

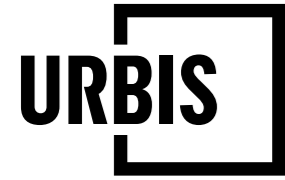
RESIDENTIAL TOWER LOT 5003 CARSELDINE

STATEMENT OF LANDSCAPE DESIGN INTENT

Prepared FOR

DE LUCA

OCTOBER 2024
ISSUE 01



ACKNOWLEDGEMENT OF COUNTRY

Urbis acknowledges the Aboriginal and Torres Strait Islander peoples as the traditional custodians of all lands on which we do business and we pay our respects to Elders, past and present. We acknowledge the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

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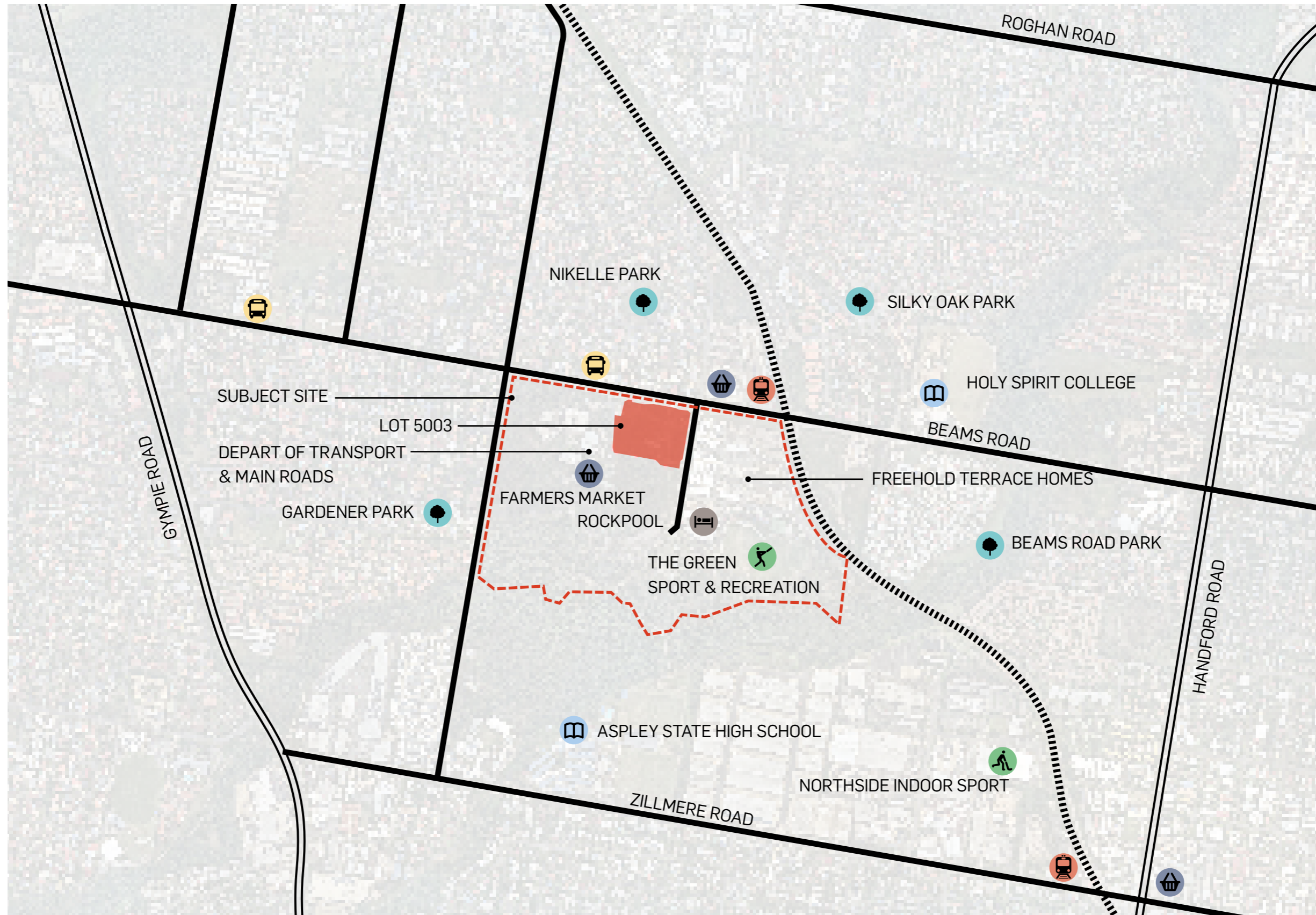
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01 Site Understanding



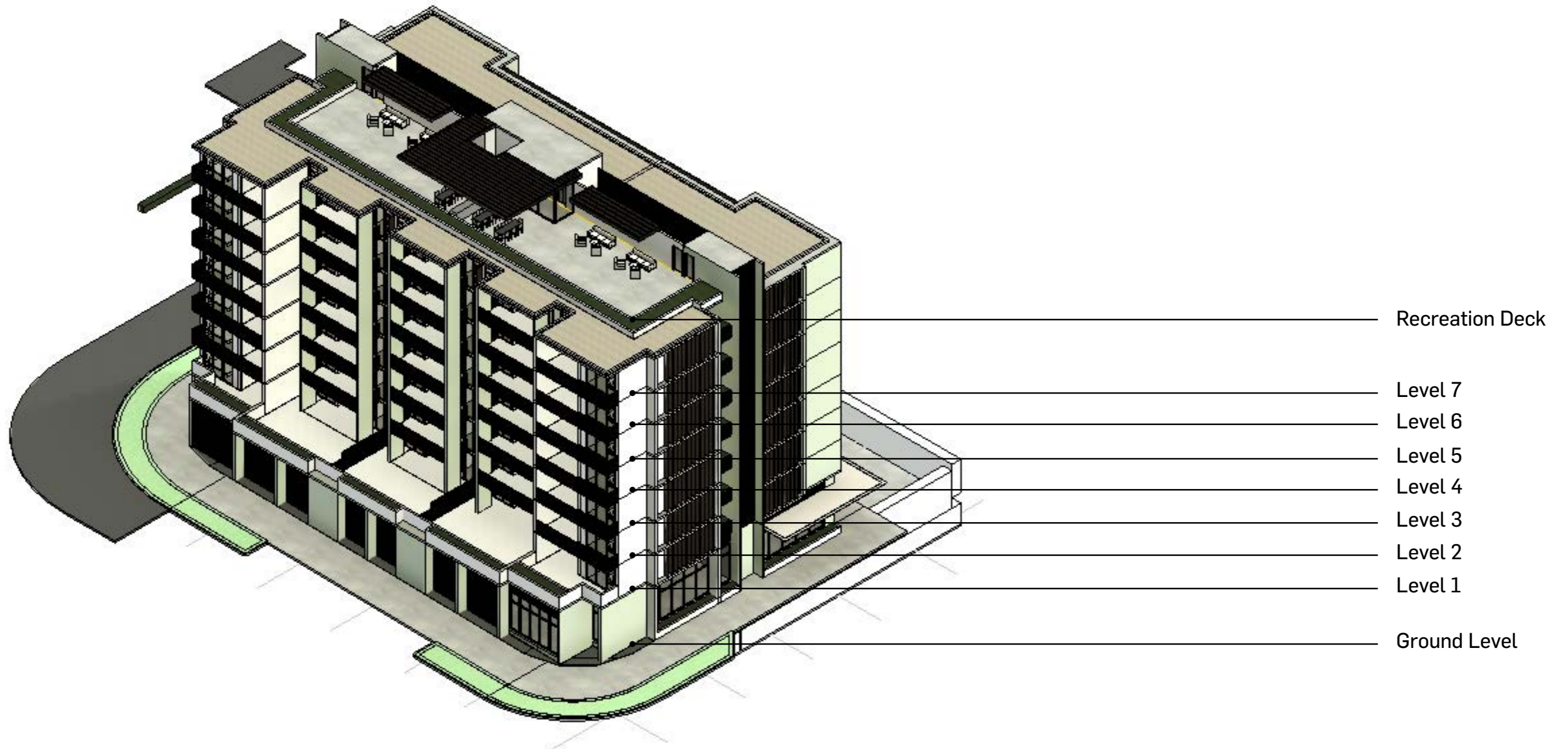
01.1

Location & Context



01.2

Landscape Levels



01.3 Surrounding Built Landscape Character



- 1. Rockpool Age Care, Plaza Place, Carseldine
- 2. Residential Town Houses, Plaza Place, Carseldine
- 3. Meander Street Entry, Plaza Place, Carseldine
- 4. Clock Corner Shopping Precinct, Carseldine

