

Coastal gardens

A design guide



**GREEN
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Contents

Using this design guide	1
Making changes in your garden ..	2
Selecting and designing a garden area	3
Designing with the local environment in mind	4
Incorporating existing site elements	5
Garden features and ideas	6
Resilient coastal gardens	8
Plants and planting	10
Planting ideas	10
Plant size and placement	13
Choosing the best plants for your garden	14
Sustainable garden materials	15
Bring a garden design to life with an action plan	16
Keeping a garden in good health	17
Garden design resource kit	18
Designing, creating and maintaining your garden in 10 steps	18
Graph paper	20
Plant selections list	21
Action plan	22
Establish and maintain	25
Acknowledgements	28

This guide provides design ideas and gardening tips for people living in the coastal suburbs of Adelaide. Carefully planned gardens that consider the local environment will thrive in coastal conditions, better suit your home and lifestyle, and require less water and maintenance.

Coastal gardens – A design guide is part of a series of gardening guides produced by Green Adelaide.

The other guides are:

- *Coastal gardens – A planting guide*
- *Adelaide gardens – A planting guide*

They are available from

greenadelaide.sa.gov.au/resources



Using this design guide

Whether making a few small changes to a garden or undertaking a major project, this guide helps Adelaide coastal residents living within 5 kilometres of the coast to design and transform a garden to achieve 'garden success'.

What does garden success look like? It's a garden that:

- thrives in local coastal conditions
- suits your home and lifestyle
- needs less maintenance and water
- contributes to a cooler, greener, wilder Adelaide.

This guide can provide a few ideas on coastal garden design or it can be used as a workbook to develop a garden design for your home. It contains the following:

- landscape garden design ideas
- garden design case studies
- planning resources to successfully create and maintain a new garden.

Garden design can be a rewarding process where you create a garden that best suits you and the natural environment.

Be flexible / Be courageous / Have fun



Making changes in your garden

Every household is different. This coastal gardens design guide is flexible enough to support all types of households wanting to make positive changes in their coastal areas.

What do you want for your garden?

Presentation is everything I want a garden with maximum street appeal	I'm busy and don't have time to garden I want a garden that is minimal effort but looks great	The nature lover I want a garden that attracts local wildlife
The nurturer I want a garden for my family and friends to enjoy	The foodie I want to eat fresh produce grown from the garden	The socialite I want a garden that suits entertaining
The accountant I want a garden that looks great with no big spend	The lizard I want winter sun and summer shade	The generalist Generally interested in gardens and gardening

Whichever type of garden you want, research shows that every minute spent gardening is good for physical and mental health and wellbeing.

The best way to design a garden

This guide starts with assessing your local environment to help you choose plants that will be best suited for your garden. It looks at features you may wish to incorporate into your garden before deciding upon plant size and location. Selecting the plant species is the last step of this garden design process.

Planning before buying plants will help you choose plants that will be best suited to your environment and help you create the type of garden you wish to achieve.

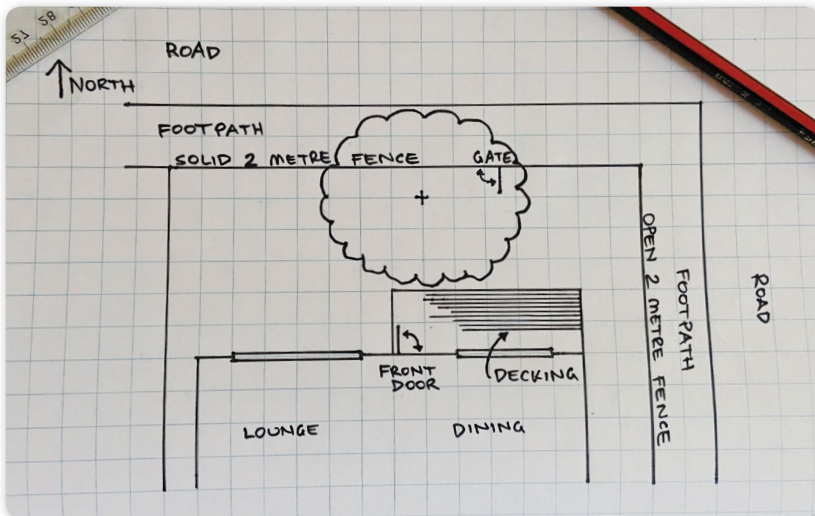
Selecting and designing a garden area

Take the time to think about your coastal property and where you would like to improve or transform your garden. For example, this may be an entire front or backyard, or a small, specific area. You might choose to change an existing garden or you may be starting with a blank canvas.

