caused by tree removal, valued by an external arborist and/or suitably qualified Council staff member using the Tree Value Assessment Form and Tree Valuation Guide. (Appendix B).
- 8.10 An applicant will not be required to cover the costs described in 8.9.1.2 or 8.9.2.3 if the tree to be removed is a pest tree, or if the tree is dead or in severe decline due to natural causes and holds no ecological benefit.
- 8.11 Individuals or organisations wishing to remove pest trees from Council land at their own expense must apply in writing and obtain written approval from Council prior to undertaking the works. Council will assess each such removal application on its own merits before making a decision.
- 8.12 Dead, diseased, or damaged trees that are structurally sound and located within urban biodiversity reserves, rural reserves or rural roadsides will be retained for fauna habitat at Council's discretion and in accordance with the *Native Vegetation Act 1991*.
- 8.13 In cases where an application is not granted, and the applicant does not agree with the decision, the applicant may respond to the decision in writing. Any response from an applicant must demonstrate that the decision is non-compliant with Council's Tree

Management Policy, that the suggested alternative actions are not reasonable and provide evidence of such. The applicant's response is to be directed to the General Manager Infrastructure to review the initial decision and make suggestions for alternative actions if the initial rejection was deemed reasonable. The outcome of the review must be communicated in writing, and include information about the alternatives to tree removal and benefits of retention of the subject vegetation. If new alternatives, not already provided to the applicant are suggested, then the applicant may once again respond with evidence of non-compliance to the Tree Management Policy and why the alternatives are not reasonable.

- 8.14 Referral to Council regarding tree management matters may only be referred in extraordinary cases that lie outside the provisions of Council's Tree Management Policy. A negotiation process should be used in the first instance to assist the parties to identify and assess options and negotiate an agreement to resolve their dispute.

9. Tree Vandalism

- 9.1 It is an offence to poison, prune, remove, deface, or otherwise interfere with or cause unauthorised damage to trees on Council land, as per clauses 9.23, 9.25.4 and 10.1.2 of Alexandrina Council By-Law No. 2 – Local Government Land, section 221(2)(e) of the *Local Government Act 1999* and the *Native Vegetation Act 1991*.
- 9.2 Proven non-compliance should be expected to result in penalties including prosecution. Council will adopt a consistent approach to the deterrence and investigation of, and response to, tree vandalism incidents. This approach will include one or more of the following: public notification of the vandalism incident via letter drops, signage and media engagement, remediation works including replacement plantings, referral to the Native Vegetation Compliance Unit for investigation and the prosecution of offenders.

10. Trees on Private Land

- 10.1 The management of trees located on private land, including the impacts of such trees on neighbouring property, are the responsibility of the land owner.
- 10.2 Council may require the owner or occupier of land to maintain vegetation encroaching onto Council land (such as a footpath, road or urban biodiversity reserve). If this is not undertaken in a timely manner, Council staff are authorised under the *Local Government Act 1999* to undertake the work and recover the costs of such work from the owner or occupier of that property.
- 10.3 If the trunk of a tree is located on the boundary between private land and Council land, Council shall be responsible for the management of that tree, according to the principles in the Tree Management Policy and this Tree Management Procedure.

11. Plant, Seed, Flower and Fruit Collection

- 11.1 Native plants or parts of native plants including seeds, flowers or fruit must not be collected from trees or other vegetation on Council land (including parks, reserves, urban streets, and rural roads) without prior written approval from Council and the relevant state government authority, as outlined in clauses 9.23.1, 9.23.5 of Alexandrina Council By-Law No. 2 – Local Government Land, and part 4 of the *National Parks and Wildlife Act 1972*.



11.2 Individuals or organisations wishing to collect native plants or parts of native plants on Council land must submit a written application addressed to the Environmental Project Officer. Proven non-compliance should be expected to result in penalties including prosecution.

12. Exemptions

The restrictions in this procedure do not apply to a Council employee acting in the course and within the scope of that person's normal duties, or to a Council contractor or volunteer while performing work for Council and acting under the supervision of a Council employee.

13. Delegations

Council acknowledges that the Chief Executive Officer may sub-delegate matters related to this Procedure to staff or other persons employed or engaged by council.

