

DEEP SOIL AREAS, PLANTING AREAS AND CANOPY COVER

What is a deep soil area?

A deep soil area is a soft landscape area on a lot with no impeding building structure or feature above or below, which supports growth of medium to large canopy trees and meets a 1 metre x 1 metre (1m²) dimension. Deep soil areas exclude basement carpark, services, swimming pools, tennis courts and impervious surfaces.

What is a planting area?

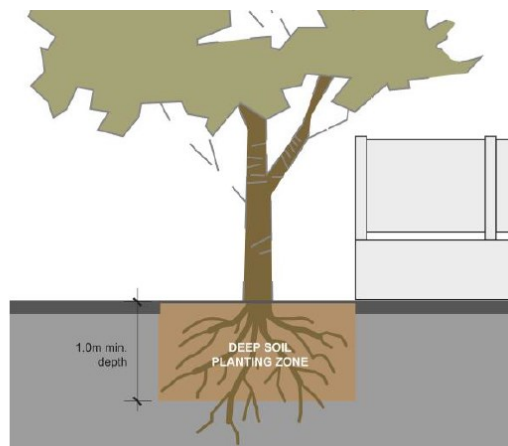
A planting area is an area with a minimum soil depth and dimension of 1 metre (1m³) that supports growth of medium to large canopy trees.

What is a soft landscaping?

The R Codes Volume 1 defines soft landscape as: any landscaped area with a minimum soil depth of 300mm that contains in-ground planting and **excludes** removable planter boxes/pots and permeable paving areas. Turf is included.

What is the difference between a deep soil area and a planting area?

The difference is that a planting area may be located on a structure, whereas a deep soil area may not have any building above or below it.