Most successful gardens start with a plan. The example sketch below uses graph paper, so the design plan is to scale. The scale for this plan is one grid square on paper equals one metre squared (1m x 1m) on the ground.

The plan below is for a front garden and includes a north direction symbol, the house (including main doors and windows), boundary fence, footpath, road and features that will be kept in the new garden – in this example, the decking and the mature tree.

Action: Use the graph paper provided on page 30 of this guide to draw a scale plan of your chosen garden area. Remember to include the existing garden features you wish to keep within your new garden.



CASE
STUDY

Designing with the local environment in mind

Every garden is unique with a particular soil type, plants, neighbours, areas where nothing seems to grow, or areas where everything overgrows. Understanding and tailoring a garden to local environmental conditions is the key to garden success.

This example shows some of the local environmental conditions to consider.



Knowing the site's challenges and opportunities is important for developing a design. The table below lists site elements that can be relevant for many existing gardens.

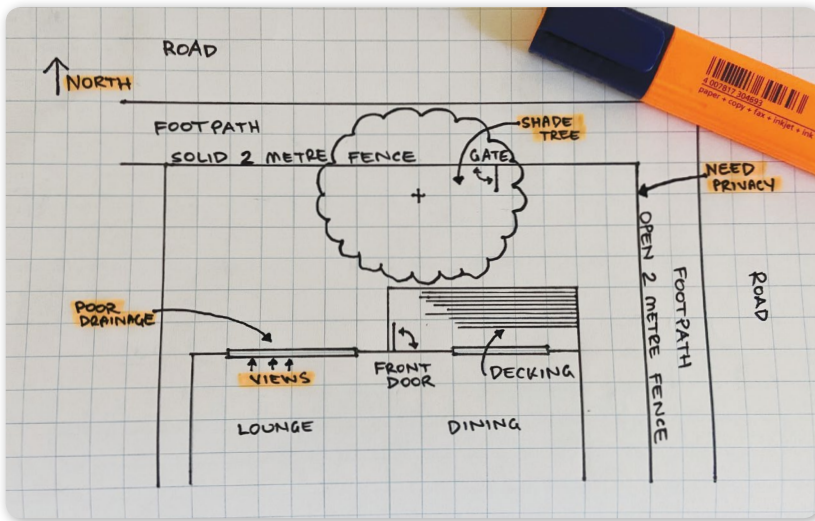
Examples of garden site elements to consider:

Existing plants	Built structures (e.g. garages and neighbouring buildings)	Reusable materials (e.g. rocks, paving)
Northerly aspect	Cool sea breezes	Shady and sunny areas
Slope	Soil type (e.g. contamination, sandy, repels water)	Drainage and stormwater runoff
Views and vistas	Privacy	Strong winds

Action: Circle the elements in the table above that might be relevant in your garden.

Incorporating existing site elements

This example plan lists the site elements around the edge with arrows pointing to where they are relevant in the garden. Understanding these elements is an important step in creating a new garden design that solves current garden problems and works with the site conditions.

CASE
STUDY

Now that you've decided on your site elements, list them around the edge of the plan with arrows pointing to the relevant areas within your garden.

Garden features and ideas

Garden features and ideas can support the lifestyle and interests of your household.

The table below lists some of the new garden features that could be included in a garden design.

Food plants	Play and learning areas	Lawn
Screening (plants or built)	Storage	Outdoor entertaining
Garden sitting area	Utility areas (bins and clothes lines)	Swimming pool
Ponds and rain gardens	Native plant garden beds	Bridges and lookouts
Rainwater tanks	Pathways and bridges	Bird baths
Artistic feature	Chicken coop	Trees

Action: From the table above, circle garden features that you want for your garden – be realistic; sometimes less is more!

