



**CORANGAMITE
SHIRE**

Urban Street Tree Asset Management Plan

Corangamite Shire

August 2014

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Executive Summary

This Urban Street Tree Management Plan aims to provide a framework for the management of Corangamite Shire urban street trees. Trees located outside the Council's Urban boundaries are to be managed under the existing "Rural Roadside Management Plan" February 2012, and therefore do not form any part of this plan.

The approach taken in forming the Plan was to borrow heavily on an existing Tree Management Plan (in this case 'City of Ballarat Tree Management Plan' 2007 & Corangamite Shire Tree Management Plan 2010) to provide ready structure and format for the Plan.

The Plan's origins commenced with a review of the existing Urban Street Tree Asset Management Plan and an audit of all street trees in 2012.

THE IMPORTANCE OF STREET TREES

Corangamite Shire has a history of tree planting with treed avenues in many of its older township streets. The conservation and enhancement of high priority historical landscapes, for instance the Avenue of trees on the Cobden-Camperdown Road, Camperdown, is a core value to this Urban Street Tree Management Plan.

Communities highly value street trees and their contribution to the built environment. It is quality of life and environmental issues that are increasingly on the community's agenda. It should be noted however that with the many benefits of street trees there is a considerable cost in terms of installation, maintenance, and negative impacts on services and infrastructure by trees.

SELECTION OF SPECIES

The street trees selected for use have been chosen based on:

- a limited number of species which is manageable in terms of total tree number
- existing township and streetscape character and themes
- tolerance of changing environmental conditions and reasonable in terms of maintenance requirements and risk.

STREET TREE THEMES

The key areas in Corangamite townships have been divided into street tree theme areas. The theme areas are based on:

- preserving historical landscapes and the existing tree species
- allowing tree themes based on 'like' trees for re-planting of historically less important ageing elm tree landscapes (elms are subject to disease and have high maintenance costs)

- creation or enhancement of single tree variety avenue streetscapes to provide sense of place
- providing tree variety emphasis based on township character and tree suitability to location.

RECOMMENDATIONS

1. Council to:

- undertake new and replacement plantings in accordance with the plan and within Council's budget constraints whilst continuing to manage risk associated with its trees
- undertake a full tree assessment of street, park and reserve trees that Council is directly responsible for by 2017
- use the procedures for tree removal, works in the vicinity of trees, plantings and inspections as outlined in the plan
- consider the plan in the assessment of new subdivisions and developments as a guideline for influencing the nature and form of the development.

2. Council seeks to:

- source appropriate grant funding in line with the strategic and replacement tree themes outlined in the plan inclusive of undergrounding of overhead electrical supply lines to enhance existing streetscapes
- develop a register of significant Shire trees through the input from the community
- formulate agreements with other authorities to minimise conflict between trees and infrastructure
- develop a program of powerline relocation projects for future consideration and consider powerline assessment when reviewing the scope of new capital works
- regularly review and amend the Tree Management Plan to continuously improve the Plan.

Purpose

The purpose of this Urban Street Tree Asset Management Plan is to:

- Acknowledge the important role that trees play within Corangamite Shire townships.
- Provide a framework for the protection and enhancement of street, roadside and parkland, trees within Corangamite Shire.
- Provide a clear and consistent approach to the way Corangamite Shire manages tree issues
- Assist Corangamite Shire in determining priorities for tree maintenance programs, removal and replanting and associated works including planning / development issues.

The Tree Management Plan will provide principles and a policy framework for how Corangamite Shire addresses:

- Tree Management
- Tree Risk Identification and Mitigation
- Tree Inspections and Assessments
- Tree Selection and Tree Planting
- Tree Removal
- Tree Replacement
- Tree Protection
- Significant Trees
- Infrastructure protection
- Electric Power-line clearance (Powercor)
- Tree Maintenance
- Pests & Disease control.

Introduction

This Tree Management Plan aims to provide a strategic framework for the management of Corangamite Shire's urban tree assets.

This plan does not cover:

- rural roadsides (refer Rural Roadside Management Plan)
- the Elm Avenue on Manifold Street, Camperdown (refer Avenue Restoration Management Plan)
- the Camperdown Botanic Gardens

Corangamite Shire Trees

The Corangamite Shire has responsibility for a very wide diversity (in terms of species, age, size and density) of trees in the public domain. Towns within the Corangamite Shire have a very distinctive character; the township streets are very wide and lined in many cases with large deciduous trees, while others have predominately native plants. The Townships and

precincts contain a broad mix of native and exotic trees. There are a large amount of vacant spaces where trees have not been planted or removed over time.

It is the main Townships of:

- **Camperdown**
- **Cobden**
- **Darlington**
- **Derrinallum**
- **Lismore**
- **Noorat**
- **Port Campbell**
- **Princetown**
- **Skipton**
- **Simpson**
- **Terang**
- **Timboon**

It is not only Corangamite Shire's historic buildings and wide street spaces that are valued but also its significant avenues of trees and substantial attractive trees in private gardens, Council parks and reserves. This uniqueness has its origins in the Victorian period with the major trees planted in the late 1800's to early 1900's. The formal avenues of older exotic street trees create intimate spaces where the canopies spread across the street and road space.

Management of the tree asset through most of the 20th century was generally detrimental to the long-term health and structure of the street trees.

Outside the Shire townships the Tree-scape is generally remnant native bush but in places there are smaller avenues of exotic trees, some of these being commemorative icons; the majority of township streets having finite planting themes in the post-war idiom. In the new estates there are substantial areas with fewer and less developed trees and these lack much of the character of the treed areas. Many of the trees that do exist are not always suitable species for the location and have been affected by overhead powerline clearance pruning, inconsiderate and inappropriate construction works or poor species selection. In some instances trees have been decimated by natural disaster such as fire or extreme storm incidents.

Indigenous trees that have been retained in areas such as Lismore, for example, form the dominant landscape theme; planting in these areas is 'as-it-is' or quite informal. Other areas such as the main townships and various sites, have evolved through deliberate planting and design. It is the combination of public, private and institutional trees that create the ambience associated with these townships.

The trees within the Shire's townships are under ever increasing pressure from infrastructure, development and periodic and usually prolonged drought cycles with national.

The Shire contains some unusual, important and significant trees listed with the National Trust of Australia (Victoria). These trees exist within the public spaces and gardens, major parks and some private residences or schools. There are also other significant trees that are not listed with the National Trust or others existing in Crown Land and Private property.

Early tree planting was not just limited to public areas. Trees on private property, both urban and rural, contribute significantly to local character.

Elm, Oak, Plane, Pine and Ash trees are the dominant species in the streets. Elms (*Ulmus* sp.) mostly English Elm (*U. procera*) that make up a large proportion of the existing street and parkland trees. These Elms represent one of the best collections of (relatively) disease free elms left in the world.

There is a strong history of community association with the streets tree in Corangamite Shire.

The main urbanised areas of the Corangamite Shire contain a significant number of trees in public areas. There is capacity however in some cases to accommodate additional street trees.

A significant amount of data on Council's trees has been collected and recorded in the past but completing and maintaining this up to date is required for prioritizing works and protecting and enhancing treescapes.

Benefits of Trees

Trees are an essential part of the urban and rural fabric, providing significant economic, social and ecological benefits.

Trees:

- provide a pleasant softening effect to the built urban infrastructure.
- have a calming and therapeutic influence on the human psyche.
- provide perspectives in scale creating more desirable spaces for movement and recreation.
- trap carbon and produce oxygen.
- ameliorate the extremes of noise, wind, sunlight, temperature and air pollution.
- assist in creating a unique identity and structure to town precincts.
- provide the opportunity to establish regional presence and a distinct neighbourhood character.
- can highlight features, provide sculptural effects or screen unwanted views.
- provide habitat and food for native wildlife and other animals.
- form corridors for movement and refuges for native wildlife
- reduce the impacts of rainfall and run-off and reduce erosion.

Tree Management Responsibilities

The tree management responsibilities defined within this document are applicable only to those areas directly under the control of the Corangamite Shire Council and within the town boundaries of those mentioned above. It is often difficult to define where the various boundaries of responsibility begin and end as there are many other Responsible Authorities, including

private property owners and committees of management.

Tree Management Issues

The costs, financial and social, of not managing trees correctly can be high. Trees, just like other infrastructure, need to be managed to maximise their benefits and minimise any adverse effects and cost. Assets such as trees do not behave evenly over their life and are prone to many factors outside the control of the tree owner/steward such as drought, weather, disease and ageing.

Trees take many years to develop to maturity and provide maximum benefits to the community and the local ecology. They cannot be quickly replaced. The retention and protection of mature trees in particular is vital especially in an expanding and ever changing urban environment.

In considering climate change theory, trees will have to endure whatever climatic changes occur in their life-time. Given that trees may live for a period of up to one hundred years or more, pre-empting possible changes is important. Climate variability has been recorded for 150 years. Reviewing the species that were planted locally and their performance over time provides useful data on which to evaluate the future use of these species or alternate similar species.

Any tree asset comes with a level of inherent risk. Identifying and managing (minimising) that risk is essential. In urban environments in particular, people, buildings and other infrastructure will be in close proximity to trees. In public areas containing trees Council, and some other authorities, have a duty of care to provide all residents and visitors with a safe environment. The potential for ongoing conflict of trees with persons and property is magnified as populations grow and ageing trees decline.

Insurance companies require a certain standard for identifying all trees and their hazards, recording information and developing tree management strategies, plans and maintenance programs. The cost to Council of not correctly managing their various assets can be significant. Insurance premiums (which are based on the quality of management) and legal duty of care responsibilities have the potential to impact significantly on the finances of Council.

Many tree management practices of the past were poorly considered and based on short-term goals. Arboriculture as a science has progressed significantly over the last twenty five years and there is now a greater understanding of items such as tree physiology, branch structure, wounding response, and root-growth characteristics.

You cannot manage an asset effectively if you do not have detailed information on the asset. An inventory of all trees (Data-base) that includes their location, species, condition, size and surrounding environment provides the basis for making qualified and informed decisions. It is essential to be able to interrogate and update this data.

Controlling the diversity in age and species is very important in creating a “sustained amenity” approach. Analysis of the makeup of the tree population is now much easier using computer software but does rely on regular and timely updating of the information. The effectiveness of decision-making can be determined relatively quickly by tracking any changes in the asset as a whole.

Trees create very emotive feelings in residents and can often polarise the community. The two main divides are those who wish to “Retain” versus “Remove” trees and preferences for “Native” versus “Exotic” trees. Unlike most residents, trees are not transitory and should not be subject solely to the preferences of the residents or individuals of the time. Decisions made today are going to determine the tree scape and quality of the Urban and Parkland environment for several generations to come. Procedures for considering residents’ views, explaining management rationale, and minimizing any conflicts are essential in managing the tree asset.

A programmed approach to managing an asset is essential. Residents expect a professional level of response to tree problems or requests. Weather and vehicle accidents for example can also create a need for unplanned tree works. The conflict between Programmed and Reactionary Maintenance will always be present and needs to be managed carefully when the level of resources is limited.

Risk Mitigation or Hazard Abatement should be the determining factor in balancing Programmed versus Reactionary works. Powerlines Works, Infrastructure development, Disease, Climate and a combined desire for rational uniformity consistently challenge managers in trying to achieve an effective, valued landscape with the resources they have.

Urban Trees

Trees and infrastructure conflict with each other in the urban environment. Enhancing the benefits of trees whilst minimising the disadvantages is a challenge. Choosing the right species for the right location or creating the right location and/or environment for the desired species is key. There is now a much wider variety of ornamental and native tree species to select from that are tolerant of or predictable in, harsh urban conditions. Providing sufficient space for and raising public awareness of the advantages and the disadvantages of large trees is also important - more and larger trees for the future are desirable but the consequences are also greater.

Plan Review and Amendment

The Tree Management Plan is open to the process of continuous review and improvement. This Plan is not a closed document but will require regular review and amendment to:

- Respond to community requirements.
- Maintain relevancy and applicability in a changing environment.
- Cater to local environments and existing circumstances of tree plantings.

1.0 Tree Management

Principles

Trees provide net benefits to communities and form an essential part of existing and newly developed areas. Corangamite Shire has a significant tree legacy and Council has a responsibility to preserve and enhance that legacy. The promotion of the benefits of public and private trees and correct maintenance and protection practices can create a greater appreciation of and pride in the Shire's tree heritage.

Public trees can however conflict with other essential infrastructure, whether it be public or private. General infrastructure management must serve to minimise these conflicts without serious detriment to the tree assets. Trees are just one component within a network of assets that Council has management responsibility for.

Trees are vulnerable and need a high degree of monitoring and protection to ensure their survival and development. Many activities or works can significantly affect the condition of the public tree asset. All works within or adjacent to public land needs to be properly planned and implemented to avoid or minimize any detrimental impacts on public trees.

Plans and procedures for trees should be reviewed regularly to ensure they remain effective and current. Trees potentially live for many generations and their environment, peoples' attitudes and management practices can change significantly over their life span.

Policy (Tree Management)

- 1.1 Public areas including streets, parklands, roadsides and car parks to be planted with trees consistent with policies.
- 1.2 A register of trees significant to Corangamite Shire and relevant protective management procedures be maintained over time.
- 1.3 Council promote professional tree care practices where appropriate amongst the local community and contractors (relevant to various benchmarks including the Australian Standard for the 'Pruning of Amenity Trees' AS 4373 1996/07).
- 1.4 All development projects incorporate planting of new trees where appropriate in conformance with section 4.0 "Tree Selection and Planting".
- 1.5 All works in the vicinity of existing trees within development projects incorporate protection of trees in conformance with section 6.0 "Tree Protection" (also refer Australian Standard AS 4970 2009 – Protection of Trees on Development Sites)

- 1.6 Corangamite Shire seeks to provide adequate maintenance funding and pursue appropriate grant funding opportunities to ensure its tree population remain healthy and in a safe condition.
- 1.7 Council seeks to liaise with other authorities involved in public land to formulate agreements that minimise the conflicts between Council trees and other infrastructure and ensures compliance with the Road Management Act (2004).
- 1.8 Council's tree maintenance works are focused on and prioritised towards tree protection and risk mitigation.
- 1.9 Tree issues and information are incorporated into a tree asset database and management system.
- 1.10 This Urban Street Tree Asset Management Plan, including all supporting procedures and lists, be subject to periodical review and continuous improvement.

Related Documents

Road Management Act (2004)
Victorian Native Vegetation Framework (DSE)
Corangamite Shire Roadside Management Plan
AS 4373 1996/07 – Pruning of Amenity Trees
AS 4970 2009 – Protection of Trees on Development Sites

2.0 Risk Identification and Mitigation

Principles

Trees have an inherent risk that must be managed effectively. A formal risk assessment of all situations where trees exist needs to be undertaken to accurately identify the risks, determine appropriate actions and assign priorities.

The risk associated with trees is a combination of the condition of the tree and the use around and in the vicinity of the tree. Council has a duty of care to reduce the level of risk to the public and potential financial burden on ratepayers.

Risk assessment/ potential should be the overriding factor in determining priority for works and allocating resources. Risks include hazardous trees, deadwood, falling fruit, sight distance issues, impact on public and private infrastructure and power lines clearance. The Australian Standard, Risk Management (AS/NZS 4360:2004) provides a sound methodology for managing risk.

