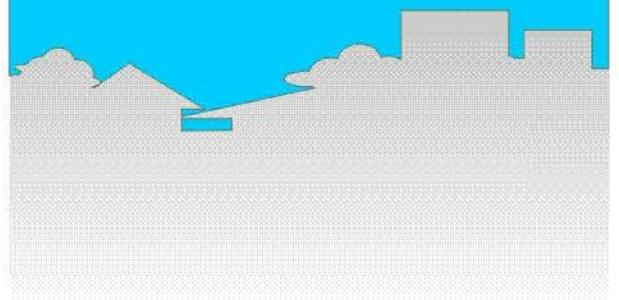


Part N

Landscaping Requirements



Greater Taree
CITY COUNCIL

PART N LANDSCAPING REQUIREMENTS

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N1 Landscaping requirements

About this part:

This part provides the detailed guidelines for landscaping.

Applies to:

All new development including subdivision, commercial, industrial, residential (with the exception of single dwelling houses), tourist facilities and car parking areas, as well as the redevelopment of existing sites, including heritage items and sites located within a Heritage Conservation Area.

Related Policy / Technical Manual:

Indigenous Plants of Greater Taree, GTCC Open Space Strategy.

Date adopted by Council:

14 October 2009

Effective Date:

25 June 2010

Objectives

- Maintain or improve the overall image and character of the area by ensuring that new development does not intrude on its surroundings and that an aesthetically pleasing environment is created for all;
- Maintain and improve the visual amenity of townships consistent with the identified landscape character of an area;
- Provide safe environments for users by avoiding or minimising the risks in landscaped areas, and providing landscaping which assists in crime prevention.

N1 General landscaping requirements

N1.1 Site coverage and lot requirements

Explanation

There are three major types of environment relevant to landscaping within the Greater Taree Local Government Area – coastal, river and hinterland. The characteristics of each are as follows:

Coastal

Subject to salt laden winds. Often few or only light frosts.

Soils: Generally sandy, poor, lacking in nutrient, with low water loading capacity, free draining, and prone to erosion – particularly from wind. Clay soils sometimes present.

Comments: Careful plant selection to suit sandy soils and salt exposure. Mulching beds are desirable to reduce moisture loss.

River

Subject to periodic inundation and possible overland flows, weed infestation common.

Soils: Fertile, often permanently moist, areas subject to tidal influence may also be brackish.

Comments: Careful plant selection required to suit periodic water logging.

Hinterland

Subject to frosts in low-lying areas.

Soils: Shallow, generally clay, fairly fertile.

Comments: Cold hardy plants may be required for frosty locations.

Objectives

- Provide for pleasant, liveable environments and microclimates in the landscaped surroundings of developments and maximise the energy efficiency of buildings;
- Facilitate a sustainable landscape that can be maintained efficiently and which promotes the conservation of natural resources, such as the incorporation of water sensitive urban design features and the use of indigenous plant species
- Ensure landscape works are designed and carried out to minimise potential environmental impacts and to reduce negative effects on adjoining land
- Incorporate within new landscaping existing vegetation of ecological, aesthetic or cultural heritage significance and natural landscape elements such as existing slope, rock formations and watercourses.

Appendix 5 of the Planning for Bushfire Protection Guidelines contains additional landscaping requirements for bushfire prone land and should be read in conjunction with this part.

This Part should be read in conjunction with **Part B Character Statements and Part L Local Area Plans of this DCP** which may contain specific landscaping requirements for certain areas.