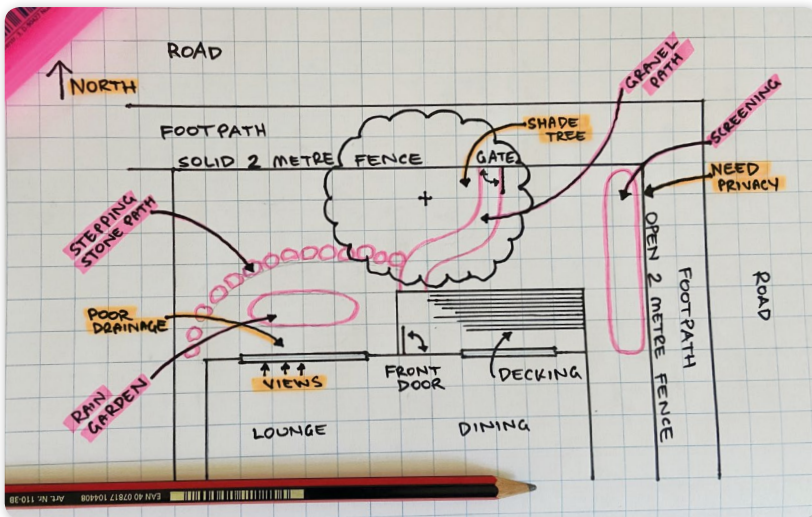
Get creative!

Gather garden design ideas from magazines and books, online (e.g. Instagram), childhood memories, favourite places, the garden down the street, or base it on a couple of key plants that grow well in your area.

This example plan includes loosely placed garden features, some of which link to the existing garden elements. For example, a dry creek bed has been positioned in an area with poor stormwater drainage.

Selected feature labels appear around the outside edge of the plan with a pointer to each feature location, so the garden plan area remains uncluttered.

It is important to allow for connection between garden features. A walk through your garden site to visualise new features can help you position them carefully and ensure they work with surrounding areas.

CASE
STUDY

Now you've decided on your garden features, draw them and label them around the edge of your plan.

Straight lines in a garden – for example, paving, pathways and lawn areas – provide structure and can set the scene for a more formal or contemporary style garden. Curved lines can create a more natural, flowing and relaxed setting and work well with a greater variety of plants.

Resilient coastal gardens



Trees – nature's home cooling system

Trees can bring great value to a garden. They attract birds, provide oxygen and shade, and can naturally cool gardens and homes over the hotter months. If designing a garden with feature trees, ensure there is enough room for the root systems and branches. A smaller, carefully positioned tree may be better for a small garden or preventing solar panels from being shaded. There are many native trees well suited to coastal environments. Local plant nurseries and Green Adelaide's *Coastal gardens – A planting guide* provide helpful advice for finding the perfect tree.

Rain gardens – a low maintenance, cost-effective water feature

Rain gardens are appearing all around Adelaide, diverting valuable rainfall from hard surfaces and stormwater drains to garden beds and back into groundwater. A variety of styles are appearing in home gardens to turn a problem wet area into an attractive garden feature. Find out more about designing rain gardens at www.environment.sa.gov.au/goodliving/posts/2018/02/how-to-make-a-raingarden.



Lawn quality, not quantity

If including lawn in a garden design, focus on quality over quantity.

Minimising lawn areas and selecting drought-tolerant varieties saves water and can make it easier to maintain a healthy lawn. A healthy lawn can function as a natural air conditioner, keeping gardens up to 30 per cent cooler than other sun-exposed surfaces, like concrete.

Healthy lawn tips:

- Prepare all new lawns with at least 100 millimetre thickness of sandy loam to support healthy lawn growth.
- Be water smart; water in the morning or evening to reduce evaporation.
- Feed lawn occasionally with a slow release organic lawn fertiliser.
- Don't mow too low in summer, as a longer lawn will insulate from the sun.
- Sandy soil can sometimes repel water, so use a wetting agent to improve soil moisture uptake.
- Aerate compacted lawn with a garden fork or lawn aerator.



