LANDSCAPE PLAN GUIDE
FOR DEVELOPMENTS IN CAMPASPE SHIRE COUNCIL CITY OF GREATER SHEPPARTON AND MOIRA SHIRE COUNCIL

spiire

GOULBURN BROKEN CATCHMENT MANAGEMENT AUTHORITY

moira SHIRE

CAMPASPE

GREATER SHEPPARTON

FINAL

Inspiiring people and places

This Landscape Plan Guide was prepared by Spiire Australia

Landscape Plan Guide

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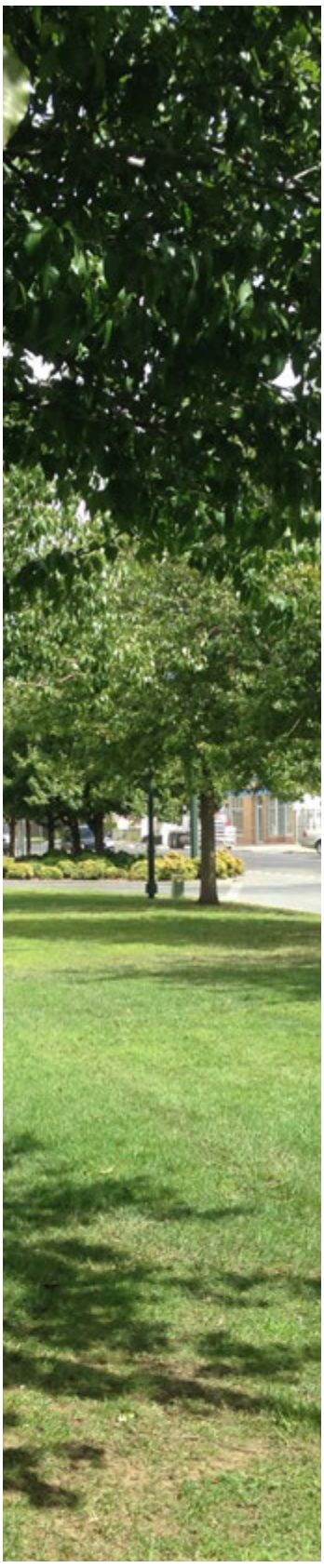

EXECUTIVE SUMMARY

On behalf of Greater Shepparton City Council, Moria Shire Council, Campaspe Shire Council and the Goulburn Broken Catchment Management Authority, welcome to the Landscape Plan Guide for residential, rural, commercial and industrial developments in the Local Government Areas.

This guide has been prepared in partnership by the above Councils and Catchment Management Authority to develop consistent standards for the preparation of landscape plans, implementation of landscape works and on going maintenance for new developments.

The purpose of the Landscape Plan Guide is to ensure Councils have appropriate consideration of and input into landscape developments within the Local Government Areas.

The Guide provides an outline for residential, rural, commercial and industrial developments Approvals Process and Requirements, Landscape Design Considerations, Landscape Plan requirements, general Materials and Techniques and Plant Species required in landscape developments.

The use of this Guide and subsequent approvals and implementation of approved landscape developments will ensure sustainable landscapes that contribute positively to our local environments.

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Moira Shire	*Campaspe Shire Council*	*Greater Shepparton City Council*	*Goulburn Broken Catchment Management Authority*
Chief Executive Officer	*Chief Executive Officer*	*Chief Executive Officer*	*Chief Executive Officer*

SECTION 1
INTRODUCTION

1. INTRODUCTION

This Landscape Plan Guide applies to residential, rural, commercial and industrial developments in the City of Greater Shepparton, Moira Shire and the Shire of Campaspe.

The landscape settings of these municipalities has a unique set of diverse environmental and climatic conditions. These conditions require appropriate landscape design responses in the design and construction of new developments.

The preparation of this guide has been a collaborative process facilitated through the Goulburn Broken Catchment Management Authority (GBCMA) partnerships with each of the Councils working to improve and protect the Catchment's land, water and biodiversity.

This Landscape Plan Guide establishes common requirements for sustainable and appropriate landscape developments across the municipalities. The Guide will also assist developers and Councils in landscape plan requirements that meet Council expectations.

It is recommended that this Guide become a reference document in each of the Council's Planning Schemes.

Extensive planting lists are provided within this Guide to encourage the use of native plants suited to the conditions of the municipalities. A variety of native plants are very suitable for use in gardens and open spaces. The species lists also outline a selection of indigenous plants found in the region. Indigenous plants are those that occur naturally in the local area. The specifying of native plants aims to develop an appreciation and understanding of natural biodiversity in the region and how they can be used within developments.

It is recommended that this Landscape Plan Guide is made available to anyone considering landscape developments, particularly developers and planning permit applicants early in the planning process to enable understanding of landscape plan requirements that are in line with the agreed standard across the Campase, Greater Shepparton and Moira municipalities.

2. PURPOSE OF THE LANDSCAPE GUIDE

All new developments are required to submit a landscape plan for Council approval as part of a planning permit application or to meet Conditions of a planning permit.

This guide is a resource that:

- Provides the Greater Shepparton City Council, Campaspe Shire Council and Moira Shire Council with the appropriate consideration of and input into landscape developments.
- Establishes a clear and concise framework for the preparation of landscape plans.
- Provides a clear process for the approval of landscape works both by external parties and Council.
- Assists planning permit applicants and also applicants who have received a permit to efficiently and effectively submit the required characteristics of a landscape plan.
- Ensures the landscape is considered as part of engineering approvals and is in line with the Infrastructure Design Manual (IDM).
- Ensures applications address numerous aspects of landscape requirements that are relevant to the development.
- Ensures the visual and environmental quality of the landscape and neighbourhood character is not adversely affected by inappropriate landscaping.
- Assists applicants prepare informed and sustainable landscape designs.
- Outlines key landscape design considerations in order to achieve appropriate and quality landscape outcomes for new developments.
- Provides a comprehensive list of plant species which are appropriate to the environmental and climatic conditions of the municipalities.
- Acknowledges the use of and benefits from planting indigenous species, including:
  - Adaptation to the local climate, soil type and tolerance of drought and frost.
  - Attract native fauna to the garden by providing a source of food and shelter.
  - Local plants do not ‘escape’ from gardens to become environmental weeds.
  - Require less water and fertiliser than many exotic species. Reducing water and fertiliser application reduces salinity and limits the amount of nutrients entering natural waterways.
  - Contribute to wildlife corridors that enable wildlife to move from one forest area to another.
  - By planting native plants in your garden you will assist in the preservation of the natural landscape and enhance natural biodiversity.
- Outlines the maintenance requirements and handover obligations for newly constructed landscape works.
- Identifies other Council documents relevant to the design and development of landscape.

3. GENERAL LANDSCAPE DESIGN CONSIDERATIONS

The following design considerations are to be addressed in any landscape proposal.

Landscape Character

- Promote designed landscapes as part of a fully integrated approach to site development within residential, commercial and industrial areas.
- Retain and protect quality existing vegetation, particularly large and medium trees, to conserve significant natural features of the site and provide habitat. An arborist assessment may be required to confirm suitability for tree retention.
- Landscape proposals shall respond to existing site conditions, local character and ensure that the landscape outcomes create and enhance community environments.
- Ensure the landscape adequately complements the proposed built forms and minimises the impacts of scale, mass and bulk of the development on the existing area and surrounding streetscapes, view lines and neighbourhood amenity.
- Promote the use of native and indigenous plant materials that are suitable to and reflect the local character.
- Enhance and define areas and frame views from and into the landscape site.
- Ensure the landscape proposal meets current and future use requirements.
- Encourage landscape that can be effectively maintained to a high standard for the life of the development.

Environmental Sustainability

- Ensure quality, sustainable landscapes that make a positive contribution to the liveability of communities.
- Promote the use of and benefits from planting indigenous species, including:
  - Adaptation to the local climate, soil type and tolerance of drought and frost.
  - Attract native fauna to the garden by providing a source of food and shelter.
  - Requirements for less water and fertiliser than many exotic species. Reducing water and fertiliser application limits the amount of nutrients entering natural waterways.
  - Contribute to wildlife corridors that enable wildlife to move from one forest area to another.
  - Assisting in the preservation of the natural landscape and enhance natural biodiversity.
  - Reducing environmental weeds in the landscape.
- Incorporate best practice Water Sensitive Urban Design.
- Use appropriate species that enhance biodiversity and minimise pests and disease, such as fruit fly, exotic birds and human health.
- Protect and enhance native vegetation, wetlands and waterways.

4. LANDSCAPE PLAN APPROVALS PROCESS

Landscape proposals are subject to a Council approval process prior to any construction being undertaken. This applies to external private developments and internal Council landscape projects.

Council requires that Landscape plans are required as part of the Planning Permit application or through secondary consent as part of Conditions on the Planning Permit.

The type of the development proposal will determine whether a simple or complex approvals process will be undertaken. A pre-application discussion with all relevant Council departments will assist in the determination of the approvals and approvals process required. For example a simple landscape proposal may be limited to planting in terms of species selection, distribution and layout, while complex landscape proposal may include integrated landscape and engineering outcomes. Relevant Council departments to be consulted may include sustainability and environment, engineering, assets and parks teams.

Landscape plans for complex landscape proposals must be prepared by a Council accredited landscape architect or landscape consultant. Landscape plans for small or less complex developments may be prepared by landscape designers or horticulturists. Mid range to larger complex developments which require landscape plans must be prepared by registered landscape architects.

The following flow charts outline the general landscape plan approvals processes that are undertaken by the Campaspe Shire Council, Moira Shire and Greater Shepparton City Council.

4.1 Campaspe Shire Council approvals process

Pre-Application Discussion with Council

1. Landscape Plans are submitted to the Council Planning department.
2. Submitted plan is allocated to a Planner for assessment.
3. The Planner refers the plan to the Council's Parks and Gardens department, Recreation manager and the Engineering department for each to review.
4. Once they have reviewed the plan, the Council departments and officers provide comments back to planner.

These steps may only apply if the landscape plan includes drainage components or landscaping works that will ultimately become a Council asset (e.g. a residential subdivision and public open space landscape plan).

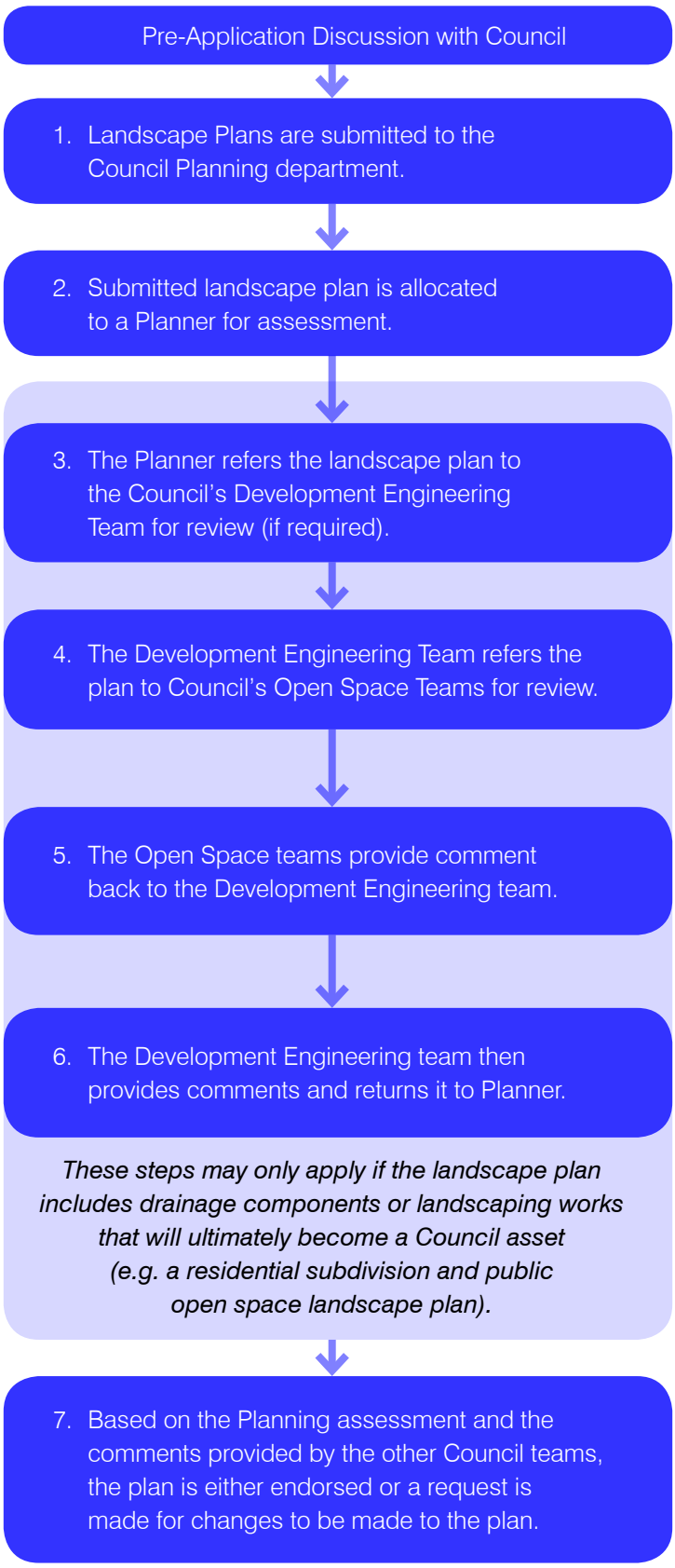
5. Based on the Planning assessment and the comments provided by the Council departments/ officers, the plan is either endorsed or a request is made for changes to be made to the plan.

4.2 Moira Shire Council approvals process

Pre-Application Discussion with Council

1. Landscape Plans are submitted to the Council Planning department.
2. Submitted plan is allocated to a Planner for assessment.
3. The Planner refers the plan to the relevant internal Council officers (Natural Resources/Construction and Assets/ Operations etc.) for review.
4. The relevant Council officers sign off on the plan or request further information
5. If further information is required the Planner will advise the Applicant and request that an amended plan be submitted. If no further changes are necessary the Planner will then endorse the plan.

4.3 Greater Shepparton City Council approvals process



SECTION 2
URBAN RESIDENTIAL DEVELOPMENTS

5. URBAN RESIDENTIAL DEVELOPMENTS

5.1 Design Considerations

Some factors to consider in the preparation of a landscape plan for urban residential developments are outlined below.

PRIVATE OPEN SPACE

- Streetscape frontage that enhances the street aesthetic through garden bed and tree planting, paving, grass areas, edging and so on.

STREETSCAPES – STREET TREES

"The right tree in the right location"

- Species variety to complement/create local character, ensure resilience and longevity, and provide habitat.
- Canopy cover – achieve maximum canopy cover that is appropriate to the site location. Full mature tree canopy size to be shown and as percentage of public land.
- Consistency – achieve consistency in themes/ character and regular planting intervals.
- Services – prioritise tree locations over services to achieve maximum canopy cover and regular planting intervals, while ensuring required clearances to existing and proposed services.
- Tree planting details – stakes and ties, tree planting cells, root barriers.
- Sight lines – maintain sight lines at driveways and cross streets.

STREETSCAPES – NATURE STRIPS

- Grassing – turf or seeding.
- Other treatments (subject to Council consent) such as permeable paving, granitic gravel, groundcover planting or mulch only.

STREETSCAPES – TRAFFIC ISLANDS / ROUNDABOUTS

- Surface finishes – planted garden beds, paved (continuous or unit hard paving, permeable paving, granitic gravel), or combination of planting and paving. Minimise large expanses of continuous hard paving.
- Planting – trees, garden beds, species selection appropriate for streetscapes.
- Safety – traffic and pedestrian safety, sight lines, safety of maintenance crews.
- Maintenance – ongoing maintenance obligations to minimise high maintenance.

PUBLIC OPEN SPACE

Parks and reserves, recreation precincts, waterways and wetlands, urban squares.

General

- Open areas and activity areas for a range of passive and active recreation opportunities suitable for local, neighbourhood or regional parks.
- Comply with Infrastructure Design Manual (IDM) Clause 24 Landscaping and Public Open Space.
- Comply with Federal Disability Discrimination Act 1992 (DDA).

Centre median planting

- Comply with Crime Prevention Through Environmental Design (CPTED) guidelines.
- Comply with Supportive Environments for Physical Activity (SEPA) guidelines, now also Active by Design and Healthy Design.
- Ensure general compliance with the Parks and Leisure Australia Open Space Planning and Design Guide.
- Integration of activity areas, play spaces and connecting pathways to ensure unified outcomes.
- Integration of high quality landscape outcomes with engineering infrastructure.
- Interface treatments – screen/buffer planting.
- Connectivity – pedestrian desire lines, pathway connections to adjacent path networks, road crossings.
- Surface treatments – paving (permeable, continuous or unit hard surface), grassing (turf, seeding, species, edging).
- Sustainability – durability and longevity of materials and finishes to reduce maintenance obligations, and the use of recyclable materials where possible
- Heritage – preservation and integration of heritage elements.
- Remnant vegetation – retention of existing high quality vegetation for amenity or habitat value.
- Public Art – purpose, scale, form, materials and compliance with relevant policies.
- Maintenance – layout, accessibility, on-going life cycle.

Tree Planting

- Species variety to complement/create local character, ensure appropriate scale, resilience and longevity, provide habitat for native fauna.
- Appropriate installation size and planting details.
- Structure – use tree planting to enhance landscape character and spatial arrangements.
- Canopy cover – achieve maximum canopy cover using appropriate species adjacent pathways, activity areas, play spaces and grassed areas.

Garden Beds

- Appropriate size and location for visual effect and ease of maintenance.
- Edge treatments.
- Soils and mulch requirements.
- Species selection for drought tolerance, suitability to site, habitat, purpose (screening, ornamental, personal safety). Encourage use of native/indigenous species for the biodiversity benefits they provide.
- Layout of species for variety, visual impact and cohesive themes.
- Irrigation.

Streetscape and roundabout planting

Play Spaces

- Passive surveillance from surrounding land uses.
- Provide shade through tree planting or approved shade structures.
- Provide a range of play opportunities for a variety of age groups including structured, unstructured and nature based play.
- Ensure compliance to relevant Australian Standards and Council Play Space Strategies.
- Ensure play equipment meets Australian Standards.
- Certification of play space design and installation.
- Surface finishes – organic soft fall, rubber soft fall (high impact areas).
- Edging treatments – materials and locations, considering natural elements as edge treatments.
- Natural play elements – logs, rocks, timber rounds, sand, water.
- Drainage and connections to stormwater.
- Ongoing management and maintenance.

Activity Areas

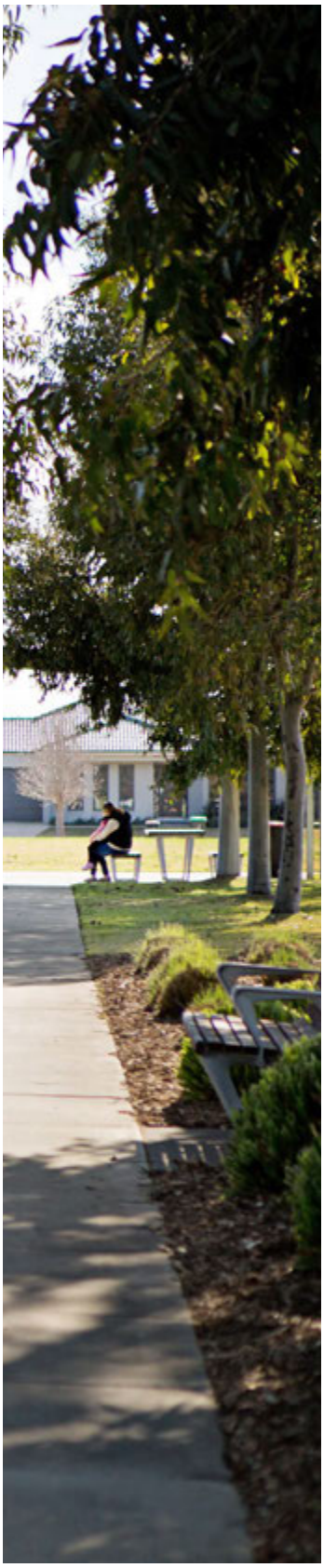
- Passive surveillance from surrounding land uses.
- Furniture and amenity elements – shelters, barbecues, seating, picnic settings, waste receptacles, drinking fountains and other furniture.
- Lighting – locations, fittings, energy saving materials.

Grass Areas

- Open grass areas for passive and active recreation.
- Mounding.
- Turf areas and seeding, using species appropriate for use.
- Soil preparation for appropriate use.
- Edge treatments and interfaces.
- Irrigation.
- Drainage.

Stormwater, Floodways and Wetlands

- Integration of high quality landscape outcomes with engineering requirements.
- Swales – locations, planting/grass treatments, crossing points.
- Infrastructure – locations and visual appeal of headwalls, pits, culverts and so on.
- Slopes, banks and batters – grades and treatments.
- Planting – species selections (local indigenous species for terrestrial and aquatic vegetation), establishment.
- Amenity – seating, visual and physical access.
- Maintenance obligations – accessibility, dewatering for system health.



Other

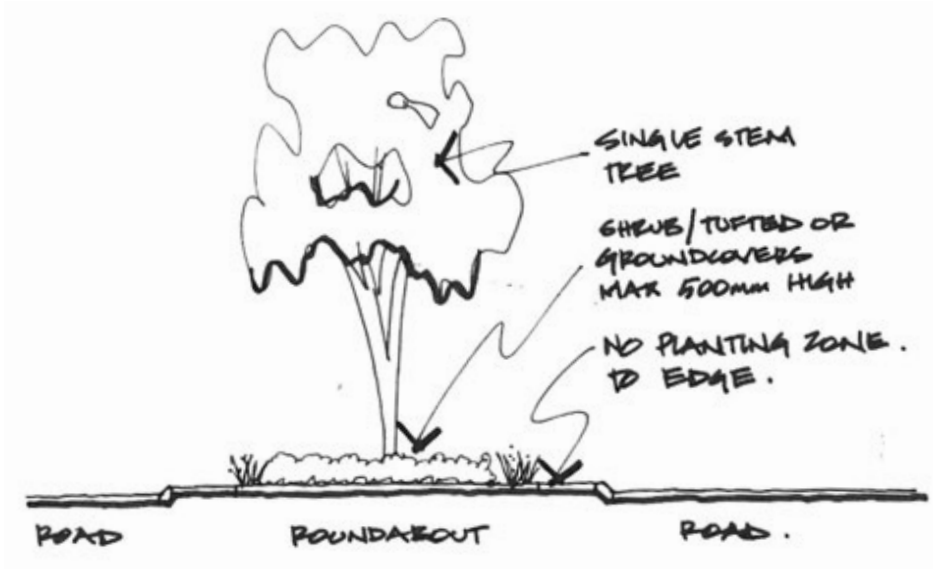
- Infrastructure – irrigation controllers/valve boxes, water supply, pit locations, substation locations.

MAINTENANCE

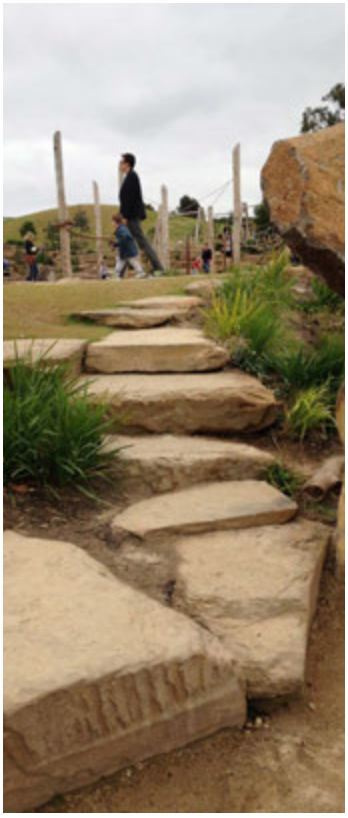
- Maintenance obligations that meet Council requirements for all elements of the landscape.

Refer to Section 11 Recommended Plant Lists and Section 15 Materials and Techniques for further information on plant species, design and specification of landscape works.

Good nature strip treatments



Roundabout with central planting sketch. Shrub and groundcover planting to be max. 500mm high.

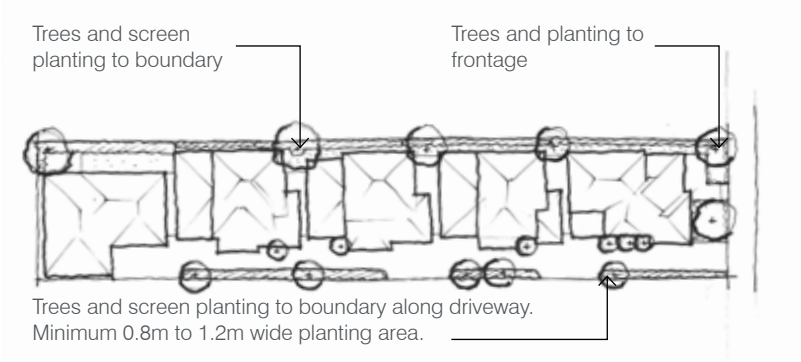


Natural materials in play spaces

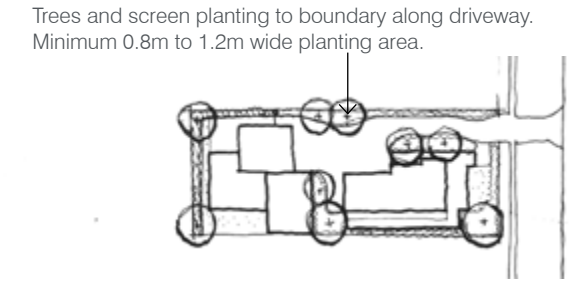
Natural materials in play spaces

MEDIUM DENSITY DEVELOPMENTS

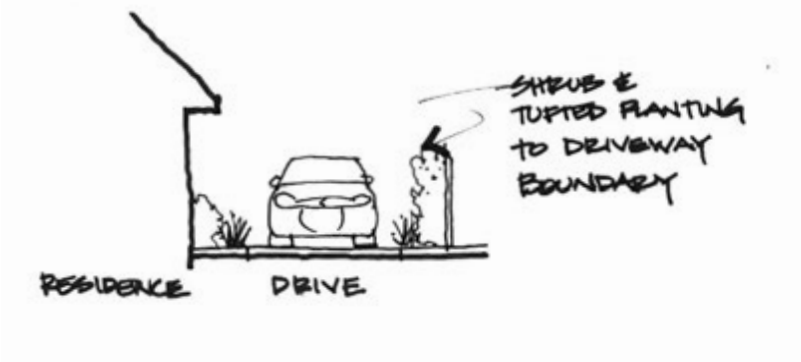
- Streetscape frontage (garden bed treatments, private realm and street tree planting, fencing, service locations).
- One medium to large tree to front yard.
- Boundary planting of trees and hedging/screening plants (along driveways, interfaces with adjoining land uses).
- Access (pedestrian paths, vehicle crossings/ driveways, resident/visitor parking areas).
- Private open space (front/rear courtyards including grass, garden beds, paving and tree planting, drainage).



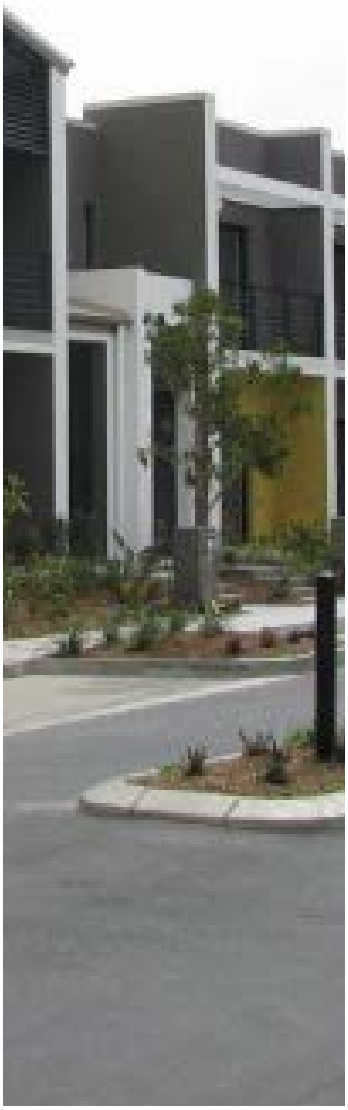
Sketch of medium density boundary planting



Sketch of medium density boundary planting



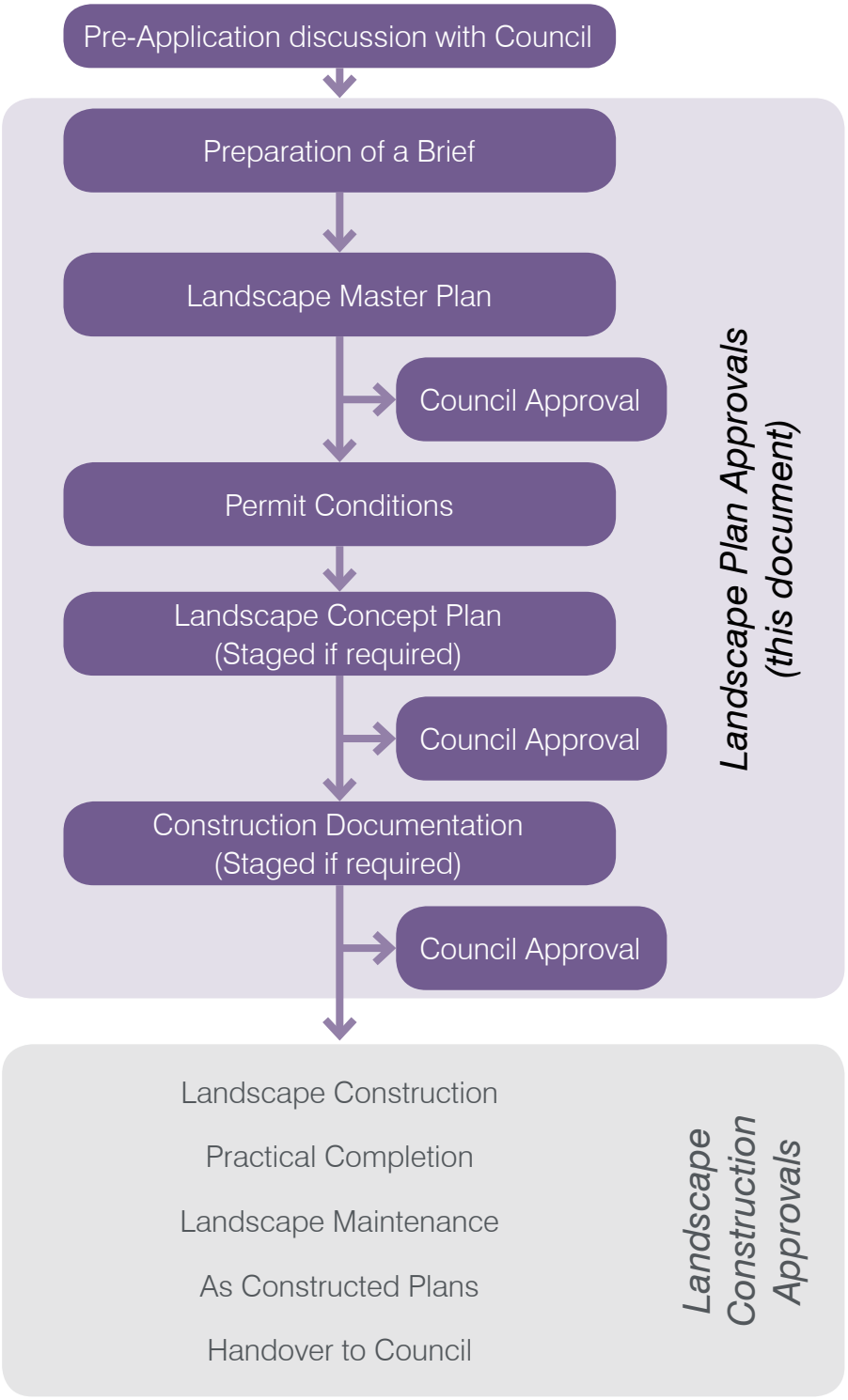
Sketch of medium density boundary planting along driveway



Medium density streetscape interface landscape treatments

5.2 Approvals Process

The following outlines the preferred approval process for complex landscape proposals, such as urban residential developments. These generally include landscapes (streets and open space) which will become Council assets. It is important that a thorough landscape design and installation process is undertaken to ensure high quality and integrated outcomes.



5.3 Landscape Plan Approvals process for landscape works that will become Council assets

In some cases, landscape works that will be handed over to Council for ongoing management and maintenance will generally follow the following process.

PREPARATION OF A BRIEF

Design requirements to be met in the proposed landscape works must be considered early in the application process. A Brief may be prepared by the applicant which outlines the following:

- Opportunities and constraints to be assessed and identified.
- Site Analysis.
- Any further investigation required.

Preparation of the Brief may also include a pre-application discussion between the applicant and Council to consider and formulate landscape design requirements. In discussion, Council should ensure that the applicant is aware of relevant policies and guidelines which will inform the landscape design.

LANDSCAPE MASTER PLAN

Landscape Master Plans are to be produced for relevant subject sites and included as part of a Planning Permit application. This may be a requirement of the Planning Scheme, or it may be 'required additional information'. The Landscape Master Plan shall address streetscape and open space landscape proposals.

Where appropriate the Landscape Master Plan is to be developed from the prepared Brief and/or discussions with Council.

Application Review

The Landscape Master Plan will be reviewed by appropriate Council officers. The Landscape Master Plan will be assessed against relevant State, regional and local planning legislation. It will also be reviewed against Council's Standards and Policies.

Council will be responsible for internal referrals to ensure adequate consultation.

External referrals

While it is expected that applicants ensure the Landscape Master Plan meets requirements of external authorities, Council is responsible for seeking comments for Landscape Master Plans to any relevant authorities for their review and approval.

These authorities may include for example, Department of Environment, Land, Water and Planning (DELWP), VicRoads, Catchment Management Authorities and Goulburn-Murray Water.

Request for further information

Council may request further information from the applicant during the approval process. This may include, for example, information on integration with engineering proposals such as water sensitive urban design or justification for removal of vegetation.

Road reserve walkway with buffer planting

Public Display (if required)

Public Consultation and/or Notification may be required as part of the application depending on the nature of the development. Council should advise the applicant of this requirement and arrange for display of the Landscape Master Plan and receipt of comments.

Amendments to the Landscape Master Plan may be required following Council consideration of community comment. Where this is the case, Council will provide this information to the applicant in writing and provide time frames within which the amendments will be accepted.

