



VERGE TREATMENTS

GUIDELINES FOR ENHANCING YOUR VERGE

March 2020

HOME BY THE SWAN

Town of
Bassendean





**Ngalak kaadtitj nidja boodja
Baal Whadjuk Noongar
boodja Ngalak nyininy**

We together know this land is Whadjuk
Noongar land. We together sitting.

In the language of the first people of
this land we say that we know that we
are gathered together here on the land
of the Whadjuk Noongar people.

Always was, always will be.

Be Waterwise

These guidelines were developed with reference to the Water Corporation's "Waterwise verge best practice guidelines". For more information, visit: <https://www.watercorporation.com.au/Waterwise>

Contact

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Message from the Mayor

At the Town of Bassendean, we encourage the development and maintenance of our verges to be sustainable, productive and social spaces.

The street verge is a valued public space and to achieve its maximum potential for the community, your valued contribution in landscaping and maintaining the verge is encouraged.

These guidelines encourage you to install verge treatments within our community which:

- reduce water use within the verge
- promote cooling our suburbs
- provide a habitat for fauna and improves biodiversity
- create a sense of community and place
- add to the amenity of the local area
- increase water infiltration and reduces stormwater runoff
- improve soil quality and the health of street trees.

Within these guidelines, you will find some practical information and examples for the design and implementation of your new verge garden. Good luck!

Cr Renee McLennan
Mayor
Town of Bassendean

What is a Verge?

The verge area is the portion of land between the edge of the road and the front property boundary.

These guidelines relate to the verge area and excludes footpaths and driveways.

Verges are provided on the edge of each road as a corridor to house underground services such as street lighting, power, gas, stormwater, water, sewerage and telecommunications.

Any work associated with establishing your new verge garden must not have an adverse impact on any infrastructure located within the verge.

Before starting any work within the verge, residents should contact Dial Before You Dig and the Town to identify and protect any infrastructure (cables, pipes, manholes, etc.).

It is important for residents to note that utility providers are empowered by legislation to carry out infrastructure maintenance or upgrade works within the verge.

If this work is undertaken within the verge it may damage or disturb your verge garden.

While all care is taken, maintaining the infrastructure is a priority.

Works within the verge may also include street tree pruning by the Town or its authorised contractors.

Residents are responsible for the reinstatement of their verge garden on the completion of any works carried out by the utility provider, the Town or authorised contractors.



What is a Street Tree?

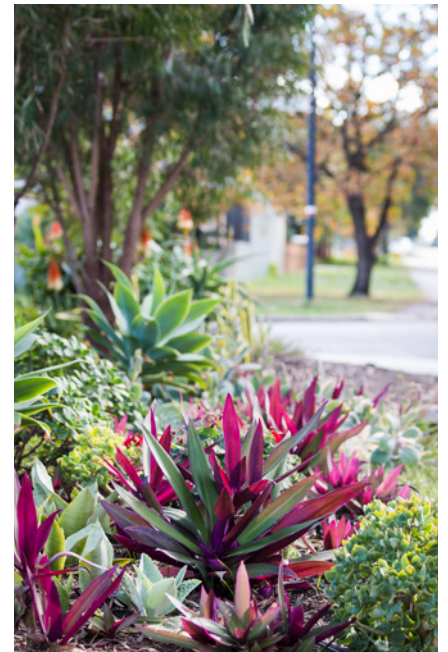
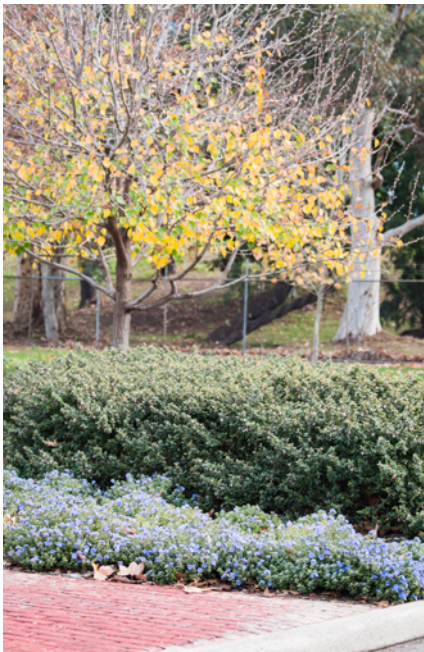
A street tree is any tree located within the verge. Street trees are under the care, ownership and control of the Town. To ensure the long-term health of trees in streetscapes, the Town operates a street tree program.

