

# City of Cockburn

# **Verge Improvement Guidelines**





Cockburn Nyungar moort Beeliar boodja-k kaadadjiny. Koora, yeyi, benang baalap nidja boodja-k kaaradjiny.

Ngalak kaadatj dayin boodja, kep wer malayin. Ngalak kaadatj koora koora wer yeyi ngalang birdiya.

City of Cockburn acknowledges the Nyungar people of Beeliar boodja. Long ago, now and in the future they care for country.

We acknowledge a continuing connection to land, waters and culture and pay our respects to the Elders, past, present and emerging.

## Contents

What is the Verge? Why Design It?	
Who is responsible for the street verge?	4
Service and utility locations	5
Waterwise Verges	
Street tree/verge requests	6
Water Sensitive Urban Design	
Community verges	
Grants, Subsidies and Resources	
Waterwise Verge Rebate	7
Guidelines for your Verge	
Acceptable materials for verge treatments	8
Unacceptable materials for verge treatments	
Approvals required	
Verge Design Guidelines	
Accessibility	12
Set-backs	
Sightlines	
Waste collection	
Designing	
Verge Design Examples	
Corner block verge	13
Truncation	
Verge with centrally located footpath	14
Verge with no footpath	14
Disconnected verge	15
Small verge	16
Verge Planting Tips	
Verge preparation	17
When to plant	17
Plant selection	17
Plants to avoid	17
Further Information	
Contact the City of Cockburn	18
Council Policies	18

These guidelines provide information to assist the design and maintenance of your verge. Informing you of the requirements and approvals that you will need.

# What is the Verge? Why Design It?

The verge is an important part of the streetscape.

The verge is the area between the road, your property and the property next door. The verge is Crown Land, under the control of the City and a shared area set aside for;

Access to residential, rural and commercial lots

Crossovers (driveways)

Footpaths

Linking to the natural environment

Pedestrian movement

Service utilities

Street trees.

A well designed verge can play a crucial role in enhancing the liveability and amenity of a suburb. The verge can increase biodiversity and habitat for our wildlife through adding linkages and corridors between areas of vegetation. A biodiverse, green verge assists to cool your local area, through reducing the urban heat effect caused by large areas of hard and dark coloured surfaces.

The City encourages improvements to the verge that incorporate waterwise design and plantings.

# Who is responsible for the street verge?

The City encourages all property owners, managers or residents to maintain the verge. This includes:

Mowing

Mulching

Pruning

Maintaining safe condition of any approved structures or furniture

Weeding.

Street trees are the responsibility of the City. Residents and ratepayers are not permitted to prune or remove the street tree. If the tree needs watering, the City would appreciate the resident watering it.

It is important to consider all information within this document prior to installing a verge treatment. All matters related to verge treatments including design, requests for information and/or approvals, should be directed to the City's Customer Service Team.

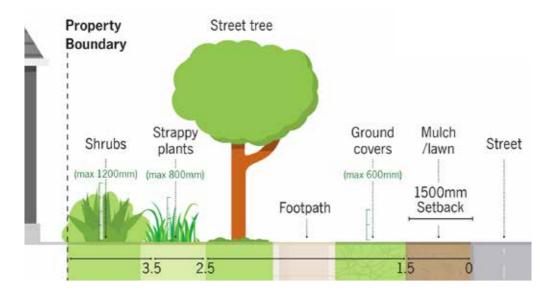
## Service and utility locations

Underneath the verge area contains the service utilities, telephone lines and electricity cables. Before beginning any excavation work, it is important to find the location of any below ground services. Verge treatments must not cover or obstruct access to these services.

Call '**Dial before you Dig**', a free call on 1100 or visit the website www.1100.com

Utility providers have the right to access, upgrade or repair services. Returning the verge to its former design may be the responsibility of the householder.

Figure 1. Verge Plant heights.



# Waterwise Verges

The local trend is toward a drying climate. Many households use almost 40% of their water consumption on their garden. Planting, grouping and mulching waterwise plants on your verge and gardens will help to reduce your home water use. Visit the Water Corporation website for waterwise plant species and design options.

## Street tree/verge requests

Trees beautify, provide habitat for wildlife and cool our streets and suburbs reducing the Urban Heat Island Effect. Street Trees help to secure these benefits by increasing our urban tree canopy cover. The City's aspirations are for a thriving urban forest, the Urban Forest Plan presents a clear pathway to achieving this. If you would like your verge to help improve the liveability of our suburbs, contact the City and request a free Street Tree today.