Performance criteria

1. Designs should reflect the unique local character of the area in which they are located.
2. An assessment of the physical conditions of each site should be undertaken prior to design. Particular emphasis should be placed on the recognition of aspect, prevailing wind directions, soils, drainage and susceptibility of the site to flooding.
3. In established areas, landscaping should relate to the scale of other elements of the streetscape and the landscaping of adjoining development. Where possible, landscaped areas should adjoin the landscaped areas of adjacent allotments.
4. Proposals should endeavour to maintain established gardens, remnant vegetation and natural features where practicable. In particular, proposals should identify existing areas of natural vegetation and provide for the retention, protection and enhancement of these areas within the site where possible.
5. Existing trees should be retained wherever possible and shall be protected during construction with temporary fencing (i.e. capped star pickets at 2m centres with hazard mesh) around their drip lines – outer edge of canopy. Existing areas of natural vegetation shall also be fenced and protected from soil disturbances, and should not be used for the storage of materials.
6. Sites should be considered within the context of their importance and contribution to landscape connectivity and wildlife movement. Proposals should minimise the impact on native flora and fauna and their habitats, particularly threatened species and plant communities and ecological processes. Inclusion of measures to help offset any impacts (such as nesting boxes, bat boxes, bird feeders, etc) should also be considered in the design.
7. To maintain the ecological balance of the local area, indigenous plants (species natural to the local area) should be used in preference to native plants or exotic plants. Noxious weeds, pest plants and undesirable species should also be avoided.
8. Species to be used should be well established, disease free, container or field grown stock that have been propagated for the specific site conditions, i.e. sun-hardened, shade and sun tolerant.
9. Designs should contribute to the creation of pleasant microclimates by providing for summer shade and winter sun and capturing breezes. This can be achieved by incorporating the following:
 - a. Providing one shade tree per 20m² of lawn area.
 - b. Maximising winter solar access by planting winter-deciduous trees such as Illawarra Flame Tree (*Brachychiton acerifolius*) adjacent north-facing living areas.
 - c. Respecting the solar access of adjacent properties by minimising overshadowing.
 - d. Using landscaping to minimise heat and glare from built structures and hard surfaces.
 - e. Incorporating earth berms or masonry fences in noisy locations to help reduce noise and maintain privacy.

Information on noxious weeds, pest plants and undesirable species can be found in Council's **Indigenous Plants of Greater Taree** publication.

10. Utility services (sewerage, water, gas and power lines) should be considered early in the design phase to avoid disturbance to vegetation during future maintenance works. Tunnelling (directional boring) for underground services, rather than open trenching, should be undertaken in areas adjacent to existing trees to reduce injury to tree roots. Potential future impacts on the structural integrity of buildings (including footings) should be considered as well as the use of appropriate mitigation measures such as root pruning and root barriers.
11. For the provision of safe environments plantings should avoid obscuring casual observation of sites and creating areas of dense vegetation, in order to maintain public surveillance and reduce the incidence of crime. Shrub plantings under 1m in height should be used to enable passive surveillance where this is desired. Surfaces should be non-slip, and trip hazards must be avoided. Potential injurious plants should not be used adjacent to pedestrian areas (e.g. sharply pointed or serrated leaves or plants which shed seed/fruit or are prone to dropping limbs). Poisonous plants and plants known to cause respiratory problems should not be used in designs for childcare centres and aged care facilities. Vehicular and pedestrian traffic should be separated.
12. Components of landscapes should be in accordance with Australian Standards where they apply, such as:
 - a. Areas subject to wetting per AS1141.2
 - b. Pedestrian lighting per AS 1158.3
 - c. Roadway sight line maintenance per AS 2890.1 (1993)
 - d. Potting mixes per AS 3743 (1996)
 - e. Outdoor lighting per AS 4282 (1997)
 - f. Pruning amenity trees per AS 4373 (1996)
 - g. Top dressing, landscape soils per AS 4419 (1998)
 - h. Composts, mulches and soils per AS 4454 (1997).
13. Implementation of Ecologically Sustainable Development (ESD) principles, including the selection of low-embodied energy materials, recycled materials (e.g. chipping any removed vegetation and using the chips on site as mulch, re-use of on-site topsoil, and use of recycled plastic products), and design to ensure low resource consumption (e.g. drought hardy plantings to reduce water use, use of permeable paving and providing on-site detention/infiltration areas to allow rainfall to seep into the soil rather than run off). Water features should be avoided, and sprinklers should be used only in the evening, overnight, or early morning to minimise evaporation losses.
14. Protection of visual amenity: unsightly activities and structures should be screened, and buildings should be framed and softened. The visual impact of car parks and roadways should be reduced by erecting fences and planting mounds and vegetative screens. Good views into and from the site should be used advantageously by siting viewing areas within visual corridors. Entry points should be clearly defined and can be enhanced by special feature / accent plantings to delineate them (e.g. strong plant forms, striking foliage colours, etc).
15. Protection of water quality through the retention of natural vegetation along watercourses, and implementation of short-term erosion control measures (e.g. silt fences) during construction.