01.4

Surrounding Soft Landscape Character

Plaza Place Reserve



Beams Road Streetscape



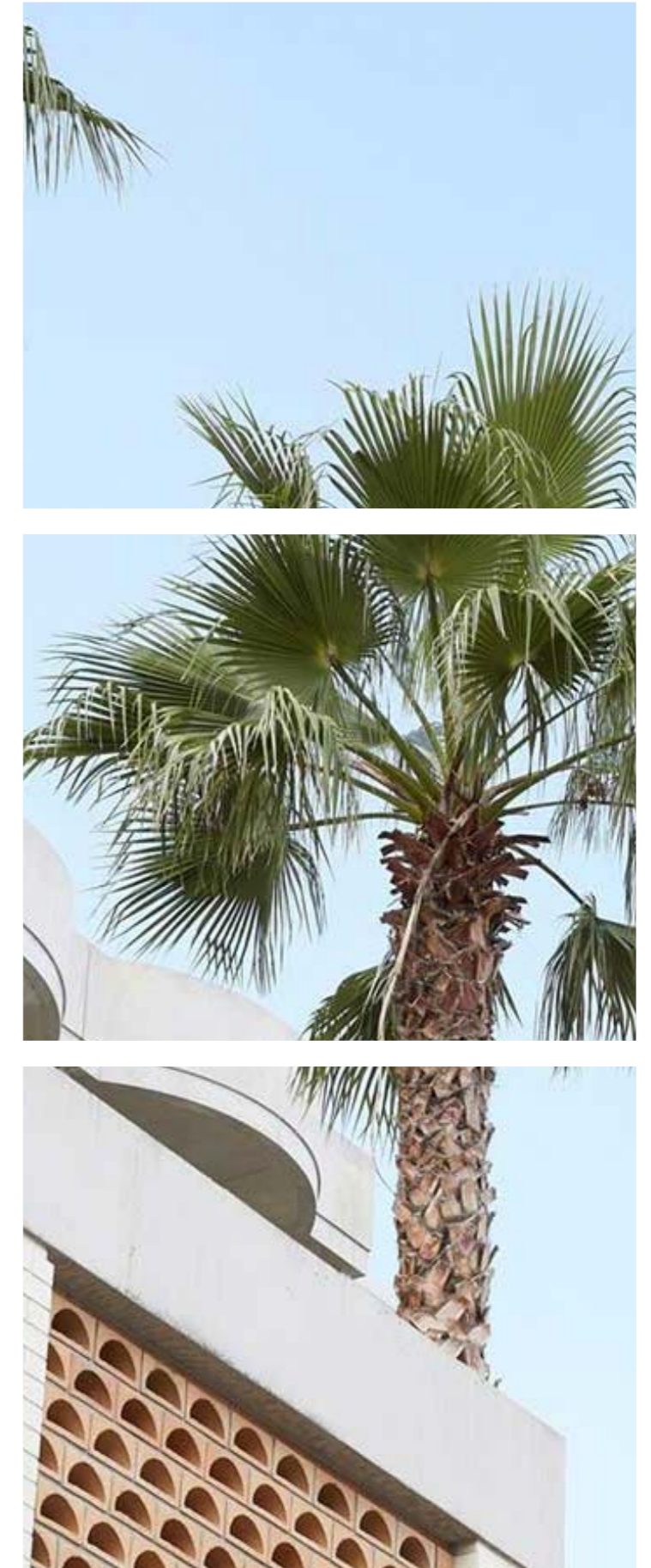
Plaza Place Streetscape



Site Character



02 Design Approach



02.1 Design Approach
Landscape Vision



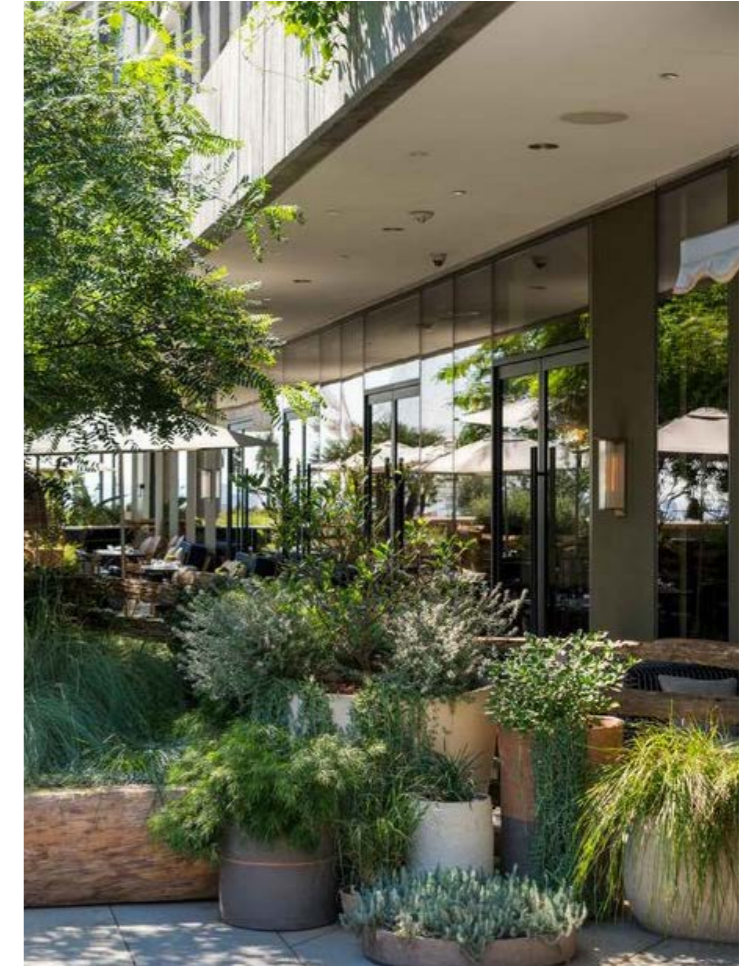
Soften Hard Structural Elements



Provide Lush Recreation Amenity

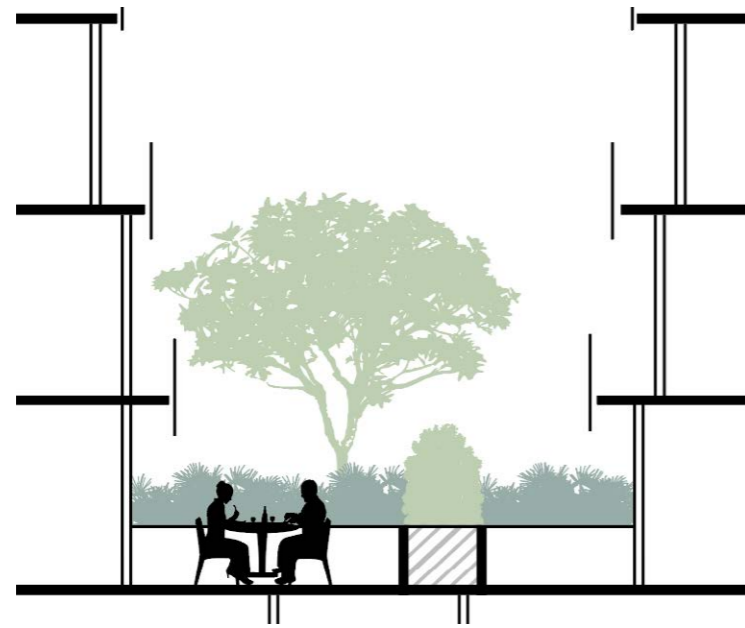


Integrate Green Residential Interfaces

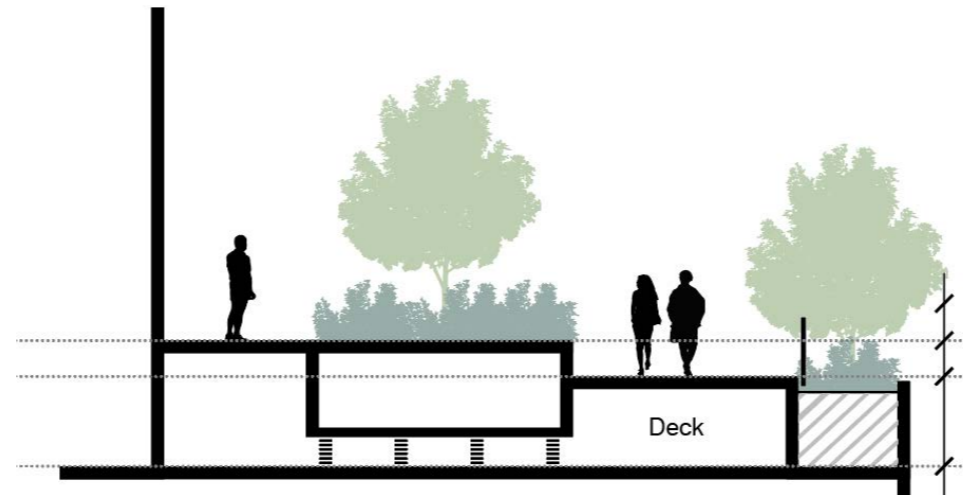


Sustainability Via Species Selection

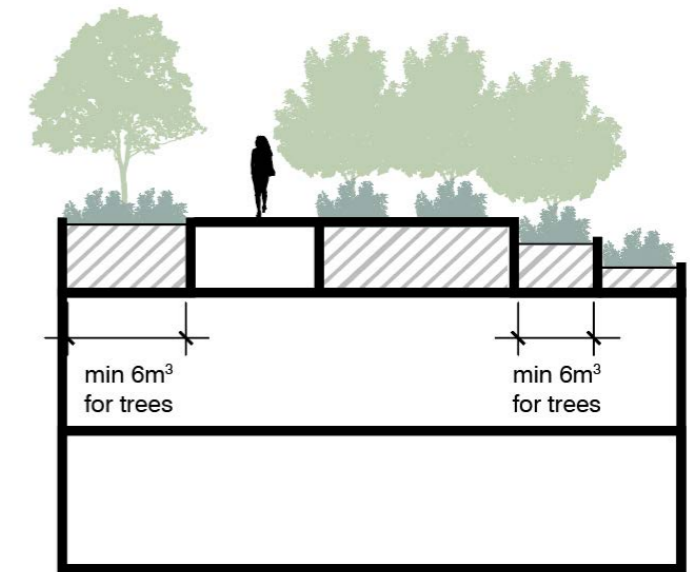
02.2 Design Approach
Design Principles



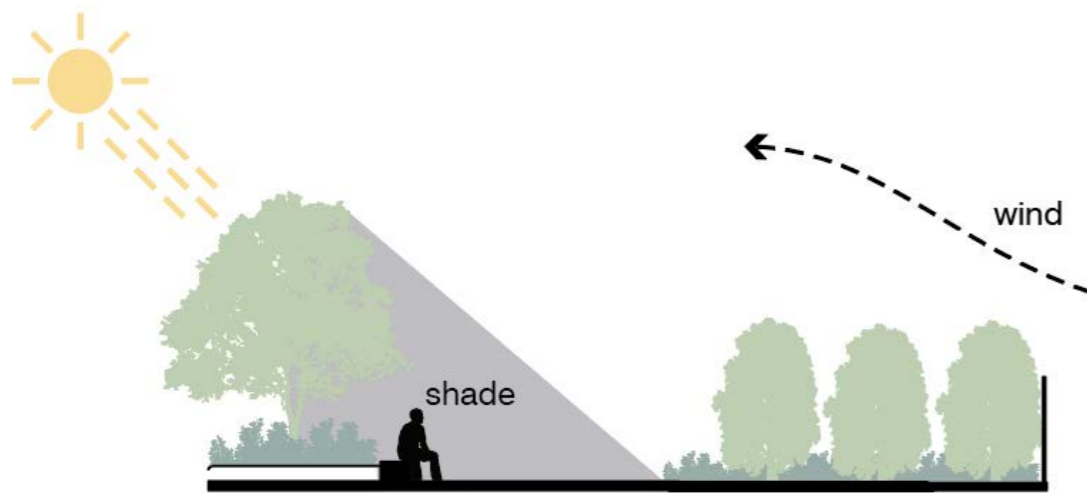
Green Roofs and Terraces



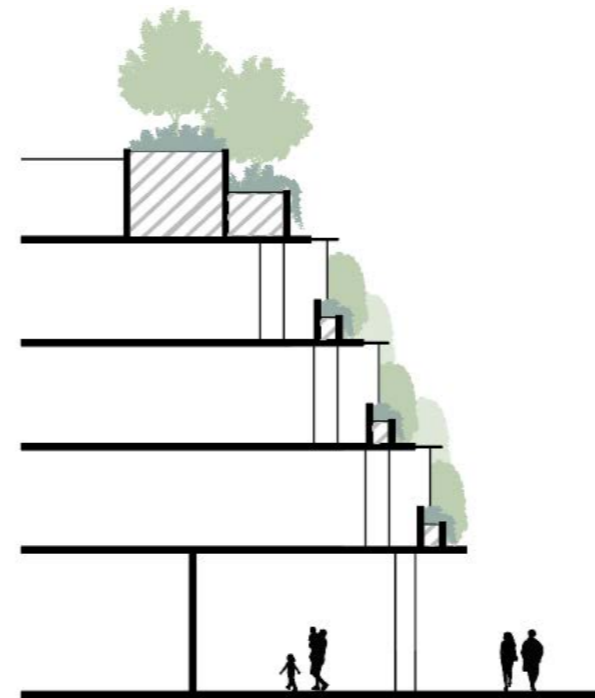
Articulate Levels for Interest



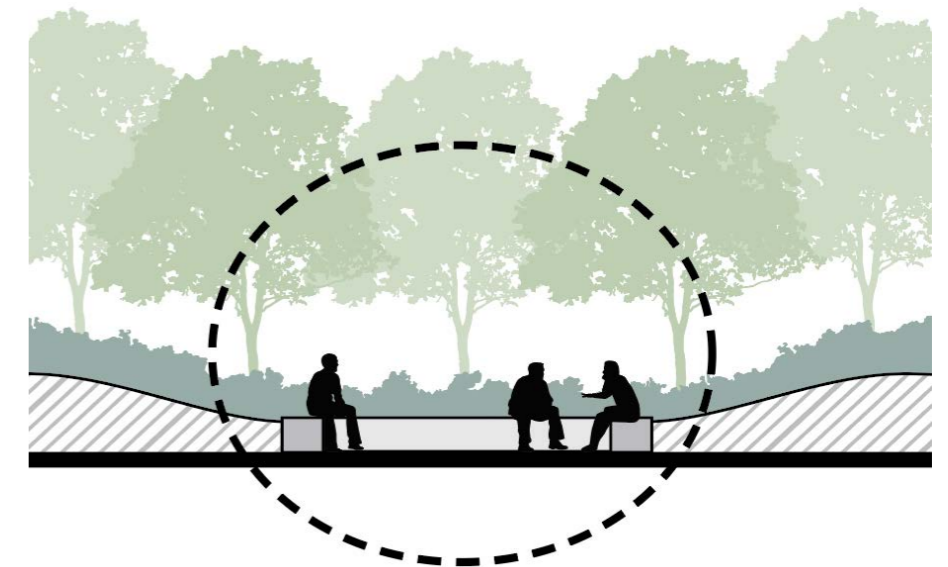
Provide Soil Volumes for Trees



Provide Micro Climatic Niche Areas

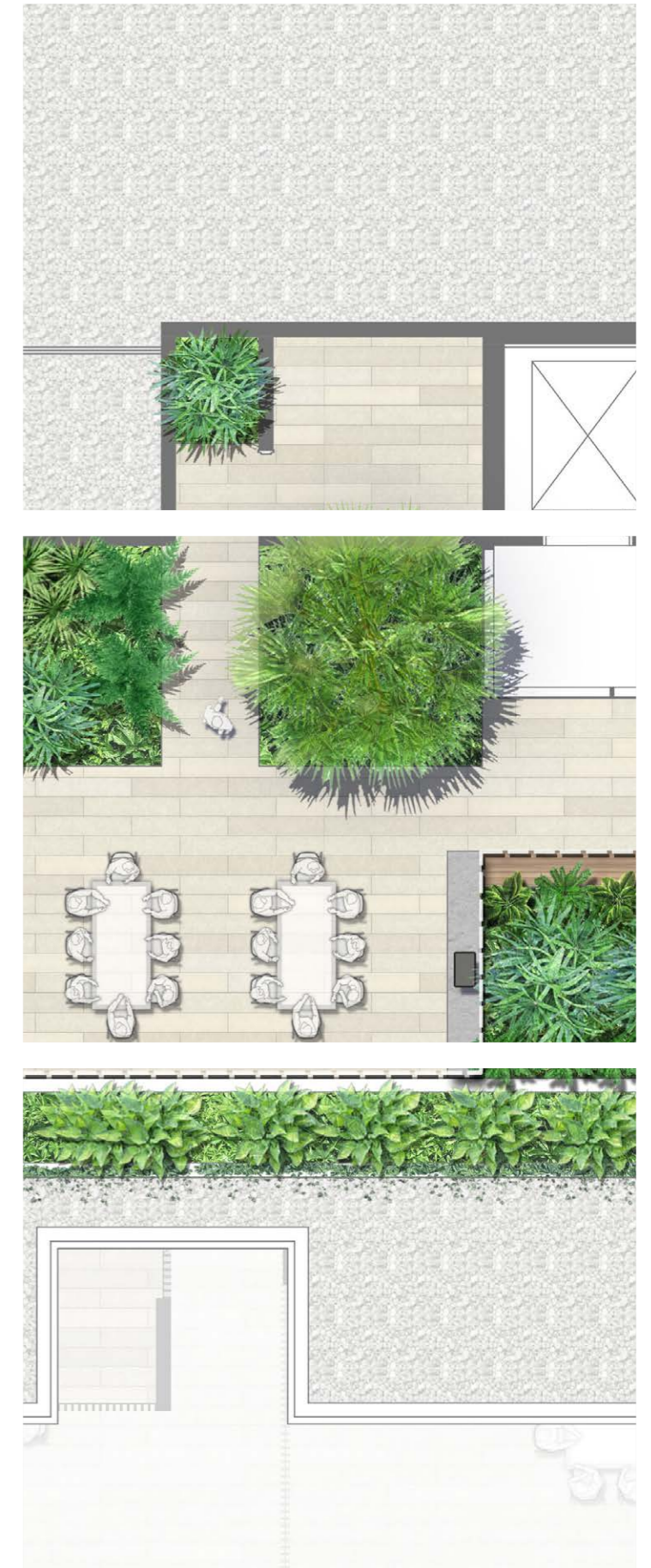


Soften Edges



Garden Rooms

03 Landscape Design



03.1

Landscape Design Ground Level



LOCATION | Key Plan

LEGEND

- 01** Planted landscape buffer to increase greenspace and soften hard structure
- 02** 3m wide exposed aggregate footpath
- 03** Central plaza area
- 04** Fire stair entrance
- 05** Low planting to enable view lines between pedestrians and vehicles
- 06** On street car parking
- 07** Strip planting at set down to soften hard structural edge min 300mm depth
- 08** Low planting to corner for visibility
- 09** Tactile paving



LOCATION | Key Plan

LEGEND

- 01** Low shrubs, ground covers and cascading podium planting to spill between structure and awning
- 02** Low shrubs, ground covers and cascading planting to soften central building spine
- 03** Low shrubs ground covers and cascading podium planting
- 04** Structural awning
- 05** Terrace zone, opportunity for additional planting

