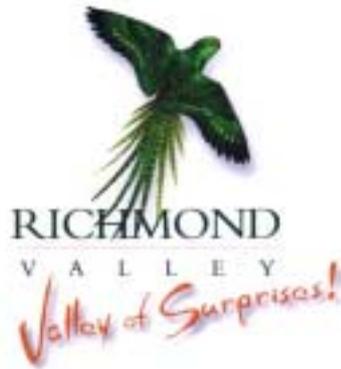


RICHMOND VALLEY COUNCIL



LANDSCAPING GUIDELINES FOR URBAN AND VILLAGE AREAS

Environmental & Development Services

September 2000

Richmond Valley Council
Landscaping Guidelines for Urban and Village Areas

Produced by Richmond Valley Council's
Division of Environmental Development Services (EDS)

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Production: John Lynch

This Guideline was adopted by Council on 19 September 2000.

In the event of an inconsistency between these guidelines and any other policy of Council, made before these guidelines, these guidelines shall prevail to the extent of that inconsistency.

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SECTION 1 -INTRODUCTION

Landscaping plays an important part in the integration of developments into the surrounding streetscape. The success of a new development and its acceptability to surrounding neighbours is strongly influenced by the landscaping undertaken. Well planned and maintained landscaping can significantly contribute to the appearance of a new development and enhance the overall image and amenity of a locality.

Landscaping has become an integral part of the planning process. A landscaping plan should not be an after thought, but should be part of the design consideration for the total development.

Preamble

This policy is part of Development Control Plans for village areas within Richmond Valley Council (Casino, Evans Head, Coraki, Broadwater, Woodburn, Rappville). It provides practical guidelines to assist in the preparation of development proposals.

Related Statutes & Reference Publications

- ◆ Revegetation Recommendations for the North Coast of New South Wales (Department of Conservation and Land Management, Coffs Harbour) 1991
- ◆ Trees & Shrubs for Eastern Australia (Forestry Commission, NSW) 1980
- ◆ Readers' Digest Practical Guide to Home Landscaping (1973)

Scope & Policy Objectives

These guidelines are aimed at assisting those responsible for preparing landscape plans for developments which may not warrant employment of a professional landscape designer/architect. For major residential or commercial developments an experienced landscape designer should be employed. If you have doubts about the need for a landscape designer/architect, please consult with Council's officers within the Environmental & Development Services.

The key objectives of these guidelines is to improve the environment of Richmond Valley Council's urban areas by:

- ◆ Ensuring that new development does not unreasonably intrude on surroundings, and
- ◆ Creating a pleasant safe and attractive living and working environment.
- ◆ Encourage the enhancement of Richmond Valley's biodiversity through the planting of endemic species.

SECTION 2 - WHEN IS A LANDSCAPE PLAN REQUIRED?

Table 1 below identifies typical landuses that would require a landscape plan. As all development and construction certificate applications are assessed on individual merits, some landuses, may still require the preparation of a landscape plan. If you have doubts about the need to prepare a landscape plan you should consult with Council's Officers within the Environmental and Development Services section first.

TYPE OF DEVELOPMENT	LANDSCAPE PLAN REQUIRED
Single Dwelling House (Other than in a 7(b) – Environmental Protection Zone)	No
Exempt Development	No
Minor Extensions to Existing Landuse	No
Minor Change of Use	No
Dual Occupancy Development	Yes
Town House Development	Yes
Residential Flat Development	Yes
Commercial Development	Yes – Inaccordance with any street beautification plans adopted by Council
Industrial Development	Yes
Some Agricultural Development	Yes
Bed & Breakfast Development	Yes
Rural Tourist Facilities	Yes
Boarding Houses	Yes
Childcare Centres	Yes
Motels	Yes
N.B. Refer to specific local development control plan for specific landscape open space requirements	

General Landscaping Principles

- ◆ Tall trees should be a major element within any landscape plan. These may be supplemented by shrubs and ground cover plants. Bush rocks and river gravel are not considered to be a suitable substitute for plants.
- ◆ Planting needs to be in scale with the buildings proposed. Two to three storey buildings should have trees with a mature height of at least ten metres.
- ◆ Designs should result in landscape areas requiring little maintenance. Features such as mulched garden beds and use of perennial, rather than annual plants, grass strips and so on, help to reduce maintenance.
- ◆ Utility services should be considered. Future problems can easily be avoided if the location of water, sewerage and powerlines are known and taken into account in any design.

- ◆ Landscape plans should be simple. Groups of a few species should be used rather than a large number of individual plants.
- ◆ Landscaped areas need to be physically separated from driveways, carparks and pedestrian areas. Low timber railings or constructed kerbs will protect landscaping from car and pedestrian damage.
- ◆ Existing trees should be retained wherever possible. It is preferable to retain groups rather than individual trees.
- ◆ Use of Australian native plants is favoured. The varieties listed at Appendix 1 & 2 have been selected because they are attractive, hardy species, suited to conditions of the Local Government area.

SECTION 3 - CLIMATE CONTROL

- Landscaping should attempt to enhance and reinforce positive climatic influences and minimise the impact of adverse climatic influences.
- With due consideration to the prevailing weather conditions, landscaping can effectively control climatic impacts on buildings and outdoor spaces.
- Additionally, climatic conditions can directly affect the success of species. Choice of trees and shrubs to be planted should be endemic to the particular area or able to tolerate the conditions.

The following Climate Schedule is provided to assist in plant selection.

<u>Climate Schedule</u>	
Temperature:	
Summer:	Warm to hot and humid 29.8 (max) 16.8 (min) degrees C
Winter	Mild 23.0 (max) 6.4 (min) degrees C
Rainfall Average:	2000 mm Annually (Coastal) 1200 mm Annually (Casino area)
Maximum:	Late summer/early autumn
Minimum:	Late winter/early spring
Elevation:	0-20m (Coastal) 20m-70m (Casino)

SECTION 4 - LANDSCAPING FOR ENERGY EFFICIENCY

The relationship between the building and the garden landscaping needs to be considered at an early stage in the design process.

Where possible provide direct access from the principal indoor living areas to those outside. These considerations need to be carried out in conjunction with the architect/builder.

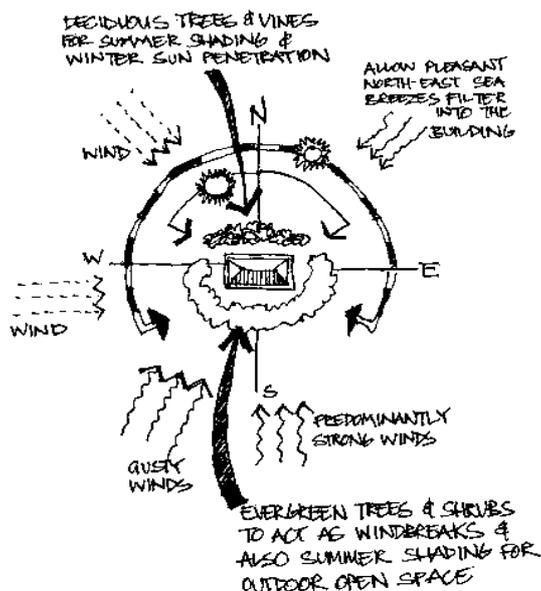
Landscaping is desirable for many reasons such as:

- Enhancing amenity
- Adding value to a property
- Modifying the microclimate of a site
- Enhancing the energy efficiency of a building

Generally, landscaping can contribute to energy efficiency by:

- **Controlling sun** to reduce summer heat gain, by shading the house and outdoor spaces, without reducing solar access in winter
- **Controlling winds** to reduce both heat loss, (by providing protection from unfavourable winds) and heat gain (by funnelling cooling summer breezes)
- **Improving outdoor comfort levels** in summer, through shading, absorbing heat and funnelling breezes.

Selecting plants for Shading



When Selecting plants for shading it is important to consider:

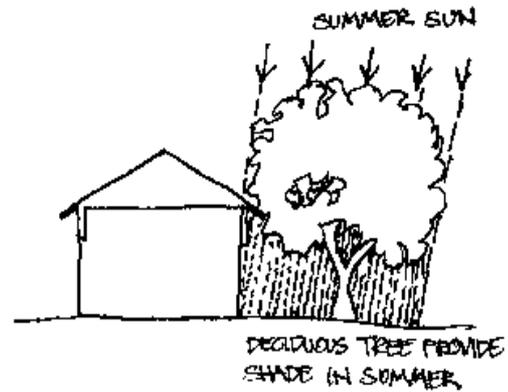
- the part of the building to be shaded – roof, outdoor living areas, walls and/or windows
- choosing plants by using the following criteria:
 - type – trees, shrubs, ground covers, vines
 - suitability of their location
 - growth habitat – height, width, shape
 - root spread
 - dense or dappled shade pattern

Shade for the Northerly Aspect of Building

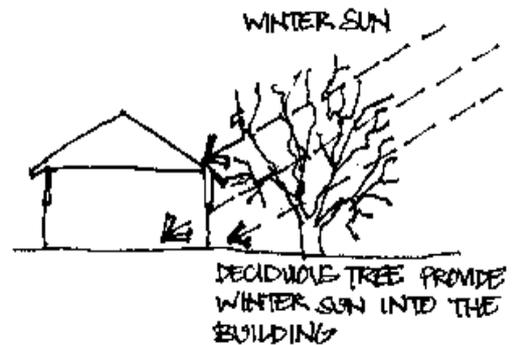
Northern walls can be protected by planting deciduous trees, shrubs and vines for summer shading while allowing winter sun access.

Deciduous vines can be grown over a pergola to provide summer shade and allow winter sun access.

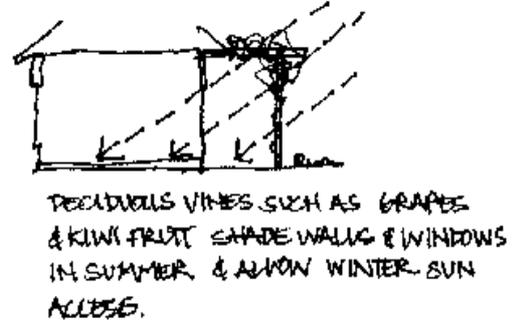
DECIDUOUS
TREES IN
SUMMER



DECIDUOUS
TREES IN
WINTER



DECIDUOUS
VINES



Landscaping for Northerly Aspect of a Building

Tall Evergreen Trees

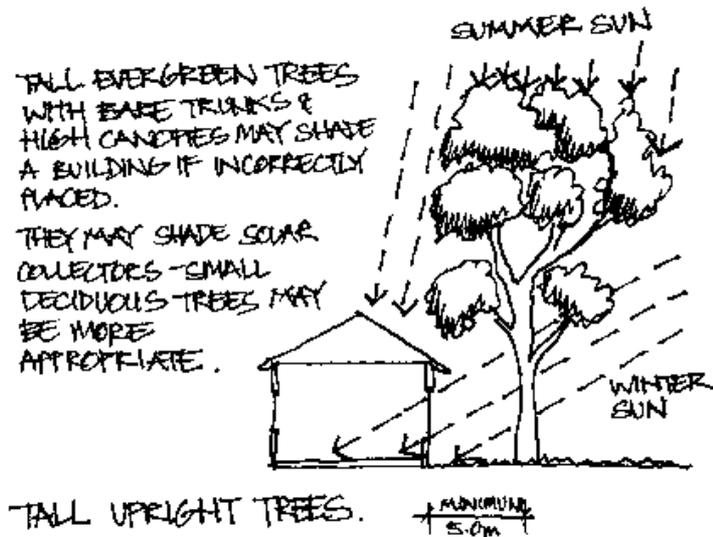
Tall evergreen trees with bare trunks and high canopies located close to buildings can shade the roof, walls and windows in summer.

