

Landscaping of Nature Strips

Guidelines and Application Form

The purpose of the guidelines

These guidelines apply to all urban areas in the Wagga Wagga Local Government Area that have kerb and gutter. Landholders wishing to landscape the nature strip adjacent to their property will need to make application to Wagga Wagga City Council (Council) as outlined in these guidelines to ensure the intended landscaping and beautification conforms with Council's Policy and continues to provide a safe walkway for the community and does not impact on existing services in the nature strip.

An application form can be found as an attachment to this document.

Benefits of nature strips

In comparison with fully paved areas, nature strips offer the following benefits.

- They absorb rainwater and reduce stormwater run-off.
- They complement the natural settings of the neighbourhood such as street trees and home gardens and allow healthier private and street trees to grow.
- They visually soften the effect of the harder surfaces of road, footpath and driveway paving, fences and buildings.
- They can provide habitat for small fauna.

Landscaping of nature strips

The nature strip (also known as verge, footpath or road reserve) is the area between the private property boundary and the edge of the road. Depending on the suburb you live in, this is a distance of either 3.5 or 5.5 metres.

Nature strips are an integral part of Wagga Wagga's functional urban environment:

- They are the location for power and light poles and underground services, water and gas supply pipes, stormwater, sewage, telephone and sometimes electrical cables.
- They provide a flat space for the location of household garbage, recycling and green waste bins.
- They allow for door opening space and pedestrian, pram, pusher and wheelchair traffic between the road and footpath.
- They allow for visibility for motorists, cyclists and pedestrians at intersections or curves in the road and near driveways.

Types of approved nature strips

Grass or turf nature strips are very commonplace and appear deceptively easy to maintain. This is not necessarily true, as they are not well suited to our hot summer climate, and require a lot of watering, mowing, weeding and fertilising to maintain to a high standard. While turf grass nature strips are allowed, Wagga Wagga City Council and Riverina Water are encouraging residents to move towards more sustainable alternatives.

The following is an overview of the three main types of approved nature strips for Wagga Wagga, and example concept plans.

1. Mixed planting nature strips

This is the preferred method of nature strip landscaping by Wagga Wagga City Council. A mixed planting nature strip can achieve both water savings and beautification.

2. Gravel nature strips

Gravel nature strips offer the following benefits:

- They are far more 'tree root friendly' than turf or a paved surface. A gravel nature strip will make your street tree much healthier.
- They are far more effective in reducing stormwater run-off than a paved surface such as asphalt or concrete.
- They offer a much lower maintenance arrangement than a mown turf nature strip.
- They are much lighter in colour, offering a more reflective surface than asphalt.
- They can be planted into with ease.

If you wish to replace an existing nature strip with gravel, the steps below should be followed:

- Spray the grass with herbicide (use a glyphosate-based herbicide such as 'Roundup', 'Zero' or similar), wait two weeks and then respray any grass or weeds that were missed, wait another week for the grass or weeds to die.
- Excavate the turf and topsoil to a depth of 100 millimetres. If there is a nature strip tree, great care needs to be taken to avoid severing roots. In such a case, hand excavation will be essential.
- Place crushed rock or recycled crushed brick of 10 millimetres particle size to a depth of 50 millimetres. This provides a firm base and prevents the final surface from forming potholes. It also provides air spaces, which enable tree roots to take in oxygen and allows room for them to grow.
- Use a compactor or 'wacker plate' to compact the crushed rock.
- Fill the remaining gap with unwashed granitic sand. The clay content in this material prevents the particles from getting onto the footpath or into the gutter and thus the stormwater system. The surface should be smooth and gently graded towards the kerb and gutter for drainage purposes.

3. Synthetic turf nature strips

If you wish to replace an existing nature strip with synthetic turf, the steps below should be followed.