14. Documentation

To assist in demonstrating that the above processes are fair, transparent and accountable, cost effective and meet community needs, all requests, assessments and outcomes in relation to Council's tree management activities will be documented. A Tree Removal Register will be made available to the public on the Council website. When specialist advice is required, written and dated advice will be obtained from persons with relevant qualifications and experience.

15. Availability of Procedure

This Procedure and the associated Policy will be available for inspection on the Council's website www.alexandrina.sa.gov.au. Copies can also be provided to interested members of the community upon payment of a fee in accordance with Council's Schedule of Fees and Charges.



Appendix A

INSERT ALTERATION OR ROAD APPLICATION TYPE 1 – Residential Landscaping

Appendix B

Tree Valuation will be undertaken according to the following method. The use of the formula was pioneered in Australia by the City of Melbourne, and is based on the Maurer-Hoffman formula.

$$\text{Value (V)} = \text{Basic Value (\$)} \times \text{Species (S)} \times \text{Aesthetics (A)} \times \text{Locality (L)} \times \text{Condition (C)}$$

Basic Value (\$)

The basic monetary value of a tree is determined by matching the trunk diameter at breast height (DBH) with its corresponding base value. The basic monetary value is adapted from a table of values devised by the American Council of Tree and Landscape Appraisers and the International Society of Arboriculture, which in the base year 1988 was \$US27 per square inch trunk basal area. The City of Melbourne converted values to centimetres in trunk diameter at breast height (DBH) and updated values for inflation in 2012.

DBH cm	Base Value	DBH cm	Base Value	DBH cm	Base Value
6	\$ 309.92	50	\$21,522.33	100	\$ 86,089.33
8	\$ 550.98	55	\$26,042.03	105	\$ 94,913.49
10	\$ 860.89	60	\$30,992.16	110	\$104,168.09
15	\$ 1,937.00	65	\$36,372.74	115	\$113,853.14
20	\$ 3,443.57	70	\$42,183.77	120	\$123,968.63
25	\$ 5,380.58	75	\$48,425.25	125	\$134,514.58
30	\$ 7,748.04	80	\$55,097.17	130	\$145,490.97
35	\$10,545.94	85	\$62,199.54	135	\$156,897.81
40	\$13,774.29	90	\$69,732.35	140	\$168,735.09
45	\$17,433.09	95	\$77,695.62	145	\$181,002.82

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 to the tree will also modify how the tree is scored. Judgment regarding species factor must be made by a qualified Arborist (which may be a Council staff member).

Group	Characteristics	Example Species	Score
1	<ul style="list-style-type: none"> trees of short life span (less than 50 years) fast growth rate 	<i>Prunus, Acacia, Virgillia, Laburnum</i>	0.5
2	<ul style="list-style-type: none"> trees of short life span (less than 50 years) slow growth rate 	<i>Malus, Crataegus, Eugenia, Waterhousia, Pyrus</i>	0.6

3	<ul style="list-style-type: none"> trees of medium life span (50 -150 years) fast growth rate 	<i>Populus, Liquidamber, Eucalyptus, Corymbia, Angophora, Grevillea, Melaleuca, Michelia, Salix, Casaurina, Hakea, Celtis, Acmena</i>	0.7
4	<ul style="list-style-type: none"> trees of medium life span (50 - 150 years) slow growth rate 	<i>Brachychiton, Fraxinus, Gleditsia, Jacaranda, Shinus, Phoenix, Melia, Robinia, Lophostemon, Liriodendron, Agonis, Meterosideros, Syzygium</i>	0.8
5	<ul style="list-style-type: none"> trees of long life span (more than 150 years) fast growth rate 	<i>Cupressus, Platanus, Ficus, Pinus</i>	0.9
6	<ul style="list-style-type: none"> trees of long life span (more than 150 years) slow growth rate 	<i>Ulmus, Quercus, Sequoia, Ginko, Araucaria</i>	1.0
Modifiers	<ul style="list-style-type: none"> Environmental Weeds dangerous (poor branch attachment) undesirable characteristics (e.g. allergenic) 		-0.1
Modifiers	<ul style="list-style-type: none"> a rare species in the locality a special precious cultivated variety a 'significant tree' registered by the National Trust has special historical or other significance 		+0.1

Aesthetics (A)

The aesthetic value of a tree is determined by the impact on the landscape if the tree were removed.