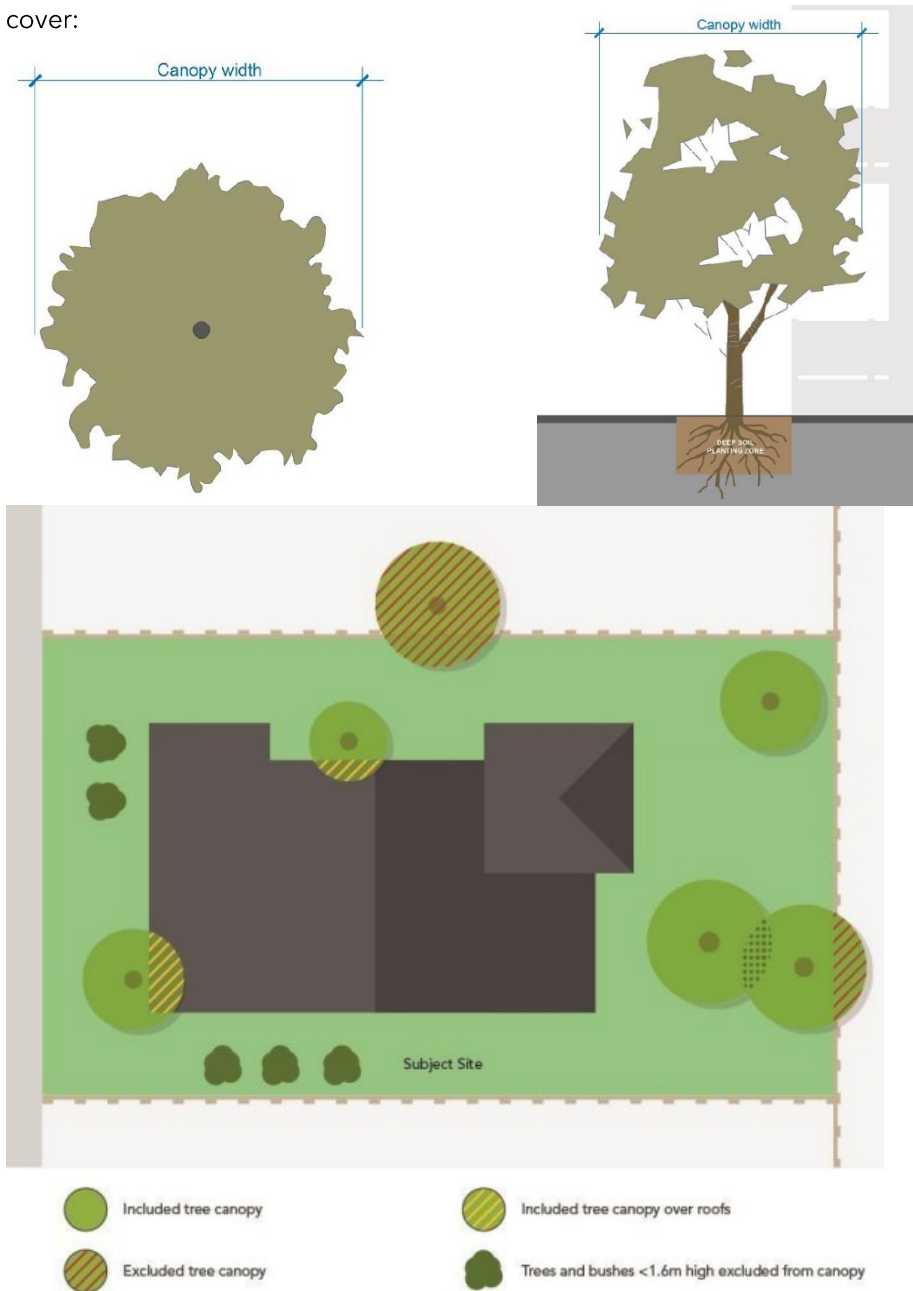


What is canopy cover?

Canopy cover is the land area covered by tree crowns (branches, leaves, and reproductive structures extending from the trunk or main stems) from trees located within the subject site, excluding any area that falls within an adjoining privately owned lot. It is calculated using the canopy width of a tree species at full maturity. Where overlapping occurs between the tree canopies, the site's total canopy cover is the total land area covered by tree crowns, not the sum of the canopy cover of each individual tree.

Table 1 at the end of this sheet lists species of trees suitable within the City of Vincent, and provides information on the area of canopy cover provided by each type of tree at maturity.

How we assess canopy cover:



Why are deep soil areas, planting areas and canopy cover important?

Effective landscape design is integral to creating sustainable systems where buildings and landscapes work in harmony within an ecological context. It involves the protection and enhancement of existing natural features and ecosystems, as well as the restoration of lost ecological functions.

This design philosophy considers a multitude of environmental factors, including water and soil management, microclimate, and habitat preservation, while also addressing social, cultural, and economic aspects. The approach combines both hard and soft landscaping elements to forge spaces that are not only functional and resilient but also foster community identity and enhance the streetscape. Moreover, it emphasises the importance of maintaining urban tree canopies, advocating for the retention of existing trees and the strategic planning of new canopy cover to support long-term ecological balance and community well-being.



When are deep soil areas, planting areas and canopy cover required?

Deep soil areas, planting areas and canopy cover are required to be provided in accordance with the deemed-to-comply requirements of the City's Policy No. 7.1.1 – Built Form (Built Form Policy) or where applicable, Residential Design Codes Volume 1 (R-Codes Volume 1 – Part B or Part C) or Volume 2 – Apartments (R-Codes Volume 2 – Apartments).

The types of developments that will require the inclusion of deep soil areas and canopy cover are:

- Development applications for new dwellings (a single house, grouped dwelling, multiple dwelling);
- Development applications for new commercial or mixed-use building; and
- Development applications for any additions or alterations to all buildings.

What are the requirements for my development?

The requirements for each type of development vary depending on the type of development proposed and the Built Form Area and the R Coding of your development site:

R Codes		Single Houses	Grouped Dwellings	Multiple Dwellings <i>(includes dwelling components of mixed-use developments)</i>
Volume 1	Part B	R40 and below	R25 and below	R10 to R25
	Part C	R50 and above	R30 and above	R30 to R60
Volume 2		N/A	N/A	R80 and above including R-AC

For Commercial Developments, please refer to Volume 3 of the City's Built Form Policy.

The City's Built Form Policy also includes landscaping provisions for residential development. The relevant Volume of the Built Form Policy is as per the R Codes, in the table above, with the Section depending on the Built Form Area your property is allocated under the policy.

R Codes Part B – Deemed-to-Comply Requirements (Single House & Grouped Dwelling)

In accordance with the above table, the standards against which the City assesses R Codes Part B applications are:

- R Codes:
 - Minimum one tree within a 2 metre x 2 metre planting area to be provided per dwelling;
 - No more than 50 per cent of the street setback area to consist of impervious surfaces;
- Built Form Policy:
 - 12% deep soil to be provided per site, with a 1m minimum dimension;
 - 30% of the site area is to be provided as canopy coverage at maturity.
 - Where open air car parking is proposed, a minimum 60% canopy coverage to be provided, at maturity, and the perimeter of the parking space(s) to include a 1.5m planting strip.