The risk assessment based on selection of replacement plantings should consider but not be limited to the following:

- high survival potential
- minimal maintenance requirements
- fit with the current street scape theme for the town
- Potential effects on infrastructure eg power line clearance, tree root structure and size

Works by other sections of Council and external contractors and land-owners can have a significant impact on the risk potential of Council trees. Control over or awareness of works in the vicinity of Council trees is necessary to ensure risk minimization.

Policy (Risk Identification and Mitigation)

- 2.1** A formal risk assessment program in general conformity with the process set out in AS/NZS 4360:2004 is undertaken on the tree asset group.
- 2.2** Tree management practices and procedures adopt the general approach as laid out in AS/NZS 4360:2004.
- 2.3** Tree inspections are undertaken every 4 years with annual programs of tree maintenance works to be developed and documented based on the priorities identified in Council's tree risk assessment.
- 2.4** Tree risk management issues and information are incorporated into the asset database and management system.

- 2.5** All works and events likely to impact on, or be affected by, Council trees, be referred to Council's Manager Environment and Emergency at the planning stage.
- 2.6** The degree of use and nature of the use, likely impact on infrastructure of fully grown tree, be major considerations in determining the location and species of trees to be planted.

Related Documents

Risk Management AS/NZS 4360:2004
Electrical Line (Electric Line Clearance) Regulation 2010
Camperdown Electrical Line Clearance Management Plan

3.0 Tree Inspections and Assessments

Principles

Council has responsibility for trees in most of its streets, parklands and roadsides and also in public facilities such as Council Buildings, Swimming Pools and Community Halls. It is important that these trees are identified and assessed.

Council trees need to be inspected and assessed to determine their potential for public risk. Trees in “High Risk or High Use” areas and “Significant Trees” may require more frequent and / or detailed inspections. Inspections and risk assessments require standardised and documented procedures. Inspections should to be undertaken by appropriately qualified and experienced people. This may involve Council use of external expertise and / or include education of Council personnel in appropriate Hazard Tree Assessment procedures.

An up-to-date computerised tree inventory system is required for effective tree management decision making and programming of works. Review of Council’s tree inventory, inspection and works data should be undertaken regularly to review and adjust priorities.

Condition Assessment

A visual assessment of all urban nature strip trees be carried out. Previous audits were carried out in 2003, 2008 and 2012. The most recent assessment was carried out on foot with each tree inspected from multiple ground level aspects as well as spatially plotted via GPS.

The data to be collected included:

- *tree location*
 - the town, road name (and segment)
 - street address / park name
 - GPS coordinates
 - Nearby assets (powerlines)
- *tree characteristics*
 - identification of the species
 - botanical name
 - common name
 - origin (indigenous, native or exotic)
 - condition (health & structure)
 - risk assessment (per Ellison Rating method)
 - $\text{Risk of Harm} = 1/(\text{Probability of Failure} \times \text{Failure Size} \times \text{Target Occupancy Rating})$
 - tree age (young, semi-mature, mature)
 - useful life expectancy
 - Dimensions (height, width & DBH -diameter at breast height)
 - Site photo
 -

- *recommended works (prioritised – Urgent, High, Moderate, Low, Nil)*
- *suggested replacement species (3) particular to that site taking into account:*
 - town theme
 - available nature strip width (to allow for maximum growth)
 - nearby assets (e.g. overhead power, driveway, road furniture)
 - maintenance requirements (e.g. non-fruit bearing)
 - aesthetic value

All street trees are spatially located. Information is stored in the Assetic Asset Management software.

Formal street tree audits will be carried out every 4 years.

Policy (Tree Inspections and Assessments)

- 3.1** A four yearly program of tree inspections in streets, parklands, and other facilities be developed to satisfy Council’s risk management responsibilities and protection of assets.
- 3.2** All trees within the urban areas that are to come under the control of Council are to be assessed by appropriately trained personnel for their suitability for retention and to identify any remedial works required to bring them up to a good and safe condition.
- 3.3** Council develop and maintain an up-to-date inventory of street, facility and parkland trees under its responsibility and seek to develop this inventory to include significant trees over time
- 3.4** The Corangamite Shire street tree inventory includes the data mentioned above for each tree

Related Documents

Risk Management AS/NZS 4360:2004
 Electrical Line (Electric Line Clearance) Regulation 2010
 Camperdown Electrical Line Clearance Management Plan

4.1 Tree Selection and Planting

Principles

General

Street and parkland tree planting is best done in a programmed and sustainable manner. This approach is sound both environmentally and economically. It is also necessary to pre-plan what tree stock will be needed to be assured of obtaining the right species, good quality stock and at the right time. Corangamite Shire currently has over 19000 tree sites, 4000 of which are vacant.

A “Sustained Amenity” approach (also known as Urban Forestry) to provide a balanced diversity of tree ages and sizes should be followed to achieve long term stability of the tree population and landscape character. This approach must be balanced to achieve realistic outcomes within available budgets and resources.

The right mix of species and age diversity are vital components of a sustainable tree population. A general methodology for achieving this is for no particular genera to make up a predominant percentage of the whole tree population. The age of trees should also be spread evenly across the Shire between young and old trees to lessen the impact of or need, to remove whole areas of trees. A sensible approach with an integrated township application is desirable.

Priority for tree planting should be given to:

- Areas with a lack of trees.
- Areas where residents or community groups have requested trees and are prepared to be involved in tree establishment and after-planting care.
- High profile and high use areas.
- Areas where there are high percentages of old aged trees, low species diversity and/or trees in poor condition.
- Sites where trees have been removed.
- New developments.

When selecting tree species for street or parkland tree planting the following factors must be considered:

- Preferred “Landscape Character”.
- Adopted masterplans, strategies, planning overlays and development plans
- The significance of previous history of tree planting.
- Drought tolerance/ water usage.
- Longevity. Durability. Hardiness and Amenity.
- Growth habit, size and structural integrity.
- Tolerance to harsh urban or structural environments.
- Soil type.
- Root growth characteristics and tolerances.
- Pruning requirements.

- Amount and type of organic debris shed.
- Proximity and form of surrounding existing and future infrastructure and potential impact.
- Solar radiation/orientation.
- Pests & Disease susceptibility or tolerance.
- Existing and future use of the surrounding area.
- Environmental and Habitat value.
- Possible poisonous or health effects.
- Weed potential.
- Existing and likely future adjacent land use.

New tree planting should reinforce the existing character themes of areas. Character areas may have been defined through various mechanisms that include Heritage or other Planning Overlays. They might consist of character types including *Exotic; *Mixed (exotic and native); and *Native (preferably indigenous).

Tree planting in Corangamite Shire has a long history and it may be culturally important to reinforce and/or replicate these early plantings in some streets or areas. Council must be consulted and give approval for any tree planting within streets and parklands it controls or will take control of as Council ultimately becomes responsible for tree planting strategy, tree maintenance and any issues arising.

Only high quality tree stock should be used and planted correctly as substandard trees or planting can increase maintenance costs significantly and conversely good quality stock and planting techniques dramatically increases establishment rates and the community's appreciation of trees.

Street and parkland tree numbers generally increase over time and maintenance costs will increase correspondingly. Correct species selection and planting technique, use of good quality stock and follow-up maintenance (e.g. weed control, formative pruning etc.) in the establishment phase can dramatically reduce maintenance costs and problems in the long term.

Large growing trees provide maximum landscape and environmental benefits and create the greatest visual impact. The ability to maintain or establish large growing species is becoming limited on both private and public land.

Tree planting by developers and others in land that will become the responsibility of Council must be done in consultation with and to the satisfaction of Council to ensure compliance with the principles listed above.

Street Trees

All streets should be planted with trees where space is available. Uniform tree planting within a street or block, in terms of species, age and spacing, provides the most appropriate planting within the central and older urban areas (*Exotic and *Mixed areas). Residents have very different opinions on their preferred species of tree and it is not practical to attempt to satisfy every resident with personal tree preferences.

Trees should generally be centred on each building lot and planted opposite one another where possible.

Planting in streets should be confined to species that are able to satisfy clearance or set-back requirements. Generally speaking trees should be selected and maintained to provide a clear single trunk (Excurrent Form) for approximately one metre. Multi-stemmed (Decurrent or Deliquescent Form) trees are also viable in the appropriate context.

The location of and selection of street trees needs to take into account possible effects on all other infrastructure and services. It may not be possible to eliminate all conflicts between infrastructure within the street, road or parkland.

Locations of street trees in the older areas e.g. in the road shoulder, is not always the best location for optimum growth but maintaining the historic fabric in these areas is very important. It will be critical to use specific planting techniques, establishment and maintenance practices that will maximise growth in these areas.

Street trees provide many benefits and establish much quicker and grow faster when residents take responsibility for their care in the early stages. Residents should be encouraged to be involved in planting and maintaining new trees e.g. by watering, mulch (not weed clippings), weed control etc.

Selection of tree species should take advantage of the wide range now available. A diversity of species spread across the Shire has multiple benefits e.g. disease tolerance, visual and seasonal variation, lower maintenance and habitat creation and diversity.

New or replacement street trees should be an integral component of any site. Council and developers need to work together to determine the appropriate tree planting and implementation programs. Generally tree planting should be done at the earliest practical stage of any project/ development to get the maximum benefit.

Parkland trees

Parkland tree planting should not take place without proper consideration and consultation with Heritage Overlays, user groups; for major parks and reserves this ideally should be in the form of a site-specific Master plan. Existing Master plans, historic evidence and various precedents or existing management plans are to be used to guide tree planting, species selection, locations and priorities.

Parklands should contain large growing trees as large trees provide the most environmental and cultural benefits. Parks are one of the few spaces within urban environments where there is sufficient space to grow large trees to offer cultural, historic, botanic and local amenity whilst minimising conflicts with other infrastructure.

Tree planting in parklands is becoming more important to ameliorate affects of climate change e.g. increased temperatures and solar radiation. Provision of adequate shaded areas in high use areas should be a priority. Tree planting in parklands is also important to maintain, uphold and promote botanical, historical and cultural diversity.

Policy (Tree Selection and Planting)

- 4.1** Annual tree planting programs be developed and undertaken for Street Trees in Corangamite Shire’s Townships.
- 4.2** Annual street tree planting programs for specific areas include sufficient numbers of trees to achieve over time:
 - Trees needed to make up the shortfall in desired total numbers
 - Replacements for every tree removed or existing number of trees divided by estimated lifecycle (whichever is greater).
 - An extra 10 percent to allow for expected losses from vandalism and natural attrition.
- 4.3** All Corangamite Shire tree selection and planting programs conform to the “Tree Selection and Planting” principles.
- 4.4** The type of Street and parkland trees to be planted generally conform to the “Proposed Tree Planting Strategy for Townships” (refer Appendix B)
- 4.5** No more than two different species generally to be used in any one street, or specific and definable sections of the street, within the “Exotic” and “Mixed” areas.
- 4.6** For the overall urban Council tree population: aim to have any one genera limited to no more than 30% and have an even spread of “age” classifications.
- 4.7** A “Tree Planting Procedure” or “Standard Guidelines for Tree Planting” be developed and implemented with trees to be planted in conformance with this procedure.
- 4.8** A method for consulting with residents and property owners that are immediately affected by Council tree plantings and any service authorities that may be affected be developed and included within Council’s “Tree Planting Procedure” or “Standard Guidelines for Tree Planting”.
- 4.9** All roads, street and car park designs include capacity for tree planting while minimising conflicts with other infrastructure to the satisfaction of Council. (See ‘Standard Guidelines for Tree Planting’ Pro-Forma.)
- 4.10** The species selected for planting should be selected on mature tree size considering the constraints of the site to create a definite visual impact on the site and provide for the necessary physical clearances.

- 4.11** All new development sites incorporate new tree planting within the adjoining street frontages and any open space areas where appropriate to the approval of Council. The provision of tree planting and establishment, for a minimum period of two years, to be at the developers cost.
- 4.12** Any person or organisation wishing to plant trees, shrubs, herbaceous plants, or undertake any landscaping within a road reserve, park or other land under the control of Council must have permission in writing from Council.
- 4.13** Any trees or shrubs planted without Council permission and not in conformance with section '4.0 Tree Selection and Planting' or 'Guidelines for Tree Planting' (refer Appendix I) principles and policies will be removed in accordance with Council's Tree Removal Procedure (see Appendix C).
- 4.14** All tree planting within a VicRoads controlled road to be undertaken after consultation with VicRoads and as far as is practicable comply with their planting procedures and the Road Management Act 2004.

Related Documents.

Victorian Native Vegetation Framework (DSE)
Roads Act 2004
Vic Roads – "A Guide to Tree planting within
the Road Reserve."

5.0 Tree Removal

Trees can take many years to develop fully and once removed cannot be quickly replaced. Urban trees are organisms with a finite life-span; they grow in an environment frequently less favourable than needed, subject to numerous forms of damage, and can become a hazard. Removal of trees will therefore be a regular and necessary activity for Council and especially as tree assets age.

Removal of any tree has the potential to create a great deal of conflict as trees often instill very emotive feelings, both for and against removal. Tree removal decisions must therefore be done systematically and with due consideration of all factors and with an appropriate level of consultation.

Principles

General

All state and local planning requirements controlling the removal of trees must be adhered to the following policies will be in addition to those requirements.

Any person or organisation wanting to remove a street, parkland or roadside tree has a responsibility to obtain permission through a permit system from Council as the managing authority of the road reserve or open space. Planning Permits are required for vegetation removal or lopping in accordance with Native Vegetation Retention Controls (NVR) when:

- The vegetation is an Australian Native or a Rare and Threatened Species or Community
- If it is indigenous vegetation greater than ten years old and is on land greater than 0.4 hectares
- On the register of significant trees

A permit is requested from the Council Planning Department who will refer the application to the Department Sustainability and Environment for guidelines and advice, or any other referral authority as appropriate to the application.

A planning permit is not required when if the vegetation is not indigenous, presents an immediate risk of personal injury or damage to property or is proclaimed as a noxious weed (further details can be found in the NVR and Councils Rural Roadside Management Plan).

Removal of problem trees, reducing nuisance and costly public liability situations will be an ongoing responsibility of Council. Analysis of suitable Street and parkland trees for Corangamite Shire and ongoing assessment of the health and structure of existing trees must be undertaken to identify priorities for tree removal.

All Council tree removals should involve consultation with affected parties. Tree removal often causes serious differences of opinion. It is appropriate to assume residents and community members will have, to varying degrees, some emotional and/or physical

attachment to adjacent trees. Prior consultation and involvement in the decision making process generally minimizes concern and provides for good tree management.

Council trees can become an “Immediate Risk” to Persons and/ or Property and, simply cannot wait until a consultation process is undertaken. In these situations a detailed record of the status of the tree should be made with information forwarded to Council’s Manager Works for action. The recorded information may be also provided to adjacent residents upon request.

Trees are living organisms and have a finite life so removal is inevitable. In an urban environment the location and/or use in the vicinity of a tree is a significant determining factor in the timing of the removal. Any trees removed should be replaced as a matter of principle if the opportunity exists in order to maintain the sustainability of the overall tree asset. Any decision to remove a tree should be based on the best long-term outcome for the treed landscape and the community as a whole. Removal of trees for relatively minor matters only (e.g. leaf/litter drop or personal dislikes) should not occur.