Avoid planting trees in locations where they:

- shade solar collectors, both on the building and on adjoining properties
- block winter sun access to the building
- may drop branches on roofs.

Suitable planting distance of at least $\frac{3}{4}$ of the tree's mature height from the building is recommended for trees with vigorous root systems such as Ashes, Elms, and Peppercorns and native plants such as Figs, Lilly Pilly and some Eucalypts.

While evergreen and deciduous trees are growing, other shading devices may be needed in the interim.



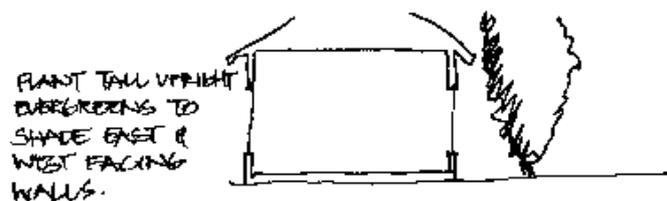
Landscaping for Northerly Aspect of a Building

Shade for Easterly & Westerly Aspects

East and west walls can be protected from low intense summer sun, while allowing some winter sun access, by planting a dense screen of evergreen trees, shrubs and ground covers.

Tall upright evergreen trees can also provide shade from low angled eastern and western sun.

Deciduous vines covering a pergola or trellis can be used to protect the east and west walls. Alternatively, evergreen vines grown on a trellis can insulate and shade the walls.

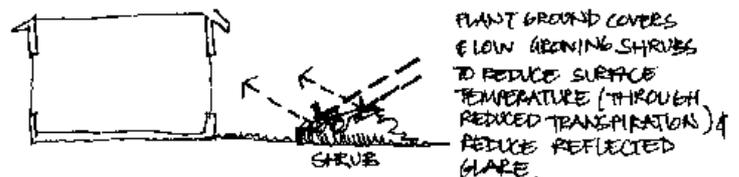


TALL UPRIGHT EVERGREEN TREES



To reduce glare and lower surface temperatures, ground covers lawn and low growing shrubs can be used. Compared to paving areas, low growing planted areas are cooler and increase stormwater absorption. Trees or pergolas covered with vines can shade large paved areas to reduce surface temperatures and reflected glare.

Minimise the use of lawn as it involves higher water usage and is less energy efficient than other forms of ground covers.

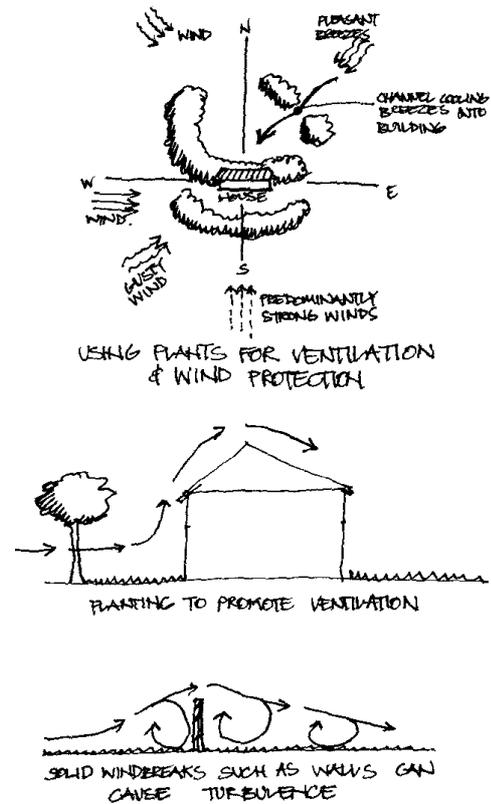


Selection of Plants for Ventilation and Windbreaks

Try to channel cooling northeasterly summer breezes through the building by using large dense shrubs. Trees can be positioned to deflect airflow through the building to assist with its natural ventilation.

Windbreaks are more effective if they can filter 50-60% of the wind through their leaves compared to a solid structure such as a wall that doesn't allow wind penetration and creates turbulence on its lee side.

The most effective wind breaks are planted at 90° to the direction of westerly and southerly winds. Small straight windbreaks are not effective unless designed into subdivision layouts or neighbourhood plantings. For smaller areas, windbreaks planted in a parabola shape can help deflect cold winds around and over the windbreak.



SECTION 5 - DESIGN FACTORS

There are several important considerations which need to be taken into account when preparing a successful landscape plan.

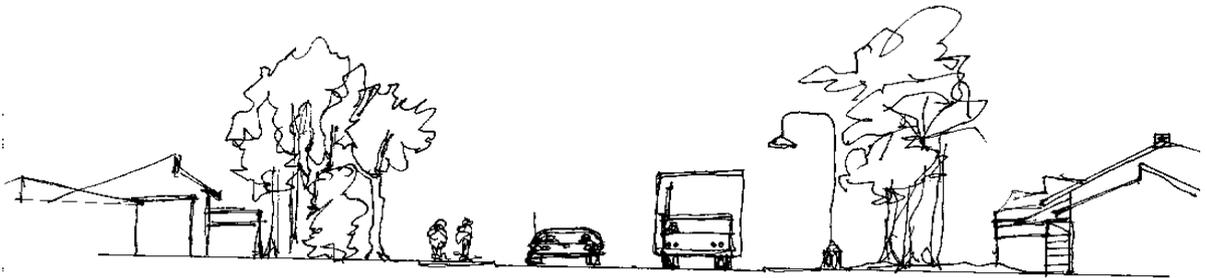
Street Frontage

What is Required

To screen and soften the impact of buildings and improve the view along the street.

How to achieve it

Use mass plantings of tall trees and shrubs within the front setback area.



Landscaping Character

What is Required

Consider the character of the existing locality and incorporate this character into the design plan

How to achieve it

Landscaping materials should be similar or harmonious to architectural materials of the development.

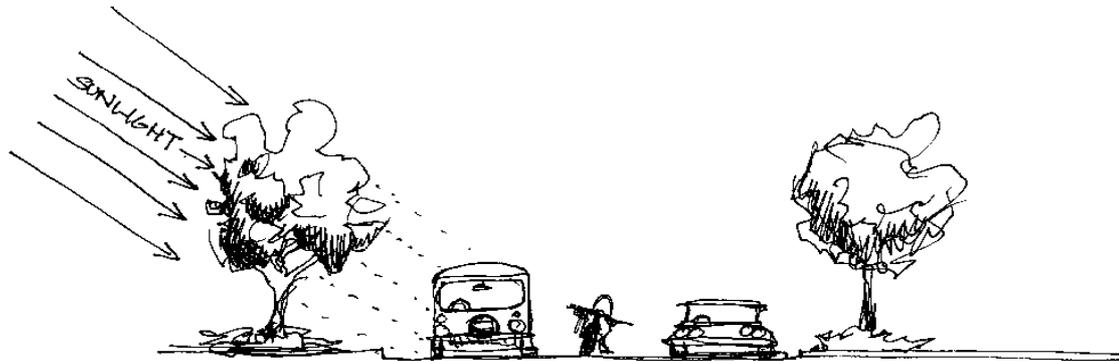
Carparking & Driveway

What is required

- ◆ To lessen the visual impact of expanses of hard paving and provide shade for cars and pedestrians

How to achieve it

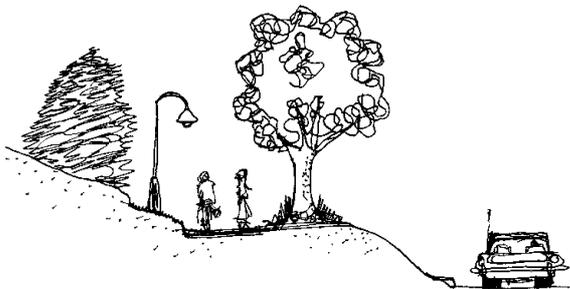
- ◆ Reduce driveway width without limiting movement of vehicles.
- ◆ Use decorative paving e.g. bricks, cobbles & patterned concrete that appears less harsh
- ◆ Curved driveways should be considered in residential developments
- ◆ Provide shade for cars and pedestrians by planting trees and shrubs along boundaries which are interspersed with carparking bays. These should be species not prone to dropping limbs or sap.



Access

What is required

- ◆ Creation of safe but direct pedestrian access



How to achieve it

- Separate pedestrian pathways from driveways and carparking areas by using physical barriers and plantings.
- Provide separate pedestrian & vehicle entry/exit points

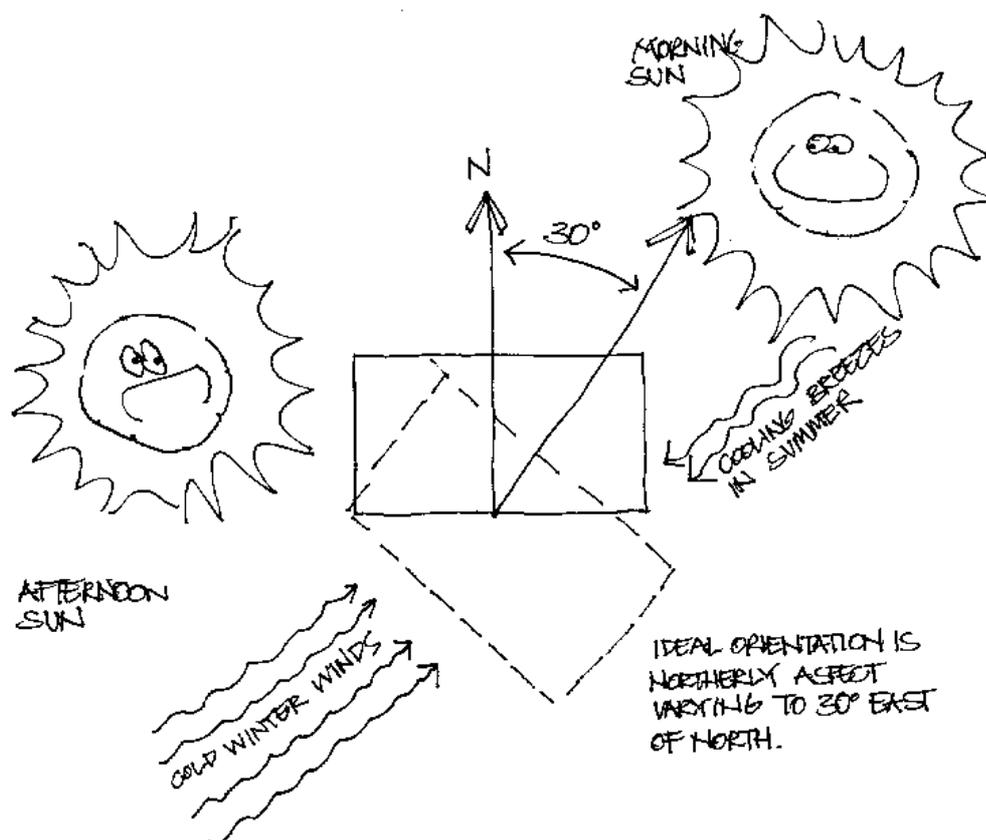
Outdoor Recreation & Openspace

What is required

- ◆ Usable and attractive places for workers or residents.

