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Project		THE CHATSWOOD CHASE		

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### **ACKNOWLEDGEMENT FOR COUNTRY**

LatStudios commit to supporting the health and wellbeing of Country, by respecting, valuing and being guided by First Nations people.

#### **Engaging and Respectful Consultation**

LatStudios are currently engaged on several projects working with different traditional custodians, working in line with the protocols established by the Australian Institute of Landscape Architects' Reconciliation Action Plan. We work with experienced engagement consultants to facilitate a respectful dialogue with a focus on listening and being open to guidance.

AILA Reconciliation Action Plan summary:

- Acknowledge and respect traditional owners across Australia as the traditional custodians of Country.
- To honour Elders past, present and emerging and ensure the continuation of culture and traditional practices
- A 'Connection to Country' approach to landscape planning, design and management
- A collaborative journey to better understand and engage with Country in a respectful and consultative way and to build ongoing relationships with traditional owners
- Four (4) key areas for development each area has a number of actions and deliverables which aim to:
- actively monitor progress of actions
- build internal and external relationships
- participate in and celebrate NAIDOC Week
- raise RAP awareness
- increase employment and supplier diversity
- increase educational opportunities
- 1. Relationships
- 2. Respect
- 3. Opportunities
- 4. Governance and Tracking

#### Link to AILA's RAP:

https://www.aila.org.au/documents/AILA%20Reflect%20 RAP%202018-19%20-%20RA%20endorsed.pdf

THE CHATSWOOD CHASE Vicinity Centres [E]

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## CONTEXT

## Speaking to the folds and crevices of Kuring-gai Chase...

#### **CITY CONTEXT**

Chatswood Chase shopping centre sits on the main axis to Chatswood's CBD, Victoria Avenue.

Chatswood Chase has a physical connection to all four street frontages, Havilah Street, Malvern Avenue, Archer Street and the main entry to Victoria Avenue.

#### The Site includes;

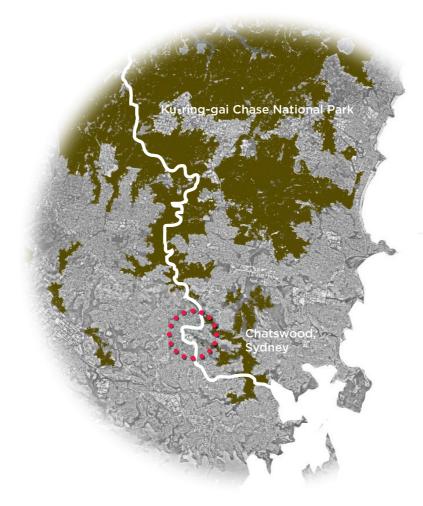
- + Chatswood Chase Shopping Centre (345 Victoria Avenue). Lot 10 DP 1143909 (area: 35,334m2)
- + The local neighbourhood consists of low and medium density residential, mixed use and commercial core. Connecting this neighbourhood are key streets that include mature street trees.
- + Chatswood Chase is well connected in terms of accessibility to public transport. The Chatswood Train Station and Bus Interchange is within a 12 minute walk, along the axis of Victoria Avenue.
- + It is also within a 4 minute drive to the Pacific Highway creating accessibility on all modes of transport.

#### **Site Description**

The location of the site provides an opportunity for permeability to residential areas and commercial.

The existing building on site is to be retained in part, with a dominant portion renovated. The materials palette across the site will undergo extensive refurbishment to ensure consistency throughout.

For details of tree retention refer to the Arborist Report.



...nature seeping back into the urban form

...a landscape where the folds reveal the changing character from the ridge to the flourishing gullies...





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Natural rock formations of the gullies



