SHIRE OF MELTON

LANDSCAPE GUIDELINES

for the Shire of Melton

2010

introduction

Melton Shire Council is committed to improving the standard of new developments within its municipality. The continuing high rate of urban growth provides an opportunity for Council to work with developers to ensure unified, attractive and sustainable parks, streetscapes and public outdoor areas are delivered with new developments. High standard landscapes can add value to existing areas and new subdivisions, and play a role in increasing civic pride, local identity and community ownership over the public domain.

The provision of open space and associated infrastructure in an area is determined by Precinct Structure Plans in growth areas, and by the Melton Planning Scheme, supported by the Shire of Melton Open Space Strategy for existing areas. These documents will provide the context for new developments and should be considered in conjunction with these Guidelines.

This document clarifies Council's minimum requirements for landscaping standards in residential, commercial and industrial developments, and will assist all parties to:

- Meet Council's documentation requirements;
- Understand site conditions and gain the most from your land;
- Consider context to create an informed and successful landscape; and
- Achieve a high standard of landscape design.

Adherence to these Guidelines does not exempt the developer from meeting the requirements of the relevant environment, access and safety legislation.

how to use this guide

The Guidelines reflect Council's expectations of all landscape requirements and should be consulted at the pre-application planning stage to guide the preparation of landscape master plans (for subdivisions); following planning approval to inform the landscape plans of all open spaces and streetscapes; and to inform implementation and post-construction maintenance.

The Guidelines are intended primarily for use by:

- Landscape professionals;
- Land developers; and
- Planners

They should be read in conjunction with the following documents:

- Melbourne 2030 and Melbourne @ 5 million;
- Precinct Structure Plans (Toolern, Melton North and Taylors Hill West);
- Melton Planning Scheme, amendments and Municipal Strategic Statement;
- Shire of Melton Open Space Strategy;
- Shire of Melton Heritage Study; and
- Opening Doors - Access & Inclusion in the Shire of Melton

Copies of the above are available online at http://www.melton.vic.gov.au or by contacting Customer Service on 9747 7200.

landscape design professionals

All planning applications involving the development of a site must include a professionally prepared landscape plan. Lists of qualified landscape designers are available from:

The Australian Institute of Landscape Architects
Level 1, 41 Exhibition St
Melbourne VIC 3000
Ph (03) 9016 0111
http://www.aila.org.au/groups/ailavic/

The Landscape Industries Association Victoria
Suite 2 / 497 Burke Road
Hawthorn East VIC 3123
Ph 1300 365 428
http://www.liav.com.au

Other landscape professionals, such as urban designers, arborists and horticulturalists may be required for aspects of your development. Council encourages engaging a specialist consultant early in the planning stages of your development, in order to ensure all aspects of the landscape planning and design are considered.

understanding your site

introduction

The key to good design is understanding your site and its wider context and using that knowledge to inform the design process. Below are listed factors which influence your site, both externally (External Factors) and those that are specific to the site itself (Site Factors). Council recommends that you undertake a thorough analysis of your site.

external factors

Climate

The Shire of Melton has a temperate climate, similar to that of much of greater Melbourne, and the predominant winds are from the north and to a lesser extent from the west and south west. The strong northerly winds blow hot in summer and cold in winter. Protection of outdoor areas will be required from these winds. This can be achieved by careful siting of buildings, walls and other structures or by providing windbreak plantings for protection.

Climate Statistics

	Spring	Summer	Autumn	Winter
Average daily max. temp (°C)	19.4	25.6	20.4	13.7
Average daily min. temp (°C)	8.7	13.2	10.4	5.9
Average daily hrs sunshine	7.0	8.4	6.2	4.6

Source: Bureau of Meteorology (30 year means for Melbourne Airport 1981-2010)

The rainfall average deduced from nearby weather stations (Melton, Melbourne Airport, Rockbank and Melton Reservoir) is **516.8mm**; significantly drier than the 30 year Melbourne City average of 595mm.

Geology/Soils

Melton Shire is on the Keilor-Werribee plain, part of a lava plain that extends from Melbourne to Mount Gambier in South Australia. The texture of the soils is mostly basalt derived cracking clay that has a poor drainage rate. The soil becomes waterlogged in wet weather and dries and cracks in the warm weather. Despite being relatively fertile, these soils do not support trees well, therefore imported topsoil and/or amelioration and cultivation of the existing soils, will ensure better plant growth rates on your site.

Street/Neighbourhood Character

Each street has a particular character. Assess the street in which your development is to be located and see if you can build on existing themes, such as fence types or heights, tree species and scale, pavement details and colours. This is important in order to design a cohesive environment, avoid an ad hoc approach to the streetscape and assist in defining the neighbourhood character.

Views

Views into or from the site may be preserved or screened depending on your design. It is important not to overshadow adjacent properties, as well as to capture solar access to your site. Rural and distant vistas, such as of Mt Cottrell and Mt Macedon may be important to your design, as will highlighting a significant tree or any other features of your site. Plan to retain privacy and separation from busy streets and possibly to frame and reinforce vistas with avenue planting.

site factors

Existing Vegetation

A permit may be required to remove, destroy or lop existing native vegetation in your property. This includes grasslands, wetlands, woodlands and forests. Refer to the relevant Native Vegetation Precinct Plan (where applicable) and to Clause 52.17 of the Melton Planning Scheme to determine if a permit is required. If unsure, contact Council on 9747 7200 or email csu@melton.vic.gov.au. Refer also to the Department of Sustainability and Environment's Land Management policy on Native Vegetation which can be viewed online at http://www.dse.vic.gov.au or obtained by contacting the department on ph:136 186. Existing trees that are dead or dying must be identified and assessed by a qualified arborist, and an Arboricultural Report must be provided to Council before an application to remove the trees will be considered.

Aim to incorporate existing healthy trees into your design.

Drainage

Investigate drainage on your site. Due to the heavy clay soils, sub-soil drainage may be required to remove water quickly. Plan to control the direction of surface water away from buildings and connect sub-surface drainage to the 'legal point of discharge' on your site. Collect runoff from paved areas and roofs and wherever possible store for future irrigation of garden areas. Follow existing contours where possible. Most of Melton Shire is relatively flat with occasional mountains rising from the plains. The flatter areas will require consideration of drainage early in the planning phases of your development. Contact the Shire of Melton's Engineering Department on 03 9747 7200 or refer to http://www.melton.vic.gov.au/standarddrawings for detailed requirements in relation to drainage.