How to achieve it

- ◆ Orient outdoor areas so they can be shaded in summer yet obtain winter sun. In confined areas where winter sun is required, deciduous trees may be appropriate.
- ◆ Generally plan around the perimeter of the space to create usable areas.
- ◆ Provide privacy by using plants and or mounding to screen neighbouring buildings, roads, carparks and so on.
- ◆ In high usage areas such as courtyards or barbeque areas, decorative paving may be needed.



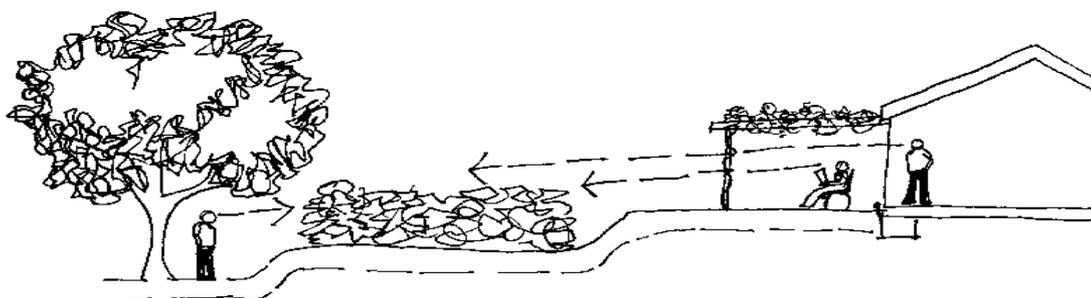
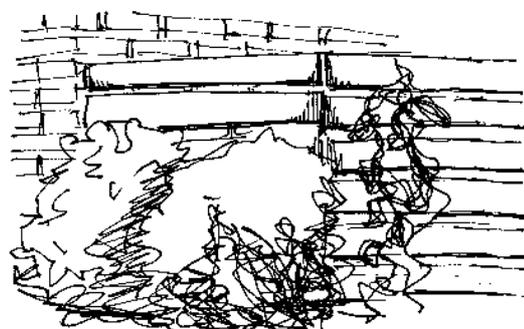
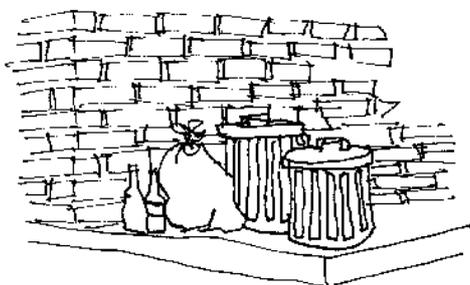
Outlooks & Views

What is required

- ◆ Take advantage of good views, but use plant material of varying heights to adequately screen unsightly views.

How to achieve it

- ◆ Planting should not restrict good views from buildings or outdoor recreation areas.
- ◆ Use plant material with a range of mature heights to adequately screen unsightly views including wheelie bins and waste disposal areas.
- ◆ Do not clear or harm vegetation on Council or Crown Land to maintain view. This will result in prosecution.



Existing Vegetation

What is required

- ◆ Landscaping should retain, protect and enhance existing natural vegetation.

How to achieve it

- ◆ Maximum advantage should be taken of existing mature trees and shrubs on the site and these should be incorporated into the overall landscape strategy

SECTION 6 - PARTICULAR LANDSCAPING REQUIREMENTS

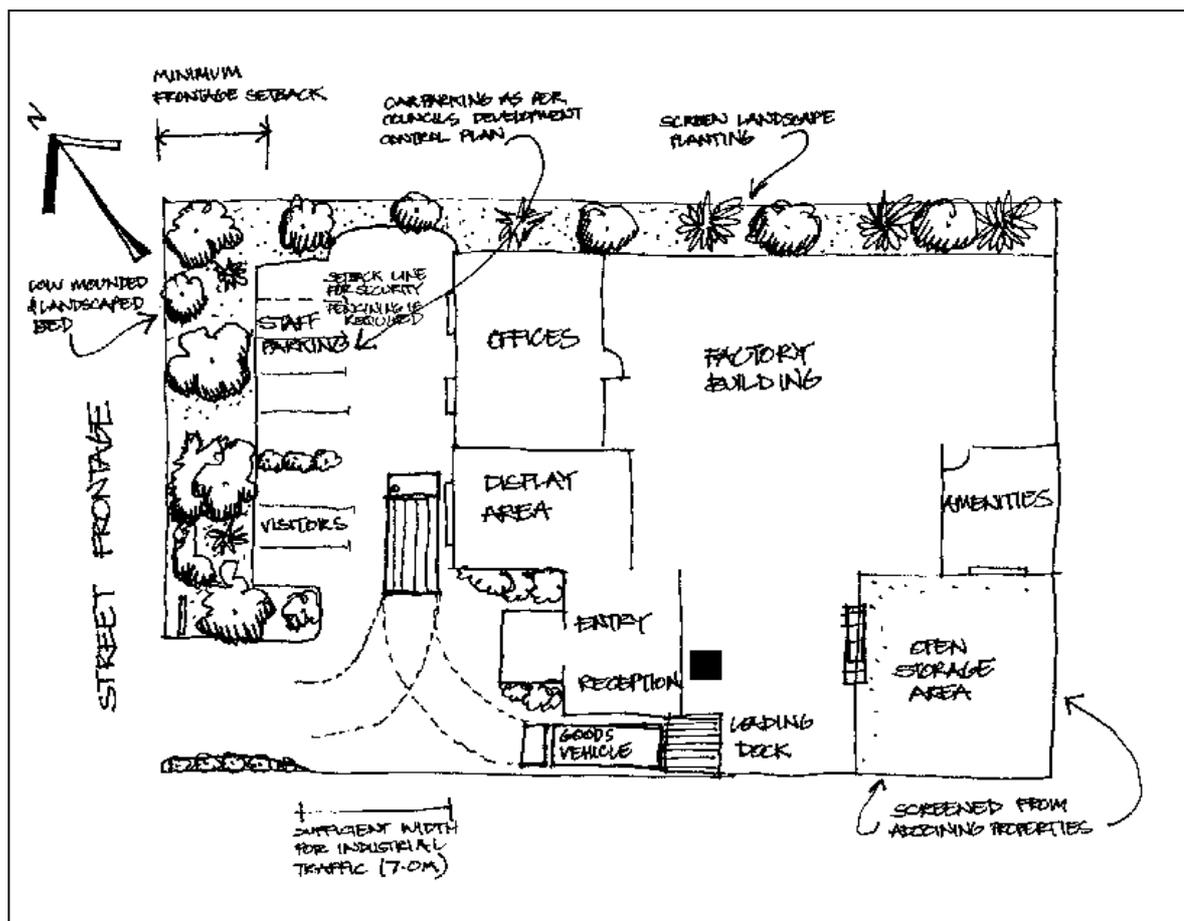
Commercial and Industrial Developments

Commercial

Landscaping in commercial areas should aim at improving the amenity and enhance the appearance of a development. Careful landscaping can significantly augment the character and appearance of a business centre and streetscape quality through the provision of areas of trees and shrubs.

Any area of a commercial development which is not used for building or necessary hard surface areas (e.g. driveways, pedestrian access) should be appropriately landscaped.

Where rear or side boundaries adjoin non-business zones, landscaping should include substantial plantings of trees and shrubs to minimise overlooking and reduce the visual impact of the building on adjacent properties.



Above: Example of a Concept Commercial/Industrial Landscaping Plan

In areas of building line setback and between commercial developments a combination of recreational and activity areas and tree/plants should be used to provide usable space and an attractive aspect to the street.

Attempt to incorporate some street furniture into landscape design. This will provide passive recreation point available to patrons and employees.

Prior to the preparation of a landscape plan for a commercial development, the proposal should be discussed with Council's Director of Environmental & Development Services. Any plan should be consistent and integrated with any streetscape and beautification plans adopted by Council or existing adjoining streetscape.

Industrial

Adequate landscaping for industrial developments is necessary to reduce the visual impact of development upon the streetscape and to complement the site environs.

Landscaping to Council's requirements, which are identified in specific DCP's, is to be established within the building line setback area and within the carparking areas. A large proportion of the building setback area must be landscaped and maintained to a high standard.

Trees should be used with a mature height matching the scale and bulk of the development. A detailed landscaped plan must be submitted with the development application and should indicate the names, locations and mature heights of all tree and shrub species to be used together with the location of any mounded garden beds, grassed and paved areas.

Where carparking is located, developers are expected to provide screen walls and earth mounds to reduce the impact of hardstanding areas. The use of mounding effectively contains noise and car headlights in a carparking area and also acts as a pedestrian barrier.