Trees contained within the proposed “Corangamite Shire’s Significant Tree Register” – a register to be developed over time - are worthy of wider consideration and consultation before any final decision to remove them is made. Many residents and visitors in Corangamite Shire have strong personal attachment to and important historical information on local trees. It is important to identify these trees and collate the information to ensure these trees are not removed without due consideration.

Council trees will often need to be removed for reasons that are not visibly apparent to the general public (e.g. healthy, full-canopied trees that are in danger of splitting apart, roots damaging property). A planning permit is not generally required to remove dead or hazardous trees. Education and involvement of residents should assist greatly in overcoming perceived poor tree management and decision-making.

Some other authorities can become involved in removing Council trees. Wanon Water for example has the power under the Water Act to remove trees interfering with their assets. Powercor and Vic Roads also have legislative and statutory interest in these trees.

When considering the removal of street trees, an inspection of the tree will be carried out to assess whether or not it meets the following criteria for removal. Some criteria for that may need to be considered are if:

- It is severely diseased or pest infested
- It has significant rot, dieback or collar-stress
- It is dead
- It exhibits excessive canopy overhang or poor structural condition
- It is a poor specimen or unsuitable species
- It is restricting access to properties
- It poses a threat to public safety (instant removal).
- The tree has potential high maintenance costs
- The tree is posing health concerns to the property owner or the adjoining property owner (to be confirmed by a Medical Certificate)
- The tree is posing or causing damage to private property or other infrastructure; eg

- footpath or road
- Debris from the tree is causing a public hazard
- The tree occurs in a road segment (block) where in excess of 30 % of trees have already been removed or have a ULE of less than 5 years and
- Other, as determined by the Officer

Where Council trees have been removed, or require to be removed due to vandalism, poisoning or willful damage done without first receiving permission in writing from Council, the offending party should be responsible for the full cost of removing and replacing the tree and reasonable compensation for the loss of amenity to the neighbourhood. The monetary value of the tree/s should be payable in these instances.

The removal of trees, shrubs or landscaping that have been planted or installed in streets, parklands or roadsides without Council permission would normally be at the cost of the person who planted or installed them.

Street Trees

Removal of a street tree can impact on more than just the adjacent resident so it is important to consult with a selection of people likely to be affected. Where a formal petition to remove a tree or trees is presented to Council then a report to Council may be appropriate.

Any trees not conforming with proposed street tree planting themes or that are categorised as being “Hazardous” or in either “Poor Health” or “Poor Structure” (in accordance with the Corangamite Shire’s “Tree Inspection Procedure”) may be removed at the discretion of the Manager Works. Reporting and documentation protocols are to be followed in these cases.

Parkland Trees

Some of the major parks and gardens in Corangamite Shire have will require consultation with user groups, committees of management and the wider community. Tree removals in these parks should follow the recommendations in adopted strategies. User groups should be generally consulted through the relevant committee of management.

Council’s neighbourhood parklands contain large numbers and many sizeable and significant trees. Their removal can affect many people and often there are no identifiable user groups to consult with. Documentation is important to substantiate decisions on removal that may be made.

Policy (Tree Removal)

- 5.1** Consideration for and consultation regarding removal of street and parkland trees will be in accordance with Council’s “Tree Removal Procedure” (see Appendix C).
- 5.2** Council’s Manager Works or delegated Team Leader has the delegated authority to remove any street, parkland or roadside tree:

- Assessed as being Hazardous or an “Immediate Risk.”
 - Assessed as being “Dead” or in “Poor” health and/or structure.
 - Where its removal is essential for the construction of an approved development.
 - Not in accord with the preferred species for that street.
 - Not in accord with “Standard Guidelines for Tree Planting”.
 - Recommended for removal in an adopted Master plan.
- 5.3** All trees removed are to be replaced as soon as is practical unless otherwise directed by the relevant Director.
- 5.4** Council will not remove a tree or undertake any formal removal consideration process based purely on the following reasons:
- Falling leaves, bark, twigs, fruit or flowers.
 - Failure to establish grass under the tree
 - Obscuring vistas.
 - Perceived aesthetic concerns.
- 5.5** The removal and replacement of Street and parkland trees to facilitate private development works including driveways and service connections, is to be at the cost of the requestor unless otherwise determined by the relevant Director or with the exception of trees that meet the criteria in policy 5.2.
- 5.6** A recognised method for determining the monetary value of amenity trees be adopted and used as required to determine an appropriate level of compensation for trees removed without written permission from Council or that require to be removed due to poisoning or damage not approved by Council. ‘The VCAH Burnley Method’ (Melbourne) for the Evaluation of Amenity Trees is a generally well-accepted method for determining monetary value.
- 5.7** No person is allowed to remove any tree on land owned or managed by Council without written permission from Council. The contractor or person performing the works must also be approved in writing. Tree removal on Council land is only to be done by people with appropriate qualifications, experience and insurances.
- 5.8** A program of removal of “unsuitable species” in streets and parklands to be developed over time.
- 5.9** Any trees/ shrubs planted without Council permission and not in conformance with section 4.0 “Tree Selection and Planting” principles and policies may be removed in accordance with Council’s Tree Removal Procedure (see Appendix C).
- 5.10** The removal of non-approved landscaping on Council land and any necessary reinstatement is to be at the cost of the person/s that undertook or arranged such landscaping.

Related Documents

Corangamite Shire – Planning Permit – Tree Removal
Native Vegetation Retention Controls
Rural Roadside Management Plan – Feb 2012

6.0 Tree Protection

Principles

Trees and infrastructure are essential items in a modern environment.

Trees are regularly subject to damage from civil works. When civil works are proposed in the vicinity of trees an assessment and works plan is necessary to ensure tree damage is avoided or minimised. There are various guidelines for determining what can be classed as in the “vicinity” of a tree - age, size and/or vigor of the tree are usually the determining factor. For example, guidelines to avoid unacceptable root damage may include “exclusion zones” equal to a radius 12 times the trunk diameter or the area contained within the “Dripline” of the tree.

Significant trees, older trees or larger trees need the greatest protection owing to the potential for a major public risk event and / or property damage.

Incentives for protecting trees and also penalties may need to be put in place to ensure that trees do not get damaged. The payment of Bonds prior to works commencing is an effective method.

Some form of physical protection of trees (e.g. solid fencing) is very important and can often be the only way trees are effectively protected. The circumstances at each works site can vary significantly so using general or rigid guidelines/ rules does not always produce the best outcome for either the tree or the proposed works.

The growth of the above and particularly the below ground parts of trees plus the long term consequences of damage is generally best understood by qualified and experienced arborists. The underground parts of trees are as important as the above ground parts. Underground or root damage may not be obvious and may take many years before a failure occurs. Trees may not show any signs of stress or failure until long after damage or disturbance occurs with inspection/ assessment required before and after works.

All protection issues should be identified at the design stage with any protection plans finalized prior to any works commencing. Successful protection of trees relies on a commitment from all parties involved in the project. Council should not accept the responsibility for any trees below an acceptable condition/ standard. Any development or works within a street or parkland should take all practical steps to preserve existing trees in a healthy and safe condition.

Trees growing beyond the “scope of works”, due to the potential extent of their root system, changes to drainage patterns etc. can be seriously damaged. Capital and maintenance works should be designed and managed to avoid private trees being impacted by Council works and Council trees being impacted by private works.

Many authorities and private contractors have responsibility for conducting works adjacent to Council trees, particularly in streets. All parties need to give due consideration to all tree assets that they are likely to impact upon.

Above ground parts of trees are subject to damage by high vehicles, abrasion from telecommunication cables etc. No pruning of Council trees by others is allowed without prior consultation and permission from Council. Overhead electrical cables have the greatest impact on trees. The issues involved are complex and are covered in Section 8.0.

Policy (Tree Protection)

- 6.1** All works likely to impact on Council trees to be referred to the Manager Works at the planning/ design stage.
- 6.2** Tree condition information, including photos, be provided for all Council projects where trees (public and private) may be impacted by works
- 6.3** Council trees, or trees that will become the responsibility of Council, be protected during all works
- 6.4** All works within the vicinity of a Council tree (or trees that will become the responsibility of Council) should comply with Council's "Works in the Vicinity of Trees – Guidelines and Procedures" (see Appendix D).
- 6.5** A "Tree Protection Plan" be provided and implemented to the satisfaction of Council for all projects likely to impact on trees
- 6.6** A Significant Tree Register is developed in order to define trees requiring specific tree protection.
- 6.7** All works within streets and roadsides comply with Council's Road Opening reinstatement standards and requirements.
- 6.8** Trees identified to be retained and that are damaged either deliberately or through neglect by works be rectified where practicable and as soon as possible.
- 6.9** Costs associated with Policies 6.7 and 6.8 be the responsibility of the person/ contractor who caused the damage and be subject to compensation where applicable
- 6.10** Council seek to develop a tree and infrastructure protection agreement with other authorities and contractors who undertake works within Council land.

Related Documents.

The Australian Standard for the Pruning of Amenity Trees – AS 4373 1996/07

The Australian Standard AS 4970 2009 – Protection of Trees on Development Sites

7.0 Infrastructure Protection

Principles

Infrastructure and trees are essential items in a modern environment. It is not possible to avoid all of the conflicts. They can however be minimized through innovative design and correct management of maintenance strategies and activity. Liaison between other infrastructure managers, Utilities, Responsible Authorities and Council, is essential in ensuring infrastructure damage is prevented or kept to a minimum.

Infrastructure is regularly subject to damage from adjacent trees. When any tree plantings are proposed in the vicinity of above and below ground infrastructure careful consideration of species selection, soil type, planting technique, available root space and the appropriateness of root control measures are needed to ensure damage is avoided or minimized.

Infrastructure within land outside of Council control can also be affected. Tree planting and growth from Council trees should not place any undue burden in the form of risk or maintenance on adjacent land or property.

It is often easier to design and construct new infrastructure to withstand impacts from tree roots rather than control root growth or provide sufficient space for root growth. There are ongoing opportunities to do this as infrastructure may be replaced or changed several times throughout the life of adjacent trees. Consideration needs to be given to designing and constructing infrastructure that will not be adversely affected by existing established trees.

Overhead assets such as cables and street-lights can be detrimentally impacted by trees. The Office of the Chief Electrical Inspector largely has control over this issue, though council has a responsibility to not plant new trees which will cause significant adverse affect these assets.

Policy (Infrastructure Protection)

- 7.1** All proposed tree planting or tree maintenance works likely to impact on, or affect, Council infrastructure, be referred to Council's Asset and Works sections for comment at the design or planning stage.
- 7.2** All tree selection and planting programs conform to the "Tree Selection and Planting" Principles listed in Section 4.0.
- 7.3** Any person or organisation wishing to plant trees, shrubs, herbaceous plants, or undertake any landscaping within a road reserve, park or other land under the control of Council must have permission in writing from Council.

- 7.4** Any trees or shrubs planted without Council permission and not in conformance with Council's Tree Selection and Planting principles and policies will be removed in accordance with Council's Tree Removal Procedure (see Appendix C)
- 7.5** Council's tree programs and maintenance activities are prioritised to ensure that all statutory obligations are met and that infrastructure damage and public nuisance are minimised.
- 7.6** All designs for roads, streets, and/or parklands under, or that will become under the control of Council, include adequate capacity for tree planting and growth whilst minimising conflicts with other infrastructure to the satisfaction of Council.
- 7.7** Where it is cost effective in the long term, infrastructure be selected and/or constructed to a standard that is capable of withstanding damage from existing tree
- 7.8** Council liaise with other authorities that have infrastructure within land managed by Council that may be impacted by trees prior to any major tree planting.
- 7.9** Council seeks to develop a tree and infrastructure protection agreement with other authorities and contractors who undertake works within Council land.

Related Documents

Powercor: 'Your Guide to Planting Near Electricity Lines'.

8.0 Electric Line Clearance

Energy Safe Victoria (ESV) is responsible for ensuring electrical safety. The Corangamite Shire has a statutory obligation under the Electricity Safety Act (1998) for maintaining public trees clear of overhead electric lines in the “Declared Areas” (refer to the “Corangamite Shire Electric Line Clearance Management Plan” for details on how this is managed and “Declared Areas” maps).

The Corangamite Shire Electric Line Clearance Management Plan must be resubmitted to the ESV by the 28th February each year. ESV review the Plan and will either approve it or require alterations. The responsibility for reviewing and implementing the Plan lies with Council’s Manager Environment and Emergency.

The “Declared Area” in Corangamite Shire is the township of Camperdown. Maintaining overhead electric line clearances for all trees outside this area is the responsibility of the local distribution company i.e. Powercor.

Principles

A reliable and safe supply of electricity is essential to the Corangamite Shire business and residential community.

Overhead electric lines impact significantly on the aesthetics, longevity, health and structure of street trees and the best long term solution is to relocate the electric lines underground or clear of trees e.g. by the use of offset cross arms, increased height, aerial bundled/insulated cables.

Undergrounding of overhead electric lines is very expensive. Council should take the opportunity to significantly reduce these costs during road reconstruction, subdivisions and capital works projects e.g. by installation of underground conduits where appropriate.

The costs for any electric-line relocation project should be borne by all parties that benefit from it i.e. Council, local distribution company, residents and businesses. Opportunities for funding subsidies through the Powerline Relocation Committee should also be pursued if applicable. The Shire has many large trees and conflicts with overhead electric lines that need to be resolved over the longer term without the need to preclude retaining or planting large growing trees.

Although electric line clearance responsibilities for public trees outside the “Declared Area” lies with another organisation (Powercor) Council still has an obligation to ensure residents views and Council’s policies and procedures are taken into account and impacts on trees are minimized.

Policy (Electric Line Clearance)

- 8.1** An Electric Line Clearance Management Plan be reviewed and submitted to ESV for approval annually.
- 8.2** Council seeks to undertake a formal liaison process with the distribution company (Powercor) and/or their agents with a focus on street tree planting, tree protection, pruning and electric line relocation.
- 8.3** Street tree planting, species selection and pruning practices aim to minimise conflicts with overhead electric lines.
- 8.4** Relocation of overhead electric lines be considered as a possible part of any capital works project or development and discussions held with relevant authorities at the time to progress the idea

Related Documents.

Corangamite Shire Electric Line Clearance Management Plan
Code of Practice for Powerline Clearance (Electricity Act)
Powercor: 'Your Guide to Planting Near Electricity Lines'

9.0 Tree Maintenance

Principles

Tree maintenance should be based on a priority basis relative to Councils` annual program and budget allocations. High priority maintenance works must take precedence over reactionary or lower priority requests.

Council has the responsibility to provide adequate maintenance on trees within public streets, parklands and roadsides within Council budgetary and resource constraints.

Maintenance of clearances (e.g. for pedestrians, vehicles, buildings and signage) and traffic sight distances is necessary. The correct maintenance regime on young and developing trees has the potential to significantly reduce the future risks and costs associated with mature trees. All trees shed litter in the form of branches, leaves, twigs, bark, flowers, fruit etc. and Council should provide a maintenance system or service to minimize the potential nuisance caused by this “natural shedding” process.

Tree maintenance should be performed to a recognised standard. The Australian Standard for the ‘Pruning of Amenity Trees’ – AS 4373 1996/2007 establishes a national benchmark.

Residents may wish to be actively involved in the maintenance of their street trees but this is ultimately the responsibility of Council. Qualified and experienced people should be involved in maintaining Council trees and residents should be encouraged to undertake basic care and establishment of newly planted trees.