Services

Determine the location of existing and proposed services on your property (i.e. gas, water, electricity, sewage, stormwater and telephone). Avoid planting large trees close to services. Check on your Certificate of Title for the location of any easements as you may not be able to plant within them.

For existing underground services locations you can contact 'Dial before you Dig' on 1100 or http://www.1100.com.au.

Overlooking and Privacy

In a multi-unit residential development, creating and maintaining privacy for all residents is vital. Likewise, aim to screen out ugly service areas and existing roofs and sheds with strategically placed planting, lattice or fencing. In public areas, maintain passive surveillance from adjacent homes; don't use high fences along the street or adjacent to public park areas, as this contributes to an unsafe environment and prevents opportunities to integrate parklands into the design. Provide semi private front yards and private, sheltered backyards.

Solar Access

In public areas, children's playgrounds should be partially shaded from strong sun using structures. This is particularly important in new landscape areas where no mature trees exist. Aim to provide a combination of sunny and shaded seating areas within public open space areas.

document requirements

preparation of landscape plans

Depending on the nature of your development, the Planning Permit may require you to submit the following: site plans, floor plans, elevations, feature plans, subdivision layout plans, vegetation retention/removal plans and a written description of your proposal. Three (3) sets of Landscape Plan(s) incorporating all elements listed on the following checklist:

- Plan title, including:
  - project name / subdivision name
  - location
  - proponent / client's name
  - consultant's name, address and contact details
- Plans to include date, north point and issue / revision number
- All plans to be to scale. 1:100 or 1:200 preferred, or 1:500 for subdivision layout plans
- Legend

Use of PDF and electronic lodgment is acceptable, provided plans are legible at A3.

The following checklist clearly indicates the extent of drawings required as part of the Planning Permit submission. It separates the requirements of different development types and is available in PDF format from Council's website.

document requirements

The following requirements are to be clearly indicated on the documents:

	Drawings required for different development types:		
	Subdivision	**Med-Density**	**Commercial/ Industrial**
Site Context Plan	■		
A site context plan shows the locality of the site:			
• Location of the site,	✓		
• Neighbourhood context.	✓		
Site Analysis Plan	■	■	■
A site analysis indicates existing conditions and is an excellent basis to inform future design directions:			
• Orientation and slope,	✓	✓	✓
• Trees and other significant features on and adjacent to the site,	✓	✓	✓
• Entry and exit points,	✓	✓	✓
• Services locations,	✓	✓	✓
• Site exposure to sun and wind,	✓	✓	✓
• Surrounding buildings, streets, crossovers,	✓	✓	✓
• Fences and boundaries,	✓	✓	✓
• Views both into and from the site,	✓	✓	✓
• Other notable characteristics of the site.	✓	✓	✓
Vegetation Retention / Removal Plan	■	■	■
A surveyed plan indicating existing vegetation on the site, accurately showing:			
• Location, height and species of all existing vegetation (to be retained or removed),	✓	✓	✓
• Accompanying arborist report detailing health, structure, safety and suitability for retention of trees,	✓	✓	✓
• Tree protection zones with written tree protection measures.	✓	✓	✓
Landscape Master Plan	■		
This overall plan defines the extents of circulation networks, lot layouts, entries, general streetscape treatments, open space areas and linkages, clearly illustrating:			
• Entry boulevards, collector roads, residential access streets and laneways,	✓		
• Main entries, pedestrian spines, pathways and access ways,	✓		
• Proposed cycle routes, indicating where they are shared with pedestrians, on road, and connecting with the existing broader network. This will take the form of a "Mobility Plan", consistent with the requirements of the Outline Development Plan (ODP).	✓		
• Areas of open or shared space,	✓		
• Title boundaries, easements and services locations,	✓		
• Continued themes such as existing boulevards from adjacent areas, or highlight features such as lookouts etc.,	✓		
• Street tree species, including mature height and spread,	✓		
• Water treatments, such as wetlands, enhancement of creeks and waterways, as valuable public open space etc.	✓		

document requirements

	Drawings required for different development types:		
	Subdivision	**Med-Density**	**Commercial/ Industrial**
Detailed Landscape Plan	■	■	■
This plan pulls together all the background information as well as the design intent, to graphically illustrate the landscape proposal:			
• treatment of open parklands, buffers, shared space, entries and any other features within the landscape proposal,	✓	✓	✓
• title boundaries, easements and services locations,	✓	✓	✓
• adjacent land uses, surface levels, existing buildings (showing doors and habitable windows), existing fences, existing vegetation, private open space and relationship to adjacent public open space and other features where appropriate,	✓	✓	✓
• streetscape character: poles, street trees, kerbs and crossovers,	✓	✓	✓
• location of existing and proposed buildings showing doors and windows, including garages, sheds etc.,	✓	✓	✓
• distance between existing and proposed buildings and the properties' boundaries and adjoining walls,	✓	✓	✓
• Locations and details of signage and lighting; surface treatments such as car parks, paving, lawns, gardens etc, including dimensions; fences and any external buildings or structures; letterboxes, clotheslines, bin storage and service areas,	✓	✓	✓
• basic surface levels on paving, pathways and soft landscaping (relative to the Australian Height Datum),	✓	✓	✓
• sub-surface and surface drainage and irrigation,	✓	✓	✓
• areas of cut and fill, batters and their treatment, levels (relative to AHD),	✓	✓	✓
• erosion control measures and sediment control during and post construction where appropriate,	✓	✓	✓
• water treatments, such as wetlands, enhancement of creeks and water ways, as valuable public open space etc.,	✓	✓	✓
• design details of specific elements,	✓	✓	✓
• Water Sensitive Urban Design maintenance regime instructions (where relevant).	✓	✓	✓
Materials Palette	■	■	■
A list or legend should form part of the landscape works drawing, indicating different durable materials for hardscape elements such as:			
• paving (including where existing materials are to be retained and matched into),	✓	✓	✓
• gravels,	✓	✓	✓
• mulches,	✓	✓	✓
• furniture,	✓	✓	✓
• features such as public artworks etc.,	✓	✓	✓
• lighting hierarchy i.e. overhead public safety lighting to uplights accentuating major trees or landscape features,	✓	✓	✓
• signage.	✓	✓	✓
Planting palette	■	■	■
A planting schedule (cross referenced to the plan) should be included on the landscape works drawing indicating:			
• botanical name of trees and shrubs,	✓	✓	✓
• size at installation,	✓	✓	✓
• mature height and spread of trees,	✓	✓	✓
• quantity or number of plants to be installed.	✓	✓	✓

suggested planting

recommended species

The following tree species are a recommended guide for the Melton area, however given the large range of species and cultivars available through nurseries, Council will assess applicant's proposals on individual merit. Care should be taken when selecting plants for the development. The skills of a professional horticulturalist, landscape designer or landscape architect can prove invaluable when designing the landscape. The successful growth of trees depends on many factors including quality of the stock, planting preparation and technique at installation and, importantly, ongoing maintenance.