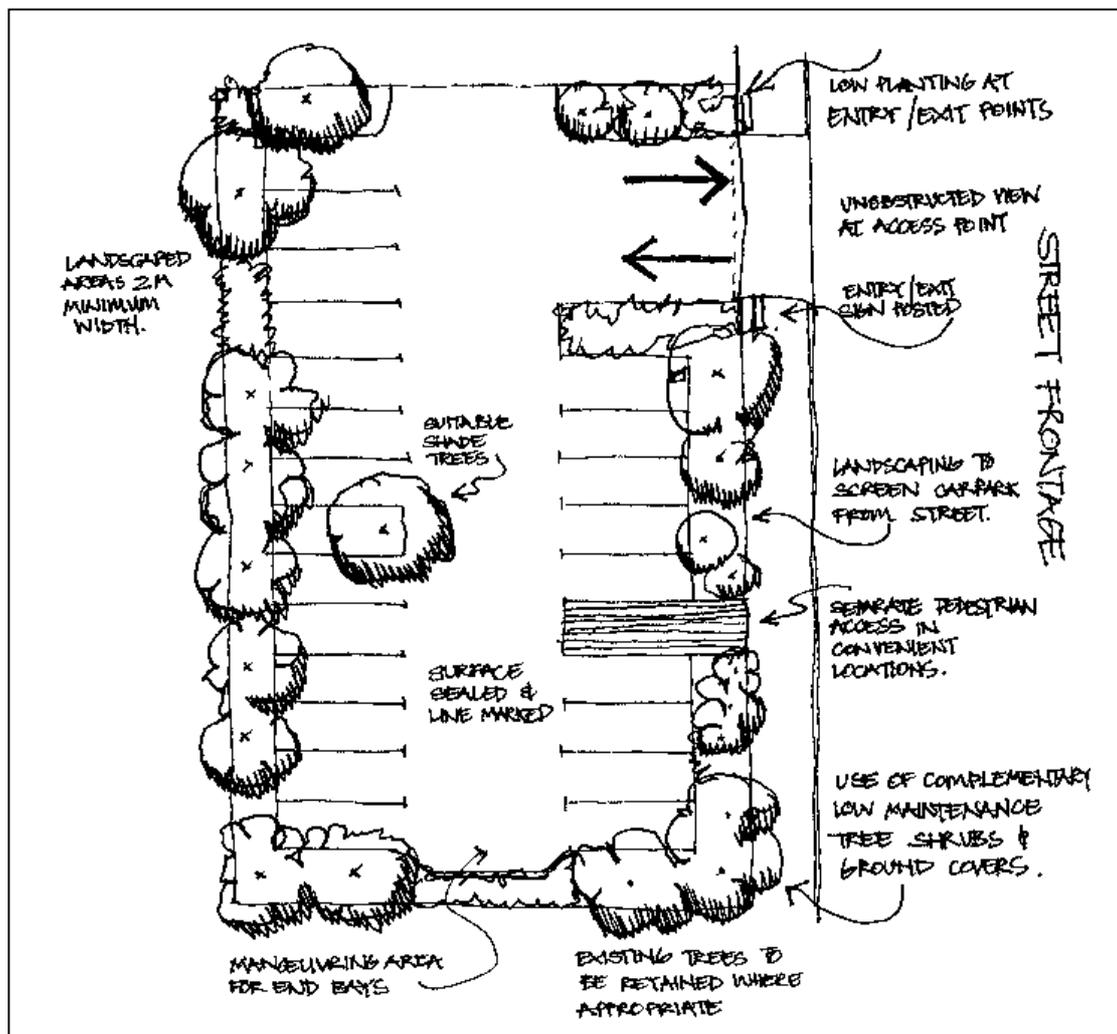
Industrial waste/refuse areas should also be adequately screened with plant material that has a range of mature heights. Waste and refuse areas should not be seen from the street.

Large industrial and commercial developments should also make provision for an outdoor lunch area for staff in a suitably landscaped location.

Carparking Areas

The careful siting and planning of carparking areas is a key element in:

- ◆ Reducing the visual impact of the carparking area
- ◆ Improving its functional performance; and
- ◆ Enhancing the overall aesthetic appeal of a development.



Above: Example of Landscaped Carparking Area

The following points are to be considered when landscaping carparking areas:

- Ensure adequate screening from view of the carpark area from adjoining developments and public areas, but still permit views through to the carpark to maintain safety.
- Provide shade trees for patron's vehicles and to reduce radiant heat levels of hard paved areas;
- Incorporate efficient lighting during after hours.
- Shade trees should be provided at a rate of 1 per 5 carspaces in larger carparking areas;

- Landscaped areas are to have a width of not less than 2 metres, which provides a viable area for gardens, screening, etc.
- Provision of a separate entry/exit points for vehicles and pedestrians;
- A detailed landscaping plan for a carparking area should be submitted as part of a landscaping plan for an entire development. Such landscaping plans will show the location and species of shade trees and ornamentals, height and crown dimensions of mature shade trees, other landscaped areas (including species list) and details of pedestrian access and circulation.

Medium Density Development

The successful landscaping of medium density developments is necessary to ensure an adequate provision of open space, yet maintain visual privacy for each dwelling.

Minimum landscaped open space areas are defined within each of the villages respective development control plans.

Fencing should be kept to the absolute minimum in order to eliminate unnecessary fragmentation of the landscape.

However, suitable screen fencing will be permitted, where appropriate, to ensure privacy for clothes drying, personal space and activities, e.g. sunbaking, and to screen undesirable views. Screen walls must be suitably designed to achieve integration with the overall landscape treatment.

SECTION 7 - PREPARING A LANDSCAPE PLAN

The following steps provide a basis to complete a landscape plan to meet Council requirements.

Prepare a Base Plan

- ◆ Your base plan should include the following:
- ◆ The boundaries of the site, site orientation, existing vegetation etc.
- ◆ All paved and hard standing areas e.g. driveways and manoeuvring areas.
- ◆ Recreation areas and open space.
- ◆ The location of sewer pipes and overhead wire on and close to the site.
- ◆ Buildings on adjoining lots.
- ◆ Scale of the Plan (1:100 or 1:200), north point and access road.
- ◆ An outline of buildings indicating doors and windows.

Preparing Your Design

- ◆ Work with transparent overlays until the desired concept has been found.
- ◆ Indicate high (Trees), medium (Shrubs) and low (groundcovers, grass) plant material.
- ◆ Begin to consider the type of species you wish to incorporate into your landscape design.
- ◆ Indicate where retaining walls, logs, seating, fences, gates, decorative features etc are located to scale.
- ◆ Use shade trees to the north and west of carparking, or between carparking bays.
- ◆ Advanced tree species appropriate to the street should be provided or replaced in the naturestrip.
- ◆ Minimise lawn areas in order to minimise maintenance costs.
- ◆ Do not place tall trees below powerlines, or on top of sewer pipes.

Prepare Your Final Plan

- ◆ Indicate exactly which plant species are used in their location or with reference to a plant list. Use a botanical name and a common name, height and root spread.
- ◆ Refer to attached recommended plant species, but use only a limited number of species.
- ◆ Indicate plant distances, so a contractor can exactly construct what is intended.
- ◆ Realise that shrubs will eventually grow under trees so can be planted closer to them.
- ◆ Check if soil is adequate, if not specify supply of better topsoil or fertiliser in key locations.
- ◆ Show scale, north point etc as per base plan.
- ◆ If finance is a problem in the short term ask for approval of implementation in stages say over two years, rather than skimp on plant material. Stage 1 would be the frontage.
- ◆ Submit 2 copies with your Development Application/Construction Certificate, one will be returned with an approval stamp.
- ◆ Supervise the construction of the landscaping so it accords with the landscaping plan.

SECTION 8 - MAINTENANCE

The design and construction of a landscape plan should involve techniques that ensure the landscaping requires a minimum of maintenance.

Edging

Grassed areas should be separated from garden beds with suitable garden edging.

Mowing strips of concrete, brick or timber should be constructed to facilitate ease of maintenance and to enhance appearance.

Mulching

All planting beds and mounds are to be mulched with suitable materials, eg pine bark. Additionally, vegetation listed for removal may be chipped and used as a mulch thus assisting in the reduction of green waste.

These areas should then be overplanted with suitable ground covers to create living mulch.

Sufficient and careful preparation of garden beds will significantly reduce the level of maintenance required in future years.

Irrigation

Irrigation systems such as drip, trickle or spray are recommended as they minimise maintenance times, and remove the need for hand watering.

Such watering methods are time and cost effective and ensure the health of planting.

Fertilising

Regular fertilising will ensure the health and growth of plant species. Care should be taken to ensure that the fertiliser requirements of different plants species are met. For example, rainforest species respond well to the application of fertilisers whereas plants such as Grevillias and Banksia prefer conditions of low soil fertility.

The use of environmentally suitable, low maintenance species are encouraged which are best suited to conditions of the site.

The use of the above practices are required for a period of twelve months to two years after establishment to ensure the success of a landscape plan and minimise maintenance costs. Developers must ensure that watering and general maintenance is ongoing after this period to prevent the mortality of landscape species. Additionally, Council may require a landscaping bond to ensure all works are maintained to a sustainable level.

SECTION 9 - LANDSCAPE PLANTING GUIDELINES

When landscaping an area, it is essential to give consideration to structures and features surrounding the area you intend landscaping which may be affected.

Thoughtful observations will ensure minimal future conflict between your landscaping and surrounding areas/structures.

The most obvious considerations that will need to be considered include:

- Electrical lines (Above ground and below ground)
- Water & sewer mains & Easements
- Foundations and Built Structures
- Access paths (Vehicular & pedestrian)
- Around swimming Pools

Planting Near Electrical Lines

The Concern

Consideration needs to be given to leaving appropriate clearance areas and distances around powerlines and service lines to connect to your house. This both enables easy maintenance of the powerlines if needed and minimised threats such as falling branches, public trimming trees near powerlines, igniting bushfires, children climbing trees near powerlines and electric shocks received from trees touching powerlines.

The Rule

When selecting trees to be planted near powerlines, two simple rules apply:

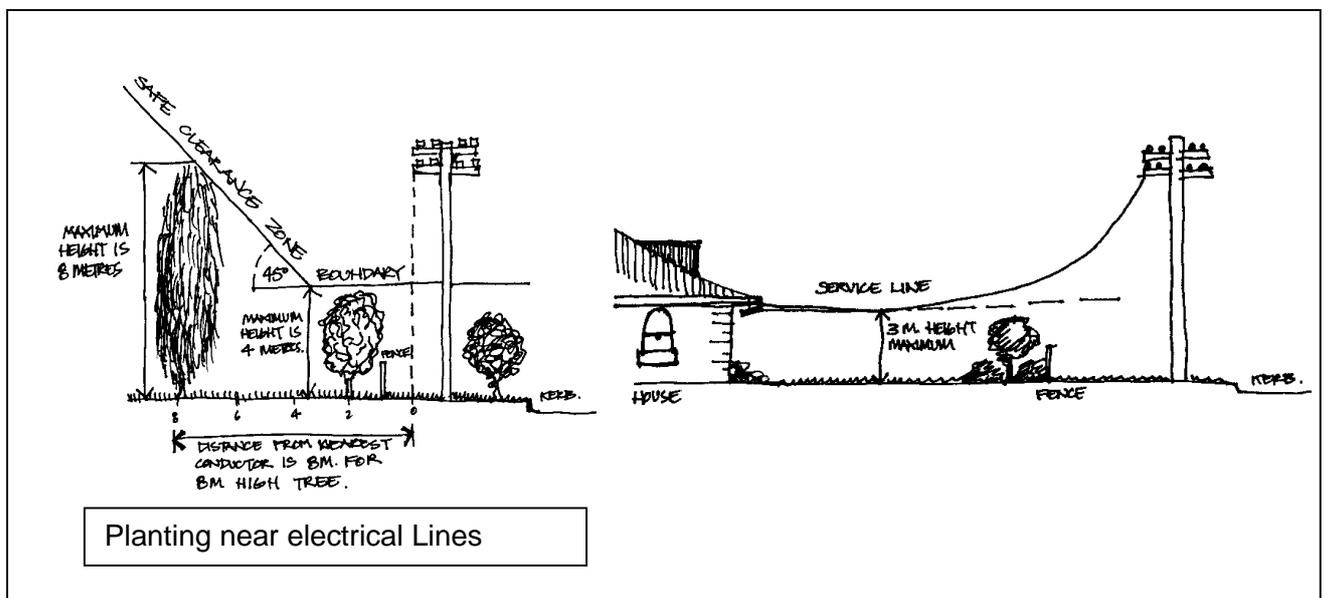
- Trees near powerlines should not exceed 4 metres in height at maturity
- Trees near a service line to your home should not exceed 3 metres in height at maturity.
- For underground power it is recommended to plant at least 5 metres away from the underground line and trees should not have invasive root systems.