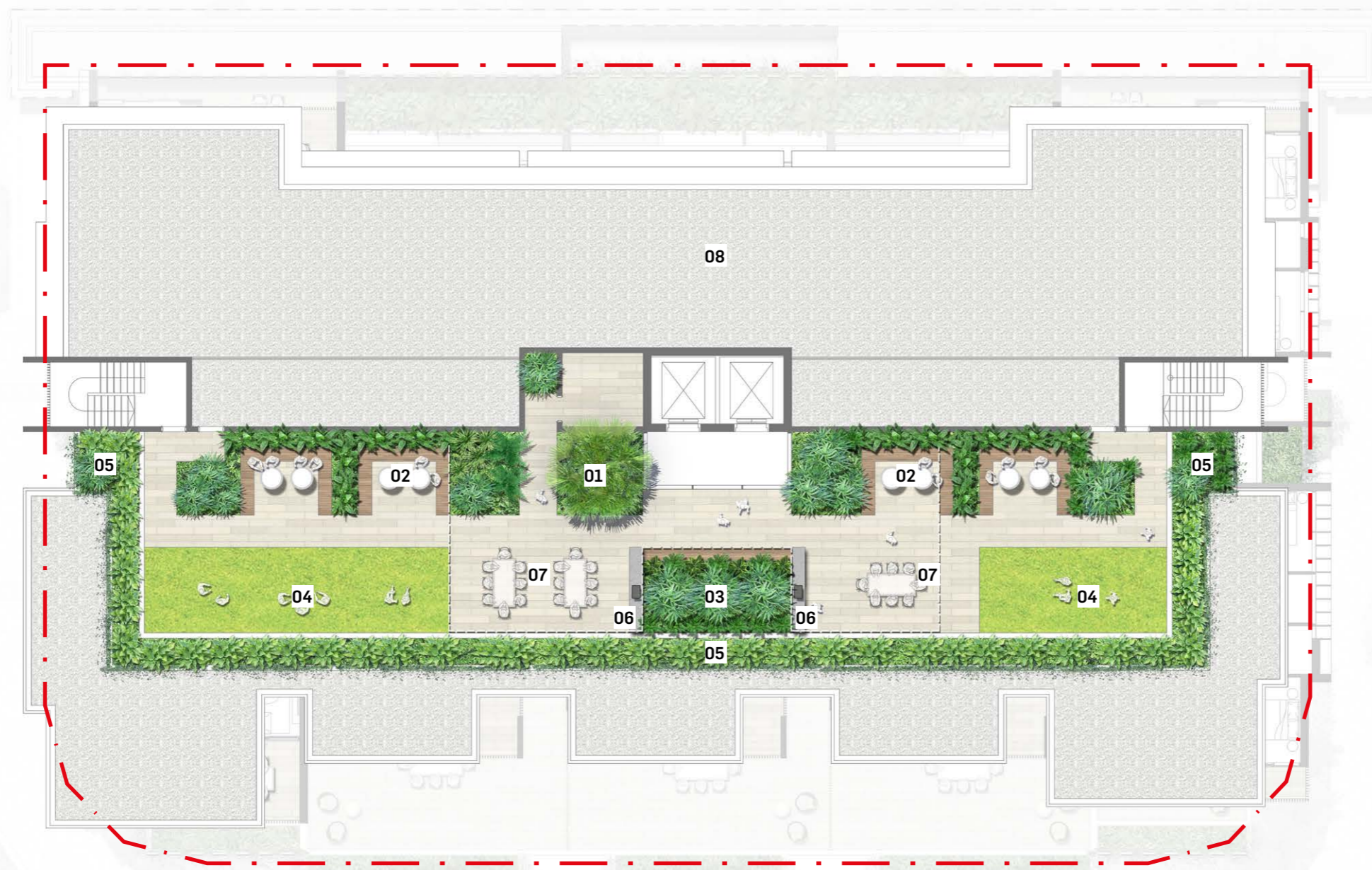


LOCATION | Key Plan

LEGEND

- 01 Low shrub, ground covers and cascading planting to soften central building spine
- 02 Terrace zone



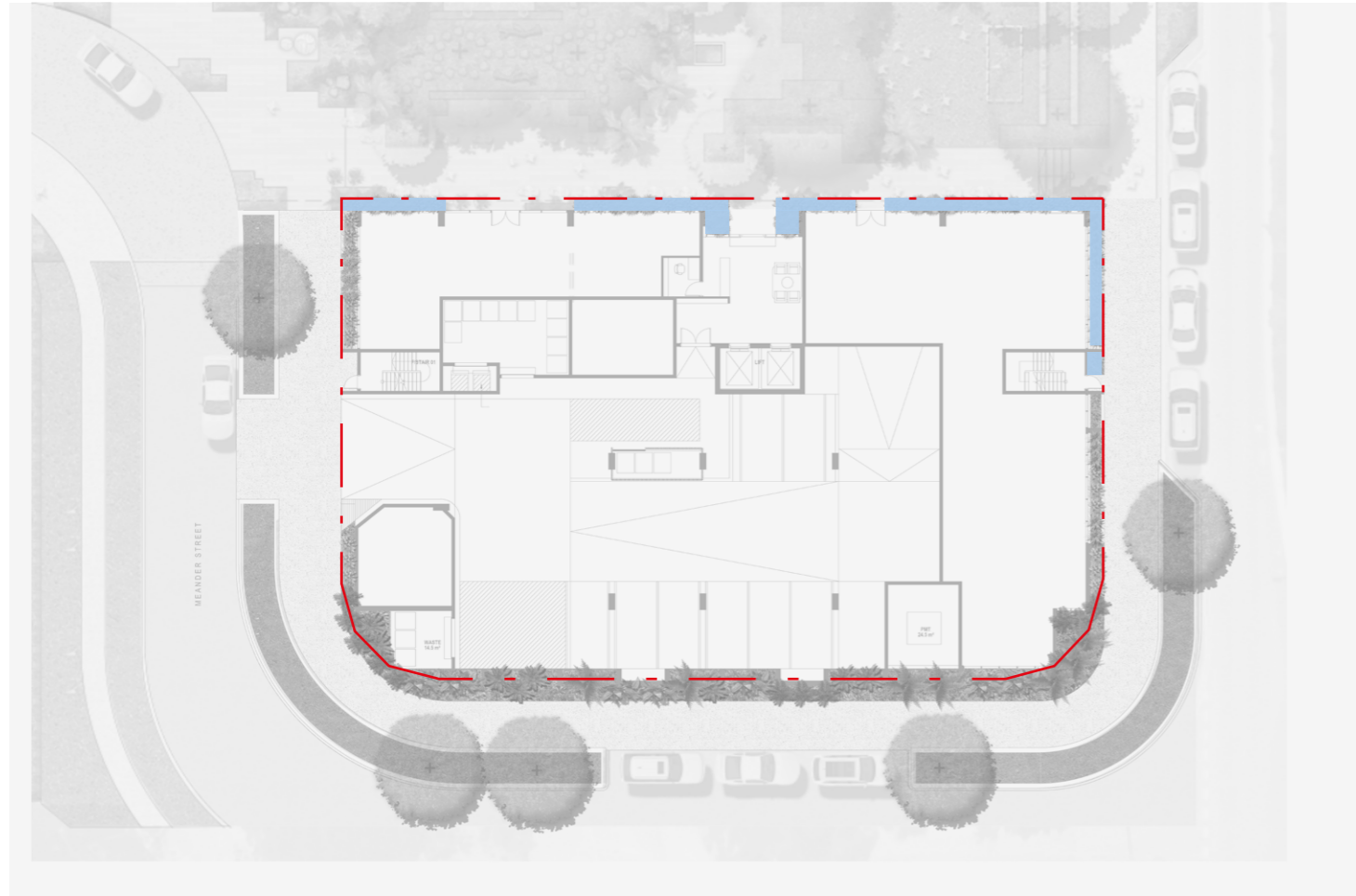


LOCATION | Key Plan

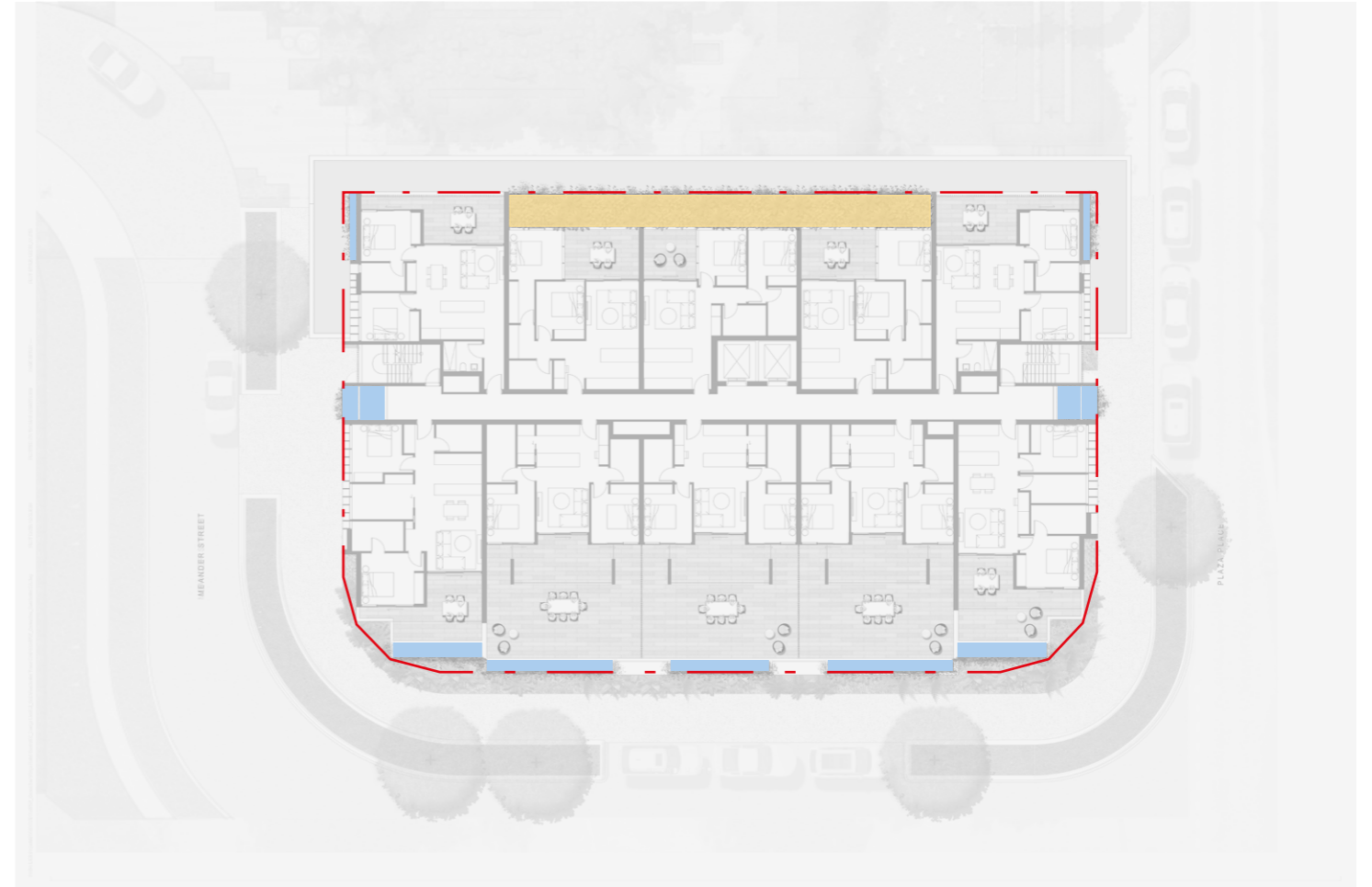
LEGEND

- 01** Livistona australis, low shrubs and ground covers planted in structural void
- 02** Lush planted recreation garden rooms
- 03** Low shrub, ground cover and cascading planting to soften immediate view point from lift core
- 04** Communal / Event turf zone
- 05** Low shrubs, ground covers and cascading planting.
- 06** BBQ
- 07** Communal seating zone
- 08** Plant and utility area