Preference is given to planting indigenous species of local provenance. Native and indigenous plants not only provide better habitat for local fauna, they are often more suited to Melton's climate and geology. The focus on native and local species does not preclude exotic species, but the use of such plants must take into account their relationship to existing stands of remnant vegetation, creeks and waterways. Some exotic species are listed for greater horticultural variety. Local nurseries are an excellent source of advice on species selection and plant availability in this area, as is Council's "Sustainable Gardening in Melton Shire" booklet.

Large Indigenous Trees for public open spaces

		Height	Evergreen (e) or Deciduous (d)	Growth Rate f=Fast m=Moderate s=Slow
Acacia mearnsii	Black Wattle	<20	e	f
Acacia melanoxylon	Blackwood	<20	e	f
Eucalyptus albens	White Box	<25	e	f
Eucalyptus baueriana	Blue Box	<20	e	m
Eucalyptus camaldulensis	River Red Gum	<30	e	m
Eucalyptus leucoxylon ssp.connata	Yellow Gum	<12	e	m
Eucalyptus melliodora	Yellow Box	<20	e	m
Eucalyptus microcarpa	Grey Box	<25	e	m
Eucalyptus obliqua	Messmate	<30	e	m
Eucalyptus ovata	Swamp Gum	<25	e	m
Eucalyptus polyanthemos	Red Box	<20	e	s
Eucalyptus viminalis	Manna Gum	<30	e	f

Small to Medium Indigenous Trees for streets and parks

Acacia implexa	Lightwood	<10	e	f
Acacia retinodes	Wirilda	< 8	e	m
Acacia pycnantha	Golden Wattle	<10	e	f
Allocasuarina leuhmannii	Buloke	<10	e	f
Allocasuarina verticillata	Drooping Sheoke	5 - 10	e	m
Eucalyptus behriana	Bull Mallee	<10	e	m

suggested planting

Large Exotic & Native trees for streets and public open spaces		Height	Evergreen (e) or Deciduous (d)	Growth Rate f=Fast m=Moderate s=Slow
Acmena smithii	Lilly Pilly	<15	e	m
Angophora costata	Smooth-barked Apple	<20	e	m
Banksia integrifolia	Coastal Banksia	<15	e	s
Brachychiton populenus	Kurrajong	<10	d	s
Celtis australis	Hackberry	<18	d	m
Corymbia citriodora	Lemon-scented Gum	<20	e	f
Corymbia eximia	Yellow Bloodwood	<12	e	m
Corymbia ficifolia	Red Flowering Gum	<15	e	m
Corymbia maculata	Spotted Gum	<20	e	m
Eucalyptus sideroxylon	Red Ironbark	<20	e	m
Eucalyptus leucoxylon 'Rosea'	Pink-flowering Yellow Gum	<20	e	m
Eucalyptus mannifera ssp. maculosa	Red Spotted Gum	<20	e	m
Fraxinus griffithii	Evergreen Ash	<12	semi d	m
Fraxinus oxycarpa 'Raywood'	Claret Ash	<25	d	m
Gleditsia triacanthos 'Limegold'	Gold Honey Locust	<15	d	m
Gleditsia triacanthos 'Shademaster'	Green Honey Locust	<20	d	f
Lophostemon confertus	Brush Box	<15	e	m
Melia azaderach 'Elite'	White Cedar	<10	d	m
Pistachia chinensis	Chinese Pistachio	<10	d	m
Quercus palustris	Pin Oak	<20	d	m
Robinia pseudoacacia 'Bessoniana'	Compact Robinia	<12	d	f
Robinia pseudoacacia 'Umbraculifera'	Black Locust	<10	d	f
Tristaniopsis laurina	Kanooka	<10	e	m
Ulmus parvifolia 'Todd'	Chinese Elm (variety)	<12	semi d	m
Zelkova serrata	Japanese Zelkova	<20	d	m

Gleditsia triacanthos 'Shademaster'

suggested planting

Small to Medium Exotic & Native trees

		Height	Evergreen (e) or Deciduous (d)	Growth Rate f=Fast m=Moderate s=Slow
Acer buergerianum	Trident Maple	<10	d	m
Agonis flexuosa	Willow Myrtle	<10	e	m
Callistemon 'Kings Park Special'	Hybrid Bottlebrush	< 8	e	m
Callistemon salignus	Bottlebrush	< 7	e	m
Corymbia ficifolia dwarf cultivars	'Wildfire', 'Wild Sunset', etc.	< 7	e	m
Eucalyptus leucoxylon 'Eukie Dwarf'	Eukie Dwarf Yellow Gum	< 9	e	m
Eucalyptus mannifera 'Little Spotty'	Dwarf Red Spotted Gum	< 9	e	m
Eucalyptus caesia 'Silver princess'	Gungurru	< 8	e	m
Eucalyptus scoparia	Wallangarra White Gum	<15	e	f
Geijera parvifolia	Wilga	< 9	e	s
Hymenosporum flavum	Native Frangipani	< 9	e	m
Koelreuteria paniculata	Golden Rain Tree	< 9	d	m
Lagerstroemia indica	Crepe Myrtle	< 9	d	m
Olea europaea	Olive Tree	< 12	e	f
Pyrus betulaefolia 'Southworth' Dancer	Dancer Pear	<10	d	f
Pyrus calleryana 'Aristocrat'	Aristocrat Pear	<12	d	f
Pyrus calleryana 'Bradford'	Bradford Pear	<12	d	f
Pyrus calleryana 'Capital'	Capital Pear	<12	d	f
Pyrus calleryana 'Chanticleer'	Chantlicleer Pear	<12	d	f
Zelkova serrata 'Green Vase'	Green Vase Zelkova	<15	d	m

