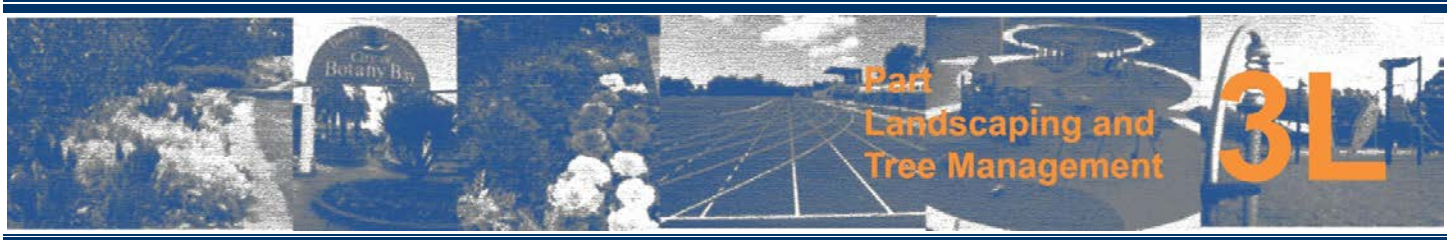

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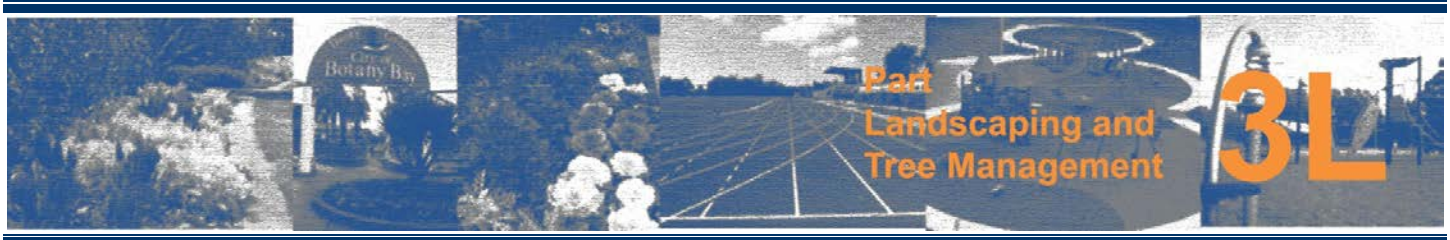


3L.1 Introduction

This Part must be read in conjunction with **Part 10 – Technical Guidelines for Landscaping on Development** sites.

Landscaping and planting design is a necessary component in the development of a site that:

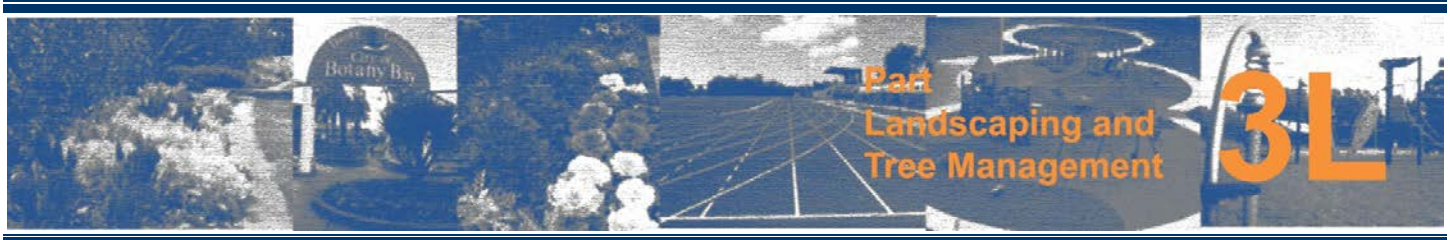
- Improves the overall quality of the development and the environment, amenity and aesthetics of a site;
- Enhances its integration and relationship with the surrounding streetscape, built context and landscape;
- Contributes to the health and well-being of the users of the site and of the community; and
- Provides opportunities for stormwater management and microclimate control.

Landscape design is to optimise the usability and amenity of the open spaces surrounding built structures to enhance social connection, visual outlook, access, usability, functionality, site responsiveness and privacy. Well designed, constructed and maintained landscapes are an asset to the community. Council actively promotes a high standard of landscaping on development sites through consideration of:

- The individual site and its intrinsic qualities and assets and how the proposed development can enhance and improve the site;
- The surrounding context, streetscapes and public spaces;
- Minimising impacts on neighbours, the streetscape and public domain;
- Good quality landscape design that is functional, aesthetically pleasing and site responsive;
- Construction details that include contemporary, robust finishes; and
- Provision of a high proportion of tree canopy cover in appropriate locations and the retention of trees.

Site responsive landscape design is encouraged that aims to:

- Unify the buildings and structures on a site and enhance pedestrian and open space;
- Retain and incorporate views and vistas, natural landforms, trees and vegetation and any other significant features;
- Improve microclimate, energy efficiency and air quality and reduce stormwater runoff;
- Contribute to local biodiversity, green corridors and wildlife habitat;
- Enhance privacy and screening, particularly the provision of landscaped buffers between residential and industrial interfaces and the screening of utility areas, car parks and vehicle circulation areas;
- Use planting and other landscape elements appropriate to the scale of the development to integrate the development with the character and proportions of the streetscape and public domain;
- Provide sufficient soil depths and planter box dimensions to enable trees to be grown over podiums;
- Minimise maintenance by using robust landscape elements; and
- Be sustainably designed.

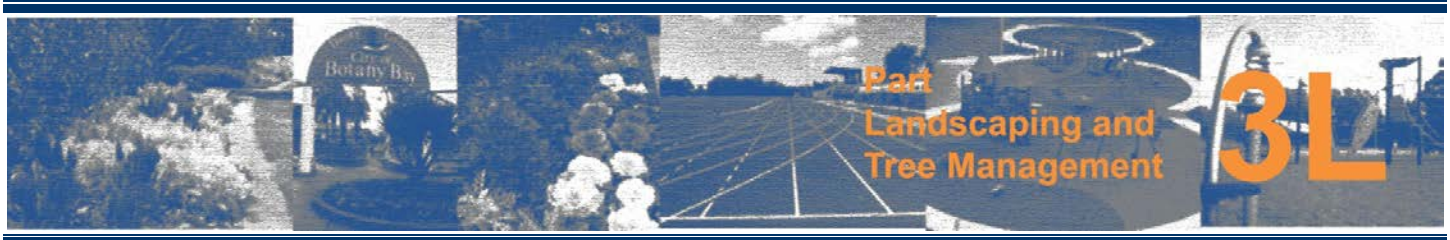


Trees contribute significantly to the character, quality and amenity of an area. It is vitally important to protect, preserve and manage trees and vegetation.

New developments provide an opportunity to reinforce and embellish the landscape character by protecting and planting trees.

A diverse and healthy tree community provides significant aesthetic, environmental and ecological benefits for residents, workers and visitors, including:

- Enhancing biodiversity, landscape quality and visual amenity of open spaces and providing green canopy cover to the built environment;
- Encouraging native wildlife by providing wildlife corridors and connections, food and habitats;
- Reducing stormwater runoff by increasing the absorption of water into the soil;
- Promoting environmental sustainability. For example, through natural temperature modification of buildings, walls and hard surfaces;
- Providing shade and reducing heat islands over hard surfaces;
- Enhancing the comfort and liveability of properties, streets, paths and open spaces;
- Ameliorating, screening and softening buildings and car parks; and
- Filtering the air and improving air quality.



3L.1.1 Bonds

Tree Preservation Bonds

Council may impose a Tree Preservation Bond on significant or heritage trees or trees with a high potential to be damaged or impacted upon during construction. Council will calculate the bond amount using the Thyer Tree Valuation Method. Tree Bonds are paid to Council in the form of a refundable deposit prior to issuing any Construction Certificate.