- Spray the grass with herbicide (use a glyphosate-based herbicide such as 'Roundup', 'Zero' or similar), wait two weeks and then respray any grass or weeds that were missed, wait another week for the grass or weeds to die.
- Excavate the turf and topsoil to a depth of 100 millimetres. If there is a nature strip tree, great care needs to be taken to avoid severing roots. In such a case, hand excavation will be essential.
- Place crushed rock or recycled crushed brick of 10 millimetres particle size to a depth of 50 millimetres. This provides a firm base and prevents the final surface from forming potholes. It also provides air spaces, which enable tree roots to take in oxygen and allows room for them to grow.
- Use a compactor or 'wacker plate' to compact the crushed rock.

- Lay out the synthetic turf on the prepared base. Apply contractor or product securing measures to ensure the synthetic is secured to the road base.

NOTE: From time-to-time utility providers need to dig up the nature strip to work on their infrastructure. When this occurs, they are required to replace damaged footpaths and driveways and re-level the nature strip with loam and grass-seed. Residents with synthetic turf nature strips will be required to reinstate the surface for themselves.

Sustainability considerations

A list of recommended plant species can be found in Appendix A of the guidelines.

- Plant selection for landscaping works should be guided by Council's principal vegetation theme of waterwise native plants.
- Plants should be low growing to avoid any traffic sighting problems and the heavy maintenance requirements of keeping them at a suitable height.
- Plants should be tough enough to withstand the pressures of occasional pedestrian traffic.
- Plants should be drought tolerant to minimise watering requirements.
- Plants should be able to cover the ground effectively to compete with weeds.
- Plants under established trees need to be tolerant of dry shade.
- Plants must not have prickly leaves or other parts that might harm users of the naturestrip.
- Plants listed as noxious or environmental weeds must not be used. This is highly important as seeds from nature strip plants can easily get into the stormwater system and reach our waterways where weeds are difficult to control. These plants have a history of destroying nearby natural vegetation areas making them unsuitable for native animals and birds.

Safety and access

Beautification works must maintain clearances and visibility for pedestrian, cycle and vehicular traffic when using, entering or exiting an intersection, driveway or footpath. Any works considered hazardous will be required by Council to be removed or made safe at the cost of the adjoining landowner.

- A minimum walkway width of 1.2 metres is to be retained.
- Vegetation is to be maintained below a height of 500 millimetres. The minimum height of 500mm must be reduced if the sight lines of traffic for pedestrians are obstructed. The reduction in height will be site specific, to remove the obstruction to traffic and pedestrian sight lines.

- Hard landscaping elements, such as rocks, timber (including prominent edging) must be used in such a way as to not become trip hazards or obstacles to pedestrians.
- Mulch material must be kept stable and properly contained. Recommended treatments include easily compacted granitic sand, screened granite, crusher grit, blue metal grit and white metal grit which have a diameter of less than 10mm. Finely ground mulch materials (< 25mm) can also be used. Larger materials such as stones or chunky woodchips can get kicked onto paths or into gutters and can create problems with the stormwater system.
- Adequate areas are to be kept free of plants to allow placement of mobile garbage, recycling and green waste bins, and to allow for car door opening and pedestrian traffic alignment.
- Maintain any material so it is not likely to become dislodged or to become a trip hazard, obstacle or look unsightly, for example chunky mulch or rocks, coarse sand, timber edging, bollards or logs, black plastic, or carpet.
- Changes to nature strip levels or retaining walls that might interfere with drainage will not be permitted.
- The type and placement of materials shall be designed in such a manner as to prevent it being displaced or washed onto the road or into the stormwater gutter in a rain event.

Construction approval and conditions

Application under Section 138 of the NSW Roads Act 1993 is required for any activity in a Road Reserve. The application form 'Landscaping of Nature Strips' is attached to the back of these Guidelines. The process for this application is described in these guidelines. Alternatively, residents wishing to beautify or change their nature strip landscaping are invited to contact Councils customer service staff for advice.