Callistemon species

suggested planting

Suggested Indigenous Shrubs

Acacia acinacea	Gold Dust Wattle
Acacia paradoxa	Hedge Wattle
Acacia verniciflua	Varnish Wattle
Atriplex cinera	Coastal Saltbush
Atriplex paludosa ssp. paludosa	Marsh Saltbush
Atriplex suberecta	Lagoon Saltbush
Banksia marginata	Silver Banksia
Bursaria spinosa var. spinosa	Sweet Bursaria
Callistemon sieberi	River Bottlebrush
Cassinia arcuata	Chinese Scrub
Cassinia longifolia	Shiny Cassinia
Correa alba	White Correa
Correa glabra	Rock Correa
Dodonaea viscose ssp. cuneata	Wedge-leaf Hop Bush
Eutaxia diffusa	Eutaxia
Eremophila deserti	Turkey Bush
Goodenia ovata	Hop Goodenia
Gynatrix pulchella	Hemp Bush
Hymenanthera sp.	Spiny Tree Violet
Indigofera australis	Austral Indigo
Lavetera plebeia var. plebeia	Australian Hollyhock
Maireana brevifolia	Small-leaf Bluebush
Maireana decalvans	Black Cottonbush
Melicytus dentata	Tree Violet
Muehlenbeckia florulenta	Tangled Lignum
Myoporum insulare	Boobialla
Myoporum viscosum	Sticky Boobialla
Pimelea glauca	Smooth Rice-flower
Pimelea curviflora var. sericea	Curved Rice-flower
Prostanthera nivea	Mint Bush
Rapanea howittiana	Muttonwood
Rhagodia candolleana ssp. candolleana	Seaberry Saltbush
Rhagodia parabolica	Fragrant Saltbush
Rubus parvifolius	Native Raspberry
Sambucus gaudichaudiana	Native Elderberry
Templetonia stenophylla	Leafy Templetonia
Senna artemisiodes	Desert Cassia
Solanum laciniatum	Large Kangaroo Apple
Viminaria juncea	Golden Spray

Suggested Indigenous Grasses

Amphibromus neesii	Swamp Wallaby Grass
Austrostipa beigeniculata	Tall Spear-grass
Austrostipa elegantissima	Feather Spear-grass
Austrostipa gibbosa	Spear-grass
Austrostipa mollis	Soft Spear-grass
Austrostipa scabra ssp. falcata	Slender Spear-grass
Austrostipa semibarbata	Fibrous Spear-grass
Austrostipa setacea	Corkscrew Grass
Austrodanthonia caespitosa	Common Wallaby Grass
Austrodanthoinia duttoniana	Brown Black Wallaby Grass
Austrodanthonia linkii	Wallaby Grass
Bothriochloa macra	Red-leg Grass
Chloris truncata	Windmill Grass
Deyeuxia quadriseta	Reed Bent Grass
Dichanthium sericeum	Silky Blue Grass
Microlaena stipoides	Weeping Grass
Panicum decompositum	Umbrella Grass
Pentapogon quadrifidus	Five-awned Spear Grass
Poa poiformis var. poiformis	Coastal Tussock Grass
Poa sieberiana var. sieberiana	Tussock Grass
Themeda triandra	Kangaroo Grass

Pimelea species

suggested planting

Suggested Indigenous Climbers

Clematis microphylla	Small leaved Clematis

Suggested Native or Exotic Climbers

Hardenbergia comptoniana	Lilac Vine
Hardenbergia violacea	Purple Coral Pea
Pandorea jasminoides	Bower Vine
Pandorea pandorana	Wonga Wonga vine
Trachelospermum jasminoides	Star Jasmine

Suggested Aquatic Plants

Alisma plantago-aquatica	Water Plantain
Ranunculus inundatus	River Buttercup
Carex fasciularis	Tassel Sedge
Carex tereticaulis	Common Sedge
Crassula helmsii	Swamp Stonecrop
Cyperus gunnii	Flecked Flat Sedge
Gahnia filum	Chaffy Saw-edge
Isolepis inundata	Swamp Club Rush
Isolepis nodosa	Knobby Club Rush
Juncus subsecundus	Finger Rush
Marsilea drummondii	Common Nardoo
Marsilea mutica	Nardoo
Mimulus repens	Creeping Monkey-flower
Myriophyllum crispatum	Water Milfoil
Nymphoides crenata	Wavy Marshwart
Persicaria decipiens	Slender Knotweed
Potamogetan crispus	Pond Weed
Potamogetan tricarinatus	Floating Pondweed
Ranunculus inundatus	River Buttercup
Triglochin procera	Water Ribbon

Aquatic Plants for revegetation

Bolboschoenus caldwellii	Sea Club Rush
Bolboschoenus medianus	*M*arsh Club Rush
Eleocharis actua	Common Spike Rush
Eleocharis sphacelate	Tall Spike Rush
Phragmites australis	Common Reed
Scheonoplectus validus	River Club Rush

weed species

Plants that grow naturally in the Melton area are unlikely to become weeds, but any plants that are introduced from other parts of Australia or from other countries have the potential to become weeds. The following species will not be approved for planting in Melton:

Trees

Acacia baileyana	Cootamundra Wattle
Cupresses macrocarpa	Monterey Cypress
Cytisus palmensis	Tagaste
Eucalyptus botrioides	Southern Mahogany
Fraxinus angustifolia	Desert Ash
Genista monspessulana	Montpellier Broom
Hakea salicifolia	Willow-leaf Hakea
Pinus radiata	Radiata Pine
Pittosporum undulatum	Sweet Pittosporum
Prunus cerasifera	Cherry Plum
Salix sp	Willow
Schinus molle	Peppercorn Tree

Environmental Weeds

Cardaria draba	Hoary Cress
Dialectica scalariella	Patersons Curse
Gazania sp.	Gazania
Lycium ferocissimum	Box Thorn
Marrubium vulgare	Horebound
Nassella trichotoma	Serrated Tussock Grass
Nassella neesiana	Chilean Needle Grass
Physalis viscose	Prairie Ground Cherry
Rosa rubiginosa	Sweet Briar
Rubus fruticosus	Blackberry

Gazania species

Pittosporum undulatum Sweet Pittosporum

performance criteria

design principles

Rather than attempt to provide a detailed 'how to' set of guidelines, the following defines the minimum requirements to be achieved within the landscaped areas:

landscape performance criteria for residential subdivisions

Streetscapes:

- Connect paths seamlessly with existing adjacent pedestrian and cycle paths;
- Maintain safe clearances and sight lines when installing trees and furniture near intersections *;
- Incorporate Water Sensitive Urban Design (WSUD) principles to meet the requirements of Clause 56 or the Precinct Structure Plan;
- Median treatments should be low maintenance, providing regular and frequent pedestrian access from one side of the street to the other.