Ku-ring-gai Chase geology

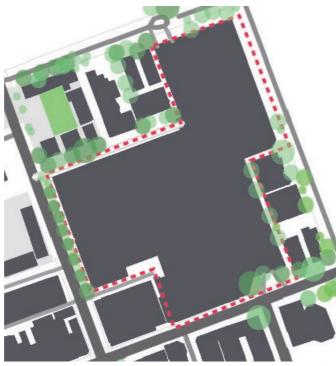


## SITE ANALYSIS

# **ACTIVE STREET FRONTAGES**

Active streets

### **SITE VEGETATION**



Existing vegetation

### **HERITAGE CONTEXT**



Conservation area General item for conservation

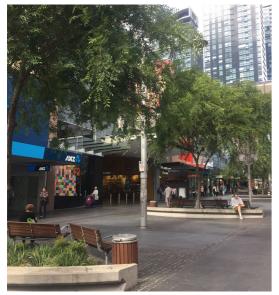
### ZONING



Local Centre Mixed Use Low Density Residential Medium Density Residential

Source: Willoughby Local Environmental Plan 2012

## SITE PHOTOS



Victoria Avenue shop fronts



Victoria Avenue approach



Victoria Avenue shop fronts



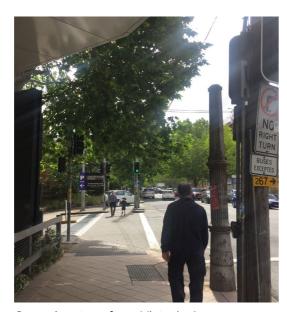
Archer Street frontage



Malvern Avenue



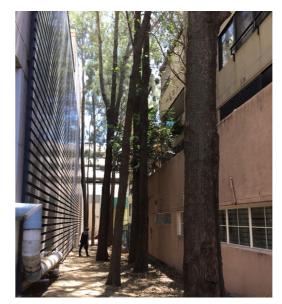
Havilah Street



Carpark entry - from Victoria Ave



Loading dock entry - from Victoria Ave



Existing trees on Eastern Boundary



Existing vegetation on Havilah St





## DESIGN PRINCIPLES

THESE SIX KEY PRINCIPLES HAVE BEEN FOUND IN ALL GREAT PLACES HAVE BEEN USED TO GUIDE THE APPROACH AT CHATSWOOD CHASE



### PEOPLE COME FIRST



#### COMFORT

• SHADE + SHELTER

#### **AMENITY**

• SEATING + SPACES FOR ALL

#### **VARIETY + SCALE**

• LOCAL VIBRANCY + CHARACTER

#### CONNECTIVITY

• PEOPLE WATCHING + GATHERING

SENSE OF PLACE



#### CELEBRATE

CELEBRATE SITE
 HISTORY VIA ARTWORK +
 CULTURAL EVENTS

#### **UNIQUE FEATURES**

• ELEMENTS OF DELIGHT + SURPRISE

#### CLIMATE

TAKE ADVANTAGE
 OF LOCAL CLIMATIC
 CONDITIONS

#### **RESOURCES**

• NATURALLY + LOCALLY SOURCED MATERIALS

#### LIFESTYLE

• ENJOYING THE LOCAL ENVIRONMENT

CONNECTIVITY



#### **LEGIBILITY**

RECOGNISABLE
 DESTINATIONS (IE EXITS +
 ENTRIES)

#### SIGHT LINES

• CLEAR SIGHT LINES + MINIMAL SIGNAGE CLUTTER

#### PERMEABILITY

 DIVERSE CONNECTIONS, DESIRE LINES + ACTIVE FRONTAGES

#### **CONNECTION TO NATURE**

 INTEGRATE + ABSTRACT THE NATURAL ENVIRONMENT 4 ADAPTABLE + COMPLEX



#### **DIVERSITY**

 ACCOMMODATE DIVERSE RANGE OF SPACES + ACTIVITIES

#### ADAPTABLE

• TECHNICAL + FUNCTIONAL STRATEGIES

#### **ACTIVE FRONTAGES**

RESPONSIVE TO
 DIFFERENT MODES +
 CLIMATES

#### **SPECIFICITY**

 PUBLIC REALM REFLECTS SITE CHARACTER, MATERIALS + PROGRAM

#### **FUTURE PROOFING**

 ROOM FOR ONGOING DEVELOPMENT 5 EPHEMERA



#### **EXTENDED HOURS**

 SPACE FUNCTIONALITY ACROSS DAY + NIGHT

#### **UNIQUE OVERLAY**

EVENT/PROGRAM
 OVERLAY RELATED TO
 SITE, SEASON AND/OR
 USERS

#### LIGHTING

LIGHTING RESPONDS
 TO EVENTS/MODES
 CREATING EXPERIENCE

#### MOVEABLE

 MOVABLE ELEMENTS ENSURE PLACE FLEXIBILITY 6 MULTIPLE BENEFITS



#### **USABILITY**

 DINING, ENTERTAINMENT, RECREATION, TRANSPORT + SHELTER

#### **OUTDOOR LIFESTYLE**

 PROVIDE OPTIONS FOR INDOOR/OUTDOOR SPACES

#### **ACTIVITY**

 OFFER AN ARRAY OF PASSIVE + PHYSICAL ACTIVITIES

## CONCEPT DRIVERS

The overarching landscape design concept is to bring elements of the Kuring-gai Chase National Park back to Chatswood Chase, with links to the vegetation, rock formation and layered materiality.