03.5 Structure Diagrams



GROUND LEVEL
Planter Depth



LEVEL 1
Planter Depth

LEGEND

■ Podium planting — 450 mm depth

LEGEND

■ Podium planting — 1000 mm depth

■ Podium planting — 300 mm depth

Scale 1:100 @ A3 0 0.5 1 2.5 5

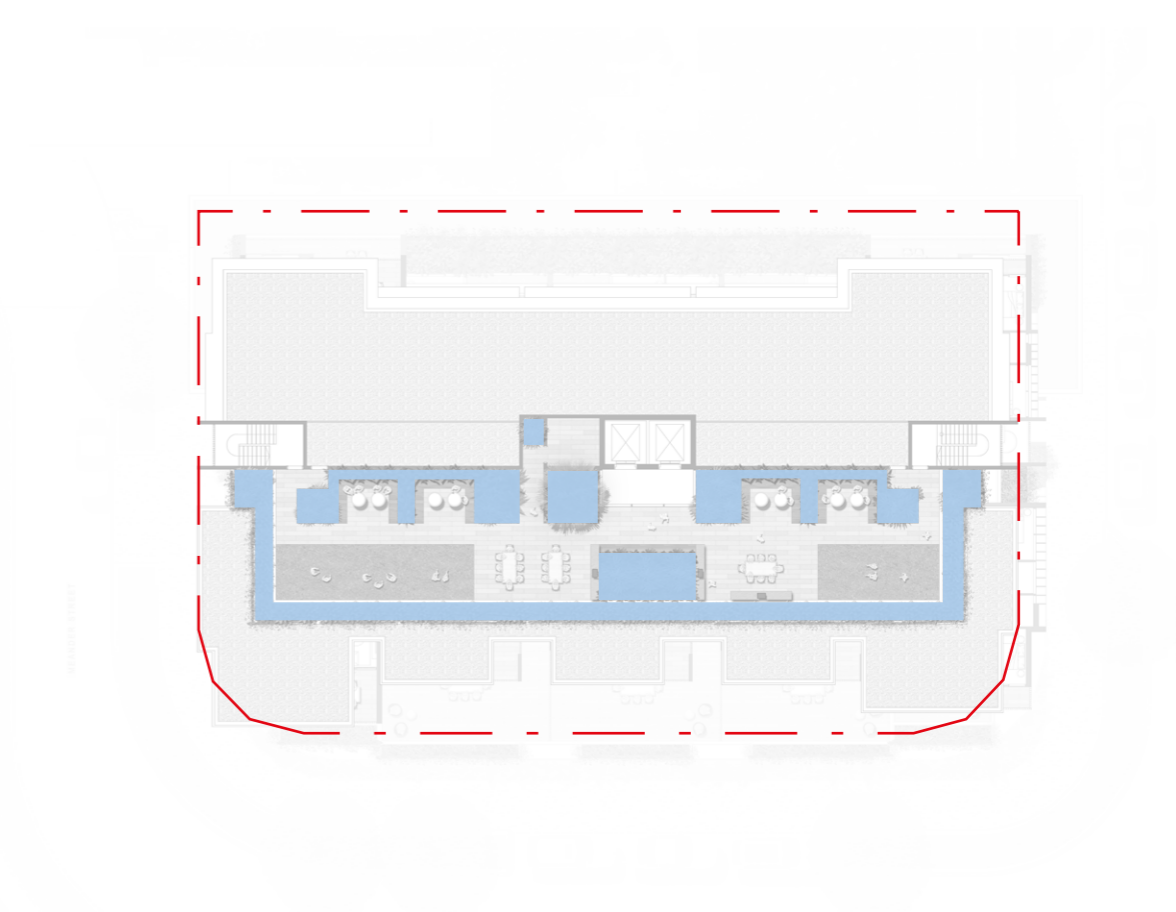




TYPICAL LEVEL
Planter Depth

LEGEND

■ Podium planting — 450 mm depth



RECREATION DECK
Planter Depth

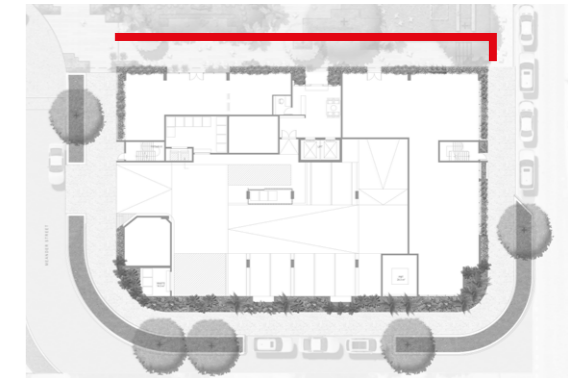
LEGEND

■ Podium planting — 550 mm depth

Scale 1:100 @ A3

04 Sections & Elevations

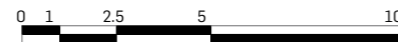


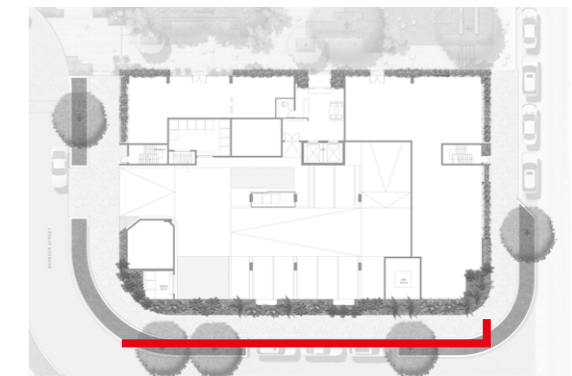


LOCATION | Key Plan

LEGEND

- 01 Strip planting at set down to soften hard structural edge min 300mm depth
- 02 Tree planting in central plaza zone
- 03 Cascading podium planting to spill between structure and awning

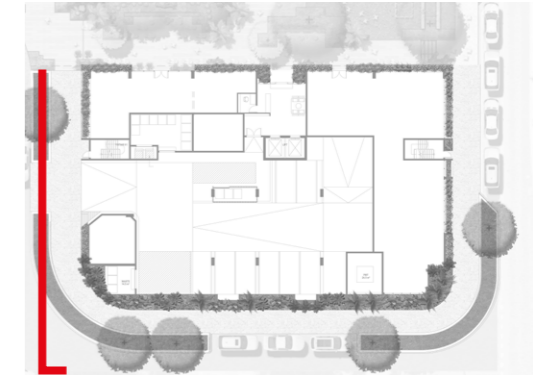
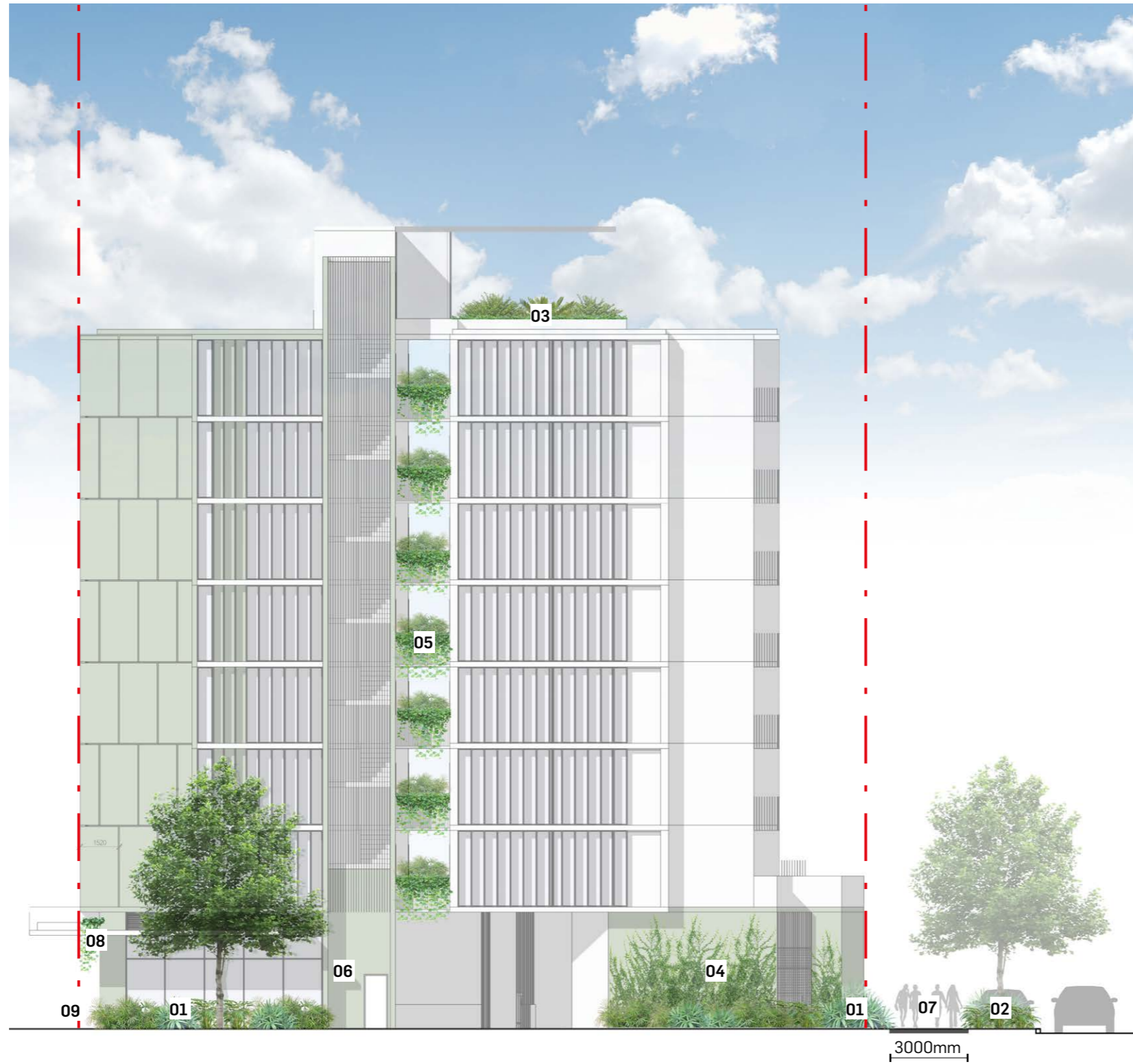