R Codes Part C – Deemed-to-Comply Requirements

In accordance with the above table, the following general provisions apply to applications that are assessed against Part C of the R Codes, in conjunction with the City's Built Form Policy:

- R Codes:
 - 15% soft landscaping to be provided per site, with a 1 metre minimum dimension;
 - 30% soft landscaping to be provided within the primary street setback area;
 - Single Houses & Grouped Dwellings to provide:
 - Minimum one small tree to be provided per dwelling;
 - Where street setback is greater than 1.5 metres, 1 small tree is to be provided within the street setback **and** where frontages are 20 metres or greater, 1 small tree is to be provided within the street setback per 10m of frontage;
 - Multiple Dwellings are to provide the following trees based on the size of the site:
 - Less than 700m²: medium tree and 2 small trees;
 - Between 700m² – 1000m²: 2 medium trees **or** 1 large tree and 1 small tree;
 - Greater than 1000m²: 2 medium trees **or** 1 large tree and 1 small tree **PLUS** 1 medium tree per 400m² in excess of 1000m².
- Built Form Policy:



- 12% deep soil to be provided per site, with a 1m minimum dimension;
- 30% of the site area is to be provided as canopy coverage at maturity.
- Where open air car parking is proposed, a minimum 60% canopy coverage to be provided, at maturity, and the perimeter of the parking space(s) to include a 1.5m planting strip.

To discuss the requirements for the R Codes Volume 2, please contact one of the City's Senior Urban Planners.

How do I show where the deep soil areas, planting areas and canopy cover are located on my site?

The locations of deep soil areas, planting areas and canopy cover onsite should be provided to scale and in a similar way to the example landscape plan in Figure 1. It is important to indicate all pre-existing and proposed landscaping onsite, and to also note the types of species provided.

When do I need to include a Landscape Plan?

A Landscape Plan needs to be included for:

- New Single House and Grouped Dwelling developments;
- Additions to existing Single Houses and Grouped Dwellings where the additions affect existing deep soil area or canopy coverage on site;
- Multiple Dwellings (apartments) and Mixed Use developments (plan to be designed by a registered landscape architect); and
- Commercial developments (plan to be designed by a registered landscape architect where the site is located within a 'Town Centre', 'Activity Corridor' or 'Mixed Use' Built Form area).

What if I can't meet the requirements?

If you are unable to meet the deemed-to-comply requirements, written justification against the relevant policy objectives should be submitted to the City alongside your development application.

This should outline why you are unable to meet the relevant requirements (e.g. site constraints), and should note any pre-existing landscaping onsite, any proposed landscaping that partially meets the requirements and any efforts to provide additional landscaping on site. All of which should also be outlined on a submitted landscape plan.

An Urban Planner will then review the proposal and consider whether the application meets the relevant design principles or objectives of the City's Built Form Policy to determine whether the departures can be considered. Where the departures are not deemed appropriate or in line with the design principles, amended plans or reconsideration of the proposal will be required.

How long do I have to provide my deep soil areas, planting areas and tree(s)?

Development approvals are valid for 2 years. Deep soil areas, planting areas and trees are to be provided prior to occupancy or use of the development and maintained thereafter to the satisfaction of the City.

Do you have more questions?

To discuss appropriate tree/plant species, please contact the City's Parks Technical Officers.

Applicants can also discuss planning proposals and preliminary plans with the City's Urban Planners. Urban Planners can provide general advice to applicants on a proposed development or land use and the information required to lodge a complete application. The City is unable to confirm if a proposal will be supported in the absence of a formal development applications.

A Duty Planner is available to talk to at the City's Administration Office Monday to Friday, 8.30am to 5.00pm, in person or on the phone.