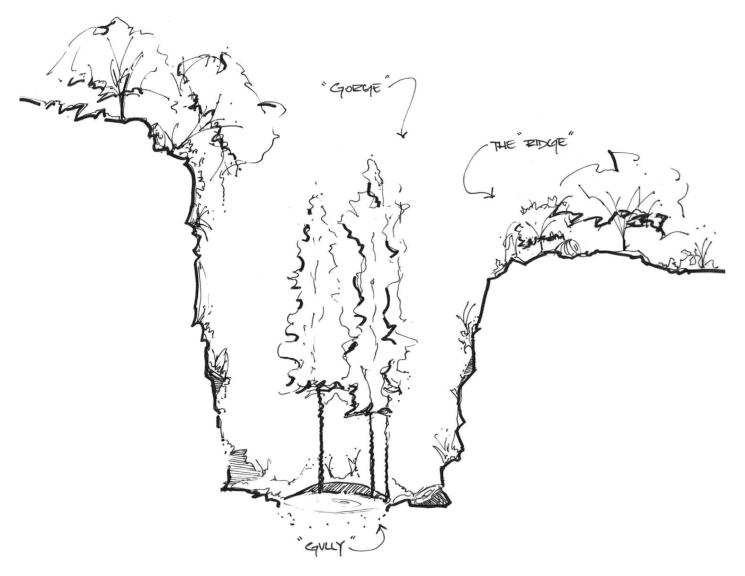
These elements have been broken down into three concept drivers, the Ridge, the Gorge and the Gully.

Architectural design principles reinforced by the landscape are;

Welcome and Farewell - an emphasis on increasing the landscape within the entry zones creating shade and ambience to key gathering spaces

Journey - terracing and cascading the green layer throughout the floors, focusing on the Victoria Avenue building frontage. Creating visual links from each outdoor space, from Street level to Rooftop.

Discovery - hidden layered landscape revealed through the journey providing surprise and delight up to and through the sunken oasis.



# the natural landscape

## THE RIDGE



The highest vantage point through the transect features craggy and stark native vegetation, falling towards the edge of the Gorge.



## THE GORGE



Exposed rock on the face of the Gorge, pulling back and revealing historic strata - providing room for opportunistic planting native to Ku-ring-gai.



## THE GULLY



Moss covered rock pools and lush ground covers sweep the floor of the Gully - interrupted with remnant tall canopy vegetation; shading and cooling the spaces below.

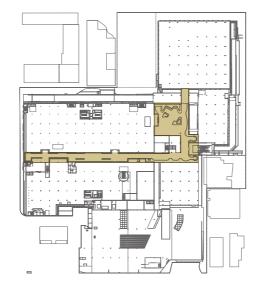


THE CHATSWOOD CHASE Vicinity Centres [E]