16. All landscape designs should take into account ongoing maintenance requirements. Design, plant selection and construction techniques should facilitate efficient and low cost maintenance of the newly established and mature landscapes. Edgings to lawns are recommended to define turf areas and to minimise the invasion of turf grasses into garden beds. Use of low maintenance options should be considered as replacement for turf (e.g. mulched garden beds, groundcovers, gravel or hard paving). Turf areas should be free of surface rocks/debris to avoid harm to public safety during mowing. Any plantings (e.g. trees) in lawn areas must be planted into mulched island beds and not planted directly into the turf. This will reduce the risk of mowing damage and improve plant establishment by avoiding root competition from the turf. High use areas should be gravel or unit pavers rather than turf.
17. The choice of hard landscaping materials should be made carefully. Large areas of paving can be enhanced by combining different paving materials (e.g. concrete/bitumen with brick grids or other paving patterns). Smaller areas of paving should be paved with a small-scale unit, which relates to the size of the area to be paved, e.g. brick cobble. Trees in paved areas should be surrounded with root barriers to encourage deep rooting and avoid shallow surface roots, which have the potential to disturb paving units.
18. Hard landscaping should allow the infiltration of water into the soil, through for example permeable paving.
19. Designs should have a sense of unity and a balance of repetition and contrast to avoid monotonous or chaotic forms of landscaping.

N1.2 Landscape plans

Explanation

Landscaping assists the process of integrating development into the surrounding neighbourhood. The selection of plants and materials, which complement the existing streetscape and reflect a similar size and scale helps blend new development into the surrounding environment.

Similarly, the landscaped areas of a site, when designed as part of the total site design, can provide an attractive and useable link between the site, dwelling and its surrounds.

Landscaping should be designed to complement the natural features of the site and adjoining areas. Existing landscape elements such as existing slope, rock formations, mature trees, other vegetation or watercourses should be preserved.

In established areas, landscaping should relate to the scale of other elements of the streetscape and the landscaping of adjoining development. Landscaped areas should adjoin the landscaped areas of adjacent allotments where possible.

The landscaped area may assist in moderating the sun and shade impacts on a dwelling and soft landscaping areas enhance natural infiltration of water into the soil.

Landscape areas may consist of soft landscaped areas, such as gardens, trees and grass and hard landscaped areas such as swimming pools and paved outdoor areas. It is important to achieve a balance between hard and soft landscaping.

Objectives

- Ensure that landscaping is considered as an integrated part of the design process;
- Maximise soft landscaping to soften the appearance of buildings, complement the streetscape, maximize water infiltration and reduce water runoff;
- Retain and enhance significant trees and existing vegetation that may contribute to a local area landscaping quality;
- Maintain the ecological balance of the local area, using indigenous plants planting known to suit local conditions;
- Maintain the visual amenity of existing streetscapes and enhance the appearance and amenity of development;
- Maintain existing levels of density of trees;
- Provide shading from the northern, western and eastern sun in summer, while allowing appropriate levels of solar access in winter;
- Contribute to the provision of visual and acoustic privacy where possible and appropriate.

Performance criteria

1. A Landscape Plan shall be submitted to Council in conjunction with the Development Application, or where otherwise required by Council.
2. Landscape Plans shall be prepared by a suitably qualified and experienced person (this is normally a Landscape Architect or a Landscape Designer with project experience similar to the project being proposed). Generally there should be three plans submitted to Council.