When considering beautifying nature strips the following items should be considered:

- The cost of establishment, maintenance and renewal of the area and plants is borne by the resident or landowner.
- Non-land-owning residents are to provide written consent of the landowner for the landscaping proposal.
- Loose materials, fencing, rocks and walls are not permitted on your nature strip. These materials create hazards for motorists when accessing/egressing your property, and for pedestrians using the nature strip.
- Effective preparation for nature strips is to spray-out using herbicide or physically remove existing turf or weeds. A repeat spray or weed may be necessary after two or three weeks in case some plants were missed. Once the grass has died off and been removed, this is followed by planting and mulching.
- If a depth of greater than 200 millimetres is needed, the Service "Dial Before You Dig" must be contacted first on 1100 to obtain and carefully examine service plans.
- Avoid cultivating under the "drip line" of existing street trees as this potentially impacts on the health of the street tree due to possible root severance.

During construction the following shall apply:

- Contractors shall work in accordance with all applicable legislation and Work cover requirements.

- If traffic and pedestrian movement around the site is affected by the works, appropriate pedestrian/traffic management shall be implemented.
- No work/delivery vehicles are to impede pedestrian paths and traffic lanes without appropriate traffic management.

Maintenance

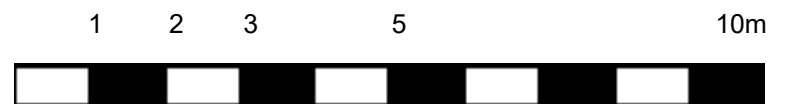
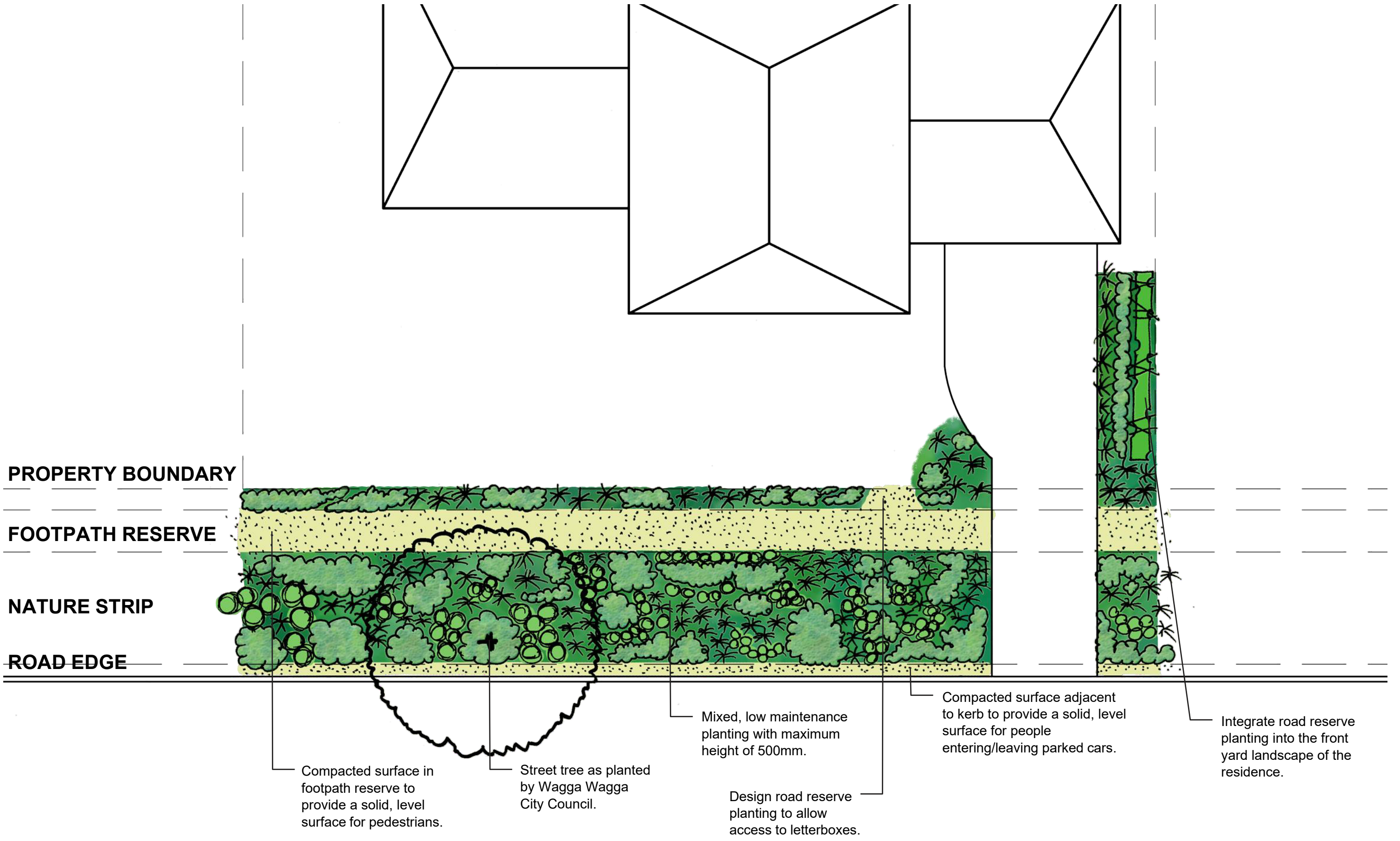
All general maintenance of the nature strip is the responsibility of the adjoining landowner, with the exception of street trees and any concreted walkways, which will be maintained by Council.