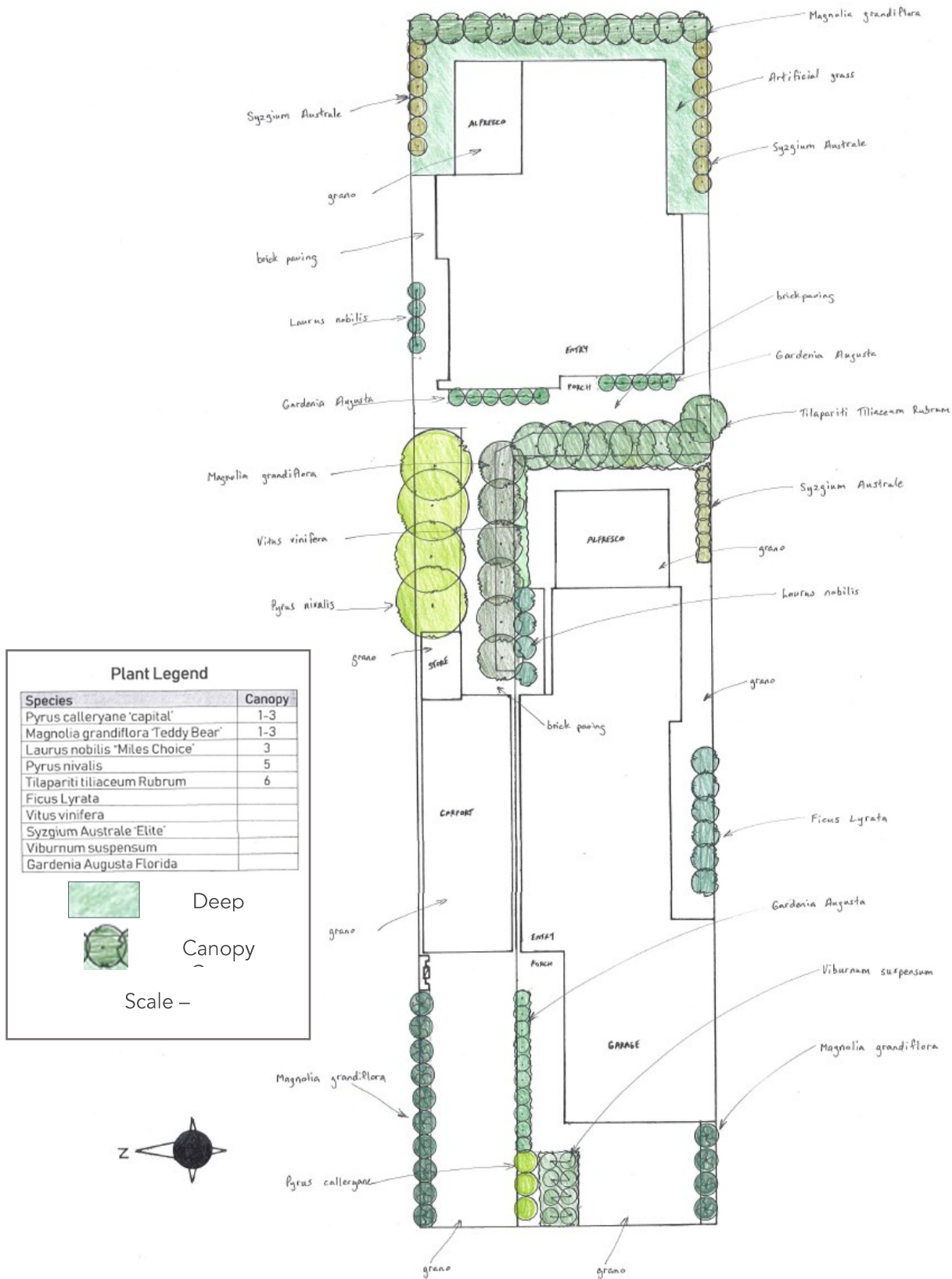
Phone: 9273 6000

Email: mail@vincent.wa.gov.au

Address: Main Administration Building, 244 Vincent Street, Leederville 6007, WA



Figure 1 - Example Landscaping Plan:



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Table 1 – Calculation of Tree Canopy Spread At Maturity:

Tree species	Common name	Canopy spread at maturity (Diameter)	Area calculation (3.14 x radius squared)	Total Area (m ²)
<i>Pyrus calleryana</i>	Bradford Pear	4 metres	3.14 x 4	12.56
<i>Pyrus ussuriensis</i>	Manchurian Pear	6 metres	3.14 x 9	28.27
<i>Prunus cerasifera</i>	Flowering Plum	3 metres	3.14 x 2.25	7.06
<i>Magnolia grandiflora</i>	Southern Magnolia	6 metres	3.14 x 9	28.27
<i>Magnolia 'Little Gem'</i>	Dwarf Magnolia	3 metres	3.14 x 2.25	7.06
<i>Fraxinus raywoodi</i>	Claret Ash	6 metres	3.14 x 9	28.27
<i>Ulmus parvifolia</i>	Chinese Elm	8 metres	3.14 x 16	50.26
<i>Sapium sebiferum</i>	Chinese Tallow	6 metres	3.14 x 9	28.27
<i>Pistacia chinensis</i>	Chinese Pistacia	6 metres	3.14 x 9	28.27
<i>Gelditsia tricanthos</i>	Honey Locust	8 metres	3.14 x 16	50.26
<i>Bauhinia purpurea</i>	Orchid Tree	4 metres	3.14 x 4	12.56
<i>Hibiscus tiliaceus</i>	Cotton wood	5 metres	3.14 x 6.25	19.63
<i>Lagerstromia indica</i>	Crepe myrtle	4 metres	3.14 x 4	12.56
<i>Jacaranda mimosaeifolia</i>	Jacaranda	10 metres	3.14 x 25	78.53
<i>Delonix regia</i>	Poincianna	12 metres	3.14 x 36	113.09
<i>Tipuana tipu</i>	Pride of Bolivia	12 metres	3.14 x 36	113.09
<i>Pittosporum rhombifolium</i>	Queensland Pittosporum	4 metres	3.14 x 4	12.56
<i>Olea europaea</i>	Olive	5 metres	3.14 x 6.25	19.63
<i>Fraxinus griffithii</i>	Evergreen Ash	3 metres	3.14 x 2.25	7.06
<i>Syzigium australe</i>	Lilly Pilly	4 metres	3.14 x 4	12.56
<i>Agonis flexuosa</i>	Weeping Peppermint	5 metres	3.14 x 6.25	19.63
<i>Melaleuca linarifolia</i>	Snow in Summer	4 metres	3.14 x 4	12.56
<i>Melaleuca viridiflora</i>	Red Flowering Paperbark	4 metres	3.14 x 4	12.56
<i>Melaleuca quinquenervia</i>	Broad Leafed paperbark	5 metres	3.14 x 6.25	19.63
<i>Angphora costata</i>	Apple Gum	6 metres	3.14 x 9	28.27

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CITY OF VINCENT

Tree species	Common name	Canopy spread at maturity (Diameter)	Area calculation (3.14 x radius squared)	Total Area (m ²)
Eucalyptus torquata	Coral Gum	4 metres	3.14 x 4	12.56
Eucalyptus leucoxlyn 'rosea'	Pink Flowering Gum	5 metres	3.14 x 6.25	19.63
Euclayptus victrix	Little Ghost Gum	3 metres	3.14 x 2.25	7.06
Hymenosporum flavum	Native Frangipani	3 metres	3.14 x 2.25	7.06
Eucalyptus forrestiana	Fuschia Gum	3 metres	3.14 x 2.25	7.06
Eucalyptus sargentii	Salt River Gum	4 metres	3.14 x 4	12.56
Eucalyptus synandra	Jingymia Mallee	3 metres	3.14 x 2.25	7.06
Eucalyptus caesia	Gungurru	3 metres	3.14 x 2.25	7.06
Eucalyptus erythrocorys	Red Capped Gum	3 metres	3.14 x 2.25	7.06
Callistemon "Perth Pink"	Pink Flowered Bottelbrush	4 metres	3.14 x 4	12.56
Eucalyptus ficifolia	Red Flowered Gum	5 metres	3.14 x 6.25	19.63
Cupaniopsis anacariodes	Tuckeroo	6 metres	3.14 x 9	28.27
Tristaniopsis conferta	Water Gum	4 metres	3.14 x 4	12.56
Hakea petiolaris	Sea Urchin Hakea	3 metres	3.14 x 2.25	7.06

For a more detailed overview of a selection of trees, refer to the City's [Tree Selection Tool](#). The Tree Selection Tool is a database with information about the City's various streetscapes typologies, as well as a comprehensive set of tree species, their key features and growing requirements.

Disclaimer: This information is produced by the City of Vincent in good faith and the City accepts no responsibility for any ramifications or repercussions for providing this information. Verification with the original Local Laws, planning schemes and other relevant documents is recommended for detailed references.