If you want to plant taller trees

- Plant them at a distance, from the nearest wire, at least equal to their mature height.

Preferred Species near Electrical Lines

- Endeavour Bottlebrush (*Callistemon citrinus*)
- Native Rosemary (*Westringia brevifolia*)
- Yesterday, Today & Tomorrow (*Brunfelsia australis*)
- Ned Kelly (*Grevillea* hybrid)
- Perth Pink Bottlebrush (*Callistemon* hybrid)
- Clarence River Baeckea (*Baeckea virgata*)
- Glossy Abelia (*Abelia x grandiflora*)
- May Bush (*Spiraea cantoniensis*)
- Copper Glow Tea Tree (*Leptospermum* sp)
- Mauve Flowered Bracelet Honey Myrtle (*Melaleuca armillaris*)
- John Evans Grevillea (*Grevillea rosmarinifolia* X)
- Snow in Summer (*Melaleuca linariifolia* "Purpurea")



Water & Sewer Mains

The Concern

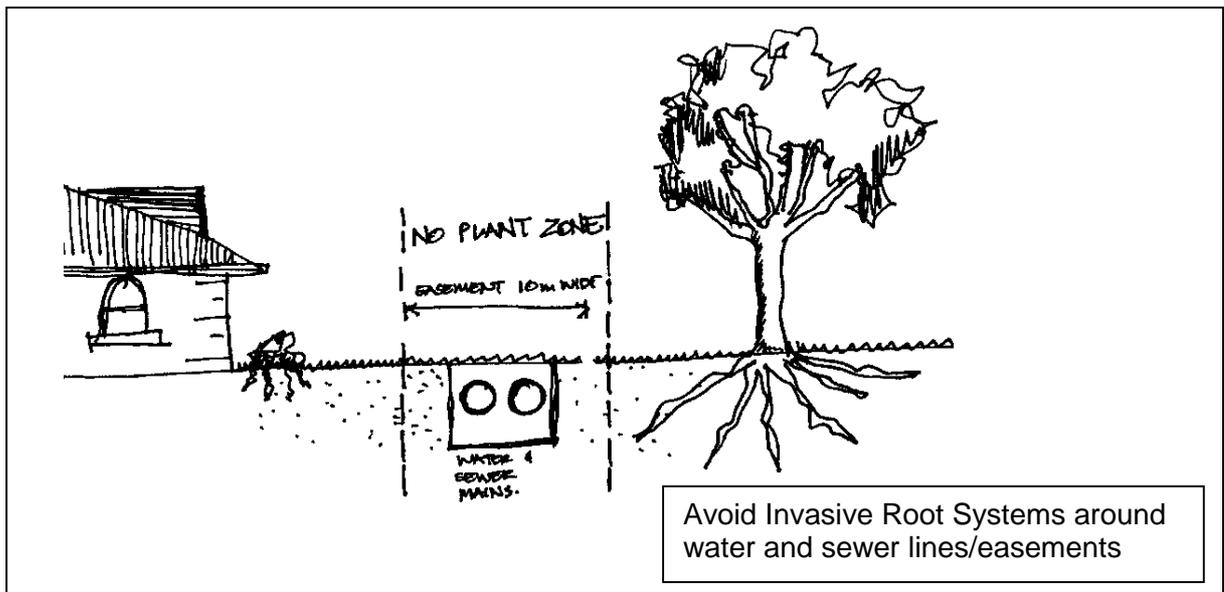
Vegetation with invasive root system can, with time, penetrate and damage water and sewer mains. Repairs to water and sewer infrastructure can be extremely expensive.

The Rule

- Generally avoid planting out water and sewer easements
- When planting close to water and or sewer mains use species with non-invasive root systems.

Preferred Species

- Species with non-invasive root systems (Refer to **appendix 2** – How to avoid tree root problems)



Foundations and Built Structures

The Concern

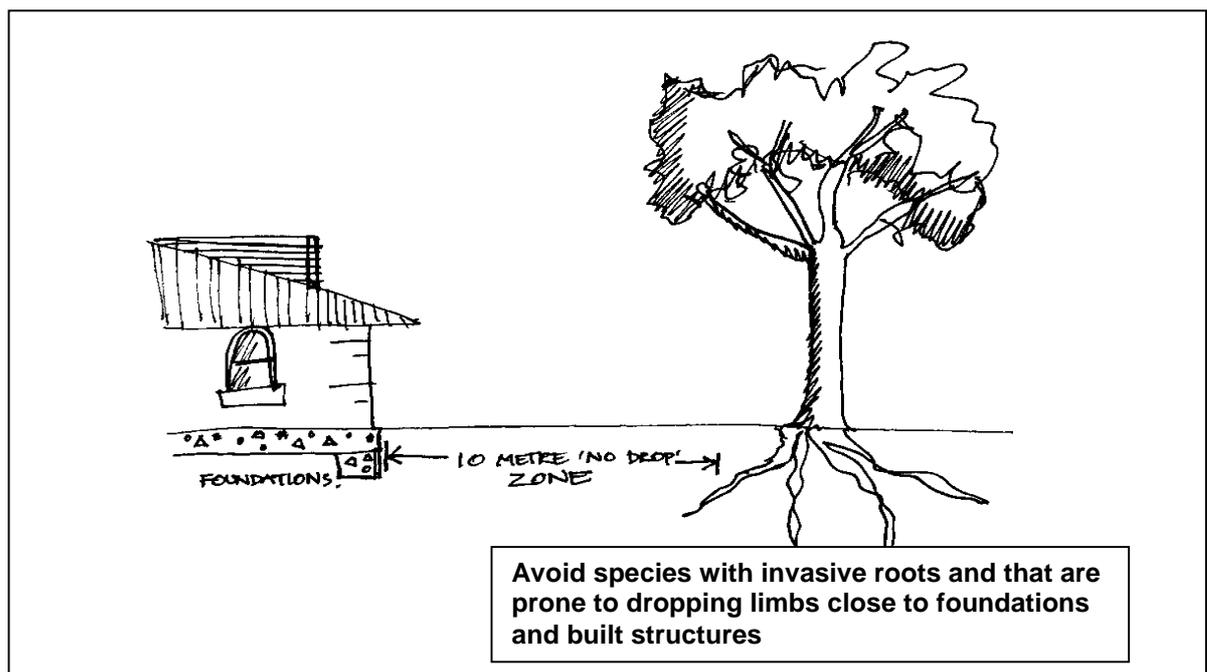
Invasive root systems have the potential to crack concrete tracks of foundations undermining the strength of the overall structure. Large trees with significant limbs also have the potential to cause extensive damage if the tree or part of the tree falls on a built structure below.

The Rule

- Avoid planting species which are known to be associated with root problems.
- Avoid planting large species which may drop limbs adjoining built structures.

Preferred Species

- Species with non-invasive root systems (Refer to **appendix 2** – How to avoid tree root problems)



Access Paths (Pedestrian and Vehicular)

The Concern

Paths and accessways can be obscured by dense and overly high vegetation. This poses a significant safety risk, especially when paths and accessways, including driveways, adjoin public roads and pedestrian footpaths.

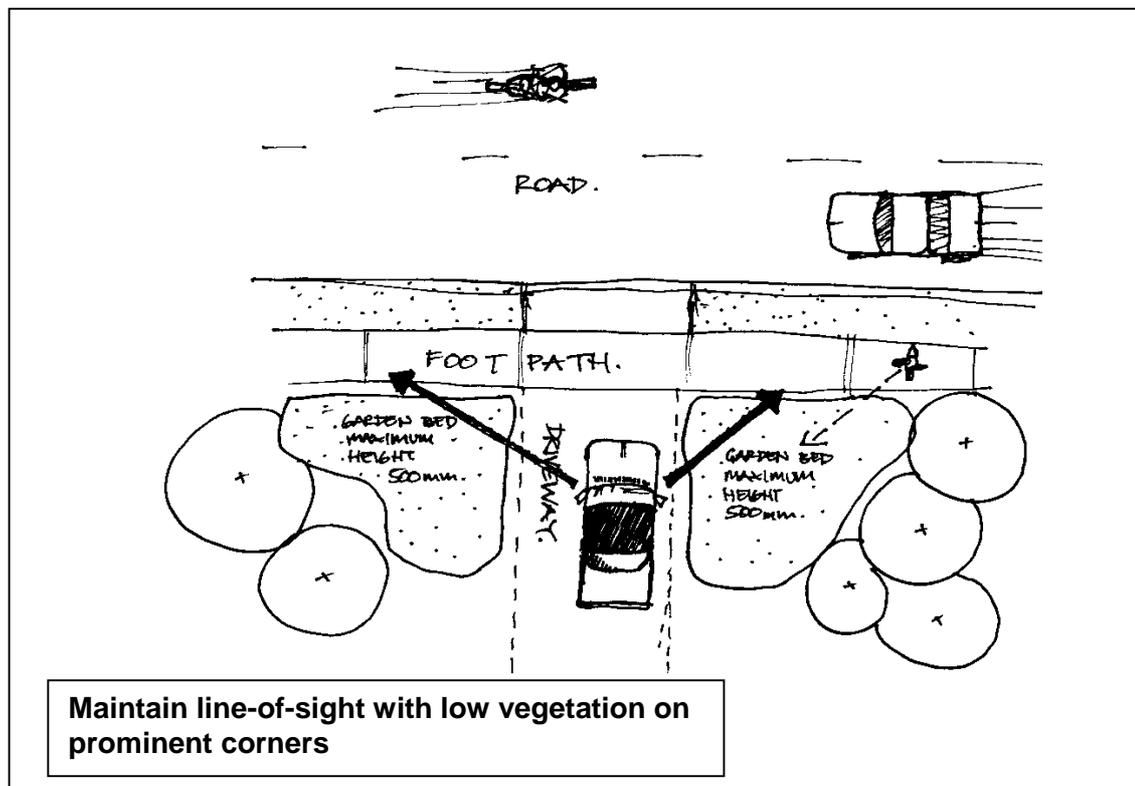
There is a need to maintain safe sightlines on prominent corners especially where vehicles and pedestrians meet.

The Rule

- Landscaping on prominent corners of pathways, accessways and driveways, where sightlines need to be maintained, should be reduced to 500mm high at maturity.
- Landscaping should be reduced to 500mm over an adequate area to allow for comprehensive line of sight.
- Plant species with non-invasive roots should be chosen to avoid breaking up pathways and public safety risk.

Preferred Species

- Species that do not exceed 500mm at maturity.
- Species that do not have invasive root systems as identified in Appendix 2.



Planting Around Swimming Pools

The Concern

It is always difficult to find plants that don't present root problems and don't make a mess (drop leaves) and are suitable to plant around pools. All plants make a mess sometimes; even palms drop masses of tiny flowers and fruit in season. Sometimes it is worth putting up with the mess for a short time and balancing that with the enjoyment of plants in flower.