Where trees have been lopped or damaged without the permission of Council the offending party may be responsible for restoration of that tree or paying to Council an appropriate level of compensation for rectification of damage.

Street and parkland tree numbers will likely increase every year and maintenance costs will therefore increase correspondingly. Tree maintenance budgets should keep pace with the increase in tree numbers to provide sensible and effective management.

One area of maintenance that is often neglected is the tree’s root zone. Root growth of trees can be less than desirable owing to the constraints of the root zone environment and damage to infrastructure from tree roots may require measures to be taken that impact on the tree.

Policy (Tree Maintenance)

- 9.1** Council develop prioritised programs of pruning and tree maintenance to improve the condition of Council trees and to minimize any potential hazard or nuisance.
- 9.2** Young and developing trees are formatively pruned with an emphasis on preventing future and long-term structural problems.
- 9.3** Council’s tree maintenance programs are based primarily on a priority system.
- 9.4** The development of a leaf (or “tree litter”) pick up service and composting advice be investigated to assist residents manage Street and parkland tree litter that falls from Council trees.
- 9.5** Residents are encouraged to provide watering to young Council trees to aid their establishment.
- 9.6** Council seek to promote modern tree management techniques to assist residents and contractors make the best decisions on how to correctly manage tree assets.
- 9.7** Council regularly review the numbers and condition of trees it has responsibility for, methods of maintenance and budget requirements.

Related Documents

AS 4373 2007 – Pruning of Amenity Trees

10.0 Environmental and Community Imperatives

Principles

Residents generally have an interest and often strong view on tree issues that are close to their properties. Consultation with residents can create a much better understanding of tree issues and a wider acceptance of the role and works undertaken by Council.

The community are generally aware of works and other activities that are or are about to be happening around their area. They are on site more often than Council staff and can quickly identify issues or threats to trees.

Many trees throughout the Shire provide a range of habitat for fauna e.g. hollows, nesting sites and roosting sites. Preserving these values can conflict with normal tree management practices. Alternative tree management practices may be warranted for trees with high habitat or ecological value.

Trees as ameliorators of air pollution and climate change will be an increasing area of value. Large trees are the most effective sinks of old carbon and their protection and further planting is important in overcoming greenhouse effects.

Recycling of material from tree maintenance operations such as woodchip, leaves, stump grubbing tailings and timber can reduce costs and provide a valuable source of materials to gardens, craft and trades people. The Shire's trees contain a valuable timber resource with the reusing of this material valuable in reducing dependence on landfill.

Many trees have the potential to become environmental weed species. A tree's weed potential needs to be an important consideration when selecting species.

The tree issues within the Corangamite Shire are not unique to the Shire. Many of the surrounding Councils and local communities deal with similar issues and opportunities to assist each other should be explored. For example Elm Leaf Beetles do not respect boundaries, wildlife corridors should not stop at boundaries, LandCare and community groups do not limit themselves to Council boundaries.

Policy (Environmental and Community Imperatives)

- 10.1 The Corangamite Shire will seek to consult with adjacent residents when new or major tree works are being proposed or undertaken.
- 10.2 The Corangamite Shire seek to encourage the wider community to be aware of tree issues and to contact Council for information or when matters of concern are noticed.

- 10.3** Protection and planting of large growing trees be actively encouraged and Council's tree planting programs aim at providing maximum community and environmental benefits.
- 10.4** A list of tree species that have a high weed potential if planted in the Shire area be developed with this information made available to the community.

Related Documents

11.0 Pest and Disease Control

Principles

Trees are subject to a range of pests and diseases. The concept of eradication is not practical in most cases and harm minimization should be seen as the best approach.

Pests and diseases do not recognise boundaries so a co-operative approach is required between land owners/ managers. Where pests and diseases have the potential to affect Council's tree asset or "Significant Trees" Council should seek to assist residents and other land managers where possible in being aware of potential problems and control options.

Council has a responsibility to protect particular assets from harm or loss. Corangamite Shire has an exceptional collection of Elms that require special protection. Biodiversity is particularly important given our rapidly changing environment and possible threat from new pests and diseases.

Policy. (Pest and Disease Control)

- 11.1 Council develop and implement specific control programs where appropriate for major pests and diseases likely to affect trees under the control of Corangamite Shire.
- 11.2 All trees to be planted conform to the 'Pests and Diseases' Principles listed above.
- 11.3 Council seek to develop relationships with surrounding municipalities, government agencies and local community groups to share information and resources to respond to the management challenges associated with pest and disease impacts on public and private trees.

12.0 Significant Trees

Principles

There are many trees or groups of trees within Corangamite Shire that are of state and local significance. Some of these are recognised by the National Trust of Australia (Victoria) and are listed on their Significant Tree Register. This does not afford them any legal protection however. Some of these and others are protected under the Corangamite Shire Planning Scheme. There remain many significant trees that are not protected nor recognised in any way with identification, recognition and protection of these trees yet to be developed.

Protection measures for significant trees are critical. There are a variety of ways to ensure their protection e.g. including them within the planning scheme and/or section 173 agreements.

Assessment of and, agreement of what is considered to be significant is subjective. A process of nomination and registration may be best undertaken by a panel of people with a wide range of expertise and viewpoints; this should assist in creating community stewardship of these trees.

Community awareness of significant trees and the implications of having a Significant Tree Register are important. It will be the Community in most cases that identifies what trees are significant and, through their monitoring, that which best helps to protect them.

A register of significant trees (individuals and groups) covering the range of selection criteria in Appendix E can act as a valuable educational resource.

Policy. (Significant Trees)

- 12.1 A formal program to identify and assess public trees (individuals and groups) that are significant to the Shire and the local community be promoted within the community.
- 12.2 The Corangamite Shire in conjunction with the interested significant tree community and owners seek to develop appropriate measures of protection (including the possible use of a Local Law and Local Government Act) and promotion for each significant tree or group of trees.
- 12.3 The Corangamite Shire Significant Tree Register should generally follow the criteria used by the National Trust of Australia (Victoria) as detailed in Appendix E. It should however have a greater emphasis on what is peculiar or important to the local community rather than importance at a state level.

- 12.4** The community be encouraged in nominating trees for inclusion on the register (yet to be developed) and also make up the majority of any future panel to decide which trees are to be included in the register.
- 12.5** Trees that are significant to Corangamite Shire be clearly identified and promoted throughout the community as these trees are recognised and registered moving forward.

Related Documents

Victorian Native Vegetation Framework (DSE)

13.0 Existing Tree Controls and Regulations

There are currently existing State and Local laws and regulations that control the removal and pruning of both native and exotic vegetation on private and public land. The policies and procedures in these Plans are in support of those laws and regulations and need to be viewed as being in addition to those laws and regulations.

It is the responsibility of all persons to ensure they do not do anything that is in contravention of any existing laws and regulations. The following information is provided to assist in determining what laws and regulations may apply noting that these may change over time.

When removing a tree, permission must first be sought from Council if it is located on Council controlled land. Planning permits are also required for the removal or lopping of native vegetation over 10 years old, as stipulated in the Native Vegetation Retention Controls (NVR).

Under general maintenance, the pruning of vegetation to keep the roadway clear to maximise safe use by road users is allowed. A planning permit is not required if the vegetation is not indigenous, presents an immediate risk of:

- personal injury or damage to property or is
- proclaimed as a noxious weed (further details can be found in the NVR or Council's Rural Roadside Management Plan).

Planning permits are required for vegetation removal when:

- the vegetation is an Australian or Victorian Rare or Threatened Species or Community
- if it is indigenous vegetation greater than ten years old on land that has an area greater than 0.4 hectares.
- on the register for Significant Trees (refer Appendix 4).

A permit is requested from the Council Planning Department who will refer the application to the Department Sustainability and Environment for guidelines and advice, or any other referral authority as appropriate to the application.

More information on this and also the Department of Sustainability and Environment's (DSE) Native Vegetation Management Framework (NVMF) can be found at www.dse.vic.gov.au/planning.

Local Government:

The Corangamite Shire has a variety of planning scheme overlays and local laws that specify what may or may not be undertaken with certain types of vegetation. The overlays may include:

- Heritage Overlays with Tree Control
- Heritage Act 1995 – includes trees of State Cultural Heritage Significance
- Significant Landscape Overlays

- Environmental Significance Overlays
- Public Acquisition Overlays
- Vegetation Protection Overlays

Other: Other relevant authorities would include but not limited to: *Vic Roads. *Catchment Management Authorities. *Wanong Water. * Parks Victoria. * Powercor.

14.0 Definitions

Arborist (Qualified): person with a Certificate IV in Arboriculture as a minimum (or equivalent qualification) or higher and a minimum of three years of relevant industry experience.

Tree Incident: the failure of any part of a tree that caused or realistically could have caused damage or injury to persons or property or where damage or injury was caused to a tree by another party.

Immediate Risk: – An ‘Immediate Risk’ (AKA Hazardous) relates to risk where “*the danger is to be present, immediate or imminent and not remote either as to likelihood or as to time of occurrence (in other words something not to be expected for years to come)*”. Usually a situation with serious implications of damage (or worse) to persons or property - within 24 hrs of its notification

Poor Health: – foliage colour and density plus annual shoot/extension growth plus wound wood development all severely retarded and/or outer canopy dying back and/or pest and disease/s present and causing significant affects.

Poor Structure: – extensive decay and/or structural defects affecting the main branch/trunk framework, extensive remedial work required or not practical/possible.

Diameter at Breast Height (DBH): – a pertinent measurement taken at approximately 1.4 metres above the ground, that being a convenient height at which to measure a tree's diameter. For trees on slopes, multi-trunked trees, leaning trees or where branches are growths interfere with measuring at 1.4 metres refer to the Australian Standard AS 4970 2009 – Protection of Trees on Construction Sites.

Sustained Amenity: – (AKA Urban Forestry) is the creation and management of a tree population that contains a range of species and age classes within a local population; from new planting right through to mature trees. Amenity is sustained i.e. visual amenity of the landscape managed in this way does not fluctuate wildly. The need to remove many trees at the same time and rapid changes in the local landscape is avoided. Removal and replanting of trees takes place continually or irregularly throughout the whole of the tree population.

Hazard Tree:

A structurally unsound tree deemed to be an immediate risk to persons, property or infrastructure.

Definitions – Tree Descriptions & Terminology

AGE:

Young:	Juvenile tree recently planted. Last 1- 5 yrs
Semi-mature:	Tree still growing
Mature:	Specimen has reached expected size in current situation.
Senescent:	Tree is over mature and in decline.

FORM:

Good:	Canopy full and symmetrical.
Fair:	Minor asymmetry, or suppression. Considered typical for species in situation.
Poor:	Canopy suppressed, major asymmetry. Stump re-growth.

HEALTH:

Good:	Crown full, with good density. Foliage entire with good colour; minimal or no pathogen damage. Good growth indicators, e.g. extension growth. No or minimal canopy dieback. Good wound-wood development.
Fair:	Tree is exhibiting one or more of the following symptoms; Tree has <30% dead wood, or can have minor canopy dieback, Foliage generally with good colour, some discolouration may be present, minor pathogen damage present. Typical growth indicators, e, g. extension growth, leaf size, canopy density for species in location may be slightly abnormal.
Poor:	Tree has >30% dead wood. Canopy die-back present. Discolored or distorted leaves and/or excessive Epicormic growth. Pathogen is present and/or stress symptoms that could lead to or are leading to decline of tree.
Dead:	Tree is dead.

STRUCTURE:

Good:	Good branch attachment and/or no minor structural defects. Trunk and scaffold branches sound or only minor damage. Good trunk and scaffold branch taper. No branch over extension. No damage to structural roots and/or good buttressing present. No obvious root pests or diseases.
Fair:	Some minor structural defects and/or minor damage to trunk. Bark missing. Cavities could be present. Minimal or no damage to structural roots. Typical structure for specie type.
Poor:	Major structural defects and/or trunk damaged and/or missing bark. Large cavities and/or girdling or damaged roots that are problematical.
Hazardous:	Tree poses immediate hazard potential that should be rectified as soon as possible.

VIGOR:

Good, Fair or Poor: This describes the ability of a tree to promote extension growth and wound-callus effectively; this is directly related to the annual progress of tree growth, including root systems, which are dependent on in-situ and environmental conditions.

GENERAL CONDITION:

Describes a tree or group of trees in a broad term of convenient précis that considers all of these Tree Descriptors as mentioned in Documents & MS XL Spreadsheets.

USEFUL LIFE EXPECTANCY (ULE):

Useful Life Expectancy (ULE) means that in a planning context the length of time a tree can be maintained as a useful amenity and not a liability is by far the most important long-term consideration. ULE is contingent on a number of obvious
Trees are a renewable resource.

Definitions – Remedial Tree Pruning Works Descriptions

All Remedial Pruning Works recommendations are not essentially aesthetic; they are necessary for reinvigorating or preserving older trees and reducing the potential for further immediate failure. These perspectives are effective when extending the Useful Life Expectancy (ULE) of older trees. The natural role of Plant Growth Regulators (AKA Hormones) can be enhanced by appropriate pruning to promote the specimen.

Due to the age, size, condition, history and proximity to public access it is necessary to apply Remedial Works to minimise the typical large limb failure potential for which some Mature Trees are known.

Crown Reductions (**CR**), for example, reduce the potential wind influence upon a tree and consequently encourage new growth lower down within the canopy. This in-turn promotes new root growth, which is of the utmost importance for older trees thereby allowing the tree to feed more effectively and also improving root anchorage.

Dead Wood (**DW**) Removal reduces Pest & Disease infestation and eliminates current potential for public liability. Limb Reduction (**LR**) and Weight Reduction (**WR**) serve to enhance a truer Tree Form whilst focusing new growth in a desired direction by the influence of inherent natural Plant Growth Regulators; this may be absolutely necessary in an altered or contrived environment or to maintain Tree Form whilst reducing the potential for Branch Drop. Crown Thinning (**CT**) is the selective removal of branches to increase light penetration and air movement through the canopy, it may also serve to reduce the weight of certain branches or Branch Fork Unions; this technique is also known as Drop-Crotching. Under Pruning (**UP**) serves to allow public egress, sight distance, security, light spill or to achieve vehicular access.” (AP).

These descriptions are drawn from industry perspectives based upon the following:

- AS 4373 1996/2007 –Pruning of Amenity Trees
- Tree Pruning Guidelines, Performance Committee, International Society of Arboriculture; 1995.
- Arboriculture, Integrated Management of Landscape, Trees, Shrubs and Vines. Harris, Clark & Matheny.
- Urban Landscape Management. Dr James Hitchmough, 1994.