LOCATION | Key Plan

LEGEND

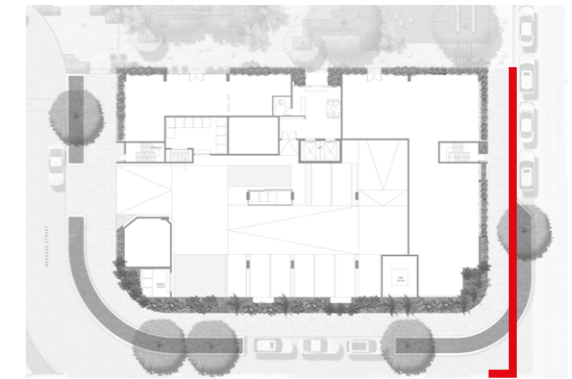
- 01** Planted landscape buffer to increase greenspace and soften hard structure
- 02** Trees, low shrubs and ground covers planted in streetscape
- 03** Low shrubs and ground cover podium planting
- 04** Creeping fig climber to soften structural wall
- 05** Medium shrub, ground cover and cascading planting to soften immediate view point from lift core



LOCATION | Key Plan

LEGEND

- 01** Planted landscape buffer to increase greenspace and soften hard structure
- 02** Trees, low shrubs and ground covers planted in streetscape
- 03** Low shrub and ground cover podium planting
- 04** Creeping fig climber to soften structural wall
- 05** Low shrub, ground covers and cascading planting to soften central building spine
- 06** Fire stair entrance
- 07** 3m wide exposed aggregate footpath
- 08** Cascading podium planting to spill between structure and awning
- 09** Planted landscape strip to soften structural threshold. Min 300mm



LOCATION | Key Plan

LEGEND

- 01** Planted landscape buffer to increase greenspace and soften hard structure
- 02** Trees, low shrubs and ground covers planted in streetscape
- 03** Low shrub and ground cover podium planting
- 04** Creeping fig climber to soften structural wall
- 05** Low shrub, ground covers and cascading planting to soften central building spine
- 06** Trellised climbing species to soften fire stair entrance
- 07** 3m wide exposed aggregate footpath
- 08** Cascading podium planting to spill between structure and awning
- 09** Planted landscape strip to soften structural threshold. Min 300mm

05 Design Details



05.1 Character Images - Planting



05.2 Character Images - Planting



05.3

Design Details
Plant Palette



Livistona australis
Cabbage Tree Palm



Tristaniopsis laurina 'Luscious'
Water Gum



Syzygium tierneyanum
River Cherry



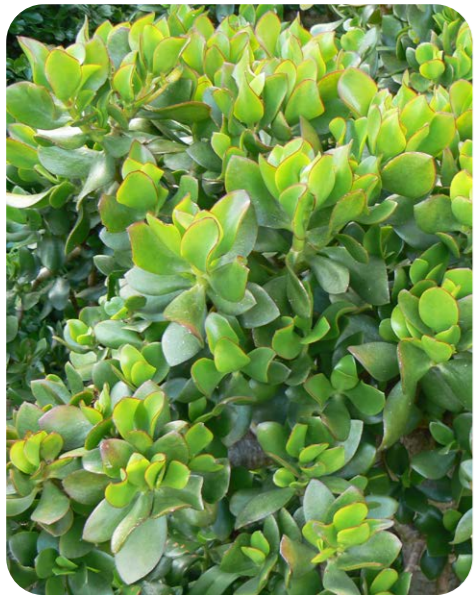
Hymenosporum flavum
Native Frangipani



Syzygium paniculatum
Lillyput



Westringia fruticosa
Coastal Rosemary



Crassula undulata
Curly Jade



Lomandra longifolia
Spiny-head Mat Rush



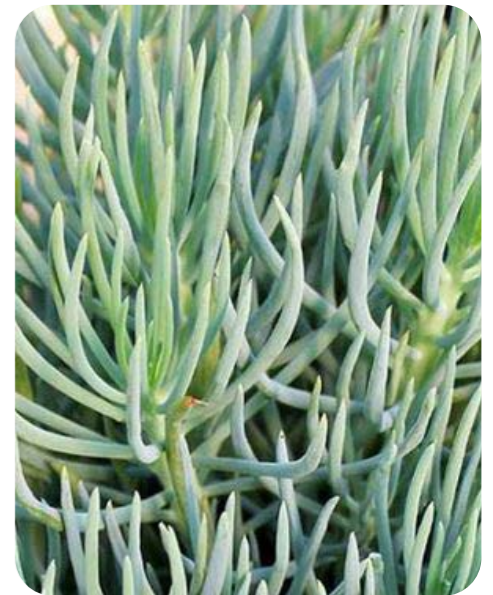
Carpobrotus glaucescens
Pig Face



Kalanchoe eriophylla
Silver Spoons



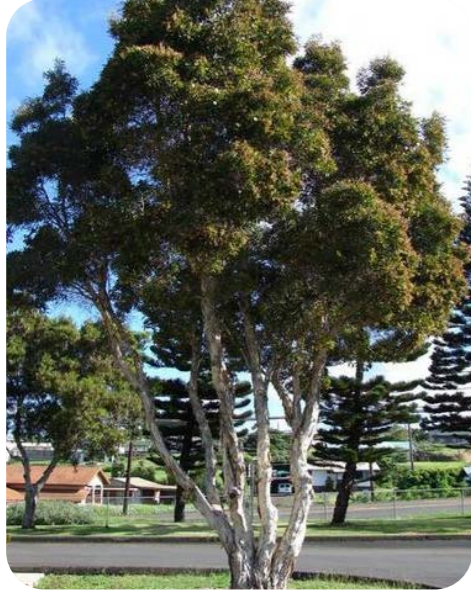
Casuarina glauca
Cousin It



Senecio vitalis
Narrow-Leaf Chalksticks

05.4

Design Details
Plant Palette



Melaleuca quinquenervia
Paper Bark Tea Tree



Randia fitzalanii
Native Gardenia



Alpinia mutica
False Cardomom Ginger



Rhapis excelsa
Slender Lady Palm



Zamia furfuracea
Cardboard Palm



Syzygium paniculatum
'Lillyput'



Pittosporum tobira
Miss Muffet



Phyllanthus minutiflora
Little Leaf Phyllanthus



Blechnum gibbum
Silver Lady Fern



Cissus antarctica
Kangaroo Vine



Viola hederacea
Native Violet



Zoysia tenuifolia
No Mow Grass

05.5

Plant Palette



Philodendron Xanadu
Xanadu



Monstera deliciosa
Swiss Cheese

06 Technical Details

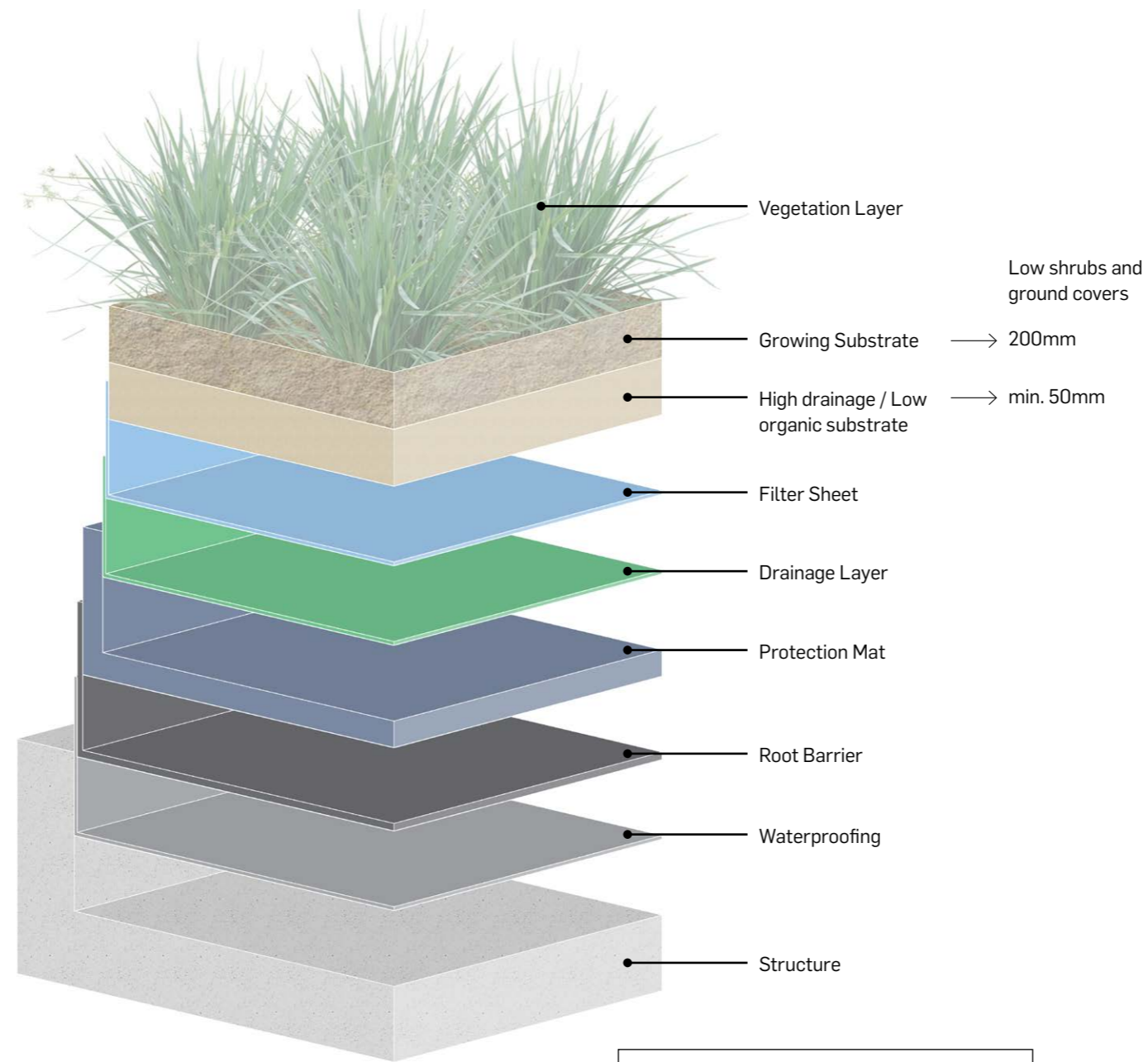


06.1 Podium Planter Strategy

A large majority of the gardens will sit on top of a concrete slab. For this reason, high quality, purpose made soil mixes are to be used to ensure success and longevity for the gardens.