Tree Preservation Bonds are refunded if there is no damage incurred to the tree (both above and below ground) and may be in force for any length of time after construction has ceased to monitor tree health or structural soundness. If the tree is damaged or dies during construction or in the monitoring period, or if conditional tree protection requirements are not adhered to during construction, the bond may be partially or fully forfeited.

Landscape Bonds

To ensure the establishment and maintenance of landscaping in accordance with a Development Consent, applicants may be required to enter into a 5 year legal agreement with Council.

The landscape bond is calculated at approximately 30% of the estimated current industry cost of the initial cost to install the landscaping multiplied by the area of landscaping proposed. This may be increased annually in accordance with CPI. The bond is subject to a minimum of $2000 and tenure commences on issue of the Occupation Certificate.

Council undertakes inspections of landscaping in all new developments to ensure compliance with the Development Consent. If the landscaping is not installed or maintained in accordance with the approval, the landscaping must be rectified within a specified time frame to Council's requirements otherwise the landscape bond may be forfeited and utilised by Council to reinstate the landscaping.

3L.1.2 Development Application Submission Requirements

C1 A Landscape Plan must be of sufficient detail to enable Council evaluation of the adequacy and suitability of landscaping for the development proposed and include the following:

a) Layout and details of open space, landscaped areas, planter beds, paved areas, walls and fences; and
b) A plant schedule listing of all plants, including botanical names, plant numbers, spacings and pot sizes; and
c) Building envelopes and paved areas, including parking and vehicular areas; and
d) Finished levels of the subject and adjoining properties; and
e) Location, species, height and spread of existing trees and vegetation to be removed and retained, including trees on adjoining properties and street trees; and
f) Treatment of interface with adjoining land uses and public land; and
g) Public domain improvements (where applicable), such as street trees, footpaths, furniture and landscaping; and
h) Underground and overhead utilities, including drainage, fire booster valve assemblies and electrical kiosks; and
i) Irrigation system details.

Note: Applicants are strongly advised to engage consultants with sufficient training, qualifications and experience to provide Landscape Plans that provide landscape outcomes that are appropriate and responsive to the site and comply with this DCP and industry best practice. Inadequate plans will need to be amended and resubmitted.

C2 For new large industrial and commercial developments a Schedule of Finishes is required and must include a materials samples palette and colour scheme of pavements and hard landscape elements. The samples palette is to be cross-referenced with elevation plans and manufacturer's details.

3L.1.3 Definitions

Deep soil zones are areas of natural or existing ground with the natural soil profile retained within a development to promote the healthy growth of large canopy trees, to protect existing trees and to enhance the natural infiltration of stormwater and runoff to the ground water table. Deep soil zones are to be related to the provision of open space and retention of existing trees on a site (boundary setbacks, communal open space, private open space and green corridors).

Deep soil zone do not include landscape areas or planters located over building podium or basement car parks and do not include planter boxes regardless of soil depth.

Deep soil zones do not contain stormwater detention tanks, rainwater tanks or infiltration trenches, driveways, car parks (at grade or basements) or large areas of paving, they are green landscaped areas.

Hard landscaped area includes the following:

- Uncovered balconies, decks, pergolas and the like;
- Paving and patios (porous and non-porous);
- Driveways and car stand areas (porous and non-porous);
- Water features;
- Any part of a basement car park which extends beyond the footprint of the building above; and
- Excludes anything defined as soft landscaped area or site coverage.

Landscaped area includes all of the parts of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area. This refers to soft landscaping only.

Site coverage is the proportion of a site area covered by buildings.
The following are not included for the purpose of calculating site coverage:

(i) any basement,
(ii) any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
(iii) any eaves,
(iv) unenclosed balconies, decks, pergolas and the like.

Swimming pools are included in the calculation of site coverage, however ‘landscaped area’ and ‘hard landscaped area’ is not included.

Injury or **Injuring or Wilful Destruction** means damage to a tree and includes:

(i) The administering of a chemical or artificial substance that is toxic to a tree or part of a tree (includes spilling and runoff) whether deliberate or accidental.

(ii) The alteration of ground level or water table which causes damage to the tree or any part of the tree including roots.

(iii) Any physical injury especially by machinery on construction sites such as tearing or hacking of branches or roots that is not carried out in accordance with arboricultural practices or AS 4373 - 2007 – Pruning of Amenity Trees.

(iv) Ringbarking - damaging the bark with machinery whether intentional or otherwise, fixing objects to trees with nails, staples or wire, or any actions that restrict the normal function of the tree's trunk or branches.

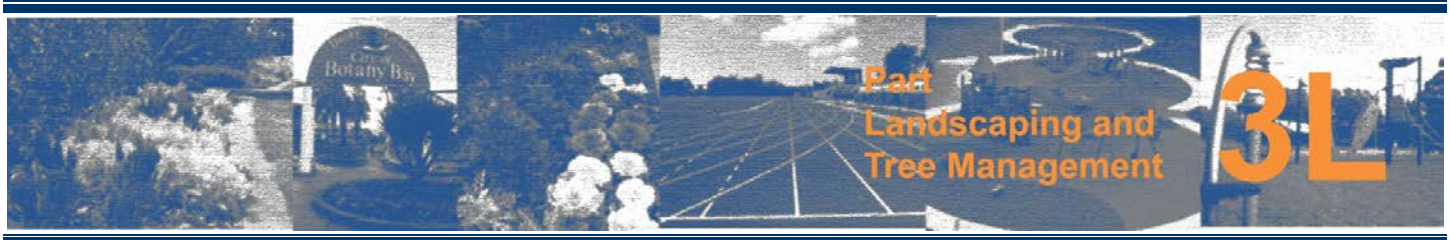
(v) Soil compaction, excavation within or suffocation of the tree's root zone through impervious pavements, fill materials or storage in the root zone, topsoil stripping, soil stockpiling.

(vi) Construction of unapproved wall footings or retaining walls in the tree root zone.

(vii) Construction of sub-surface stormwater detention or infiltration devices and pits without consideration of tree roots.

(viii) Lopping (cutting between branch unions) and topping (to reduce height) of the canopy.

(ix) Changes to drainage in the tree's root zone.



3L.2 General Requirements

Objectives

O1 To maintain and embellish the visual and environmental amenity of the City;

O2 To ensure that new development incorporates high quality landscaping and planting designs integral to the overall development;

O3 To ensure landscaping is site responsive, retains trees and provides adequate and appropriate landscaping;

O4 To improve and enhance the landscape structure and character of the City of Botany Bay;

O5 To ensure that landscaping improves the amenity of open spaces in a development;

O6 To conserve and protect the natural environment and promote the use of native and indigenous species, contributing to the effective management of biodiversity;

O7 To retain and increase canopy cover, particularly medium and large canopy trees and contribute to the urban forest;

O8 To provide vegetated screens and buffers around developments to reduce impacts on neighbouring properties;

O9 To promote landscape planning and design in conjunction with planning the layout of buildings, structures, vehicle circulation and ancillary areas on a development site;

O10 To improve the visual amenity of the built environment by minimising bulk and scale; and

O11 To enhance the existing streetscape by providing a scale and density of landscaping that softens the visual impact of buildings.

Controls

C1 Existing trees including street trees must be preserved. The arrangement of buildings, secondary dwellings, pods, car parks, driveways, ancillary building and paved vehicle/other circulation spaces must consider existing trees and incorporate them into the site layout.

C2 Landscaping will be designed to reduce the bulk, scale and size of buildings, to shade and soften hard paved areas, to create a comfortably scaled environment for pedestrians in the public domain, or from within the site, and to screen utility and vehicle circulation or parking areas. Emphasis is to be placed upon landscaped setbacks.

C3 Landscaping is to be used to define the transition between public and private spaces.

C4 Landscape screening or buffers are to be included and designed so as to enhance privacy between properties and softening of walls and facades.

C5 Street tree planting is required for most large developments. Landscaping in the public domain is to reinforce existing streetscape planting themes and patterns. The species and size will be in accordance with Council's Street Tree Master Plan and to Council specification and may include street tree planting, grass, shrub and accent planting. Streetscape beautification may also include re-paving public footpaths.