The Town's street tree program includes the regular maintenance of street trees including pruning, watering and the annual winter planting of new and replacement street trees.

Residents are encouraged to contact the Town to request a street tree for their verge.

Alternatively, residents may choose to plant their own trees in the verge (including fruit trees), but that is subject to prior written approval being provided by the Town.

The Town's Adopt-A-Tree program calls on residents, businesses and community groups to work in partnership with the Town to care for street trees.



Find out more

Visit our website www.bassendean.wa.gov.au to find out more about the:

- Street tree program (planting, watering and maintenance)
- Adopt-A-Tree Program Plant subsidy scheme
- Free mulch (for collection from the Town's Depot at 69 Scaddan Street, Bassendean).

When to Apply?

No application or permit is needed for upgrading your verge, if your verge garden fully complies with these guidelines, plus the following:

- Activities on Thoroughfares and Trading in Thoroughfares and Public Places Local Law 2010
- Verge Treatment Policy
- The Water Corporation's Waterwise verge best practice guidelines

Residents wishing to install a verge garden different to the above requirements should seek written approval from the Town before carrying out any works in the verge. Please visit the Town's website and submit an Infrastructure Services Application for Permits form.

Where a verge is 'common property' between two or more owners or occupiers, the owner or occupier proposing to install a verge treatment must obtain written agreement from all other owners or occupiers before commencing a verge treatment.

Permissible Verge Treatments

Under these guidelines, the following treatments are permitted:

- **Lawn** varieties which are drought tolerant and suitable for Western Australia's warm conditions. When installing a new lawn, residents are encouraged to consider soft leaf buffalo grasses, Queensland Blue, Velvetene, Kikuyu grasses and Zoysia grasses.
 - **Plants** such as locally sourced natives which grow to a maximum height of 700mm and are not thorny, poisonous or hazardous. A mix of groundcovers, strappy leaf plants and shrubs are encouraged, as are flowering species which attract birds and insects. You may also wish to consider options for an edible garden within your verge.
 - **Paved Area** which occupies up to 30% of the verge. To calculate the permitted area of paving, the area of footpath and vehicle crossover (driveway) should be deducted from the total verge area. Pavers should be a minimum of 2 metres from the base of any street tree and must not be higher than the adjacent kerb line, footpath or vehicle crossing. Limit the use of paving in your design so as to increase water infiltration into the verge garden and to limit the amount of stormwater runoff. Paving must be able to tolerate limited vehicle traffic.
 - **Composted or chipper mulch material** which must not be higher than the adjacent kerb line, footpath or vehicle crossing. Mulch should be kept away from the base of any street tree. Vehicle crossings, footpaths and the road must be kept free of loose mulch at all times.
 - **Raised garden beds** constructed from suitable materials, such as timber, sleepers, logs or planks, providing they do not have any sharp edges or pose a hazard to anyone using the verge area. They can be pre-fabricated or pre-assembled and made from galvanised zinc material or similar materials. The raised garden bed should be easy to disassemble or move if required. Works associated with the construction and installation of a raised garden bed on the verge must comply with the Town's Street Tree Policy.
- Garden beds must be a maximum height of 350mm and setback 500mm from footpaths, vehicle crossings, street trees and infrastructure. The garden bed must be set back 2 metres from the road kerb line if a footpath is not located on the verge and 1 metre if there is a footpath located on the verge for the use of pedestrians.