Street Trees and Planting:

- Provide one tree per house frontage and two trees per sideage;
- Install trees of a size appropriate to the scale of the street, using larger tree species on arterial roads and small tree species in local streets;
- Install trees in 300mm minimum pots (1.2m approx height). Larger trees are acceptable;
- Install larger more advanced trees at development entries and along main roads
- When designing for roundabouts or roadways, consider the mature plant height; i.e. planting to meet AustRoads requirements - refer Austroads Traffic Engineering Practice Series Guide to Traffic Engineering Practice - Part 5: Intersections at Grade;
- Install clear trunked trees in roundabouts i.e. remove low and branches and avoid bushy trees species;
- Roundabout less than 25m2 to be landscaped with granitic sand, gravel or pavement, rather than plant materials;
- Use robust, easily maintained plant species, such as drought tolerant or indigenous plantings that do not require irrigation after establishment.

(*refer Shire of Melton Engineering Standards)

Public Open Space

As part of the Melton Planning Scheme and Precinct Structure Plans, a percentage of the total developable land is required for public open space. Parklands of varying scale and intensity are required, including smaller local parks, neigbourhood parks and larger district parks, as follows:

- Local Park- has a small residential catchment within short walking distance. These parks are relatively undeveloped, but provide treed open space with a path network and seating. Further facilities could be provided, dependent on the local context.
- Neighbourhood Park - has a broader catchment offering a range of facilities generally between those of a Local and District Park.
- District Park-has a significant catchment from the larger suburb and usually offers a range of structured recreational uses and can serve environmental, historic and cultural interests.

residential subdivision

The following minimum Park Assets are to be provided in either Local, Neighbourhood or District Parks:

Park Assets	Local Park	Neighbourhood Park	District Park
seats (formal and/or informal eg. low seating wall)	4	6	10
rubbish bins	2	2	4
internal pathways	■	■	■
drinking fountains		1	2
bollards	Dependent on site	Dependent on site	Dependent on site
pergola/shelter	Dependent on existing shade	1	1-2
play equipment	Dependent on proximity to other playgrounds	Junior & senior play facilities. Min area = 200m or equivaleint	Single adventure play area with range of activities
garden beds		■	■
advanced trees		■	■
barbecues		1	2
picnic tables and associated seats	Dependent on site	1	3
bicycle parking	2	6	12
community facility/sports club area allowance			■
sports ground			■
directional signage (if located on trail network)		■	■
toilets		Dependent on park design and activity	Dependent on park design and activity
preservation of existing environmental values	■	■	■
irrigation to 2000m2 surrounding a passive recreation or play area			■
100% irrigation coverage to sporting grounds			■
lighting	Dependent on site	■	■
community centre with community garden area allowance		■	
reserve name & regulatory signage at main entry	■	■	■

Note: Provide the above minimum number (2) or requirement (■) of assets per park

residential subdivision

Parks:

- Provide strong physical links to other open space areas wherever possible;
- Install shelter belt tree plantings to reduce the impact of strong northerly winds;
- Avoid dense/tall shrub plantings (ie. 2m+ height) close to paths/activity areas to minimise the creation of hiding spots;
- Provide robust and well designed seating, adequate shaded areas, barbecues, bollards, bins and other furniture;
- Provide well designed playgrounds and other features located appropriately to encourage diversity of play experience;
- Provide robust, easily maintained paving and low walls, utilising local stone or recycled materials, where appropriate;
- Use locally derived or recycled aggregates wherever possible;
- Incorporate earthworks such as mounding to provide simple visual amenity;
- Maintain and integrate existing vegetation wherever possible;
- Replace annual flower displays with low-maintenance, perennial plantings prior to handover to Council;
- Provide a variety of spaces defined by topography or planting, maintaining adequate open areas for informal sporting activities.
- Consider adequate on-street parking is available around local and neighbourhood parks;
- Provide visual access from roads, locate parks on corner sites or adjacent to commercial facilities if possible to maximise access;
- Carparks for district parks should be kept to the park perimeter, and large expanses of paving should be broken up with tree planting. Safe pedestrian circulation routes must be provided within carparks.

Lawn:

- Avoid narrow strips of lawn for ease of maintenance;
- Select suitable grass species for heavily shaded areas;
- Select drought tolerant grass species to minimise water requirements.

Vehicle Control Fencing:

- Provide impediments to the incursion of vehicles into parklands through means such as barrier kerbs, planted areas, bollards, fencing, grade changes, rocks, etc;
- Design vehicle exclusion measures to be as visually unobtrusive as possible by combining the methods noted above and incorporating the judicious use of vegetation to minimise their visual impact;
- Provide designated and lockable access points for maintenance vehicles.

Estate Entries:

- Estate entries will be considered at the Planning Application stage and developers should consider the following:
  - Entry statements that advertise the estate or 'village' are considered advertising and may require separate planning permission. Contact Council's Planning Department for a copy of the Outdoor Advertising Policy and Guidelines for further information.
  - Entry statements (such as walls, annual flower beds, etc.) will be removed and the area reinstated prior to handover to Council.

residential subdivision

- Utilise robust materials capable of withstanding vandalism and weathering;
- Preference is given to the use local materials that reinforce local character and heritage;
- Utilise earthworks, where appropriate to further define entries;
- High walls, gates or designs that create the impression of gated entries will not be permitted;
- Any estate entry feature that has been approved for installation within the road reserve must be frangible and not obscure sight distances and driver vision at intersections.

Nature Strips:
Nature strips may be designed to incorporate planting and other features providing the following requirements are met:

- Designs submitted to Council for approval;
- Access to and from kerbside parked vehicles is provided;
- Any nature strip planting must comply with Council's Nature strip Guidelines. Plantings in roundabouts, central medians and other traffic islands must be clear of and not obscure any traffic signage; and
- Designs do not create hazards to public safety.