> **Note:** Council may require that all street trees be planted at the Site Establishment Phase or during Stage 1 of a staged development so that trees become established and soften the development by practical completion.

C6 All fencing and wall details will be provided in the Landscape Documentation and comply with the relevant Parts of the DCP**.**

C7 Any electrical kiosk, fire booster assembly or similar utilities will be in a location that is visible from the main entrance of the development, unable to be obstructed, and readily accessible to vehicles and service staff.
Fire booster assemblies are to be a minimum of 10m distance to an electrical kiosk, and housed within the external face of the building structure or in a built enclosure with screen doors. The enclosure is to be integrated with the architectural design of the development and compliant with AS2419.
Applicants are encouraged to provide landscaping that will not impede access to, and effective use of, the utilities to reduce the visual impact of the utilities on the streetscape and public domain.

C8 Retaining walls will be certified by a Structural Engineer if over 500mm in height.

Documentation

C9 Landscape documentation is required to be submitted in accordance with **Table 1**.

Table 1 - Development Application Landscape Submission Requirements

Development Type	Documentation to be Submitted	To be prepared by
New Residential Dwellings, Secondary Dwellings, Ancillary Buildings, First Floor Additions, Alterations and Additions, Swimming Pools &	Accurate survey plan and site plan indicating all trees, palms and vegetation on the property, on adjoining properties close to boundaries and Council street trees; height, canopy width and trunk diameter/circumference and whether trees are proposed to be	Surveyor/Designer NOTE: An Arborist Report may be required.

Fences.	retained or removed.	
	Landscape planting plan indicating open spaces and landscape treatment including indicative tree species and boundary screen planting (pools).	Landscape designer or horticulturalist preferably.
	Fence construction details (incorporating provisions for tree preservation and protection of tree roots, if applicable).	Draftsman/Engineer
Multi Dwelling Housing & Residential Flat Buildings	Tree survey and Arboricultural Report/Tree Assessment	Consulting Arborist (AQF 5)
	Detailed (construction level) landscape documentation, site analysis, schedule of finishes, specification construction details plan, section and elevations. Landscape maintenance schedule. Public Domain Plan	Registered Landscape Architect and/or Landscape specialist for green rooves/walls
Industrial Development	Tree survey and Arboricultural Report/Tree Assessment	Consulting Arborist (AQF 5)
	Detailed (construction level) landscape documentation, site analysis, schedule of finishes, construction details plan, section and elevations. Landscape maintenance schedule.	Landscape Architect
Commercial / Mixed Use Development	Tree survey and Arboricultural Report/Tree Assessment	Consulting Arborist (AQF 5)
	Detailed (construction level) landscape documentation, site analysis, schedule of finishes, specification construction details plan, section and elevations. Landscape maintenance schedule.	Registered Landscape Architect. AND/OR Specialised Landscape Architect for green walls/green rooves.

	Public Domain Plan	
Child Care Centres, Community Centres & Related Buildings (schools, churches)	Accurate survey plan indicating all trees, palms and vegetation on property, on adjoining properties close to boundaries and Council street trees; height, canopy width and trunk diameter/circumference and whether trees are proposed to be retained or removed	Surveyor and Designer NOTE: An Arborist Report may be required.
	Landscape/Planting Plan	Landscape Designer/Architect
Car Parks	Tree survey and Arboricultural Report/Tree Assessment	Consulting Arborist (AQF 5)
	Detailed (construction level) landscape documentation, schedule of finishes, construction details plan, specifications. Landscape maintenance schedule.	Landscape Architect
Subdivision and Demolition Applications	Accurate survey plan indicating all trees, palms and vegetation on property, on adjoining properties close to boundaries and Council street trees; height, canopy width and trunk diameter/circumference and whether trees are proposed to be retained or removed	Surveyor
Fences	Accurate survey plan indicating all trees, palms and vegetation on property, on adjoining properties close to boundaries and Council street trees; height, canopy width and trunk diameter/circumference and whether trees are proposed to be retained or removed	Surveyor
	Fence construction details (incorporating provisions for tree preservation and protection of tree roots, if applicable)	Draftsman/Engineer

Third Party Advertising Signage	Tree survey and Arboricultural Report/Tree Assessment	Consulting Arborist
	Detailed perspective sketches and/or photo montages	Architect
	Detailed (construction level) landscape documentation, site analysis, schedule of finishes. Landscape maintenance schedule.	Landscape Architect; and/or Specialised Landscape Architect for green walls.
Development adjoining Wetland zones or natural areas	Flora & Fauna Assessment Assessment of Significance Species Impact Statement	Ecological Consultant – professionally trained qualified and experienced.

C10 If a Landscape Plan is required in **Table 1** it must:

(i) Shows the detail of the landscape proposal and illustrates the final layout of open space, landscaped areas, paved areas, landscaping materials and plant species and groupings suitable for construction;

Note: The Plan is derived from the Site Analysis.

(ii) Be of sufficient detail and content to enable Council evaluation of the adequacy and suitability of the landscape proposal for the development proposed;

(iii) Include concept or thematic plans that indicate plant groupings and indicative species. (Plans that do not contain a plant schedule are not acceptable);

(iv) Include the following:

a) Building envelopes, built structures, parking areas, circulation, access;

b) Finished levels, existing levels of surrounding properties;

c) Treatment of interface with adjoining land uses and public land;

d) Underground and overhead utilities, including drainage, fire booster valve assemblies and electrical kiosks;

e) All planter beds and the layout, arrangement and labelling of plant materials including trees and shrubs;

f) Labelling of all existing trees and vegetation to be removed and retained, including neighbouring trees and street trees;

g) Public domain proposals (where applicable) – street trees, footpaths, landscaping;

h) Plant schedule : botanical name, pot sizes, spacing, staking;

i) All planter boxes/podium planters, roof gardens, walls, fences, furniture, amenity lighting;

j) Irrigation system details;

k) An adequate number of sections and elevations to adequately depict the landscape proposal and to clearly indicate changes in levels, terraces, retaining walls and podium planters; and

l) Overlay basement car park areas with the ground level landscape plan/layout clearly showing landscaping on natural ground and landscaping over podium.

Note: Council will not accept plans from any persons or company without landscape qualifications and experience, and who utilise non-landscape trained or practicing staff. Hand drafted submissions are not acceptable.

C11 If Specifications and Construction Details are required in **Table 1** it must:

(i) Clearly illustrate and quantify the type, layout and method of construction of landscape materials and elements to be used in the project; andInclude tree/shrub planting methods, tree protection measures, paving construction details, edge treatments, retaining walls, fences, steps, footings, planter boxes on slab (construction and drainage), furniture, landscape structures and so on. Landscape construction of landscaping is to be in accordance with **Part 10 - Landscape Technical Guidelines for Development Sites**.

C12 If a Schedule of Finishes is required in **Table 1** it must include a materials samples palette and colour scheme inclusive of pavements and hard landscape elements. The samples palette should be cross-referenced with manufacturer's details. The colour scheme should take the form of rendered and coloured elevations cross-referenced with a colour chart.

C13 If a Landscape Maintenance Schedule is required in **Table 1** it must:

(i) Cover a 12 month period and provides a guide to the landowner or occupier on how to best maintain the constructed landscaped areas; and

(ii) Include the following information:

a) Shrub pruning/trimming (frequency, plant requirements);

b) Fertilising and pest control (soil testing, types, rate, frequency);

c) Mulching, weeding and soil improvement (frequency, materials);

d) Irrigation (checks, adjustments);

e) Adjustment of tree stakes and ties;

f) Tree maintenance (fertilising, mulching, special tree requirements);

g) Maintenance of hard landscape elements (paving, edges, walls, pergolas, seats, planter box walls etc); and

h) Planter boxes/roof gardens/green wall (specialised maintenance requirements).

Note: Applicants and developers are strongly advised to engage consultants with sufficient training, qualifications and experience to provide landscape plans that have design merit, that provide landscape outcomes that are appropriate and responsive to the site and that achieve compliance with the standards and controls contained within this DCP and industry best practice. Plans that do not achieve this will need to be re-submitted or amended.