- **Seating, little libraries and other street furniture** located within the verge that considers the safe access of pedestrians and road users. All furniture must be securely fixed, located away from the road carriageway and not pose a hazard or obstruction. Street furniture within the verge should be located adjacent to your front property boundary and must not force pedestrians or cyclists towards the road carriageway.

Unacceptable Verge Treatments

While we encourage attractive and environmentally sustainable verge gardens, there is a requirement to maintain safe and accessible verges for the community, pedestrians and all road users.

To achieve this, the verge area **must not** contain barriers, fences, statues, bunting, signs, star pickets or any other hazard, at any time.

The following **unacceptable materials** cannot be used within the verge area:

- **Rigid or non-frangible materials** such as rocks or boulders. These pose an obstruction or hazard to pedestrians and road users.
- **Loose objects** such as gravel or aggregate because these may create an unstable area within the verge and are potential projectiles. Loose objects, which are able to be broken, may be brittle or disintegrate and pose a safety risk to the community, pedestrians and road users.
- **Artificial lawn or turf** may affect soil health and lead to an increase in the urban heat island effect by absorbing the heat from sunlight and then emitting this built up heat at a later stage. It also reduces water infiltration, which leads to an increase in stormwater runoff.
- **Built structures** with walls and/or a roof constructed from concrete, bricks, limestone, wood, stone, metal or similar materials.

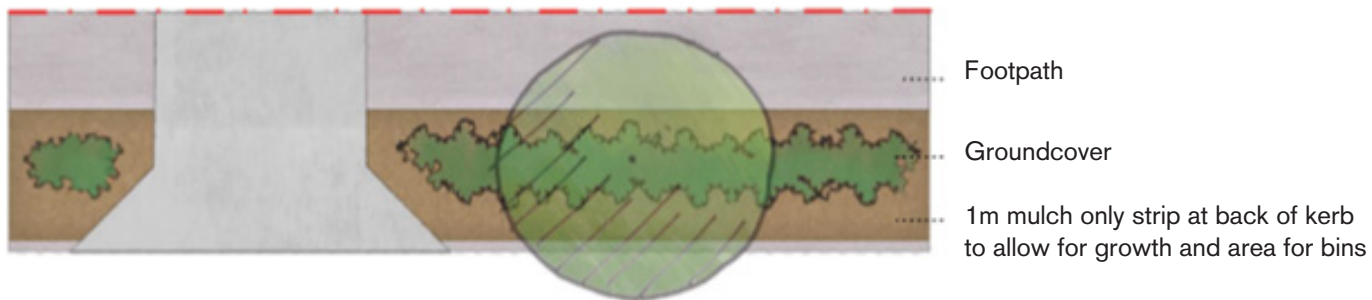
Verge Treatment Design

- Refer to the Water Corporation's Waterwise web page and Waterwise verge best practice guidelines.
- Measure your verge (length and width) and draw up your verge plan to scale.
- Calculate the area of your verge (length multiplied by the width) and how many plants are required.
- Consider the materials you wish to use.
- Offset plants from street trees, kerbs, footpaths, utilities and vehicle crossovers in accordance with the required setbacks, to allow them to grow appropriately. For further information, please refer to the Verge Treatment Design Examples below.
- Consider layered plantings with the use of different varieties and colours to create contrast and variety.
- Consider flowering native plants, which look great and attract birds and insects.
- Leave an area within your verge to put out your wheelie bins and bulk waste collection near the kerb.
- Leave a pedestrian access strip along the road kerb and ensure any raised garden beds are adequately set back from street trees, infrastructure, footpaths, kerbs and vehicle crossovers.
- Consider options for an edible garden.