- Nature strip soil levels, including mulch, should not be allowed to significantly drop or protrude above the level of the footpath or kerb.
- Ideally, nature strips are gently graded towards the kerb for drainage purposes.
- Foliage must not be allowed to overhang or obstruct pedestrian access to footpaths.
- Residents are to keep nature strips free of litter, and in a generally tidy state.
- Council strongly discourages the installation of fixed irrigation systems. Not only do they tend to use water inefficiently and contribute to urban salinity issues, but if Council, Essential Energy, Riverina Water, Telstra or other service providers need to access the underground services in your nature strip, irrigation systems are often ruined, and are costly for the property owner to replace.

NOTE: Wagga Wagga City Council reserves the right to remove any nature strip beautification or treatment for the purpose of carrying out works, without being liable to compensate the adjoining landowner for any loss in reinstating the nature strip.

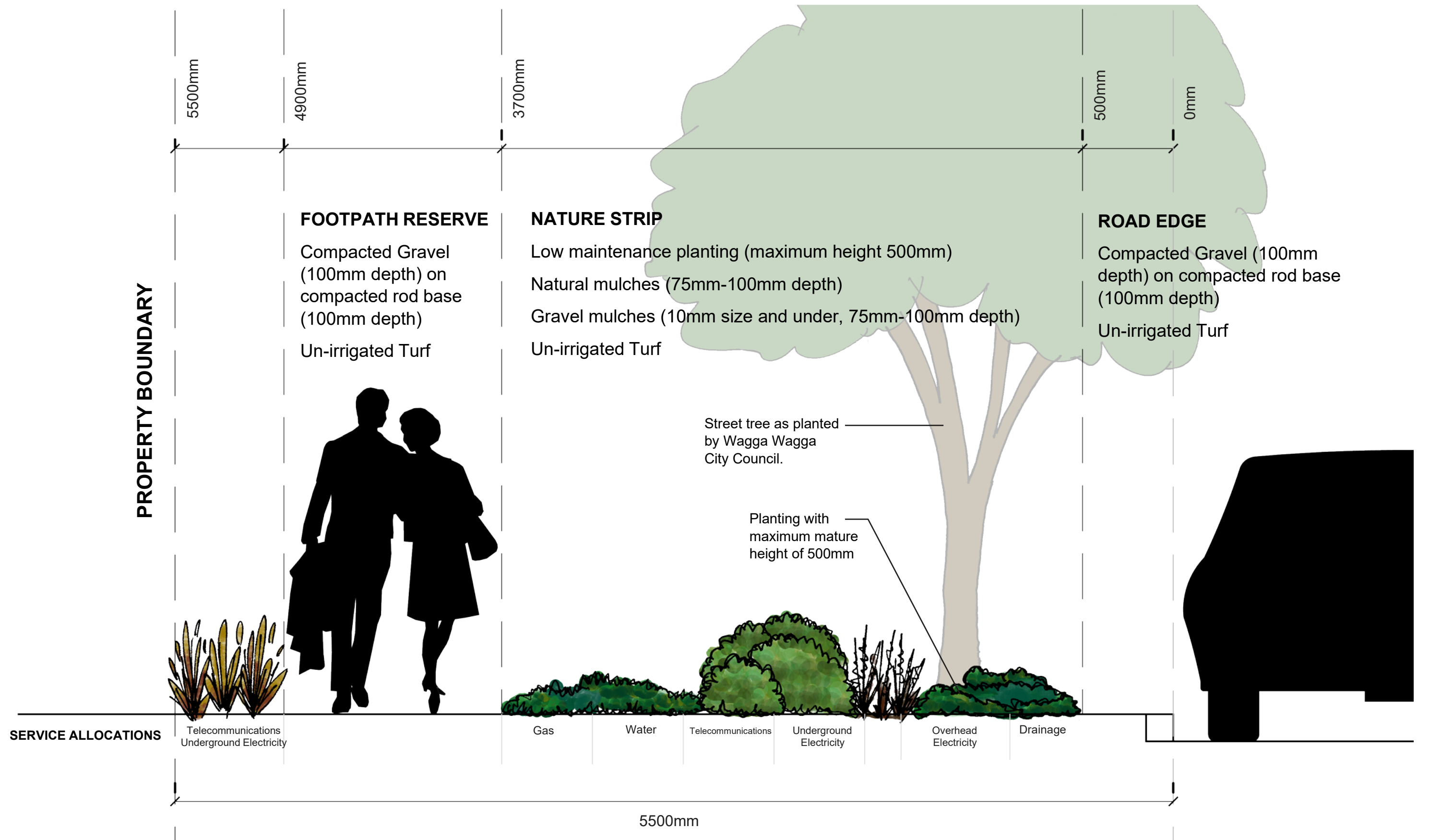
Enforcement of guidelines

Under the Roads Regulation 2008 and the Local Government Act 1993 the adjoining property owner may be fined and or ordered by Council to remove any nature strip treatments which are installed contrary to these guidelines and may be requested to replace them with an approved nature strip treatment. Such work is to be carried out by the adjoining property owner at their own cost.