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
Aesthetics (A)	

Locality (L)

The locality factor is determined by the tree's geographical situation.

Locality Factor	Score
In undeveloped bushland or open forest	0.5
In country areas and country roads	1.0
In outer suburb areas and residential streets	1.5
In inner city suburbs	1.75
In Township Park or Reserve; significant street near Town Centre	2.0
In Town Centre Garden, Square, Mall or Town Centre secondary street	2.25
Town Centre Main Street, Principal Boulevard	2.5

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	• >15cm twig elongation this season	3
	• 5-15cm twig elongation	2
	• <5cm twig elongation	1
Structure	• healthy, stable and sound	5
	• 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 balance canopy	5
	• full but unbalanced, lop-sided	3
	• unbalanced and lacking full canopy	1



Life Expectancy	• >50 years	5
	• 10-50 years	3
	• <10 years	1

TOTAL SCORE	TREE CONDITION	RATING
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

Condensed form of the above is in the following **Tree Valuation Guide** with following **Assessment Form**.

Tree Valuation Guide (Use this guide in conjunction with the Tree Value Assessment Form)



Tree Valuation will be undertaken according to the following method: **Value (V) = Basic Value (BV) x Species (S) x Aesthetics (A) x Locality (L) x Condition (C)**

(The use of the formula was pioneered in Australia by the City of Melbourne, and is based on the Maurer-Hoffman formula.)

Basic Value (BV) Table 1

The basic monetary value of a tree is determined by matching the trunk diameter at breast height (DBH) with its corresponding base value. The basic monetary value is adapted from a table of values devised by the American Council of Tree and Landscape Appraisers and the International Society of Arboriculture, which in the base year 1988 was \$US27 per square inch trunk basal area. The City of Melbourne converted values to centimetres in trunk diameter at breast height (DBH) and updated values for inflation in 2012.

DBH cm	Base Value														
6	\$ 309.92	8	\$ 550.98	10	\$ 860.89	15	\$ 1,937.00	20	\$ 3,443.57	25	\$ 5,380.58	30	\$ 7,748.04	35	\$10,545.94
40	\$13,774.29	45	\$17,433.09	50	\$21,522.33	55	\$26,042.03	60	\$30,992.16	65	\$36,372.74	70	\$42,183.77	75	\$48,425.25
80	\$55,097.17	85	\$62,199.54	90	\$69,732.35	95	\$77,695.62	100	\$ 86,089.33	105	\$ 94,913.49	110	\$104,168.09	115	\$113,853.14
120	\$123,968.63	125	\$134,514.58	130	\$145,490.97	135	\$156,897.81	140	\$168,735.09	145	\$181,002.82				

Species Factor (S) Table 2

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 to the tree will also modify how the tree is scored. Judgment regarding species factor must be made by a qualified Arborist (or suitably qualified Council staff member).

Group	Characteristics	Example Species	Score
1	trees of short life span (less than 50 years) & fast growth rate	<i>Prunus, Acacia, Virgillia, Laburnum</i>	0.5
2	trees of short life span (less than 50 years) & slow growth rate	<i>Malus, Crataegus, Eugenia, Waterhousia, Pyrus</i>	0.6
3	trees of medium life span (50 -150 years) & fast growth rate	<i>Populus, Liquidamber, Eucalyptus, Corymbia, Angophora, Grevillea, Melaleuca, Michelia, Salix, Casaurina, Hakea, Celtis, Acmena</i>	0.7
4	trees of medium life span (50 - 150 years) & slow growth rate	<i>Brachychiton, Fraxinus, Gleditsia, Jacaranda, Shinus, Phoenix, Melia, Lophostemon, Liriodendron, Agonis, Meterosideros, Syzygium</i>	0.8
5	trees of long life span (more than 150 years) & fast growth rate	<i>Cupressus, Platanus, Ficus, Pinus</i>	0.9
6	trees of long life span (more than 150 years) & slow growth rate	<i>Ulmus, Quercus, Sequoia, Ginko, Araucaria</i>	1.0
Modifiers	Environmental Weeds , dangerous (poor branch attachment), undesirable characteristics (e.g. allergenic)		-0.1
Modifiers	a rare species in the locality, a special precious cultivated variety, a 'significant tree' registered by the National Trust, has special historical or other significance		+0.1

Tree Valuation Guide (Use this guide in conjunction with the Tree Value Assessment Form)



Aesthetics (A) Table 3

The aesthetic value of a tree is determined by the impact on the landscape if the tree were removed.

