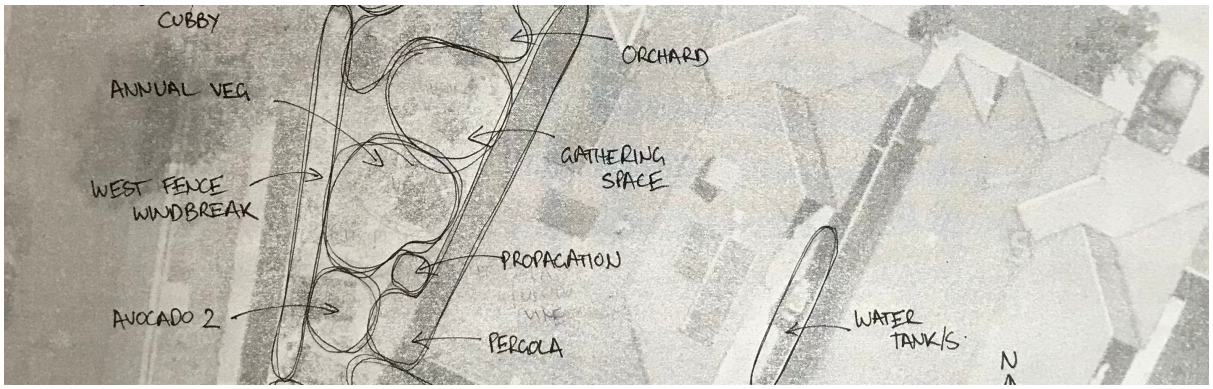
An introduction to designing your garden



There's a lot to think about when planning a garden! Many of us are keen to get stuck in and start planting, but taking the time to properly assess your needs and the site will help you find the optimal location for each element. You will enjoy the space more, increase your harvest, and avoid wasted materials, expensive mistakes and missed opportunities. Whether it's a small balcony or a larger backyard, gardens of any scale can benefit from a clear design process.

The process I use is based on permaculture, which is an ethically-based design framework to evolve systems that protect and restore ecological health while providing for human needs. The permaculture design process describes ethics to support our shared interests, principles that offer lessons from systems that work well, and a clear design process. It helps us think about things in the right order, and find clever connections so we can work with, rather than against nature.

Develop your garden vision and wishlist

The first step is to reflect on why you want this garden. For example, do you want to teach kids where food comes from, grow as much fresh food as possible to keep food costs down, or connect to nature and restore habitat for local wildlife?

Describe your ideal garden. What does it look like? How does it feel to live in? What's an ideal day in the garden? How would you like to experience it once complete?

Use these insights to detect and articulate your own unique goals and write a vision statement. Focus on desired functions and feel (the vibe!), rather than details of form (specific elements). Use present, active tense to make the garden feel like a reality and check if it feels right (e.g. "My garden is" not "My garden will be").

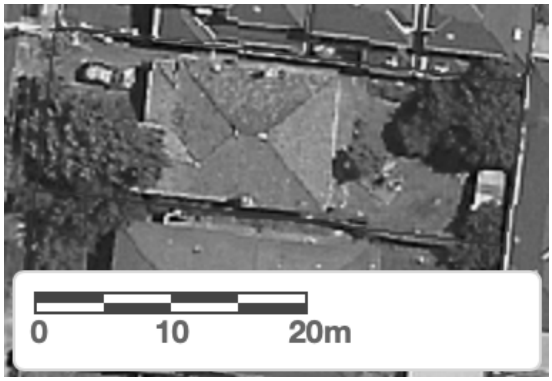
Next consider your time, skills and experience for gardening, long term plans, budget and other resources, aesthetic tastes, what will stay/go, and any other limiting factors.

Decide what elements do you need and want in the garden. Wishlist elements may include a vegie patch, fruit trees, herbs, water tank, greywater, chickens, habitat garden, pond, pergola, social area and kids play area. Don't forget practical things like bike storage, clothesline, and a compost system.