PERMIT CONDITIONS

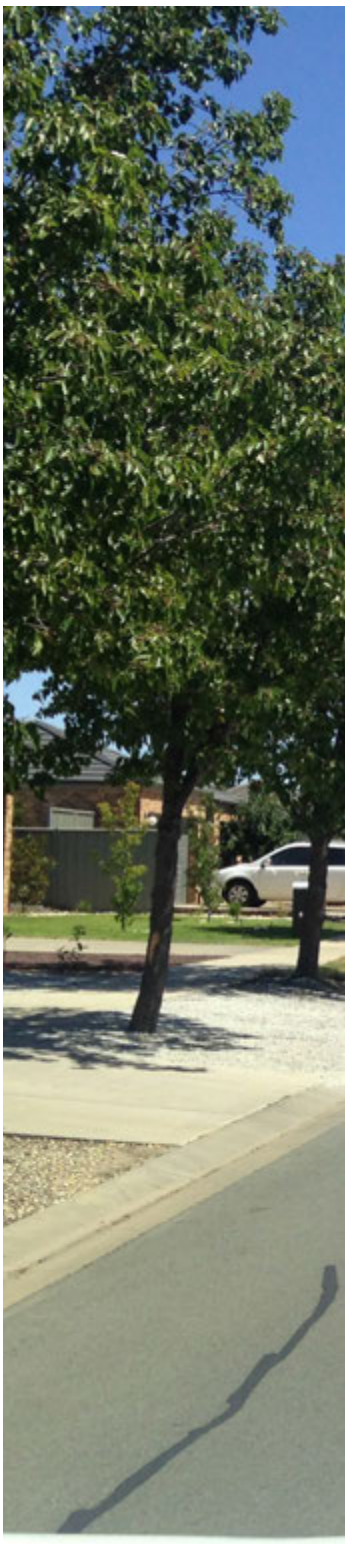
The approved Landscape Master Plan will be the basis of any Permit Condition requirements for landscape works.

A Condition for the requirement of landscape plans will be included in the Permit and will be similar to the following:

Before the use or developments starts, a landscape plan to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. The plan must be prepared in accordance with The Landscape Plan Guide. When approved, the plan will be endorsed and will then form part of the permit.

Permit Conditions may also detail requirements for:

- Landscape Concept Plans.
- Construction Documentation Plans.



Tree planting of appropriate scale

LANDSCAPE CONCEPT PLAN (STAGED IF REQUIRED)

Permit Conditions will normally require a Landscape Concept Plan to be submitted, developed from the approved Landscape Master Plan.

Separate Concept Plans may be prepared and submitted according to the staging of the development.

The Landscape Concept Plan must be submitted to Council and approved prior to the approval of engineering/architectural construction plans and/or plan of subdivision certification for any particular stage.

The Landscape Concept Plan will be assessed against the approved Landscape Master Plan and engineering/architectural construction plans. When approved, the Landscape Concept Plan will be the basis for Construction Documentation plans.

Reserve walkway with tree planting

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Permit Conditions will normally require Construction Documentation Plans to be submitted, developed from the approved Landscape Concept Plan.

Separate Construction Documentation Plans may be prepared and submitted according to the staging of the development.

Construction Documentation Plans are to be submitted to Council for approval prior to Council acceptance of any associated engineering/architectural works. Council will refer the plans to relevant internal departments. The plans will be assessed against the engineering construction plans to ensure integrated proposals.

Reserve shelter and seating with tree planting

5.4 Landscape Plan Requirements

The following describes Council's expectations relating to the range of landscape plans and construction works required by the design and approvals processes defined above.

The requirements for landscape plans will vary depending on the level of detail required by the landscape proposals, including the size and cost of the works.

Landscape plans must be prepared by a Council accredited landscape architect or landscape consultant. Landscape plans for small or less complex developments may be prepared by landscape designers or horticulturists. Mid range to larger complex developments landscape plans must be prepared by registered landscape architects (Registered member of the Australian Institute of Landscape Architects). Ideally, the landscape architect/designer shall be commissioned early in the design process to ensure that all landscape related issues are considered.

LANDSCAPE MASTER PLAN

A Landscape Master Plan is a review of the site that includes relevant landscape design and maintenance considerations sufficient to demonstrate an understanding of the proposed development and provide an adequate basis for the production of concept designs. Landscape Master Plans may be drawn and/or written.

Site Analysis

A site analysis plan shall be prepared as the first step in the master planning process and include such things as the following:

- Photographs of existing conditions and any key features.
- Existing conditions including landscape characteristics, topographical information, existing native and exotic vegetation, views to and from the site, micro-climate (such as wind and sun), overland flows and water courses.
- Pedestrian and vehicular access.
- Solar access, orientation and noise sources.
- Fences, boundaries and easements.
- Proximity of, connection and access to public open space.
- Surrounding neighbourhood character (built form and landscape character) such as residential areas, play areas and outdoor activities, buffer zones, screening, public and private areas, security, passive surveillance and landmark elements.
- Heritage acknowledgments.

Site Layout

The site layout should be based on the site analysis and be determined in conjunction with other professionals including engineers, planners and urban designers.

Planting

Planting design at the Landscape Master Plan stage should include the following:

- Layout of proposed planting, including indicative locations of proposed trees and areas of proposed garden bed planting.
- A recommended plant schedule for proposed trees, shrubs, tufted plants and groundcovers in accordance with the approved planting lists.
- Planting themes to ensure a cohesive landscape outcome.
- Protection and enhancement of existing vegetation which is to be retained.

Water Sensitive Urban Design

The Landscape Master Plan is to demonstrate the ways in which the proposed design integrates with engineering treats water including:

- Stormwater treatment and/or retention.
- Reuse of captured stormwater.
- Grey water systems.

Materials and Finishes

Materials and finishes are to be in line with Landscape Standards – Materials and Techniques as described in this document.

Community art

Inclusion of appropriate public art opportunities should be considered.

LANDSCAPE CONCEPT PLAN (STAGED IF REQUIRED)

The Landscape Concept Plan is a clearly resolved landscape design, traceable to the Landscape Master Plan and where relevant, based on defined engineering and architectural proposals. Landscape Concept Plans should be to scale and show proposed hard and soft materials to an extent appropriate to review, discussion and approval, but not in sufficient detail to enable construction.

A Landscape Concept Plan for each stage of development must be prepared according to the design and approval process. Plans may be prepared separately according to stages.

The Concept Plan must be drawn to scale.

The Landscape Concept Plan should show:

- Existing vegetation to be retained (a tree assessment and management plan may be required).
- Existing vegetation to be removed (a tree assessment may be required).
- The proposed quantity and location of landscape elements in all proposed open space and streetscape embellishments which comprise the landscape works. This includes elements such as tree planting, garden beds, pathways, seating, shelters, picnic facilities, boardwalks, signage, drinking fountains, rubbish receptacles, irrigation systems, playgrounds, artwork, retaining walls, protective fencing (temporary and permanent), vehicle control methods, wetlands, ornamental water bodies and so on.
- Areas to be managed and rehabilitated for conservation or offset planting purposes and the method by which these areas will be protected.

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Landscape Construction Documentation Plans are precise plans, schedules and specifications, clearly traceable to the Landscape Concept Plan and based on final engineering and architectural proposals. The plans are sufficient to control the construction of the landscape works and are appropriate for review, discussion and approval.

Construction Plans for each stage of development must be prepared according to the approval process. Plans may be prepared separately according to stages.

The construction plans are to be drawn to scale.

The following is to be included in the Construction Documentation plans and must be submitted to Council for approval prior to construction.

Existing Conditions

All existing site conditions and information including buildings, services, roads, footpaths and vegetation.

Streetscape planting with viewlines to park

Demolition

All existing site features that are to be removed as part of the landscape construction including removal of any vegetation.

Grading and Drainage

Proposed contours and finished levels of the works. This should include falls and drainage associated with the new landscape design.

Setout

The proposed layout of the landscape design with accurate descriptions and dimensions of the proposed elements sufficient for construction of the works. Existing and proposed utility services must be shown on the plans.

Materials & Finishes

The materials and finishes of all proposed hard & soft landscape treatments, including furniture types, any colours and or themes for the hard and soft landscape.

Planting

The type and location of the planting included in the works including botanical and common names of proposed plant species, mature height and installation size, location and quantity.

Tree canopy size to be shown on plans as full mature size and as a percentage of public land.

Irrigation

The location, type and performance of the proposed irrigation system. This may be prepared by the Contractor as a 'Design and Construct' irrigation system.

Elevation / Sections

The vertical and horizontal relationships of the design in the form of scaled elevations and or sections. The elevations and sections are to demonstrate how the works are to look and are to be drawn from relevant and key locations across the works.

Construction Details

Construction Details are a combination of plans, sections and elevations at varying scales (for example 1:10, 1:20, 1:50) which clearly describe the construction intent and requirements of the hard and soft landscape works.

Landscape Specifications (when required)

The Specification describes the requirements for construction and installation of the works, Completion, Maintenance and Handover obligations.

Streetscape planting with large deciduous trees

MAINTENANCE / ESTABLISHMENT PLAN

The Maintenance or Establishment Plan or Program may be required to be submitted to Council for approval with the Construction Documentation.

Any Maintenance Plan requirements will be provided by Council and may include the obligations and requirements for the maintenance of the hard and soft landscape works such as the following:

- Weeding & Rubbish Removal.
- Replacement Plants.
- Stakes & Ties.
- Grass.
- Pruning.
- Mulch.
- Fertiliser.
- Remnant Vegetation maintenance.

5.5 Landscape Plan Submissions

Landscape Plans shall be produced according to the following minimum standards.

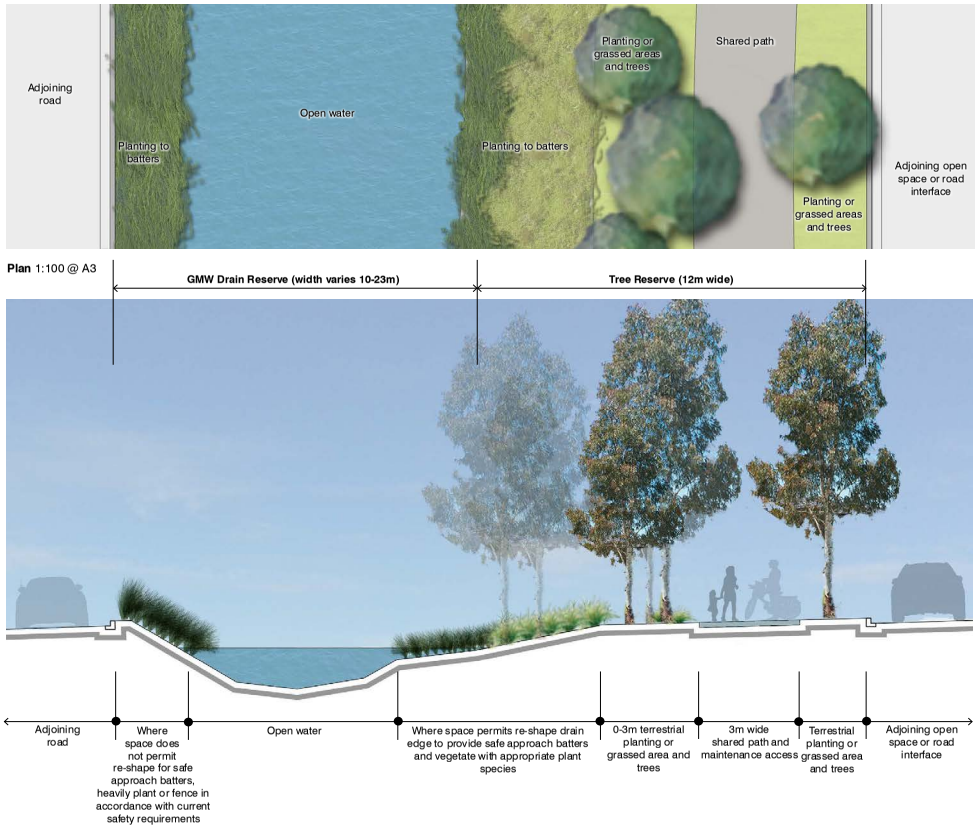
- Scale appropriate to the size of the site and nature of development to adequately describe the landscape proposal.
- Large sites may be scale 1:500 or 1:200 and smaller sites 1:100 or 1:50.
- Construction Details are to be generally 1:20 or 1:10.

PRESENTATION

- Landscape Master Plans and Landscape Concept Plans
  1 x coloured plan and 2 x black and white plans.
- Landscape Construction Documentation Plans
  3 x black and white plans
- Neatly printed, legible and supported by relevant documentation.
- Accurate location of existing and proposed site features.
- Include legend, titleblock, scale and scale bar, and north point.
- Include plant schedule of proposed trees, shrubs, grasses and groundcover species.

5.6 Landscape Plan Templates/Examples

Template example of a typical open space landscape plan integrating engineering and landscape



NORTH

SCALE 1:100@A3

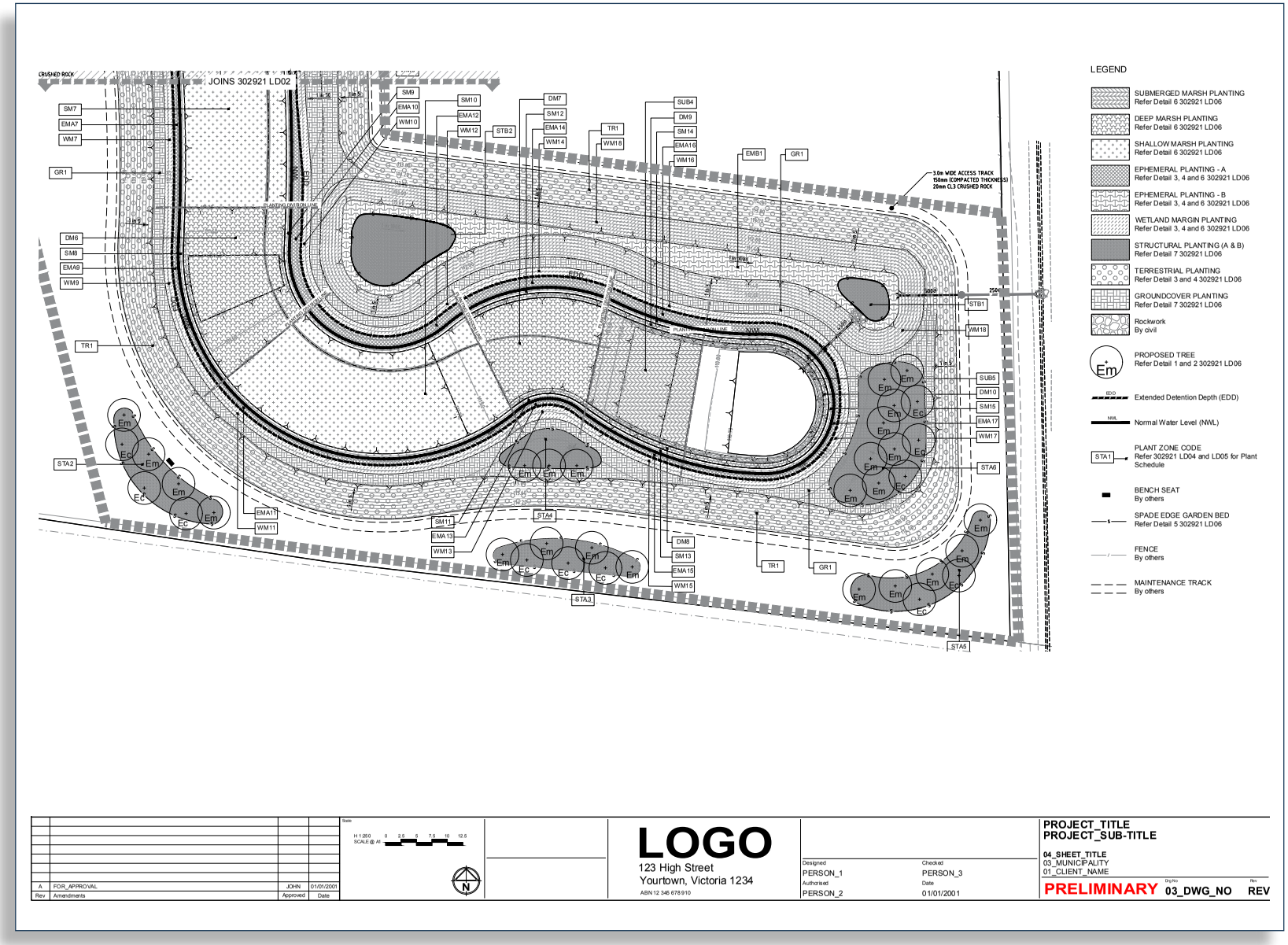
Drawing Number:	Revision	Date:	Sheet:	Drawn by:	Checked by:
123456 000	**01**	**01/01/2001**	**01 of 01**	**Person 1**	**Person 2**

PROJECT TITLE

PLAN TYPE | PROJECT LOCATION

LOGO

Template example of a typical landscape section integrating engineering and landscape



Template example of a part of a typical wetland planting plan

MASTER PLANT SCHEDULE		
Botanical Name	**Common Name**	**Qty**
Acacia acinacea	Gold-dust Wattle	1443
Acacia dealbata	Silver Wattle	94
Acacia implexa	Lightwood	309
Acacia paradoxa	Hedge wattle	825
Atriplex semibaccata	Creeping Slatbush	6712
Baumea articulata	Jointed Twig Rush	2256
Bolboschoenus caldwellii	Marsh Club Rush	2148
Brachyscome basaltica	Swamp Daisy	2263
Callistemon sieberi	River Bottlebrush	188
Calocephalus citreus	Lemon Beauty Heads	1640
Carex appressa	Tall Sedge	7894
Carex inversa	Knob Sedge	1547
Carex tereticaulis	Terete Culm-sedge	2160
Cassinia arcuata	Drooping cassinia	547
Chloris truncata	Windmill Grass	6031
Crassula helmsii	Swamp crassula	613
Cyperus exaltatus	Tall Flat-sedge	2148
Dianella revoluta	Black-anther Flax-lily	12084
Dillwynia cinerascens	Grey Parrot-pea	618
Einadia nutans	Nodding Saltbush	13846
Eleocharis acuta	Common Spike-rush	3374
Eleocharis sphacelata	Tall Spike-rush	2256
Enchylaena tomentosa	Ruby Saltbush	17680
Eucalyptus camaldulensis	Red Red Gum	15
Eucalyptus microcarpa	Grey Box	34
Isolepis inundata	Swamp Club-sedge	1840
Juncus amabilis	Hollow Rush	2148
Juncus flavidus	Gold Rush	613
Juncus semisolidus	Plains Rush	2148
Juncus usitatus	Pin Rush	1547
Leptospermum obovatum	River Teatree	188
Marsilea drummondii	Common Nardoo	1289
Mentha diemenica	Slender Mint	9899
Mimulus gracilis	Slender Monkey-flower	613
Myoporum parvifolium	Creeping boobialla	6712
Myriophyllum crispatum	Upright Water-milfoil	1289
Myriophyllum papillosum	Robust Water-milfoil	4404
Nymphoides crenata	Wavy Marshwort	3545
Ottelia availifolia	Swamp Lily	1289
Persicaria decipiens	Slender Knotweed	1902
Poa labillardieri	Large Tussock Grass	11918
Potamogeton tricarinatus	Floating Pondweed	4734
Schoenoplectus tabernaemontani	River Clubrush	2417
Themeda triandra	Kangaroo Grass	10984
Triglochin procerum	Water Ribbons	7043
	Total	165242

SUBMERGED MARSH (SUB) - plant size: tubestock (250cc)			Wetland Location	SUB1	SUB2	SUB3	SUB4	SUB5	Total No. of Plants
400 - 900 below NWL			Area m2	109	13	1127	1067	162	
BOTANICAL NAME	**COMMON NAME**	Species Density m2	% Distribution Species						
Potamogeton tricarinatus	Floating Pondweed	2	50%	109	13	1127	1067	162	2478
Triglochin procerum	Water Ribbons	2	50%	109	13	1127	1067	162	2478
Total Submerged Marsh			100%	218	26	2254	2134	324	4956

DEEP MARSH (DM) - plant size: tubestock (250cc)			Wetland Location	DM1	DM2	DM3	DM4	DM5	DM6	DM7	DM8	DM9	DM10	Total No. of Plants
200 - 400mm below NWL			Area m2	128	14	59	51	895	1457	1150	54	51	170	
BOTANICAL NAME	**COMMON NAME**	Species Density m2	% Distribution Species											
Baumea articulata	Jointed Twig Rush	4	14%	72	8	33	29	501	816	644	30	29	95	2256
Eleocharis sphacelata	Tall Spike-rush	4	14%	72	8	33	29	501	816	644	30	29	95	2256
Myriophyllum papillosum	Robust Water Milfoil	4	14%	72	8	33	29	501	816	644	30	29	95	2256
Nymphoides crenata	Wavy Marshwort	4	14%	72	8	33	29	501	816	644	30	29	95	2256
Potamogeton tricarinatus	Floating Pondweed	4	14%	72	8	33	29	501	816	644	30	29	95	2256
Schoenoplectus tabernaemontani	River Clubrush	4	15%	77	8	35	31	537	874	690	32	31	102	2417
Triglochin procerum	Water Ribbons	4	15%	77	8	35	31	537	874	690	32	31	102	2417
Total Deep Marsh			100%	512	56	236	204	3580	5828	4600	216	204	680	16116

SHALLOW MARSH (SM) - plant size: tubestock (250cc)			Wetland Location	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	SM13	SM14	SM15	Total No. of Plants
0 - 200mm below NWL			Area m2	118	12	52	45	41	42	1747	92	55	2762	39	76	56	50	182	
BOTANICAL NAME	**COMMON NAME**	Species Density m2	% Distribution Species																
Bolboschoenus caldwellii	Marsh Club Rush	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Cyperus exaltatus	Tall Flat-sedge	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Eleocharis acuta	Common Spike-rush	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Juncus amabilis	Hollow Rush	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Juncus semisolidus	Plains Rush	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Marsilea drummondii	Common Nardoo	4	6%	28	3	12	11	10	10	419	22	13	663	9	18	13	12	44	1289
Myriophyllum crispatum	Upright Water-milfoil	4	6%	28	3	12	11	10	10	419	22	13	663	9	18	13	12	44	1289
Myriophyllum papillosum	Robust Water-milfoil	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Nymphoides crenata	Wavy Marshwort	4	6%	28	3	12	11	10	10	419	22	13	663	9	18	13	12	44	1289
Ottelia availifolia	Swamp Lily	4	6%	28	3	12	11	10	10	419	22	13	663	9	18	13	12	44	1289
Persicaria decipiens	Slender Knotweed	4	6%	28	3	12	11	10	10	419	22	13	663	9	18	13	12	44	1289
Triglochin procerum	Water Ribbons	4	10%	47	5	21	18	16	17	699	37	22	1105	16	30	22	20	73	2148
Total Shallow Marsh			100%	472	48	208	180	164	168	6988	368	220	11048	156	304	224	200	728	21476

Rev	Amendments	Approved	Date
A	FOR_APPROVAL	JOHN	01/01/2001

Scale
H 1:250 0 2.5 5 7.5 10 12.5
SCALE @ A1

LOGO
123 High Street
Yourtown, Victoria 1234
ABN 12 345 678 910

Designed: PERSON_1
Checked: PERSON_3
Authorised: PERSON_2
Date: 01/01/2001

PROJECT_TITLE
PROJECT_SUB-TITLE

04_SHEET_TITLE
03_MUNICIPALITY
01_CLIENT_NAME

PRELIMINARY Drg No. **03_DWG_NO** Rev **REV**

Template example of a typical wetland planting schedule

PLANT SCHEDULE DWG 001

TREES

Code	*Botanical Name*	Common Name	Installation Size	Qty
Af	*Acer freemanii* 'Jeffersred'	Maple	45L container, min 1.0 - 1.5m tall and 30mm caliper	6
Bp	*Brachychiton populneus*	Kurrajong	45L container, min 1.0 - 1.5m tall and 30mm caliper	21
Em	*Eucalyptus melliodora*	Yellow Box	45L container, min 1.0 - 1.5m tall and 30mm caliper	25
E'Ed'	*Eucalyptus leucoxylon* 'Euky Dwarf'	Dwarf Yellow Gum	45L container, min 1.0 - 1.5m tall and 30mm caliper	6
Li	*Lagerstroemia indica* 'Natchez'	White flowering Crepe Myrtle	45L container, min 1.0 - 1.5m tall and 30mm caliper	5
Pc	*Pistacia chinensis*	Chinese Pistachio	45L container, min 1.0 - 1.5m tall and 30mm caliper	1
			Total	**64**

SHRUBS

Code	*Botanical Name*	Common Name	Installation Size	Density	Qty
Bs	*Banksia spinulosa x ericifolia*	Banksia 'Giant Candles'	Tubestock	4/m2	180
C'Mm'	*Callistemon* 'Mauve Mist'	Callistemon 'Mauve Mist'	Tubestock	4/m2	180
Cr	*Correa reflexa*	Common correa	Tubestock	4/m2	180
Gb	*Grevillea (G.banksii x G.bipinnatifida)*	Grevillea 'Ned Kelly'	Tubestock	4/m2	180
Wc	*Westringia crassifolia*	Whipstick Westringia	Tubestock	4/m2	180
				Total	900

GROUNDCOVERS

Code	*Botanical Name*	Common Name	Installation Size	Density	Qty
Cha	*Chrysocephalum apiculatum*	Yellow Buttons	Tubestock	4/m2	180
E'Kc'	*Eremophilla* 'Kalbarri Carpet'	Emu Bush	Tubestock	4/m2	180
Mp	*Myoporum parvifolium*	Creeping boobialla	Tubestock	4/m2	180
Sa	*Scaevola aemula*	Fan Flower	Tubestock	4/m2	180
				Total	**720**

TUSSOCK PLANTS

Code	*Botanical Name*	Common Name	Installation Size	Density	Qty
Ca	*Carex appressa*	Tall Sedge	Tubestock	4/m2	180
Ci	*Carex inversa*	Knob Sedge	Tubestock	4/m2	180
Ju	*Juncus usitatus*	Emu Bush	Tubestock	4/m2	180
Ll	*Lomandra longifolia*	Pin Rush	Tubestock	4/m2	180
Pl	*Poa labillardieri*	Common Tussock Grass	Tubestock	4/m2	180
				Total	**900**

CLIMBERS

Code	*Botanical Name*	Common Name	Installation Size	Density	Qty
Cm	*Clematis microphylla*	Small-leaved Clematis	Tubestock	4/m2	180
Hv	*Hardenbergia violacea*	Happy Wanderer	Tubestock	4/m2	180
Rp	*Rubus parvifolius*	Native Rasberry	Tubestock	4/m2	180
				Total	**540**

Rev	Amendments	Approved	Date
A	FOR_APPROVAL	JOHN	01/01/2001

Scale: H 1:250 SCALE @ A1 — 0 2.5 5 7.5 10 12.5

N

LOGO
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01_CLIENT_NAME

PRELIMINARY Dwg No: **03_DWG_NO** Rev: **REV**

Template example of a typical planting schedule showing quantities

Integrated seating area with tree and garden planting

Integration of landscape and engineering WSUD

Screen planting and gravel access area around substation

Open grassed areas and buffer planting adjacent residential lots

Grass areas, pathway and planting incorporated with WSUD basin

Seating area with concrete pad set in gravel.

SECTION 3
RURAL DEVELOPMENTS

6. RURAL DEVELOPMENTS

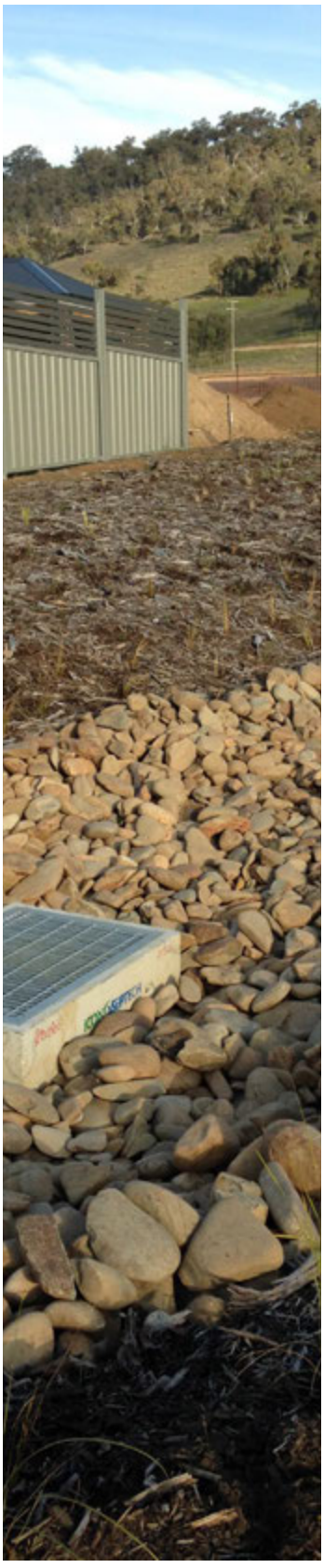
6.1 Design Considerations

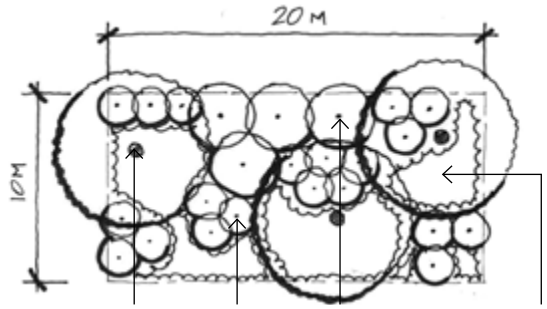
Refer to Section 11 Recommended Plant Lists and Section 15 Materials and Techniques for further information on plant species, design and specification of landscape works. Rural species are denoted with **R** in the plant list.

Some factors to consider in the preparation of a landscape plan for rural developments are outlined below.

- Visual Landscape Assessment.
- Siting of buildings in relation to existing vegetation and view lines.
- Boundary planting for screening and habitat.
- Wildlife corridors as habitat for native fauna, including connectivity to external wildlife corridors.
- Fencing that is visually unobtrusive and minimises harm to native fauna such as post and wire (e.g. do not use barbed wire).
- Setbacks for proposed buildings/structures from existing native vegetation to be retained.
- Tree Protection Zones for existing native vegetation.
- Use of indigenous and native plants. Indigenous plants are those that occur naturally in a local area. Benefits of indigenous species include:
  - Adaptation to the local climate, soil type and tolerance of drought and frost.
  - Attract native fauna to the garden by providing a source of food and shelter.
  - Are not likely to become environmental weeds.
  - Require less water and fertiliser than many exotic species. Reducing water and fertiliser application limits the amount of nutrients entering natural waterways.
  - Reducing soil erosion and improving soil structure.
  - Contribute to wildlife corridors that enable wildlife to move from one forest area to another.
  - Planting native plants will assist in the preservation of the natural landscape and enhance natural biodiversity.
  - Improving the appearance and aesthetics of properties and rural landscapes.
- Setback of planting to allow for fence maintenance, firebreaks, services, sight lines near roads, access ways etc.
- Landscaping in fire prone situations using appropriate offsets and species.
  Refer http://www.cfa.vic.gov.au/plan-prepare/landscaping-for-bushfire/
- Ensure successful establishment of plants through adequate site preparation, row spacing and planting patterns which match plant variety with aspect, drainage and soil type characteristics of the site.
- Canopy cover – achieve maximum canopy cover that is appropriate to the site location.

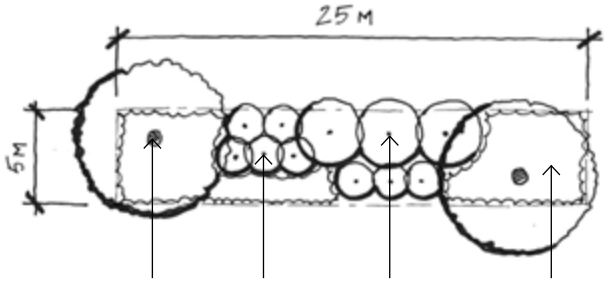
- Use appropriate ratios trees:shrubs for various purposes e.g. screen, dust, visual, filter views, light, noise etc
  - minimum two rows of planting however more rows may be required depending on site and circumstance
  - tree spacing may be 12 m apart or 20% of site area depending on species characteristics
  - shrub spacing may be 2 - 3 m spacing or 80% of the site area depending on species characteristics.
- Use a variety of species including trees, shrubs, tufting plants and ground covers to provide layered vegetation.
- Use planting layouts where the variety of species may be repeated along the length of the subject site, for example repeating a 10m x 20m layout of planting area (as per example sketch below).
- Revegetation areas to include a combination of Trees, shrubs and understorey plants.
- Tree planting density to be a minimum of one tree per 10 sq m or 10-15 lin m.
- Plant Understorey species in groups five to seven plants of same species.
- Use of ground covers and mulch to retain water and minimise erosion.
- Maintenance especially watering, weed control, replacement of losses.





Tree under-planted with grasses and ground covers | Small shrubs (2m spread) | Large shrubs (4m spread) | Grasses and/or ground covers

Note: Spacings and plant varieties may vary.



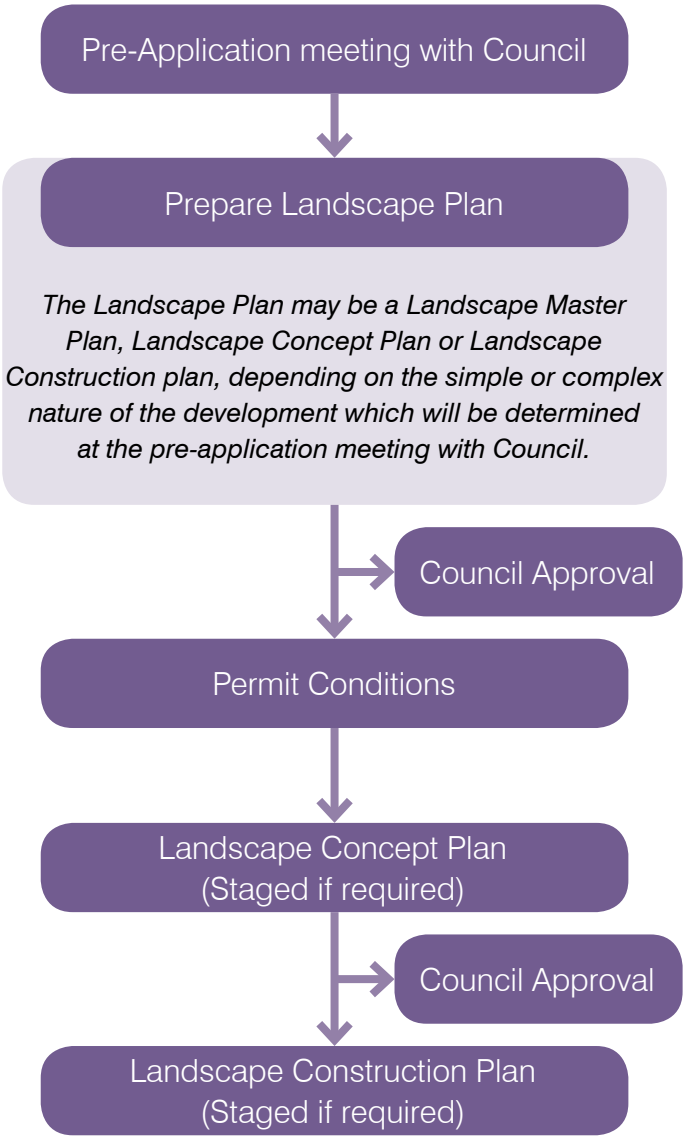
Tree under-planted with grasses and ground covers | Small shrubs (2m spread) | Large shrubs (4m spread) | Grasses and/or ground covers

Note: Spacings and plant varieties may vary.