Plants and planting

Planting ideas

Thirsty plants together and up front

‘Hydrozoning’ is a method where plants of a similar water requirement are planted together. This way, targeted irrigation can occur, rather than over-irrigating the garden to support a few thirsty plants. Australian native plants generally use less water, and native plants naturally growing in your local area can be very drought tolerant. Bring thirstier plants close to the house in areas you use the most. This will make frequent hand watering easier and bring these plants into the foreground to give your entire garden an overall lush, cooling effect.



Flexible plants for high traffic areas

Choose strap leaf plants, like grasses and sedges for high traffic areas such as driveways, pathways, and the edges of lawns. In these areas, strap leaf plants will sway rather than snapping when impacted by pets, balls, car doors and shopping bags.

Many species of grasses and sedges suit coastal environments. Local plant nurseries and the [*Coastal gardens – A planting guide*](#) can provide good advice for finding the right plant for these areas.



Garden areas to screen and views to create

Plants that grow to a mature height of between 2 to 4m can be ideal for protecting gardens from coastal winds, screening for privacy, softening fences and blocking undesirable views. Other garden areas may be best to keep more open, to allow views and cooling sea breezes. Maintain views by avoiding medium-sized shrubs, choosing trees with bare trunks, and planting low growing shrubs and groundcovers beneath them.

Garden designers use the term 'borrowed landscape' when incorporating a garden view or feature in a neighbouring property, for example, a view of a neighbour's tree.



Plant variety or uniformity?

The variety of plants chosen for a garden influences the garden style. For example, mass planting with one or two plant species can add impact to a garden, make it feel more contemporary, and accentuate the quality of a plant. On the other hand, gardens with lots of plant variety can have many contrasts and areas of interest while providing more opportunities for native wildlife to feed and shelter.



Odd or even plantings?

Garden designers often select an odd number (usually 3 or 5) of the same plant, slightly offset, to create a visual balance. Even numbers of plantings of the same type can be important for achieving symmetry, which works particularly well if you have a symmetrical house or wish to create a more formal, structured garden.

Favour native plants

Coastal native plants are suited to growing in soil with low nutrient requirements and have a good tolerance to drought and some coastal exposure. Favouring native plants within your plant selections will generally make gardening easier as there will be fewer soil additives, and less watering and maintenance required than for many exotic plants.

Some garden plants can become garden escapees, easily spreading into areas where they can do environmental damage. The *Coastal gardens – A planting guide* can provide good advice for avoiding garden escapees and using alternative plant species.



Plant size and placement

Both plant height and width are important to consider when designing a garden. Designers will often select the size and shape before deciding on a plant species. Drawing circles on a scale plan to mark the locations of new plants is helpful for deciding on sizes.

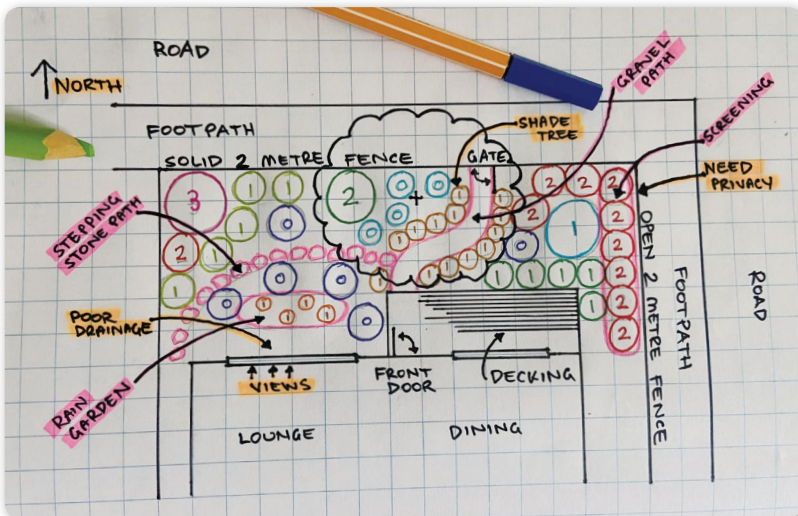
In the plan below, circles have been drawn to show the width of the plant. For example,

a larger circle at 2 graph squares wide is the equivalent of a 2 metre wide shrub. The circles can then each be given a number which indicates the desired height of the plant. For example, a circle with a '2' indicates a plant with a mature height of 2 metres, whereas a circle with a '0' indicates a very low plant, like a groundcover.