If the Landscape Documentation/Plan is considered to be sub-standard by Council or is not in

accordance with DCP requirements, approval may not be granted. The Applicant will be required to re-submit, or amend, any part of the landscape documentation as directed by Council.

Deep Soil Landscape Zone

C14 A deep soil landscape zone is required for all developments within boundary setbacks (particularly where a site adjoins a residential property), communal and private open space, and green corridors.

Note: Development in B1 and B2 zones are permitted to be built to front boundary and therefore do not require a deep soil landscape zone in the front boundary.

C15 Where possible, deep soil zones are to be contiguous with deep soil zones on neighbouring sites so as to enhance tree canopy continuation and wildlife corridors.

C16 Underground parking should be situated underneath the building footprint to maximise the deep soil landscape zone.

C17 Areas containing trees are to be of suitable dimensions to allow for lateral root growth as well as adequate water penetration and air exchange to the soil substrate.

Planter Beds

C18 All planter beds will be a minimum 1 metre wide except where otherwise stipulated in boundary setbacks for individual development types.

C19 All planter beds adjoining paved areas will be separated by a 150mm high masonry kerb or edge.

Note: Does not apply to dwelling houses.

C20 Planter beds along building façades are encouraged to visually “ground” buildings and connect them to the landscape.

Paving

C16 Use of asphalt and large expanses of bland concrete paving is not permitted. Hard paved areas are to be finished with unit pavers.

C17 A contrast of paving materials is required to break up large sections of paving and to delineate pedestrian areas, entries, car parks, special use areas or transition zones between different uses. Porous paving is to be utilised wherever possible.

3L.3 Planting Design & Species

Objectives

O1 To ensure the landscape and plant design enhances the appearance and amenity of the development and makes a positive contribution to the streetscape;

O2 To promote adequate and suitable landscaping that is functional, site-responsive, low maintenance, sustainable and promotes energy efficiency and aesthetically pleasing and contributes to a greener and visually enhanced local environment; and

O3 To encourage the planting of environmentally sustainable native and locally indigenous species throughout the City.

Controls

General

C1 Landscape design and plant species selection is to be utilised to improve the local microclimate, improve energy efficiency and the thermal performance of buildings and reduce energy consumption.
This can be achieved by using suitable and well located trees and vegetation to:

i. Provide shade to buildings and outdoor spaces in summer;
ii. Provide solar access to living areas, outdoor spaces, solar collectors and drying areas in winter;
iii. Reduce glare from hard surfaces;
iv. Funnel favourable air currents into buildings;
v. Provide windbreaks to unfavourable wind directions;
vi. Reduce noise;
vii. Reduce evaporation of pools through shading; and
viii. Provide privacy, and filter or screen views.

Species

C2 A minimum of 80% of a planting scheme is to consist of native plants. Locally indigenous species, as specified in **Part 10 – Technical Guidelines for Landscaping on Development Sites**, are to be incorporated where practical and suit the microclimate conditions. .

C3 Plant species suited to the local soils will be selected to reduce the need for large quantities of soil improvement, fertilizers or pesticides.

C4 Landscaping adjoining Endangered Ecological Community (EEC) remnants is to provide an

effective buffer to these areas and not overshadow or compete with the ecological communities.

C5 Plant low water consumption plants and group plants of similar irrigation requirements (i.e. hydrozoning).

C6 Shrubs are to be densely planted and trees spaced and located according to their mature size. Close spacing of certain species of trees may be used for screening.

Planting Design

C7 Canopy trees are to be planted in setbacks, particularly the front and rear setbacks of a property, to ameliorate built elements, subduing their appearance in the landscape and to encourage the continuity of landscape patterns.

C8 To allow adequate lateral root space and soil volume for medium to large canopy trees, the front setback area must be on one level or at a slightly battered grade rather than terraced, stepped or containing narrow planter boxes.

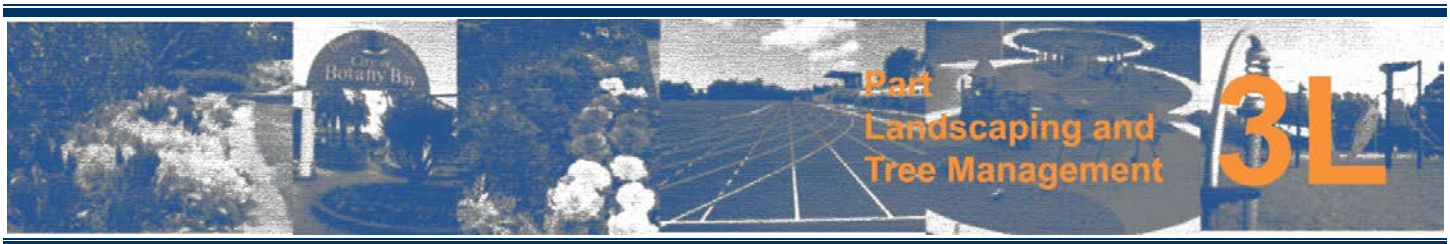
C9 Tree species must be of a suitable scale for the development and size of buildings on a site and soften the ends and corners of buildings. A list of suitable trees and plants for residential sites can be found in **Part 10 Landscape Technical Guidelines for Development Sites**.

C10 A layered landscaping approach incorporating the following is required in large landscaped areas, setbacks, buffer zones and interface areas:

i. Canopy trees for upper level screening and softening of buildings, privacy and shade (a mixture of small to large trees can be used for different purposes but the site must contain large canopy trees);
ii. Shrubs for mid-level screening and demarcation of spaces and uses (a mixture of low to tall shrubs are to be used for different purposes); and
iii. Groundcovers for low-level screening, soil stabilization and weed reduction.

C11 Lawns are generally not permitted (except on rear yards of detached dwellings) since they are generally not water efficient or as effective as trees and shrubs in screening, ameliorating buildings and structures and enhancing the streetscape and public domain. Native groundcovers can be used in open areas instead.

C12 Landscaped areas are to be supplied with an automatic drip irrigation system (except on land occupied by detached dwellings) preferably with moisture censors and connected to a recycled water source. However, plant species that are sustainable and not reliant on long term irrigation are preferable.



3L.4 Tree Management

This Part identifies whether Council's approval (i.e. a Development Application) is required to remove or prune a tree.

Consent is required to undertake any tree pruning or removal work. Where works to trees is required as part of other works for which development consent is required, the works will be assessed as part of the Development Application, otherwise an Application to Remove or Prune a Tree on Private Property (i.e. a Tree Permit) should be lodged with Council. Information on Tree Permit Applications can be accessed on Council's website at http://www.botanybay.nsw.gov.au/Resident-Services/Trees/Tree-Inspections.

This Part applies to trees and vegetation on all land within the City of Botany Bay and supplements **Clause 5.9** Preservation of Trees and Vegetation BBLEP 2013.

Clause 5.9 of Botany Bay LEP 2013 identifies controls for the preservation of trees within the City of Botany Bay. The objective of Clause 5.9 is "to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation." In accordance with BBLEP 2013 this Part of the Development Control Plan prescribes the trees or other vegetation to which the clause applies.