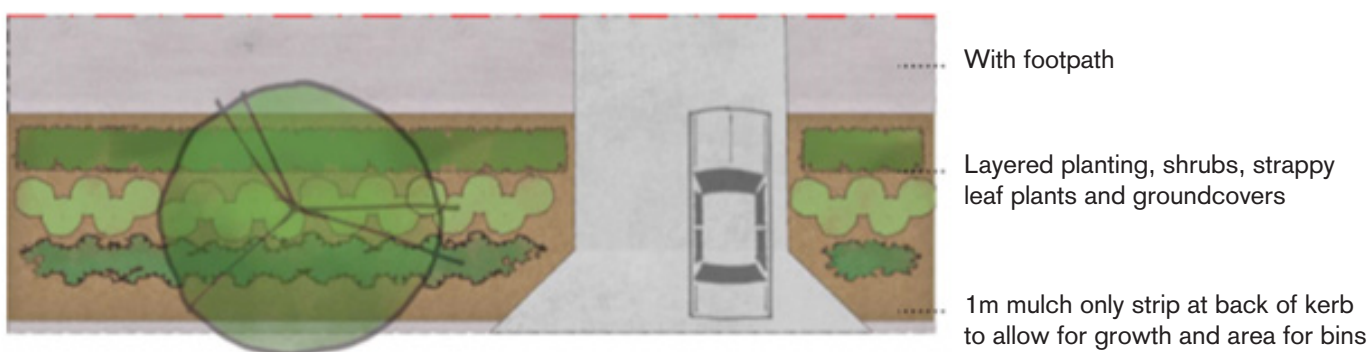


Verge Treatment Design Examples

NARROW VERGE



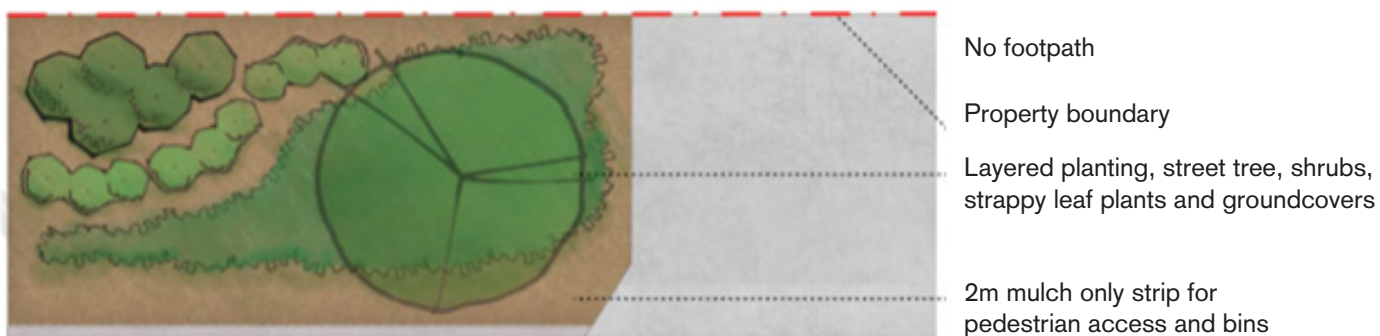
STANDARD VERGE



LARGE VERGE

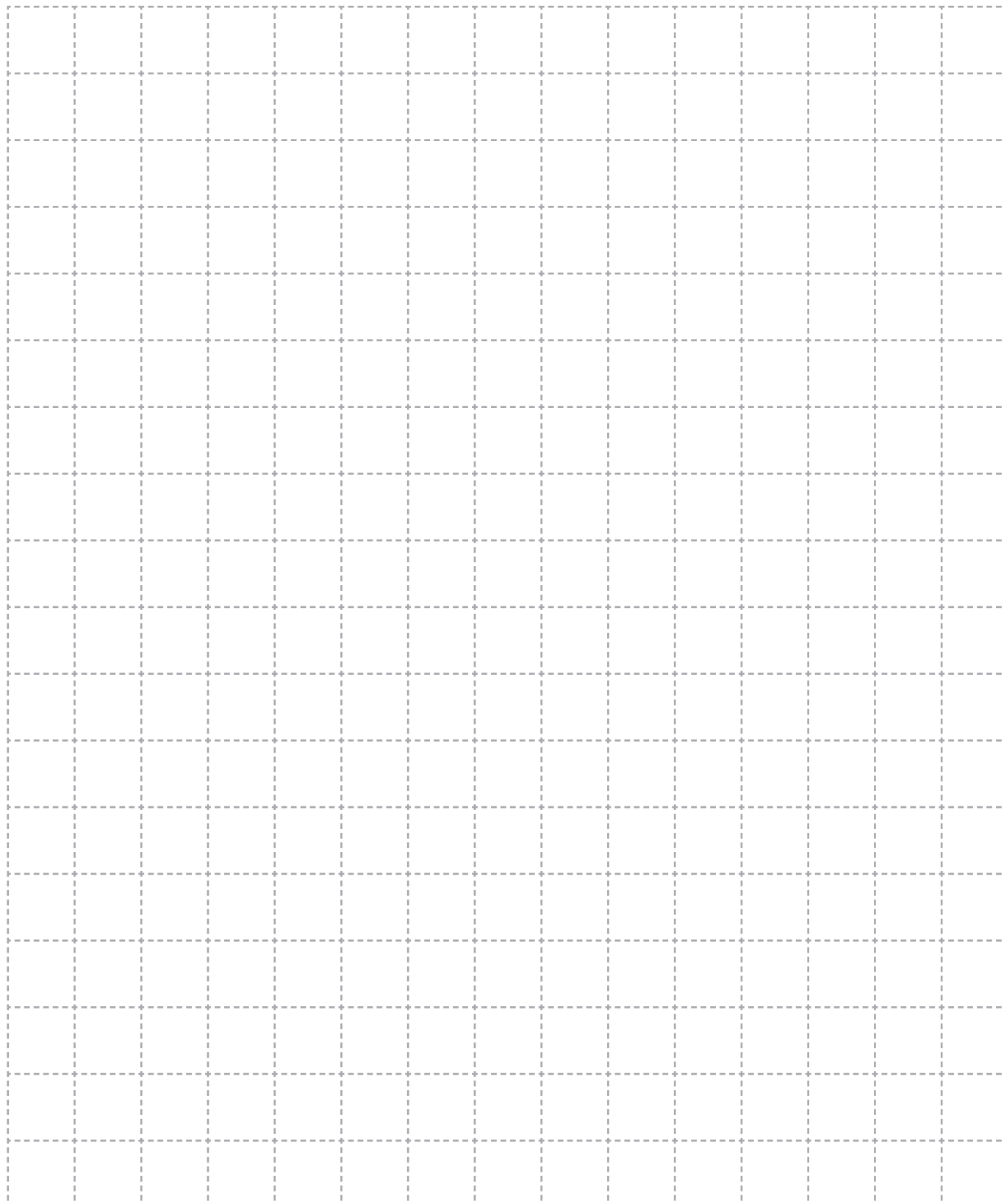


LARGE VERGE



Verge Treatment Plan

Use the grid below to sketch and design your new verge garden. Remember to capture vehicle crossovers, footpaths, street trees, road carriageway and property boundaries.



Verge Preparation

Preparation of the verge area is critical to the success of your new verge garden. For further information please refer to the Water Corporation's Waterwise web page.

Consider a process such as this:

Lawn and weed removal

It is important to remove any existing lawn and weeds to ensure that reinfestation does not occur in the future. The removal of some perennial grasses such as buffalo and kikuyu can be undertaken manually with the use of hand tools, while other types such as couch grass are more difficult to remove. Residents are encouraged to research the most effective and environmentally sustainable methods for the removal of lawns or weeds. Machinery should not be used in close proximity to any street tree located on the verge and all works must comply with the Town's Street Tree Protection Policy.

Whatever method you use to remove couch grass, the regular removal of any new growth is required to maintain your new verge garden.

Soil preparation and levels (boxing out)

When removing existing turf or weeds, bring your soil level down to about 75-100mm below the kerb/footpath level to allow for mulch application later. Your finished level after mulching should be flush with the kerb and any other hard surface. This helps retain water and mulch within the verge rather than spilling onto the footpath, road carriageway or vehicle crossover. Machinery should not be used in close proximity to any street tree located on the verge and all works must comply with the Town's Street Tree Protection Policy.