Site Analysis Plan outlining:

1. Views into and out of the site, identifying which views are to be blocked and which are to be retained;
2. Solar access and any potential solar impacts on sites to the south;
3. Areas of natural vegetation on the site, including trees and understorey vegetation;
4. Slopes on the site and areas of steep land unsuitable for development;
5. Recent aerial photograph.

Site Layout Plan showing:

1. Existing and proposed buildings and structures including fences;
2. Existing and proposed overhead and underground services (power/water/gas);
3. Existing trees and areas of natural vegetation proposed to be retained and removed on site and off-site within 10m of the property boundary (along with a schedule of botanical names and condition);
4. Proposed earthworks (cut and fill areas) and retaining walls together with details of existing ground levels and proposed finished levels of the site, including mounding;
5. Existing and proposed surface and subsurface drainage, including any drainage infrastructure (e.g. Ag drains and surface pits) planned to be installed;
6. Measures to be used to control soil erosion during construction;
7. Temporary protective structures (e.g. board crossings over existing pavements, or temporary fencing) to be used.

Landscape Plan including:

1. A Statement of Landscape Intent, which gives an explanation (in words) of what the designer is trying to achieve in the landscape plan;
2. Explanation if non-compliant – if the plan intentionally does not meet Council requirements then an explanation of how it does not, and justification for why such variation should be approved, needs to be provided;
3. Planting Schedule with the following information:
 - a. Plants should be sorted into groups of like sizes (i.e. trees, shrubs, groundcovers, climbers),
 - b. Plant names – Botanical nomenclature (genus, species and types – subspecies, varieties, forms or named cultivars) and common names,
 - c. Plant numbers (quantity per species),
 - d. Mature height and canopy width,
 - e. Planting details (staking, mulching, soil depth, fertiliser, ground preparation),
 - f. Size at time of planting (pot size for most plants, or minimum trunk calliper and minimum height for non-containerised trees) Normally Council will expect the minimum pot sizes to be met:
 - trees 45L (400mm),
 - shrubs 4L (200mm),
 - groundcovers 1.5L (140mm),
 - native grasses - forestry tubes or virocells.
4. Pavement and ground treatments: types and colours of pavements should be specified, along with edge treatments. Turf or permeable paving is preferred to allow for the infiltration of rainfall and to reduce stormwater runoff. High usage areas should be paved or gravelled rather than turfed;
5. Root barriers should be clearly identified where they are to be used;
6. Proposed maintenance program for the first twelve (12) months, with a monthly program of proposed activities including plant replacement, fertilizing, re-mulching, pruning, etc;
7. All of these plans should be at the same scale and orientation on the page, and include the following:
 - a. Title block with project name, plan version and date,
 - b. North point in the upper right hand corner of the page,
 - c. Scale (1:100 or 1:200 preferred),
 - d. Site Boundaries (using a specific line type easily identified using the key).
8. Main structures on site (buildings, carports, fences, retaining walls, surfacing materials) and off-site within 10m of the property boundary. The floor plans of structures must be provided to show the locations of doors and windows.

N1.3 Public Open Space

Explanation

The provision of landscaping in parks and open space areas, particularly trees, greatly enhances the aesthetic appearance and useability of the open space where landscaping is appropriately designed and located.

Objectives

- Ensure that landscaping is considered as an integrated part of the design process;
- Retain and enhance significant trees and existing vegetation that may contribute to a local area landscape quality;
- Maintain the ecological balance of the local area, using indigenous plants planting known to suit local conditions;
- Maintain the visual amenity of existing streetscapes and enhance the appearance and amenity of development;
- Maintain existing levels of density of trees;
- Ensure the safety of open space users.