Example sketches of boundary/buffer planting. Layout of planting may be repeated along the length of the subject site to meet the required landscape area.

6.2 Approvals Process

The following outlines the general approval process for rural developments landscape proposals.



6.3 Landscape Plan Requirements

The following describes Council's expectations relating to the range of landscape plans and construction works required by the design and approvals processes defined above for rural developments.

The requirements for landscape plans will vary depending on the level of detail required by the landscape proposals, including the size and cost of the works.

Council recommends the applicant employ a qualified landscape architect, landscape designer or horticulturist to prepare or assist with developing the required landscape plans. Ideally, the landscape architect/designer shall be commissioned early in the design process to ensure that all landscape related issues are considered.

LANDSCAPE MASTER PLAN

A Landscape Master Plan is a review of the site that includes relevant landscape design and maintenance considerations sufficient to demonstrate an understanding of the proposed development and provide an adequate basis for the production of concept designs. Landscape Master Plans may be drawn and/or written.

Site Analysis

A site analysis plan may be prepared as the first step in the master planning process and include such things as the following:

- Photographs of existing conditions and any key features.
- Existing conditions including landscape characteristics, topographical information, existing native and exotic vegetation, views to and from the site, micro-climate (such as wind and sun), overland flows and watercourses.
- Pedestrian and vehicular access.
- Solar access, orientation and noise sources.
- Fences, boundaries and easements.
- Proximity of, connection and access to public open space.
- Surrounding neighbourhood character (built form and landscape character) such as residential areas, play areas and outdoor activities, buffer zones, screening, public and private areas, security, passive surveillance and landmark elements.
- Heritage acknowledgments.

Site Layout

The site layout should be based on the site analysis and where relevant be determined in conjunction with other professionals including engineers, planners and urban designers.

Planting

Planting design at the Landscape Master Plan stage should include the following:

- Layout of proposed planting, including indicative locations of proposed trees and areas of proposed garden bed planting and any watercourse planting.
- A recommended plant schedule for proposed trees, shrubs,

tufted plants, groundcovers and aquatic vegetation in accordance with the approved planting lists.

- Planting themes to ensure a cohesive landscape outcome that is in keeping with the local rural character.
- Protection and enhancement of existing vegetation which is to be retained.

Water Sensitive Urban Design

The Landscape Master Plan is to demonstrate the ways in which the proposed design treats water including:

- Stormwater treatment and/or retention.
- Reuse of captured stormwater.
- Grey water systems.

Materials and Finishes

Materials and finishes should be described in the Master Plan and where appropriate are to be in line with Landscape Standards – Materials and Techniques as described in the Landscape Plan Guide.

LANDSCAPE CONCEPT PLAN (STAGED IF REQUIRED)

The Landscape Concept Plan is a clearly resolved landscape design, traceable to the Landscape Master Plan and where relevant, based on defined engineering and architectural proposals. Landscape Concept Plans should be to scale and show proposed hard and soft materials to an extent appropriate to review, discussion and approval, but not in sufficient detail to enable construction.

A Landscape Concept Plan for each stage of development must be prepared according to the design and approval process. Plans may be prepared separately according to stages.

The Concept Plan must be drawn to scale.

The Landscape Concept Plan should show:

- Existing vegetation to be retained (a tree assessment and management plan may be required).
- Existing vegetation to be removed (a tree assessment may be required).
- The proposed quantity and location of landscape elements which comprise the landscape works. This includes (but not limited to) elements such as tree planting, buffer/screen planting, garden beds, pathways, buildings, sheds, shelters, signage, irrigation systems, retaining walls, protective fencing (temporary and permanent), access roads, wetlands/waterways, ornamental water bodies and so on.
- Areas to be managed and rehabilitated for conservation or offset planting purposes and the method by which these areas will be protected.

Buffer planting to large scale rural development

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Landscape Construction Documentation Plans are precise plans, schedules and specifications, clearly traceable to the Landscape Concept Plan and where relevant based on final engineering and architectural proposals. The plans are sufficient to control the construction of the landscape works and are appropriate for review, discussion and approval.

Construction Plans for each stage of development must be prepared according to the approval process. Plans may be prepared separately according to stages.

Council may consider applications which combine the Landscape Concept and Landscape Construction Plans in one drawing set.

The construction plans are to be drawn to scale.

The following is to be included in the Construction Documentation plans and must be submitted to Council for approval prior to construction.

Existing Conditions

All existing site conditions and information including buildings, services, roads, footpaths and vegetation.

Demolition

All existing site features that are to be removed as part of the landscape construction including removal of any vegetation.

Grading and Drainage

Proposed contours and finished levels of the works. This should include falls and drainage associated with the new landscape design.

Setout

The proposed layout of the landscape design with accurate descriptions and dimensions of the proposed elements sufficient for construction of the works. Existing and proposed utility services must be shown on the plans.

Materials & Finishes

The materials and finishes of all proposed hard & soft landscape treatments, including furniture types, any colours and or themes for the hard and soft landscape.

Planting

The type and location of the planting included in the works for both terrestrial and aquatic planting including botanical and common names of proposed plant species, mature height and installation size, location and quantity.

Irrigation

The location, type and performance of the proposed irrigation system. This may be prepared by the Contractor as a ‘Design and Construct’ irrigation system.

Elevation / Sections

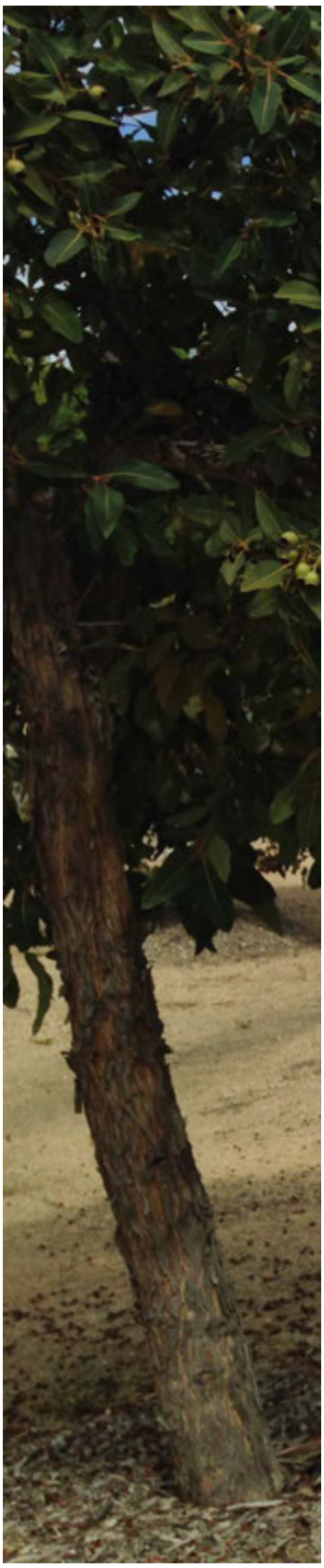
The vertical and horizontal relationships of the design in the form of scaled elevations and or sections. The elevations and sections are to demonstrate how the works are to look and are to be drawn from relevant and key locations across the works.

Construction Details

Construction Details are a combination of plans, sections and elevations at varying scales (for example 1:10, 1:20, 1:50) which clearly describe the construction intent and requirements of the hard and soft landscape works.

Landscape Specifications (when required)

The Specification describes the requirements for construction and installation of the works. The Landscape Specifications will detail the proposed method of Completion and ongoing Maintenance obligations.



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- Stakes & Ties.
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- Grass.
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- Mulch.
- Fertiliser.
- Remnant Vegetation maintenance.

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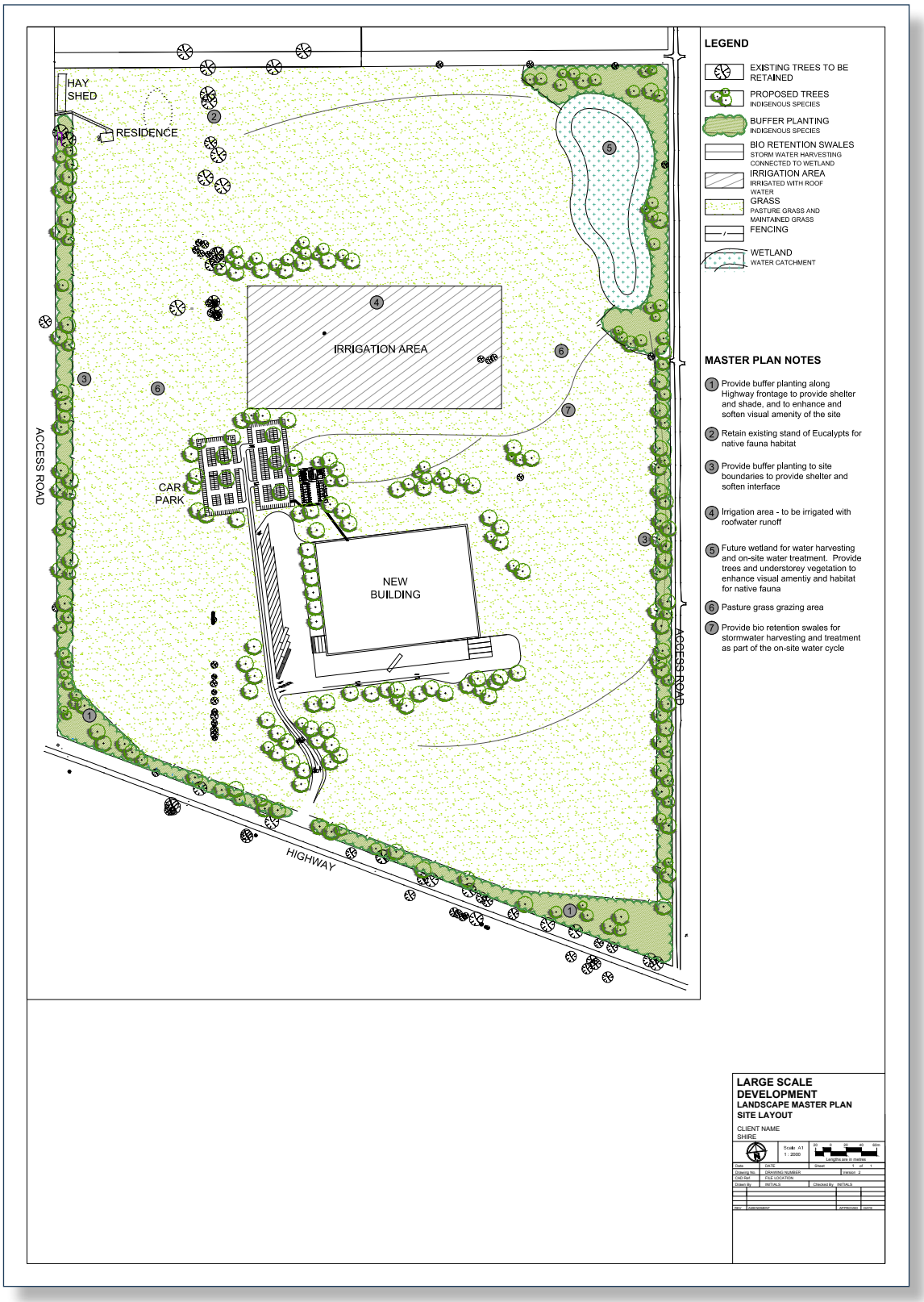
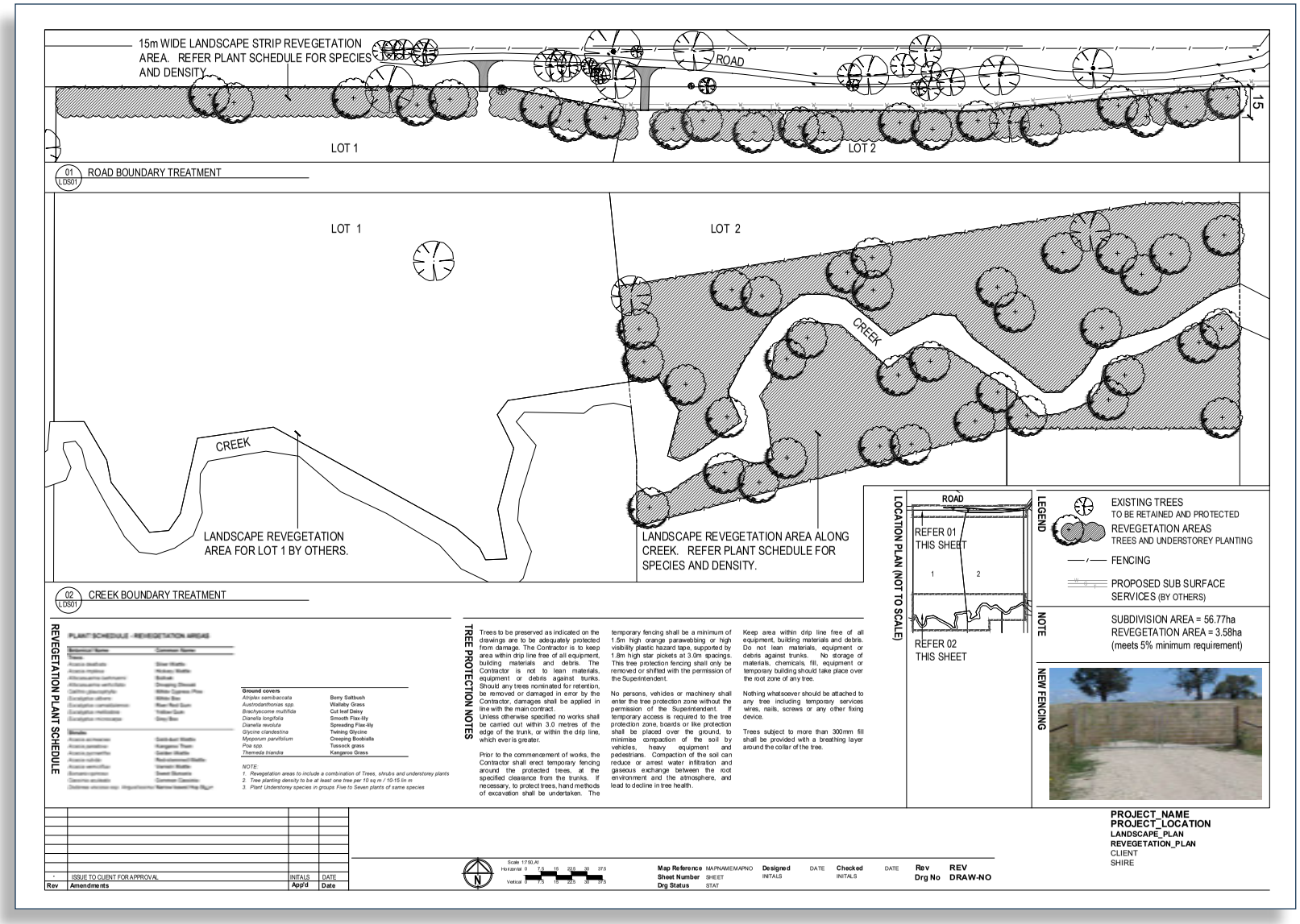
  3 x black and white plans
- Neatly printed, legible and supported by relevant documentation.
- Accurate location of existing and proposed site features.
- Include legend, titleblock, scale and scale bar, and north point.
- Include plant schedule of proposed trees, shrubs, grasses and groundcover species.

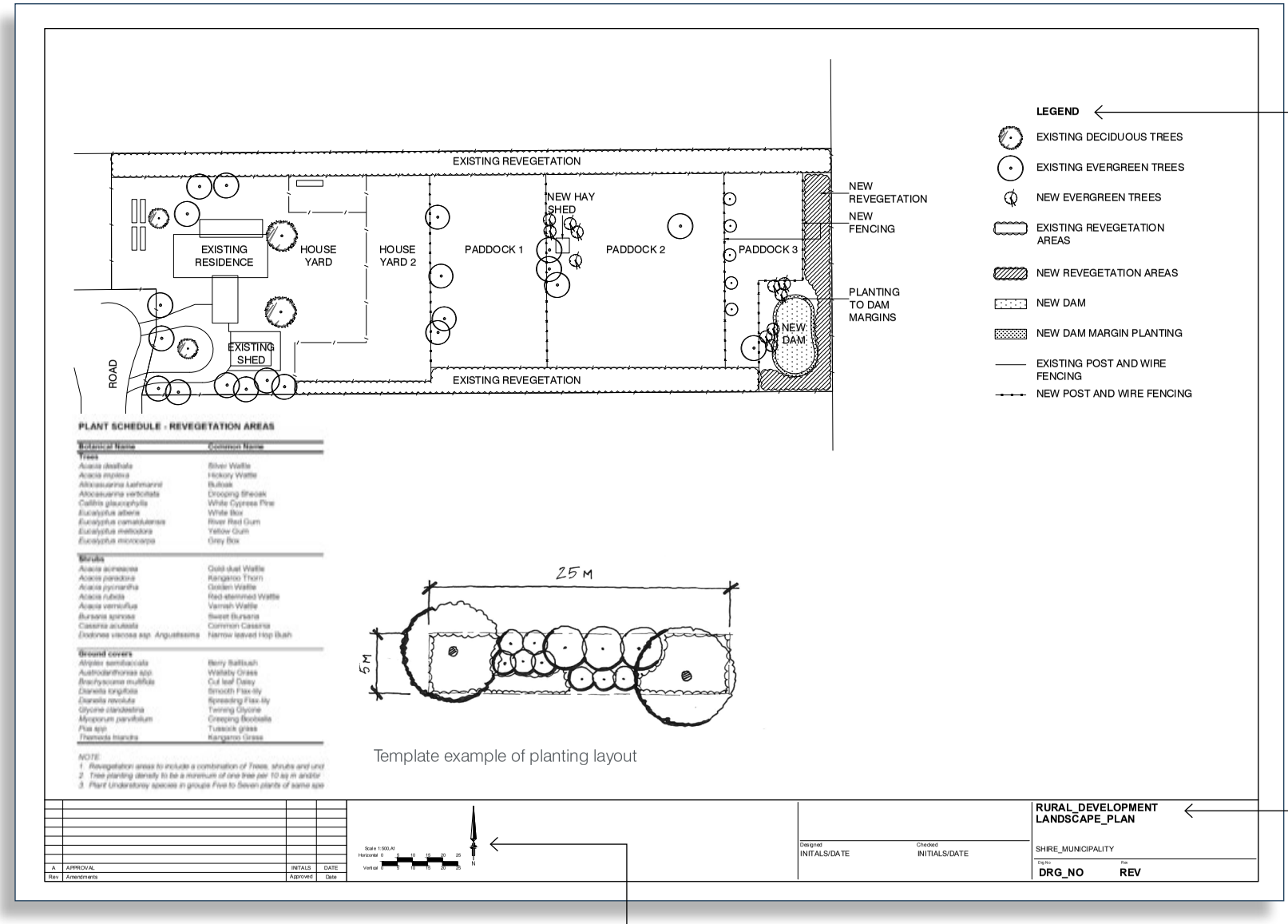
6.5 Landscape Plan Templates/Examples



Template example of large scale rural development including buffer planting



Template example of a rural subdivision landscape plan and notes



LEGEND showing all elements on plan

TITLEBLOCK with project name, location, plan type and municipality

Template example of a rural lot development landscape plan

TITLEBLOCK with north point and scale bar

SECTION 4
COMMERCIAL DEVELOPMENTS

7. COMMERCIAL DEVELOPMENTS

7.1 Design Considerations

Commercial developments typically include landscape areas used by the public, such as entry forecourts and car parks. These typically interface with the broader public realm physically and visually.

Refer to Section 11 Recommended Plant Lists and Section 15 Materials and Techniques for further information on plant species, design and specification of landscape works.

Key landscape design elements to be considered are outlined below.

GENERAL

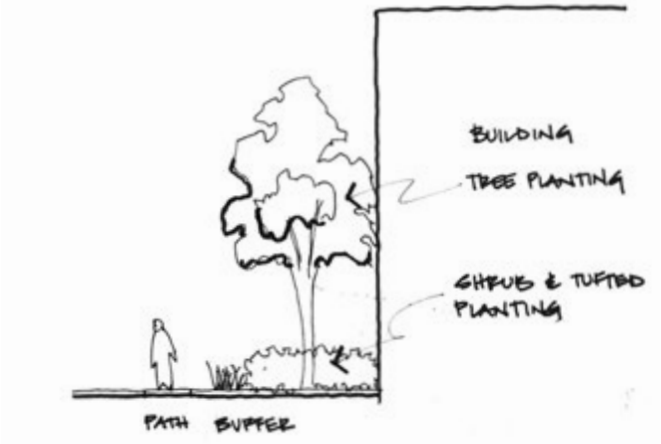
- Landscape treatments are to address the visual bulk and scale of the development such as with tree and garden bed planting or green walls.

STREETSCAPE/PROPERTY INTERFACES

- Consider appropriate width areas for garden bed and verge width for tree planting – minimum 2.1m wide and wider where large trees are to be used.
- Soften visual impact of blank walls and blur hard edges/lines with garden bed and tree planting of appropriate scale.
- Soften street interfaces and adjoining properties through tree and garden planting and appropriate fence treatments (where fencing is required).
- Define pedestrian access from streets into commercial developments via connecting pathways, including through car parks.

GARDEN BEDS

- Appropriate size and location for visual effect, success of planting and ease of maintenance (minimal traffic management plans).
- Species selection that promotes native plants for drought tolerance, suitability to site, micro–climate, purpose (screening, ornamental, personal safety).
- Layout of species for variety, visual impact and cohesive themes.
- Appropriate edge treatments, soils and mulch.
- Irrigation for planting establishment and on-going longevity.

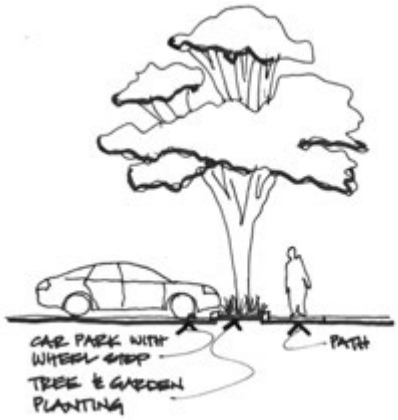


Boundary planting sketch showing tree and garden planting to soften interface

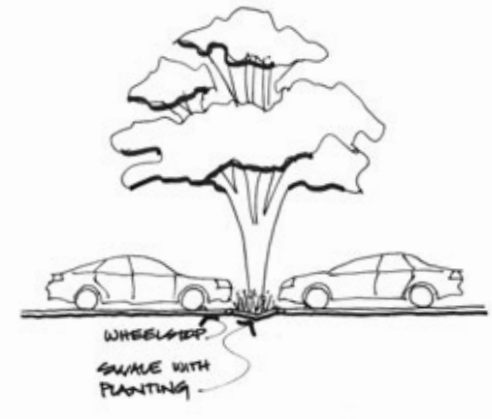
CAR PARKS

- Tree planting throughout car parks to achieve maximum shade and amenity.
- Tree species for car parks are to be determined according to locality, aspect, microclimate and other considerations such as local character.
- Full mature tree canopy size to be shown.
- Planting areas of appropriate width (minimum 2.1m) where car parks interface with streets/road reserves and buildings.
- Ensure success of planting areas by not allowing vehicle overhang to burn/damage planting – use permeable paving or mulch only beneath vehicle overhang area.
- Use wheel stops or bollards in parking bays to mitigate damage to planted areas from front vehicle overhang.
- Incorporate best practice Water Sensitive Urban Design (WSUD) including passive watering of trees throughout car park.
- Pedestrian access and safety through car parks via connecting pathways and appropriate line marking.
- Surface treatments to be permeable paving where appropriate.
- Minimum garden bed width to be 2.0m wide.

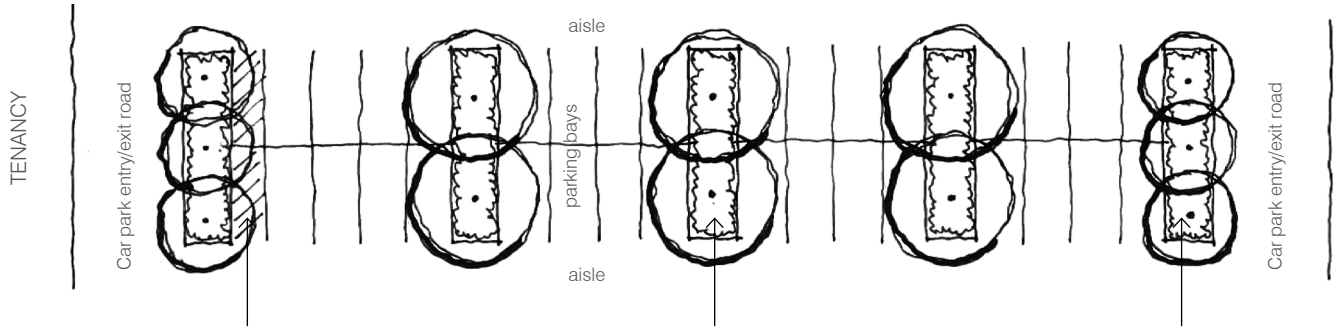
Car park sketch showing no planting beneath vehicle overhang



Car park sketch showing wheel stop and planting



Car park sketch showing wheel stop with central swale tree and garden planting

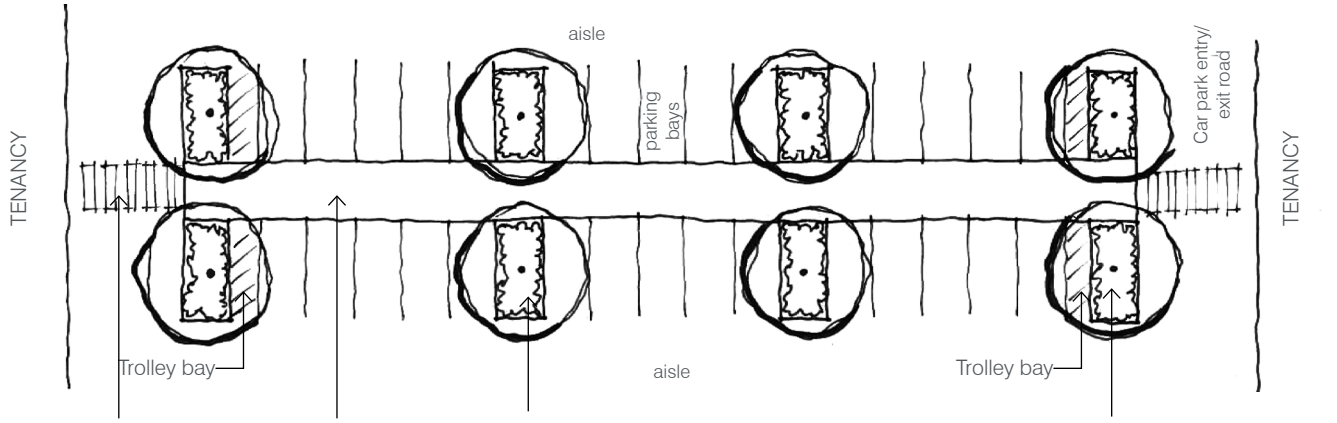


Trolley bay

Minimum 2.0m wide planted bay with shade trees at regular intervals to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary according to tree species.

Minimum 2.0m wide planted end bay with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Car park with planted end bay and planted bays at regular intervals



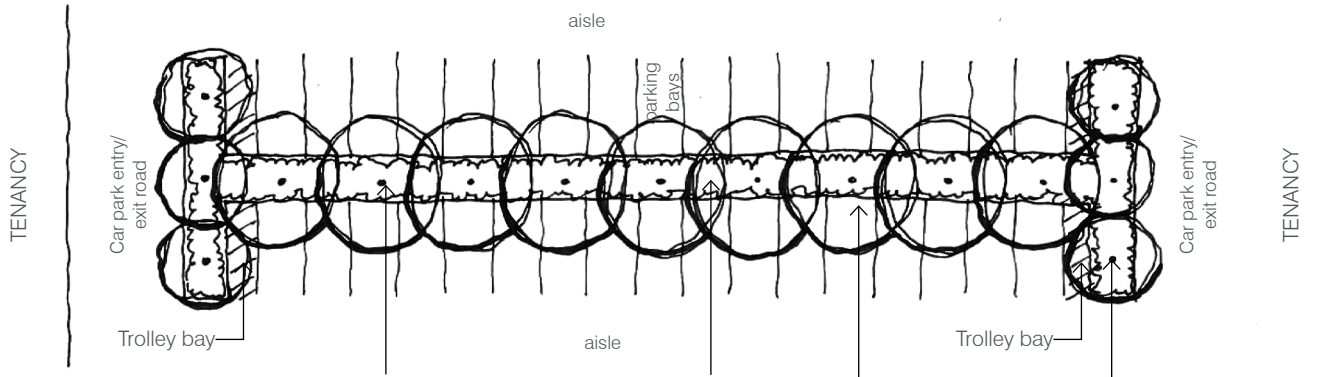
Pedestrian crossing aligning with walkway

Accessible central median pedestrian walkway (e.g. 3.0m wide)

Minimum 2.0m wide planted bay with shade trees at regular intervals to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary according to tree species.

Minimum 2.0m wide planted end bay with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Car park with central walkway including tree planting in paving at regular intervals



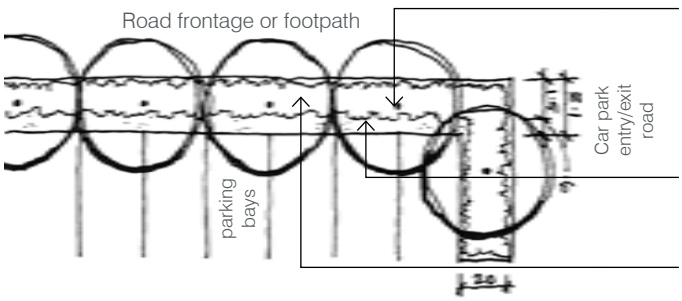
Shade trees at regular spacings. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Minimum 1.5m wide planted swale.

Flush kerb to allow stormwater flows into planted swale.

Minimum 2.0m wide planted end bay/ swale with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Car park with flush kerb, central planted swale and wheel stops

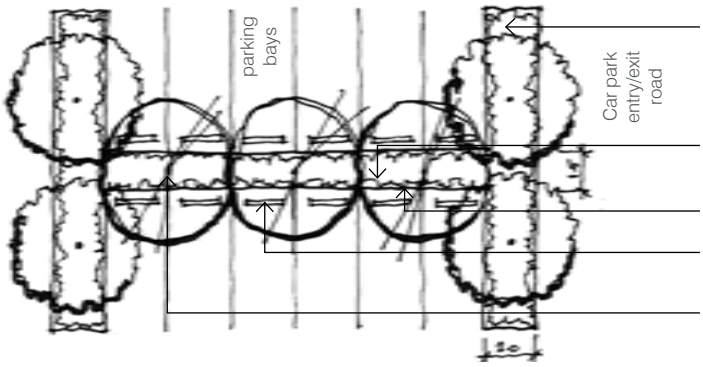


Shade trees at regular spacings. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

600mm wide no planting zone to allow for vehicle overhang (apply to all barrier kerbs).

Minimum 2.1m wide garden bed interface to road reserve/street frontage.

Car park with barrier kerb and planting area to street frontage



Minimum 2.0m wide planted end bay/swale with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

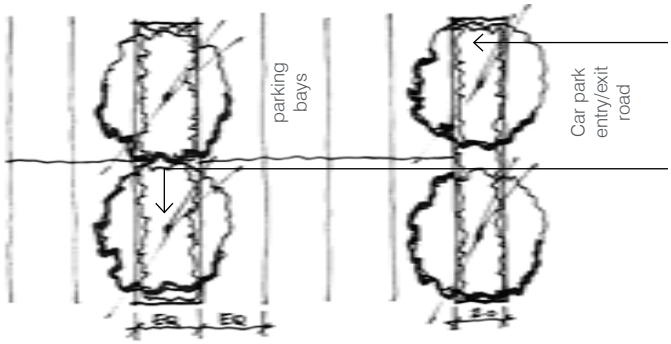
Minimum 1.5m wide planted swale.

Flush kerb to allow stormwater flows into planted swale.

Wheel stops.

Shade trees at regular spacings. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

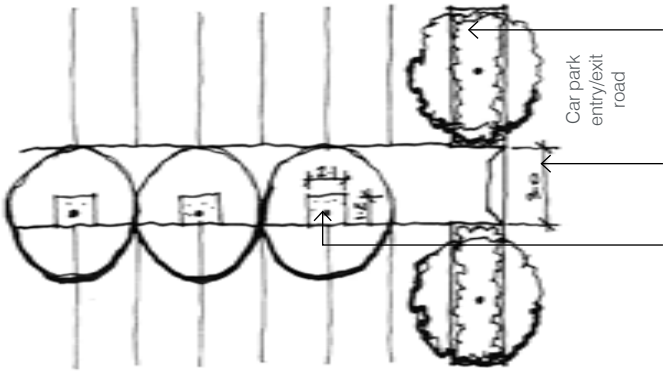
Car park with flush kerb, central planted swale and wheel stops



Minimum 2.0m wide planted end bay with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Minimum 2.0m wide planted bay with shade trees at regular intervals to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary according to tree species.

Car park with planted end bay and planted bays at regular intervals

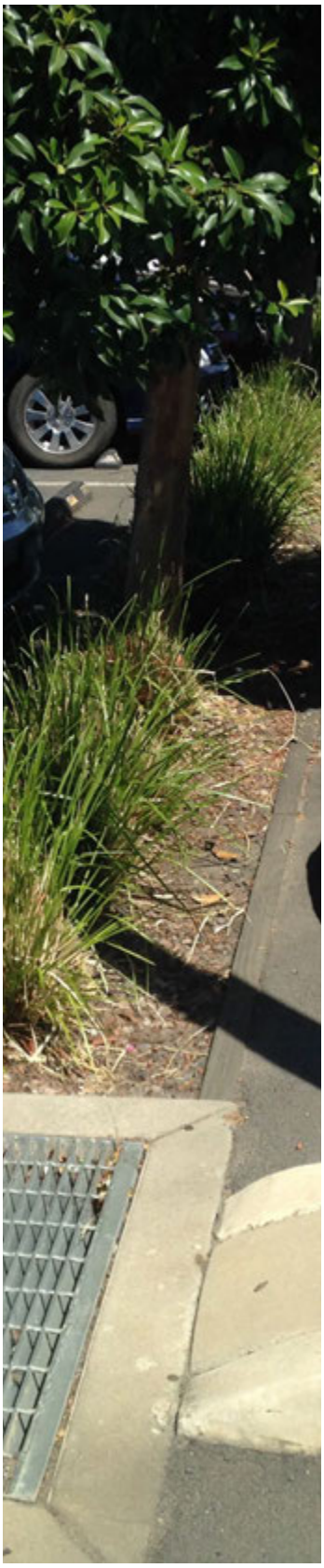


Minimum 2.0m wide planted end bay with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Suggested 3.0m wide pedestrian access through carpark including shade trees in paving.