Appendices

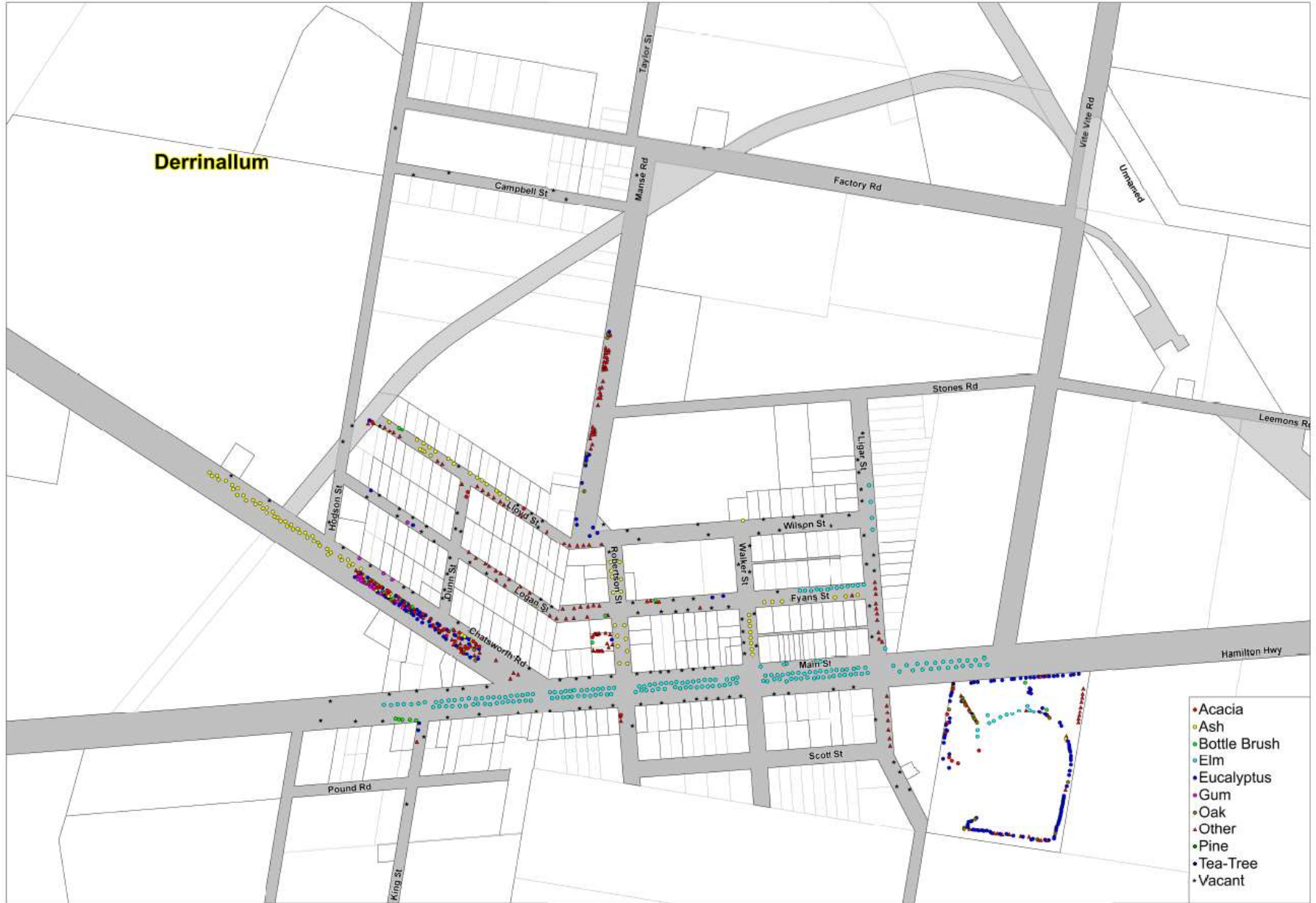
Appendix A:

Corangamite Shire Townships – Existing Tree
Themes – Maps

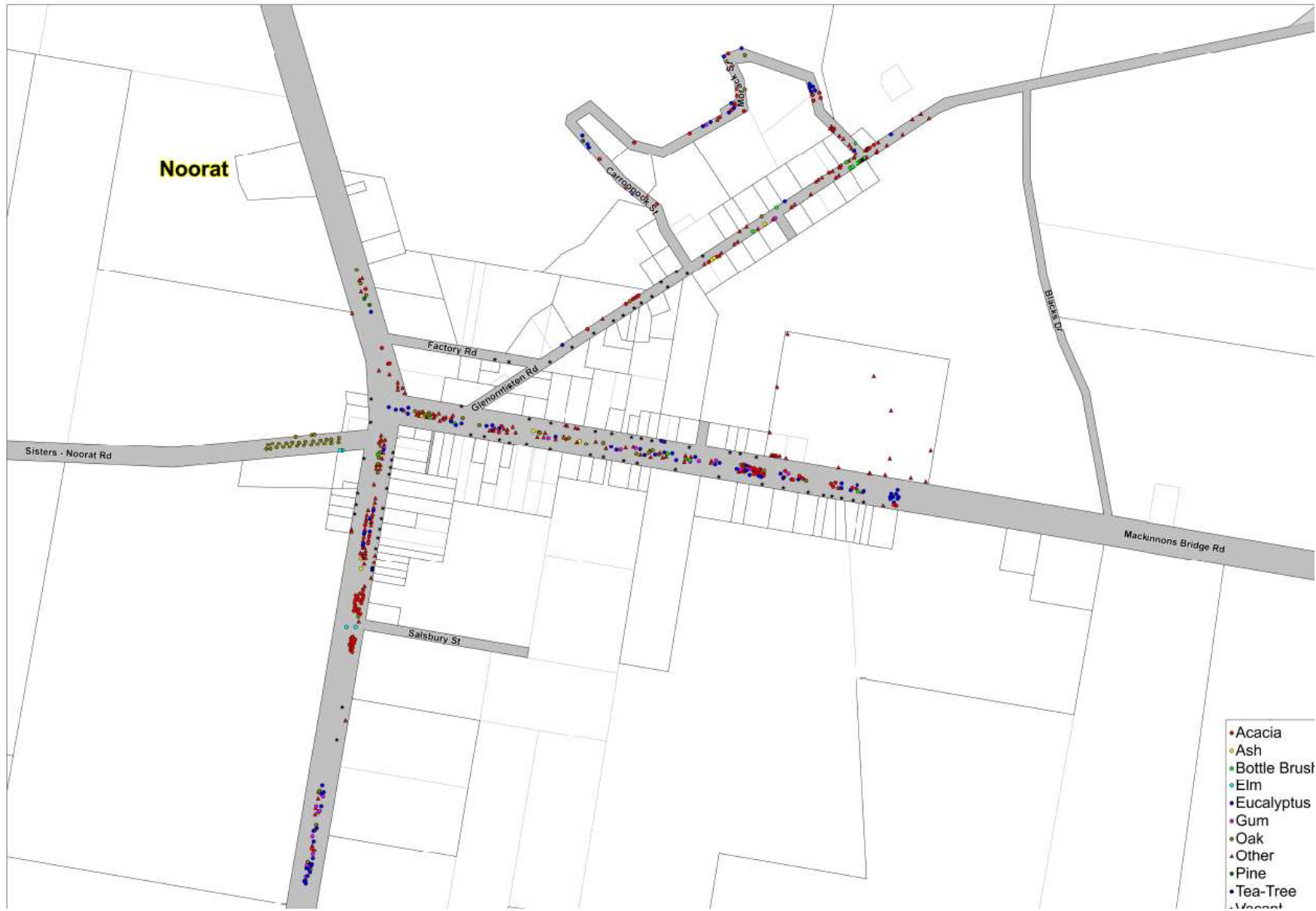




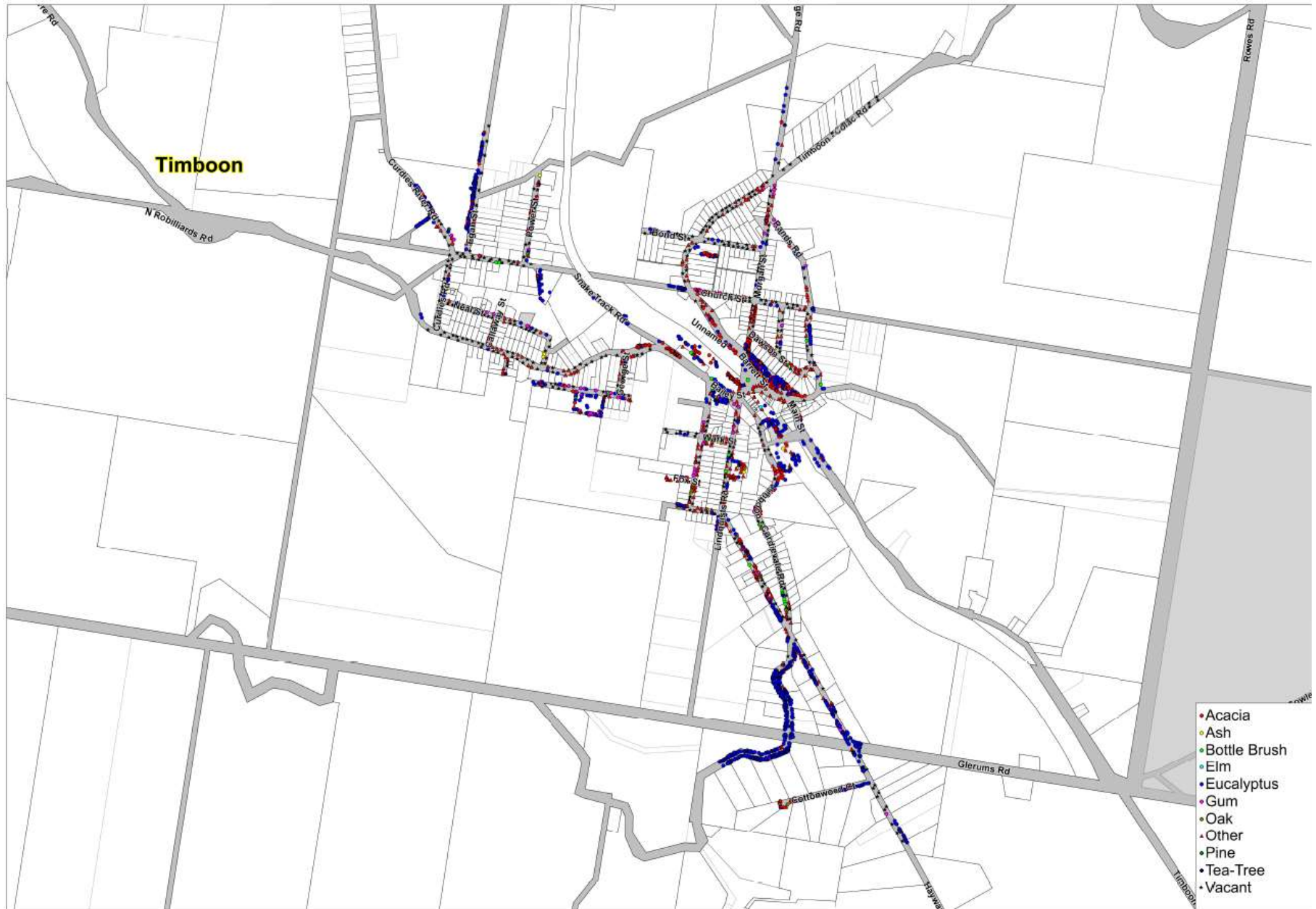


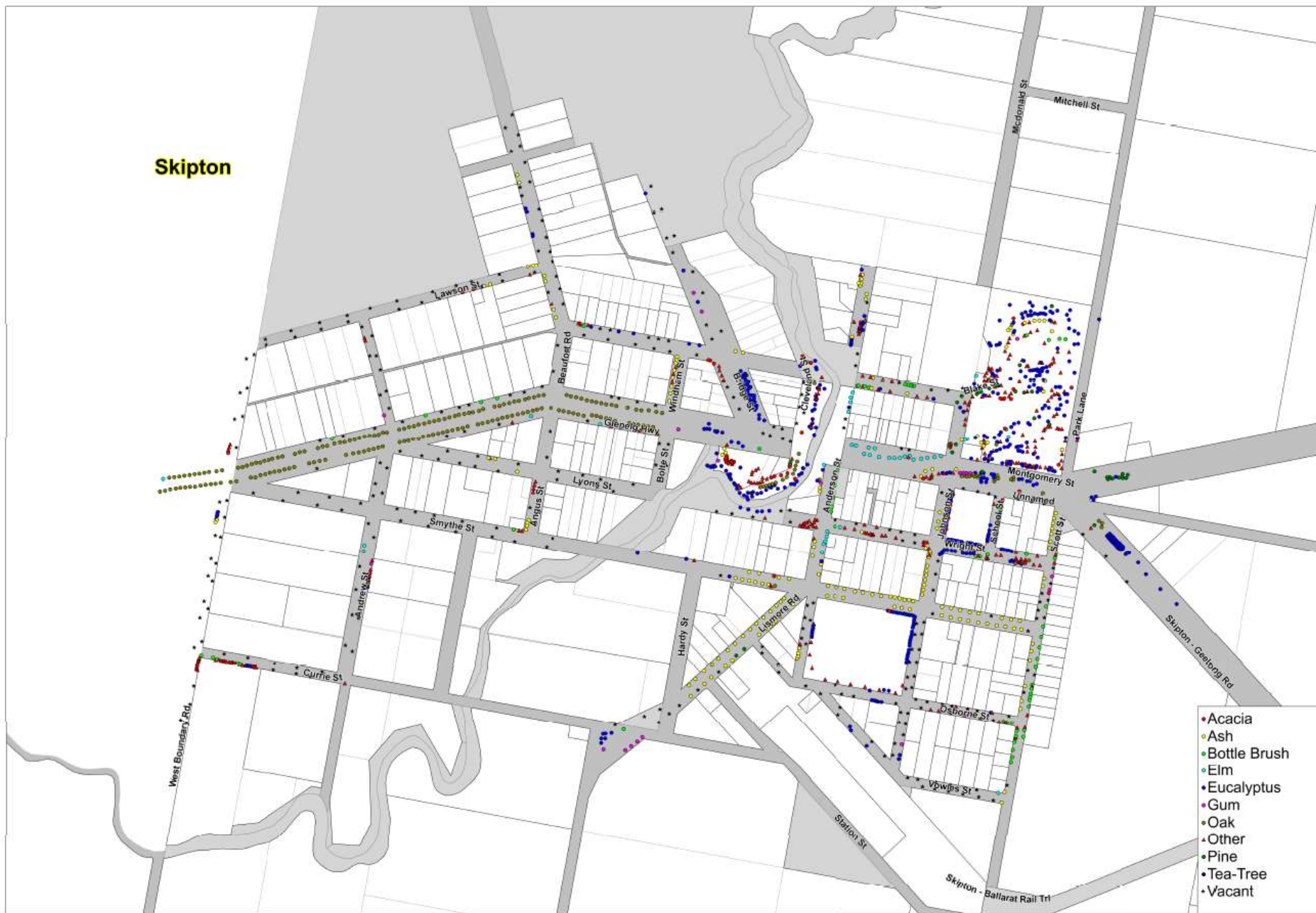












Corangamite Shire – Urban Street Tree Asset Management Plan - 2014



Appendix B:
Corangamite Shire Townships – Proposed Tree
Themes and Nominated Species list

Corangamite Shire – Proposed Tree Planting Strategies

Strategy for all towns	<ol style="list-style-type: none"> 1. Remove all dead and poor condition tree 2. Develop Street by street species planting strategy using nominated species list 3. Develop street tree planting program 4. Apply for funding and deliver planting program
------------------------	--

<u>Town</u>	<u>Theme</u>
Camperdown	European / Exotic
Cobden	European / Exotic
Darlington	Native Bush land
Derrinallum	Native Bush land
Lismore	Native Bush land
Noorat	Native Bush land
Port Campbell	Coastal Native
Princetown	Coastal Indigenous
Skipton	Native Grassland
Terang	European / Exotic Species
Timboon	Native Bush land

Corangamite Shire – Nominated Species List

Camperdown

Acacia '*boormanii*' *
Acacia '*rotundifolia*'
Acer japonica '*japanese maple*'
Callistemon '*harkess*' *
Callistemon '*salignus*' *
English elm '*ulmus procera*' +
English oak '*quercus robur*' +
Eucalyptus '*caesia*'
Eucalyptus leucoxylon '*eukie dwarf*' *
Fraxinus excelsior '*european ash*' +
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Lagerstroemia '*nachez*' *
Lagerstroemia '*zuni*' *
Tilia cordata '*linden greenspire*'

Cobden

Acer japonicum '*aureum*'
Agonis flexuosa '*jarvis bay after dark*'
Agonis juniperina
Callistemon '*harkness*' *
Callistemon '*salignus*' *
Eucalyptus leucoxylon '*eukie dwarf*' *
Fraxinus '*metropolitan*' +
Jacaranda Mimosifolia
Magnolia '*grandiflora*' +
Melia azedarach '*flora bank*'
Pyrus fauriei '*korean sun*' *
Ulmus parvifolia '*chinese elm*' +

* Suitable to be planted under power lines

+ Avenue planting only, not to be planted near power lines.