Width of the circle shows the mature plant width.



Number in the circle shows the mature plant height.



CASE
STUDY

Draw circles to map out the width of the plants in your plan. Write the height of the plant within each circle and use different colours to show different types of plants.

Choosing the best plants for your garden

Once plant proportions have been determined, you can consider other attributes, such as shade tolerance, water logging and coastal winds. Other qualities you may want to consider are flower colour, foliage type, whether you want to attract birds and/or butterflies, and if you want a 'formal' or 'natural' appearance.

An example plant selection list (your shopping list) is provided below. Each different plant icon from the plan has been transferred onto the list along with plant numbers and special 'nice-to-have' features.

The plant selections sheet on page 21 of this guide can be used as your plant shopping list, helping you make good choices when researching and buying plants.

Plant Selections List			
Plant list			
Symbol	Plant name	Number	Tree /shrub /ground cover /grass
⊙	CREeping BOOBIALLA (MYOPORUM PARVIFOLIUM)	6	GROUND COVER
⊙		4	GROUND COVER - SHADE
①		5	SHRUB - BIRD ATTRACT.
①		4	SEDGE / REED - WATER LOGGING
①		13	SEDGE / GRASS - SHADE
①		5	SHRUB
①		1	SHRUB
②		10	SHRUB - SCREENING
②		1	SHRUB - SHADE
③		1	SHRUB - DISTINCTIVE

CASE
STUDY

Sustainable garden materials

Be aware that some landscaping materials are not sustainably sourced and can harm the environment they were taken from (for example, rocks may have come from an area where they created an important natural habitat). Other materials can cause harm by being brought into your garden – such as soil full of weed seeds. Carefully select garden materials like decking, soil, sand, mulch, pebbles and rocks.

The following key questions can reveal whether a product is environmentally sustainable. Always ask suppliers:

- 1 How was it sourced?** – to help determine if the product is good quality and sourced in an environmentally friendly way.
- 2 Is there a local alternative?** – the more local the product, the less energy required for transportation.
- 3 Is there a recycled option?** – the recycled garden products market is growing.



Bring a garden design to life with an action plan

Turning garden design ideas into reality can involve many tasks and may take months or longer. Developing a prioritised action plan for implementing your garden plan is important for staying on track, planting the right plants in the right places and avoiding potentially costly mistakes.

Use the action plan on page 22 of this guide to support your garden transformation process.



Keeping a garden in good health

Looking after a newly-planted garden is important for establishing plants as they will generally require more water at the beginning than when established. The more work you put in early to water plants and control weeds, the greater the likelihood of long-term garden success.

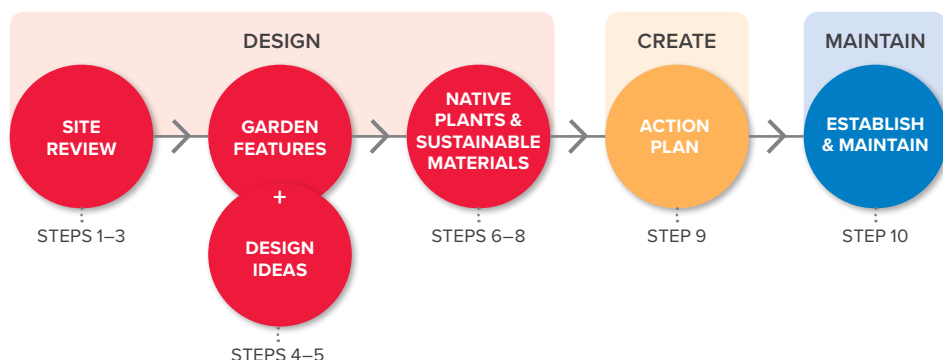
The establish and maintain section on page 25 of this guide will help you keep your new garden growing strong.