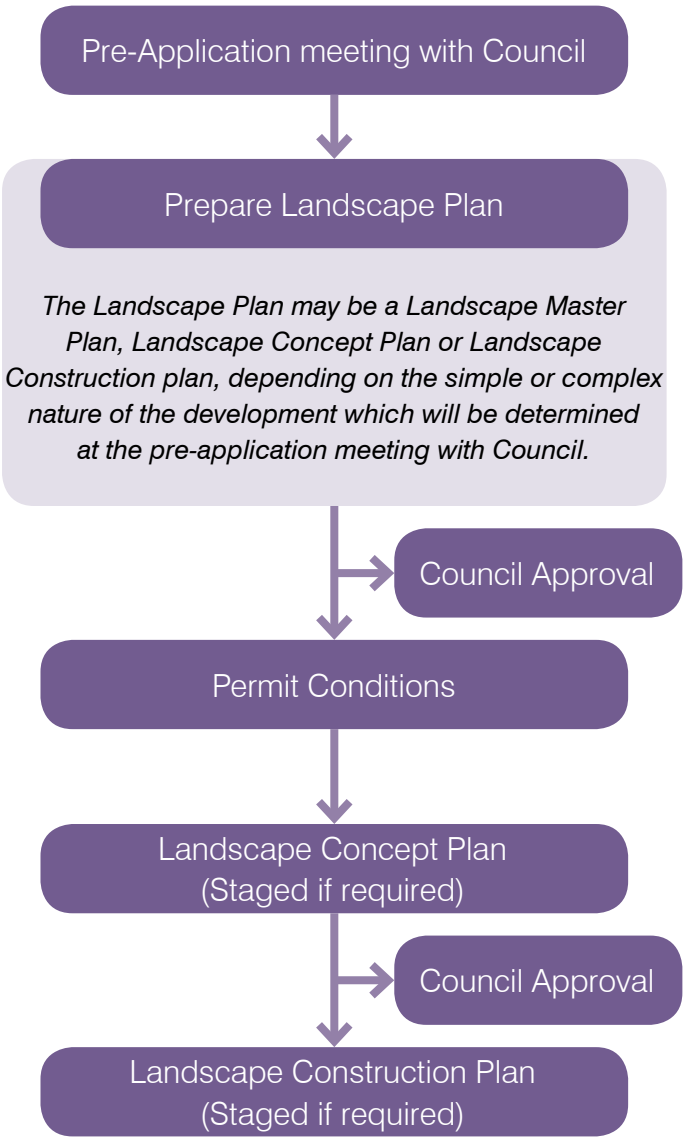
Shade trees in paving cut outs (e.g. 1.5m x 1.2m). Tree species and spacing is to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Car park with central walkway including tree planting in paving at regular intervals



7.2 Approvals Process

The following outlines the general approval process for commercial development landscape proposals.



7.3 Landscape Plan Requirements

The following describes Council's expectations relating to the range of landscape plans and construction works required by the design and approvals processes defined above.

The requirements for landscape plans will vary depending on the level of detail required by the landscape proposals, including the size and cost of the works.

Council recommends the applicant employ a qualified landscape architect, landscape designer or horticulturist to prepare or assist with developing the required landscape plans. Ideally, the landscape architect/designer shall be commissioned early in the design process to ensure that all landscape related issues are considered.

LANDSCAPE MASTER PLAN

A Landscape Master Plan is a review of the site that includes relevant landscape design and maintenance considerations sufficient to demonstrate an understanding of the proposed development and provide an adequate basis for the production of concept designs. Landscape Master Plans may be drawn and/or written.

Site Analysis

A site analysis plan shall be prepared as the first step in the master planning process and include such things as the following:

- Photographs of existing conditions and any key features.
- Existing conditions including landscape characteristics, topographical information, existing native and exotic vegetation, views to and from the site, micro-climate (such as wind and sun), overland flows and water courses.
- Pedestrian and vehicular access.
- Solar access, orientation and noise sources.
- Fences, boundaries and easements.
- Proximity of, connection and access to public open space.
- Surrounding neighbourhood character (built form and landscape character) such as residential areas, play areas and outdoor activities, buffer zones, screening, public and private areas, security, passive surveillance and landmark elements.
- Heritage acknowledgments.

Site Layout

The site layout should be based on the site analysis and be determined in conjunction with other professionals including engineers, planners and urban designers.

Planting

Planting design at the Landscape Master Plan stage should include the following:

- Layout of proposed planting, including indicative locations of proposed trees and areas of proposed garden bed planting.
- A recommended plant schedule for proposed trees, shrubs, tufted plants and groundcovers in accordance with the approved planting lists.

- Planting themes to ensure a cohesive landscape outcome.
- Protection and enhancement of existing vegetation which is to be retained.

Water Sensitive Urban Design

The Landscape Master Plan is to demonstrate the ways in which the proposed design treats water including:

- Stormwater treatment and/or retention.
- Reuse of captured stormwater.
- Grey water systems.

Materials and Finishes

Materials and finishes should be described in the Master Plan and where appropriate are to be in line with Landscape Standards – Materials and Techniques as described in the Landscape Plan Guide.

Community art

Inclusion of appropriate public art opportunities should be considered.

LANDSCAPE CONCEPT PLAN (STAGED IF REQUIRED)

The Landscape Concept Plan is a clearly resolved landscape design, traceable to the Landscape Master Plan and where relevant, based on defined engineering and architectural proposals. Landscape Concept Plans should be to scale and show proposed hard and soft materials to an extent appropriate to review, discussion and approval, but not in sufficient detail to enable construction.

A Landscape Concept Plan for each stage of development must be prepared according to the design and approval process. Plans may be prepared separately according to stages.

The Concept Plan must be drawn to scale.

The Landscape Concept Plan should show:

- Existing vegetation to be retained (a tree assessment and management plan may be required).
- Existing vegetation to be removed (a tree assessment may be required).
- The proposed quantity and location of landscape elements in all proposed open space and streetscape embellishments which comprise the landscape works. This includes elements such as tree planting, garden beds, pathways, seating, shelters, picnic facilities, boardwalks, signage, drinking fountains, rubbish receptacles, irrigation systems, playgrounds, artwork, retaining walls, protective fencing (temporary and permanent), vehicle control methods, wetlands, ornamental water bodies and so on.
- Areas to be managed and rehabilitated for conservation or offset planting purposes and the method by which these areas will be protected.

Car park shade tree planting

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Landscape Construction Documentation Plans are precise plans, schedules and specifications, clearly traceable to the Landscape Concept Plan and based on final engineering and architectural proposals. The plans are sufficient to control the construction of the landscape works and are appropriate for review, discussion and approval.

Construction Plans for each stage of development must be prepared according to the approval process. Plans may be prepared separately according to stages.

The construction plans are to be drawn to scale.

The following is to be included in the Construction Documentation plans and must be submitted to Council for approval prior to construction.

Existing Conditions

All existing site conditions and information including buildings, services, roads, footpaths and vegetation.

Demolition

All existing site features that are to be removed as part of the landscape construction including removal of any vegetation.

Grading and Drainage

Proposed contours and finished levels of the works. This should include falls and drainage associated with the new landscape design.

Setout

The proposed layout of the landscape design with accurate descriptions and dimensions of the proposed elements sufficient for construction of the works. Existing and proposed utility services must be shown on the plans.

Materials & Finishes

The materials and finishes of all proposed hard & soft landscape treatments, including furniture types, any colours and or themes for the hard and soft landscape.

Planting

The type and location of the planting included in the works including botanical and common names of proposed plant species, mature height and installation size, location and quantity.

Irrigation

The location, type and performance of the proposed irrigation system. This may be prepared by the Contractor as a 'Design and Construct' irrigation system.

Elevation / Sections

The vertical and horizontal relationships of the design in the form of scaled elevations and or sections. The elevations and sections are to demonstrate how the works are to look and are to be drawn from relevant and key locations across the works.

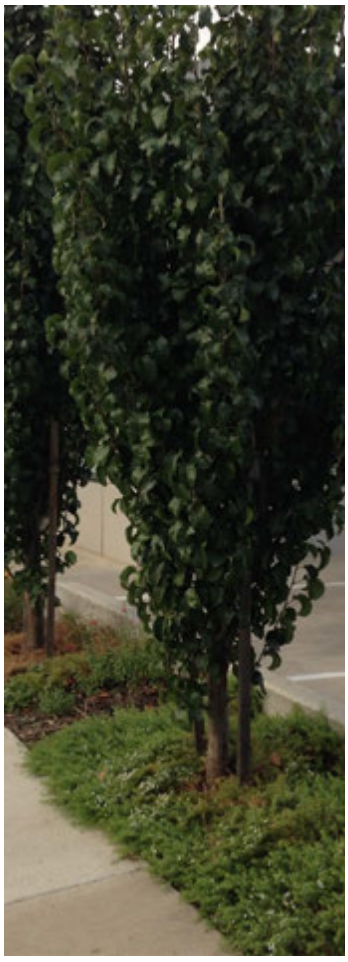
Construction Details

Construction Details are a combination of plans, sections and elevations at varying scales (for example 1:10, 1:20, 1:50) which clearly describe the construction intent and requirements of the hard and soft landscape works.

Landscape Specifications (when required)

The Specification describes the requirements for construction and installation of the works, Completion, Maintenance and any Handover obligations (where required).

WSUD to car park medians including wheel stops



Tree and garden bed planting in narrow car park area

MAINTENANCE / ESTABLISHMENT PLAN

The Maintenance or Establishment Plan or Program may be required to be submitted to Council for approval with the Construction Documentation.

Any Maintenance Plan requirements will be provided by Council and may include the obligations and requirements for the maintenance of the hard and soft landscape works such as the following:

- Weeding & Rubbish Removal.
- Replacement Plants.
- Stakes & Ties.
- Grass.
- Pruning.
- Mulch.
- Fertiliser.
- Remnant Vegetation maintenance.

7.4 Landscape Plan Submissions

Landscape Plans shall be produced according to the following minimum standards.

- Scale appropriate to the size of the site and nature of development to adequately describe the landscape proposal.
- Large sites may be scale 1:500 or 1:200 and smaller sites 1:100 or 1:50.
- Construction Details are to be generally 1:20 or 1:10.

PRESENTATION

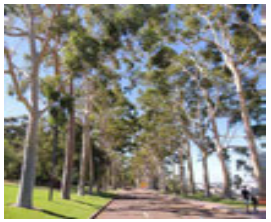
- Landscape Master Plans and Landscape Concept Plans
  1 x coloured plan and 2 x black and white plans.
- Landscape Construction Documentation Plans
  3 x black and white plans
- Neatly printed, legible and supported by relevant documentation.
- Accurate location of existing and proposed site features.
- Include legend, titleblock, scale and scale bar, and north point.
- Include plant schedule of proposed trees, shrubs, grasses and groundcover species.

Suitable shade trees in car park median

Town Centre with seating, tree planting, paving and green space

7.5 Landscape Plan Templates/Examples

Template example of commercial development landscape master plan



Large Feature Trees
Corymbia citriodora - Lemon-scented Gum

Screen planting of hardy natives
Above: *Callistemon sieberi* - River Bottlebrush

Areas of hardy ground-cover
Above: *Myoporum parvifolium*
Creeping Boobialla

Areas of hardy small shrubs
Above: *NGrevillea rosmarinifolia*
Rosemary Grevileea

RECOMMENDED PLANT SCHEDULE

Large Evergreen Trees

Botanical name	Common Name	Mature h x w (m)	Approx total
Corymbia citriodora	Lemon-scented gum	20 x 8	30
Eucalyptus microcarpa	Grey Box	25 x 8	7
Eucalyptus melliodora	Yellow Box	25 x 8	6

Small Evergreen Tree

Botanical name	Common Name	Mature h x w (m)	Approx total
Geijera parviflora	Wilga	10 x 5	37

Deciduous Tree

Botanical name	Common Name	Mature h x w (m)	Approx total
Ulmus parvifolia 'Todd'	Chinese Elm	10 x 11	41

Small Shrubs

Botanical name	Common Name	Mature h x w (m)	Approx total
Eremophila complanata	Compact Emu Bush	1 x 0.5	440
Eremophila glabra	Common Emu Bush	1 x 1	440
Grevillea rosmarinifolia	Rosemary Grevillea	1 x 1	440
Nandina 'Obsession'	Nandina Obsession	1 x 1	440
Micromyrtus ciliata	Fringed Heath Myrtle	0.6 x 1	450

Groundcover & Tufting Plants

Botanical name	Common Name	Mature h x w (m)	Approx total
Dianella revoluta	Black-anther Flax-lily	1 x 1.5	200
Grevillea 'Poorinda Royal Mantle'	Poorinda Royal Mantle	0.2 x 3	100
Myoporum parvifolium	Creeping Boobialla	0.15 x 1	220

Raingarden

Botanical name	Common Name	Mature h x w (m)	Approx total
Colocephalus lacteus	Milky Beauty-heads	0.20 x 0.50	100
Carex appressa	Tall Sedge	1 x 1	70
Leptospermum 'Lemon Bun'	Compact Tea-tree	1 x 1	70
Lomandra longifolia	Spiny-headed Mat Rush	1 x 1	70
Melaleuca linariifolia 'Dwarf Little Red'	Honey Myrtle	1 x 1	70

Screen Planting

Botanical name	Common Name	Mature h x w (m)	Approx total
Callistemon sieberi	River Bottlebrush	3 x 2	80
Grevillea bipinnatifida x banksii 'Ned Kelly'	Grevillea Ned Kelly	3 x 2	80
Grevillea 'Moonlight'	Grevillea Moonlight	2 x 2	80

SECTION A – A' - 1:200@A3

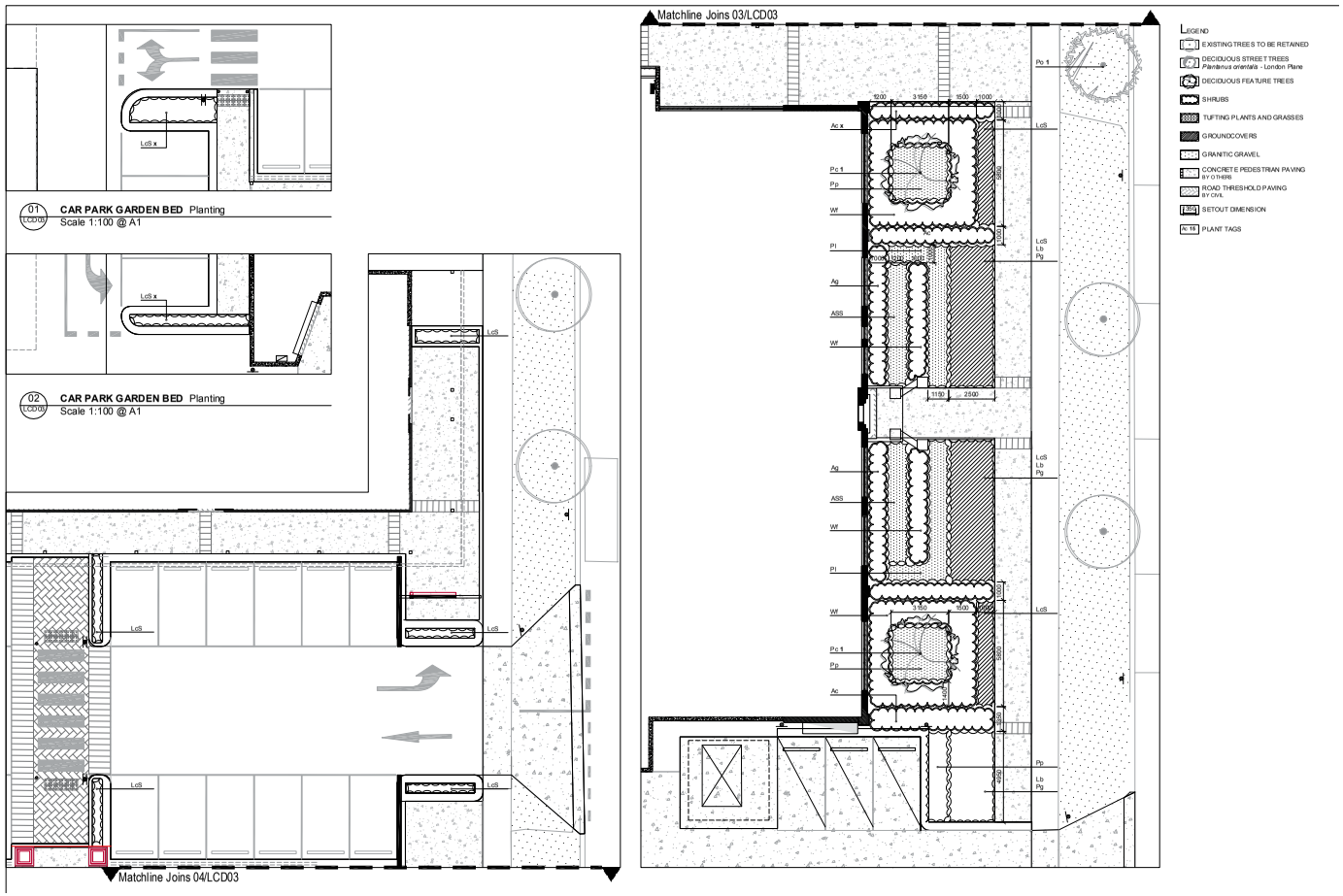
0 1 2 3 4 5m
SCALE 1:200@A3

DRG NO. 123456 LMP01 | REV -- | DATE date | DES initials | AUTH initials

LANDSCAPE MASTER PLAN
PLANT MATERIALS AND ELEVATION

LOGO

Template example of commercial development landscape master plan elevation and plant schedule with images



Template example of commercial development landscape planting plan

SECTION 5
INDUSTRIAL DEVELOPMENTS

8. INDUSTRIAL DEVELOPMENTS

8.1 Design Considerations

Industrial developments typically include landscape areas within the property boundary. These may include around buildings, car park areas and boundary treatments to adjacent land uses. These landscape areas impact the public realm visually.

Refer to Section 11 Recommended Plant Lists and Section 15 Materials and Techniques for further information on plant species, design and specification of landscape works.

Key landscape design elements to be considered are outlined below.

GENERAL

- Landscape treatments are to address the visual bulk and scale of the development such as with tree and garden bed planting, grassed areas and/or green walls.

STREETSCAPE/PROPERTY INTERFACES

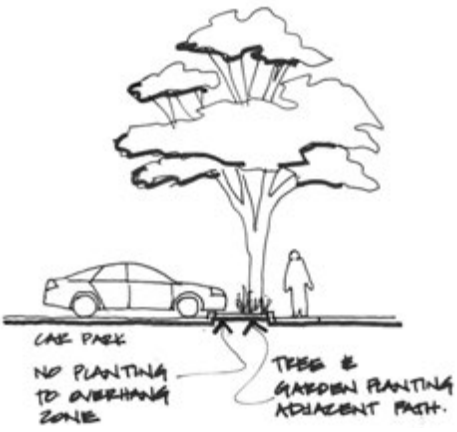
- Include appropriate width areas for garden bed and tree planting – minimum 2.1m wide and wider where large trees are to be used.
- Soften visual impact of blank walls with garden bed and tree planting of appropriate scale.
- Soften interfaces with streets and adjoining properties through tree and garden planting and visually appealing fence treatments (where fencing is required).
- Combine fence treatments with soft landscape treatments for maximum visual effect.
- Define pedestrian access from streets into industrial developments via connecting pathways, including through car parks.

GARDEN BEDS

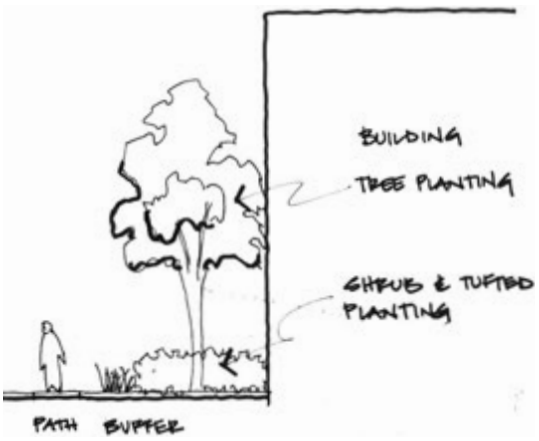
- Appropriate size and location for visual effect, success of planting and ease of maintenance.
- Species selection that promotes native plants for drought tolerance, suitability to site, micro–climate, purpose (screening, ornamental, personal safety).
- Layout of species for variety, visual impact and cohesive themes. Appropriate edge treatments, soils and mulch.
- Irrigation for planting establishment and on-going longevity.

CAR PARKS

- Tree planting throughout car parks to achieve maximum shade and amenity.
- Tree species for car parks are to be determined according to locality, aspect, microclimate and other considerations such as local character.
- Full mature tree canopy size to be shown.
- Planting areas of appropriate width (minimum 2.0m wide) where car parks interface with streets and buildings.
- Ensure success of planting areas by not allowing vehicle overhang to burn/damage planting.
- Use wheel stops in parking bays to mitigate vehicle damage to planted areas.
- Incorporate best practice Water Sensitive Urban Design (WSUD).
- Pedestrian access and safety through car parks via connecting pathways.
- Soften visual impact of large expanses of hardstand (for example loading bays) with adjoining suitable garden bed and tree planting.
- Surface treatments to be permeable where appropriate.

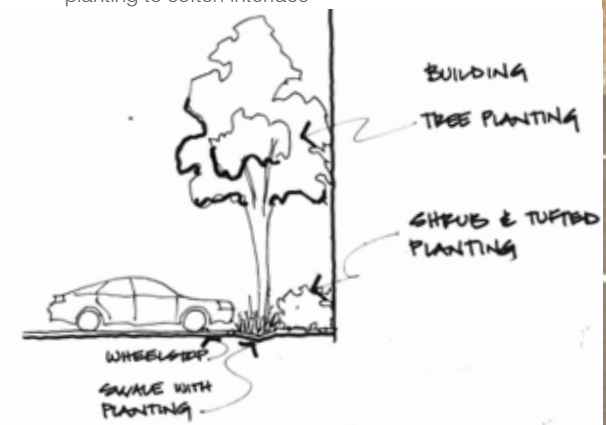


Car park sketch showing no planting beneath vehicle overhang

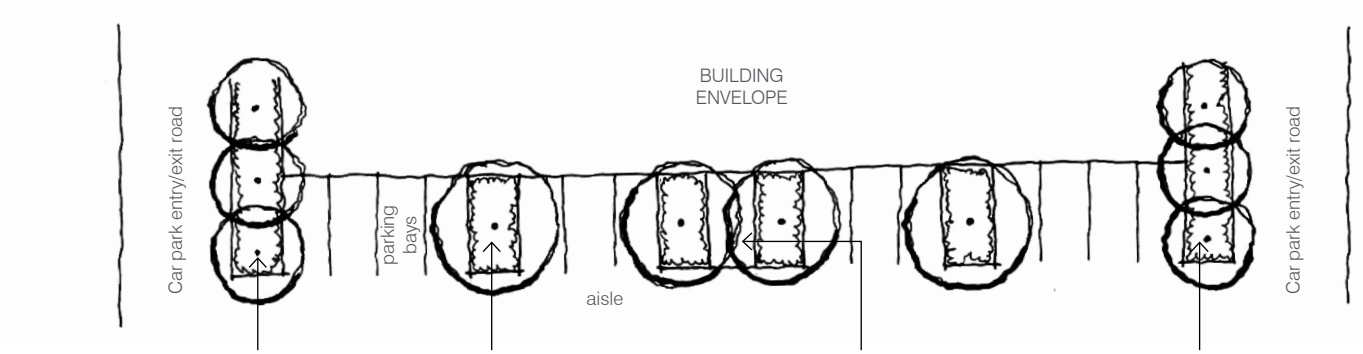


Boundary planting sketch showing tree and garden planting to soften interface

Car park sketch showing wheel stop and planting



Car park sketch showing wheel stop with swale including tree and garden planting adjacent building



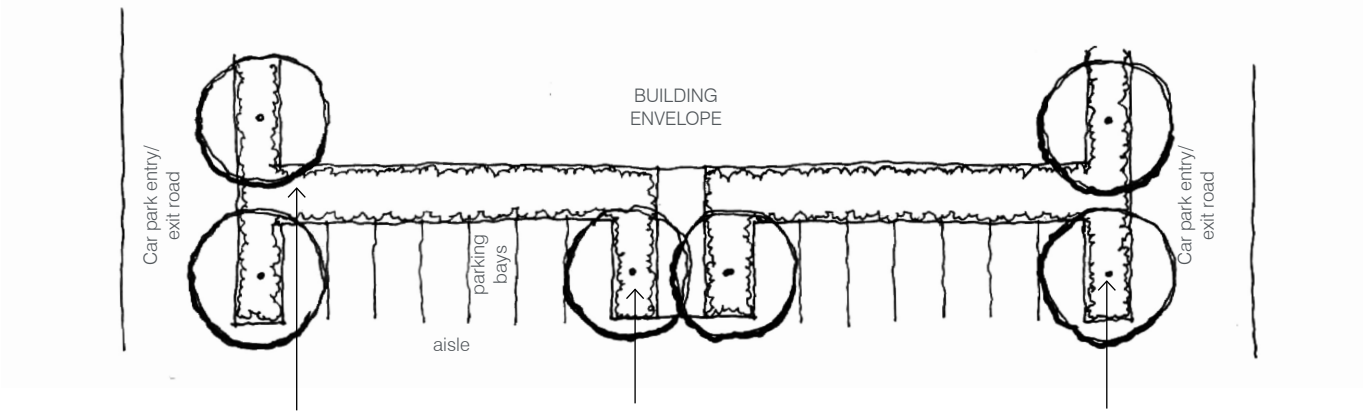
Minimum 2.0m wide planted bay at end of parking aisle/ building with garden bed planting and trees. Width of bay may vary.

Minimum 2.0m wide planted bay with shade trees at regular intervals to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary.

Pedestrian access to building area. Consider planting adjacent pedestrian access.

Minimum 2.0m wide planted bay at end of parking aisle/building with garden bed planting and trees. Width of bay may vary.

Car park with planted end bays adjacent building and planted bays at regular intervals including trees

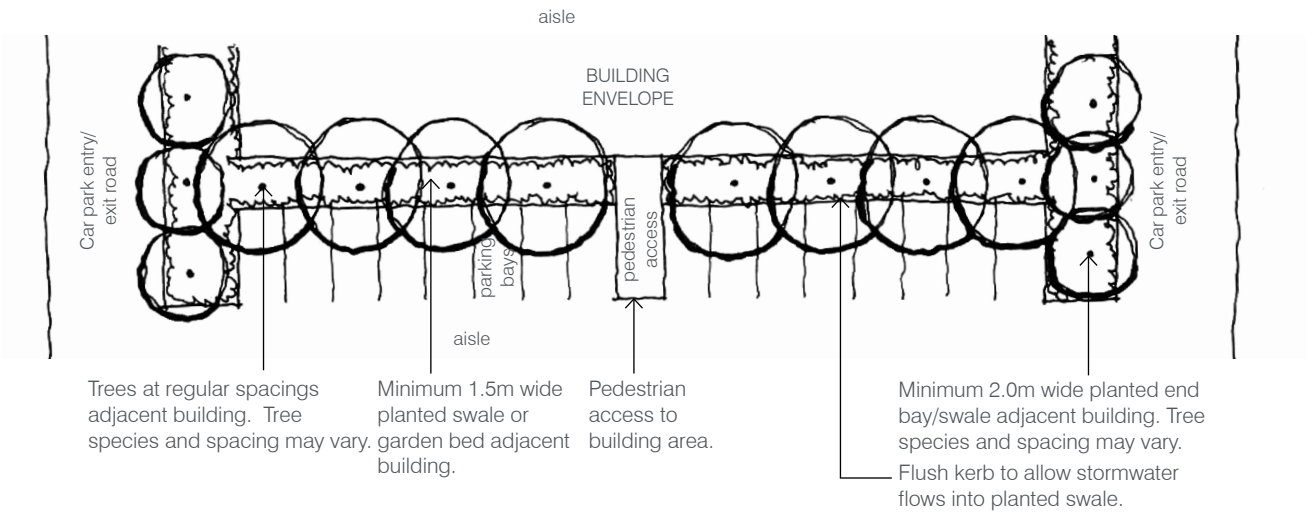


Minimum 1.5m wide planted swale or garden bed adjacent building.

Minimum 2.0m wide planted bay with shade trees at regular intervals and/or adjacent pedestrian access to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary.

Minimum 2.0m wide planted end bay/ planting adjacent building with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

Car park with planted area adjacent building and planted bays at regular intervals including trees



Trees at regular spacings adjacent building. Tree species and spacing may vary.

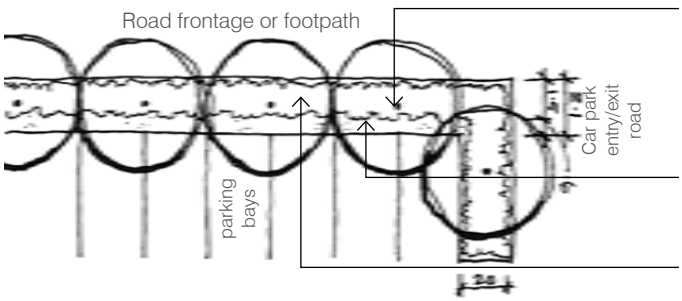
Minimum 1.5m wide planted swale or garden bed adjacent building.

Pedestrian access to building area.

Minimum 2.0m wide planted end bay/swale adjacent building. Tree species and spacing may vary.

Flush kerb to allow stormwater flows into planted swale.

Car park with wheel stops, flush kerb and planting area/swale to building frontage



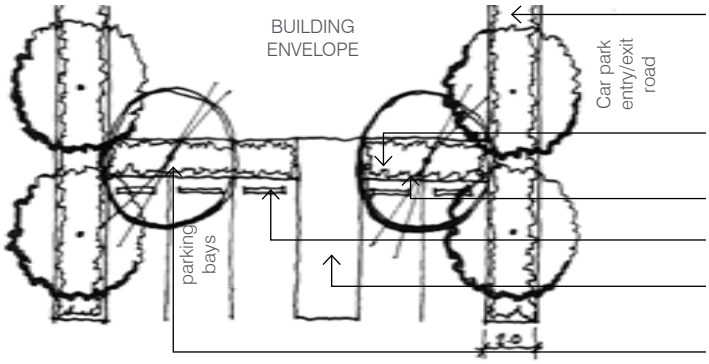
Shade trees at regular spacings. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

600mm wide no planting zone to allow for vehicle overhang (apply to all barrier kerbs).

Minimum 2.1m wide garden bed interface to road reserve/street frontage.

Car park with barrier kerb and planting area to street frontage

Note: Building envelope and car park size and interface may vary and each site shall be considered to achieve best practice design.



Minimum 2.0m wide planted end bay/swale with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary.

Minimum 1.5m wide planted swale.

Flush kerb to allow stormwater flows into planted swale.

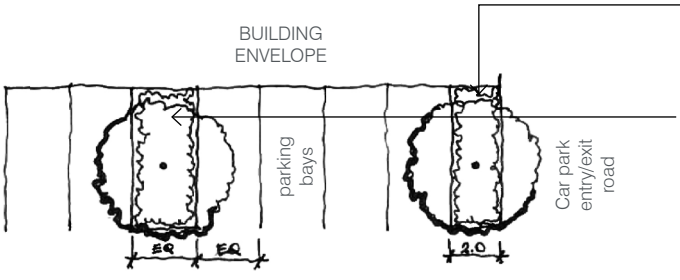
Wheel stops.

Pedestrian access to building between car parks.

Shade trees at regular spacings along building frontage. Tree species and spacing may vary.

Car park with flush kerb, central planted swale and wheel stops

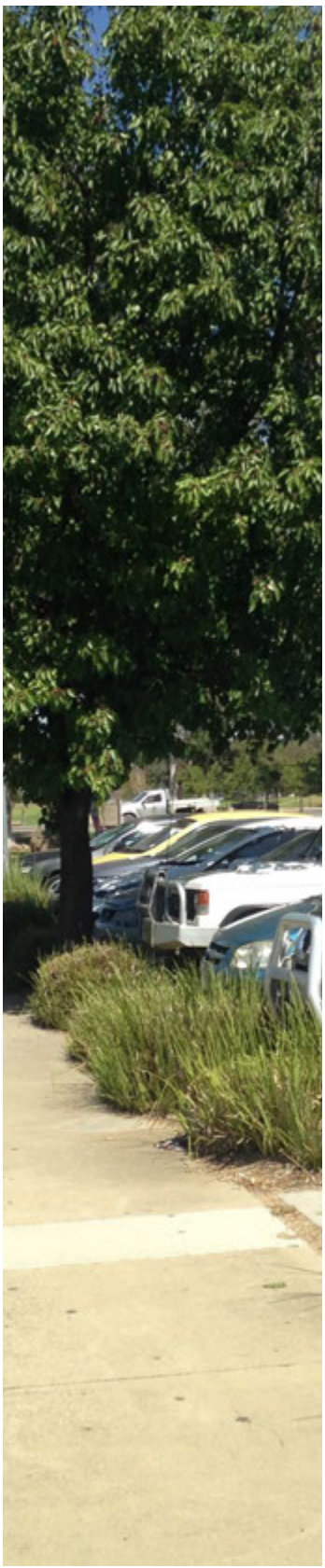
Note: Building envelope and car park size and interface may vary and each site shall be considered to achieve best practice design.



Minimum 2.0m wide planted end bay with shade trees. Tree species and spacing to achieve maxiumum canopy cover. Spacing may vary according to tree species.