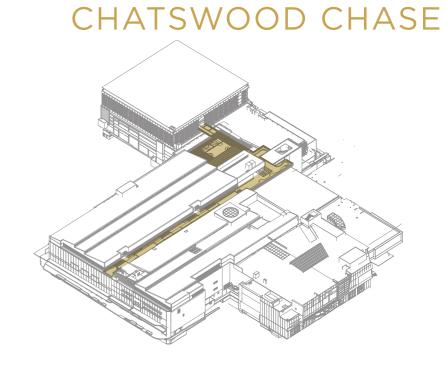
# the urban environment

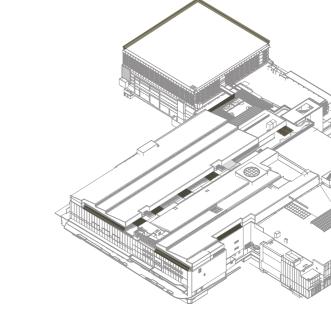
## **ROOFTOP**

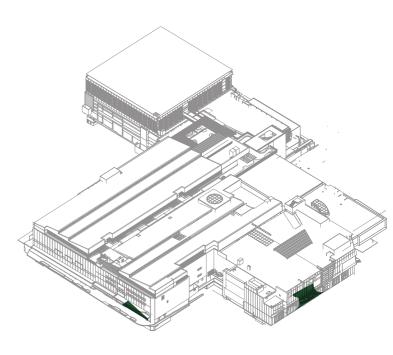
A place of discovery



Rooftop green rooves reflect the ridge character with cascading greenery creating places of discovery; a sunken oasis

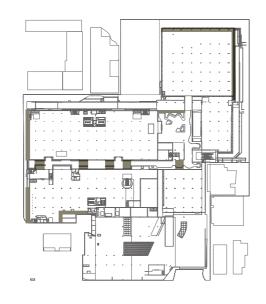






## **EDGES + ABOVE**

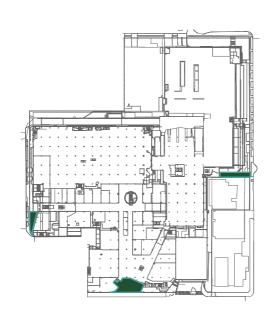




Vegetation and materiality convey the sense of the gorge through the boundaries of intermediate levels