Alternatively, you may wish to only box out along the boundaries of your verge. This will reduce the amount of work involved in boxing out your verge area, ensure mulch is level with any hard surface and reduce the loss of valuable top soil disposed of in landfill.

Some soils are sandy and have limited retention of moisture or nutrients. You should consider the application of a soil conditioner such as organic compost, clay such as bentonite and soil wetting agents, by manually mixing it into the top 50mm of soil.

When buying soil conditioner or wetting agents, select products with the Waterwise and Smart Approved Water Mark symbols and refer to the manufacturer's instructions for application rates.



Verge Treatment Implementation

Setting out plants

Before digging any holes for your new plants set out your plants in their pots within the verge area. Check the mature size (height and width) of your plants, allowing them room to grow to their full size without obstructing sight lines, access ways and infrastructure. In general, keep larger shrubs away from hard surfaces and offset groundcovers about 1 metre to 1.5 metres away, to stop them spilling over into access ways.

Planting

Late autumn and early winter is the best time to plant your verge as rainfall and cooler temperatures will help to establish your new verge garden without additional watering.

Once you dig your holes, a few granules of slow release fertiliser for native plants can be added before planting and backfilling the hole. Gently compact the soil around and then water in your new plants.

Mulching

The application of good waterwise mulch will help reduce plant stress and evaporation loss, suppress weed growth and greatly improve the appearance of your new verge garden. The Town provides free mulch to residents for collection from the Town's depot at 69 Scaddan Street, Bassendean. The mulch is made from material collected during tree pruning as part of the Town's street tree program and is subject to availability.

Organic mulch can be placed 75mm to 100mm deep, level with or below adjacent hard surfaces, 100mm clear of plant stems and 500mm clear of street tree trunks.

Verge Treatment Maintenance

Maintenance of verge gardens is to be undertaken by the resident. Native verge gardens should only require occasional weeding and pruning. Prune plants periodically to ensure good form, maintain sightlines and access. Your garden may benefit from an application of slow release native plant fertiliser once a year. Mulch levels should be monitored and topped up as necessary.

Maintenance of all street trees is to be undertaken by the Town. If your tree needs pruning, please contact the Town on 9377 8000 or mail@bassendean.wa.gov.au

Verge Irrigation

Water and reticulation systems are permitted, if they comply with the Water Corporation's Waterwise verge best practice guidelines.

Valves and other mechanisms are to be located on the residents' private property and below ground irrigation or pop up sprinkler heads must be used.

To achieve the objectives of these guidelines, the recycling of stormwater on the verge is encouraged and water spillage from irrigation systems onto





vehicle crossings, footpaths, the road carriageway and other hard surfaces is to be prevented.

Residents are reminded to comply with their designated watering days and not to water in winter months.



Installation of an irrigation system on the verge must comply with the Town's Street Tree Protection Policy.

Recommended Plant Species

Ground Covers	Botanical Name	Common Name	Growth Habit/Height	Comments	Origin
	Adenanthos meissneri	Prostrate Woolly Bush	30cm high x 3m wide	Full sun/ part shade	WA native
	Carpobrotus virescens	Coastal Pig Face	Less than 50cm high, 50cm-1m wide	Sun/ part shade	WA native
	Chrysocephalum apiculatum	Paper Daisy Fringed Everlasting	Up to 50cm x 50cm	Full sun	Australian native
	Dampiera linearis	Dampiera	Less than 60 cm high	Sun/ part shade	WA native
	Dichondra repens	Kidney Weed	Very low, 50cm-1m wide	Sun/ part shade	Australian native
	Eremophila glabra 'Kalbarri carpet'	Emu Bush Fuchsia Bush	Less than 50cm high, 1-2m wide	Sun	Cultivar of a Australian native
	Grevillea crithmifolia prostrate		60cm x 3m wide	Full sun/ part shade	Cultivar of a WA native
	Grevillea obtusifolia 'Gingin gem'	Grevillea 'Gingin gem'	25cm x 3m	Full sun/ part shade	Cultivar of a WA native
	Grevillea preissii 'Mini marvel'		20cm high x 1m wide	Full sun/ part shade	Cultivar of a WA native
	Grevillea thelemaniana prostrate	Spider Net Grevillea	Less than 50cm high, 50cm-1.5m wide	Sun/ part shade	Cultivar of a WA native