The Rule

Stick with vegetation/landscaping that will:

- limit maintenance needs of the pool (leaves & other vegetative matter)
- not have invasive roots that may damage the pool (Appendix 2)
- not overly shade pool areas making surfaces slippery (restrict algal growth) and the pool cold by restricting sunlight penetration



Use low maintenance species with non-intrusive roots when planting around swimming pools

Swimming Pool Preferred Species

Some of the less messy species include:

Alocasia macrorrhizos (poisonous)

Alpinea caerulea

Archoncophoenix cunnighamiana

Banksia spirrulosa

Banksia robur

Bracteantha bracteata

Chrysocephalum apiculatum

Cordyline petiolaris

Cordyline stricta

Crinum pedunculacum

Dianella sp

Goodenia rotundifolia

Hibbertia scandens

Hibbertia dentata

Lomandras Petalostigma triloculare

Myoporum acuminatum

Omalanthus populifolius

Plectranthus parviflorus

Scaevola ramosissima

Viola hederacea

Wahlenbergia sp

- Ferns are also suitable provided shade and adequate water can be supplied.

SECTION 10 - SPECIES LIST

One of the objectives of these landscaping guidelines is to enhance Richmond Valley Council's natural environment which includes a wide range of ecologies from coastal heathland to littoral rainforest. There is a need to maintain biological diversity for local areas. The planting of endemic natives will:

- ◆ Provide ecological diversity for native wildlife
- ◆ Add character and visual appeal to local areas,
- ◆ Stabilise landscapes and reduce erosion, and tolerate local climatic extremes and conditions.

To assist with the choice of suitable species, this section includes a categorised species list. This species list includes important information relating to habitat and growing conditions.

Information is listed in tabular form, designed to enable quick and easy assessment of species for various conditions.

The list is divided into these main categories:

- ◆ Trees Greater than 20m
- ◆ Trees Greater than 20m for Basalt Soils
- ◆ Trees 6-20m
- ◆ Trees 6-20m for Basalt Soils
- ◆ Small Trees to 6m
- ◆ Shrubs
- ◆ Rainforest Species

APPENDIX 1 – Suitable Species

Richmond Valley Council Landscaping Guidelines Species List

SUITABLE PLANTINGS		
TREES GREATER THAN 20 METRES IN HEIGHT		
Common Name	Scientific Name	Mature Height
Hoop Pine	<i>Araucaria cunninghamii</i>	30
Norfolk Island Pine	<i>Aracucaria heterophylla</i>	18
Bangalay	<i>Eucalyptus botryoides</i>	18
Forest Red Gum	<i>Eucalyptus tereticornis</i>	18
Morton Bay Fig	<i>Fiscu Marcrophylla</i>	30
Hill's Weeping Fig	<i>Ficus microcarpa</i>	15
Weeping Fig	<i>Ficus Benjamina</i>	15
TREES GREATER THAN 20 METRES FOR BASALT SOILS (not generally salt tolerant)		
Common Name	Scientific Name	Mature Height
Australian Teak	<i>Flindersia australis</i>	30
Bennet's Ash	<i>Flindersia bennettiana</i>	30
Cudgerie	<i>Flindersia schottiana</i>	30
Red Carabeen	<i>Geissois benthamii</i>	25
Maiden's Blush	<i>Sloanea australis</i>	25
Coolamon	<i>Syzgium moorei</i>	25
TREES 6 TO 20 METRES		
Common Name	Scientific Name	Mature Height
Cedar Wattle	<i>Acasica elata</i>	12

Flame Tree	Brachychiton acerifolia	12
Queensland Lace-bark	Barachychiton discolor	15
Cape Chestnut	Calodendron capense	12
Coast She Oak	Casuarina equisetifolia	12
Swamp Oak	Casuarina glauca	18
Fiddlewood	Citharexylum subserratum	9
Small leaved Peppermint	Eucalyptus nicholii	9
Swamp Mahogany	Eucalyptus robusta	15
Cheese Tree	Glochidion Ferinandi	12
Norfolk Island Hibiscus	Lagunaria paterscnii	10
White Manolia	Magnolia grandiflora	12
Broad leaf paperbark	Melaleuca quinquenervia	15
Fire Wheel Tree	Stenocarpus sinatus	18
Brush Box	Lophostemon confertus	20
Water Gum	Tristaniopsis laurina	12
TREES 6 TO 20 METRES (Basalt Soils)		
Common Name	Scientific Name	Mature Height
Pink lace flower	Archidendon grandiflorum	10
Red Apple	Acmena brachylandra	15
Lilly Pilly	Acmena smithii	15
Lacebark trees	Brachychiton discolour	20
Cape Chestnut	Calodendron capense	8
	Castonospermum australe	10
Leopard Tree	Caesalpinia ferrea	20

Tamarind	Diploglottis australis	20
Tulipwood	Harpullia pendula	12
SMALL TREES TO 6 METRES		
Common Name	Scientific Name	Mature Height
Pink bloodwood	Eucalyptus gummifera	5
Bank's Gravellea	Gravillea Banksii	5
Sydney Golden Wattle	Acacia longifolia	5
Rough Treed Fern	Alsophilia australis	5
White Honeysuckle	Banksia integrifolia	6
Mountain Ebony	Bauhinia hookeri	6
Pink tips	Callistemon salignus	6
Weeping Bottlebrush	Callistmon viminalis	6
Golden Shower	Cassis Fistula	6
Brown Kurrajong	Commersonia bartramii	6
Tuckeroo	Cupanionpsis anacardioides	6
Poinciana	Delonix regia	6
Scribbly Gum	Eucalyptus haemastoma	6
SHRUBS		
Common Name	Scientific Name	Mature Height
Glossy Abelia	Abelia grandiflora	3
Coastal Wattle	Acacia sophorae	3
Shrubby Allemanda	Allemanda neriifolia	3
Azalea	Azalea indica	3
Heath Banksia	Banksia ericifolia	3
Red Bauhinia	Bauhinia galpinii	3

Red Bottlebrush	Callistemons citrinus	3
Looking Glass Plant	Coprosma repens	3
Gardenia	Gardenia Jasminoides	3
Scarlet poinsettia	Euphorbia pulcherrima	3
Ivanhoe	Gravillea sp.	3
Chinese Hibiscus	Hisbiscus rosa-sinensis	3
Common tea tree	Leptospermum flavescens	5
Coast tea tree	Leptospermum laevigatum	5
Lemon scented tea tree	Leptospermum petersonii	5
Bracelet Honey Myrtle	Melaleuca armillaris	6
Brids Nest Fern	Asplenium australiasicum	0.75
English Ivy	Hedera helix	
Chinese Star-Jasmine	Pandorea jasminoides	
Bougainvillea	Bougainvillea spp	
Common Jasmine	Jasminum officinale var grandiflorum	
Fruit Salad Plant	Monstera deliciosa	
Crimson Passion Flower	Passiflora cinnabarina	
Purple or Black Passionfruit	Passiflora edulis	
Rangoon Creeper	Quisqualis indica	
RAINFOREST TREES		
Common Name	Scientific Name	
Black Bean	Castanospermum australe	
Blackwood	Acacia melanoxylon	
Bleeding Heart	Omalanthus populifolius	

Blue Fig	Elaeocarpus grandis	
Blue Lilly Pilly	Syzygium coolminianum	
Blunt-leaved Steelwood	Toechima dasyrrhache	
Brown Currajong	Commersonia bartramia	
Brush Cherry	Syzygium paniculatum	
Brush Turpentine	Rhodamnia trinervia	
Callicoma	Callicoma serratifolia	
Cheese Tree	Glochidion ferdinandi	
Crow's Ash	Pentaceras australis	
Cudgerie	Flindersi schottiana	
Dubosia (Corkwood)	Dubsoisia myoporoides	
Figs - all types	Ficus spp	
foambark Treet	Jagera pseudorhus	
Guoia	Guoia semiglauca	
Hard Quandong	Elaeocarpus obovatus	
Hoop Pine	Aracucaria cunninghamii	
Koda	Ehretia acuminata	
Lilly Pilly	Acmena smithii	
Long Jace	Flindersia xanthoxyla	
Macaranga	Marcarnaga tanarius	
Native Frangipani	Hymenosporum flavum	
Native Guava	Rhodomyrtus psidioides	
Native Peach	Trema aspera	
Native Tamarind	Diploglottis australis	

Pencil Cedar	<i>Polyscias murrayi</i>	
Plum Myrtle	<i>Polidostigma glabrum</i>	
Red Apple	<i>Amena brachyandra</i>	
Red Ash	<i>Alphitonia excelsa</i>	
Red Bopple Nut	<i>Hicksbeachia pinnatifolia</i>	
Red Cedar	<i>Toona australis</i>	
Red Kamala	<i>Mallotus philippensis</i>	
Scentless Rosewood	<i>Synoum glandulosum</i>	
Silky Oak	<i>grevillea robusta</i>	
Silver Basswood	<i>Polyscias elegans</i>	
Snow Wood	<i>Abarema sapindoides</i>	
Soft Corkwood	<i>Ackama paniculata</i>	
Stinging Trees	<i>Dendrocide spp</i>	
Teak	<i>Flindersia australis</i>	
Various Acronychias	<i>Acronychia spp</i>	
White Cedar	<i>Melia azedarach</i>	
White Euodia	<i>Euodia micrococca</i>	
White Kamala	<i>Mallotuse discolour</i>	

APPENDIX 2 – How to avoid tree root problems

When selecting trees for a garden situation it is not only important to select species suitable for the site and climatic conditions but it is equally important to take into consideration the position of the plant relative to the house, concrete tracks, foundations and drainage or sewerage pipes. Avoid planting species which are known to be frequently associated with root problems. Some of these problems have been listed below:

Structural Problems

Tree roots can spread laterally between 0.4 and 2.0 times the height of the tree. In the majority of cases, single trees will not interfere with footings, etc, if they are planted a distance away greater than their expected mature height. When there is a group of trees the minimum planting distance must be increased to 1.5 times the mature height of the trees.

Should cracking occur in concrete tracks or foundations, then it would be necessary to remove the offending tree or construct a vertical cut off wall between trees and the damaged sections. This is done by digging a narrow 10 cm wide trench to a depth of 1.4 metres or greater and filling with lightly reinforced concrete.

Drainage Problems

Most trees have the capacity to cause problems if leakages are present in sewerage or drainage pipes. To alleviate this problem it is generally acceptable to clean out the pipes and repair the leaks. If repeated blockages occur then it may be necessary to remove the trees or construct a vertical cut-off wall as above.