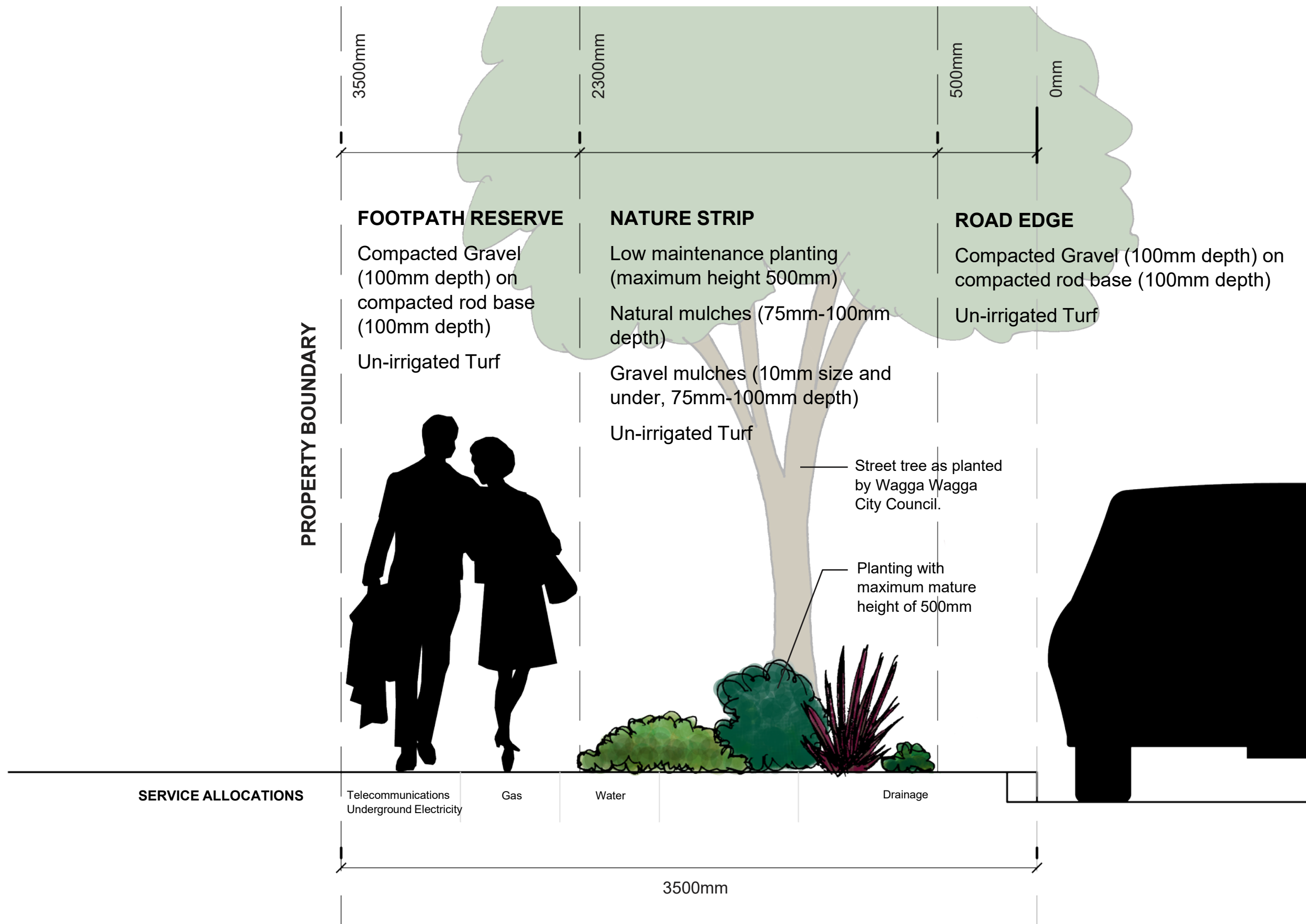
LANDSCAPE CONCEPT

WATERWISE NATURE STRIPS



ROAD RESERVE – 5.5 METER SETBACK

WATERWISE NATURE STRIPS



ROAD RESERVE – 3.5 METER SETBACK

WATERWISE NATURE STRIPS



APPENDIX A – Recommended species list

The following table is a starting point to indicate the plant types that fit the guidelines: ie less than 500mm in height and either water wise, native or salt tolerant. Other species may be used if they meet these criteria. The Riverina Water website has a link to an interactive online plant selector of waterwise species.