Water:
Apply Water Sensitive Urban Design principles (WSUD) wherever possible to minimise overall water use, such as:

- Use of organic mulch to retain soil moisture;
- Installation of water storage to collect run-off from paved areas or roofs;
- Re-use of grey water through approved diversion systems;
- Installation of rain gardens, swales or wetlands to improve water quality downstream (refer below);
- No trees or srubs to be located in raingardens or bio-retention systems;
- Group plants with similar water requirements together;
- Limited use of high water demanding plants.
  (Refer to Council's Policy and Engineering Guidelines, Council's WSUD Guidelines and the requirements of Clause 56 or Precinct Structure Plan. Also refer Melbourne Water Guidelines - www.wsud.melbournewater.com.au)

Irrigation:

- Provide 100% irrigation coverage to sporting grounds;
- Provide irrigation to grassed passive recreation and play areas, and to 2000m2 surrounding these areas;
- Use irrigation systems that provide water efficiently with minimum water loss through evaporation or run-off;
- Install water tapping of sufficient size to allow adequate watering of irrigated areas; and
- All irrigation systems to be fitted with mains power electric controller (with battery backup) and to have rainwater override (refer to the Water Authority Guidelines for specifics of irrigation system supply, such as backflow prevention and maintenance).

residential subdivision

Planting:

- Install trees (1.2m approx height). Larger trees are acceptable;
- Use organic mulch to retain moisture (minimum depth 75mm);
- Use irrigation systems that reduce evaporation, i.e. buried drip systems;
- Install native or even local plant species as they often have a better chance of survival and require less maintenance;
- Select plants of different colours, sizes and textures to create complementary and contrasting arrangements;
- Use a variety of plants that flower at different times to create a continuously changing landscape;
- Choose tree species from “Recommended Species” list on pages 9-13;
- Plantings within road reserves must not adversely affect the integrity of the road pavements, piped drainage systems, WSUD systems, footpaths, vehicle crossings or other civil works. Root barriers should be employed where conflict may arise. Seek engineering advice if in doubt of requirements;
- Landscaping should frame rather than screen key buildings. Select and locate plants to reinforce site functions such as entries and circulation routes;
- Retain existing trees where they exhibit good health and structure;
- The canopies of street trees within the road reserve must not obscure light emanating from street lighting fixtures;
- The canopies at maturity of street trees within the road reserve must be clear of any overhead service lines.

Public Art:

- Council strongly encourages the inclusion of public art in a variety of forms, in accordance with Council's Public Art Policy. A copy of this policy can be obtained from Council's Events and Culture Department.

medium density

landscape performance criteria for medium density housing

Planting:

- Locate deciduous trees to maintain winter sunshine to both the dwelling and main outdoor living areas and to provide shade in summer, especially on northern and western sides;
- Use evergreen trees where winter shade isn't a concern and for screening to neighbours or service areas;
- Install trees in 300mm minimum pots (1.2m approx height). Larger trees are acceptable
- Consider the mature plant heights when planting along front boundaries so as to maintain views and stay clear of overhead powerlines;
- Use commercial organic mulch to retain moisture (minimum depth 75mm);
- Use irrigation systems that reduce evaporation, i.e. buried drip systems;
- Install native or even local plant species as they often have a better chance of survival and require less maintenance;
- When planting near structures, seek arboricultural advice about installation of root barriers or other controls;
- Select plants of different colours, sizes and textures to create complementary and contrasting arrangements;
- Use a 'layering' of plants in garden beds; plant taller shrubs at the rear graduating to groundcovers at the front;
- Use a variety of plants that flower at different times to create a continuously changing landscape.

Lawn:

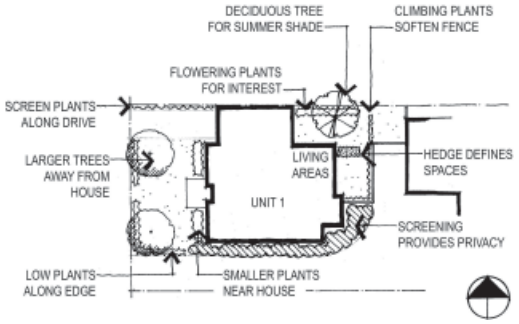
- Avoid narrow strips of lawn for ease of maintenance;
- Use suitable species for heavily shaded areas;
- Use drought tolerant grass species to minimise water requirements.

Solar & Wind Access:

- Locate outdoor courtyards to the north of buildings, where they will get the most sun;
- Locate clothes drying areas where they will receive some sun, and close to laundry service areas;
- Provide shelter for courtyards and play areas by utilising planting, walls of adjacent buildings or fences.

Entry:

- Use planting or an entry feature (such as a low wall, highlight paving or even lighting) to reinforce the entry;
- Letterbox materials should be complementary to the built architecture and be positioned within the property boundary.



determine plant functions before choosing the exact species

medium density

Fencing:

- Front fencing, if required, should be complementary to the building type and materials and should not exceed 1.0m height;
- Side and rear fences should not exceed 1.8m height;
- All fences to be a durable material, such as rendered brick or blockwork, stained timber or steel;
- No high fencing forward of the building line;
- Timber paling fences visible from the street to be capped;
- No tall and/or solid fencing adjoining public areas, such as parks. Fencing to parks not to exceed 1.2m height and to be >80% transparent for passive surveillance;
- Fencing bordering a park or public area should be stained or painted in a muted dark colour, to become visually recessive.

Service Areas:

- Provide 'all weather' paved access to areas such as the clothes line, compost bin, and outdoor storage areas (this may even be of compacted gravel);
- Screen views to service areas with fencing, planting, lattice or a combination of all.

landscape performance criteria for industrial and commercial

Storage:

- Where permits allow to provide storage at the front or sideages of buildings, provide a landscape treatment so storage does not detrimentally impact on the streetscape;
- Locate outdoor storage to have minimal impact on adjacent properties and streetscape;
- Soften or screen storage areas with planting, walling and/or fencing.

Fencing:

- Fencing visible from the street is to be of contemporary design and material.

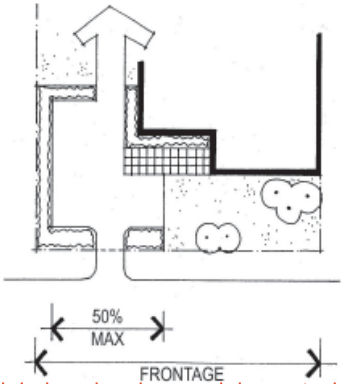
Materials:

Paved areas should be designed to be functional and to not dominate the development;

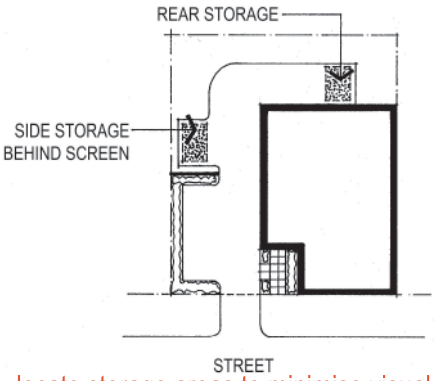
- Utilise materials such as dark coloured concrete or asphalt to reduce glare and be less visually dominant in the landscape;
- Wherever possible, paved areas should be designed to drain to on-site retention areas for infiltration into the ground;
- Council encourages small wetlands within larger sites to improve the water quality, provide increased evapo-transpiration, to provide habitat opportunities and to reduce soil erosion, land degradation and soil contamination off-site.