The following legislation is also applicable:

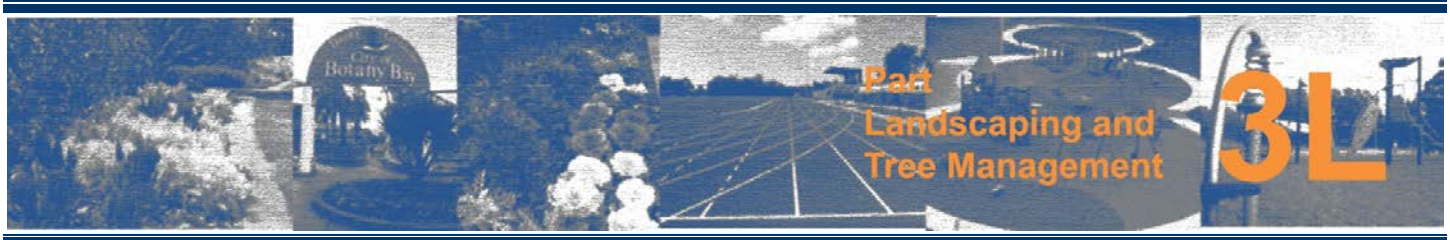
- *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*;
- *State Environmental Planning Policy (Infrastructure) 2007*;
- State Environmental Planning Policy No. 19 - Bushland in Urban Areas;
- *Environment Protection and Biodiversity Conservation Act 1999*;
- *Threatened Species Conservation Act 1995*; and
- *Noxious Weeds Act 1993*

The following must also be complied with:

- ***Australian Standard AS4373-2007 – Pruning of amenity trees***
  Provides a guide defining uniform tree pruning procedures and practices to minimise adverse impacts on trees.

- ***Australian Standard AS4970-2009 – Protection of trees on development sites***
  Provides best practices for the planning and protection of trees on development sites.

- **WorkCover NSW Code of Practice: Amenity Tree Industry, 1998**



3L.4.1 General Objectives

O1 To prescribe trees and other vegetation to be protected under **Clause 5.9** of BBLEP 2013;

O2 To preserve significant and valuable trees;

O3 To maintain and embellish the visual and environmental amenity of the City through the preservation of trees and vegetation;

O4 To protect and preserve trees and vegetation within the City of Botany Bay for biodiversity, visual and aesthetic and environmental amenity values;

O5 To maximise the quality and quantity of healthy tree canopy throughout the City;

O6 To ensure the protection of trees and vegetation by ensuring new developments consider and incorporate existing trees into the site layout and design and ensure vegetation is protected during construction and the ongoing operation of the site; and

O7 To provide a guide to the regulatory framework for the preservation of trees and establish a coordinated approach to tree management.

3L.4.2 Tree Works Requiring Council Approval

Tree works are actions affecting the health, form, habitat or canopy of a tree or vegetation community and includes modification to the tree crown (all types of pruning work, crown thinning and crown lifting – refer to *AS4373-2007*), root pruning and tree removal.

The removal, lopping, topping, ring barking, injuring or willful destruction of the following trees and vegetation without Council approval is prohibited:

(i) Any tree works that are not considered to be exempt (refer to **Part 3L.4.3 – Exempt Tree Works**);

(ii) Any tree, palm or vegetation on private land (other than an exempt species listed in **Table 3L.1**) at least 3 metres in height or with a diameter at breast height (DBH) equal to or greater than 200mm or 600mm circumference for a multi trunked tree;

(iii) Any tree or plant identified as a heritage item, located on a heritage listed property; and

(iv) Any vegetation within an area identified as an Endangered Ecological Community under the *Threatened Species Conservation Act 1995* or protected by any other State or Federal legislation (*Environment Protection and Biodiversity Conservation Act 1999*) irrespective of size.

3L.4.3 Exempt Tree Works

The following tree removal or pruning works do not require Council approval:

(i) Any tree works that do not require approval under **Section 3L.4.2 – Tree Works Requiring Council Approval**;

(ii) Tree works to exempt species identified in **Table 3L.1**;

(iii) Trees that meet criteria under *SEPP (Exempt & Complying Development Codes) 2008* (Clause 3.6A and Clause 5A.3);

(iv) Removal of noxious weed species in the Botany Bay Local Government Area under the *Noxious Weeds Act 1993* (as listed in **Part 10 – Landscape Technical Guidelines for Development Sites**);

(v) Pruning near domestic power or telecommunications lines to maintain line distance clearance where the work is a maximum distance clearance of 500mm of branches up to 50mm diameter at the nearest branch collar (Branch collar is the point of attachment to another branch/trunk). Work must be carried out by an experienced Arborist or Tree Surgeon AQF Level 5 in accordance with *AS4373-2007*;

(vi) Minor pruning work at a maximum distance clearance of 2 metres measured from the surface of the structural component (wall/ roof) of the building's edge and of branches up to 50mm in diameter at the nearest branch collar. (Branch collar is the point of attachment to another branch/trunk for branches overhanging the roof only);

(vii) Tree works authorised under the *Electricity Supply Act 1995* or the *Roads Act 1993*;

(viii) Emergency work carried out by Council, State Emergency Services, Fire Services or a public authority;

(ix) Removal or pruning works undertaken by Council or a contractor acting on behalf of Council on Council owned or controlled land; and

(x) Where Council is satisfied the tree is dying or dead or poses a risk to human health or safety.

Note: Part 3L.4.2 – Tree Works Requiring Council Approval overrides the exemptions listed above as Council approval is required for works involving threatened species, populations or ecological communities.

Table 3L.1 - Exempt Tree Species List

Ailanthus altissima	Tree of Heaven
Bambusa spp, Phyllostachys spp and others	Bamboo
Cinnamonum camphora	Camphor Laurel **Note**: Only trees under 5 metres high
Citrus spp.	Lemon, Orange, Mandarin
Cotoneaster spp.	Cotoneaster
Erythrina crista-galli.	Coral Tree **Note**: Only trees under 5 metres high
Ficus elastica	Rubber Tree
Morus alba	Mulberry
Nerium oleander	Oleander
Olea europaea subsp. cuspidata *Olea europaea*	*African Olive* European Olive
Prunus spp. *(fruiting species)*	**Fruiting** species only (Peach, Plum, Apricot, Cherry). ***Note: Does not apply to ornamental/sterile varieties.***
Pyrus spp. *(fruiting species)*	**Fruiting** species only (Pear). ***Note: Does not apply to ornamental/sterile varieties.***
Schefflera actinophylla	Umbrella Tree
Syagrus romanzoffiana	*Queen Palm* ***Note :*** *only palms less than 5 metres*

Note: The above exemptions do not apply to trees upon land in a Heritage Conservation Areas or on land in which a listed Heritage Item is located or any tree listed on a Significant Tree List**.**

3L.4.5 Applying for Council Approval

A Development Application for proposed tree works (removal or pruning) is required to include the following at a minimum:

1. A site plan showing the surveyed location of all tree/s or vegetation on the property and trees within 5 metres of property boundaries (trees on adjoining properties and street trees);
2. Details of the species and size (height, canopy spread and trunk diameter/girth at ground level) of the surveyed trees or vegetation, whether to be retained or removed;
3. Arborist Report for sites with large trees, several trees or as required by Council;
4. Full written details and justification for the proposed tree or vegetation removal and/or pruning (refer to C3 below). It is the responsibility of the applicant to substantiate applications for tree removal; and
5. Owner's consent.

Retention of Trees on Development Sites

Council expects the retention of healthy and/or functional trees on all development sites. Developments are to be designed to incorporate existing trees into the layout and design of open spaces, buildings, basement car parks, hard stands and ancillary structures to ensure that their health is not compromised by siting structures too close to trees, including trees on adjoining properties.

Controls

C1 A Development Application involving tree removal or pruning works based on one or more of the following reasons is likely to be refused:

(i) The shedding of leaves, bark, fruits, flowers, sticks or the like which are part of the normal life cycle of a tree;

(ii) To minimise the inconvenience caused by animals and insects, including the dropping of fruit and bird droppings;

(iii) To improve views, visibility of signage (unless essential road signage) or reduce shading of solar receptors;

(iv) To reduce the height of a tree (topping) which is not in accordance with Australian Standards;

(v) To facilitate the construction of a driveway or structures, including swimming pools, outbuildings or fences. Alternative locations of such structures must be sought;

(vi) Lifting of pavements. Tree removal is the final option when all other avenues for management have been investigated, such as removing paving from the base of a tree and relaying pavers;

(vii) Sewer chokes where an aged/faulty sewer system has not been replaced with PVC to the mains supply. Alternatives to tree removal include replacement of damaged pipes and relocation or encasement of pipes;

(viii) Structural impact of a minor nature that could be rectified by an alternate means or cannot be directly attributed to a tree. For example, absent, aged or poorly constructed fence or footings, minor cracking that could be rectified by bracing walls, bridge footings or relocating

fence sections, relaying pavers over a reinforced concrete slab, alternative paving solutions such as asphalt or raised decking, removing paving from the base of a tree, relocating clothes lines, re-routing small sections of stormwater pipe, alternative fence or wall construction methods, relaying of public footpaths;

(ix) Overhanging a property boundary. Council may approve selective pruning of some branches that does not adversely affect the health and aesthetics of trees.