Trees & Shrubs that Shouldn't be Planted within 3.0 metres of a Sewer

Botanical Name	Common Name
Abelia Species	Abelia
Acacia acuminata	Raspberry Jam Wattle
Acacia baileyana	Cootmundra Wattle
Acacia cultriformis	Knife-leafed Wattle
Acacia longifolia	Sallow Wattle
Acacia pycnantha	Golden Wattle
Bauhinia species	
Callistemon species	Bottlebrush
Calothamnus species	Net Brush
Camellia species	Camellia
Chamaelaucium uncinatum	Geraldton Wax Plant
Citharexylum species	Fiddlewood
Citrus species	Orange, lemon, etc
Cordyline australis	Australian Palm
Cratogeomys species	Hawthorn
Eucalyptus burdettiana	Burdett's Gum
Eucalyptus eremophila	Tall Sand Mallee
Eucalyptus rythrocorys	Red Capped Gum
Eucalyptus erythronema	Lindsay Gum
Eucalyptus foecunda (E.leptophylla)	Slender leaved Mallee
Eucalyptus forrestiana	Fuchsia Gum
Eucalyptus salubris	Gimlet Gum
Syzygium paniculatum	Brush cherry

Botanical Name	Common Name
Acmena smithii	Lilly Pilly
Geijera parviflora	Wilga
Hakea species	Hakea
Hibiscus Species	Hibiscus
Homolanthus populifolius	Bleeding Heart Tree
Juniperus sheppardii var	Southern Africa Juniper
laburnum species	laburnum
lagerstroemia indica	Pink crepe myrtle
Leptospermum species	Tea Tree
Malus species	Flowering crabs and apples
Melaleuca species	Honey myrtles and paperbarks
Myoporum species	Boobialla
Pittosporum species	Mock Orange
Prunus Species	Flowering almonds, plums, apricots, cherries and preaches
Strelitzia reginae	Bird of Paradise
Viburnum tinus	laurustinus
vitex agnus – castus	Lilac Chaste Tree

Trees that Shouldn't be Planted within a 5.0 metres of a Sewer

Botanical Name	Common Name
Acacia decurrens	Queen wattle
Acacia melanoxylon	Blackwood
Acacia pendula	Weeping myall
Acacia saligna	Golden Wreath Wattle
Acacia terminalis	Cedar Wattle
Acer negundo	Box elder
Agonis flexuosa	WA Willow Myrtle
Albizia julibrissin	Silk Tree
Angophra cordata	Dwarf/Scrub Apple Myrtle
Brachchiton acerifolium	Flame Tree
Brachchiton discolor	Queensland lace bark
Brachchiton populneus	Kurrajong
Brachchiton hybridum	Hybrid flame tree
Callitris species	Cypress Pine
Calodendron capense	Cape Chestnut
Cuasuarina cristata	Black Oak, Belah
Casuarina stricta	Weeping she oak
Casuarina torulosa	Rose She Oak
Cedrela (Toona) australis	Red Cedar
Celtis australis	Southern Hackberry
Celtis occidentalis	American Hackberry
Ceratonia siliqua	Carob bean
Eucalyptus astringens	Brown Mallet
Eucalyptus botyoides	Southern Mahogany
Eucalyptus cinerea	Mearly Stringbark
Eucalyptus cladocalyx Nana	Bushy sugar gum
Eucalyptus eximea	Yellow Bloodwood
Eucalyptus ficifolia	WA Scarlet Flowering Gum
Eucalyptus lehmannii	Bushy Yate
Eucalyptus leucoxyton Rosea	Pink Flowering Blue Gum
Eucalyptus melliodora	Yellow Box
Eucalyptus nicholii	Weeping peppermint

Botanical Name	Common Name
Eucalyptus odorata	Peppermint box
Eucalyptus platypus	Round leafed Moort
Eucalyptus polyanthemus	Red box
Eucalyptus salmonophloia	Salmon Gum
Eucalyptus scoparia	Wallangarra White Gum
Eucalyptus sideroxylon	Red Ironbark
Eucalyptus spathulata	Swamp Mallee
Eucalyptus stricklandii	Yellow Flowering Gum
Eucalyptus torquata	Coral Gum
Eucalyptus Torwood	Hybrid Coral Gum
Fraxinus excelsior Aurea	Golden Ash
Harpephyllum caffrum	Kaffrum Plum
Hymenosporum flavum	native frangipanni
Juglans regia	Walnut
Lagunaria patersonii	Pyramid Tree
Magnolia grandiflora	Southern Magnolia
Melaleuca styphoides	Prickly paper bark
Melia azedarach	White cedar
Podocarpus elatus	Brown Pine
Stenocarpus situatus	Fire Wheel Tree
Tamarix juniperina	Flowering Tamarisk
Tristania conferta	Brush box
Tristania laurina	

Species to avoid. These Species are considered UNSUITABLE for small garden planting and a minimum clearance of 10 from an internal drain is suggested.

Botanical Name	Common Name
Angophora costata	Smooth-Barked Apple Myrtle
Araucaria bidwillii	Bunya Pine
Araucaria cunninghamii	Hoop Pine
Araucaria heterophylla	Norfolk Island Pine
Casuarina Speceis	Swamp oaks, she oaks
Cupressus speceis	Cypress
Eucalyptus sp (Large growing)	Gum Trees
Ficus sp	Figs
Fraxinus oxycarpa	Desert Ash
Grevillea Robusta	Silk Oak
Phoenix sp	Date Palms
Pinus sp.	Pines
Platanus sp	Plane trees
Plumeria sp	Fragipanni
Pupulus nigra	Poplars
Quorcus robus	Oaks
Salix babylonica	Weeping & pencil willows
Schinus molle	Pepper Tree
Tamarix aphylla	Athel Tree

APPENDIX 3 – What not to Plant

(Prepared by the Far North Coast County Council)

Noxious Weeds

Following is a list of plant species declared as noxious under the *Noxious Weeds Act 1993*.

Common Name	Botanical Name	Category
Alligator Weed	<i>Alternanthera philoxeroides</i>	1
Bitou Bush	<i>Chrysanthemoides monilifera</i>	3
Black Knapweed	<i>Centaurea nigra</i>	1
Blackberry	<i>Rubus Fruticosus (agg. Spp.0</i>	2
Broomrape	<i>Orobanche spp.</i>	W1
Burrs – Bathurst, Californian, Cockle & Noogoora	<i>Xanthium spp.</i>	2
Cabomba - except pink cabomba	<i>Cabomba spp.</i>	4(g)
Camphor Laurel (***)	<i>Cinnamomum camphora</i>	4(d)
Columbus Grass	<i>Sorghum alnum</i>	2
Crofton Weed	<i>Ageratina adenophora</i>	3
Giant Parramatta Grass (**)	<i>Sporobolus fertilis</i>	2/3
Giant Rat's Tail Grass	<i>Sporobolus pyramidalis</i>	2
Green Cestrum	<i>Cestrum parqui</i>	2
Groundsel Bush	<i>Baccharis halimifolia</i>	2
Harrisia Cactus	<i>Harrisia spp.</i>	4(f)
Hawkweed	<i>Hieracium spp.</i>	W1
Hawkweeds	<i>Hieracium spp.</i>	1
Horsetail	<i>Equisetum spp</i>	1
Johnson Grass	<i>Sorghum halepense</i>	2
Karoo Thorn	<i>Acacia Karroo</i>	1
Kochia (*)	<i>Kochia scoparia</i>	1
Lagarosiphon	<i>Lagarosiphon major</i>	1
Lantana – except pink lantana	<i>Lantana camara</i>	3
Mexican feather grass	<i>Nassella tenuissima syn Stipa tenuissima</i>	W1
Miconia	<i>Miconia spp.</i>	1
Mistflower	<i>Ageratina riparia</i>	3
Nodding Thistle	<i>Carduus nutans</i>	2
Pampas Grass	<i>Cortaderia spp.</i>	2
Parthenium Weed	<i>Parthenium hysterophorus</i>	1
Prickly Pears (****)	<i>Opuntia spp.</i>	4(f)
Rhus Tree	<i>Toxicodendron succedaneum</i>	2
Salvinia	<i>Salvinia molesta</i>	2
Scotch/English Broom	<i>Cytisus scorparius</i>	2
Senegal Tea Plant	<i>Gymnocoronis spilanthoides</i>	1
Siam Weed	<i>Chromolaena odorata</i>	1
Spiny Burrgrass	<i>Cenchrus incertus & longispinus</i>	2
Spotted Knapweed	<i>Centaurea maculosa</i>	1
St John's Wort	<i>Hypericum perforatum</i>	2
Water Hyacinth	<i>Eichhornia crassipes</i>	3
Water Lettuce	<i>Pistia stratiotes</i>	1
Willows	<i>Salix spp.</i>	4(q)

NOXIOUS WEEDS CATEGORIES

(*)	Kochia scoparia other than sub species Tricophylla
(**)	W3 in the whole area of operations except in the Council areas of Byron, Ballina & Tweed where it shall be W2
(***)	W4d in all Local Government areas except in the Shires of Tweed and Byron, and in the part of the Shire of Ballina north of the Bruxner Highway where it is not declared a noxious weed
(****)	Opuntia spp. except Opuntia ficus indica (Indian Fig)
W(1)	The presence of the weed on land must be notified to the local control authority and the weed must be fully and continuously suppressed and destroyed
W(2)	The weed must be fully and continuously suppressed and destroyed
W(3)	The weed must be prevented from spreading and its numbers and distribution reduced
W(4)	A category may be allocated to a weed requiring specific control actions to be taken. These are classified as W4 followed by a letter. A W4 category may apply to more than one weed.
W4(d)	The weed must not be sold, propagated or knowingly distributed and the weed must be fully and continuously suppressed and destroyed if it is: <ul style="list-style-type: none"> • three (3) metres in height or less; • or within half a kilometre of remnant urban bushland, as defined by SEPP 19, and is not deemed by a Local Control Authority as having historical or heritage significance, • or over three (3) metres in height and not included in a Management Plan approved by the Local Control Authority
W4(f)	Shall not be sold, propagated or knowingly distributed. Occupier must implement biological control or other program directed by the Local Control Authority
W4(g)	The weed must not be sold, propagated or knowingly distributed

In addition to the above, the Far North Coast Noxious Weeds Authority has proposed the declaration of the following weeds.

Common Name	Botanical Name	Category
Asparagus Fern	<i>Asparagus plumosus</i>	W4g
Balloon Vine	<i>Cardiospermum grandiflorum</i>	W4g
Blue Morning Glory	<i>Ipomoea indica</i>	W4g
Broad-leaved Peper (Broadleaf Pepper)	<i>Schinus terebinthifolia</i>	W2
Cadaghi	<i>Eucalyptus torelliana</i>	W4g
Cat's Claw Creeper	<i>Macfadyena unguis-cati</i>	W4g
Chinese Celtis (Chinese Elm)	<i>Celtis sinensis</i>	W2
Chinese Tallow	<i>Triadica sebera (Sapium sebiferum)</i>	W2
Climbing Asparagus	<i>Asparagus africanus</i>	W4g
Glory Lily	<i>Gloriosa superba</i>	W4g
Ground Asparagus	<i>Asparagus aethiopicus</i>	W4g
Honey Locust	<i>Glenditsia triacanthos</i>	W2
Large-Leaved Privet	<i>Ligustrum lucidum</i>	W4g
Madeira Vine (Lamb's Tail)	<i>Anredera cordifolia</i>	W4g
Mile-a-Minute (Five Leaf Morning Glory)	<i>Ipomoea cairica</i>	W4g
Small-Leaved Privet	<i>Ligustrum sinense</i>	W4g
Thorny Poinciana (Mysore Thorn)	<i>Caesalpinia decapetala</i>	W2
Trad (Wandering Jew)	<i>Tradescantia fluminensis</i>	W4g
Winter Senna	<i>Senna pendular var glabrata</i>	W4g
Yellow Bells, (Yellow Elder, Tecoma)	<i>Tecoma stans (Bignonia stans)</i>	W2

The species identified in the above table as Category W4g are nominated as part of the *Bushland Friendly Nursery Scheme* to encourage nursery operators not to sell or distribute the listed species.