Planting:

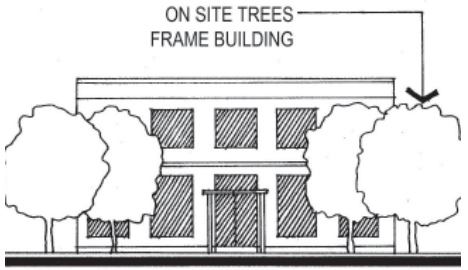
- Choose species that are hardy, and have low water requirements;
- When planting near structures, install root barriers. If in doubt, seek engineering advice;
- Landscape should frame rather than screen the buildings. Select and locate plants to reinforce site functions (such as entries and circulation routes);
- Install a landscape buffer strip to commercial buildings with sideages to residential streets (1.0m minimum to 2m width);
- Retain existing trees (exhibiting good health and structure), particularly if they are at the front of the building;
- Select plants of different colours, sizes and textures to create complementary and contrasting arrangements;
- Use a 'layering' of plants in garden beds; plant taller shrubs at the rear graduating to groundcovers at the front.



minimise visual carpark impact when seen from the street



locate storage areas to minimise visual impact from the street



locate planting to frame buildings and views, not screen them

technical notes

Protecting Existing Trees:

- Trees identified for retention are to be protected in accordance with AS4970 Protection of Trees on Development Sites;
- Temporary protective fencing to be constructed of durable fencing materials such as wire mesh, timber posts and galvanised wire, star pickets and galvanised wire or relocatable barrier fencing to prevent vehicles entering the root zone;
- Implement arboriculture recommendations to ensure tree preservation during and after construction;
- Refer to planning permit for any additional or differing conditions, i.e. trees retained under the Native Vegetation Framework will have more extensive protection requirements and there may be restrictions on usage of the surrounding area.

Protecting Existing Shrubs, Grasses and Groundcovers:

- Install temporary protective fencing (as detailed above) to 1m beyond perimeter of significant planting area deemed by Council to be preserved.

Paving:

- Slope paved areas to drain water away from buildings. A fall of 2cm in 100cm will ensure that paved surfaces shed water;
- Drain large paved areas to a grated pit, strip drain or rain garden.

Garden Bed Preparation:

- Utilise stockpiled site topsoil where it is of sufficiently high quality;
- Cultivate thoroughly before planting by hand or by shallow ripping with machinery. Use gypsum to break up clay soils and add compost or other rotted organic matter to any soil before cultivation;
- Provide 20cm minimum depth topsoil to garden beds. All imported topsoil to be certified weed- and pathogen-free;
- Provide separation between garden beds and from lawns or gravel surfaces with brick, concrete or timber edging this will assist with weed control.

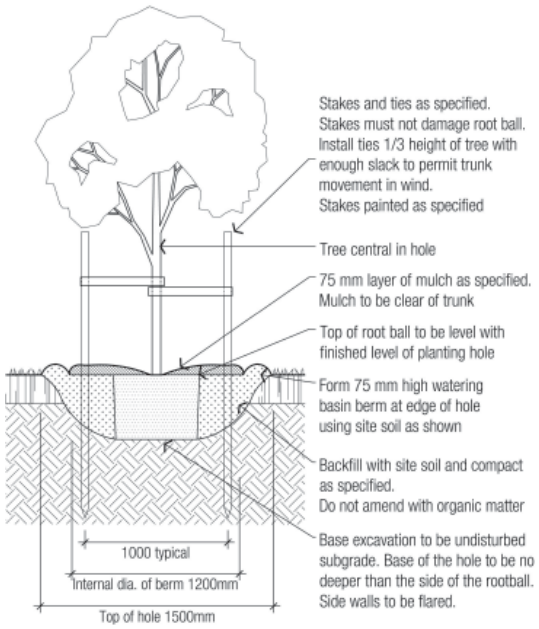
Street Tree Planting Offsets:

The following distances must be adhered to when planting street trees:

- Offset from intersections — Refer to Engineering Guidelines
- Offset from crossover/driveway — 3 metres
- Offset from Street light poles — 3 metres

Planting:

- Water the plants in their pots thoroughly before planting;
- In warm weather, plant during the cooler parts of the day;
- Make a hole twice the diameter of the pot, but not deeper. Mix a slow-release fertiliser in the soil to be backfilled.



typical advanced tree detail

technical notes

- Water in all plants immediately after planting;
- Support larger shrubs and trees with stakes and soft webbing or cloth ties. Remove the stakes after approximately twelve months, to encourage growth of a strong root system and trunk;
- Install 75mm minimum depth mulch to all garden beds and install mulch rings to trees in lawn areas. Mulching around plants conserves water and maintains even soil temperature. Keep the mulch away from the base of plants.

Plant Quality:

Trunks, stems and branches to be:

- Free of pests and pathogens;
- Free of conspicuous scarring. Any scars must be healed;
- Free of splitting of canes or trunks at branching points. Free of dead wood or dead branches;
- Well formed, sturdy and well rooted; stable, self- supporting in the container, can be installed in the ground without staking;
- Sufficiently 'hardened-off' to resist prevailing winds and other climatic conditions following installation;
- Exhibiting a dominant central leader and generally even canopy form.

Foliage to be:

- Free of pests and pathogens;
- Reasonably free of any chlorosis, yellowing or poor chlorophyll formation, as well as blemishes from pest damage;
- Cleaned of all dust and fertiliser residue and present in a representative way of the species.

The root system to be:

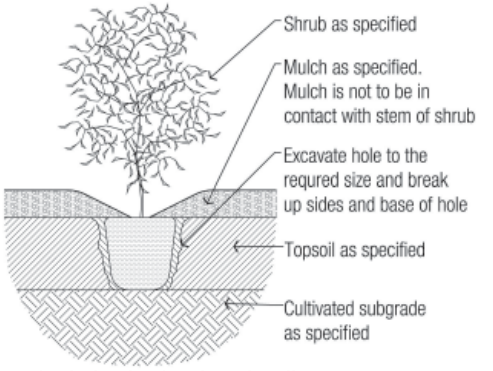
- Well developed and free of pests and pathogens;
- Well distributed throughout the container, so that the roots visibly extend on all sides to the inside face of the container and are not 'pot-bound' ie. swirling within the container.