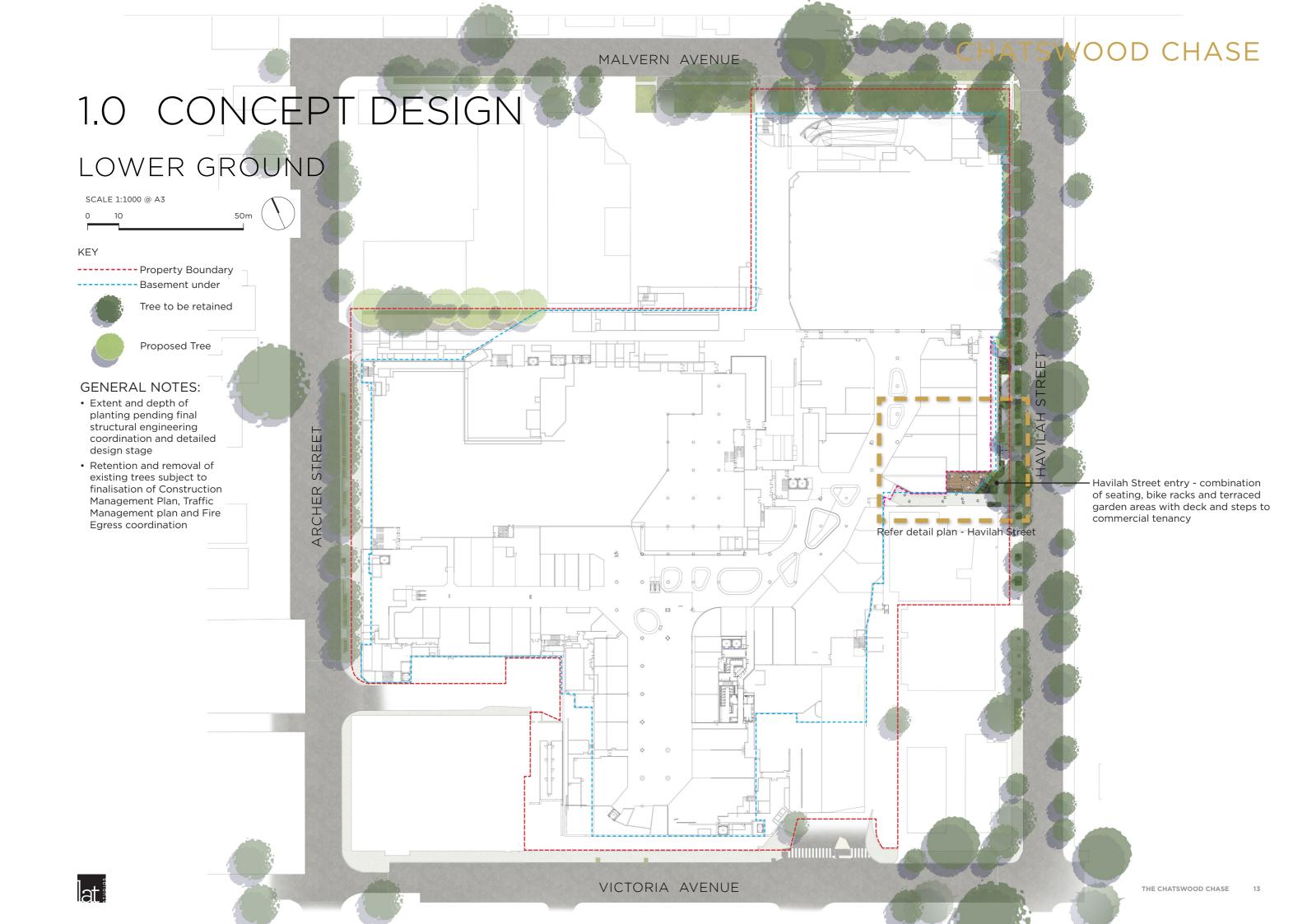


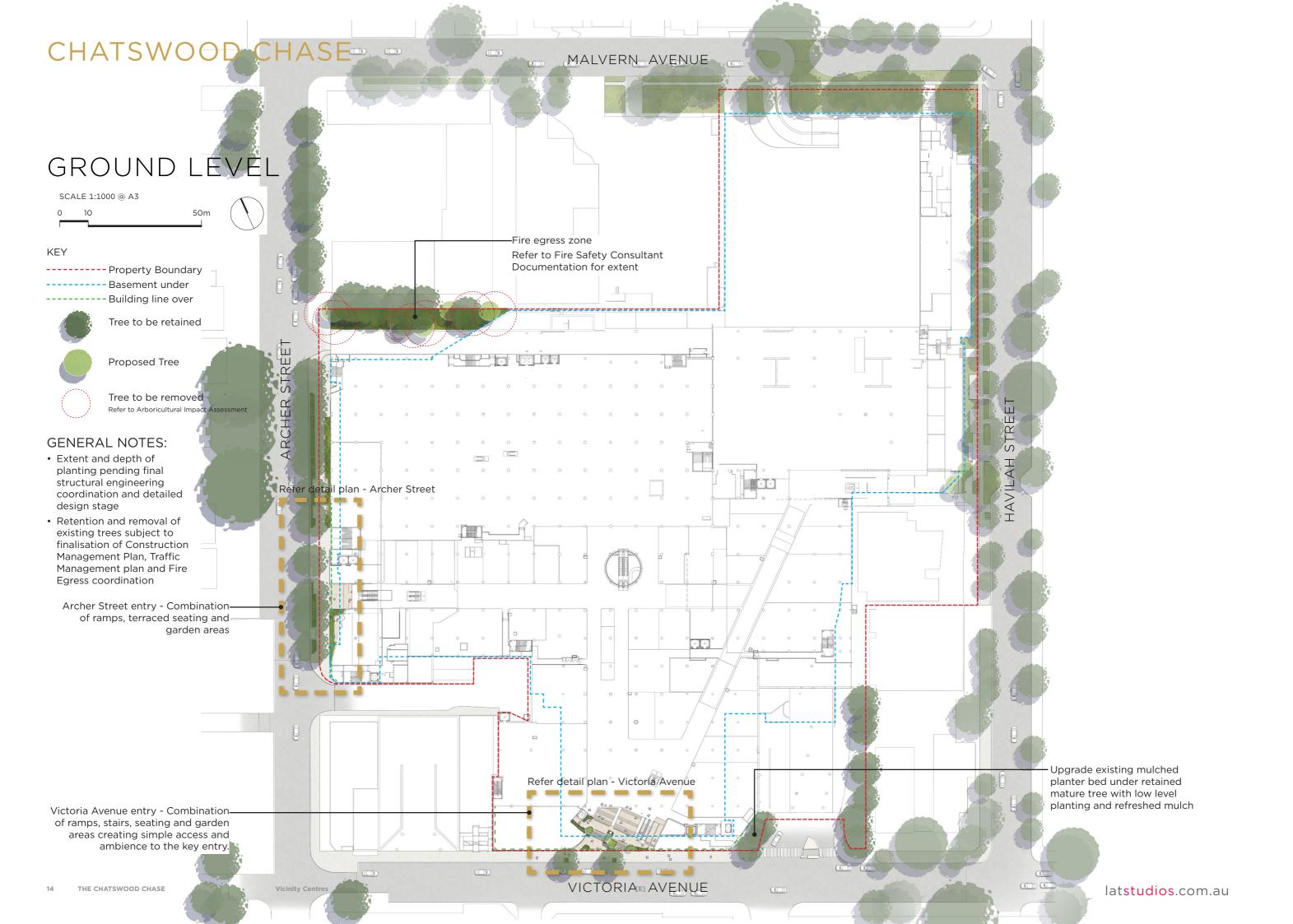