Timboon

Agonis flexuosa '*jarvis bay after dark*'
Banksia dentata '*tropical banksia*' *
Banksia integrifolia '*coast banksia*'
Casuarina littoralis '*black sheoak*'
Eucalyptus '*caesia*' +
Eucalyptus '*citriodora*' +
Eucalyptus ficifolia '*flowering red gum*'
Eucalyptus leucoxylon '*eukie dwarf*' *
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Hakea '*petiolaris*' *
Hakea '*salicifolia*' *
Melaleuca '*tea tree*' *

Port Campbell (Coastal Theme)

Acacia pravissima
Allocasuarina littoralis *
Allocasuarina verticillata
Banksia ericifolia *
Banksia marginata
Callistemon '*harkness*' *
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Telopea speciosissima '*waratah*'

Noorat

Acacia howitti
Acacia prarissima
Callistemon '*harkness*' *
Callistemon '*salignus*' *
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Hakea petiolaris *
Melaleuca '*tea tree*' *
Tristaniopsis laurina *

* Suitable to be planted under power lines

+ Avenue planting only, not to be planted near power lines.

Terang

Acacia pravissima
Callistemon *'beaufortia'* *
Callistemon *'harkness'* *
Callistemon viminalis *'weeping'*
English oak *'ulmus robur'* +
Eucalyptus citriodora
Eucalyptus ficifolia *'flowering red gum'*
Eucalyptus leucoxylon *'eukie dwarf'* *
Fraxinus excelsior *'european ash'* +
Hakea petiolaris *
Lagerstroemia *'indica'* *
Lagerstroemia *'zuni'* *
Melaleuca *'tea tree'* *
Platanus x acerifolia *'london plane tree'* +

Simpson

Acacia howittii
Acacia pravissima
Agonis flexuosa
Agonis juniperina
Allocasuarina littoralis *
Allocasuarina verticillata
Banksia integrifolia
Callistemon *'harkness'* *
Callistemon *'salignus'* *
Eucalyptus *'caesia'* +
Eucalyptus citriodora +
Eucalyptus leucoxylon *'pink'* +
Grevillia *'honey gem'* *
Grevillia *'pink surprise'* *
Hakea petiolaris *
Hakea salicifolia *

* Suitable to be planted under power lines

+ Avenue planting only, not to be planted near power lines.

Darlington

Callistemon '*harkness*' *
Callistemon '*salignus*' *
Eucalyptus citridora
Eucalyptus ficifolia '*flowering red gum*' +
Eucalyptus leucoxyton '*pink*' +
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Melaleuca '*tea tree*' *

Derrinallum

Allocasuarina littoralis
Allocasuarina veticillata
Callistemon '*harkness*' *
Callistemon '*salignus*' *
Eucalyptus ficifolia '*flowering red gum*' +
Fraxinus excelsior '*european ash*' +
Grevillia '*pink surprise*' *
Hakea petiolaris *
Hakea salicifolia *
Ulmus procera '*english elms*' +

Lismore

Agonis flexuosa
Agonus juniperina
Callistemon '*harkness*' *
Callistemon '*salignus*' *
Eucalyptus burdettiana '*burdett gum*' +
Eucalyptus caesia +
Eucalyptus ficifolia '*flowering red gum*' +
Eucalyptus forrestiana '*fuschia gum*' +
Eucalyptus leucoxyton '*eukie dwarf*' *
Eucalyptus stoatei '*pear gum*'
Eucalyptus torquate '*coral gum*'
Grevillia '*honey gem*' *
Grevillia '*pink surprise*' *
Hakea salicifolia
Prunis elvins '*flower cherry*' *
Prunis nigra '*flowering plum*' *

* Suitable to be planted under power lines

+ Avenue planting only, not to be planted near power lines.

Skipton

Acacia pulchella '*prickly moses*'
Allocasuarina littoralis *
Allocasuarina verticillata
Callistemon '*harkness*' *
Callistemon '*salignus*' *
Eucalyptus camaldulensis '*river red gum*' +
Eucalyptus ficifolia '*flowering red gum*' +
Fraxinus excelsior '*european ash*' +
Grevilla robusta '*silky oak*' +
Hakea salicifolia *
Quercus palustris '*pin oak*' +
Ulmus procera '*english elms*' +

* Suitable be planted under power lines

+ Avenue planting only, not to be planted near power lines.

Appendix C

Corangamite Shire - Tree Removal Procedure

This procedure is to be used when considering the removal of any trees under the control or management of Corangamite Shire.

Many public and private trees will be under the control or protection of local and/or state planning schemes. When considering removing these trees Council's Statutory Planning Department should be contacted to determine any additional requirements.

Tree removal decisions will not be based purely on the preferences of those consulted. Decisions to remove, or not to remove, a tree must be in conformance with the principles listed in Council's Tree Management Plan, Section 5.0 "Tree Removal".

The removal of trees in "Poor" health and/or "Poor" structure and from any relevant Unsuitable Street Tree Species List will generally not require referral but must be fully documented.

No person is allowed to remove any tree on land owned or managed by Council without first obtaining written permission from Council. This permission is obtained by applying for a planning permit for the removal of the tree(s). Council may seek compensation, using an agreed and proven amenity tree valuation method, for any trees removed without its permission.

Many trees are planted and landscaping installed on public land without Council permission and do not comply with the principles as stated in the Tree Management Plan section 4.0 "Tree Selection and Planting". Removal of these trees and associated landscaping is often necessary for safety, policy and maintenance issues. When considering removing these trees and landscaping the required procedures will be followed.

1.0 Trees Assessed as Being 'Hazardous' or an 'Immediate Risk'

Only trees that present a Hazardous or Immediate Risk can be removed without prior consultation with adjacent residents or owners. Only experienced staff should be used to make this assessment; except in an emergency defined as - Usually a situation with serious implications of damage (or worse) to persons or property within 24 hrs of its notification.

A Hazardous or Immediate Risk relates to risk where *"the danger is to be present, immediate or imminent and not remote either as to likelihood or as to time of*

occurrence (in other words something not to be expected for years to come)”.

A written and photographic record must be made by a qualified arborist (or experienced and responsible person) detailing the reason/s for the removal of the tree/s. The record is to be provided to the Manager Civil Operations as soon as is practicable and kept in **Council’s** information system. In the case of trees listed on the “Corangamite Shire Significant Tree **Register**”, or remnant native trees that present a Hazardous or Immediate Risk the area under threat is to be isolated from use/access if practicable. The Operations Manager is to be notified as required to determine the appropriate action to be taken.

‘**Diagram 1: Hazardous or an Immediate Risk – Dangerous Trees Flow Diagram**’ gives a visual outline of the tree removal procedure for hazardous trees.

2.0 Trees Assessed as Being Non-Dangerous Trees

‘**Diagram 2: Non-Dangerous Trees Flow Diagram**’ gives a visual outline of the tree removal procedure for non-hazardous trees.

3.0 Consultation Procedure – Tree Removal

If reasons for the removal request are purely as per Tree Removal Policy 5.5 no further removal consideration will be undertaken.

4.0 General Consultation procedure

The responsibility for carrying out this procedure lies with the **Council’s** Staff.

When considering removing a street, roadside or parkland tree adjacent residents, property owners and, in the case of parkland trees, committees of management must be consulted and their opinions taken into consideration when determining an appropriate course of action. Adjacent residents and property owners are those that could be reasonably expected to be affected by the removal of the subject trees.

The residents and owners are to be provided with a clear assessment of the trees condition, the Councils preferred option and the full range of options that were considered in writing.

If the immediate adjacent resident and owner plus a majority of the residents consulted agree with Councils preferred option then the work can proceed after seven (7) working days. Any residents who did not agree with the majority should also be informed seven (7) working days prior to commencing the works.

If the immediate adjacent resident and owner plus a majority of residents disagree with Council's preferred option the Senior Arborist or Council officer must try to resolve the matter through discussion with the affected parties. If consensus cannot be reached the Senior Arborist or Council officer is to provide a report to the relevant Manager, detailing the trees condition, options for remedial action, list of people consulted and their opinions and a recommendation.

The relevant Manager has delegated authority from Council to make a final decision. The people consulted are to be informed of the final decision at least seven (7) working days prior to performing the works.

Where no adjacent residences exist no consultation procedure is required unless the adjacent property owners have specifically requested to be consulted about trees abutting their properties. The Senior Arborist or Council officer will keep the Operations unit informed about these locations and the resident contact details.

In the case of trees that may be listed on the "Corangamite Shire Significant Tree Register" the Senior Arborist or Council Officer will consult, where possible, with those people (including absentee owners), organisations or groups having a direct relationship with the tree.

Diagram 1: 'Hazardous' or an 'Immediate Risk' - Dangerous Trees Flow Diagram

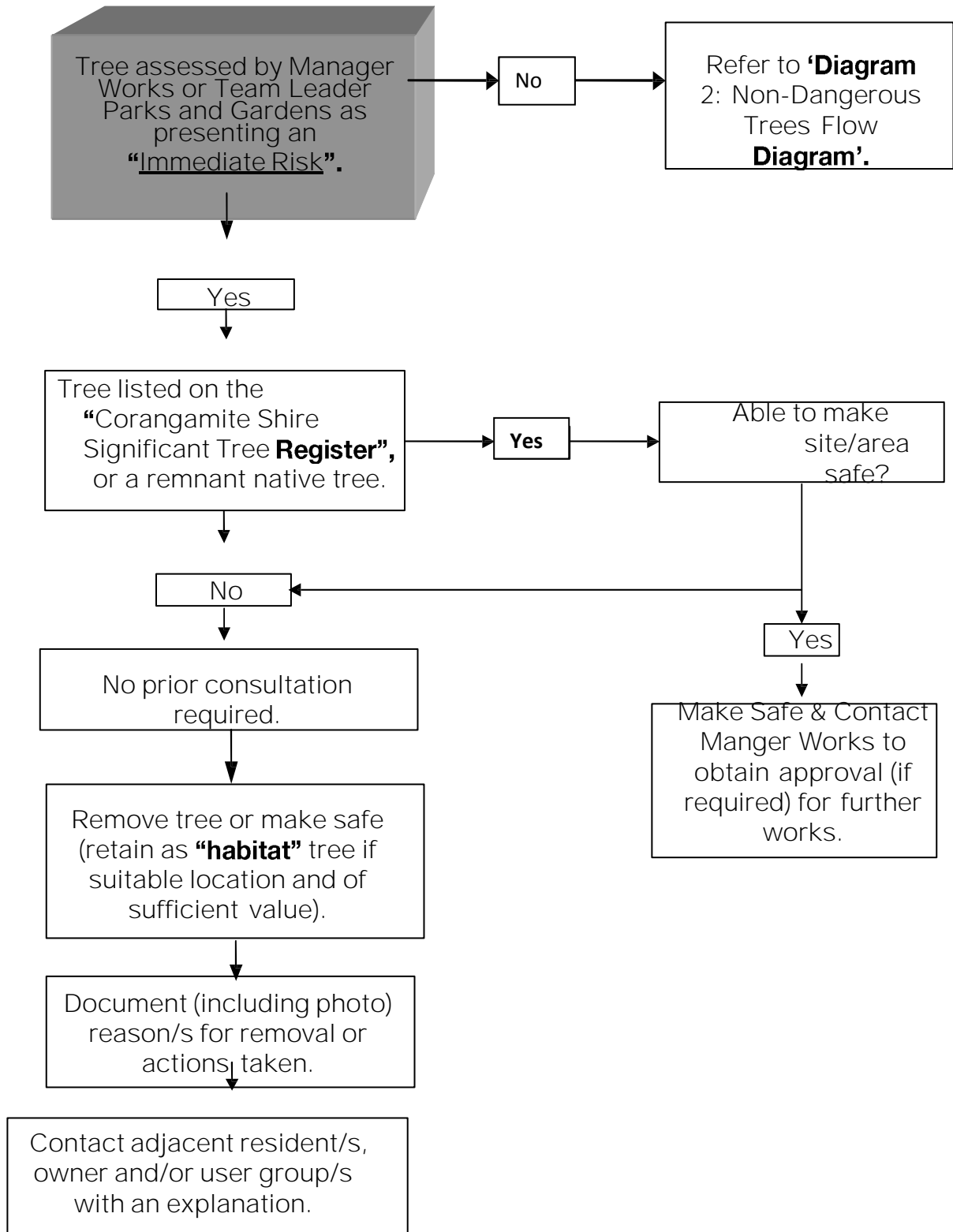
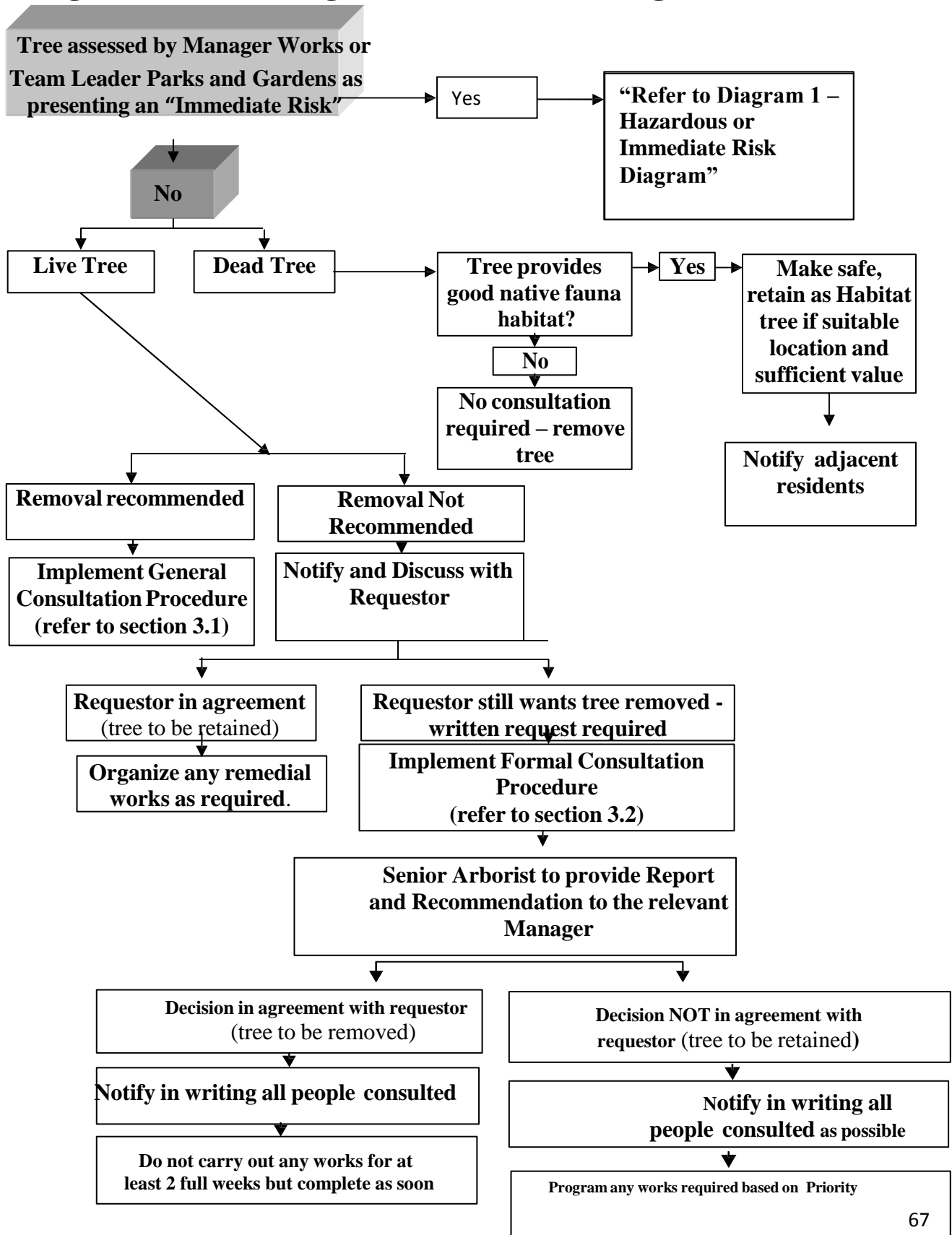


Diagram 2: Non-Dangerous Trees Flow Diagram



Appendix D

Works in the Vicinity of Trees: Guidelines and Procedures

Refer: AS 4970 2009 – ‘Protection of Trees on Development Sites.’