Ground Covers Continued	Botanical Name	Common Name	Growth Habit/Height	Comments	Origin
	Hibbertia grossulariifolia 'Strawberry Leaf Buttercup'		Low	Part shade/ full shade Attracts butterflies	WA native
	Hibbertia racemosa	Stalked guinea flower	Less than 70cm high	Sun/ part shade	WA native
	Kennedia coccinea 'Coastal carpet'		Low, 3m wide	Full sun/ part shade	WA native
	Kennedia prostrata	Running Postman	Low, 1m wide	Best in part shade	Australian native
	Lechenaultia bilboa or floribunda	Lechenaultia	Less than 30 cm high	Sun	WA native
	Scaevola crassifolia	Beach Fan Flower	Low, 1m wide	Full sun/ part shade	Cultivar of a WA native
	Thryptomene baeckeacea 'Kalbarri Cascade'	'Kalbarri Cascade' Thryptomene	Less than 50 cm high	Sun	Cultivar of WA native

Recommended Plant Species

Grassy and Strappy Plants	Botanical Name	Common Name	Growth Habit/Height	Comments	Origin
	Anigozanthos species	Kangaroo or Cats paw	Species dependent	Species dependent	Australian native and cultivars of natives
	Conostylis aculeata		30cm x 30cm	Full sun	WA native
	Conostylis aurea	Golden Conostylis	40cm x 30cm	Full sun	WA native
	Conostylis candicans	Grey Cottonheads	30cm x 30cm	Full sun	WA native
	Dianella species	Dianella Cultivars	30-70cm high depending on cultivar	Sun/ part shade	Australian native
	Ficinia nodosa	Knotted club rush	50-100cm high	Full sun/ part shade	Australia native
	Lomandra species	Species dependent	Less than 70cm	Sun/ part shade	Australia native and cultivars
	Patersonia occidentalis	Purple Flag/ Native Iris	Up to 80 cm including flower stalks	Sun/ part shade	WA natives
	Thysanotus multiflorus	Fringe Lilly	Up to 50cm high	Sun/ part shade	WA native

Small Shrubs	Botanical Name	Common Name	Growth Habit/Height	Comments	Origin
	Acacia cognata 'limelight'	Bower of Beauty Wattle (Cultivars)			Australian native
	Adenanthos cuneatus	Coastal Jugflower, Flame Bush, Bridle Bush or Sweat Bush	70cm x 2m wide	Full sun	WA native
	Boronia crenulata 'pink Passion'	Pink Passion	75x75cm	Sun/ part shade	Cultivar of WA native
	Calytrix flavescens	Summer star flower	30-80cm high and up to 50cm wide	Full sun/ part shade	WA native
	Darwinia oldfieldii		50cm high x 1m wide	Full sun/ part shade	WA native
	Hibbertia racemosa	Coastal Buttercup Stalked Guinea Flower	75cm high	Full sun/ part shade	WA native
	Leucophyta brownii	Silver nugget Dwarf cushion bush	Up to 1m high (may be pruned)	Full sun	WA native
	Melaleuca incana nana	Dwarf Grey Honey Myrtle (Nana)	Up to 1m	Full sun/ part shade	WA native
	Olearia 'mini' or 'beach ball'	Olearia 'mini' or 'beach ball'	40 cm high x 80 cm wide	Sun	Cultivar of Australian native
	Westringia dampieri low form		50cm x 50cm	Full sun	WA native