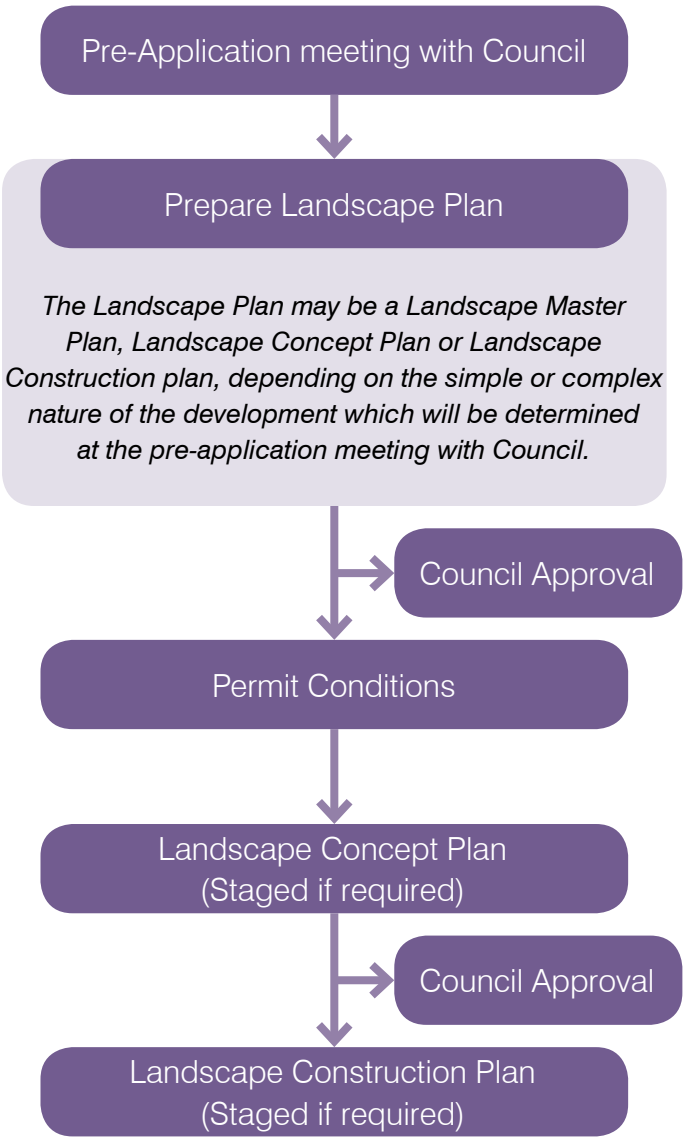
Minimum 2.0m wide planted bay with shade trees at regular intervals to achieve maxiumum canopy cover (e.g. every five car parking bays). Spacing and width of bay may vary according to tree species.

Car park with planted end bay and planted bays at regular intervals



8.2 Approvals Process

The following outlines the approval process for industrial development landscape proposals.



8.3 Landscape Plan Requirements

The following describes Council's expectations relating to the range of landscape plans and construction works required by the design and approvals processes defined above.

The requirements for landscape plans will vary depending on the level of detail required by the landscape proposals, including the size and cost of the works.

Council recommends the applicant employ a qualified landscape architect, landscape designer or horticulturist to prepare or assist with developing the required landscape plans. Ideally, the landscape architect/designer shall be commissioned early in the design process to ensure that all landscape related issues are considered.

LANDSCAPE MASTER PLAN

A Landscape Master Plan is a review of the site that includes relevant landscape design and maintenance considerations sufficient to demonstrate an understanding of the proposed development and provide an adequate basis for the production of concept designs. Landscape Master Plans may be drawn and/or written.

Site Analysis

A site analysis plan shall be prepared as the first step in the master planning process and include such things as the following:

- Photographs of existing conditions and any key features.
- Existing conditions including landscape characteristics, topographical information, existing native and exotic vegetation, views to and from the site, micro-climate (such as wind and sun), overland flows and watercourses.
- Pedestrian and vehicular access.
- Solar access, orientation and noise sources.
- Fences, boundaries and easements.
- Proximity of, connection and access to public open space.
- Surrounding neighbourhood character (built form and landscape character) such as residential areas, play areas and outdoor activities, buffer zones, screening, public and private areas, security, passive surveillance and landmark elements.
- Heritage acknowledgments.

Site Layout

The site layout should be based on the site analysis and be determined in conjunction with other professionals including engineers, planners and urban designers.

Planting

Planting design at the Landscape Master Plan stage should include the following:

- Layout of proposed planting, including indicative locations of proposed trees and areas of proposed garden bed planting.
- A recommended plant schedule for proposed trees, shrubs, tufted plants and groundcovers in accordance with the approved planting lists.

- Planting themes to ensure a cohesive landscape outcome.
- Protection and enhancement of existing vegetation which is to be retained.

Water Sensitive Urban Design

The Landscape Master Plan is to demonstrate the ways in which the proposed design treats water including:

- Stormwater treatment and/or retention.
- Reuse of captured stormwater.
- Grey water systems.

Materials and Finishes

Materials and finishes are to be in line with Landscape Standards – Materials and Techniques as described in this document.

LANDSCAPE CONCEPT PLAN (STAGED IF REQUIRED)

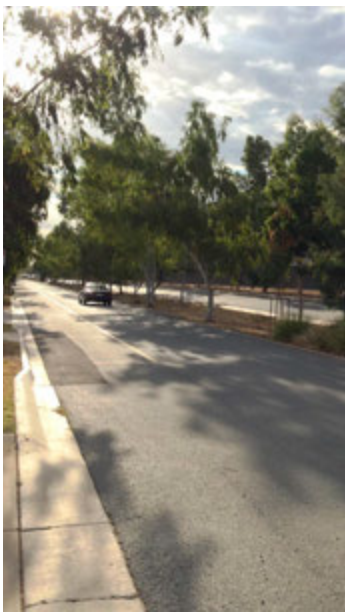
The Landscape Concept Plan is a clearly resolved landscape design, traceable to the Landscape Master Plan and where relevant, based on defined engineering and architectural proposals. Landscape Concept Plans should be to scale and show proposed hard and soft materials to an extent appropriate to review, discussion and approval, but not in sufficient detail to enable construction.

A Landscape Concept Plan for each stage of development must be prepared according to the design and approval process. Plans may be prepared separately according to stages.

The Concept Plan must be drawn to scale.

The Landscape Concept Plan should show:

- Existing vegetation to be retained (a tree assessment and management plan may be required).
- Existing vegetation to be removed (a tree assessment may be required).
- The proposed quantity and location of landscape elements in the proposed development. This includes elements such as tree planting, garden beds, pathways, seating areas, shelters, signage, rubbish receptacles, irrigation systems, retaining walls, protective fencing (temporary and permanent), vehicle control methods, wetlands, ornamental water bodies and so on.
- Areas to be managed and rehabilitated for conservation or offset planting purposes and the method by which these areas will be protected.



Streetscape treatment including planting and WSUD

Shade trees and mass planting to car park interface

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Landscape Construction Documentation Plans are precise plans, schedules and specifications, clearly traceable to the Landscape Concept Plan and based on final engineering and architectural proposals. The plans are sufficient to control the construction of the landscape works and are appropriate for review, discussion and approval.

Construction Plans for each stage of development must be prepared according to the approval process. Plans may be prepared separately according to stages.

The construction plans are to be drawn to scale.

The following is to be included in the Construction Documentation plans and must be submitted to Council for approval prior to construction.

Existing Conditions

All existing site conditions and information including buildings, services, roads, footpaths and vegetation.

Demolition

All existing site features that are to be removed as part of the landscape construction including removal of any vegetation.

Grading and Drainage

Proposed contours and finished levels of the works. This should include falls and drainage associated with the new landscape design.

Setout

The proposed layout of the landscape design with accurate descriptions and dimensions of the proposed elements sufficient for construction of the works. Existing and proposed utility services must be shown on the plans.

Materials & Finishes

The materials and finishes of all proposed hard & soft landscape treatments, including furniture types, any colours and or themes for the hard and soft landscape.

Planting

The type and location of the planting included in the works including botanical and common names of proposed plant species, mature height and installation size, location and quantity.

Irrigation

The location, type and performance of the proposed irrigation system. This may be prepared by the Contractor as a 'Design and Construct' irrigation system.

Elevation / Sections

The vertical and horizontal relationships of the design in the form of scaled elevations and or sections. The elevations and sections are to demonstrate how the works are to look and are to be drawn from relevant and key locations across the works.

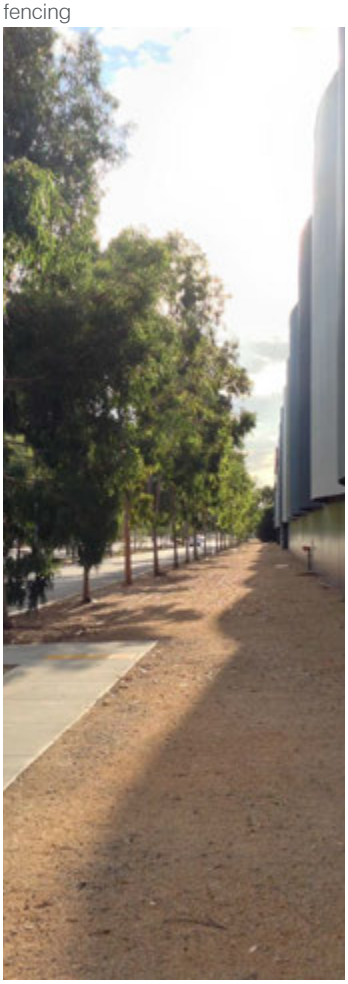
Construction Details

Construction Details are a combination of plans, sections and elevations at varying scales (for example 1:10, 1:20, 1:50) which clearly describe the construction intent and requirements of the hard and soft landscape works.

Landscape Specifications (when required)

The Specification describes the requirements for construction and installation of the works, Completion, Maintenance and Handover obligations (where relevant).

Plant species that work well with fencing



Appropriate scale tree planting to soften large walls

MAINTENANCE / ESTABLISHMENT PLAN

The Maintenance or Establishment Plan or Program may be required to be submitted to Council for approval with the Construction Documentation.

Any Maintenance Plan requirements will be provided by Council and may include the obligations and requirements for the maintenance of the hard and soft landscape works such as the following:

- Weeding & Rubbish Removal.
- Replacement Plants.
- Stakes & Ties.
- Grass.
- Pruning.
- Mulch.
- Fertiliser.
- Remnant Vegetation maintenance.

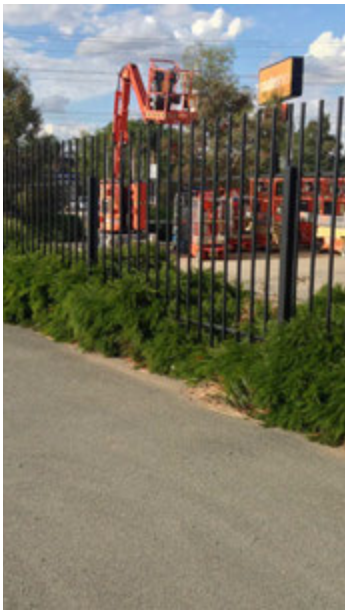
8.4 Landscape Plan Submissions

Landscape Plans shall be produced according to the following minimum standards.

- Scale appropriate to the size of the site and nature of development to adequately describe the landscape proposal.
- Large sites may be scale 1:500 or 1:200 and smaller sites 1:100 or 1:50.
- Construction Details are to be generally 1:20 or 1:10.

PRESENTATION

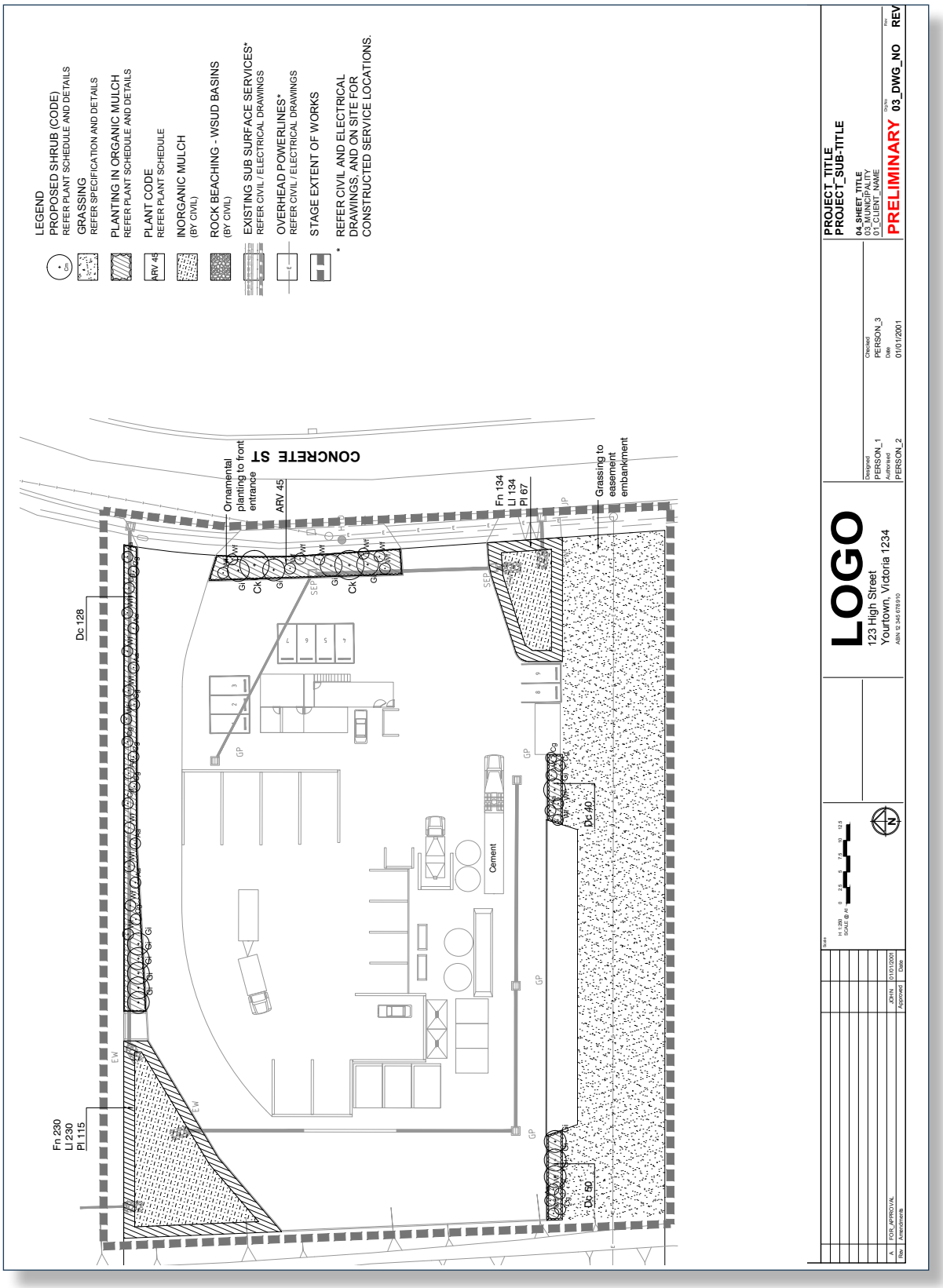
- Landscape Master Plans and Landscape Concept Plans 1 x coloured plan and 2 x black and white plans.
- Landscape Construction Documentation Plans 3 x black and white plans
- Neatly printed, legible and supported by relevant documentation.
- Accurate location of existing and proposed site features.
- Include legend, titleblock, scale and scale bar, and north point.
- Include plant schedule of proposed trees, shrubs, grasses and groundcover species.



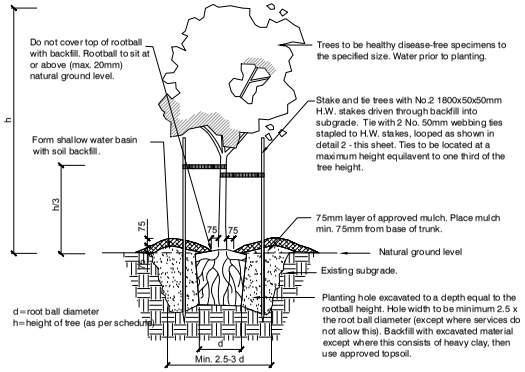
Low planting along transparent fence to soften interface

Landscape planting to interface and WSUD treatment

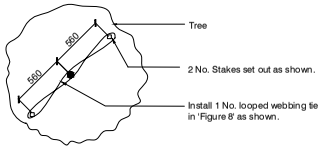
8.5 Landscape Plan Templates/Examples



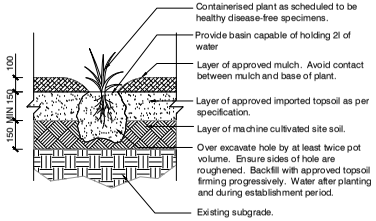
Template example of industrial development landscape plan



1 LCD 01 **STANDARD TREE PLANTING DETAIL**
Scale 1:20 @ A1



2 LCD 01 **TREE STAKE SET OUT DETAIL**
Scale 1:10 @ A1



3 LCD03 **GARDEN BED WITH ORGANIC MULCH PLANTING DETAIL**
Scale 1:10 @ A1

PLANT SCHEDULE

CODE	Botanical Name	Common Name	Height	Width	Install Size/Pot Size	Qty	Density	Comments
	Ornamental Planting to Front Entrance							
APU	Agrocanthus Ruby Velvet	Kangaroo Paw	0.6	0.4	Hi-tor pot	45	4 plants/m²	Planting groups of 5 and 7
Cm	Callistemon 'Kings Park Special'	Bottle brush	4	3	2.5-3m high - 100L	2	as shown	
Ge	Grevillea 'Ivanhoe'	Cherry Pie Grevillea	1.5	2	Hi-tor pot	4	as shown	
Rof	Westringia fruticosa 'Aussie Box'	Native Rosemary	0.6	0.6	Hi-tor pot	9	as shown	Planting groups of 5 and 9
	Planting to northern boundary							
CODE	Botanical Name	Common Name	Height	Width	Install Size/Pot Size	Qty	Density	Comments
Aa	Acacia acinacea	Gold-dust Wattle	2	2	Hi-tor pot	6	as shown	
Cg	Correa glabra var. glabra	Rock Correa	2	2	Hi-tor pot	8	as shown	
Dv	Dianella caerulea 'Breeze'	Native Flax	0.6	0.5	Hi-tor pot	135	3 plants/m²	Planting groups of 5 and 9
Ge	Grevillea 'Ivanhoe'	Cherry Pie Grevillea	3	4	Hi-tor pot	5	as shown	
Rof	Westringia fruticosa 'Aussie Box'	Native Rosemary	0.6	0.6	Hi-tor pot	9	as shown	
	Planting to southern boundary							
CODE	Botanical Name	Common Name	Height	Width	Install Size/Pot Size	Qty	Density	Comments
Aa	Acacia acinacea	Gold-dust Wattle	2	2	Hi-tor pot	2	as shown	
Cg	Correa glabra var. glabra	Rock Correa	2	2	Hi-tor pot	4	as shown	
Dv	Dianella caerulea 'Breeze'	Native Flax	0.6	0.5	Hi-tor pot	68	3 plants/m²	Planting groups of 5 and 9
Ge	Grevillea 'Ivanhoe'	Cherry Pie Grevillea	3	4	Hi-tor pot	4	as shown	
Rof	Westringia fruticosa 'Aussie Box'	Native Rosemary	0.6	0.6	Hi-tor pot	9	as shown	
	Planting to Batter of Bio Retention Pond		Area: 120					
CODE	Botanical Name	Common Name	Height	Width	Install Size/Pot Size	Qty	Density	
Fn	Ficinia nodosa	Knotted Club-rush	0.4	0.5	Tubestock	35	4 plants/m²	
Lc	Lomandra longifolia	Spiny-headed Mat-rush	1	0.5	Tubestock	35	4 plants/m²	
Pc	Poa labillardieri var. labillardieri	Common tussock grass	1	1	Tubestock	10	1 plant/m²	

NORTH

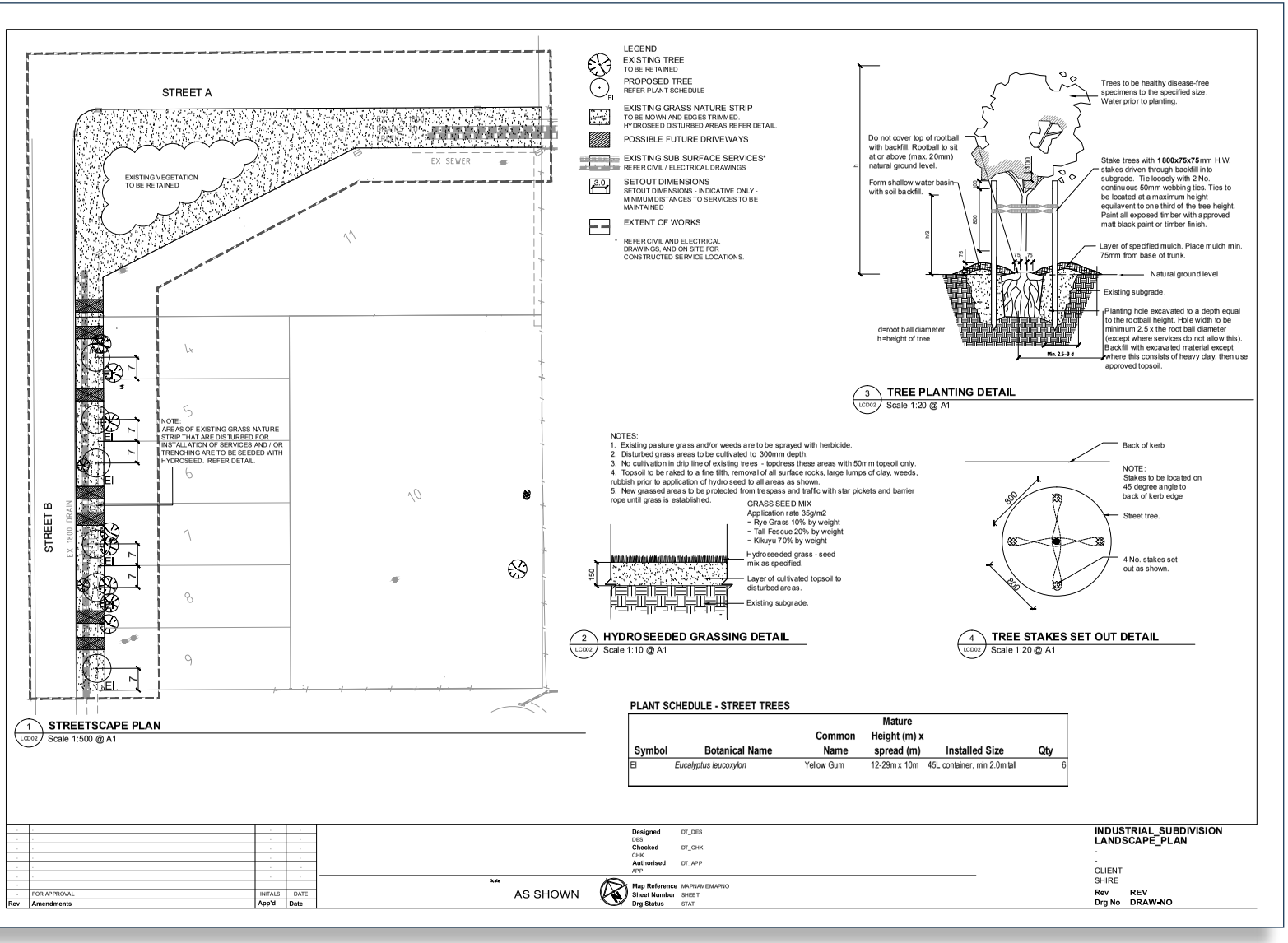
0 5 10 15 20 25 m
SCALE 1:100@A3

Drawing Number:	RevisionDate:		Sheet:	Drawn by:	Checked by:
123456 000	**01**	**01/01/2001**	**01 of 01**	**Person 1**	**Person 2**

PROJECT TITLE
PLAN TYPE | PROJECT LOCATION

LOGO

Template example of industrial development details and plant schedule



1 LCD02 **STREETSCAPE PLAN**
Scale 1:500 @ A1

3 LCD02 **TREE PLANTING DETAIL**
Scale 1:20 @ A1

2 LCD02 **HYDROSEEDED GRASSING DETAIL**
Scale 1:10 @ A1

4 LCD02 **TREE STAKES SET OUT DETAIL**
Scale 1:20 @ A1

Template example of industrial development landscape plan and details

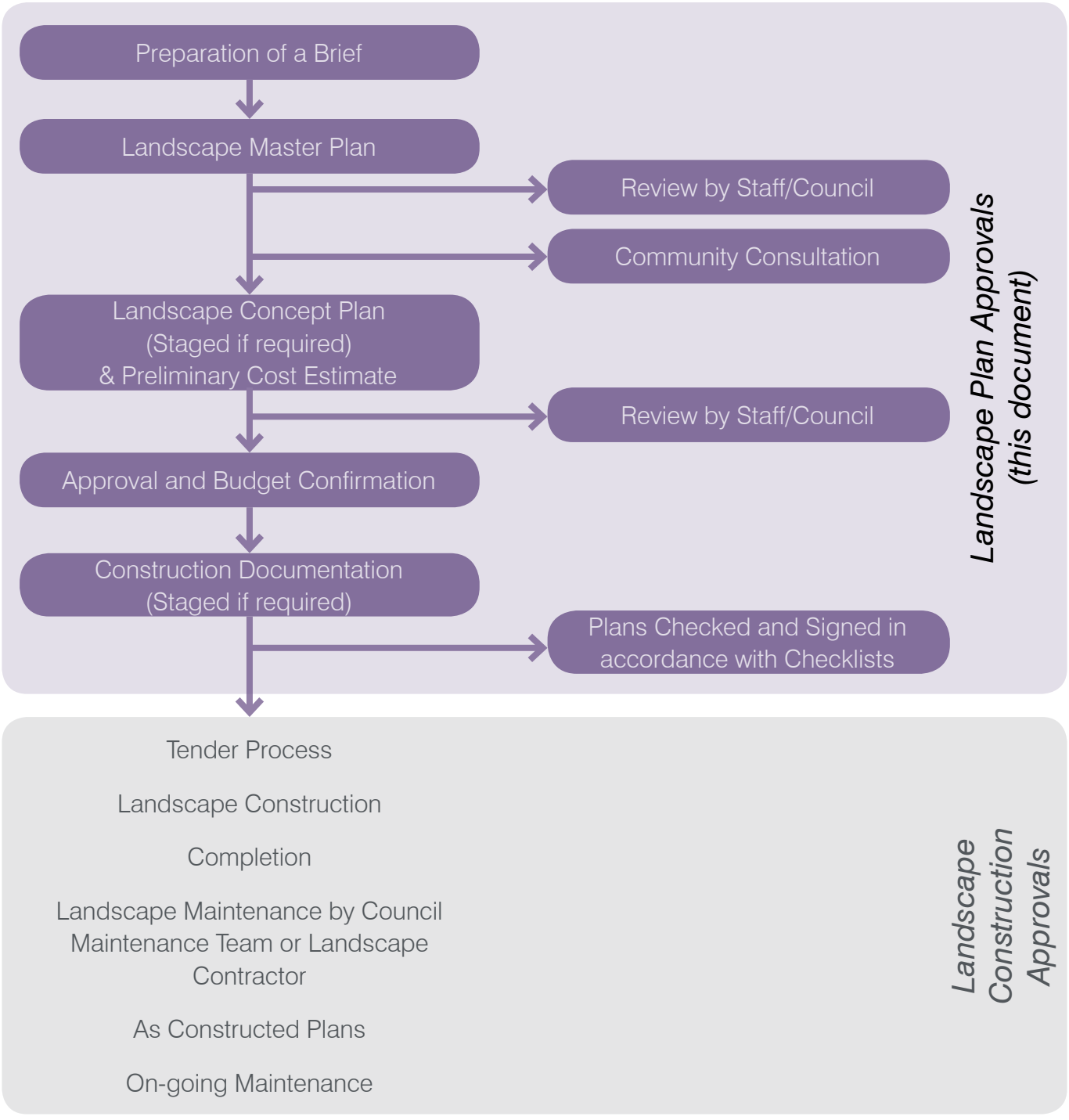
SECTION 6
COUNCIL PROJECTS PROCESS

9. DESIGN AND APPROVALS PROCESS FOR COUNCIL PROJECTS

9.1 Council Approvals Process

Internal Council projects that require landscape works will follow a design and approvals process similar to that for planning permit applications. The internal Council design and approvals process is shown in the chart below.

All relevant parts of Council landscape projects should be prepared by a Council accredited landscape architect / landscape designer (Registered member of the Australian Institute of Landscape Architects). This may be a Council employed landscape architect or a consultant professional with appropriate qualifications.



9.2 Landscape Plan Requirements

PREPARATION OF BRIEF

A Brief is to be prepared for all Council landscape works. The Brief is to outline the requirements of the proposed work and include the design outputs to be delivered and approved as part of the design process.

Internal departmental discussions will be held to determine opportunities to be assessed, constraints identified and needs for further investigation clarified.

An appropriate document control system and planning process will be developed for each project by Council Officers and consistent with the internal landscape design and approvals process.

Due to the greater probability of community involvement in Council's own projects, this Preparation of Brief stage should include consideration of the project Community Consultation and Communication Strategy.

LANDSCAPE MASTER PLAN

A Landscape Master Plan will be produced for internal approval prior to any detailed design or construction. A preliminary Opinion of Probable Cost will also be developed, based on the Landscape Master Plan, and issued for internal approval.

Review by Staff / Council

The Landscape Master Plan will be referred to other Council departments, such as the engineering, assets, and environment teams through the internal planning approvals process. This will ensure departments which have vested interest in the subject land, its development and future maintenance are included in the design and approvals process.

Written comments will be received from relevant departments.

Community Consultation and Communication

Community consultation and communication will normally be undertaken for all Council Landscape Master Plans in order to engage the community early in the design and approvals process.

The Community Consultation and Communication Strategy will ensure public display, receipt of community comments, and required amendment.

LANDSCAPE CONCEPT PLAN AND PRELIMINARY OPINION OF PROBABLE COST (STAGED IF REQUIRED)

Internal Council projects require detailed Landscape Concept Plans to be prepared based on the approved Landscape Master Plan.

Separate Concept Plans may be prepared and submitted according to the staging of the development.

The Landscape Concept Plan should be submitted to relevant internal departments through the planning approvals process, and approved prior to approval of engineering/ architectural construction plans for any particular stage. The Concept Plans will be assessed against relevant engineering/architectural construction plans. When approved, the Landscape Concept Plan will be the basis for the Landscape Construction plans.

A Preliminary Opinion of Probable Cost is to be developed from the Landscape Concept Plan and submitted to relevant internal departments for review and approval with the plans.

APPROVAL AND BUDGET CONFIRMATION

Projects will receive written approval and confirmation of budget from relevant departments prior to proceeding with Construction Documentation.

CONSTRUCTION DOCUMENTATION PLANS (STAGED IF REQUIRED)

Construction Documentation Plans are required to control the construction of the landscape works and are to be developed from the approved Landscape Concept Plan.

Separate Construction Documentation Plans may be prepared and issued for review according to the staging of proposed works.

Council will refer the plans to relevant internal departments for approval through planning approvals process. The plans will be assessed and approved against endorsed engineering construction plans.

Construction Documentation of the approved concept is to be completed prior to any commencement of built works.

A Pre-Tender Opinion of Probable Cost is to be prepared for the proposed construction, based on the preliminary cost estimate and completed in line with the construction documents.

Plans Checked and Signed in accordance with Checklists

Construction Documentation Plans and Pre-Tender Opinion of Probable Cost are to be checked and signed by the relevant Council Officer in accordance with Checklists and Council's internal Systems.

SECTION 7
PLANTING SPECIES

10. BIOREGIONS

10.1 Local Government Areas Bioregions

Across the extensive area covered by Moira Shire, Campaspe Shire Council and the Greater Shepparton City Council the landscape varies according to local conditions. These landscape types are called 'bioregions'.

Bioregions classify the environment using a range of attributes such as climate, geomorphology, geology, soils and vegetation. By identifying which bioregion a development falls within it is possible to better understand the local conditions, and therefore which plant species are more likely to survive and thrive in the landscape.

For further information on the bioregions please refer to section one in the appendix of this guide.

Four bioregions are present across Moira Shire, Shire of Campaspe and Greater Shepparton City Council:

- Victorian Riverina
- Murray Fans
- Northern Inland Slopes
- Goldfields

Below is a map showing the bioregions within the Local Government Areas. Plant species should be selected which are present in the relevant bioregion for the development site.

Further details about these bioregions can be found at

http://www.depi.vic.gov.au/environment-and-wildlife/biodiversity/evc-benchmarks

11. RECOMMENDED PLANTING LISTS

The following planting images and lists provides a guide for suggested and recommended species for landscape developments.

The applicant shall ensure that the species selected are appropriate to the individual site conditions and intended purpose, and that the plants are available from local nurseries.

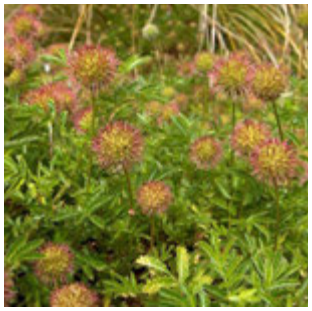
Tree species selection shall be discussed with appropriate Council officers to determine the *right tree for the right location*.