Once a garden is semi-established – usually achieved after a year, when weeds are reducing and plants have good growth – it will then require ongoing maintenance. A garden may be low-maintenance, but it will never be no-maintenance. The more in tune a garden is with the local conditions and environment, the less maintenance it will require.



Garden design resource kit

Designing, creating and maintaining your garden in 10 steps



Develop your plan by following the garden design process in this guide, as listed below. The graph paper provided is the starting point for designing your garden. It is recommended you use a pencil for your garden design sketches so you can erase lines that you wish to change. The templates and case studies will guide you through the garden design process.

Garden design process

	Steps	Task	Page
CASE STUDY	1	Once you have selected an area to design, prepare a simple sketch of the chosen area on graph paper (supplied).	3 and 30 (template)
	2	Circle garden site elements that may be relevant in your garden.	4

	Steps	Task	Page
CASE STUDY	3	Once you've decided on your site elements, write them around the edge of the plan with arrows pointing to the relevant areas within your garden.	5
	4	Circle garden features that you would like for your garden.	6
CASE STUDY	5	Once you've decided on your garden features draw them and label them around the edge of your plan.	7
CASE STUDY	6	Map out the size of the plants you need on your plan before moving on to select plant species.	13
	7	Use the plant selections shopping list to assist in making the right plant selections at plant nurseries.	14 and 21 (template)
	8	Select environmentally sustainable garden materials by asking suppliers the three questions.	15
	9	Structure your garden transformation process to turn your plan into reality.	16 and 22 (template)
	10	Establish your new garden and maintain it in the long term.	17 and 25 (template)

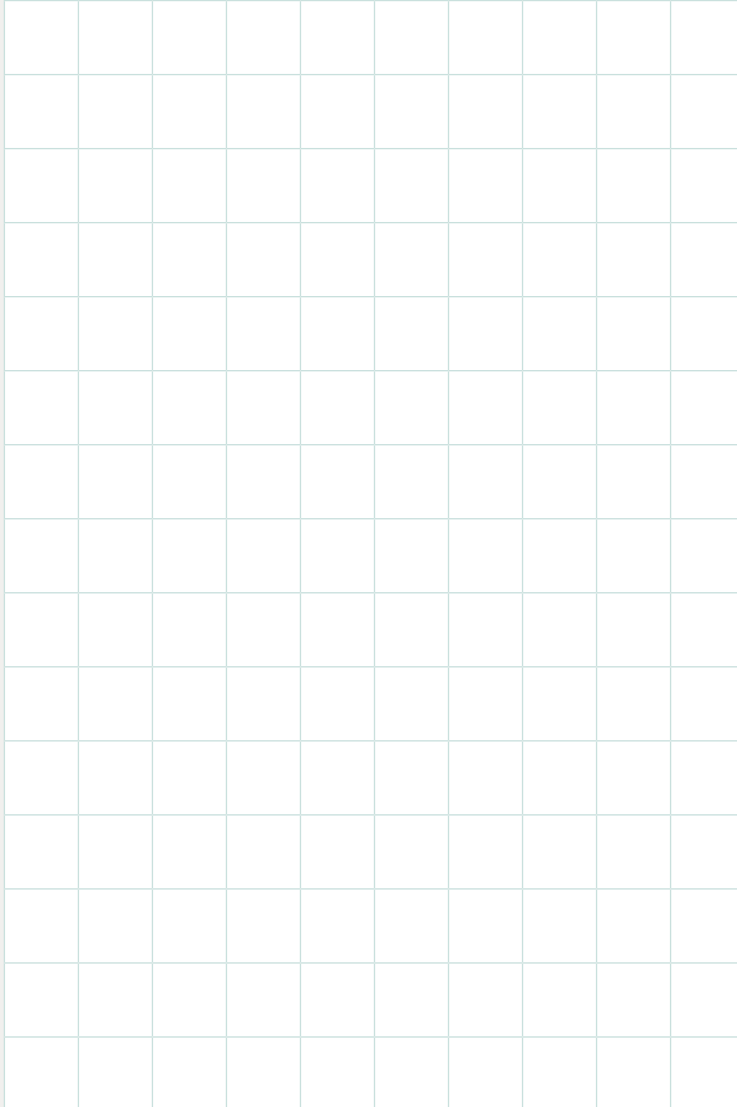
Graph paper

Please use the graph paper (in the back pocket of this booklet).