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

Locality (L) Table 4

The locality factor is determined by the tree's geographical situation.

Locality Factor	Score	Locality Factor	Score
In undeveloped bushland or open forest	0.5	In Township Park or Reserve; significant street near Town Centre	2.0
In country areas and country roads	1.0	In Town Centre Garden, Square, Mall or Town Centre secondary street	2.25
In outer suburb areas and residential streets	1.5	Town Centre Main Street, Principal Boulevard	2.5
In inner city suburbs	1.75		

Tree Condition (C) Table 5

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

Assessment Criteria	Criteria Condition	Score	Assessment Criteria	Criteria Condition	Score
Trunk	solid and sound	5	Pests and Diseases	no pest/disease infestation	3
	sections of bark damaged/missing	3		minor symptoms of infestation	2
	extensive decay, hollow trunk	1		advanced symptoms of infestation	1
Growth	>15cm twig elongation this season	3	Canopy Development	full balance canopy,	5
	5-15cm twig elongation	2		full but unbalanced, lop-sided,	3
	<5cm twig elongation	1		unbalanced and lacking full canopy	1
Structure	healthy, stable and sound	5	Life Expectancy	>50 years	5
	some deadwood and dead limbs	3		10-50 years	3
	extensive dieback and deadwood	1		<10 years	1
				TOTAL SCORE	

Tree Valuation Guide (Use this guide in conjunction with the Tree Value Assessment Form)



TOTAL SCORE	TREE CONDITION	RATING(C)	TOTAL SCORE	TREE CONDITION	RATING(C)
6-9	very poor	0.2	19-22	good	0.8
10-13	poor	0.4	23-26	excellent	1.0
14-18	fair	0.6			

Calculation of Tree replacement charge

Basic Value (**BV**) x Species Factor (**S**) x Aesthetics (**A**) x Locality (**L**) x Tree Condition (**C**) = Value (**V**)

Tree replacement and offset charge = 25% Value (**V**) (lost amenity) + Tree Replacement Fee (Council's current fees and charges)



Tree Value Assessment Form – Urban

Please complete this form using the **Tree Valuation Guide** or **Tree Management Procedure**

Details					
Site Address					
Requested By		CA #		Date	
Inspector		Tree #		Time	

Tree Characteristics			
Species		Native Veg*	Y / N
Height & Spread		Live Crown	(%)
Infrastructure Present			

Basic Value (BV) (as taken from Alexandrina Council Tree Management Procedure 2022)			
Diameter at Breast Height (DBH)		Value (BV)	\$

BV

Species Factor (S) (as taken from Alexandrina Council Tree Management Procedure 2022)				
Group		Characteristics		Species Factor

S

Aesthetic Factor (A) (as taken from Alexandrina Council Tree Management Procedure 2022)			
Aesthetic		Aesthetic Factor	
Notes:			

A

Location Factor (L) (as taken from Alexandrina Council Tree Management Procedure 2022)			
Location		Location Factor	
Notes:			

L

Tree Condition Factor (C) (as taken from Alexandrina Council Tree Management Procedure 2022)					
Trunk			Pests & Diseases		
Growth			Canopy Development		
Structure			Life Expectancy		
Total Score		Tree Condition		Tree Condition Factor	

C

Tree Value (as taken from Alexandrina Council Tree Management Procedure 2022)	
Basic Value (BV = \$ _____)	X Species (S = _____) X Aesthetics (A = _____)
Locality (L = _____)	X Condition (C = _____) = Value (V = \$ _____)

V

Tree Replacement Charge (as taken from Alexandrina Council Tree Management Procedure 2022)	
Tree replacement and offset charge = 25% of Value (V) + Tree Replacement Fee = \$ _____	
Signature of Assessor	Assigned to:

***NOTE:** If intending to remove native vegetation an approval from the Native Vegetation Council may be required. Allow minimum of 2 months for NVC consideration and approval process. (Refer to Native Vegetation Regulation 11(25) – Ecological restoration and management of vegetation.)