11.1 Native Plants & Local/Indigenous Plants in Cultivation

VR = Victorian Riverina
GF = Goldfields
MF = Murray Fans
NS = North Inland Slopes
R/V = Rare/Vulnerable plants

GROUND COVERS & PERENNIAL HERBS

Acacia aculeatissima - Thin Leaf Wattle
VR, GF, NS



Acaena novae-zelandiae - Bidgee Widgee
VR, GF, MF, NS

Acrotriche serrulata - Honey Pots
VR, GF, NS

Ajuga australis - Austral Bugle
VR, GF, MF, NS

Alternanthera denticulata - Lesser Joyweed
VR, GF, MF, NS

Asperula conferta - Common Woodruff
VR, GF, MF, NS

Astroloma humifusum - Cranberry Heath
VR, GF, MF, NS

Atriplex semibaccata - Creeping Saltbush
VR, GF, MF, NS

Atriplex vesicaria - Bladder Saltbush
MF

Bossiaea buxifolia - Matted Bossiaea
GF, NS

Bossiaea prostrata - Creeping Bossiaea
VR, GF, NS

Brachyscome chrysoglossa - Yellow-tongue Daisy **(R/V)**
VR, GF, MF

Brachyscome multifida - Cut Leaf Daisy
VR, GF, MF

Calotis scapigera - Tufted Burr Daisy
VR, GF, MF

Calocephalus citreus - Lemon Beauty Heads
VR, GF

Centella cordifolia - Swamp Pennywort
VR, GF, MF, NS

Chenopodium desertorum - Desert Goosefoot
VR, GF, MF, NS

Chrysocephalum apiculatum - Common Everlasting
VR, GF, MF, NS

Convolvulus angustissimus - Blushing Bindweed
VR, GF, MF, NS

Convolvulus wimmerensis - Bindweed
VR, MF, NS

Desmodium varians - Slender Tick-Trefoil
VR, GF, NS

Dichondra repens - Kidney Weed
VR, GF, MF

Dodonaea procumbens - Trailing Hop Bush
VR, GF

Einadia hastata - Saloop Salt Bush
VR, GF, MF, NS

Einadia nutans - Nodding Salt Bush
GF, NS

Enchylaena tomentosa - Creeping Ruby Salt Bush
VR, GF, MF

Eryngium paludosum - Long Eryngium **(R/V)**
VR, GF, MF, NS

Glycine latrobeana - Clover Glycine **(R/V)**
VR, GF

Glycine tabacina - Variable Glycine
VR, GF, MF, NS

Goodenia blackiana - Primrose Goodenia
VR, GF, MF

Goodenia lanata - Trailing Goodenia
VR, GF, NS

Goodenia pinnatifida - Cut-leaf Goodenia
VR, GF, MF, NS

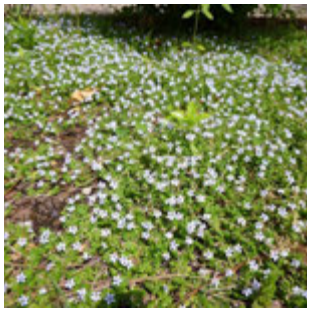
Grevillea ilicifolia - Holly Grevillea
VR, GF, MF, NS

Grevillea obtecta - Elphinstone Grevillea **(R/V)**
GF

Grevillea repens - Creeping Grevillea **(R/V)**
VR, GF

Hydrocotyle laxiflora - Stinking Pennywort
VR, GF, MF, NS

Hydrocotyle sibthorpioides - Shining Pennywort (wetland plant) **VR, GF, MF, NS**



Isotoma fluviatilis - Swamp Isotome
VR, GF, MF, NS

Kennedia prostrata - Running Postman
VR, GF, MF, NS

Lepidium pseudopapillosum - Erect Peppercress **(R/V)**
VR, GF

Lissanthe strigosa - Peach Heath
VR, GF, MF, NS

Lobelia concolor - Milky Lobelia (wetland plant)
VR, GF, MF, NS

Lobelia pedunculata - Matted Lobelia (wetland plant)
VR, GF, NS

Lobelia pratioides - Poison Lobelia (wetland plant)
VR, GF, MF, NS

Mimulus repens - Creeping Monkey Flower
VR

Myoporum parvifolium - Creeping Boobialla
VR, GF

Persoonia chamaepeuce - Dwarf Geebung
VR, GF, NS

Pultenaea pedunculata - Matted Bush Pea
VR, GF

Senecio behrianus - Stiff Groundsel **(R/V)**
VR, GF, MF

Stellaria pungens - Prickly Starwort
VR, GF, NS

Swainsona procumbens - Small Leaf Broughton Pea
VR, GF, MF, NS

Swainsona swainsonioides - Downy Swainson Pea **(R/V)**
VR, GF, NS

Tetratheca thymifolia - Black-eyed Susan
(NSW, QLD)

Veronica calycina - Hairy Speedwell
VR, GF, NS

Veronica plebeia - Trailing Speedwell
VR, GF, NS

Viola hederacea - Native Violet
VR, GF, MF, NS

VR = Victorian Riverina
GF = Goldfields
MF = Murray Fans
NS = North Inland Slopes
R/V = Rare/Vulnerable plants

GRASSES & TUFTING PLANTS

Amphibromus nervosus - Swamp Wallaby Grass
VR, GF, MF, NS

Amphipogon caricinus var. caricinus - Long Greybeard Grass **VR, MF**

Anigozanthos - Kangaroo Paws
(Western Australia)

Aristida behriana - Brush Wire Grass
VR, GF, MF, NS

Austrostipa breviglumis - Cane Spear Grass **(R/V)**
VR, GF, NS

Aristida ramosa - Purple Wire Grass
VR, GF, MF, NS

Austrodanthonia auriculata - Lobed Wallaby Grass
VR, GF, MF, NS

Austrodanthonia caespitosa - Common Wallaby Grass
VR, GF, MF, NS

Austrodanthonia carphoides - Short Wallaby Grass
VR, GF, MF, NS

Austrostipa densiflora - Foxtail Spear Grass
VR, GF, NS

Austrostipa elegantissima - Feather Spear Grass
VR, GF, MF, NS

Bothriochloa macra - Redleg Grass
VR, GF, MF, NS

Bulbine glauca - Rock Lily
VR, NS

Chloris truncata - Windmill Grass
VR, GF, MF, NS

Carex appressa - Tall Sedge
VR, GF, MF, NS

Carex tereticaulis - Basket Sedge, Terete Culm-Sedge
VR, GF, MF, NS

Dianella revoluta - Black-anther Flax-lily
VR, GF, MF

Doryanthes excelsa - Gymea Lily
(NSW)

Lomandra longifolia - Spiny-headed Mat-rush
VR, GF, MF, NS

Poa labillardieri - Common Tussock Grass
VR, GF, MF, NS

CLIMBERS AND RAMBLERS

Billardiera cymosa - Sweet Apple Berry
VR, GF

Clematis microphylla - Small-leaved Clematis
VR, GF, MF, NS

Glycine clandestina - Trailing Glycine, Twining Glycine
VF, GF, MF, NS

Hardenbergia violacea - Happy Wanderer, Purple Coral Pea, Sarsaparilla **VR, GF, MF, NS**

Hibbertia scandens - Golden Guinea Vine
(NSW, QLD)

Millettia megasperma - Native Wisteria **(NSW, QLD)**

Pandorea jasminoides - Bower Vine **(NSW, QLD)**

Rubus parvifolius - Native Raspberry
VR, GF, NS

SMALL TO MEDIUM SHRUBS (1 – 3 M)

VR = Victorian Riverina
GF = Goldfields
MF = Murray Fans
NS = North Inland Slopes
R/V = Rare/Vulnerable plants

Acacia acinacea - Gold Dust Wattle
VR, GF, MF, NS

Acacia acinacea - Gold Dust Wattle (Red-bud form)
VR, GF, MF, NS

Acacia brachybotrya - Grey Mulga
VR, GF, MF

Atriplex nummularia - Old Man Salt-bush
VR, MF

Astroloma pinifolium - Pine Heath
GF

Baeckea crassifolia - Desert Heath-myrtle
GF

Calytrix tetragona - Common fringe myrtle
VR, GF, MF, NS

Cheiranthera cyanea - Blue Finger Flower
VR, MF, GF, NS

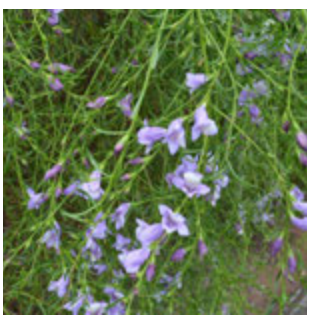
Correa reflexa - Common Correa
VR, GF, NS

Daviesia latifolia - Hop Bitter Pea
VR, GF, NS

Daviesia genistifolia - Broom Bitter Pea **(R/V)**
VR, GF, NS

Discaria pubescens - Australian Anchor Plant **(R/V)**
VR, GF, NS

Epacris impressa - Common Heath
GF



Eremophila divaricata - Spreading Emu Bush
VR, MF

Eremophila glabra - Common Emu Bush
VR, GF, MF

Eutaxia microphylla var. diffusa - Spineless Eutaxia **(R/V)**
VR, MF, GF

Grevillea alpina - Cat's Claw
VR, GF, MF, NS

Grevillea rosmarinifolia - Rosemary Grevillea
VR, GF, NS

Grevillea micrantha - Small Flower Grevillea
VR, GF

Hibbertia obtusifolia - Grey Guinea Flower **(R/V)**
VR, GF, NS

Hybanthus floribundus - Shrub Violet
VR, GF, MF

Leucopogon ericoides - Pink Beard Heath
VR, GF, NS

Micromyrtus ciliata - Fringed Heath Myrtle
VR, GF, MF, NS

Olearia pannosa subsp. cardiocarpa - Velvet Daisy Bush
(R/V) VR, GF

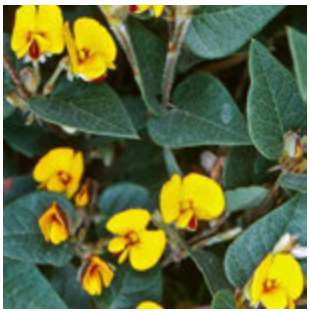
Olearia pimeleoides - Pimelea Daisy Bush
VR, GF, MF, NS

Ozothamnus retusus - Rough Everlasting
GF

Phebalium festivum - Dainty Phebalium **(R/V)**
VR, GF

Phebalium festivum - Prickly Waxflower **(R/V)**
GF

Philotheca verrucosa - Bendigo Wax (Semmens double white form) **(R/V) VR, GF, MF**



Platylobium formosum - Handsome Flat Pea
GF

Prostanthera aspalathoides - Scarlet Mint Bush
VR, GF, MF, GF

Pultenaea humilis - Dwarf Bush Pea
VR, GF, NS

Templetonia stenophylla - Leafy Templetonia **(R/V)**
VR, GF, MF, NS

Tetratheca ciliata - Pink Bells
VR, GF, NS

Westringia eremicola - Slender Westringer
VR, GF, NS

Zieria aspalathoides - Whorled Zieria/Sandfly Bush **(R/V)**
VR, GF

VR = Victorian Riverina
GF = Goldfields
MF = Murray Fans
NS = North Inland Slopes
R/V = Rare/Vulnerable plants

MEDIUM TO LARGE SHRUBS (3 – 5 M)

Acacia hakeoides - Hakea Wattle
VR, GF, MF

Acacia implexa - Lightwood
VR, GF, MF, NS

Acacia montana - Mallee Wattle
VR, GF, MF, NS

Acacia oswaldii - Umbrella Wattle **(R/V)**
VR, GF, MF

Acacia paradoxa - Hedge Wattle
VR, GF, MF, NS

Acacia pycnantha - Golden Wattle
VR, GF, MF, NS

Acacia rigens - Needle Wattle, Nealie
VR, GF, MF

Acacia verniciflua - Varnish Wattle
VR, GF, MF, NS

Acacia williamsonii - Whirrakee Wattle **(R/V)**
VR, GF

Bursaria spinosa subsp spinosa - Sweet Bursaria
VR, GF, MF, NS

Callistemon citrinus - Crimson Bottlebrush
GF

Callistemon rugulosus - Scarlet Bottlebrush
GF, MF, NS

Callistemon sieberi - River Bottlebrush
VR, GF, MF, NS

Cassinia ozothamnoides - Cottoney Haeckeria **(R/V)**
VR, GF, NS

Coprosma quadrifida - Prickly Currant Bush
VR, GF, NS

Daviesia latifolia - Hop Bitter Pea
VR, GF, NS

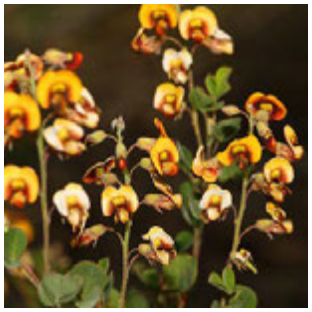
Dillwynia phylicoides - Small Leaf Parrot Pea
VR, GF, NS

Dodonaea viscosa subsp. cuneata - Wedge-leaf Hop Bush
VR, GF, MF, NS

Eremophila longifolia - Turkey Bush
VR, GF, MF, NS

Eremophila glabra - Common Emu Bush
VR, GF, MF

Grevillea rosmarinifolia - Rosemary grevillea
VR, GF, NS



Goodia medicaginea - Western Golden Tip **(R/V)**
VR, GF, NS

Hakea decurrens subsp. physocarpa - Bushy Needlewood **GF**

Hakea tephrosperma - Hooked Needlewood
VR, GF, MF

Hovea asperifolia subsp. asperifolia - Mountain Beauty
VR, NS

Leptospermum lanigerum - Woolly Tea Tree
GF, NS

Logania albiflora - Narrow Leaf Logania
GF

Melaleuca decussata - Cross Leaf Honey Myrtle
VR, GF, NS

Melaleuca lanceolata - Moonah
VR, GF, MF

Myoporum montanum - Waterbush **(R/V)**
VR, GF, MF, NS

Ozothamnus rosmarinifolius - Rosemary Everlasting
NS

Pittosporum angustifolium - Weeping Pittosporum
VR, GF, MF

Pomaderris paniculosa subsp. paniculosa - Inland Pomaderris
(R/V) VR, GF

Pultenaea graveolens - Scented Bush Pea **(R/V)**
GF

Westringia crassifolia - Whipstick Westringia **(R/V)**
VR, GF

Xanthorrhoea glauca subsp. angustifolia - Grass Tree
VR, GF, MF

VR = Victorian Riverina
GF = Goldfields
MF = Murray Fans
NS = North Inland Slopes
R/V = Rare/Vulnerable plants

SMALL TO MEDIUM TREES <10M

Acacia dealbata -
Silver Wattle
VR, GF, MF, NS

Acacia implexa -
Lightwood
VR, GF, MF, NS

Acacia melanoxylon -
Blackwood
VR, GF, MF, NS

Acacia pendula -
Weeping Myall **(R/V)**
VR, MF

Acacia pycnantha - Golden Wattle
VR, GF, MF, NS

Acacia salicina -
Weeping Acacia, Native Willow
VR, GF, MF, NS

Acacia stenophylla - Eumong, River Cooba, Showstring Acacia
VR, MF

Allocasuarina luehmannii -
Buloke **(R/V)**
VR, GF, MF, NS

Brachychiton populneus -
Kurrajong
VR,GF, MF, NS

Callitris rhomboidea -
Port Jackson Pine
GF, NS

Corymbia ficifolia -
Red Flowering Gum
(Western Australia)

Callistemon sieberi -
River Bottlebrush
VR, GF, MF, NS

Eucalyptus caesia -
Silver Princess
(Western Australia)

Eucalyptus pauciflora subsp. pauciflora - Little Snowman
VR, NS

Santalum acuminatum - Sweet Quangdong
VR, MF, NS

Leptospermum obovatum -
River Tea Tree
VR, GF, NS

MEDIUM TO LARGE TREES >10M

Angophora costata - Smooth-barked Apple **(QLD, NSW)**

Acacia stenophylla - Eumong **VR, MF**

Allocasuarina luehmannii - Buloke **(R/V) VR, GF, MF, NS**

Callitris glaucophylla - Murray Pine **(R/V) VR, GF, MF, NS**

Corymbia citriodora - Lemon-scented Gum **(QLD)**

Corymbia maculata - Spotted Gum **(NSW)**

Eucalyptus albens - White Box **VR, GF, MF, NS**

Eucalyptus camaldulensis - River Red Gum (*waterways/ wetlands only) **VR, GF, MF, NS**

Eucalyptus largiflorens - Black Box, River Box **VR, GF, MF, NS**

Eucalyptus leucoxylon subsp pruinosa - Yellow Gum, White Ironbark **VR, GF**

Eucalyptus melliodora - Yellow Box **VR, GF, MF, NS**

Eucalyptus microcarpa - Grey Box **VR, GF, MF, NS**

Eucalyptus polyanthemos subsp vestita - Red Box **VR, GF, NS**

Eucalyptus tricarpa - Red Ironbark **VR, GF, MF**

Geijera parviflora - Wilga

Hymenosporum flavum - Native Frangipani **(QLD, NSW)**

11.2 Exotic Trees

The following is a selection of exotic tree species suitable for the area. Applicants are to confirm proposed trees with Council to ensure the 'right tree for the right location'.

Acer x freemanii 'Jeffersred'
Autumn Blaze®
Jeffersred Maple

Acer rubrum 'October Glory'
Lipstick Maple

Celtis australis
Nettle Tree

Fraxinus americana 'Autumn Applause'
White Ash

Nyssa sylvatica
Black Tupelo

Pistacia chinensis
Chinese Pistacio

Platanus orientalis var. insularis
Plane

Pyrus calleryana 'Aristocrat'
Ornamental Pear

Quercus cerris
Turkey Oak

Quercus palustris 'Green Pillar'
Upright Oak

Quercus palustris
Pin Oak

Quercus rubra
Red Oak

Quercus robur 'Fastigiata'
Upright English Oak

Sapphora japonica
Japanese Pagoda

Ulmus parvifolia
Chinese Elm

Zelkova serrata
Japanese Elm

12. PLANT SPECIES LISTS

12.1 Ground Covers

(**R** denotes RURAL SPECIES LIST and only where ongoing pest plant maintenance will not be an issue)

Botanical Name	*Common Name*
Ground Covers	
Acacia aculeatissima	Thin Leaf Wattle
Acaena novae-zelandiae	Bidgee Widgee
Acrotriche prostrata	Trailing Ground Berry
Acrotriche serrulata	Honey Pots
Ajuga australis	Austral Bugle
Alternanthera denticulata	Lesser Joyweed
Asperula conferta	Common Woodruff
Astroloma humifusum	Cranberry Heath
Atriplex leptocarpa **R**	Creeping Saltbush
Atriplex semibaccata **R**	Berry Saltbush
Atriplex vesicaria	Bladder Salt Bush
Bossiaea buxifolia	Matted Bossiaea
Bossiaea prostrata	Creeping Bossiaea
Brachyscome multifida **R**	Cut Leaf Daisy
Brachyscome chrysoglossa	Yellow-tongue Daisy
Calocephalus citreus **R**	Lemon Beauty Heads
Calotis scapigera **R**	Tufted Burr Daisy
Carpobrotus modestus	Inland Pigface
Centella cordifolia	Swamp Pennywort
Chenopodium desertorum	Desert Goosefoot
Chrysocephalum apiculatum **R**	Common Everlasting
Chrysocephalum semipapposum **R**	Clustered Everlasting
Convolvulus angustissimus **R**	Australian Bindweed
Convolvulus erubescens **R**	Blushing Bindweed
Convolvulus wimmerensis **R**	Pink Bindweed
Dichondra repens	Kidney Weed
Dodonaea procumbens **R**	Trailing Hop Bush
Einadia hastata **R**	Saloop Salt Bush
Einadia nutans **R**	Nodding Salt Bush
Enchylaena tomentosa **R**	Ruby Salt Bush
Eremophila glabra prostata **R**	Silver Spread Emu Bush
Eremophila debilis **R**	Amula
Eryngium paludosum	Long Eryngium
Glycine latrobeana	Clover Glycine
Glycine tabacina	Variable Glycine
Goodenia blackiana	Primrose Goodenia
Goodenia lanata	Trailing Goodenia
Goodenia pinnatifida	Cutleaf Goodenia
Grevillea ilicifolia	Holly Grevillea
Grevillea obtecta	Elphinstone Grevillea
Grevillea repens	Creeping Grevillea
Hibbertia exutiacies	Tangled Guinea Flower
Hydrocotyle laxiflora	Stinking Pennywort
Hydrocotyle sibthorpioides	Shining Pennywort
Isotoma fluviatilis	Swamp Isotome
Kennedia prostrata	Running Postman
Kunzea pomifera	Muntries
Lissanthe strigosa	Peach Heath
Lobelia concolor	Milky Lobelia
Lobelia pedunculata	Matted Lobelia
Lobelia pratioides	Poison Lobelia
Mimulus repens	Creeping Monkey Flower
Myoporum parvifolium	Creeping Boobialla
Persicaria prostrata	Creeping Knotweed
Persoonia chamaepeuce	Dwarf Geebung
Podolobium procumbens	Trailing Shaggy-pea
Pultenaea pedunculata	Matted Bush Pea
Pycnosorus globulus	Billy Button
Scleranthus biflorus	Twin-flower Knaweel
Stellaria pungens	Prickly Starwort
Swainsona procumbens	Small Leaf Broughton Pea
Swainsona swainsonioides	Downy Swainson Pea
Tetratheca thymifolia	Black-eyed Susan
Veronica calycina	Hairy Speedwell
Veronica plebeia	Trailing Speedwell
Viola hederacea	Native Violet

12.2 Climbers and Ramblers

Botanical Name	*Common Name*
Climbers and Ramblers	
Billardiera cymosa	Sweet Apple Berry
Billardiera longifolia	Purple Apple Berry
Billardiera scandens	Common Apple Berry
Clematis aristata	Old Man's Beard
Clematis microphylla	Small-leaved Clematis
Glycine clandestina	Trailing Glycine
Hardenbergia violacea	Happy Wanderer, Sarsparilla
Hibbertia scandens	Golden Guinea Vine
Pandorea jasminoides	Bower Vine
Rubus parvifolius	Native Raspberry

12.3 Grasses

(**R** denotes RURAL SPECIES LIST and only where ongoing pest plant maintenance will not be an issue)

Botanical Name	*Common Name*
Grasses	
Amphibromus nervosus **R**	Swamp Wallaby Grass
Amphipogon caricinus var. caricinus	Long Greybeard Grass
Aristida behriana	Brush Wire Grass
Aristida ramosa	Purple Wire Grass
Austrodanthonia auriculata	Lobed Wallaby Grass
Austrodanthonia bipartita **R**	Wallaby Grass
Austrodanthonia caespitosa **R**	Common Wallaby Grass
Austrodanthonia carphoides	Short Wallaby Grass
Austrodanthonia duttoniana	Brown Back Wallaby Grass
Austrodanthonia eriantha	Hill Wallaby Grass
Austrodanthonia fulva	Copper-awned Wallaby-grass
Austrodanthonia geniculata	Kneed Wallaby Grass
Austrodanthonia induta	Yellow Anther Wallaby Grass
Austrodanthonia penicillata	Slender Wallaby Grass
Austrodanthonia pilosa	Velvet Wallaby Grass
Austrodanthonia racemosa	Clustered Wallaby-grass
Austrodanthonia richardsonii	Straw Wallaby-grass
Austrodanthonia setacea	Bristly Wallaby Grass
Austrodanthonia tenuior	Short-awn Wallaby-grass
Austrostipa aristiglumis	Plump Spear Grass
Austrostipa blackii	Plains Spear Grass
Austrostipa breviglumis	Cane Spear Grass
Austrostipa densiflora	Foxtail Spear Grass
Austrostipa elegantissima **R**	Feather Spear Grass
Austrostipa gibbosa	Spurred Spear Grass
Austrostipa mollis	Soft Spear Grass
Austrostipa nodosa	Knotty Speargrass
Austrostipa rudis	Veined Spear-grass
Austrostipa oligostachya	Fine-head Spear-grass
Austrostipa scabra	Rough Spear Grass
Austrostipa semibarbata	Fibrous Spear Grass
Austrostipa setacea	Corkscrew Spear Grass
Austrostipa stuposa	Tasmanian Spear-grass
Austrostipa tuckeri	Tucker's Spear-grass
Bothriochloa macra	Redleg Grass
Chloris truncata	Windmill Grass
Deschampsia caespitosa	Tufted Hair Grass
Dichanthium sericeum	Silky Blue-grass
Dichelachne crinita	Long Hair Plume Grass
Dichelachne hirtella	Slender Plume Grass

Botanical Name	*Common Name*
Distichlis distichophylla	Emu Grass
Elymus scaber	Common Wheat Grass
Enneapogon nigricans	Pappus Grass
Eragrostis australasica	Cane Grass
Eragrostis brownii	Common Love Grass
Eragrostis diandra	Clustered Love Grass
Eragrostis dielsii	Mallee Love-grass
Glyceria australis	Manna Grass
Hemarthria uncinata	Mat Grass
Homopholis proluta	Rigid Panic
Joycea pallida	Red Anther Wallaby Grass
Lachnagrostis filiformis var. 2	Common Blown Grass (Annual)
Microlaena stipoides **R**	Weeping Grass
Pentapogon quadrifidus	Five-awned Spear Grass
Poa labillardieri **R**	Common Tussock Grass
Poa morrisii	Velvet Tussock Grass
Poa sieberiana	Fine-leaf Tussock Grass
Poa tenera	Slender Tussock Grass
Themeda triandra **R**	Kangaroo Grass

12.4 Ferns, Perennial Herbs, Lilies, Rushes, Sedges & Other Tufts

(**R** denotes RURAL SPECIES LIST and only where ongoing pest plant maintenance will not be an issue)

Botanical Name	*Common Name*
Ferns, Perennial Herbs, Lilies, Rushes, Sedges & Other Tufts	
Acaena echinata	Sheep's Burr
Adiantum aethiopicum	Common Maidenhair
Anigozanthos	Kangaroo Paws
Arthropodium fimbriatum	Nodding Chocolate Lily
Arthropodium milleflorum	Pale Vanilla Lily
Arthropodium minus	Small Vanilla Lily
Arthropodium strictum	Chocolate Lily
Baumea articulata	Jointed Twig Rush
Blechnum minus	Soft Water Fern
Bolboschoenus caldwellii	Sea Club Rush
Brachyscome basaltica	Swamp Daisy
Brachyscome chrysoglossa	Yellow-tongue Daisy
Brachyscome ciliaris	Variable Daisy
Brachyscome dentata	Lobe-seed Daisy
Brachyscome diversifolia	Large-headed Daisy
Brunonia australis	Blue Pincushion
Bulbine bulbosa	Bulbine Lily
Bulbine glauca	Rock Lily
Burchardia umbellata	Milkmaids
Caesia calliantha	Blue Grass Lily
Calocephalus citreus	Lemon Beauty Heads
Calocephalus lacteus	Milky Beauty Heads
Calocephalus sonderi	Pale Beauty Heads
Calostemma purpureum	Garland Lily
Calotis cuneifolia	Purple Burr Daisy
Calotis scabiosifolia var. integrifolia	Rough Burr Daisy
Calotis scabiosifolia var. scabiosifolia	Rough Burr Daisy
Carex appressa	Tall Sedge
Carex breviculmis	Short Stem Sedge
Carex fasicularis	Tassel Sedge
Carex gaudichaudiana	Tufted Sedge
Carex inversa	Knob Sedge
Carex tereticaulis	Basket Sedge
Centipeda cunninghamii	Old Man's Weed
Centipeda minima	Small Old Man's Weed
Cheilanthes austrotenuifolia	Rock Fern
Cheilanthes sieberi	Mulga Fern
Chrysocephalum baxteri	White Everlasting
Chrysocephalum semipapposum	Clustered Everlasting

Botanical Name	*Common Name*
Craspedia paludicola	Swamp Billy Buttons
Craspedia variabilis	Common Billy Buttons
Correa reflexa	Common Correa
Cullen microcephalum	Dusky Scurf-pea
Cullen parvum	Small Scurf Pea
Cullen tenax	Tough Scurf Pea
Cymbonotus pressianus	Austral Bear's Ears
Cynoglossum sauveolens	Sweet Hounds Tongue
Cyperus exaltatus	Tall Flat Sedge
Cyperus gunnii	Flecked Flat Sedge
Dianella admixta (formerly D. revoluta) **R**	Flax Lily
Dianella amoena	Matted Flax Lily
Dianella sp. aff. longifolia (Benambra)	ArchingFlax-lily
Dianella tarda	Smooth Flax Lily
Dianella porracea	Riverine Flax-lily
Dianella tasmanica	Tasman Flax Lily
Doodia australis	Common Rasp Fern
Doryanthes excelsa	Gyma Lily
Eryngium ovinum	Blue Devil
Eryngium paludosum	Long Eryngium
Gahnia radula	Thatch Saw-sedge
Gahnia sieberiana	Red-fruited Saw-sedge
Galium gaudichaudii	Rough Bedstraw
Geranium retrorsum	Crane's Bill
Geranium solanderi	Austral Crane's Bill
Glischrocaryon behrii	Golden Pennants
Glycine latrobeana	Clover Glycine
Gonocarpus elatus	Tall Raspwort
Gonocarpus tetragynus	Common Raspwort
Goodenia benthamiana	Clasping Goodenia
Goodenia elongata	Lanky Goodenia
Goodenia gracilis	Slender Goodenia
Goodenia heteromera	Spreading Goodenia
Haloragis glauca	Grey Raspwort
Haloragis heterophylla	Varied Raspwort
Helichrysum rutidolepis	Pale Everlasting
Helichrysum scorpioides	Button Everlasting
Hypoxis glabella	Tiny Star
Isotoma axillaris	Showy Isotome
Juncus amabilis	Clustered Rush
Juncus aridicola	Tussock Rush

Botanical Name	Common Name
Juncus flavidus	Rush
Juncus holoshoenus	Jointed-leaf Rush
Juncus homalocaulis	Wiry Rush
Juncus ingens	Giant Rush
Juncus pallidus	Pale Rush
Juncus planifolius	Broad-leaf Rush
Juncus radula	Hoary Rush
Juncus sarophorus	Broom Rush
Lagenophora stipitata	Common Lagenifera
Leiocarpa panaetioides	Woolly Buttons
Lepidosperma curtisiae	Short Rapier Sedge
Lepidosperma filiforme	Rapier-sedge
Lepidosperma semiteres	Wire Rapier-sedge
Lepidium pseudopapillosum	Erect Peppercress
Leptorhynchos squamatus	Scaly Buttons
Leptorhynchos tenuifolius	Wiry Buttons
Leucochrysum albicans	Hoary Sunray
Leucochrysum albicans var. tricolor	Hoary Sunray
Linum marginale	Native Flax
Lobelia anceps	Angled Lobelia
Lomandra collina	Pale Mat Rush
Lomandra filiformis	Wattle Mat Rush
Lomandra longifolia	Spiny-headed Mat Rush
Lomandra micrantha	Small Flowered Mat Rush
Lomandra multiflora	Many-flowered Mat Rush
Luzula meridionalis	Woodrush
Lycopus australis	Australian Gypsywort
Maireana enchylaenoides	Wingless Bluebush
Maireana excavata	Bottle Fissure-weed
Maireana humillima	Dwarf Bluebush
Mentha laxiflora	Forest Mint
Mentha satureoides	Native Pennyroyal
Microseris lanceolata	Yam Daisy
Microtis unifolia	Common Onion Orchid
Minuria integerrima	Smooth Minuria
Minuria leptophylla	Minnie Daisy
Nicotiana suaveolens	Austral Tobacco
Opercularia varia	Variable Stinkweed
Oreomyrrhis eriopoda	Hairy Caraway
Pelargonium australe	Austral Stork's-bill
Pelargonium rodneyanum	Magenta Stork's-bill
Plantago gaudichaudii	Narrow Leaf Plantain

Botanical Name	Common Name
Podolepis jaceoides	Showy Podolepis
Podolepis	Riverine Podolepis
Pomax umbellata	Pomax
Pterostylis curta	Blunt Greenhood Orchid
Ptilotus exaltatus	Lamb-tails
Ptilotus macrocephalus	Green Pussytail
Ptilotus spathulatus	Pussytails
Pycnosorus chrysanthes	Golden Billy Buttons
Pycnosorus globosus	Drumsticks
Ranunculus amphitrichus	Small River Buttercup
Ranunculus lappaceus	Australian Buttercup
Ranunculus pachycarpus	Thick-fruit Buttercup
Rhodanthe anethemoides	Chamomile Sunray
Rhodanthe corymbiflora	Grey Sunray (Annual)
Rutidosis leptorhynchoides	Button Wrinklewort
Senecio behrianus	Stiff Groundsel
Solenogyne dominii	Solenogyne
Stackhousia monogyna	Creamy Candles
Stylidium graminifolium	Grass Trigger Plant
Stypandra glauca	Nodding Blue Lily
Teucrium racemosum	Grey Germander
Thysanotus patersonii	Twining Fringe Lily
Tricoryne elatior	Yellow Rush Lily
Velleia paradoxa	Spur Velleia
Wahlenbergia communis	Tufted Blue Bell
Wahlenbergia fluminalis	River Blue Bell
Wahlenbergia gracilenta	Annual Blue Bell
Wahlenbergia gracilis	Sprawling Blue Bell
Wahlenbergia luteola	Yellow-backed Blue Bell
Wahlenbergia stricta	Tall Blue Bell
Wurmbea dioica	Early Nancies
Xanthorrhoea minor	Small Grass Tree
Xerochrysum bracteatum	Golden Everlasting
Xerochrysum palustre	Swamp Everlasting
Xerochrysum viscosum	Sticky Everlasting

12.5 Small to Medium Shrubs (1 – 3 m)

(**R** denotes RURAL SPECIES LIST and only where ongoing pest plant maintenance will not be an issue)

Botanical Name	*Common Name*
Small to Medium Shrubs	
Acacia acinacea **R**	Gold Dust Wattle
Acacia decora	Western silver wattle
Acacia gunnii	Ploughshare Wattle
Acacia mitchellii	Mitchell's Wattle
Astroloma conostephioides	Flame Heath
Astroloma pinifolium	Pine Heath
Baeckea crassifolia	Desert Heath-myrtle
Bossiaea cordigera	Wiry Bossiaea
Brachyloma daphnoides	Daphne Heath
Brachyloma ericoides	Brush Heath
Calytrix tetragona	Common fringe myrtle
Cassinia arcuata **R**	Drooping Cassinia
Cheiranthera cyanea	Blue Finger Flower
Chenopodium curvispicatum	Cottony Salt Bush
Chenopodium nitrariaceum	Nitre goosefoot
Correa lawrenceana	Mountain Correa
Correa reflexa	Common Correa
Crowea exalata	Small Crowea
Cryptandra amara	Bitter Cryptandra
Cryptandra tomentosa	Prickly Cryptandra
Dampiera dysantha	Shrubby Dampiera
Daviesia benthamii	Spiny Bitter Pea
Daviesia genistifolia	Broom Bitter Pea
Daviesia latifolia	Hop Bitter Pea
Derwentia derwentiana	Derwent Speedwell
Derwentia perfoliata	Digger's Speedwell
Dillwynia cinerascens **R**	Grey Parrot Pea
Dillwynia hispida	Red Parrot Pea
Dillwynia sericea	Showy Parrot Pea
Discaria pubescens	Anchor Plant
Epacris impressa	Common Heath
Eremophila glabra **R**	Emu Bush
Eremophila divaricata	Spreading Emu Bush
Euromyrtus ramosissima	Rosy Heath-myrtle
Eutaxia microphylla var. microphylla **R**	Common Eutaxia
Eutaxia microphylla var. diffusa	Spineless Eutaxia
Gompholobium huegelii	Common Wedge Pea
Goodenia varia	Sticky Goodenia
Grevillea alpina	Cat's Claw (VR, MF, GF, NS)
Grevillea dryophylla	Goldfields Grevillea
Grevillea micrantha	Small-flower Grevillea