1.0 Existing Controls and Use of this Guideline

Many trees within the Corangamite Shire, both private and public, are protected under a variety of controls including the Corangamite Shire planning scheme and state planning controls. A range of penalties can be imposed on persons found damaging or removing trees.

This guide should be used by all persons involved in undertaking any works in the vicinity of trees i.e. within the canopy/drip line or within a radius from the trunk equal to 12 times the trunk diameter, whichever is greater. This can often include trees outside the scope of works i.e. within the adjacent property and/or in the adjacent street or parkland.

Please Note: this is a guide only and should not be viewed as necessarily providing the right solution for every circumstance. All individual work-sites should be properly assessed (before and during works) and specific issues identified prior to any further works activity.

2.0 Corangamite **Shire's** Trees

Corangamite **Shire's** trees both Native and exotic contribute significantly to the **Shire's** historic character and charm with many exotic plantings dating back to the late **1800's**. Many areas also contain remnant indigenous vegetation and other native trees that create a unique local identity and essential habitat for local wildlife.

Trees need and deserve strict systems of protection to control works in their vicinity that are likely to cause them damage. Trees are a living and dynamic asset often taking in excess of 80 years to mature and realistically once trees and/or roots are damaged they cannot normally be repaired or replaced.

3.0 Tree Protection Zone TPZ

The Tree Protection Zone TPZ is the principal means of protecting trees when working in the vicinity of trees. The TPZ is a combination of the root area and crown area requiring protection and must be kept free from construction disturbance so that the tree remains viable.

TPZ = DBH x 12

Where:

DBH = trunk diameter measured at 1.4m above ground level.

A TPZ should not be less than 2m nor greater than 15m, except where crown protection is required.

4.1 Procedures for Works in the Vicinity of Trees

The procedure for working in the vicinity of trees as follows:

1. Determine what trees are to be retained on site and if any trees are **'significant trees'**
2. Determine if there is to be any works within a retained **tree's** TPZ
3. Obtain **arborist's** advice if there is to be any excavation, fill or tree pruning works within the TPZ of trees to be retained
4. Undertake all works within the TPZ in accord with **arborist's** advice.

Branches Obstructing Works

Pruning branches incorrectly or breaking them off often results in limbs becoming structurally dangerous and decayed, thereby creating public liability concerns. All work sites should be inspected for possible tree or branch obstructions well before commencing work to identify any problem sites or trees. Pruning to remove obstructions should be done in accordance with the current Australian Standard for the Pruning of Amenity Trees – AS 4373 1996/2007

Council's Works department, are responsible for the maintenance of trees within most streets, parklands and roadsides. If branches from Council trees are likely to cause an obstruction to your works they should be contacted (in advance) through Customer Services on telephone 03 5593 7100 to arrange for any necessary pruning.

Appendix E

Corangamite Shire - Significant Trees (sample criteria for selection)

Category	Title	Description	Types
1.	Horticultural Value	Any tree that is of outstanding horticultural value and could be an important source of propagating stock, including specimens that are particularly resistant to disease or	Tolerance selection (pest & diseases). Propagating potential. Scientific value.
2.	Location or Context	Any tree that occurs in a unique location or context and so provides a major contribution to the landscape, including remnant vegetation, important landmarks and trees that form part of an historic garden, park, precinct or	Historic garden or park. Historic cemetery. Important landmark. Remnant native vegetation. End of natural range. Contribution to landscape. Historic planting style.
3.	Rare or Localised	Any tree of a species or variety that is rare or of very localised distribution.	Only known species. Rare species. End of natural range. Disjunct community.
4.	Particularly Old	Any tree that is particularly old or venerable.	Old specimen.
5.	Outstanding Size	Any tree outstanding for its large height, trunk circumference or canopy spread.	Height. Circumference. Canopy spread.
6.	Aesthetic Value	Any tree of outstanding aesthetic significance or unusual shape or	
7.	Historical/cultural Value	Any tree commemorating a particular occasion, including plantings by notable people, or having associations with an important event in local history, or having a generational history of commemoration.	Cultural group. Public welfare. WW1/WW2. British or other royalty. Visiting dignitary. Australian public figure. Victorian public figure. Local public figure. Group or family tree/s.
8.	Aboriginal Content (Traditional Owners)	Any tree that has a recognised association with historical aboriginal activities, including scar trees.	Scarred tree. Corroboree tree.
9.	Outstanding Example of	Any tree that is an outstanding example of its species.	Botanically
10.	Outstanding Habitat Value	Any tree that has outstanding value as habitat for indigenous wildlife, including providing breeding foraging or roosting habitat, or forming part of a wildlife corridor.	Breeding habitat. Foraging habitat. Wildlife corridor.

* Adapted from National Trust of Australia (Victoria) "Significant Tree Register" – criteria.

Corangamite Shire - Significant Trees (Sample Nomination Form)

NAME of Tree / Trees

Botanical Name:

Common Name:

Other Names:

Is the Tree / Trees: *Natural or *Cultivated

LOCATION of Tree / Trees

Where is the tree/s located: *Private Property *Public Property *Roadside

Name & Address of property:

Township / Suburb:

OWNERS of Land

Name:

Postal Address:

AGE of Tree / Trees

Estimated Age:

Date Planted:

Planted by whom?

MEASUREMENT of Tree / Trees

Individual Tree:

Height:

Trunk Circumference at 1mtr:

Canopy Spread:

Group of Trees:

Average Height:

Area:

Number in Group:

CONDITION of Tree / Trees

Current State of health: *Good *Poor *Damaged

Any Immediate Threat to the tree/s?

*Yes *No Please State:

CATEGORIES of SIGNIFICANCE - Please Circle:

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Details of Person Nominating Tree/s

Name:

Postal Address:

Telephone:

Email:

Corangamite Shire – List of Significant Trees

National Trust of Australia (Vic) Register of Significant Trees

OWNER: Corangamite Shire Council

FILE NO	BOTANICAL NAME	COMMON NAME	NO.	LOCATION	SIGNIFICANCE
11449	Ulmus procera	English Elm	314	Finley Avenue, Camperdown (Median strip, Manifold Street/Princess Hwy)	Aesthetic Value
11450	Tilia x europaea	Linden or Common Lime	9	Camperdown Botanic Gardens	Location or Context: historic garden or park; Aesthetic Value
11451	Cassia crocea	African Holly	1	Camperdown Botanic Gardens near former gardener's residence	Location or Context: historic garden or park; Rare or Localised: 10-50 known specimens
11452	Quercus leucobryophora	Himalayan Oak	2	Camperdown Botanic Gardens (1) east of Burns Statue, (2) near picnic shelter	Location or Context: historic garden or park; Rare or Localised: 1-10 known specimens
11704	Quercus robur	English Oak	118	High Street, Terang, between Estcourt & Lyons Streets	Location or Context: contribution to landscape; Aesthetic Value
11705	Populus alba	White Poplar	135	Princes Highway, Terang	Aesthetic Value
11706	Populus alba 'Pyramidalis'	Upright White Poplar	135	Princes Highway, Terang	Aesthetic Value

National Trust of Australia (Vic) Register of Significant Trees

11707	<i>Populus nigra 'italica'</i>	Lombardy Poplar	135	Princes Highway, Terang		Aesthetic Value			
11708	<i>Populus deltoides</i>	Cottonwood	60	Thompson Street (Noorat Road), Terang		Aesthetic Value			
11709	<i>Platanus x acerifolia</i>	London Plane	60	Thompson Street (Noorat Road), Terang, between Princes Highway and railway line		Aesthetic Value			
11710	<i>Carya illinoensis</i>	Pecan	1	Terang Century Park, swimming pool enclosure		Location or Context: contribution to landscape; Rare or Localised; 1-10 known specimens			
11711	<i>Araucaria heterophylla</i>	Norfolk Island Pine	1	Terang Century Park, swimming pool enclosure		Outstanding Example of Species			
11712	<i>Alectryon excelsus</i>	Titoki	1	Terang Century Park, along footpath west of church residence		Rare or Localised: 10-50 known specimens			
11713	<i>Tilia x europaea</i>	Linden or Common Lime	2	Terang Century Park, 1 west of swimming pool, 2 south of caravan park		Location or Context: contribution to landscape; Outstanding Example of Species			
11714	<i>Quercus cemis</i>	Turkey Oak	1	Terang Century Park, behind church residence		Location or Context: contribution to landscape; Outstanding Size: height x circumference x spread			

National Trust of Australia (Vic) Register of Significant Trees

11715	Picea sitchensis	Sitka Spruce	1	Terang Century Park Golf Course at end of first hole	Outstanding Size: height x circumference x spread; Outstanding Example of Species
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Appendix F: Corangamite Shire – Tree Policy Pro-formas

Front Cover



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

ROAD RESERVE TREE ISSUES & PRO-FORMA DOCUMENTS

Team Leader Parks and Gardens

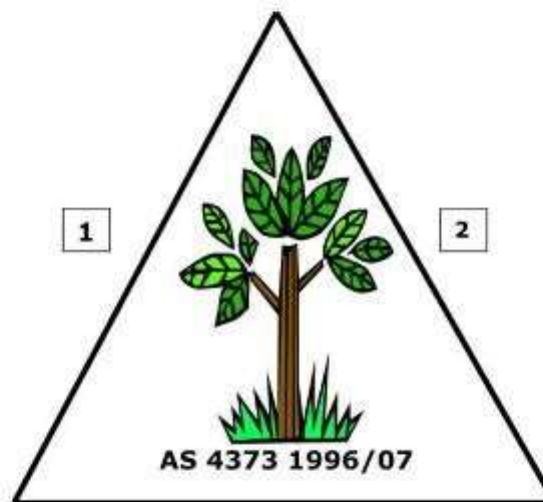
Appendix F: Corangamite Shire – Tree Policy Pro-forma

Tree Maintenance Philosophy



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

A Tree Maintenance Philosophy: (3 good reasons why trees should be managed properly)



"The Australian Standard for the Pruning of Amenity Trees - AS 4373 1996/2007"

3

- **Achieve Set-Backs** – To comply with legal responsibilities.
- **Extend Maintenance Periods** – For Cost Effectiveness & Economy.
- **Promote the Asset** – Because trees are important for many reasons.

Appendix F: Corangamite Shire – Tree Policy Pro-forma Tree Inspection Form



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

TREE INSPECTION

◆ DATE OF INSPECTION:

◆ LOCATION:

Township:

Address:

◆ POSITION:

<input type="checkbox"/> Road Reserve	<input type="checkbox"/> Nature Strip	<input type="checkbox"/> Median
<input type="checkbox"/> Park	<input type="checkbox"/> Avenue	<input type="checkbox"/> Other

Position / Comments /
Sketch:

◆ PLANT SPECIES:

Common name:

Botanical name:

STATUS:

Significan

Non-

◆ HEIGHT OF TREE:

◆ SERVICES:

<input type="checkbox"/> Overhead mains Elec.	<input type="checkbox"/> HV	<input type="checkbox"/> LV
<input type="checkbox"/> Service Wire	<input type="checkbox"/> Other	

◆ CONDITION: (Circle)

*Good

*Fair

*Poor

*Hazardous

◆ MAINTENANCE:

<input type="checkbox"/> No Action	<input type="checkbox"/> Wire Clear	<input type="checkbox"/> Under Prune
<input type="checkbox"/> Crown Reduction	<input type="checkbox"/> Limb Reduction	<input type="checkbox"/> Crown Thinning
<input type="checkbox"/> Removal	<input type="checkbox"/> Replacement	<input type="checkbox"/> Stumps
<input type="checkbox"/> Dead Wood Removal	<input type="checkbox"/> Other & Comment here:	

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Tree Pruning – Statutory Distances – Sample Letter



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

RE: Pruning of Trees – Statutory Distances

Dear Sir/Madam

I wish to take this opportunity to inform you of the commencement of tree pruning in your area. As part of our ongoing Street Maintenance Program, the Shires trees growing in the “road reserve” are to be cleared for the electrical wires, services wires and streetlights.

Approximate clearances that are attempted:

- ◆ Service Wires (up to fence line) - 0.6 metre clearance
- ◆ Main Wires:
 - Low voltage - 1.0 metre clearance
 - High voltage - 2.0 metre clearance

NB. Electricity supply may be interrupted during this time with at least 48 hours notice given to residents by ‘SPAusNet’. In this program also, all street trees will be under-pruned to achieve the following approximate heights, for pedestrians and road users:

- Over Footpaths and Front Gardens - 3.0 metres
- Over Driveway - 3.0 metres
- Over Roads - 4.3 metres
- Over Nature-strips - 3.0 metres

Some work may be required inside the tree canopy to remove Mistletoe and dead or broken branches. The Shires ongoing commitment to a high standard of quality tree maintenance will be ensured and all attempts will be made to retain the shape and character of the trees and streetscape in general.

Pruning will commence approximately 7 days after receiving this letter.

Yours faithfully:

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Street Tree Removal – Sample Letter



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

RE: Street Tree Removal

Date:

Dear Sir / Madam

I wish to take this opportunity to inform you of the intended removal of a Council owned tree presently situated in the road reserve outside:

As a result of Councils ongoing tree maintenance inspections, this tree (identified by a paint spot on the trunk) has been recommended for removal as soon as possible for the following reason(s):

- **Inappropriately Placed** _____
- **Diseased** _____
- **Structurally Unstable** _____
- **Sight Distances** _____
- **Other** _____

Given the attached Tree Planting Guidelines, a replacement tree: **Can \ Cannot** be planted.