## **Water Sensitive Urban Design**

Water Sensitive Urban Design (WSUD) is about designing our urban environments to optimise the use of rain water falling onsite. This means directing rain water onto our verges and gardens to reduce scheme water usage and to infiltrate into the groundwater. The City is implementing drainage options such as swales and rain gardens to use rain and storm water onsite. Utilising rain water tanks plumbed in to your property to reduce household scheme water use and to water the verge is a waterwise option.

## **Community verges**

Beautifying your street can be a team effort, creating a more liveable, safer and resilient community. Talk to your neighbours about a joint verge project. By upgrading the verge area on your street with your neighbours you may be eligible for the City's Sustainability Grants. Sharing the labour and the purchases reduces costs and enhances connection with your local community.

# Grants, Subsidies and Resources

The City has a number of initiatives that will assist you to improve your verge. The grants and resources that the City offers are found at **cockburn.wa.gov.au** 

Waterwise Verge Rebate — Waterwise Verge Rebate provides eligible applicants with financial support for waterwise verge installations. Applicants have free access to professional verge designs, these include a list of plant species. This rebate runs for a limited time to utilise seasonal rainfall.

**Native Plant Subsidy Scheme** – provides residents the opportunity to purchase subsidised native plants in May each year

**Sustainability Grants** – collective (2 or more) households can apply for funding for waterwise verge improvement projects, up to \$4,000

**Grow Local Brochures** – enables residents to select the right plants for their area and soil type

**Garden workshops** – these provide advice on verge design, composting, food gardening, waterwise plants and tips

**Free mulch** – pick up free mulch from the Henderson Waste Recover Park. Bring your own shovel, trailer/ute to load your own mulch.



Document Set ID: 9613164 Version: 1, Version Date: 07/08/2020

# Guidelines for your Verge

# Acceptable materials for verge treatment

Drought tolerant lawn species

Local waterwise plants are recommended

Low groundcovers

Mid-level shrubs and approved trees

Mulched gardens

Vegetable and fruit gardens.

#### Gardens

To create a safe and beautiful verge garden, follow the Figure 1 (page 5) Plant height restrictions and the designs shown in this document. Use plants that match your soil type and local climate conditions. Consider grouping and mass planting (hydrozoning) of similar species and water needs to reduce water use. Vegetable gardens can be planted, approval is needed for a raised planter bed.





Document Set 10: 9613164 Version: 1, Version Date: 07/08/2020

#### Lawn

If you would like lawn on your verge, the City recommends reducing the area. Lawn can need a lot of watering, select a drought tolerant species to reduce garden water use.

Mass plantings of low-growing ground covers can create a grass-like cover. There are native species that achieve this look.

#### Mulch

Once planting is complete, apply a course, large particle size, waterwise mulch to the verge. Mulch will reduce evaporation, maintain soil temperature, reduce plant stress and help to suppress weed growth. Mulch this size will enhance water penetration into the soil.

Mulch should be kept below kerb and footpaths height, at a depth of 5–10cm. Large and heavy mulch should be installed and maintained to not drift onto the footpath or road as it can cause a safety hazard. Free mulch is available from the Henderson Waste Waste Recover Park. Also, search for free mulch on the internet.

#### Reticulation

The City recommends non-irrigated waterwise verges. Water only on your allocated watering days as outlined by the Water Corporation. Check their website for full details.

#### **Paving**

Prior permission from the City, is required to pave an area more than 25% of your verge. Porous pavement and paving with gaps between pavers, allows for water to percolate into the soil. This will keep the water on site for your plants, rather than flowing off the paving away into the drainage system.



# Unacceptable materials for verge treatments

Due to safety concerns some verge treatments are not permitted. These images are local examples of noncompliant, unacceptable verge treatments. If verge treatments present a hazard, the City will request remedial works to correct the problem.



**Signs** 



**Fences** 



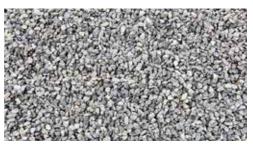
Stakes and sharp items



**Barriers** 



Variable message boards



Loose materials



**Inorganic materials** 

#### Approvals required

Any verge works outside the 'Acceptable materials' will require the lodgement of a **verge landscape plan**. A template is on the City's website.

Your design should include existing features such as street trees, crossovers, driveways, footpaths and other infrastructure. Approval will be subject to conditions that the City considers appropriate.