Performance criteria

1. Parks should be designed with the end use(s) being the prime consideration.
2. If parks are to incorporate playing fields, courts, etc, these facilities should be orientated to the correct aspect. Children's play equipment should be located to provide maximum visibility for security reasons and incorporate barriers near busy roads.
3. Ensure the safety of open space users through appropriate species, location and consideration of the principles of Crime Prevention Through Design (CPTD).
4. Drainage channels should also be provided where required.
5. The emphasis in planting should be trees in lawn areas, thus providing a minimum of ongoing maintenance. A minimum of 3m between plantings should be provided to allow mower access. Where mass planted areas are used, these should be edged and mulched.
6. The use of deciduous trees for sun/shade control should be incorporated, particularly in seating areas and children's playground areas to make them desirable in both summer and winter.
7. Where usage of the park is expected to be high, pathways should be provided anticipating the major pedestrian desire lines. Depending on the intensity of usage, lighting, seating and litterbins should be provided in adequate numbers. Where possible, seats and litter bins should be coordinated in a style and colour to provide a sense of unity within the park.
8. The developer will need to maintain all landscaped areas for a certain period to be negotiated with Council prior to being handed over to Council.

N1.4 Dual occupancy, multi-dwelling housing, residential flat buildings and mixed use development

Explanation

The quality and suitability of communal open space / landscaped areas of multi-unit housing, if well designed, contributes to the recreational and service space of residents and minimises vandalism and alienation from either private or communal use.

Objectives

- o Ensure well designed and useable communal areas;
- o To integrate landscaping into the design of multi-unit residential development to soften the visual impact of the development;
- o To retain existing vegetation where possible;
- o Provide safe environments for users by avoiding or minimising the risks in landscaped areas, and providing landscaping which assists in crime prevention.

Performance criteria

1. Landscaping should be used to create a pleasant living environment and include private open space; children's play areas and communal gardens.
2. Planting selection should:
 - a. require minimal maintenance,
 - b. provide privacy for private open space areas,
 - c. screen service areas – garbage bin stores, drying yards, visitor parking, maintenance areas, etc,
 - d. reduce glare and reflected heat from buildings and hard services,
 - e. provide shade in summer and sun in winter,
 - f. direct visitors to entry points and
 - g. not create excess shade on clothes drying areas.
3. Large areas in driveways can be reduced in scale through the use of unit paving. Physical barriers such as kerbs are required where driveways and car parks adjoin landscaped areas to protect them from damage.
4. Clearly defined play areas, at a point easily accessible and visible to all residents (for supervision) should be provided. Summer shade and winter sun should be provided through the use of deciduous trees so play areas can be used all year round.
5. Fencing should be used to provide privacy and separate private open space from common open space. Materials to be used should be compatible with those used elsewhere in the development and should have minimal ongoing maintenance.

Applicants are advised to also refer to the requirements of **Part H – Residential Development** of this DCP.