Botanical Name	*Common Name*
Grevillea rosmarinifolia	Rosemary Grevillea
Halgania cyanea	Mallee Blue Flower
Hibbertia prostrata	Bundled Guinea Flower
Hibbertia humifusa subsp. humifusa	Guinea flower
Hibbertia obtusifolia	Grey Guinea Flower
Hibbertia riparia	Erect Guinea Flower
Hovea heterophylla	Common Hovea
Hybanthus floribundus	Shrub Violet
Lasiopetalum baueri	Slender Velvet Bush
Leucopogon ericoides	Pink Beard Heath
Leucopogon rufus	Ruddy Beard Heath
Leucopogon virgatus	Common Beard Heath
Malva australiana	Australian Hollyhock
Maireana brevifolia	Yanga Bush
Maireana microphylla **R**	Eastern Cottonbush
Maireana cheelii	Chariot Wheels
Maireana decalvans	Black Cottonbush
Melichrus urceolatus	Urn Heath
Micromyrtus ciliata	Fringed Heath Myrtle
Monotoca scoparia	Prickly Broom Heath
Olearia floribunda	Heath Daisy Bush
Olearia glandulosa	Swamp Daisy Bush
Olearia myrsinoides	Silky Daisy Bush
Olearia pannosa subsp. cardiocarpa	Velvet Daisy Bush
Olearia pimeleoides	Pimelea Daisy Bush
Ozothamnus retusus	Rough Everlasting
Phebalium festivum	Dainty Phebalium
Philotheca angustifolia	Small Leaf Waxflower
Philotheca pungens	Prickly Waxflower
Philotheca verrucosa	Bendigo Waxflower
Philotheca verrucosa	Double White Form
Pimelea curviflora	Curved Rice Flower
Pimelea glauca	Smooth Rice Flower
Pimelea humilis	Small Rice Flower
Pimelea linifolia	Slender Rice Flower
Pimelea phylicoides	Hairy Rice Flower
Platylobium formosum	Handsome Flat Pea
Platylobium obtusangulum	Common Flat Pea
Prostanthera aspalathoides	Scarlet Mint Bush
Prostanthera saxicola	Slender Mint Bush
Pseudanthus ovalifolius	Oval Leaf Pseudanthus

Botanical Name	*Common Name*
Pultenaea humilis	Dwarf Bush Pea
Pultenaea largiflorens	Twiggy Bush Pea
Pultenaea laxiflora	Loose Flower Bush Pea
Pultenaea prostrata	Silky Bush Pea
Pultenaea reflexifolia	Wombat Bush Pea
Pultenaea scabra	Rough Bush Pea
Rhagodia spinescens **R**	Hedge Saltbush
Rhytidosporum procumbens	White Marianth
Senecio odoratus	Scented Groundsel
Senna artemisioides subsp. zygophylla **R**	Desert Cassia
Spyridium eriocephalum	Heath Spyridium
Templetonia stenophylla	Leafy Templetonia
Tetratheca ciliata	Pink Bells
Vittadinia cuneata (v. gracilis)	Woolly New Holland Daisy
Vittadinia muelleri	Narrow-leaf New Holland Daisy
Westringia eremicola	Slender Westringia
Zieria aspalathoides	Whorled Zieria/Sandfly Bush

12.6 Medium to Large Shrubs (3 - 5 m)

(**R** denotes RURAL SPECIES LIST and only where ongoing pest plant maintenance will not be an issue)

Botanical Name	*Common Name*
Medium to Large Shrubs	
Acacia aspera	Rough Wattle
Acacia ausfeldii	Whipstick Cinnamon Wattle
Acacia brachybotrya **R**	Grey Mulga
Acacia deanei subsp. paucijuga	Deane's Wattle
Acacia difformis	Drooping Wattle
Acacia euthycarpa	Wallowa
Acacia flexifolia	Bent Leaf Wattle
Acacia genistifolia	Spreading Wattle
Acacia hakeoides **R**	Hakea Wattle
Acacia lanigera	Woolly Wattle
Acacia leprosa	Cinnamon Wattle
Acacia ligulata **R**	Small Cooba
Acacia lineata	Streaked Wattle
Acacia melvillei **R**	Yarran
Acacia microcarpa	Manna Wattle
Acacia mitchellii	Mitchell's Wattle
Acacia montana **R**	Mallee Wattle
Acacia mucronata	Variable Sallow Wattle
Acacia oswaldii **R**	Umbrella Wattle
Acacia oxycedrus	Spike Wattle
Acacia paradoxa	Hedge Wattle
Acacia pendula **R**	Weeping Myall
Acacia penninervis **R**	Hickory Wattle
Acacia pravissima	Oven's Wattle
Acacia pycnantha **R**	Golden Wattle
Acacia retinodes	Wirilda
Acacia rigens	Nealie
Acacia rubida	Red Stem Wattle
Acacia verniciflua **R**	Varnish Wattle
Acacia verticillata	Prickly Moses
Acacia williamsonii	Whirrakee Wattle
Allocasuarina muelleriana	Slaty She Oak
Astrotricha asperifolia	Rough Starhair
Atriplex rhagodioides	Silver Salt Bush
Babingtonia behrii	Broom Baeckea
Baeckea utilis	Mountain Baeckea
Banksia marginata **R**	Silver Banksia
Boronia anemonifolia	Sticky Boronia
Bursaria spinosa subsp. lasiophylla **R**	Bursaria
Bursaria spinosa subsp. spinosa **R**	Sweet Bursaria

Botanical Name	*Common Name*
Callistemon citrinus	Crimson bottlebrush
Callistemon rugulosus	Scarlet Bottlebrush
Callistemon salignus	White weeping bottlebrush
Callistemon sieberi **R**	River Bottlebrush
Calytrix tetragona **R**	Common Fringe Myrtle
Cassinia aculeata	Dogwood
Cassinia arcuata **R**	Drooping Cassinia
Cassinia longifolia	Shiny Cassinia
Cassinia ozothamnoides	Cottoney Haeckeria
Cassinia uncata	Sticky Cassinia
Coprosma quadrifida	Prickly Currant Bush
Correa glabra	Rock Correa
Daviesia arenaria	Sandhill Bitter Pea
Daviesia benthamii subsp. humilis	Spiny Bitter Pea
Daviesia latifolia	Hop Bitter Pea
Daviesia leptophylla	Narrow Leaf Bitter Pea
Daviesia ulicifolia	Gorse Bitter Pea
Dillwynia phylicoides	Small Leaf Parrot Pea
Dillwynia ramosissima	Bushy Parrot Pea
Dodonaea viscosa subsp. angustissima **R**	Narrow-leaf Hop-bush
Dodonaea viscosa subsp. cuneata **R**	Wedge-leaf Hop Bush
Dodonaea viscosa subsp. spatulata **R**	Sticky Hop-Bush
Eremophila bignoniiflora **R**	Creek Wilga
Eremophila deserti	Turkey Bush
Eremophila longifolia **R**	Berrigan Emu Bush
Exocarpos strictus	Dwarf Cherry
Goodenia ovata	Hop Goodenia
Goodia lotifolia	Golden Tip Goodenia
Goodia medicaginea	Western Golden Tip Goodinia
Grevillea rosmarinifolia	Rosemary grevillea
Hakea decurrens subsp. physocarpa	Bushy Needlewood
Hakea laurina	Kodset pincushion
Hakea tephrosperma **R**	Hooked Needlewood
Hovea asperifolia subsp. asperifolia	Mountain Beauty
Indigofera australis	Indigofera
Kunzea sp. - Burgan (formerly K. ericoides)	Burgan
Lasiopetalum behrii	Pink Velvet Bus
Leptomeria aphylla	Leafless Currant Bush

Botanical Name	Common Name
Leptospermum continentale	Prickly Tea Tree
Leptospermum lanigerum	Woolly Tea Tree
Leptospermum myrsinoides	Heath Tea Tree
Leptospermum obovatum **R**	River Tea Tree
Logania albiflora	Narrow Leaf Logania
Melaleuca acuminata	Mallee Honey Myrtle
Melaleuca decussata	Cross-leaf honey myrtle
Melaleuca lanceolata **R**	Moonah
Melaleuca parvistaminea	Rough-barked Honey Myrtle
Melaleuca uncinata	Broom Honey Myrtle
Melaleuca wilsonii	Violet Honey Myrtle
Melicytus dentatus	Tree Violet
Mirbelia oxylobioides	Mountain Mirbelia
Muehlenbeckia florulenta **R**	Tangled Lignum
Myoporum montanum **R**	Waterbush
Myoporum platycarpum **R**	Sugarwood
Nitraria billardierei **R**	Dillon Bush
Olearia argophylla	Musk Daisy Bush
Olearia decurrens	Clammy Daisy Bush
Olearia lirata	Snow Daisy Bush
Olearia phlogopappa	Dusty Daisy Bush
Olearia teretifolia	Cypress Daisy Bush
Olearia tubuliflora	Rayless Daisy Bush
Ozothamnus ferrugineus	Tree Everlasting
Ozothamnus obcordatus	Grey Everlasting
Ozothamnus rosmarinifolius	Rosemary Everlasting
Persoonia rigida	Stiff Geebung
Pimelea axiflora subsp. axiflora	Bootlace Bush
Pittosporum angustifolium **R**	Weeping Pittosporum
Pomaderris aspera	Hazel Pomaderris
Pomaderris paniculosa subsp. paniculosa	Inland Pomaderris
Pomaderris racemosa	Cluster Pomaderris
Pomaderris vacciniifolia	Round-leaf Pomaderris
Prostanthera denticulata	Rough Mint Bush
Prostanthera lasianthos var. lasianthos	Victorian Christmas Bush
Prostanthera nivea	Snowy Mint Bush
Pultenaea daphnoides	Large-leaf Bush Pea
Pultenaea graveolens	Scented Bush Pea
Pultenaea platyphylla	Flat-leaf Bush Pea
Senna artemisioides subsp. coriacea **R**	Desert Cassia
Senna artemisioides subsp. petiolaris	Woody Cassia
Senna artemisioides subsp. zygophylla **R**	Desert Cassia
Solanum laciniatum	Kangaroo Apple
Solanum simile	Oondoroo
Spyridium parvifolium	Dusty Miller
Viminaria juncea	Golden Spray
Westringia crassifolia	Whipstick Westringia
Xanthorrhoea glauca subsp. angustifolia	Grass Tree

12.7 Native Trees

(**R** denotes RURAL SPECIES LIST)

Botanical Name	*Common Name*	*Size h x w*
Small-Medium Trees <10m		
Acacia dealbata **R**	Silver Wattle	5-10 x 3-5m
Acacia implexa **R**	Lightwood	5-10 x 3-5m
Acacia mearnsii	Late Black Wattle	10 x 5m
Acacia melanoxylon	Blackwood	10m x 5m
Acacia pendula	Weeping Boree	5-12 x 3-6m
Allocasuarina littoralis	Black Sheoak	5-15 x 3-8m
Allocasuarina luehmannii **R**	Buloke	5-15 x 3-8m
Allocasuarina verticillata	Drooping Sheoak	10 x 5m
Angophora cordifolia	Dwarf Apple Myrtle	7-10 x 4-5m
Brachychiton populneus subsp. populneus	Kurrajong	6-15 x 4-8m
Brachychiton acerifolius x populneus	Hybrid Flame Tree	8-10 x 4-5m
Bursaria spinosa subsp spinosa **R**	Sweet Bursaria	3-10 x 2-5m
Callitris rhomboidea	Port Jackson Pine	6 x 3m
Corymbia ficifolia	Scarlet Flowering Gum	6-10 x 3-5m
Eucalyptus behriana	Bull Mallee	10-12 x 5-6m
Eucalyptus caesia	Silver Princess	8 x 4m
Eucalyptus calycogona	Red Mallee	5 x 4m
Eucalyptus dumosa	Dumosa Mallee	6 x 4m
Eucalyptus froggattii	Kamarooka Mallee	5-12 x 4-8m
Eucalyptus leucoxylon	Flowering Gum	9-15 x 5-8
Eucalyptus nortonii	Mealy Bundy	10-15 x 5-7m
Eucalyptus polybractea	Blue Mallee	8 x 5m
Eucalyptus viridis	Green Mallee	8 x 5m
Exocarpos cupressiformis **R**	Cherry Ballart	8 x 4m
Geijera parviflora **R**	Wilga	10 x 8m
Hakea tephrosperma **R**	Hooked Needlewood	5-8 x 3-4m
Hymenosporum flavum	Native frangipani	8-18 x 4-8m
Melaleuca lanceolata **R**	Moonah	
Melaleuca uncinata	Broom Honey Myrtle	5-8 x 3-4m
Myoporum platycarpum **R**	Sugarwood	5-10 x 3-5m
Santalum acuminatum **R**	Sweet Quangdong	5 x 4m
Tristaniopsis laurina	Water Gum	8-15 x 4-8m

Botanical Name	*Common Name*	*Size h x w*
Large Trees >10m		
Acacia salicina **R**	Native Willow	10-15 x 5-7m
Acacia stenophylla **R**	Eumong	5 -20 x 3-10m
Angophora costata	Smooth-barked Apple	15-30 x 8-15
Callitris glaucophylla **R**	Murray Pine (White Cypress Pine)	3-15 x 2-7m
Callitris gracilis	Slender Cypress Pine	20 x 10m
Corymbia citriodora	Lemon Scented Gum	20 x 8m
Corymbia maculata	Spotted Gum	30 x 10m
Casuarina cristata	Belah	10-20 x 4-8m
Eucalyptus albens **R**	White Box	10-15 x 8-10m
Eucalyptus baxteri	Brown Stringybark	20-30 x 8-15m
Eucalyptus behriana	Bull Mallee	10-12 x 5-6m
Eucalyptus blakelyi	Blakely's Red Gum	20 x 8m
Eucalyptus camaldulensis **R** (for natural water areas only)	River Red Gum	30 x 15m
Eucalyptus dives	Broad Leaf Peppermint	10-20 x 4-8m
Eucalyptus froggattii	Kamarooka Mallee	5-12 x 4-8m
Eucalyptus globulus subsp. bicostata	Eurabbie	30-50 x 15-30m
Eucalyptus goniocalyx	Long Leaved Box	15 x 7m
Eucalyptus largiflorens **R**	Black Box	20 x 10m
Eucalyptus leucoxylon subsp. pruinosa	Yellow Gum	20-25 x 10-12m
Eucalyptus macrorhyncha	Red Stringy Bark	25-35 x 13-17m
Eucalyptus melliodora **R**	Yellow Box	20-30 x 10-15m
Eucalyptus microcarpa **R**	Grey Box	20-25 x 10-12m
Eucalyptus obliqua	Messmate	30-60 x 15-30m
Eucalyptus ovata	Swamp Gum	20 x 10m
Eucalyptus pauciflora subsp. pauciflora	Snow Gum	20-30 x 10-15m
Eucalyptus polyanthemos	Red Box	20-40 x 10-15m
Eucalyptus radiata	Narrow-leaved peppermint	30-40 x 12-15m
Eucalyptus rubida	Candlebark	25-35 x 10-15m
Eucalyptus salmonophloia	Salmon Gum	20-30 x 20-15m
Eucalyptus tricarpa	Red Ironbark	25-35 x 10-15m
Eucalyptus viminalis	Manna Gum	20-35 x 10-13m
Hymenosporum flavum	Native Frangipani	8-18 x 4-8m
Stenocarpus sinuatus	Firewheel tree	15-20 x

12.8 Exotic trees

Botanical Name	*Common Name*	*Size h x w*
Small-Medium Trees <10m		
Acer buergeranum	Trident Maple	5 x 3m
Acer campestre	Hedge Maple	7 x 6m
Acer negundo 'Sensation'	Sensational Box Elder	9 x 6m
Arbutus unedo	Strawberry Tree	7 x 5m
Calodendrum capense	Cape Chestnut	10 x 6m
Gleditsia triacanthos var. inermis 'Shademaster'	Green Honey Locust	9-12 x 8-10m
Koelreuteria paniculata	Golden Rain Tree	5 x 8m
Malus X floribunda	Japanese Flowering crab	6 x 4m
Malus ioensis 'Plena'	Betchel crab apple	4 x 3m
Malus spectabilis	Chinese crab	8 x 4m
Nyssa sylvatica	Tupelo	9-11 x 6m
Lagerstroemia spp.	Crepe Myrtle	3-10 x 3-8m
Pistacia chinensis	Chinese Pistachio	8 x 6m
Prunus x blireana	Double Flowering Pum	4 x 4m
Pyrus calleryana 'Aristocrat'	Ornamental Pear	10 x 7m

Botanical Name	*Common Name*	*Size h x w*
Large Trees >10m		
Acer x freemanii 'Jefferson Red'	Jefferson Red	13-15 x 5-7m
Acer saccharinum	Silver Maple	12-15 x 10m
Gleditsia triacanthos var. inermis 'Shademaster'	Green Honey Locust	9-12 x 8-10m
Jacaranda mimosifolia	Jacaranda	10 x 8m
Liriodendron tulipifera	*Tulip Tree*	15 x 15m
Liquidamber styraciflua	Liquidamber	20 x 6m
Magnolia grandiflora	Bull Bay Magnolia	25 x 10m
Platanus (orientalis) X 'Chilensis'	Plane	18 x 8m
Platanus orientalis 'Digitata'	Cut Leaf Plane	18 x 10m
Quercus cerris	Turkey Oak	20 x 15m
Quercus coccinea '	Scarlet Oak	12-20 x 8-10m
Quercus palustris	Pin Oak	15 x 8m
Quercus robur	English Oak	20 x 20m
Ulmus glabra 'Lutescens'	Golden Elm	10-12 x 10-12m
Ulmus parvifolia 'Todd'	Chinese Elm	10-12 x 10-11m
Sophora japonica	Japanese Pagoda	12-15 x 10m
Zelkova serrata 'Green Vase'	Japanese Zelkova	14 x 10m

NOTE: Refer to Greater Shepparton City Council Street Tree Master Plan for precinct plans. Approval of alternative Tree Species will be at the discretion of Council.

Tree species selections are to be discussed with relevant Council officers to ensure the selections are *the right tree for the right location*

12.9 Aquatic Plants

Botanical Name	*Common Name*
Aquatic	
Submerged Marsh (0.4 -0.9m below TWL)	
Potamogeton ochreatus	Blunt Pondweed
Potamogeton tricarinatus	Floating Pondweed
Triglochin procera (T. procerum)	Water Ribbons
Deep Marsh (0.2 - 0.4m below TWL)	
Baumea articulata	Jointed Twig-rush
Eleocharis sphacelata	Tall Spike Rush
Myriophyllum papillosum	Robust Milfoil
Nymphoides crenata	Wavy Marshwort
Ottelia ovalifolia	Swamp Lily
Potamogeton ochreatus	Blunt Pondweed
Potamogeton tricarinatus	Floating Pondweed
Schoenoplectus tabernaemontani	Grey Club-rush
Triglochin procera (T. procerum)	Water Ribbons
Shallow Marsh (0 - 0.2m below TWL)	
Alisma plantago-aquatica	Common water plantain
Amphibromus nervosus	Common Swamp Wallaby Grass
Bolboschoenus caldwellii	Marsh Club-rush
Cyperus exaltatus	Tall Flat-sedge
Eleocharis acuta	Common Spike-rush
Juncus amabilis	Gentle Rush
Juncus flavidus	Rush
Juncus holoschoenus	Joint-leaved Rush
Juncus semisolidus	Rush
Marsilea costulifera	Narrow-leaf Nardoo
Marsilea drummondii	Common Nardoo
Marsilea hirsuta	Short Fruit Nardoo
Myriophyllum crispatum	Upright Water-milfoil
Myriophyllum papillosum	Robust Milfoil
Nymphoides crenata	Wavy Marshwort
Persicaria decipiens	Slender Knotweed
Persicaria hydropiper	Water Pepper
Ranunculus inundatus	River Buttercup
Triglochin procera (T. procerum)	Water Ribbons
Ephemeral Marsh (Temporary inundation)	
Brachyscome basaltica	Swamp Daisy
Carex appressa	Tall Sedge
Carex inversa	Knob Sedge
Carex tereticaulis	Rush Sedge
Crassula helmsii	Swamp Crassula
Dichondra repens	Kidney-weed
Eleocharis acuta	Common Spike-rush
Eryngium ovinum	Blue Devil
Isolepis inundata	Swamp Club Rush
Juncus flavidus	Rush
Juncus usitatus	Common Rush
Lythrum salicaria	Purple Loosestrife
Mentha australis	River Mint
Mentha diemenica	Slender Mint
Mentha satureioides	Creeping Mint
Mimulus gracilis	Slender Monkey Flower
Paspalidium jubiflorum	Warrego Summer-grass
Pycnosorus globosus	Slender Knotweed
Poa labillardieri	Tussock Grass
Pycnosaurus globosus	Drumstick Billy Buttons
Triglochin striatum	Streaked Arrow-grass
Wahlenbergia fluminalis	River Bluebell
Wetland margin (capillary action)	
Brachyscome basaltica	Swamp Daisy
Calocephalus citreus	Lemon Beauty Heads
Calotis anthemoides	Cut-leaf Burr-daisy
Calotis scapigera	Tufted Burr-daisy
Carex appressa	Tall Sedge
Carex inversa	Knob Sedge
Carex tereticaulis	Rush Sedge
Chloris truncata	Windmill Grass
Dianella revoluta	Black-anther Flax-lily
Einadia nutans	Nodding Saltbush
Enchylaena tomentosa	Ruby Saltbush
Eryngium ovinum	Blue Devil
Juncus usitatus	Common Rush
Lythrum salicaria	Purple Loosestrife
Mentha diemenica	Slender Mint
Paspalidium jubiflorum	Warrego Summer-grass
Poa labillardieri	Tussock Grass
Pycnosaurus globosus	Drumstick Billy Buttons
Rytidosperma caespitosum	Ringed Wallaby Grass
Rytidosperma setaceum	Smallflower Wallaby Grass
Themeda triandra	Kangaroo Grass

13. ENVIRONMENTAL WEEDS

Environmental weeds are plants that invade areas of natural bushland. Weeds include both introduced plants and native plants that originally come from other areas of Australia. It is important to ensure these environmental weed species are not used in the landscape of any development as they could escape into the local environment and threaten the health of native bushland areas.

While a number of species have traditionally been used in recent years, these species should be avoided due to issues associated with vermin, safety and the environment.

Further information on weeds can be obtained from the below links

http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/a-z-of-weeds

http://www.weeds.org.au/vicmap.htm

WEED SPECIES AND NATIVE ALTERNATIVES

Botanical name	***Common Name***	***Native Alternative***
Fraxinus rotundifolia	Desert Ash	*Euc. polyanthemos*
Schinus molle	Peppercorn	*Acacia salicina*
Salix spp.	Willow	*Callistemon sieberi* *Acacia dealbata* *Acacia salicina* *Geijera parviflora*
Acacia baileyana	Cootamundra Wattle	*Acacia dealbata* *Acacia pycnantha* *Acacia implexa*
Crataegus monogyna	Hawthorn	*Acacia paradoxa* *Bursaria spinosa*
Cotoneaster divaricata	Cotoneaster	*Dodonea viscosa ssp.cuneata*
Genista monspessulana	*Montpellier Broom*	*Acacia verniciflua* *Acacia acinacea*
Agapanthus orientalis	*Africa Lily*	*Dianella revoluta*
Hedera helix	*Ivy*	*Hardenbergia violacea* *Einadia nutans* *Enchylaena tomentosa*

OTHER ENVIRONMENTAL WEED SPECIES TO BE AVOIDED

Botanical Name	***Common Name***
TREES & SHRUBS	
Acacia saligna	Golden Wreath Wattle
Phoenix canariensis	Canary Island Date Palm
Poplar spp.	Poplar
Prunus cerasifera	Cherry Plum
Ligustrum lucidum	Privet
AQUATIC PLANTS	
Nymphaea Mexicana	Yellow Water-lily
Tradescantia albiflora	Wandering Jew
Vinca major	Blue Periwinkle
HERBS AND GRASSES	
Avena fatua	Wild Oat
Chicorium intypus	Chicory
Foeniculum vulgare	Fennel
Nassella neesiana	Chilean Needlegrass
Phalaris paradoxa	Phalaris
Rumex crispus	Curled Dock

SECTION 8
LANDSCAPE STANDARDS MATERIALS AND TECHNIQUES

14. LANDSCAPE STANDARDS – MATERIALS AND TECHNIQUES

The following materials and techniques are provided as a guide for design and specification of landscape works.

These standards provide similar requirements across the Moira Shire, the Shire of Campaspe and the City of Greater Shepparton.

Further information for maintenance and handover requirements is to be obtained from each Council.

The following materials and techniques are to be read in conjunction with the Infrastructure Design Manual (IDM).

The Greater Shepparton City Council Parks, Sport and Recreation Department Developers Guideline document should be read in conjunction with this Landscape Plan Guide for supplementary information and specifications for landscape works within the City of Greater Shepparton.

EARTHWORKS, DRAINAGE, WATER SENSITIVE URBAN DESIGN AND EASEMENTS

Purpose

To ensure:

- That earthworks and drainage systems are implemented to maximise the on-site retention and infiltration of stormwater.
- Positive effect on existing wetlands, watercourses and water bodies.

Earthworks and Drainage

- Earthworks design shall incorporate features and functions of the site's natural drainage system and shall maximise on-site retention and infiltration of stormwater and any irrigation.
- Where a site is adjacent to a natural aquatic system, earthworks design shall provide for surface runoff to be contained and treated within the site prior to release into the natural system.
- Parks and Reserves are to be freely draining.
- Full drainage specifications are to be shown on plans.
- Heavy duty accessible pits to be used.

Slopes, Banks and Batters

- Slopes less than 1:3: non irrigated slopes with gradient 1:3 or less to have adequate established vegetation of at least 90% cover at handover. Grassing is to be drilled or hydromulched.
- Slopes greater than 1:3 are to be stabilised with 100% cover by either:
  - Retaining walls plus vegetation.
  - Slope reinforcement mesh/geo-cell plus vegetation.
  - Seeded then hydro-mulched plus addition of straw.
  - Non-woven geotextile and >150mm spalls.
- Run off areas: where concentrated rainfall runoff is directed onto a slope and not through drainage pipework, the slope must be stabilised with non-woven geotextile and established vegetation or rock riprap as minimum.
- Any concrete type inlet/outlet structure on or in a slope or batter to be stabilised with non-woven geotextile and riprap.

Water Sensitive Urban Design

- Water Sensitive Urban Design shall be incorporated into drainage design through the provision of on site stormwater treatment to achieve best practice outcomes.
- Species selection is to be locally available indigenous species from the species list contained in this document.
- Provide adequate maintenance access for maintenance machinery.
- Design wetland system with ability to easily draw down all sections to submerged marsh level for dewatering for maintenance and system health.
- Swales are to be grassed or include mulch media and vegetation.

- Swale mulch media shall include installation gravel/coarse granitic mulch layer or rock beaching at inlet locations (refer Council for depth).
- Vegetation with appropriate plant species is to completely surrounding any outlet pit.
- Terrestrial planting areas are to be protected and stabilised with mulch, slotted jute mat or mesh (or similar approved by Council).
- Aquatic vegetation in shallow marsh, deep marsh and ephemeral areas should be protected during establishment period with the use of netting to achieve at least 80% survival rate at handover.
- Floodways and open native grassland areas are to be seeded to have established grass cover of at least 90% at handover.

Easements

- Soft landscape works (except some trees) are permitted on most service easements provided that the works will not damage or create risk to services within the easement.
- Offset requirements should be followed. Service providers cannot be held responsible for any damage caused when accessing services within the easement.
- Permanent structures should not be constructed within easements unless site specific arrangements and agreements are made with Council.

Irrigation controller example

Water meter cage example

Irrigation cabinet example

IRRIGATION AND WATER

Purpose

To ensure that when provision of water and irrigation systems are required they are designed and installed:

- To provide reliable and effective use of water resources.
- To minimise water use and wastage.
- To prevent damage to irrigation equipment.
- To allow cost effective maintenance of irrigation components.

Hydrawise controller example

General Requirements

- Considerations should be made for potable water connection for future infrastructure installations such as drinking fountains.
- Open space sites should have a minimum of 20mm water tapping.
- Water meters must be above ground and housed in lockable cage.
- Irrigation shall be designed and installed to the Council's irrigation specifications.
- Irrigation system designs shall be submitted with Landscape Construction Plans for Council approval prior to any landscape works being undertaken.
- All irrigation designs shall be designed to achieve best practice outcomes, with the location and type of spray outlet selected to avoid water spray onto roads, crossovers, paths, other paved areas and playground equipment.

- Non potable water supply should be first supply option.
- Potable water supply for irrigation requires minimum 32mm tapping.
- Irrigation within planting and grass areas shall be by pop up sprays or rotor sprinklers. No part shall protrude above ground level except for pop-up sprinklers during operation.
- Sub surface dripper line may be possible only in garden beds subject to discussions with Council prior to design work.
- Install all solenoid valves, isolating valves and/or gate valves within public space where practical for commissioning and maintenance.
- Where irrigation is on a pump system the use of multistage pumps with variable speed drives are required in a fully enclosed lockable pump shed.
- Valve boxes must be heavy duty type and needs to be installed on treated pine sleepers to ensure finished level of valve box meets flush with ground height.
- Isolation points are to be provided at every valve with a main isolation point on the discharge side of a meter pump.
- Confirm with Council the preferred irrigation controllers (e.g. Hunter ACC) to ensure it can be linked into Council's Central Control Irrigation System.
- Specified irrigation controllers must be installed for station numbers greater than 10 to allow for offsite programming.
- Irrigation controllers to be housed in a lockable cabinet allowing the installation of a padlock.
- Irrigation systems less than 10 stations must be controlled through controller (e.g. 'Hydrawise') to allow for onsite programming.
- Council prefers the use of mains power to run irrigation controllers. In the event of no mains power, Council prefers the use of controllers that are installed in above ground cabinets (e.g. XC Hybrid Hunter).
- Council prefers the use of sprays or rotor sprinklers in irrigation systems for both lawn and garden areas. Sub surface dripper line may be possible only in garden beds but will need to be discussed with Council prior to design work.
- If irrigation is supplied by a pump system the use of multistage pumps with variable speed drives are required in a fully enclosed lockable pump shed.

Maintenance

- Irrigation systems are to be maintained in accordance with Council irrigation specifications.

Valve box example

Isolation point example

Isolation point example

Pop up spray example

TREES

Purpose

To ensure:

- Trees are chosen to reflect the local character and conditions.
- Trees provide attractive streetscapes (according to street hierarchy) and the environmental benefits of shade, improved micro-climate and wildlife habitat.
- Trees do not interfere with lighting, paving or other public infrastructure.
- Acceptable maintenance obligations.

General Requirements

- Tree planting is required to comply with Council's tree planting guidelines.
- All proposed trees will be described in submitted Landscape Plans and will require Council approval.
- Trees are to be grown and supplied to Australian Standards.
- Tree planting in roads controlled by VicRoads shall also comply with VicRoads standards.

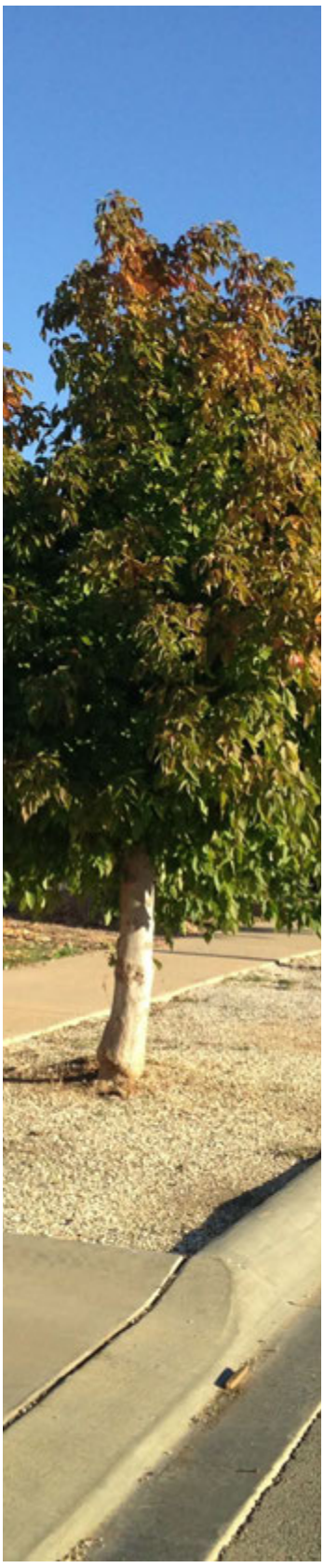
Approved Plant Species List

- Tree species used within the Council areas may be native, locally indigenous and exotic.

Tree species selection is to be from the Tree Species list contained in this document or other approved tree planting lists or approved Street Tree Master Plans relevant to each Shire.

Setout Requirements

- Street trees shall be planted at the following average spacing intervals:
  - 8.0 m spacing for small trees (less than 10 m canopy).
  - 10 m spacing for medium trees (10 – 15 m canopy).
  - 12 + m spacing for large trees (canopy larger than 15 m).
- Street trees are to be planted with minimum one tree per property frontage.
- Private front yards shall have one medium to large tree where possible.
- Corner properties require two or three trees per side street nature strip, subject to the width and length of property.
- Deciduous tree plantings are discouraged within 120 m of any natural and/or existing and proposed wetland.
- Car park areas require a minimum of 1 tree per every 4 car parking bays.
- Depending on the type of tree, trees shall not be planted less than the following offset measurements existing elements, unless otherwise approved:
  - 1.2m from pedestrian pathways.
  - 3.0m from pedestrian pathways in a open space areas.
  - 3.0m from driveways and crossovers.



- 2.0m from stormwater and sewerage pits.
- Ensure clear sight lines at intersections.
- 2.0m from service crossings.
- 1.5m from the face of kerb or edge of road pavement.
- 4.0m from a street lights or power poles.
- 2.0m from service assets including junction boxes, pits etc.
- 3.0m from fire hydrants.
- 3.0m to 6.0m apart in open space areas to allow ride-on mowing maintenance between each tree.

- Root control barriers are required on trees that are to be planted within 1.8m of paths and paving.
- 1.0m tree basins for watering.

Medians

- Central medians in municipal roads will be planted with trees where:
  - The median is greater than 4.0m wide with trees located centrally at a minimum spacing of 6.0m.
  - Medians less than 4.0m are considered by Council to be appropriate for trees.
  - Medians with flush kerbs to the finished road surface include approved safety measures including bollards with reflective tape.

Roundabouts

- Roundabouts in municipal roads will be planted with trees where:
  - The roundabout is less than 10m diameter and will include three single stem trees centrally located with maximum mature height of 8.0m.
  - The roundabout is greater than 10m in diameter and will include trees centrally located with maximum mature height greater than 8.0m.

Installation size

- Tree installation size shall be:
  - A minimum of 1.5m to 2.0m tall and either a 45 or 100 litre container for all streetscape work and 30 to 40mm caliper.
  - Tube stock for revegetation and or mass planting situations.
- Refer ‘A Guide to Specifying Trees’ by Ross Clarke.
- Refer natspec.com.au

Maintenance

- Tree maintenance shall be carried out in accordance with Council’s maintenance standards and Australian Standards.

GARDEN BEDS

Purpose

To ensure:

- Garden bed planting takes advantage of locally appropriate indigenous, native or exotic plants.
- Garden planting reduces the need for water use and ongoing maintenance costs.
- Planting provides a safe and attractive environment.
- Retention and enhancement of remnant indigenous vegetation.