Plant Name (Common, Scientific)	Plant Name (Common, Scientific)
Blue Bell <i>Wahlenbergia communis</i>	Mat Rush <i>Lomandra longifolia</i>
Blue Flax Lily <i>Dianella sp.</i>	Nasturtium <i>Tropaeolum majus</i>
Blue Margeurite <i>Felicia amelloides</i>	Native Violet <i>Viola betonicifolia</i>
Blue Tussock-grass <i>Poa poiformis</i>	Ruby Saltbush <i>Enchylaena tomentosa</i>
Catmint <i>Nepeta faassenii</i>	Running Postman <i>Kennedia prostrata</i>
Chocolate Lily <i>Dichopogon strictus</i>	Sage <i>Salvia sp.</i>
Climbing Guinea Flower <i>Hibbertia scandens</i>	Seaside Daisy <i>Erigeron karvinskianus</i>
Common Dampiera <i>Dampiera linearis</i>	Shore Juniper <i>Juniperus conferta prostrate</i>
Common Thyme <i>Thymus vulgaris</i>	Short Wallaby Grass <i>Danthonia carphoides</i>
Convulvulus <i>Convulvulus sp.</i>	Snow Grass <i>Poa clivicola</i>
Creamy Candles <i>Stackhousia monogyna</i>	Spider Lillies <i>Nerine sp.</i>
Creeping Boobialla <i>Myoporum parvifolium</i>	Spider Plant, Ribbon Plant <i>Chlorophytum comosum</i>
Creeping Saltbush <i>Einada nutans</i>	Spiny Saltbush <i>Rhagodia spinescens</i>
Dusky Coral Pea <i>Kennedia rubicunda</i>	Statice, Sea Lavender <i>Limonium sinuatum</i>
Dwarf Kangaroo Paw <i>Anigozanthos sp.</i>	Sticky Everlasting <i>Xerochrysum viscosum</i>
Emu Bush <i>Eremophila sp.</i>	Strawflower, Paper Daisy <i>Helichrysum bracteatum</i>
Fan Flower <i>Scaevola sp.</i>	Sun Plant <i>Portulaca grandiflora</i>
Flannel Flower <i>Actinotus helianthi</i>	Swan River Daisy <i>Brachycome multifida</i>
Garden Pink <i>Dianthus</i>	Toadflax <i>Linaria maroccana</i>
Globe Amaranth <i>Gomphrena globosa</i>	Ullaulla Beacon <i>Melaleuca hypericifolia</i>
Grevillea prostrate <i>Grevillea sp.</i>	Vanilla Lily <i>Arthropodium milleflorum</i>
Guinea Flower <i>Hibbertia sp.</i>	Veldt Daisy <i>Osteospermum ecklonis</i>
Happy Wanderer <i>Hardenbergia violacea</i>	Verbena <i>Verbena gaudichaudii</i>
Karkalla or Pigface <i>Carpobrotus sp.</i>	Vinca <i>Vinca sp.</i>
Lamb's Ear <i>Stachys byzantina</i>	Westringia, Rosemary <i>Westringia lucida, rigida, kydrensis</i>
Lippia <i>Phyla nodiflora</i>	Yellow Buttons, Common Everlasting <i>Chrysocephalum apiculatum</i>
Livingstone Daisy <i>Dorotheanthus bellidiformis</i>	

APPENDIX B - Street Trees Street trees in Wagga Wagga

Street trees, on Council land, are assets providing beauty and shade, absorbing air pollution and UV light, moderating wind and temperature extremes and reducing greenhousegases and stormwater run-off.

They soften the visual effects of buildings and power poles, and they also provide a haven for wildlife such as native birds and butterflies. They provide colour and seasonal variations to the street amenity. Property prices are higher in tree-lined streets, especially if they make a complete avenue of the same type of tree.