The soil specification proposed has been custom made by certified and well respected soil scientists and is based off of the Australian Standards for on-structure soils. Some of the key characteristics of the soil specification include:

- Free draining
- Two horizon layer - Horizon A = Max 300mm on-structure mix with some organic matter - Horizon B = low organic matter high mineral content
- Low slumpage soil structure to reduce garden bed levels dropping over time
- Slow release fertilisers
- Light weight (due to high air-filled porosity)



NOTE:
 Typical section demonstrates structural detail, depth and edge condition for all podium planters. Location along building edge and size of planter varies across building levels. Refer Architects Report for all layouts.

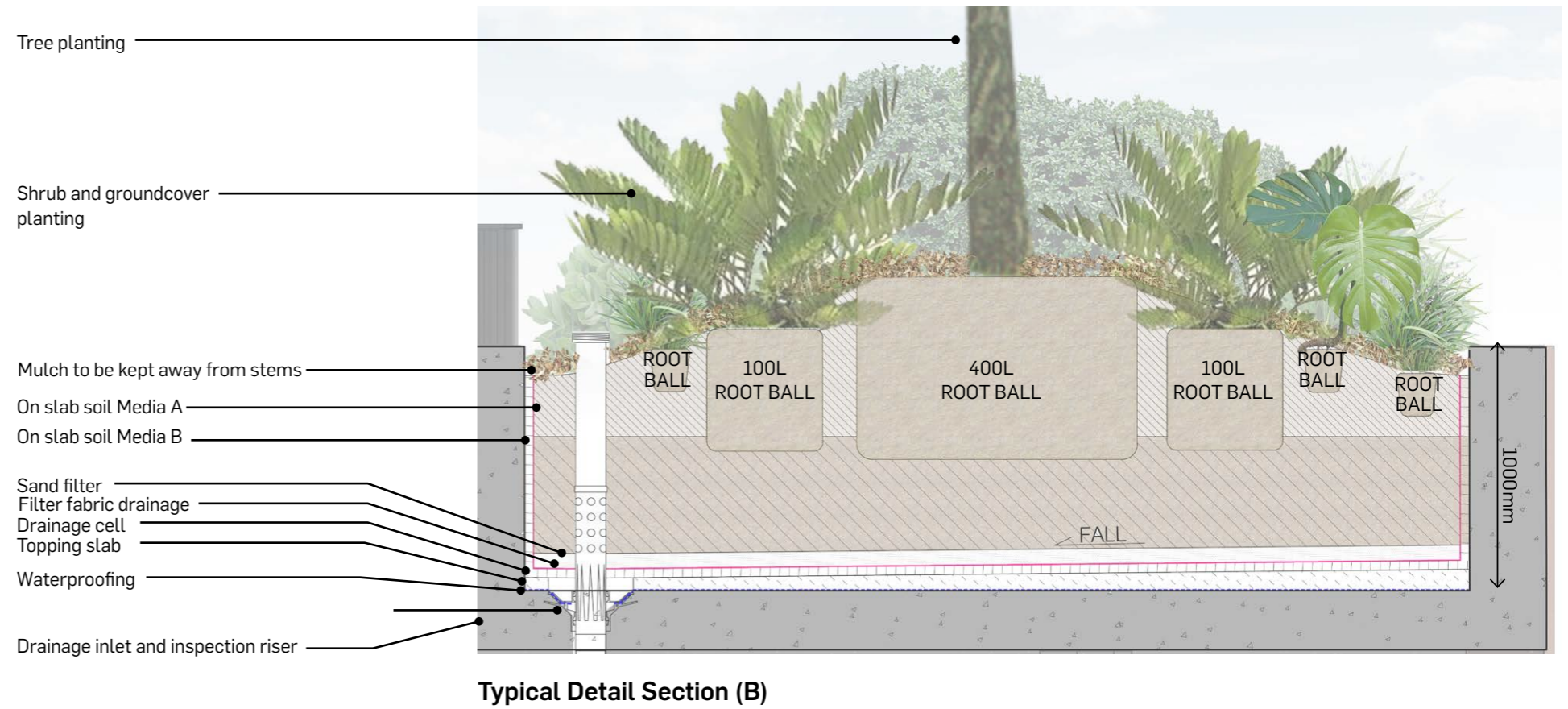
06.2 Podium Planter Strategy

Given the spatial and structural constraints on on-structure landscapes, mounding is used to maximise efficiency whilst maintaining required soil depths and volumes for planting success.

The typical sections demonstrate how mounding will be achieved utilising set-downs and up-stands.

In principal, the depth of soil we will be providing for different scales of planting is shown in the table below.

PLANT TYPE	MIN SOIL DEPTH	MAX SOIL DEPTH (if applicable)
TREES (roof only) (45 litre to ex-ground)	800mm	1000mm
PALMS (ground and podium) (45 litre to ex-ground)	800mm	1000mm
SMALL SHRUBS	400mm	na
LARGE SHRUBS	500mm	na
GROUNDCOVERS, CLIMBERS & DRAPERS	300mm (grc planters) 400mm (podium edges)	na
DRAPERS (GRC troughs only)	300mm	na



06.3 Irrigation Strategy

A fully automated irrigation system will be provided to all garden areas using a sub-mulch drip system & overhead misters with moisture sensors, with the control device located in a common area. The irrigation system will be connected to both the building wide harvested rain water system and potable mains water. All trees will be irrigated with a deep watering system around the root ball.

All external areas with plants will be serviced from harvested tank water whenever possible with remaining demand being provided from mains supply.

Plant species have been specifically chosen for their ability to thrive in the challenging micro-climates that an on-structure landscape present. This includes the use of both native and exotic species that are robust, hardy and proven performers on similar style projects within Brisbane.

A qualified irrigation consultant will be appointed to design and document the irrigation for the project.

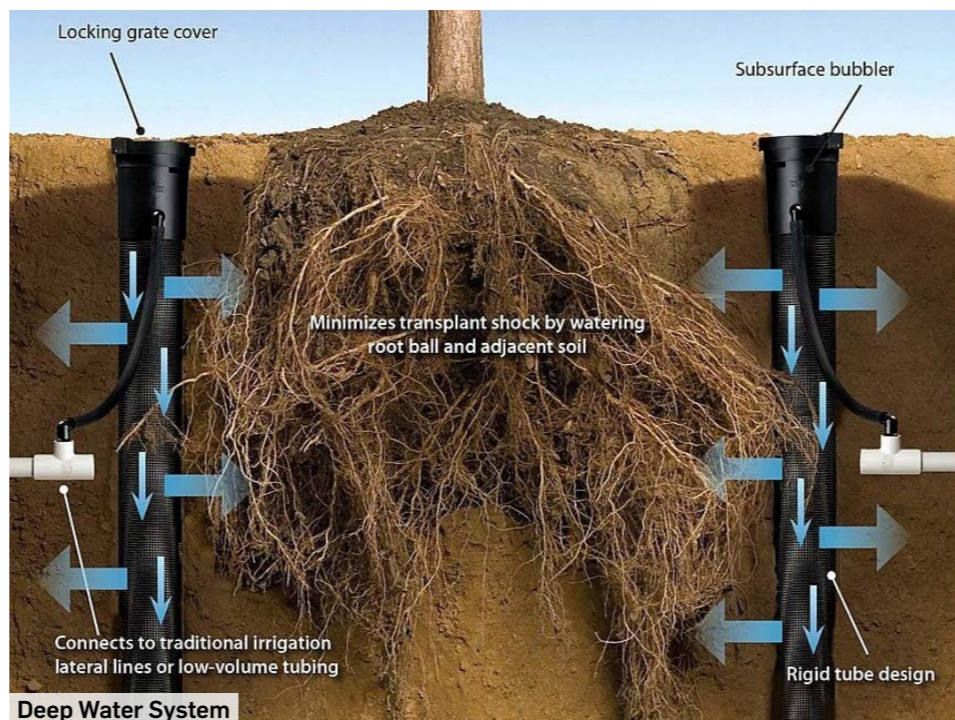
Emitter Strategy



Micro sprays



Drip Irrigation



Deep Water System

06.4

Soil Strategy

A large majority of the gardens will sit on top of a concrete slab. For this reason, high quality, purpose made soil mixes are to be used to ensure success and longevity for the gardens.

The soil specification proposed has been custom made by certified and well respected soil scientists and is based off of the Australian Standards for on-structure soils. Some of the key characteristics of the soil specification include:

- Free draining
- Two horizon layer - Horizon A = Max 300mm on-structure mix with some organic matter - Horizon B = low organic matter high mineral content
- Low slumpage soil structure to reduce garden bed levels dropping over time
- Slow release fertilisers
- Light weight (due to high air-filled porosity)

On Structure soil media A

Quality – Soil must be free from any 'unwanted materials'

Physical Properties

Property	Units	Target range
Texture, preferred range	n/a	Gravelly loamy sand to organic sandy loam
Air-filled porosity	%	≥ 10
Chloride	%	≥ 40
Permeability (@ 16 drops by McIntyre Jakobsen)	mm/h	> 100
Saturated Density	kg/L	< 2.4
Organic matter	% w/w	< 15
Wettability	min	<5
Dispensability in water		1 or 2 (AS4419) Category
Large particles in the largest dimension		
< 2 mm	% w/w	30–70
2–10 mm	% w/w	10 –20
10–20 mm	% w/w	5–10
20–50 mm	% w/w	< 5
> 50 mm	% w/w	0

Chemical Properties

C2. Chemical properties	Units	Target range
pH in water (1:5) Standard range	pH units	5.4–6.8
Electrical Conductivity (1:1.5)	dS/m	< 2.2
Chloride	mg/L	≤ 200
Ammonium-N (NH ₄)	mg/L	≤ 100
Ammonium-N + nitrate-N (NH ₄ + NO ₃)	mg/L	≥ 50
Nitrogen draw-down index	-	≥ 0.7
Toxicity index	mm	≥ 70
Phosphorus – P standard range	mg/L	8–40
Low phosphorus – P (P-sensitive plants)	mg/L	< 3
Potassium (K)	mg/L	50–250
Sulphate (SO ₄)	mg/L	≥ 40
Calcium (Ca)	mg/L	≥ 80
Magnesium (Mg)	mg/L	≥ 15
Ca:Mg ratio	-	1.5–10
K:Mg ratio	-	1–7
Sodium (Na)	mg/L	≤ 130
Iron (Fe)	mg/L	≥ 35
Cooper (Cu)	mg/L	0.4 - 15
Zinc (Zn)	mg/L	0.3 - 10
Manganese (Mn)	mg/L	1 - 15
Boron (B)	mg/L	0.02 – 0.65