For further information on noxious weeds please contact the Far North County Council, PO Box 238, CASINO NSW 2470, Phone 02 66622396 Facsimile 02 66625511.

Environmental Weeds

The following table contains a list of environmental weeds at 30 June 2000. The list has been compiled by the Far North County Council for discussion purposes and is not Council policy. The plants were ranked against six criteria:

1. Potentially invasive but of minor occurrence.
2. Weeds that are moderately widespread and possibly difficult to control.
3. Invasive weeds that are widespread and/or very difficult to control.
4. Weeds that may cause human health problems.
5. Weeds that should not be sold, propagated or knowingly distributed.
6. Weeds that became a problem because of the dumping of garden rubbish.

The column headed "A" is an assessment of the nature of the concern caused by these plants on the Far north Coast, based on the plants possible effects on the environment "E" or human health "H" or both "EH". It is quite possible that plants not listed could be found to be of even greater concern than those marked.

A	Botanic Name	Common Name	Comment	Ranking						
				1	2	3	4	5	6	
E	<i>Acetosa sagittata</i>	Turkey Rhubarb	A problem of regenerating coastal sand dunes.		X					
H	<i>Ambrosia artemisiifolia</i>	Annual Ragweed	Epiblema attacks stems. Causes breathing difficulty in high proportion of the population.				X			
E	<i>Anredera coFdifolia</i>	Madeira Vine or Lamb's Tail	Widespread throughout County and getting worse. Very difficult to control. Not permitted in City of Ipswich.			X	X	X	X	
E	<i>Araujia sericiflora</i>	Moth Vine	Climber with twining stems to 5 metres. Seeds spread by wind.		X					X
E	<i>Aristolochia elegans</i>	Dutchman's Pipe	Not permitted in City of Ipswich.	X				X	X	
	<i>Asparagus aethiopicus var.sprengeri</i>	Ground Asparagus	Declared noxious on Lord Howe Island. Not permitted in City of Ipswich. Forms total ground cover preventing establishment or growth of natives			X		X	X	
E	<i>Asparagusafricanus</i>	Asparagus Fern	Forms a vine curtain over edge species.			X		X	X	
E	<i>Asparagus plumosus</i>	Climbing Asparagus Fern	Declared noxious on Lord Howe Island. Not permitted in City of Ipswich.			X		X	X	

A	Botanic Name	Common Name	Comment	Ranking					
				1	2	3	4	5	6
	<i>Bryophyllum delagoense</i> , <i>B. daigremontianum</i>	Mother-of-Millions	Often naturalised near habitation. Toxic to cattle.		X		X	X	X
	<i>B. pinnatum</i>	Resurrection Plant	Often naturalised near habitation. Toxic to cattle.						
E	<i>Caesalpinia decapetala</i>	Mysore Thorn or Thorny Poinciana	Little yellow flower. Back facing thorns. Brush-Off registered and is better than Grazon. Will grow 9-12 metres up gum trees. Semi hallucinogenic & possibly carcinogenic. Not permitted in City of Ipswich.	X				X	
E	<i>Canna indica</i>	Canna Lily	Not permitted in City of Ipswich.					X	X
E	<i>Cardiospermum grandiflorum</i>	Balloon Vine	Widespread, particularly adjacent to streams. Grows over tall trees. Not permitted in City of Ipswich.			X		X	X
E	<i>Celtis sinensis</i>	Chinese Celtis Chinese Elm	Naturalised in south east Queensland. There are two native Celtis'. Not permitted in City of Ipswich.	X				X	
E	<i>Chrysanthemoides moniiifera</i> subsp. <i>Rotundata</i>	Bitou Bush	Well documented problem. Declared in Maclean Shire. W3 noxious weed.			X			
E	<i>Cinnamomum camphora</i>	Camphor Laurel	A massive problem. Not permitted in City of Ipswich. Noxious in some areas.			X		X	X
E	<i>Commelina benghalensis</i>	Hairy Commelina, or Hairy Wandering Jew	Problem on coastal dunes, particularly where Bitou Bush has been removed. Can be confused with Wandering Jew and a small native Commelina.		X				
E	<i>Cotoneaster glaucophyllus</i>	Cotoneaster						X	
E	<i>Cuphea carthagenensis</i>	Cuphea	Patches in various locations in County area.			X			
E	<i>Duranta erecta (D. repens)</i>	Durant, Sky flower, Blue Pigeon Berry	Small shrub or tree, branches often spiny. A hedge plant. Not permitted in City of Ipswich. A problem on Friday Hut Rd in Byron Shire. Spreading rapidly over a number of adjoining properties. Also on St Helena Thorny and non thorny plants present. Spreading from hedge into pasture and down into gully.	X				X	
E	<i>Erythrina Crista-galli</i>	Cockspur Coral Tree							X

A	Botanic Name	Common Name	Comment	Ranking					
				1	2	3	4	5	6
E	<i>Eucalyptus torelliana</i>	Cadaghi	Kills native bees and commercial bees. Thought to be due to resin in gum nuts. Nests have lower temperature tolerance/control so resin melts in hives. Commercial bees are removed to new areas when in flower so not a problem generally to commercial bees. Some contacts: Qld bushland problems - Danny Nandewelt, Brisbane City Council. Greening Australia. Metropolitan Tree Service. Bree Jashin, 70 Forsyth St Glebe 2037. Endemic in North Queensland Not permitted in City of Ipswich	X				X	
E	<i>Gleditsia tricanthos</i>	Honey Locust	Very thorny. There is now a thornless variety. Spreading rapidly at Collins Ck and Fawcett's Plains north of Kyogle.	X				X	
E	<i>Gloriosa superba</i>	Glory Lily	Large deep rhizomes make control difficult. Naturalised in coastal areas. Forms dense thickets smothering shrubs and ground covers.		X		X	X	
E	<i>Ipomea indica</i>	Blue Morning Glory	Widespread in similar areas to Madeira and Balloon vine. Not permitted in City.of Ipswich.			X	X	X	X
E	<i>Ipomoea cairica</i>	Mile-a-minute	Widespread along the coastal strip and along coastal streams and roadsides.			X	X	X	X
E	<i>Koelreuteria paniculata</i>	Golden Rain Tree	Prolific seeder with very high germination. Not permitted in City of Ipswich.	X				X	X
E H	<i>Ligustrum lucidum</i>	Broad-leaved Privet	Health problem. Not permitted in City of Ipswich.			X	X	X	X
E H	<i>Ligustrum sinense</i>	Chinese or Narrow Leaved Privet	Brush-Off 10g/100L. A health:problem. Not-permitted in city of Ipswich.			X	X	X	X
E	<i>Lonicera japonica</i>	Japanese Honeysuckle	Has potential to be a major problem in rainforests and natural scrub on the north coast. Naturalised and is a serious weed of moist gullies.	X		X		X	X
E	<i>Macfadyena unguis-cati</i>	Cats Claw Creeper	Similar habitats to Balloon and Madeira vines. Not permitted in City of Ipswich. Produces swollen-underground tubers. Smothers trees and shrubs.			X		X	X
	<i>Murraya peniculata</i>	Orange Jessamine	Mainly a problem on the edges of rainforests.	X				X	
E	<i>Nephrolepis cordifolia</i>	Fishbone Fern	Not permitted in City of Ipswich.	X	X			X	X

A	Botanic Name	Common Name	Comment	Ranking					
				1	2	3	4	5	6
H	<i>Nerium oleander</i>	Oleander	Toxic to humans and livestock.				X		
E	<i>Buddleia madagascariensis</i>	Buddleia	Climbs 30-40 feet (9-12 metres) over trees.						
E	<i>Ochna serrulata</i>	Ochna, or Mickey Mouse Plant	Native of Africa, Planted and naturalised in SE Qld. Has weed potential Not permitted in City of Ipswich.	X				X	
E	<i>Paulownia tomentosa</i>	Paulownia	Decision-deferred - Weediness doubtful. Suckers badly from roots after cutting tree off even if stump treated.						
E	<i>Pennisetum purpureum</i> x <i>P. glaucum</i>	Bana Grass	Mainly a stream bank and roadside embankment plant.			X			
E	<i>Phyla canescens</i>	Lippia, No-mow, Condamine couch, Mat grass, Phyla, Carpet weed, Fog fruit.	Sown as a non grass (no mow) lawn. Potential to spread, particularly in wet areas. Member of the Verbenaceae family which includes hard to kill plants including Lantana, Common Verbena & Mayne's Pest. Widespread in temperate and sub-tropical regions of the world . Closely related to, and similar characteristics to Phyla nodiflora.						
E	<i>Pinus elliotii</i>	Slash Pine	Free seeder. Spreading from garden plantings into heath lands, dunes and native bushland along the coastal strip. Also spreads from plantations in hinterland.						
E	<i>Pinus radiata</i>	Radiata Pine	Free seeder. Spreading from garden planting into plantings into heath lands, dunes and native bushland along the coastal strip.						
E H	<i>Ricinus communis</i>	Castor Oil Plant	Seeds extremely toxic. Problem of neglected and waste areas including rail and road verges.				X		
E	<i>Salix spp</i>	Willows	Highly destructive to stream banks. Particularly <i>S. nigra</i> , Black Wattle, which causes extensive damage to stream banks, as a result of shallow root system. Most noxious.	X		X			X
E	<i>Sansevieria trifasciata</i>	Mother-in-law's Tongue	Not permitted in City of Ipswich.	X				X	X
E	<i>Senna pendula var glabrata</i>	Winter Senna	Spreading rapidly.					X	
E	<i>Syagrus romanzoffianam</i>	Cocas Palm	Readily colonises areas. A serious pest in Lismore (NP&WS). Not permitted in city of Ipswich.		X			X	X
E	<i>Thunbergia alata</i>	Black Eyed Susan	Not permitted in City of Ipswich.						X

A	Botanic Name	Common Name	Comment	Ranking						
				1	2	3	4	5	6	
E	<i>Tithonia diversifolia</i>	Japanese Sunflower	Taking over old banana land, railway land and roadsides. Not permitted in City of Ipswich. Mainly an edge plant							
E	<i>Tradescantia albiflora</i>	Wandering Jew	Not permitted in City of Ipswich.					X	X	
E	<i>Wedelia trilobata</i>	Singapore Daisy et al.	Prefer coastal sandy soils. Not permitted in City of Ipswich. Braches root at nodes. Forms dense spreading ground cover.	X				X	X	