Lawns:

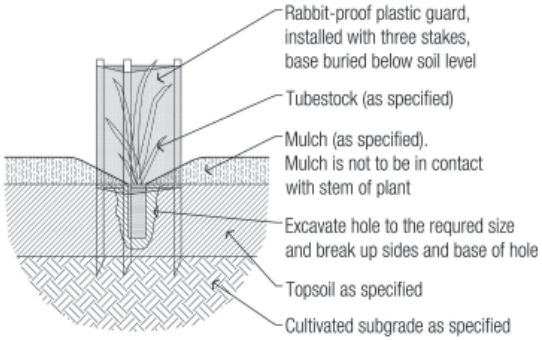
- Establish lawns when all other planting works are complete;
- Use hardy, drought tolerant seed mixes;
- Provide 10cm minimum of topsoil for lawns. Cultivate and remove clods and rock from lawn seed beds. Rake a lawn starter fertiliser into the soil.

Water Sensitive Urban Design:

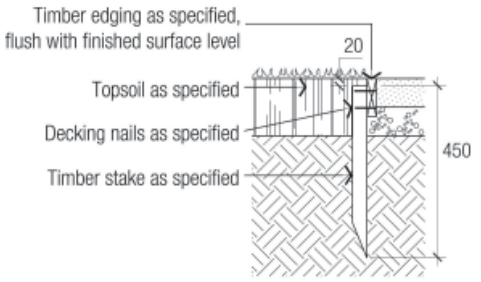
- Provide a sacrifical surface treatment layer during home construction (i.e. turf or geofabric) to prevent sediment runoff into nearby bio-retention systems.



typical shrub planting detail



typical tubestock & guard detail



typical grass & edging detail

maintenance & handover

maintenance

Maintenance is critical to the long term success of the landscape. The following list identifies the minimum tasks that must be undertaken for the lifetime of the project. Council requires that the developer maintains the landscape regularly for two years from the date of practical completion.

The following requirements must be in accordance with best horticultural practice:

Action	Aim	Requirements
Grassing and Mowing	Maintain neat appearance of grassed areas.	Mow lawns to not less than 25mm and not more than 75mm even height. Hand mow or brush cut carefully within 500mm of a tree trunk of shrub base.
	Maintain grass in a healthy condition.	Over sow, sod, top-dress, roll or pest and disease treat, to all areas of patchy grass to achieve a consistent healthy appearance. Fertilise irrigated lawn areas annually.
	Reduce weed and fire hazard	Remove weeds with selective herbicides or hand weed before 5% of area is affected. Distribute grass clippings neatly across lawn, or remove from site.
Trim and edge	Maintain lawns adjacent to trees, garden beds, fences, pits, pathways and structures in a neat manner.	Remove all long fringe grassing not accessible with a lawn mower or within 200mm of a fixture. Edging machine or brush cutter or controlled application of herbicide if grass protrudes more than 50mm. Distribute grass clippings neatly across lawn, or remove from site.
Trees and planting	Ensure healthy plants and optimum growing conditions.	Remove stakes and tree ties when trees are established (or after 12 months), and prior to handover to Council. Regularly water of trees, garden beds and grass. Top up mulch in garden beds and tree surrounds to maintain 75mm depth, once per year minimum. Fertilise in September/October. Remove all weeds manually or herbicide treat from garden beds and tree mulched areas, before weeds reach 100mm in height or 5% area is covered. Treat at first sign of pests or disease or effects thereof. Prune trees and remove dead heads of plants on a regular/seasonal basis. Pruning of trees shall include formative pruning to maintain optimum branching structure and must be accordance with AS4373 Pruning of Amenity Trees.

maintenance & handover

Pruning/Fallen limbs	To retain sight and safety clearances, and ensure healthy trees and good form.	Remove overhanging branches to 500mm from sealed edge of pathways and to 2.4m height above paths. Remove dead wood or dying limbs. Clear trunks of trees within roundabouts or near road intersections. Remove fallen limbs from ground or secure with rope and warning signage if they cannot be moved immediately.
Plant replacements	To maintain garden bed coverage.	Replace dead or stolen plants.
Litter	To maintain neat appearance of landscape.	Collect and remove rubbish off site. Collect and remove rubbish prior to mowing.
Slashing	For neat appearance of underutilised areas. To reduce weed and fire hazard.	Slash vacant land regularly to 75mm maximum height.
Irrigation	To maintain active healthy growth of plants and lawn.	Monitor system regularly for defect free performance. Maintain all irrigation systems operational. Adjust to suit seasonal or climatic changes, and to comply with current water restrictions.
Pathways	To maintain safe trafficable surfaces.	Remove grass cuttings and spray weeds with approved herbicides. Top-up gravel pathways as required.
Park Furniture	To maintain safe, functional furniture and signage.	Inspect furniture bi-annually and report defects and rectification actions to Council. Carry out minor repairs and adjustments as required.
Play Equipment	To maintain safe, functional play areas.	Repair play equipment in accordance with Council's quarterly inspection report. Top-up softfall mulch to maintain a depth of 200mm at all times.. Remove non-offensive graffiti within 2 weeks of notifcation from Council. Remove offensive graffiti within 24 hours of notification. Inspect play equipment every Friday and Monday to remove broken glass and other dangerous objects.
Management	Provide contact personnel available at all times in case of emergencies.	Respond immediately to emergency situations as requested by Council.
	Provide technical reports.	Provide technical reports regarding landscape, WSUD systems, barbecue and irrigation systems maintenance as requested by Council.

maintenance & handover

handover to council

- Periodic site inspections will be conducted by Council officers during the construction phase of the landscape;
- An inspection of the works is required at Practical Completion. The developer is to notify Council minimum two weeks in advance to arrange a suitable meeting time;
- Council's officer will identify defects (if any) for rectification by the developer;
- Upon completion of the defects (if any), the developer will notify Council's officer for a final inspection and - assuming all is complete - the maintenance period will commence;
- The developer is responsible for all associated utility costs during the maintenance period;
- Testing of irrigation systems to be carried out prior to handover;
- After the two year maintenance period has expired, the developer will arrange a final inspection to the satisfaction of Council's officer.

Documentation required prior to handover to Council:

- As-constructed irrigation, lighting and electrical plans;
- Building permits for structures within the landscape;
- List of all assets and asset values in public open space areas (for insurance purposes);
- Water and electricity meter numbers and transfer of accounts to Melton Shire Council;
- Backflow prevention device details;
- WSUD maintenance regime instructions; and
- Instruction manuals for any barbecues or irrigation systems.