Create a basemap

Basemaps are a place to record site analysis observations and a canvas to draw your design. Ideally basemaps are in 'plan view' (overhead) and to scale. Aerial photography from platforms like Nearmap is high resolution and up to date but behind a paywall. While low resolution and sometimes outdated, a free alternative are the aerial images from Vicmap/Mapshare (see instructions in box). You can also get a measuring tape and draw up your site by hand if you prefer!

Create a simple basemap in Vicmap
mapshare.vic.gov.au/mapsharevic/
Enter the property address, click 'Vicmap cartographical' then 'Vicmap aerial imagery', then zoom out until photography layer is visible
Close sidebar to remove blue highlight box.
Move image to be close to scale bar. North is to top of page. Use snipping tool to copy property image along with scale. Paste into a document, increase size without changing proportions, format picture to increase transparency and change to black and white. You can print out and use a window during daylight hours to trace a line drawing if desired.



Site analysis

(Hint: spend most of your time here)

Mark the following observations on your basemap:

- Directions of sun and bubbles to show sun/shade patterns in summer and winter (e.g. full sun all year, deep shade all year, full sun summer and part sun in winter)
- Directions of hot and cold winds, any wind tunnels or wind breaks
- Useful or problematic microclimates (heat banks, reflection etc)
- Views (wanted and unwanted)
- Direction of slope and any notable flat(ish) or steep areas
- Existing tap, downpipe, drain and tank locations
- Greywater sources (shower, bath, clothes washing machine)
- Access, paths, storage and workspaces
- Utilities (underground and overhead pipes and wires etc)
- Existing major plants and likely root competition areas, any major weeds
- Animals including movement and habitat (domestic, wildlife, pests)
- Soil types and potential sources of contamination
- What does/doesn't feel good? What is/isn't working?
- Anything else that could be relevant

Conduct basic desktop research to complement your onsite observations:

- Determine your bushfire risk: cfa.vic.gov.au/plan-prepare/bushfire-basics/am-i-at-risk If you are in an area prone to bushfire, follow CFA Landscaping for bushfire advice
- Free service maps from Before You Dig Australia: byda.com.au
- GardenSafe soil testing program at EPA Victoria: epa.vic.gov.au/gardensafe
- Learn about traditional owners and check if you are in an area with aboriginal cultural heritage sensitivity: https://achris.vic.gov.au/#/onlinemap
- Find out your bioregion, and learn about indigenous plants and animals (ask your local council)

Create a summary of your most important site analysis information to refer to during design development.

Concept design

Revisit your wishlist and reduce complexity by grouping elements that will go together. Put your wishlist into helpful order by starting with things that are hard to change (e.g. movement of water) and work your way down to things that are easier to change (e.g. location of compost bin). Often a helpful thinking order looks something like this:

Water (e.g. taps, tank, greywater)
Structures (e.g. pergola, shed, clothesline)
Access (major paths)
Plants (e.g. vegies, fruit trees, habitat garden)
Animals (e.g. chooks, bees)

Create your design by making connections between your vision, site analysis, and the elements. Think about what each element needs and produces. How much attention does each one require? Can any serve multiple functions?

For example, can you place the evergreen fruit trees where they will create a windbreak from cold southerly winds in winter, while screening an ugly fence and combining with a chook run to provide a sheltered area for the chickens, while fertilising the fruit trees and cleaning up fallen fruit to manage pests?

When you have placed everything on your wishlist, check the vision statement. Does your design bring it to life? Is living that vision possible (even inevitable!) in your design? Check your site analysis. Does it fit with or respond to all of your observations? Finally, check it out onsite and try marking it out on the ground and even mocking up with stakes for trees etc. Does your design make sense when you walk through the space?

Progress to detailed design

Detailed design can include:

- Dimensions, material choices and quotes for tanks, sheds, chook coops, vegie beds and other infrastructure
- Specific placement, numbers and species/varieties of perennial trees and shrubs. Position trees first, then shrubs and finally smaller plants
- Costing of each element to check against the budget

Further detailed design is often best done in stages, so you can observe and interact and respond to new learning.