General Requirements

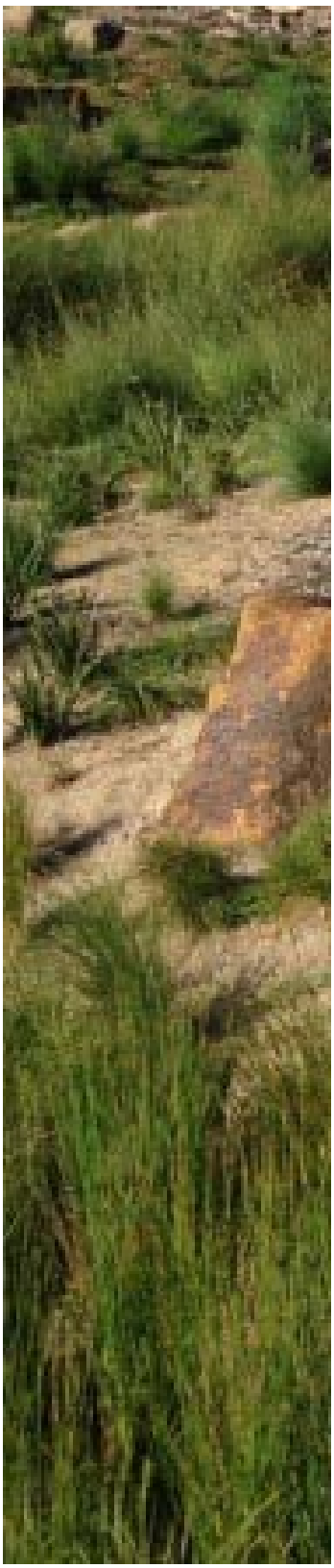
- Garden bed planting is required to comply with the requirements outlined in this document.
- All proposed shrub, groundcover and grass species will be described in submitted Landscape Plans and will require Council approval.
- Garden bed installation and planting is to comply with the requirements set out in this document.

Approved Plant Species List

- Plant species used within the Council areas should be selected from the list contained in this document.
- Use local indigenous species where appropriate.
- Approval of the use of alternative species other than those listed in this document will be at the discretion of Council.
- Full plant schedules must be listed on plans.
- Plant species selection shall consider:
  - Drought tolerance.
  - Maintenance issues including requirements for fertiliser application and pruning.
  - Hierarchy of plant materials including upper, middle and lower storey plants in appropriate combinations and layout which provide interest, diversity and amenity.
  - Safety and surveillance issues.

Setout Requirements

- Proposed planting designs and species selection must adhere to road user and pedestrian sight line requirements, and be in line with the following offsets:
  - Species which have a mature maximum height of 500mm are permissible within 5.0m of pedestrian crossing points.
  - No closer than 500mm from a path, driveway, service facility or any other structural elements within the nature strip.
  - Garden bed or mass planting areas within open space and adjacent to grass areas must allow for 1.8m deck ride on mowing maintenance.



Wetland vegetation establishment

Medians

- Central medians in municipal roads will be planted with garden bed species where:
  - Planting is set back minimum 1.5m from back of kerb.
  - Planting area is minimum 0.8m wide.

Roundabouts

- Roundabouts in municipal roads will be planted with garden bed species where:
  - The roundabout is less than 10m diameter and will include planting centrally located with maximum mature height of 500mm.
  - The roundabout is greater than 10m in diameter and will include planting centrally located with maximum mature height of 1.0m.
  - Setback of planted area from back of kerb will be 1.2m.

Naturestrip Planting

- The use of planting in nature strips is not normally encouraged for reasons relating to safety, drainage and appropriateness.
- Should planting in nature strips be requested, a written application is required to be submitted to Council for assessment and determination.

Garden edging

- All garden beds and/or mass planted areas shall be enclosed by appropriate edge treatments which may be as follows:
  - Concrete edge minimum 150mm wide.
  - Spade edge.
  - Steel edging for straight edges that is 9m length angle iron 50mm x 75mm x 5mm welded together, or similar approved.
  - Steel edging for curved edges that is 50mm x 5mm flat steel welded together, or similar approved.
  - All steel edges to be welded onto reinforcing rods for stability and support no greater than 2m apart.

Topsoil

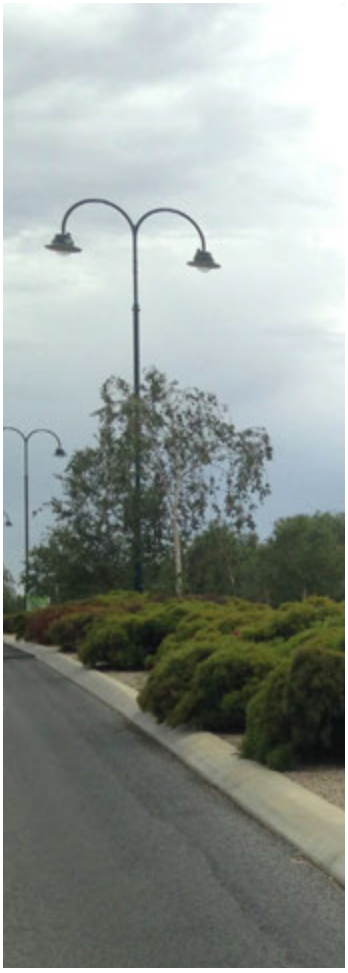
- 100mm of Council approved topsoil is required.
- Subgrade to be cultivated min 200mm prior to spreading of topsoil.

Mulch

- Mulch must be provided and may be bark, pebble or other approved alternative.
- Mulch shall be placed to a minimum depth of 75mm in garden beds and maintained throughout maintenance period.

Maintenance

- Pruning is to be carried out at the appropriate time of year and according to the particular species growth habit.
- All garden beds are to be maintained free of weeds and rubbish.



Central median planting

Steel edging

Steel edging

TURF / GRASSING

Purpose

To ensure:

- Grass areas are provided in appropriate locations that are useable by the public and/or complementary to landscape design.
- Grass areas allow cost-effective maintenance through avoidance of small, inaccessible areas that are difficult or time-consuming to maintain.

General Requirements

- Where suitable, native or ornamental grass species may be substituted for lawn grasses.
- Gradients for mown grass areas shall be equal to or flatter than 1:6.
- Open space grass areas shall be greater than 3.0m wide and 3.0m long, in manageable sizes and shapes.
- Designs shall allow for ease of access for a 1.8m ride on lawn mower and allow for a turning circle of 3.0m radius around any trees, structures or furniture.
- Grass areas shall be bounded by a road, path, garden edge or other approved solid edging material.

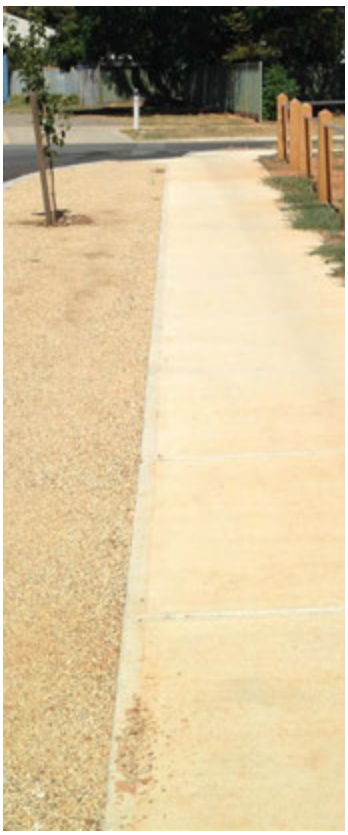
Seed mixes and Turf

- Grass species are to be as described in this document. Alternative grass species will be at the discretion of Council.
- Kikuyu grass/stolons to be used in Parks and Reserves.
- Turf grass will be male, sterile and seedless Kikuyu.
- Where seeding is required, a blend of Kikuyu and Rye grass is to be used with a minimum of 10% Kikuyu.
- Grass areas less than 500m2 will be turfed.
- Grass areas greater than 500m2 may be seeded with approved seed and turf will be installed adjacent all hard surfaces, pits and sprinklers.

Maintenance

- Irrigated lawn areas are to be maintained at an even height of between 25 and 40mm.
- Watering is to be carried out as required to maintain lawns in a healthy condition. Generally 30mm of water is required per week (depending on temperature and rainfall).
- All unirrigated dryland grassed areas are to be maintained at an even height of between 50 and 150mm.
- Native or ornamental grasses that are approved in nature strip plantings shall be selected to grow to a maximum height of 500mm at maturity and maintained to that height.
- Grass health is to be maintained through applications of appropriate fertiliser and top dressing as required. Two applications of fertiliser per annum is recommended for exotic grasses.

- Dead areas of lawn are to be removed and replaced with the same lawn species and managed to a healthy standard.



PAVING – CONTINUOUS AND UNIT PAVING

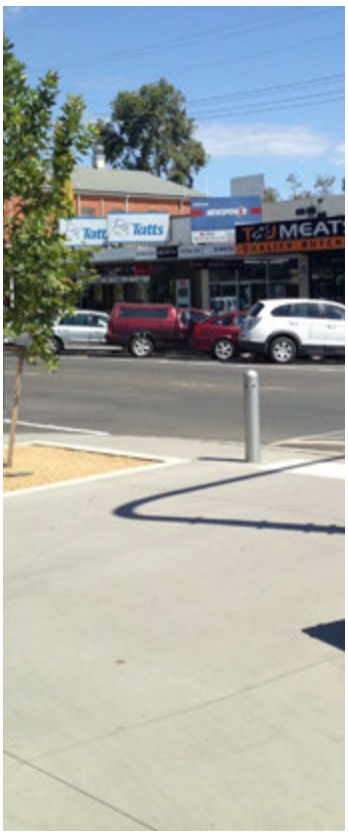
Purpose

To ensure:

- Paving is designed to cater for safe and convenient pedestrian access for people of all ages and abilities.
- Appropriate access is provided for maintenance purposes.
- Paving materials can be maintained satisfactorily and replaced if required.

General Requirements

- Footpaths and other paved areas shall be installed in accordance with relevant standards and be designed for equitable access and mobility.
- Tactile Ground Surface Indicators (TGSI) are to be installed in accordance with relevant standards.
- TGSI's may be in the form of pre-cast pavers and consistent with adjacent paving styles and colours.
- Paving is to be of appropriate strength to allow for crossing by maintenance vehicles where vehicle access is required.
- Paths in open space areas no greater 1:10.
- Path material is to provide a path that is suited to purpose, cost effective and low maintenance.
- Footpaths width are to comply with Council's IDM standards.
- Where unit paving is being installed as the path material or as an edge restraint, its concrete footing shall not extend beyond the outside edge of the unit paver.
- Aggregate, stone or other hard material shall only be used if it is permanently fixed in place with concrete, adhesive or other approved product.
- Path crossings at roads shall have pram ramps installed to Council's IDM standards.
- Where granitic gravel is used for pathways steel edging is to be provided. Granitic sand is to be minimum compacted 50mm depth placed on a 50mm compacted crushed rock base.



Naturestrip Paving

- The use of paving as a nature strip treatment other than for path and crossovers is not normally encouraged for reasons relating to safety, drainage and aesthetics.
- Should nature strip paving be requested, a written application is required to be submitted to Council for assessment and determination.

Shared Paths

- Paths within public open space shall be a minimum of 2.0m wide, designated shared use paths to be a minimum of 3.0m wide.

- Shared paths in open space areas will be reinforced concrete or asphalt.
- Shared use paths and designated cycle ways within parks and nature strips must intersect at 90° to the centre lines.
- All paths shall have a lateral clearance of 1.0m between any object and the edge of the path.
- Minimum 500mm wide shoulder constructed on pathways.
- Paved access for maintenance and emergency vehicles shall be provided to all public open spaces. Access points are to be appropriately secured.

Medians

- All medians less than 3.0m in width between face of kerbs, shall be paved or mulched.
- All medians and islands within 12.0m of an intersection and other median openings shall be paved.
- Medians greater than 3.0m in width between face of kerbs shall have a 1.5m minimum width of paving or mulch abutting the kerb, with the balance of the median being either paved or planted.

Roundabouts

- A 2.0m wide minimum paved/concrete area to face kerb shall be installed within a roundabout, with the balance of the roundabouts to be planted to Council standards.
- Walls or other structures shall not be permitted within roundabouts less than 10m in diameter.

Maintenance

- Paving maintenance is to ensure footpaths, shared paths and other paved areas are safe and functional.
- Paving maintenance shall be carried out in accordance with Council's maintenance standards.

FURNITURE AND STRUCTURES

Purpose

To ensure:

- Street and open space furniture (for example seats, picnic settings, bins etc) in public areas is provided to meet functional requirements and enhance the use of the public space.
- Integration of furniture into the overall landscape and streetscape includes provision in appropriate locations for accessibility and weather protection and sited appropriately in relation to adjacent hard and soft landscape elements.
- Furniture allows for cost effective maintenance.
- Furniture should allow for recycling at end of life.

General

- All furniture selections are to comply with elements described in this document, or other approved elements at the discretion of Council.
- Installation of furniture is to be in accordance with installation requirements described in this document, manufacturers specifications and other relevant Council standards and specifications.

Installation

- Furniture elements such as seats, bins and drinking fountains will be installed on concrete slabs.
- Furniture elements such as seats, picnic settings and drinking fountains must be wheelchair/mobility accessible.
- Concrete pad sizes to be minimum 3m x 1.5m for seats and benches and 3m x 3m for picnic settings
- Confirm with Council the required style of park furniture.
- Drinking fountain installation will include drainage point/pit and dog bowl must fit within the concrete slab to avoid water pooling then emptying the bowl avoiding water pooling.
- Bollards are to be cypress pine with 50mm galvanised rails, or other approved elements at the discretion of Council.
- Breaks in bollard and rail fencing is to allow for pedestrian access.
- Removable bollards are to be installed to allow maintenance access to parks and reserves. Chains are not be used.

Maintenance

- Street and open space furniture is to be maintained in accordance with Council's maintenance standards.

Bench seat on concrete slab example

Tables on concrete slab example

Bollard fencing example

Bins on concrete slab example

Drinking fountain with wheelchair access example

PLAYGROUNDS

Purpose

To ensure:

- Playgrounds in open spaces provide maximum play value that encourages child development through play sensations, opportunities and experiences.
- Integration of playgrounds into the overall landscape including accessibility and sited appropriately in relation to adjacent hard and soft landscape elements and provide for user safety.
- Playgrounds provide for wheelchair/mobility accessibility.
- Playgrounds allow for cost effective maintenance.

General

- All playgrounds will meet relevant Australian Standards.
- Certification of playground design during design phase and prior to tender.
- Certification of playground installation.
- Installation of playgrounds is to be in accordance with installation requirements in this document and other Australian standards.
- Fencing around playgrounds will be included where risks adjacent roads and/or water bodies is present. Confirm with Council.
- Playgrounds shall not be installed closer than 20m from roads or private property.

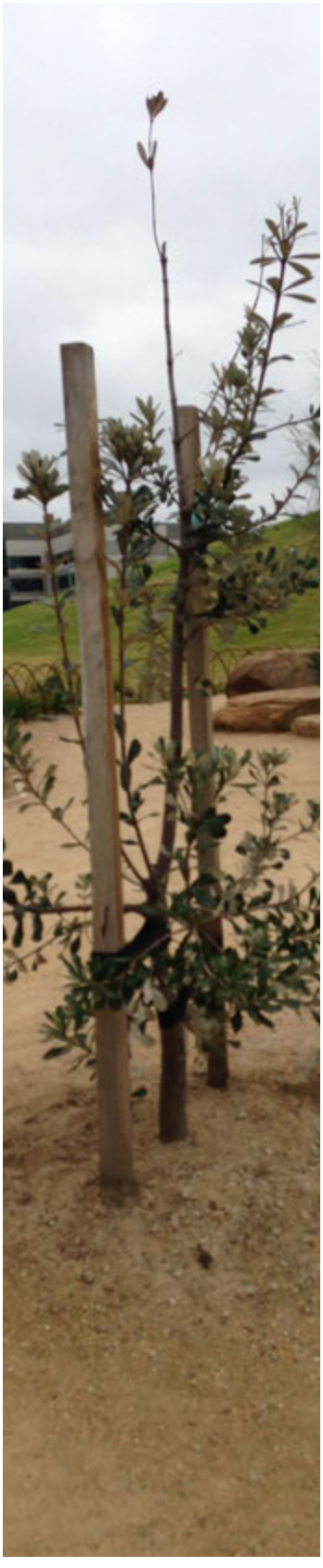
Installation

- Installation of playgrounds will be by qualified installation contractors.
- Certified playground organic soft fall must be 300mm of depth within fall zones.
- Rubber pour/rubber mats must be installed under high wear areas such as under swings and slides.
- Rubber soft fall depth to comply with Australian Standards and height of equipment.
- Concrete borders are to be installed around playgrounds.
- Drainage lines are to be installed inside the playground area with an external discharge point outside of concrete border.
- Include trade literature at practical completion.

Maintenance

- Playgrounds are to be maintained in accordance with Council's maintenance standards.

NOTE: Fitness equipment is not considered to be part of play spaces and not covered by this document. Confirm with Council any proposals for fitness equipment.



SECTION 9
FURTHER INFORMATION

15. NURSERIES

The following nurseries within the Local Government Areas provide indigenous plant species.

The nurseries listed is not exhaustive nor do they have formal endorsement from the organisations who developed this report.

AUSTRALIAN NATIVE FARM FORESTRY (ANFF)

Murray Valley Highway, approximately 15km East of Cobram.

T (03) 5873 5444 / 0417 123 432

http://www.iwanttrees.com.au/

ROCHESTER NATIVE NURSERY

6708 Northern Highway

Rochester VIC 3561

T (03) 5484 3777
http://www.rochesternursery.com.au/

MCKINDLAY'S RIVERINE NURSERY

2220 Perricoota Road, PO Box 32, Moama NSW 2731

T John 0448 836 248 / Deb 03 5483 6240
john@mckindlaysriverinenursery.com.au

THE EUROA ARBORETUM

76 Euroa Main Road.

Plant Sales and Seed Sales

E: nursery@euroaarboretum.com.au

M: 0429 127 399

BILLABONG NURSERY SHEPPARTON

295 Numurkah Road Shepparton VIC 3631

T: 03 5821 8632

16. FURTHER INFORMATION AND REFERENCES

SHIRE OF CAMPASPE

Main office

Echuca Civic Centre

2 Heygarth Street
Echuca VIC 3564
shire@campaspe.vic.gov.au

Shire of Campaspe Planning Scheme

http://planningschemes.dpcd.vic.gov.au/schemes/campaspe

MOIRA SHIRE COUNCIL

Main Administration Centre

44 Station Street
Cobram VIC 3644

(03) 5871 9222
info@moira.vic.gov.au

Moira Shire Planning Scheme

http://planningschemes.dpcd.vic.gov.au/schemes/moira

GREATER SHEPPARTON CITY COUNCIL

90 Welsford Street,
Shepparton VIC 3630

(03) 5832 9700
council@shepparton.vic.gov.au

City of Greater Shepparton Planning Scheme

http://planningschemes.dpcd.vic.gov.au/schemes/greatershepparton

City of Greater Shepparton Environmental Sustainability Strategy

http://greatershepparton.com.au/animals-environment-and-waste/environment/environmental-sustainability-strategy

Street Tree Master Plan

Urban Forest Strategy

GENERAL REFERENCES

Infrastructure Design Manual
http://www.designmanual.com.au/

Supportive Environments for Physical Activity (SEPA) guidelines
http://www.heartfoundation.org.au/victoria-healthy-design

Crime Prevention Through Environmental Design (CPTED) guidelines
http://www.police.vic.gov.au/

The Good Play Space Guide “I can play too”
http://www.playaustralia.org.au/

Use of ‘best practice’ in water sensitive urban design (WSUD)
http://wsud.melbournewater.com.au/
http://www.wsud.org/

Australian Institute of Landscape Architects
http://www.aila.org.au/

GBCMA Revegetation guide
http://www.gbcma.vic.gov.au/revegetation/

Native Vegetation of Goulburn Broken Riverine Plains
http://www.gbcma.vic.gov.au/land_and_biodiversity/resources_publications/native-vegetation-of-the-goulburn-broken-riverine-plains

Birdlife Australia Birds in Backyards Program
http://www.birdsinbackyards.net/

17. LOCAL GOVERNMENT AREAS

City of Greater Shepparton

The City of Greater Shepparton is located in the Goulburn Valley region of Victoria and covers an area of 2,422 km^2. It is the fourth largest regional centre in Victoria. Shepparton is located about 180 kilometres to the north of Melbourne at the junction of the Goulburn Valley Highway and the Midland Highway. Greater Shepparton has a population of approximately 60,000 and is home to a diverse number of ethnic groups.

Shepparton is located at the confluence of the Goulburn and Broken Rivers which form part of the surround Goulburn-Broken river system. This river system and surrounding environs, including floodplains and wetland systems is a significant environmental and recreational asset in the municipality.

The largest urban centre is Shepparton (together with Mooroopna and Kialla) which has a vibrant central business district and extensive commercial, administrative and industrial base. This centre is supported by smaller settlements at Congupna, Dookie, Katandra West, Merrigum, Murchison, Tallygaroopna, Tatura, Toolamba and Undera. The regional economic catchment of Shepparton extends from Seymour to Deniliquin. Shepparton also provides a wide range of higher order community services and facilities for a regional population of approximately 160,000 persons.

Moira Shire

Moira Shire is located on the southern banks of the Murray River, bordering New South Wales. The Shire covers an area of over 4000 square kilometres and includes the major towns of Cobram, Numurkah and Yarrawonga. These townships along with Nathalia and a host of smaller towns are supported by a diverse agricultural base heavily reliant on irrigation farming for the production and processing of a range of agricultural products.

The Shire is located on the alluvial floodplains of the Murray, Goulburn and Ovens Rivers and the Broken Creek system. The natural systems of these rivers are the core natural assets of the Shire providing fertile farming land, a desirable tourist attraction and important habitat for native species and ecosystem services. The use of these assets has been developed in a variety of ways across the Shire responding to a mix of historical, cultural and physical conditions. At the 2011 Census the population of Moira Shire was at 28,124, and has continued to grow since.

Campaspe Shire Council

Campaspe Shire Council is located in north central Victoria and covers an area of approximately 4,500 square kilometres. The Shire is located approximately 200 kilometres directly north of Melbourne. It's southern border is bounded by State Forest, with its northern border aligned with the Murray and Goulburn Rivers. The western boundary is defined by the Bendigo Creek and the Campaspe River. The eastern boundary is generally defined as east of Wyuna and Kyabram and the Waranga Basin. At the 2011 Census, the Shire of Campaspe had a population of 36,365, and has continued to grow since.

Campaspe Shire's largest town is Echuca which interacts with its New South Wales' counterpart, Moama. The bulk of the Shire's population is centred around the northern and eastern points of the Shire, especially within the Echuca - Kyabram - Rochester triangle. The southern and western areas of the Shire are more sparsely populated. Other primary population centres of the Shire include Kyabram, Rochester, Tongala, Rushworth, Stanhope, Lockington, Gunbower, Girgarre and Colbinabbin.

Agricultural production, based on intensive irrigated areas and large tracts of dry land farming, combine to form the largest industry in the Shire. Tourism is an economic and employment growth sector for the Shire and is an important aspect of the social, economic and physical make up of the Shire. The key tourism assets of the Shire are based on the Murray River, the Port of Echuca, River Boats, Native Forests, Historic Buildings, the Kyabram Fauna Park and local tourist attractions. The Port of Echuca because of its heritage values is recognized as the 'anchor' tourist attraction in the region.

SECTION 10
CHECKLISTS

18. CHECKLISTS

18.1 Master Plan Checklist

To be submitted to Council with Master Plan

Name of Subdivision:
Address:
Owner / Applicant:
Email:
Phone number:
Landscape Architect:
Permit Number:

Master Plan Checklist	Yes	No	N/A	Comments
Compliance with Planning policies				
Development Plans and/or Design Frameworks				
Development Area, property boundaries and survey/ topographical information (e.g. contours, roads and easements)				
Water Sensitive Urban Design / Stormwater / Drainage Plan or report				
Flora and Fauna Report				
Cultural Heritage Management Plan				
Relevant information from stakeholders/authorities (Council, Parks Victoria, VicRoads, Water Authorities etc)				
Other expert reports (specify)				
Bushfire Asset Protection Zones				
Site Context Plan and/or Site Analysis Plan				
Existing Conditions Plan – including Existing Vegetation for Retention and Removal				
Landscape Vision				
Community Structure				
Access and Permeability				
Roads and Access, Open Spaces, Cycling and Walking Paths				
Residential Interfaces and Fences/Screens				
Street Tree Master Plan				
Indicative Cross Sections (entrances, watercourses, retaining walls)				
Open Space Treatments				
Planting – Reserves, WSUD plantings				
Furniture and Fittings				
Structures and Surfaces				
Materials				
Play Spaces				
Signage, Interpretation, Entry Statements and Artwork				
Maintenance and Management				

18.2 Landscape Concept Plan Checklist

To be submitted to Council with Landscape Concept Plan

Name of Subdivision:
Address:
Owner / Applicant:
Email:
Phone number:
Landscape Architect:
Permit Number:

Landscape Concept Plan Checklist	Yes	No	N/A	Comment
Previous design work, such as Landscape Master Plans				
Budget (both design and construction)				
Relevant standards, guidelines, planning restrictions / permit conditions				
Ecological Vegetation Classes (EVCs) / recommended planting palettes				
Site specific reports (Flora and Fauna, CHMP, PSP, Development Plans, etc)				
Current base plans (urban design, survey, civil, architectural etc)				
Findings from a site inspection / site analysis.				
Retention of existing features, such as significant vegetation				
Existing / proposed services				
Earthworks and Grading				
Drainage / WSUD				
Hardscape / paving finishes				
Furniture				
Landscape Features (e.g. sculpture)				
Structures				
Lighting				
Materials Palette				
Planting Palette and Planting Densities				
Surface Treatments				
Function / Fit for Purpose				
Circulation and Accessibility including maintenance and emergency access				
Environmental impact				
Aesthetics / Design Theme				
Maintenance				
User Safety (sightlines, passive surveillance and level changes)				
Other information such as Structural Engineering, Lighting				

18.3 Construction Documentation Plans Checklist

To be submitted to Council with Construction Documentation Plan

Name of Subdivision:
Address:
Owner / Applicant:
Email:
Phone number:
Landscape Architect:
Permit Number:

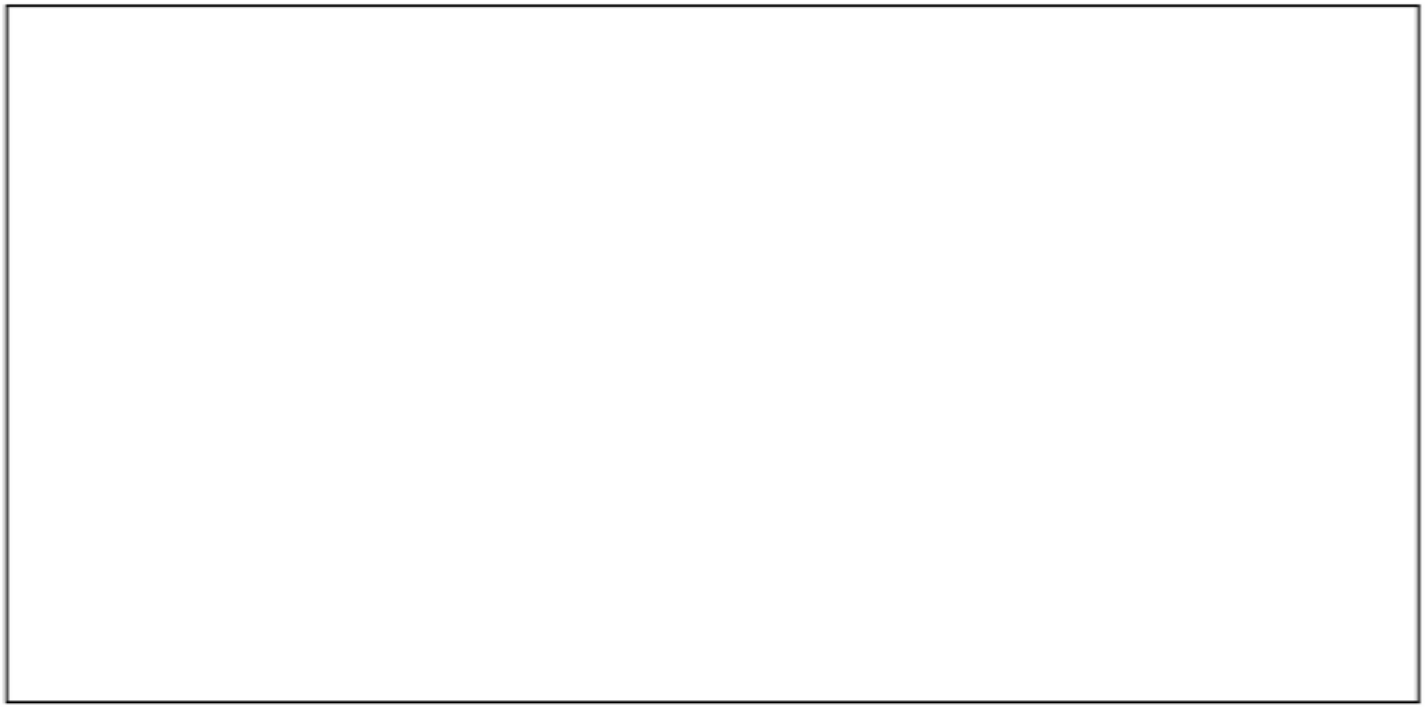
Construction Documentation Plans Checklist	Yes	No	N/A	Comments
Current base plans (urban design, survey, civil, architectural etc).				
Service locations.				
Demolition and/or protection of existing features.				
Earthworks, finished surface levels, top of wall levels, critical grades for access, function and maintenance.				
Proposed drainage, connection to existing drainage system, overland flow path, vulnerability of other materials/design elements to excess water.				
Soil quality and any improvements required to support plants/ grass.				
Trees (species, location, installed size, quantity).				
Plants (species, location, installed size, quantity).				
Grassed areas (seed mix, performance, irrigation and maintenance requirements).				
Paving (nominate materials and finishes, general design effects of expansion and control joints).				
Furniture (proprietary or custom, materials and finishes).				
Fencing (materials and finishes, maintenance and emergency access requirements).				
Playground (Design audit and certification of design to be provided)				
Landscape features and custom built items e.g. Signage (prepare supporting images/sections/sketches and provide typical dimensions and materials).				
Lighting (nominate product, supplier and location). Consider country of manufacture, availability of parts, vandalism protection.				
Irrigation (determine extent, temporary/permanent system, tapping points, conduit, controller and meter requirements).				
Construction Details.				
Maintenance Specifications (if requested by Council).				


WESLEY CT
XAVIER CR

APPENDIX 1

LANDSCAPE PLAN TEMPLATE EXAMPLE LEGENDS

LANDSCAPE PLAN TEMPLATE



PLAN

LEGEND

PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	HEIGHT X WIDTH	QUANTITY

Drawing Number:
Revision:
Date:
Sheet:

Drawn by:
Checked by:

NORTH ARROW

SCALE BAR

PROJECT TITLE _____

PROJECT LOCATION _____

EXAMPLE LEGENDS

LEGEND

EXISTING TREES
To be protected and retained

EXISTING TREES TO BE RELOCATED
Refer planting plan for location

EXTENT OF ASPHALT SEAL DEMOLITION

EXTENT OF CONCRETE DEMOLITION

EXTENT OF PLAY/GARDEN MULCH DEMOLITION
Stockpile for re-use

EXTENT OF POST AND RAIL FENCE DEMOLITION

EXTENT OF FURNITURE AND STRUCTURE DEMOLITION

EXTENT OF WORKS

LEGEND

EXISTING TREES
To be protected and retained

PROPOSED TREE
Refer plant schedule

INSITU GREY CONCRETE PAVING
Refer schedule, details and specification

EXPOSED AGGREGATE CONCRETE PAVING
Refer schedule, details and specification

INSITU ASPHALT PAVING
Refer schedule, details and specification

GRANITIC GRAVEL PAVING
Refer schedule, details and specification

PLAYGROUND SOFTFALL MULCH
Refer schedule, details and specification

PLAYGROUND SAND
Refer schedule, details and specification

GARDEN BED PLANTING
Refer details, specification and plant schedule

FLUSH STONE PAVING
Refer schedule, details and specification

MULCH BENEATH TREES
Refer schedule, details and specification

GRASS
Refer details and specification

CONCRETE EDGING TO PLAYGROUND
Refer schedule, details and specification

DRY CREEK BED
Refer schedule, details and specification

SE
STEEL EDGING
Refer schedule, details and specification

FREE STANDING STONE WALL
Refer schedule, details and specification

LEGEND

EXISTING DECIDUOUS TREES

EXISTING EVERGREEN TREES

NEW EVERGREEN TREES

EXISTING REVEGETATION AREAS

NEW REVEGETATION AREAS

NEW DAM

NEW DAM MARGIN PLANTING

EXISTING POST AND WIRE FENCING

NEW POST AND WIRE FENCING

APPENDIX 2

CITY OF GREATER SHEPPARTON DEVELOPER GUIDELINES

APPENDIX 3
FEEDBACK ON DRAFT LANDSCAPE PLAN GUIDE

Feedback on the Draft Landscape Plan Guide was provided through a Stakeholder Workshop on 21 March 2017 and public submissions. Feedback from the workshop included the following discussion points.

- City of Greater Shepparton confirmed that simple or less complex landscape proposals (e.g. rural landscape proposals) may be prepared by a horticulturalist or landscape designer while complex landscape proposals shall be prepared by a landscape architect.
- General support for the Guide and the clarity of process and requirements for landscape plans which is outlined in the document.
- City of Greater Shepparton Developer Guidelines will be added as Appendix.

The following table outlines summary of submissions received on the Draft Master Plan and notes the relevant section in the Master Plan where relevant comments have been inluded in the Final Master Plan.

SUBMISSION NUMBER	SUMMARY OF SUBMISSION	RESPONSE
1	Generally supportive of the document. Highlights that a review of the trees planted in the last 10 years is required due to losses.	Comments noted. Species proposed are suggested. Document notes tree species selection shall be discussed with Council to determine the right tree for the right location.
2	Species/planting lists needs to be better arranged to be more user friendly.	Comments noted and lists revised as appropriate. Plant species listed in alphabetical order for botanical name. Images and headings checked and amended as required.
3	Support from Goulburn Broken Catchment Management Authority and welcomes adoption by Councils.	Noted.
4	Goulburn Broken Catchment Management Authority proof read mark ups.	Noted and amended as required.
5	Tree canopy size should be displayed on plans, noting Council's Urban Forest Strategy. General comments on Shepparton-specific guidelines.	Comments noted and revisions made as required. Document refers to canopy cover under 'Design Considerations' for each section. COGS Developers Guidelines to be included as appendices. References to fitness equipment removed.
6	General comments regarding images for each section, Rural Developments design considerations and planting layout templates, plant species, blank landscape plan template.	Comments included in final document, including blank landscape plan template.