C2 Council will only approve the removal of a tree under C1 if:

(i) The tree is in a poor or declining condition, is dysfunctional, hazardous or has a minimal life expectancy; or

(ii) It can be demonstrated that it is not possible to provide an alternative layout or design of buildings or structures to permit retention of the tree.

C3 The following matters are considered by Council when a Development Application involves removal or pruning work to trees or vegetation:

(i) Whether the tree or vegetation has significance or value (amenity, aesthetic, environmental);

(ii) Whether the tree is heritage listed, located on a site with a heritage item or in a Heritage Conservation Area, on any significant tree list or listed under State or Federal legislation

(iii) Whether removal will impact on local biodiversity, habitats or the quality and quantity of healthy tree canopy;

(iv) Whether the clearing of vegetation or work near it directly or indirectly impacts on a vegetation community protected by State or Federal legislation;

(v) The health or condition of the tree or vegetation, whether the tree or its branches are dead, dying, diseased or structurally unsound and the tree's Safe Useful Life Expectancy (SULE);

(vi) Whether the tree is dangerous, hazardous or a public nuisance;

(vii) Proximity to and interference (current and future) with existing or proposed buildings, structures, utilities or vehicle sightlines;

(viii) Impact on the development potential of the land;

(ix) Whether the tree will be adversely impacted by a development proposal (its canopy and/or root system) and whether alternatives have been considered for building or structure layout, design or siting; and

(x) Whether the tree forms a valuable component of the streetscape.

C4 Setbacks are to maximise the retention of existing trees (including those on adjoining properties) and their root systems and may need to be varied to achieve this.

Arborist Report

C5 Council requires an Arborist Report for works to trees that are heritage listed or located on a site with a heritage item or within a Heritage Conservation Area.

C6 An Arborist Report may be required for any trees or vegetation on private or public land

considered to be locally significant (based on height, habitat, condition or representation etc), if it is within 5 metres of a proposed development, or if there is potential for the tree to be impacted on.

C7 Council may also require a Report if additional or more detailed information on a tree or vegetation is deemed necessary.

The Report must be prepared by a suitably qualified and experienced Consulting Arborist with a minimum qualification of AQF (Australian Qualification Framework) Level 5.

The Arborist Report must address the following:

(i) Company details, qualifications and experience of the Arborist/s;
(ii) Person or company for whom the report is prepared;
(iii) Date of inspection;
(iv) Aims of the report;
(v) Address of the site and a site plan;
(vi) Methods and techniques used in the inspection;
(vii) Whether the tree is a heritage item or on a site containing a heritage item;
(viii) The botanical name of each tree on the site and adjoining the site and whether they are proposed to be retained, removed or pruned;
(ix) The tree/s size, age, condition/health, estimate of longevity (SULE), critical and primary and structural root zones and any other pertinent information relating to tree root structure or distribution, significance value/rating, amenity value, previous pruning, structural defects or damage and any other relevant considerations such as wildlife, habitats, soil, drainage etc;
(x) Potential impacts on the tree/s as a result of the proposed development or construction work;
(xi) Tree retention and protection options, including construction techniques involving footing design, excavation and scaffolding, and building or structural modifications;
(xii) Recommendations for future management of trees to be retained, including branch or root pruning;
(xiii) Recommend mitigation or compensatory measures where there is a loss of amenity with tree removal or pruning;
(xiv) Demonstrate how the proposal complies with *AS4970-2009 – Protection of Trees on Development Sites* for trees to be removed and retained and *AS4373-2007 - Pruning of Amenity Trees*; and
(xv) Supporting evidence such as photographs, testing (Resistograph and Picus Sonic Tomograph reports), root mapping and aerial inspection findings.

Note: Arborist recommendations for tree removal must be objective and based on the arboricultural findings only. An arborist is qualified to report on tree health and structure but not on the significance of vegetation. An ecologist is required for this.

Note: Council may also require a detailed report or root mapping for trees on the property or on adjoining properties that may be impacted by construction work.

Flora & Fauna Impact Assessment/Vegetation Management Plan (VMP)

C8 A Flora & Fauna Impact Assessment prepared by an ecologist may be required for development work on or near remnant vegetation forming part of a locally endangered ecological community (refer to **Part 3M – Natural Resources).** The Flora & Fauna Impact Assessment should include an Assessment of Significance in accordance with section 5A of the *Environmental Planning and Assessment Act 1979* comprising a full description of its extent, makeup and condition and potential direct and indirect impacts expected with the proposed development. A Vegetation Management Plan should also be submitted fulfilling the property owner's responsibilities under the *Threatened Species Conservation Act 1995* and any other relevant legislation.

Other Reports

C9 Structural engineering and licensed plumbers' reports may be required for alleged damage/blockage to sewer or stormwater lines or damage to fences and other structures.

Demolition and Subdivision Sites

C10 A tree requiring approval is not permitted to be removed on a site in which subdivision or demolition has been granted by Council unless consent for removal has been obtained through the Development Application or a separate Tree Works Permit.

Protection of Trees on Development Sites During Construction

C11 Council may impose a Tree Preservation Bond on significant or heritage trees or trees with a high potential to be damaged or impacted upon during construction. Council will calculate the bond amount using the Thyer Tree Valuation Method. Tree Bonds are paid to Council in the form of a refundable deposit prior to issuing any Construction Certificate.

Tree Preservation Bonds are refunded if there is no damage incurred to the tree (both above and below ground) and may be in force for any length of time after construction has ceased to monitor tree health or structural soundness. If the tree is damaged or dies during construction or in the monitoring period, or if conditional tree protection requirements are not adhered to during construction, the bond may be partially or fully forfeited.

Replacement Trees

C12 If consent is granted for the removal or pruning of a tree, suitable replacement tree/s will be required to be planted on the subject property by the property owner or applicant.

Council will stipulate the minimum acceptable replacement tree/s pot size and number of trees and may recommend suitable species.

Replacement trees are to be planted with consideration of the location of boundary fences, walls, pipes and buildings.

Requests for Tree Works on Council Owned or Managed Land

C13 Where a Development Application is submitted to Council for pruning or tree removal within a public park or reserve, road reserve (street trees) or other public land, the request will be evaluated against the criteria in C3. Application for removal of a street tree must be sought prior to lodgement of a Development Application in consultation with Council's Planning and Parks and Landscape Departments.

Note: Canopy pruning of street trees associated with the HV electrical service is undertaken by the energy provider.

C14 Council will only prune or remove street trees or trees on public land for essential tree maintenance. Council will not consider applications by private parties for the pruning or removal of public trees based on the reasons provided in C1.

C15 Permission to remove street trees to accommodate a development or for the purposes of a relocated or widened vehicular driveway and its crossover are unlikely to be successful. The applicant must consider the location of street trees and investigate alternative designs prior to lodging a Development Application.

C16 New or widened driveway crossovers are required to be located a minimum distance of **3 metres** from the trunk of an existing street tree. Advice should be sought from Council for large street trees as an offset of up to 5 metres may be required.

C17 If pruning or removal of a tree on public land is deemed appropriate or necessary, the work will be scheduled into the works program of Council's Tree Management Team.