Who looks after trees in nature strips?

Council's Department of Environment & Community Services is responsible for establishing and maintaining nature strip trees through a number of specially trained staff and contractors.

Wagga Wagga residents are encouraged to care for street trees and nature strip plants, especially during the summer months.

You can enhance the look of your street by watering younger trees and those planted in cut-outs in footpaths. Council has a watering program but is unable to water the newer trees as often as is needed during some of our hot summer weather.

Tying tight stakes around trees can actually harm them by limiting the growth of a supporting root system, reducing trunk thickening and by rubbing and girdling the trunk and branches.

Placement of mulch on the ground around the trunk of trees can be beneficial. It can reduce drought stress and make mowing easier. Make sure that the mulch isn't right up against the trunk as this can lead to collar rot. Do not use a 'whipper snipper' or similar device near a tree trunk, as these implements can cause injuries at a very critical part of the tree.

Residents are reminded that it is an offence to damage or remove trees inside or outside of your property without written approval from Council.

Who plants new street trees?

Each year, a number of new street trees are planted throughout Wagga Wagga. Trees are planted to replace ones that have died, to beautify areas where trees are needed and in streetscape renovation projects.

For enquiries about assessing, planting, pruning, removing or replacing trees on nature strips or other public property, contact Council on 1300 292 442.

Residents must not plant trees on public property or nature strips for the following reasons:

- Species selection can be kept consistent along the street, creating an avenue effect. Council has a system in place whereby tree species selected for particular streets are listed in a computer database to enable future consistency of planting.
- Trees are located at set minimum distances from underground and other services such as street signs, intersections, fire hydrants and overhead powerlines.
- Tree species are selected on the basis of research that they can survive the rigours of street life with a minimum of nuisance effect and appropriate growth habits and responses to pruning.
- Tree planting, pruning or removal may contravene planning controls in heritage or environmental significance overlay areas and may require an application for a planning permit.