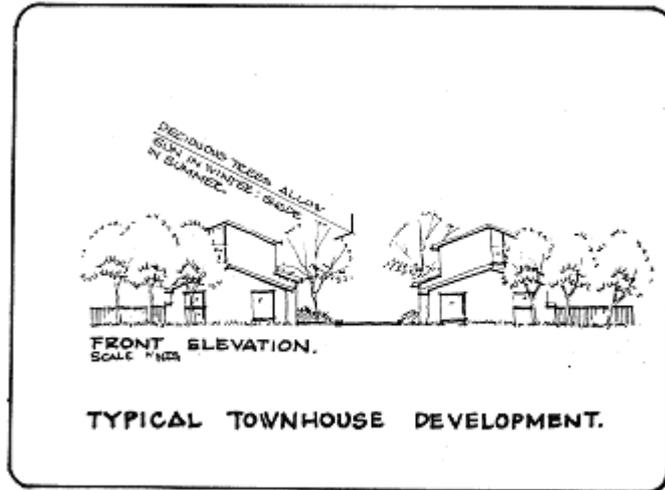


Figure 3 Typical elevation townhouse development landscaping treatment

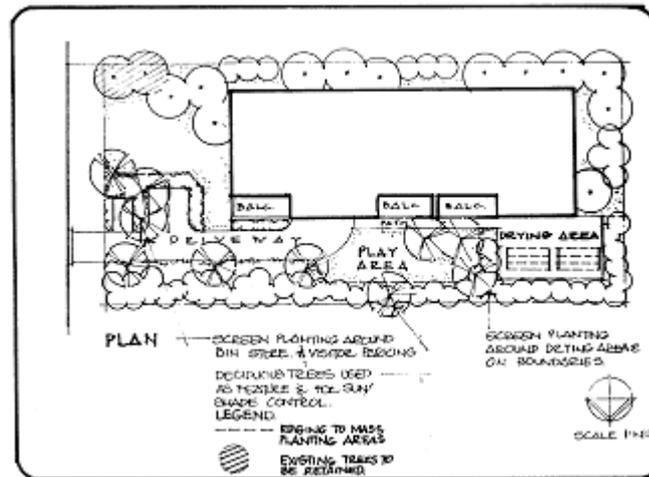


Figure 4 Typical plan townhouse development landscaping treatment

N1.5 Car Parks

Landscaping to car parking areas improves the aesthetic appearance and provides shade to both vehicles and pedestrians.

Applicants are advised to also refer to the requirements of **Part G – Car Parking and Access** of this DCP.

Objectives

- Provide safe environments for users by avoiding or minimising the risks in landscaped areas, and providing landscaping which assists in crime prevention;
- Ensure suitable species are used and landscaping is appropriately located.

Performance criteria

1. Landscaping of car parks should aim to reduce the visual impact of expanses of hard paving, reduce glare and heat and provide shade for vehicles and pedestrians.
2. Provision should be made for islands of planting at the end of rows and interspersed between car parking bays. These areas of planting should be protected from vehicular overrun by using kerbs, wheel stops and bollards, and be of at least 1.8m in width to function effectively as planting beds.
3. Contrasting paving, such as unit paving, should be used to define and visually separate pedestrian and vehicular access.
4. Where car parks adjoin residential areas acoustic and visual privacy should be maintained through fencing, mounding or vegetative screening.

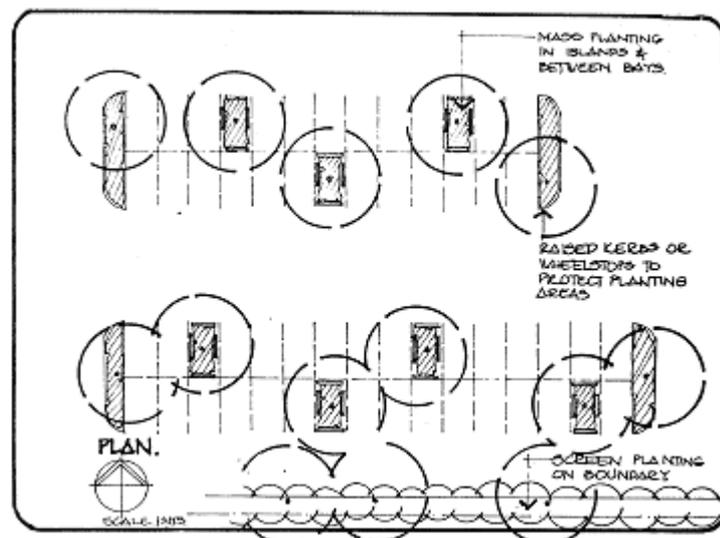


Figure 5 Typical commercial development landscaping treatment

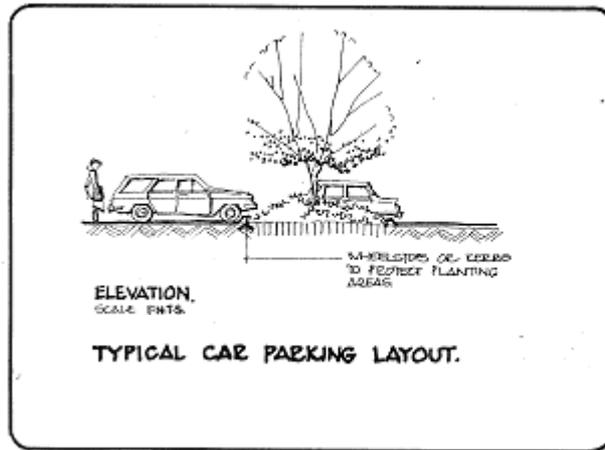


Figure 6 Typical car parking layout.