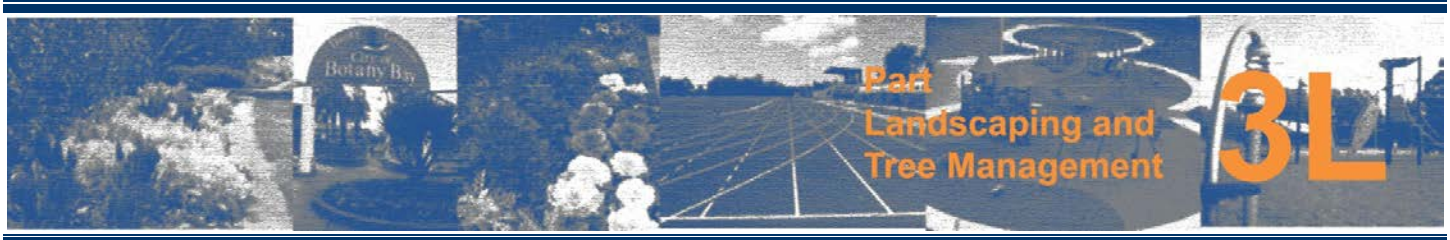
C18 For trees on public land that may be impacted by a Development Application, Council may impose conditions of consent and a Tree Preservation Bond to ensure the trees' preservation during and post-construction. Council will also require appropriate replacement planting in accordance with C11. Tree removal and replacement costs are borne by the applicant.

Tree Work Approvals

C19 Tree works approved with a Development Application lapse if the consent lapses or becomes invalid, void or surrendered.

C20 Tree works approved with a Development Application must only be undertaken once construction work has substantially commenced.

C21 A copy of the Development Consent must be presented on demand to Council's authorised officers and the Arborist engaged to undertake the approved tree works.


Part
Landscaping and
Tree Management
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3L.4.7 Dispute Resolution

Where a private property owner wishes to appeal a Council decision denying consent to remove or prune a tree or vegetation on private or public land, the following procedures will take place.

Trees or vegetation on private property

The property owner is required to engage an Independent Consulting Arborist or other specialist i.e. structural engineer or plumber to provide further detailed advice and assessment of the matter. Council will consider the independent report and re-inspect and/or review its decision if new information is provided or uphold its decision.

For minor structural damage, the property owner must investigate alternative measures to rectify the damage and retain the tree. Council will only review its decision if all avenues have been exhausted and evidence provided thereof.

Trees or vegetation on public property (including street trees)

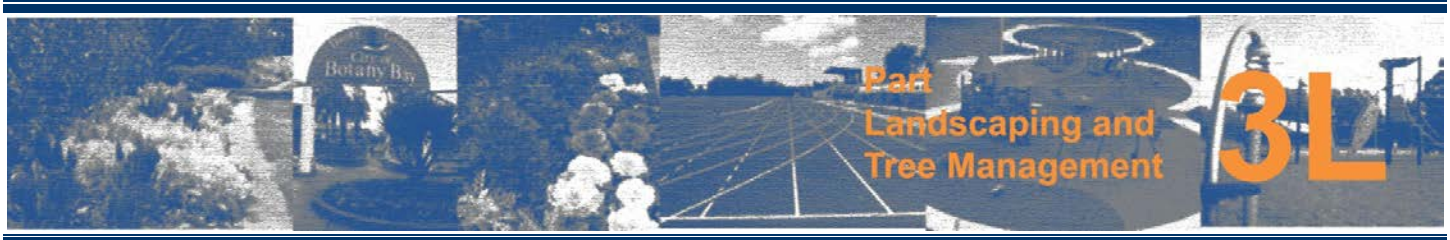
The property owner may write to Council requesting a review of the decision clearly stating the reasons and provide any new or additional information, including photographs. Council may engage a Consulting Arborist to obtain additional independent advice.

3L.4.8 Penalties

Tree works carried out on private land without Council approval or not carried out in accordance with an approval, may attract a Penalty Infringement Notice (PIN) or incur legal action in the Local Court or Land and Environment Court under Sections 125 and 126 of the *Environmental Planning and Assessment Act 1979*. The Court may also order the repair, remedial pruning or replacement of a damaged or removed tree and impose an order to maintain such replacement to maturity.

A PIN may be issued for the injury or removal of trees and vegetation on public land under Section 629 of the *Local Government Act 1993*.

Further penalties apply to the removal or damage to vegetation under the *Threatened Species Conservation Act 1995* and the *Environment Protection and Biodiversity Conservation Act 1999*.



3L.5 Stormwater

Objective

O1 To minimise stormwater runoff and increase natural infiltration through landscape design.

Controls

C1 Impervious surfacing is to be minimised. Permeable pavements are to be used where possible eg. Decks, pebbles, spaced pavers, specialised permeable pavers.

Note: Run-off from paved areas can be minimised by directing runoff to garden beds.

C2 Underground on-site stormwater detention (OSD) tanks and infiltration trenches are not to be located within soft landscaped areas.

C3 An alternative location is underneath driveways or paved areas or otherwise sited where they will not restrict landscaping of a site, particularly tree planting. No stormwater inlet pits, piping, tanks or infiltration trenches are to be located within the drip line or primary and structural root zone of any existing or proposed trees. The hydraulic design must be designed in conjunction with tree retention.

C4 WSUD (Water Sensitive Urban Design) principles and practices are required to be incorporated in all larger scale developments and may include such elements as bio-swales and rain gardens (refer to **Part 3G - Stormwater Management**).

C5 Stormwater absorption basins are to be planted with suitable trees with non-invasive root systems (where concrete storage tanks do not exist underneath), groundcovers and native grasses instead of lawn. Species are to be tolerant of periodic inundation and water logging and will not reduce the storage capacity of the basin.

3L.6 Landscaping in Car Parks

Objectives

O1 To integrate landscaping with car parks to provide shade for vehicles, to reduce the heat island effect of large areas of paved surfaces, to soften the impact of large areas of paving and parking, to improve amenity and to screen car parks from the public domain;

O2 To minimise the visual impact of car parks in the streetscape and public domain; and

O3 To integrate landscape design with the car park to provide generous sized planter beds that sustain the growth of trees.

Controls

C1 For at-grade car parks 1 tree will be provided for every 5 car spaces so that at least a 50% canopy coverage of the car park at maturity is provided. Car parks will be generously landscaped..

C2 Vehicle circulation areas, driveway access and parking will be arranged to maximise the area available for landscaping and the preservation of existing trees. Excess hardstand areas will be minimised. Planting is to be provided to edges, boundaries and internal areas of car parks to screen car parks and circulation areas from the public domain.

C3 Landscaping, including broad canopy trees will be used to effectively and adequately screen and soften parking areas, vehicle circulation areas and ancillary and utility areas and provide shade and glare reduction. Landscaped areas will be planted densely using layered plantings of trees, shrubs and groundcovers.

C4 Contrasting materials and finishes must be used to break up large sections of paving and to delineate pedestrian areas/crossings, entries, car parks, special use areas or at transition zones between different uses.

C5 Internal landscaping must allow for pedestrian visibility of traffic, maintaining open sightlines. This can be achieved utilising clear trunked trees and low level shrub plantings. Broad, dense canopy trees are to be used to enhance shading.

C6 All circulation areas must be accessible for a person with a disability.

C7 All car parking spaces adjoining planter beds or trees will contain wheel stops to reduce damage to and vehicle overhang of planter beds.

C8 **Figure 1 and Figure 2** Indicates preferred landscaping options in car parks.

C9 Small planters 1 metre x 1 metre for trees are not permitted. Planter beds must be of an adequate

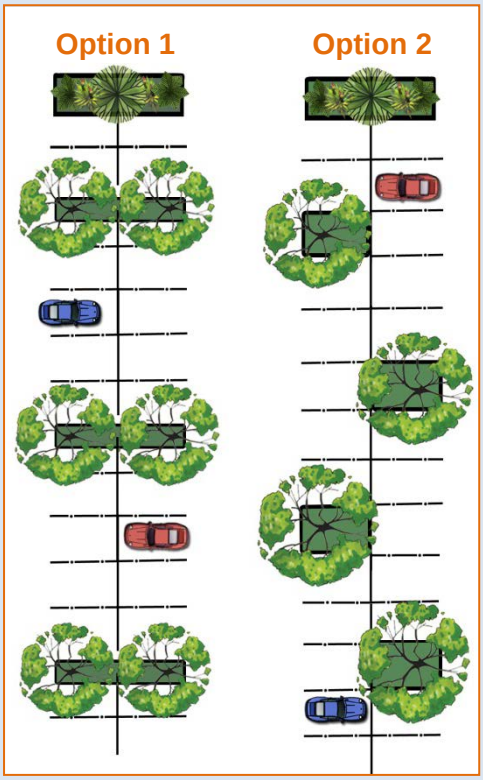
dimension to cater for tree roots and future tree growth and to provide adequate moisture penetration and aeration of the root zone.