Appendix C

TREE RISK ASSESSMENT

DRAFT

Urban Tree Risk Assessment Matrix

Follow these guidance notes to complete a Tree Risk Assessment Form - Urban:

- CA (Customer request) is received for the removal of a tree
- Inspection to be undertaken and photos taken
- Form to be completed at time of inspection
- Risk rating to be determined using the following Frequency and Likelihood Matrix below
- Write the risk number on the Tree Risk Assessment Form at the Total Risk Rating Section
- Check the action to be taken based on the rating and actions listed below.
- Write the recommended action on the Tree Risk Assessment Form in the Action section
- Take a copy of the completed form and attach to Works Order and given to Supervisor
- Completed form to go to Admin Officer for registration – with photos. File 14.55.026
- Once registered, Admin Officer to forward original form and photos to Information Management for filing.

Risk Rating of Frequency versus Likelihood of Damage Matrix

Likelihood (of damage)	Total Risk Rating Sum of Frequency Score And Likelihood Score	Frequency (Use of Area)			
		0 Occasional Use Large roadside verge away from roadway or reserve	1 Intermittent Use Horse riders, day parking or on street parking	2 Frequent Use Storage area, camping area or busy walkway	3 Constant Use A home or in use for many hours or prescribed building
0 - Rare Impact would not result in damage	0	0	1	2	3
1 - Unlikely Not expected to damage, slight possibility	1	1	2	3	4
2 - Possible Possible damage at some time	2	2	3	4	5
3 - Likely Strong possibility of damage	3	3	4	5	6
4 - Certain Very likely to cause damage	4	4	5	6	7

Total Risk Rating and Action

*A high number does not necessarily mean the tree must automatically be removed.
Management techniques can be utilized to reduce the risk to an acceptable level.*

Recommendation	Rating	Action To Be Taken
	0 - 1	Monitor for 12 months
	2 - 4	Remedial pruning required
	5 - 7	Consider tree removal*

**If intending to remove native vegetation an approval from the Native Vegetation Council may be required.*

(Refer to Native Vegetation Regulation 11(25) – Ecological restoration and management of vegetation.)



Urban Tree Risk Assessment Form

Please complete this form using the Urban Tree Risk Assessment Matrix

Details			
Site Address		CA #	
Requested By		Date	
Inspector		Time	

Tree Characteristics			
Species, Height & Spread		Native Veg*	Y / N
Trunk Condition, Size and Number		Live Crown (%)	
Root Zone Condition			
Main Scaffold Branches			
Crown Structure			

Growth Obstructions							
Kerb & Gutter		Footpath		Buildings		Powerlines	
Sewer/Water		Signage		Other			

Other Observations - Defects, Damage & Disease

Special Value					
Habitat for Native Fauna		Retention Value		Amenity	
Regulated/Significant Tree		Specimen/ Heritage		Shade	
Local Indigenous Species		Veteran Tree		Screen	
Notes:					

Frequency (of use of the area) Score 0 – 3, as per Matrix.		
Occasional Use: large roadside verge away from roadway or reserve	0	
Intermittent Use: horse riders or day parking or on street parking	1	
Frequent Use: storage, camping area, playground or busy walkway	2	
Constant Use: a home, prescribed building or area regularly used for many hours	3	

Likelihood (of damage/failure) Score 0 – 4, as per Matrix.		
Rare: No faults observed	0	
Unlikely: Minor dead wood; minor cavities, less than 10%	1	
Possible: Medium defects present; cavities form 10 – 25% of trunk	2	
Likely: High, numerous or significant defects 30 – 50% cavities; root movement	3	
Certain: Evidence of severe fungal rot; cavities over 50%; movement of root plate	4	

Total Risk Rating and Action (Refer to the Frequency & Likelihood Matrix and Recommendations)			
<i>Note: A high score does not mean the tree must automatically be removed if other management techniques are appropriate.</i>			
Total Risk Rating		Action	
Signature of Assessor		Assigned to:	

***NOTE:** If intending to remove native vegetation an approval from the Native Vegetation Council may be required. Allow minimum of 2 months for NVC consideration and approval process. (Refer to Native Vegetation Regulation 11(25) – Ecological restoration and management of vegetation.)