Scale: 1 square = 1m x 1m

It is important to measure the size of the area you want to improve or transform.

Refer to Step 1 on page 3.



Plant selections list

NATIVE
PLANTS &
SUSTAINABLE
MATERIALS

Plant list			
Symbol	Plant name	Number	Tree / shrub / ground cover / grass
Example	Ruby saltbush (<i>Encyleana tomentosa</i>)	4	Shrub

Action plan

This action plan is designed to guide the on-ground implementation of your garden design. Tick the boxes that are relevant to your garden.

STAGING: Will you be undertaking your garden transformation in staged areas?	
	Review your budgets, timing and priorities to determine if you will undertake the garden project in stages.
	Review the order of staging to ensure later stages are accessible and won't interfere with initial garden stages.
SITE PREPARATION: What stays, what goes, and what garden infrastructure is required?	
	Review garden area to confirm plants and structures that will be kept or removed. Weeds will likely need their root systems removed and unwanted lawn areas need to be treated so they aren't alive when soil improvement and planting takes place. Remember that most herbicides only work when unwanted plants are relatively green and healthy.
	Mark out new garden beds, lawn, paving and built structures.
	Set aside existing garden materials for re-use (rocks, pavers, birdbaths, gravel, ponds).
	Is earthmoving, manual or mechanical required? (bobcat, dingo, excavator).
	Power, garden taps, stormwater pipes, irrigation infrastructure is typically installed at this stage, ensure they comply with relevant standards and codes.
NOTE: Unless your existing soil isn't contaminated then keep as much onsite as practical. Soil removal costs can be expensive and sandy or clay soils can be improved. You may also want to consider mounded areas to add interest utilising retained soil.	

BUILT STRUCTURES: Will your garden have new paving or other built structures?	
	Generally, built structures (such as shade structures, pathways and paved areas, lawn edging, bridges, ponds) are undertaken at this stage. Ensure they comply with relevant standards and codes.
NOTE: Some soil may need to be brought in first if new garden structures block access to a garden bed.	
SOIL: Do you need to improve existing soil or bring in new soil?	
	Undertake a soil test to better understand your soil. Generally coastal soils are sandy with very good drainage, limited organic matter, are alkaline, can be saline, and can repel water (hydrophobic). Adelaide's coastal plants have adapted to survive in this soil type, but you may still you want to improve the growing conditions for native plantings.
	Your coastal garden soil can typically be improved using an organic compost to help build the soil and retain soil moisture. Ensure the compost is from a reputable retailer and has low levels of phosphate and nitrate. Generally, compost can be spread at 10–20 mm thickness and then mixed into the existing soil. If the soil still remains hydrophobic you may require a soil wetting agent.
	Purchase new soil through a reputable retailer to ensure there are no weed contaminants or an imbalance of nutrients. New soil needs to be low in phosphate and nitrate levels. Rather than spreading new soil across the entire garden bed, just add new soil into the base of each planting hole. Then blend the new soil with existing soil so there is a gradual soil transition for your new plantings.
	Lawn areas require a high quality base of a sandy loam soil to at least 100 mm depth to support healthy growth.
NOTE: Compost is a soil improver and is to be used sparingly and blended thoroughly with existing soil.	

PLANTING:

- Keep all the plants in their pots and move around the garden bed to determine the exact layout.
- Dig a hole at least twice the size of the plant pot, you may wish to add some new soil to each planting hole.

Optional: mix in some new soil to each planting hole and add a small quantity of native plant slow release fertiliser and/or water granules at the base of the dug hole.

- Remove plant from pot and gently tease the root ball as required.
- Plant so that a shallow 30 centimetre wide soil bowl is formed around the plant to draw water towards the stem.
- Ensure soil is firm and the soil level is not above or below the level of the soil of the potted plant.
- Water plants immediately after planting.
- Double staking trees and using flexible ties may be required in the short term.