Impermeable surfaces, paving and synthetic turf, are strongly discouraged by the City. Any proposal seeking approval for over 25% of these surfaces will need to detail water containment, heat mitigation treatments and any potential safety issues. It is encouraged to incorporate acceptable material treatments with any proposal.

To submit a plan, and seek approval please complete the online Verge Landscaping Application Form available from

cockburn.wa.gov.au

You need approval and justification for the following:

#### Art structures

Impermeable surfaces, paving and hard treatments if more than 25% of the verge is paved

Play equipment

Raised garden beds and vegetable planters

Street furniture

Street tree requests

Synthetic turf.



# Verge Design Guidelines

### **Accessibility**

Verges are shared zones used by other residents, including the elderly and disabled, postal deliveries and service utilities. Access by others should be considered when designing your verge. Changes to your verge should not obstruct access.

#### **Set-backs**

There needs to be a 1.5 meter clearance from the road kerb if no footpath has been installed. This clearance allows pedestrians safe refuge if they need to get off the road, see Figure 1.

#### **Sightlines**

There should be a clear line of sight across the verge for vehicles entering and exiting the road network from a crossover (driveway) to the property. Planted areas should not create hazards for people, bicycles, prams, wheelchairs or vehicles. Especially pertinent in newer suburbs where the verge size is reduced. Figure 1 (page 5) shows plant heights that facilitate clear sight lines.

All plants, mulch and tree branches that encroach on footpaths, roads and private property need to be trimmed on a regular basis.

#### **Table 1**. Plant height parameters

Maximum plant height of 600mm between 1.5–2.5m from the road kerb

Maximum plant height of 800mm between 2.5–3.5m from the road kerb

Maximum plant height of 1.2m in height beyond 3.5m from the road kerb.

#### Waste collection

Leave a clear space for easy access to your rubbish bins on collection day. This can be a paved (1m by 1m) or mulched area.

#### **Designing**

Plan out your verge garden on paper to get some perspective of where your plants are best located and what you can fit into the space. Plan for mature plant heights, to ensure sightlines are maintained. Professional verge designs are available free with the Waterwise Verge Rebate scheme. See Figure 1 and Table 1 for height parameters.

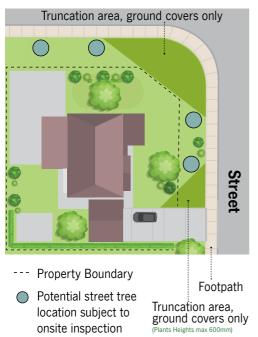
# Verge Design Examples

The following diagrams provide simple design examples on how to set out your verge. More detailed designs are available with Waterwise Verge Rebates.

## Corner block verge

A corner block provides a great opportunity for additional urban cooling trees. The garden feel can be maintained by continuing a hedge or planting into your front garden. The entire verge can also be planted where the footpath is located along the back of the kerb, Figure 2. This provides safe pedestrian access along this side.

Figure 2. Corner Block simple verge design.



#### **Truncation**

Truncation areas, Figure 2, ensure safety by providing unobstructed sight lines at vehicle access points, such as corners and driveways. When planting your verge and inside your property, give consideration of sight lines for cars exiting drive ways and turning corners, ground covers only in these areas. Check the Intramaps on the City's website for your corner truncation boundaries.

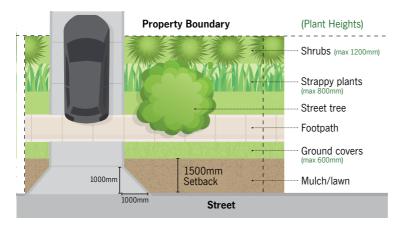
Figure 3. Corner block narrow verge design.



- --- Property Boundary
- Potential street tree location subject to onsite inspection

#### Verge with centrally located footpath

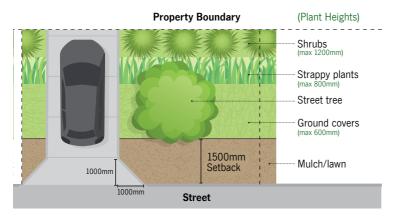
Some clear space is required for your rubbish bins. This can be paved (1m by 1m) or mulched. Limit the height of plants to around 800mm and use mulch with your groundcovers.