On Structure soil media B

Quality – Soil must be free from any 'unwanted materials'

Physical Properties

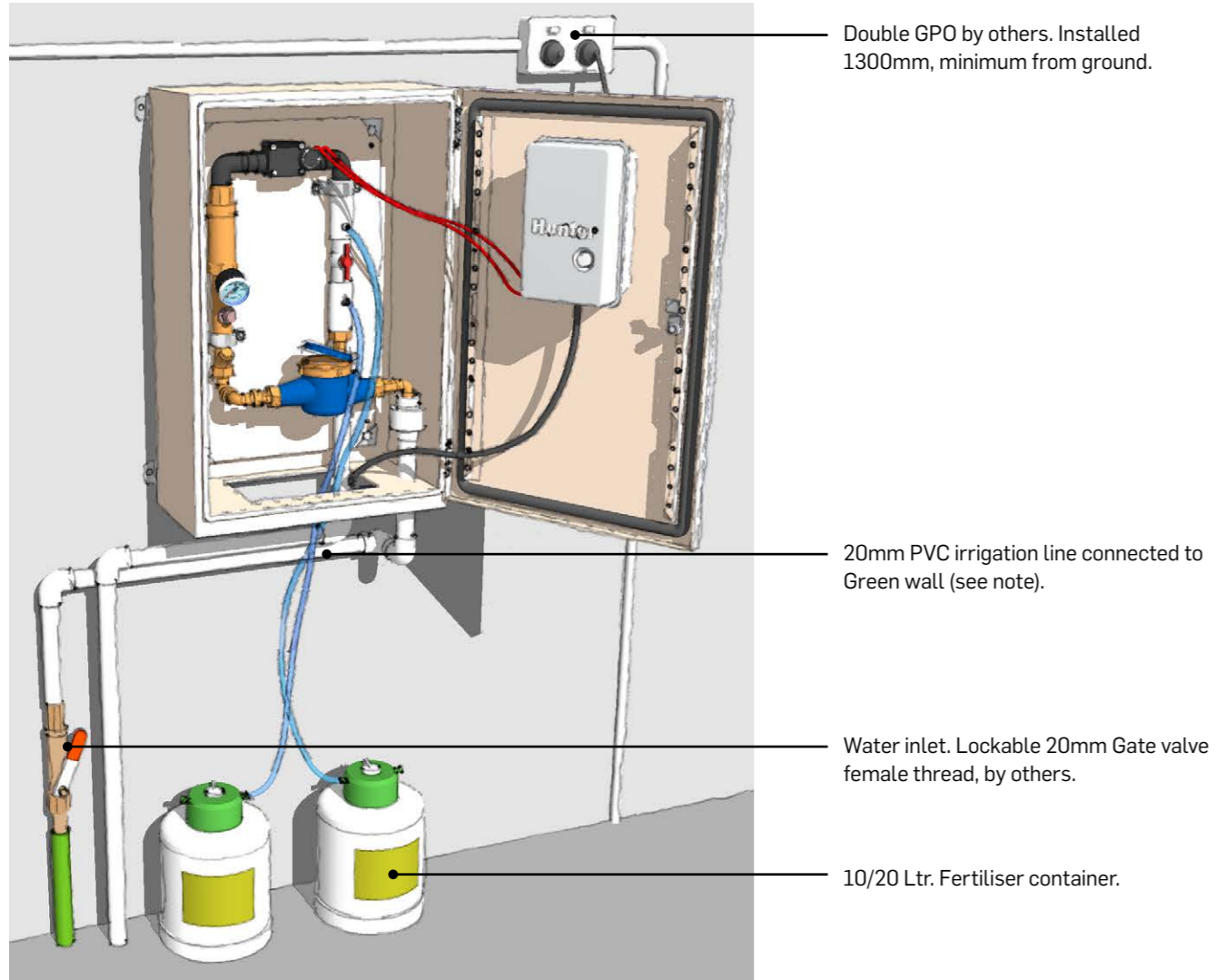
Property	Units	Target range
Texture, preferred range	n/a	Gravelly loamy sand to organic sandy loam
Air-filled porosity	%	≥ 10
Water-holding capacity	%	≥ 40
Permeability (@ 16 drops by McIntyre Jakobsen)	mm/h	> 100
Saturated Density	kg/L	< 1.8
Organic matter	% w/w	< 5
Wettability	min	≤ 5
Dispensability in water		1 or 2 (AS4419) Category
Large particles in the largest dimension		
< 2 mm	% w/w	30–70
2–10 mm	% w/w	10 –20
10–20 mm	% w/w	5–10
20–50 mm	% w/w	< 5
> 50 mm	% w/w	0

Chemical Properties

C2. Chemical properties	Units	Target range
pH in water (1:5) Standard range	pH units	5.4–6.8
Electrical Conductivity (1:1.5)	dS/m	< 2.2
Chloride	mg/L	≤ 200
Ammonium-N (NH ₄)	mg/L	≤ 100
Ammonium-N + nitrate-N (NH ₄ + NO ₃)	mg/L	≥ 50
Nitrogen draw-down index	-	≥ 0.7
Toxicity index	mm	≥ 70
Low phosphorus – P (P-sensitive plants)	mg/L	< 3
Potassium (K)	mg/L	50–250
Sulphate (SO ₄)	mg/L	≥ 40
Calcium (Ca)	mg/L	≥ 80
Magnesium (Mg)	mg/L	≥ 15
Ca:Mg ratio	-	1.5–10
K:Mg ratio	-	1–7
Sodium (Na)	mg/L	≤ 130
Iron (Fe)	mg/L	≥ 35
Cooper (Cu)	mg/L	0.4 - 15
Zinc (Zn)	mg/L	0.3 - 10
Manganese (Mn)	mg/L	1 - 15
Boron (B)	mg/L	0.02 – 0.65

Irrigation strategy

EXAMPLE OF IRRIGATION SYSTEM



06.5 Access & Maintenance

Access to all garden areas is critical to the ongoing success of the landscape. Workplace health and safety is paramount to ensure that maintenance staff are kept safe whilst working at heights and tending to soil adjustments, irrigation repair and plant maintenance.

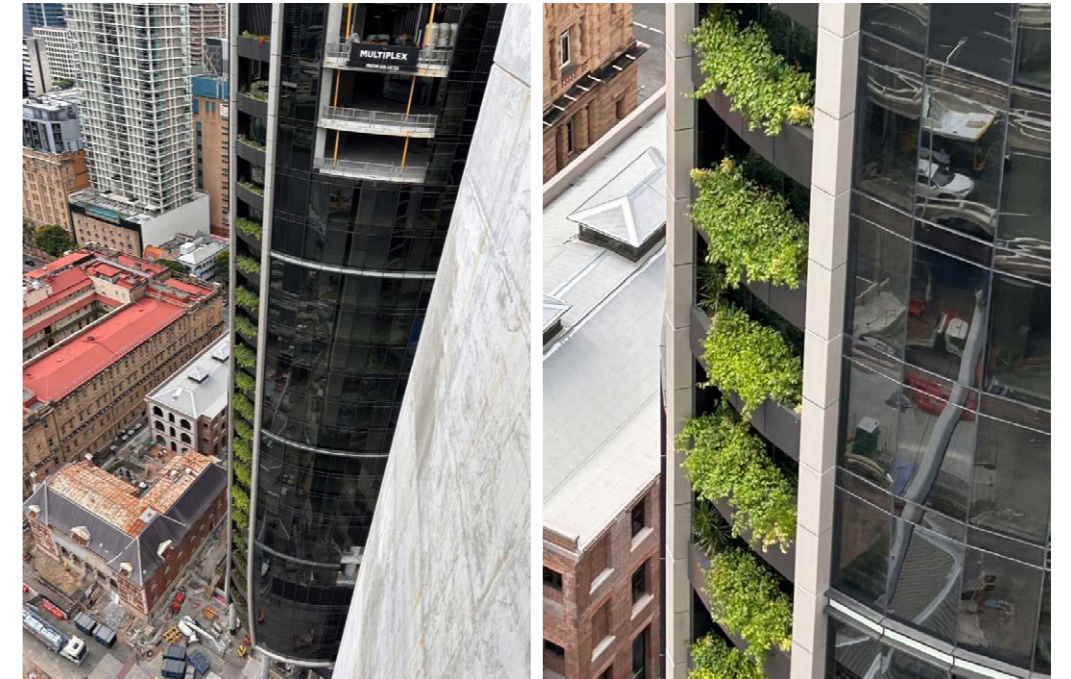
Facade gardens will be accessed for maintenance via a combination of internal access and ab-sailing from a davit arm mounted to either upper terraces or roof as shown in the diagram to the right.

The planting proposed to the facade planters will be hardy, low maintenance species that will only require quarterly maintenance checks.

The intent for the facade planting is to allow the groundcovers to spread and drape with minimal intervention or trimming.



Example of moveable Davit arm to access facade planters



Urbis designed facade planting for Queens Wharf has been installed and thriving for 1 year. Planters are fully maintained via absailing. Planting is in 400mm deep soil. Planters go up to 41 stories high. Planters are being maintained directly twice per year currently.

maintenance program

Podium edge planters	Monthly	6 Monthly	Yearly	Notes
Pruning and tidying of plants		x		Access the external facade through davit arm/ access via common areas on a quarterly inspection basis. Conduct cleaning maintenance of facade planters, pruning vines/climbers, shaping, training, and insect control in areas challenging to reach from balconies.
Fertiliser application		x	x	Apply slow-release fertiliser. Access planters via davit arm/ via common areas.
Insect control	x			Adhere to chemical control specifications.
Irrigation upstand inspection	x			Inspect, repair any damaged systems. Inspect and treat via davit arm/ via common areas.
Litter removal	x			Remove litter trapped in planter boxes. Inspect and treat via davit arm/ via common areas.

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