C10 Tree root barriers are encouraged for certain tree species. Trees with excessive fruit or leaf drop, large root systems or high maintenance needs are not encouraged to avoid applications for removal of trees at a later date. Trees with broad, leafy canopies however are required.

C11 The minimum pot size at installation for trees is 100 litres.

C12 Adequate distances from sub-surface utilities and lighting are required.

Figure 1 - Preferred Car Park Landscaping Layout

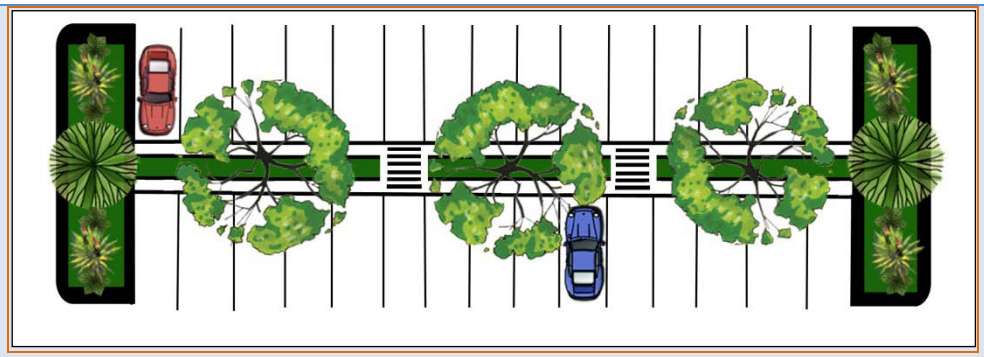


Note: Alternative landscape layouts are permitted if space does not permit either option.

Note: Option 1 is a more formal layout with the island length and width of 2 car spaces.

Note: Option 2 is less formal due to the random placement of planted islands.

Figure 2 - Preferred Car Park Landscaping Layout



Note: A central dividing planter bed and return and end of parking bay. Minimum 1.5 metres wide planted with shrubs and trees at the rate of 1 tree every 5 car spaces.

Figure 3 - An Informal Alternative for Car Park Landscaping Layout

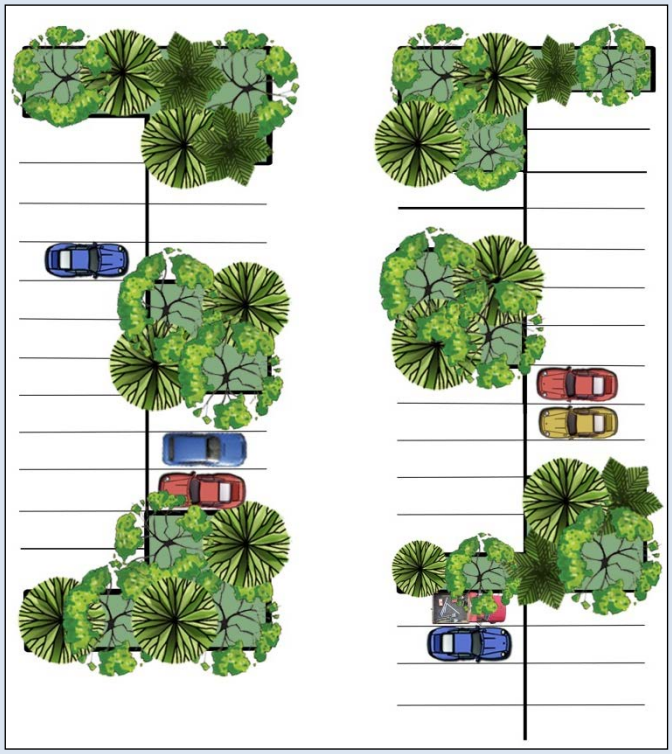
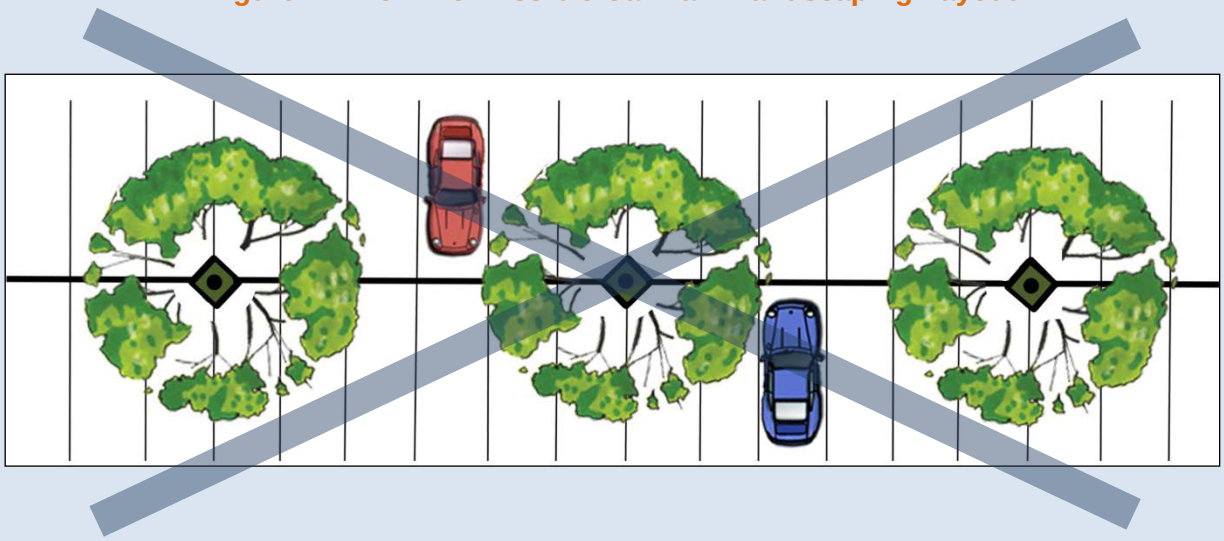


Figure 4 - Non -Permissible Car Park Landscaping Layout



3L.7 Green Walls

Objectives

O1 To encourage green roofs and walls to improve air quality, ambient air temperature, building insulation, energy efficiency, stormwater quality and runoff, fauna habitat and aesthetic quality of the urban environment by softening blank walls and screening utilities.

Controls

C1 Green walls can be utilised for their thermal properties and to visually soften large expanses of blank walling.

C2 Green walls are to be designed by a specialised landscape architect or horticulturalist.

C3 A site appraisal is required to determine the suitability of the green wall to the climatic conditions, surrounding environment and building structure, including access for maintenance.

C4 The bio-engineering details of the green wall construction, including the waterproofing membrane, root barrier, drainage system, filter fabric, soil, irrigation, support system/structure and long term waterproofing performance are to be submitted with the Development Application. Construction and materials are required to be of a high standard.

C5 An ongoing plan of management outlining the required maintenance for the green wall is to be submitted with the Development Application.

C6 Green walls on heritage items and within Heritage Conservation Areas are not to detract from the item or streetscape through the concealment of significant fabric and architectural features.

C7 Suitable plants of variable height and species are to be planted in accordance with **Section 3L.2 – Planting design and species**. Adequate soil depths are to be provided. Plants and materials are to be tolerant of the specific environmental conditions experienced in these areas such as drought, high wind, exposure, high temperature and light extremes. Species are to be selected to achieve their desired intention and to be responsive to site conditions.

C8 Water recycling and reuse, and integration of roof gardens with alternate energy sources, is to be incorporated.

C9 Green walls are excluded from the percentage landscape requirement for the site.