Replacement will occur in _____

The tree species selected will be. _____

Should you require any further information regarding this matter, please do not hesitate to contact me on the Telephone: _____ within
10 working days.

Yours faithfully:

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Guidelines for Street Tree Planting



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

GUIDELINES FOR STREET TREE PLANTING

Location to be determined by distance and existing features restrictions

Distance apart:

Trees should be normally located as per the following criteria:

- One tree per property unless other circumstances exist: eg: remnant indigenous vegetation exists to the road reserve or as may be defined in the Streetscape strategy.
- A common sense approach should be adopted.

Existing features:

Trees shall be located as per the following criteria:

- Minimum of 2.5 metres from driveways.
- Minimum of 3.0 metres from electricity poles and lines. Low growing species with a mature height less than 3m can be planted within 7 m of the lines. For trees outside the 7m zone, plant them at such a distance so that, if they fall, they will not fall on the lines or poles. For example, a 10m tall tree should be planted at least 13m from the lines. As you approach mid-span (the mid-point of the line between 2 poles) gradually increase the distances between powerline and any tree by an extra 3m.
- Minimum of 10.0 metres from corner of property boundary at intersections.
- Minimum of 2.0 metres from hydrants.
- Minimum of 3.0 metres from service wires.
- Trees are not to be located on property boundaries or over incoming electrical,

gas and water services.

- Preferred location is in the centre of the block.

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Street Tree Planting Request



Corangamite Shire Council
 PO Box 84, Camperdown,
 VIC, 3620
 Phone: (03) 5593 7100
 Fax: (03) 5593 2695
 Email: shire@corangamite.vic.gov.au

STREET TREE PLANTING REQUEST

ADDRESS: _____

MAP REF: _____

AREA: _____

DATE: _____

SOURCE: Resident
 Replaceme
 nt
 Other _____

SITE DETAILS

RESIDENT NAME:

ADDRESS:

TELEPHONE:

NEAREST INTERSECTING STREET:

CORNER BLOCK: YES / NO FRONTAGE:

PLANTING DETAILS

PLANTING SEASON:	DATE PLANTED
SPECIES:	NUMBER:
SPECIES:	NUMBER:
SPECIES:	NUMBER:

STOCKSIZE:
SUPPLIER:

WATERING LIST: YES / NO

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Tree Planting & Establishment Specifications



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

TREE PLANTING & ESTABLISHMENT SPECIFICATIONS – Streets & Parks

PLANTING

- Corangamite Shire Council will nominate/ approve all viable tree-planting sites.
- The Contractor/Staff is responsible for the preparation of planting areas, the planting of a specified quantity, size and approved quality plant species.
- All trees to be supplied shall be first approved by the Team Leader Parks and Gardens. The Contractor/Staff to provide a storage site for the plants.
- Tree planting in streets will be as in the Specimen / Feature Tree Planting Detail and Diagram or as directed by the Team Leader Parks and Gardens.

SPECIMEN / FEATURE TREE PLANTING DETAIL

All Trees

Crown growth shall be vigorous and well formed. Variation of crown bulk on opposite sides of any stem axis shall not exceed 10%.

Trees shall have straight trunks. Trees with co-dominant stems shall not be used. Tree stems shall have a good even taper.

No more than 5% of the soil volume shall fall away on lifting or gently shaking the unsupported root-ball or root system.

Trees shall have healthy, vigorous, well developed root systems and shall not be pot-bound, i.e. no coiling of the main structural roots, less than 10% coiling of the fibrous roots and the root system not being matted to the extent that it is retarding tree vigor. Trees shall be free of pests and disease.

All Street Trees

Unless otherwise specified by the Team Leader Parks and Gardens, all trees shall be a minimum two metres high (excluding root ball).

Excavation

The Contractor shall excavate the tree planting hole either naturally or mechanically ensuring no underground services are damaged. The hole shall be square and of the diameter no less than 2 times the diameter of the root-ball width and a depth of equal to the tree root ball. Sides of the hole, near the top, shall be tapered to better accommodate the horizontal growth pattern of the tree's root system. In poorly drained clay soils, the planting hole shall be 50mm shallower, so that the root ball is slightly above grade. Sides of the hole should be thoroughly scarified before the tree is planted to avoid glazing of the planting hole

Planting

If the root ball is contained, it shall be removed from the pot, spring ring or hessian wrap ensuring all ties, strings and bindings are removed from the root ball. Any girdling roots are to be teased out or cut to interrupt the pattern, upon placement into the planting hole.

The tree, when in the hole should be level with the natural ground level or in poorly drained sites up to 25mm above the natural ground level.

The tree shall be able to stand in a straight, vertical position without support. Any soil that has been placed under the root ball of the tree to position the tree at the right height shall be firmed to ensure that no sinkage occurs after the planting process has been completed.

Irrigation Tube (Street Trees only or as required by the Team Leader Parks and Gardens)

The Contractor shall place a 1.5 metre length of 100mm Agflow pipe, see planting detail, coiled around the root ball, with one end of the pipe protruding no more than 50mm above the soil level on the road side of the tree hole. Ag-flow pipe dimensions:

- | | | |
|------------------|-------------------------------------|-----------------------|
| * Advanced Trees | * Root-ball diameter exceeds 500mm | * 100mm diameter pipe |
| * Street Trees | * Root-ball diameter less than 500m | * 75mm diameter pipe |

Backfilling

The planting hole shall be backfilled with indigenous soil removed from the tree planting hole. Backfill is not to be incorporated with any other materials such as sawdust, bark, potting-mix or similar. If backfill other than indigenous soil is required, the soil texture shall be consistent with that of the indigenous soil.

Where excavated soil is heavily compacted, clods shall be broken up to approximately a 25mm maximum diameter prior to backfilling. The backfill shall be lightly firmed to eliminate any voids or air pockets and to ensure close contact with the tree's root mass and soil.

Stacking And Tying

The Contractor shall supply and install two (2) hardwood tree stakes. These stakes shall be positioned either side of the tree so that they are parallel with the side of the road - street trees only. The stakes shall be driven into the soil at the side of the root ball and not driven into the root ball mass. A tree tie of black plastic or rubber material, no less than 50 mm diameter will be stapled or nailed with galvanised clouts to the stake and wrapped around the trunk to allow sufficient freedom of movement (100mm) after staking. Guy-wires are not acceptable.

Mulching

Mulch, approved by the Supervisor shall be spread by the Contractor around the entire area both inside and outside the boundary of the planting hole to a minimum compacted depth of between 75mm and a maximum compacted depth of approximately 100mm.

Mulch must not have contact with the trunk of the tree.

Watering

The Contractor shall water all newly planted trees within 24 hours of planting taking place and there-after as instructed by agreement.

Formative Pruning

The Contractor shall prune the tree immediately after planting in order to remove any broken or damaged branches or unwanted lateral growth or twin leaders within the crown.

Site Clean-Up

The site shall be left in a clean, tidy manner, safe for pedestrians and road users. All debris, soil, rubble etc. is to be removed from site and all paved areas, kerbs, footpaths and road swept clean of clay and soil.

Establishment

The tree maintenance program should encompass the following activities to enable trees to become established with good structure:

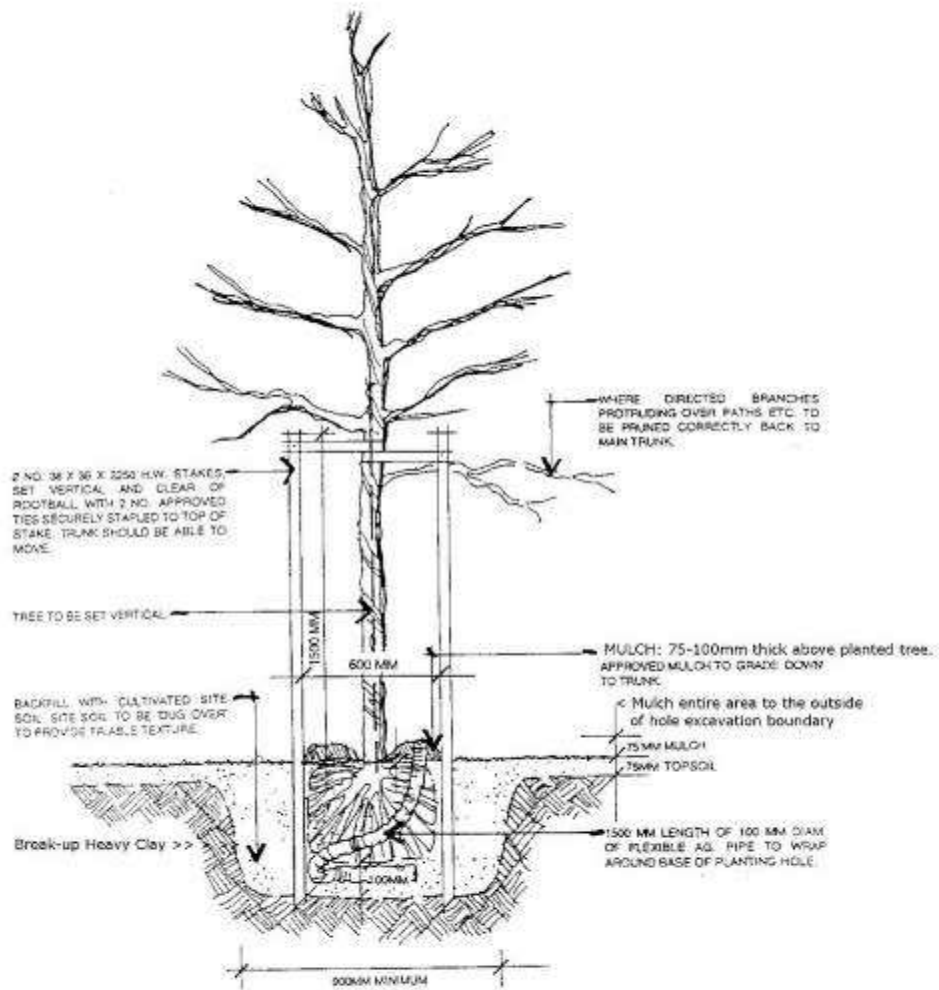
- Watering for first 5 years, especially years 1-3. Water trees in November-April period
- Top-up mulch to 100mm thickness. For 1.0-1.5m radius trees mulch to 30cm of trunk
- Check stakes
- Weed control
- Formative prune – branch structure and clean trunk to 1.7m high above ground level.

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Advanced Tree Details



Corangamite Shire Council
 PO Box 84, Camperdown,
 VIC, 3620
 Phone: (03) 5593 7100
 Fax: (03) 5593 2695
 Email: shire@corangamite.vic.gov.au



Root-Ball exceeds 500mm diameter

Advanced Tree Details

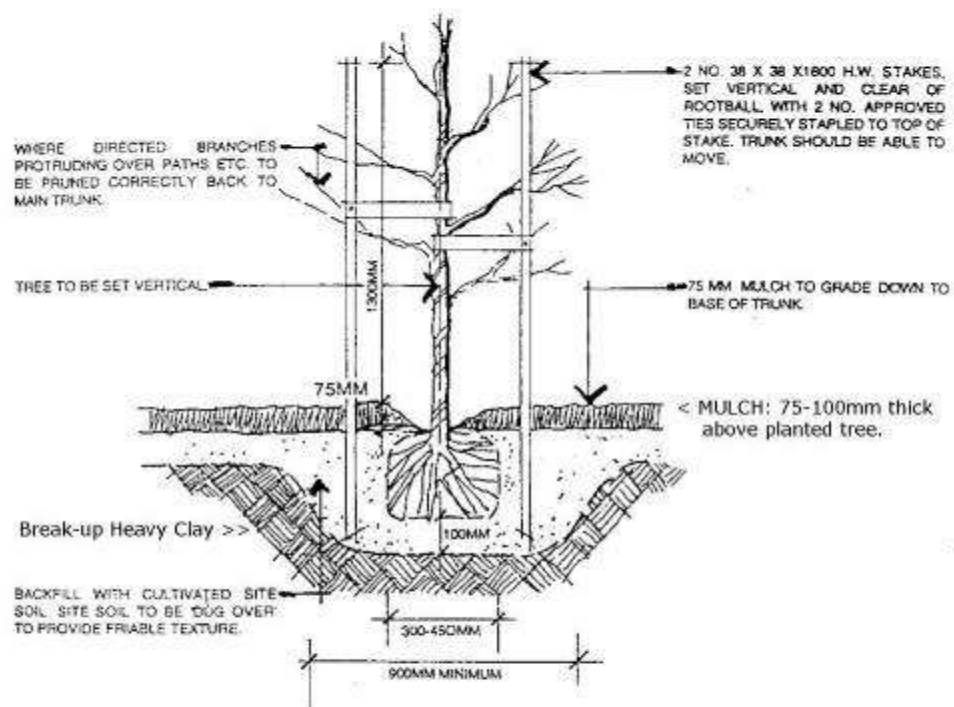
Indigo Shire: Draft Tree Management Plan – June 2009

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Semi-Advanced Tree Details



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au



Root-Ball is less-than 500mm diameter
Semi Advanced Tree Details

Indigo Shire: Draft Tree Management Plan – June 2009

Appendix F: Corangamite Shire – Tree Policy Pro-forma

Crossover (drive-way) Applications – Impact on Trees



Corangamite Shire Council
PO Box 84, Camperdown,
VIC, 3620
Phone: (03) 5593 7100
Fax: (03) 5593 2695
Email: shire@corangamite.vic.gov.au

Crossover (drive-way) Applications – Impact on Trees

A proposed course of action to be taken to ensure that conflict does not occur between the installation of a crossover (drive-way) and street trees.

Prior to the issue of any permit it should be determined if that there is no street tree within 2.5 metres of any proposed crossing.

Request for Council Inspection of Tree: In event of there being any doubt as to the effect upon any tree, arrangements must be made for the Team Leader Parks and Gardens to inspect the location and provide a ruling in accordance with the Tree Management Plan.

Minimum distances required:

The minimum distance recommended by the Parks and Gardens Department is 2.5 metres from the trunk of any tree. If a tree has a diameter at breast height (DBH) greater than 300 millimetres then an inspection by the Operations department is required.

The inspection, where necessary, is to ascertain the amount of protection required around each tree; the larger the size and foliage density the greater the area the tree requires.

Each case varies according to species, aspect, site and circumstances. Works Supervisor will determine this based on: Appendix C: Corangamite Shire – Tree Removal Procedure.
Appendix D: Works in the Vicinity of Trees – Guidelines and Procedure
Appendix E: Corangamite Shire – Significant Trees (criteria for selection)

The tree is to be assessed for removal by the Team Leader Parks and Gardens in consultation with the environment department and is either recommended or not recommended for removal dependent on the following Criteria for Tree Removal:

Criteria for Tree Removal:

- The tree is dead, dying, diseased, hazardous.
- The tree is not significant or is designated a weed specie.
- The tree is not consistent with the uniformity or integrity of the streetscape.
- The tree is responsible for damage occurring to Council, Public or Private Property and there appears to be no realistic options for retaining the amenity.
- That there is no viable location to facilitate the construction of the crossing.