**Figure 4.** Verge design for central footpath.

## Verge with no footpath

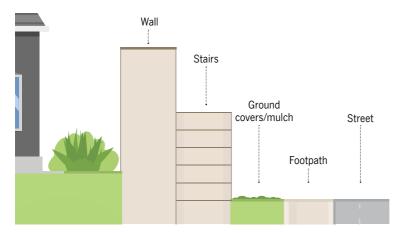
Pedestrian access is still required when there is no footpath. To allow this, use large size mulch, native ground covers or drought tolerant lawn in a 1.5m strip along the back of the kerb. This also provides a place for your bin. A street tree would be ideal for these verges and would provide a central point to design your verge garden.



**Figure 5.** Verge design with no footpath.

## **Disconnected verge**

A disconnected verge is one with restricted, limited or no access from private property. Usually when there is a height level difference from front/side of house down to the verge area. Paving here will exacerbate the Urban Heat Island Effect. The most effective verge treatment is a waterwise verge, with no grass, these require minimal water and maintenance. Applying large-sized mulch and applying for a street tree could assist with creating a low maintenance verge, combat weed issues and create a natural, environmentally friendly verge.



**Figure 6.** Verge design for central footpath.





Figure 7.
Disconnected verge before and after.

## **Small verge**

Contact the City to request a street tree, one appropriate for the space available. A small verge may not need more than one species of ground cover.

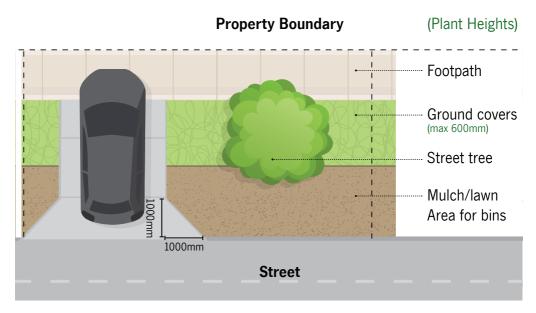


Figure 7. Verge design for small verge.





Document Set ID: 9613164 Version: 1, Version Date: 07/08/2020

# Verge Planting Tips

#### Verge preparation

Ground preparation and soil improvements play a significant role in the success of a verge garden and should be integral to your verge improvement planning.

Removal of existing lawn and weeds is critical to help your waterwise verge garden thrive. This can be completed manually or by using a natural herbicide. It can be a hard task, planning into the timeline is important.

Local sandy soils need improving as they lack many nutrients required for plants to thrive. To increase soils microbial activity and nutrients, apply a soil conditioner like compost, native slow-release fertiliser and clay to the top 30 centimeters. Local soils can be water repelling. Adding a wetting agent will increase the soils ability to allow water and nutrients penetrate to the plant root zone.

## When to plant

The best time to plant is after substantial rain, generally in late autumn or early winter. Planting at this time makes the most of natural rain to get plants established and reduces scheme water use. Avoid planting in hotter months, as new plants will struggle to survive without considerable water

#### **Plant selection**

The best plants are those suited to our local environmental conditions. Local native West Australian species are the most waterwise plants, as they have adapted to our dry climate. Consider planting different local plant species which will attract diverse wildlife.

The Grow Local Plants brochure provides information about local native plants and where to find them. This brochure can be found on the City's website. The Water Corporation website lists waterwise plants and where to buy them.

#### Plants to avoid

When selecting plants for your verge, be careful not to plant declared weeds or prickly and poisonous plants.

Some native species can also become environmental weeds. A list of weed species can be found on the City's website.



## **Further Information**

The Water Corporations website provides information on waterwise plants for Perth.

Website: www.watercorporation.com.au

## **Contact the City of Cockburn**

If you require any assistance or further advice about the design of your verge, permissions required or general verge queries please contact us.

Website: cockburn.wa.gov.au

Email: customer@cockburn.wa.gov.au

**Telephone**: 08 9411 3444

For free mulch:

Henderson Waste Recover Park **Telephone:** 08 9411 3444



#### **Council Policies**

To assist with managing the condition of the City's verges, the Council has adopted a number of policies, strategies and plans. These can be viewed via the 'Policies' section of the City's website, they are:

Vehicle Access – LPP5.6

Maintenance of Public Open Space & Reservation following Residential Subdivision Policy

Residential Design Codes Alternative Deemed to Comply Provisions — LPP1.1

Residential Design Guidelines - LPP1.2

Street Verge Improvements

Subdivision Construction Standards

Subdivision Development Street Trees I PP5 18

Urban Forest Plan 2018–2028

Vehicle Crossover Specification and Forms

Waste Management in Multiple Unit Developments LPP1.14

Street & Reserve Tree Management Policy

Landowner Biodiversity Conservation Grant Program Policy



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