IRRIGATION: Depending on the plants in your garden, budget and the time you are prepared to spend handwatering.

Install drip line irrigation for the garden beds keeping the drippers above the soil level and below the mulch level. Seek specialist advice.

Install appropriate lawn irrigation if required. Seek specialist advice.

MULCHING:

- Use mulch from a reputable source to ensure that it is well composted and that it is not contaminated with weeds.
- Keep the mulch layer separate from mixing with the soil and apply at 100 mm thickness.
- Taper mulch down to the base of the plant stem to ensure that plant stems are not covered by mulch.

Establish and maintain

ESTABLISH
& MAINTAIN

This guide will help you establish your new garden and keep it flourishing in the long term.

IRRIGATION AND WATERING

Native plants generally require significantly less water than other plants, especially once established. If you have decided to use an irrigation system for native plants, it will only be required during the warmer months. Once established, garden beds with irrigation systems require no more than fortnightly watering in spring and autumn and once per week in summer. No irrigation is required in winter. Regardless of irrigation systems, always water plants immediately after planting and provide a good hand water a few times within the first months.

MULCH

It is important that the mulch layer remains separate to the soil layer to suppress weeds and retain soil moisture. If further planting occurs or soil improvers are added, be sure to move mulch aside from the area being worked upon. You may need to sweep dislodged mulch back into the garden beds in the short-term period before it fully settles (birds may initially dig at it also). Top up mulch as required – a minimum depth of 75 mm is recommended.

SOIL

Coastal native plants have a low nutrient requirement. The only soil additives that you may want to use in the area immediately surrounding the plants could include a root growth stimulator or slow release native plant (low phosphorus) fertiliser. Keep soil additives separate from the mulch layer. Use fertilisers at recommended rates and avoid excessive use that may lead to leggy plant growth.

PRUNING

As a general rule, prune plants after flowering to promote dense growth and abundant flowers in the next flowering season.

Prune or slash native grasses when seed heads have dried to encourage new growth and appearance for the following season. Most grasses and strap leaf plants, such as *Dianella brevicaulis*, can be pruned down to almost ground level every 2–3 years if they are starting to look untidy, to reinvigorate fresh new growth.

STAKING AND TREE GUARDING

Tree guards can be useful at highly exposed sites, where wildlife may eat new plants or at sites with weed infestations. Triangular tree guards tend to be most effective. Generally tree guards are removed after one year or when growth of a plant is inhibited by the guard. Tree staking can be especially important for more mature plantings and trees. Stake trees loosely using adjustable ties and two stakes positioned either side of the stem. Trees are generally staked for a period of one to two years with stake adjustments made as required. Staking a plant in a rigid manner over long periods of time may inhibit the strength and balance of the tree in the longer term.

WEEDING

Hand weeding is often the most suitable method. If using herbicides for invasive plant species, follow directions closely – never spray herbicide in windy weather or if rain is forecast, and ensure that the plants you want to keep do not receive any overspray.



Acknowledgements

Text by Nick Fewster, Urban Sustainable Landscapes.

Green Adelaide gratefully acknowledges the photographers who donated their images for this guide: TG Landscapes (page 16), Nick Fewster, Green Adelaide, Claire Lock, Catnik Design Studio.

Cover image and garden design by Catnik Design studio.

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Graph paper enclosed here

Green Adelaide

Department for Environment and Water
81–95 Waymouth Street, Adelaide SA 5000

Phone: (08) 8463 3733

Email: dew.greenadelaide@sa.gov.au

www.greenadelaide.sa.gov.au

 facebook.com/GreenAdelaide

 instagram.com/GreenAdelaideSA

#GreenAdelaide



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Green Adelaide was established by the South Australian Government to help manage urban densification and climate change impacts on metropolitan Adelaide. Green Adelaide is working to create a cooler, greener, wilder and climate-resilient city by partnering, funding and supporting aligned organisations and communities, as well as delivering on-ground iconic projects to establish Adelaide as Australia's first National Park City.

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May 2022

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