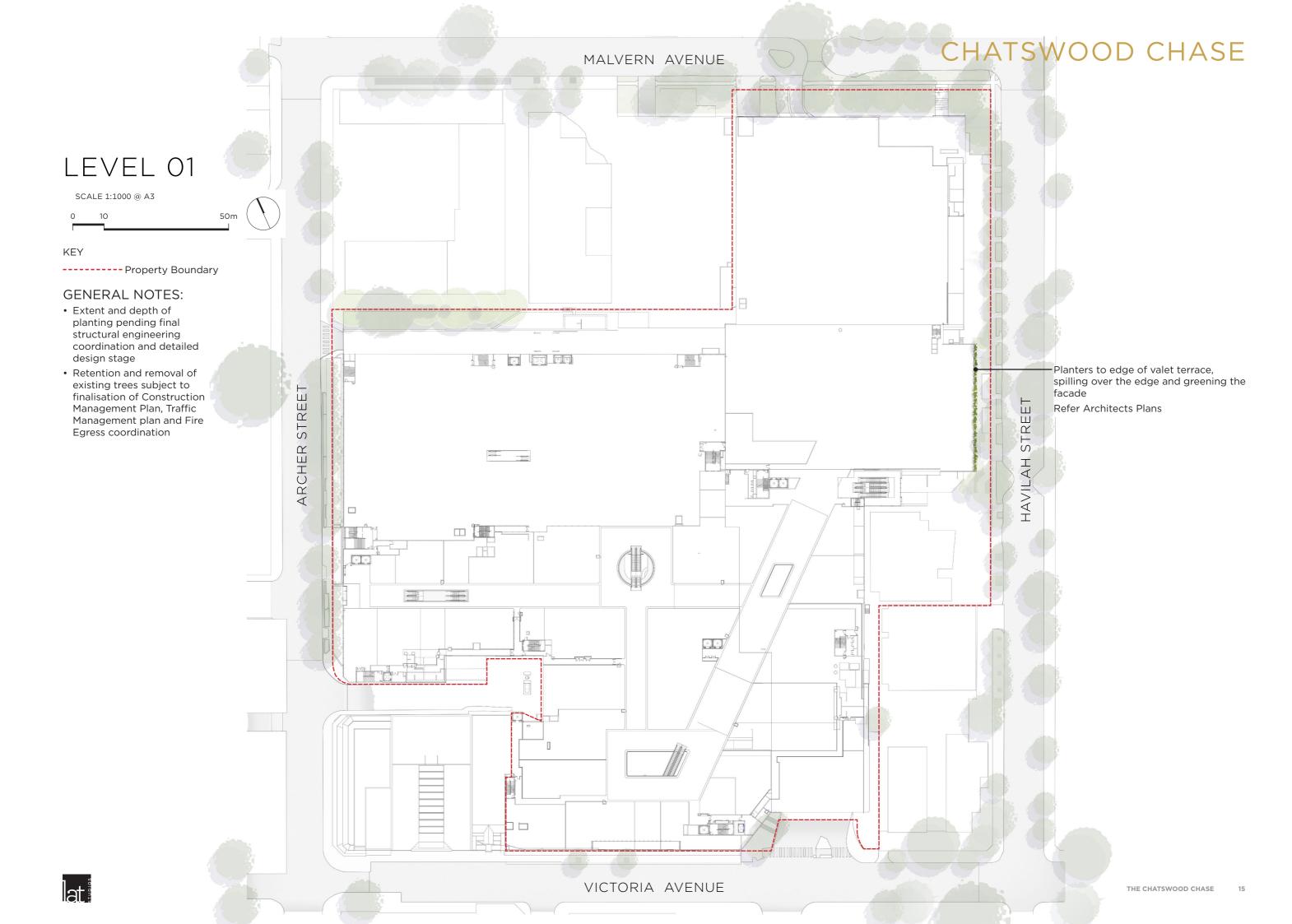


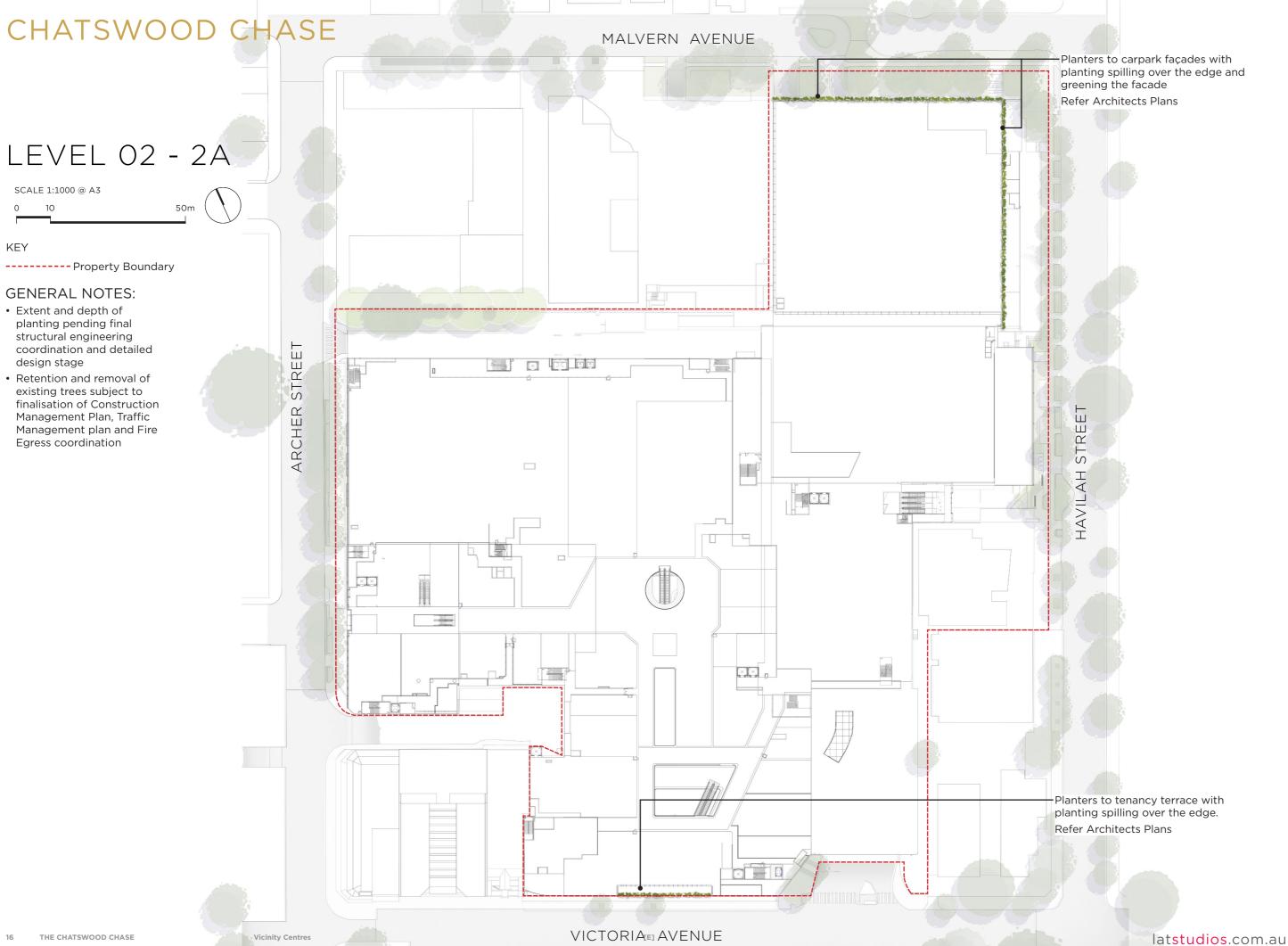
Flowing from entries to the streetscape the gully connects the Chase to Chatswood...

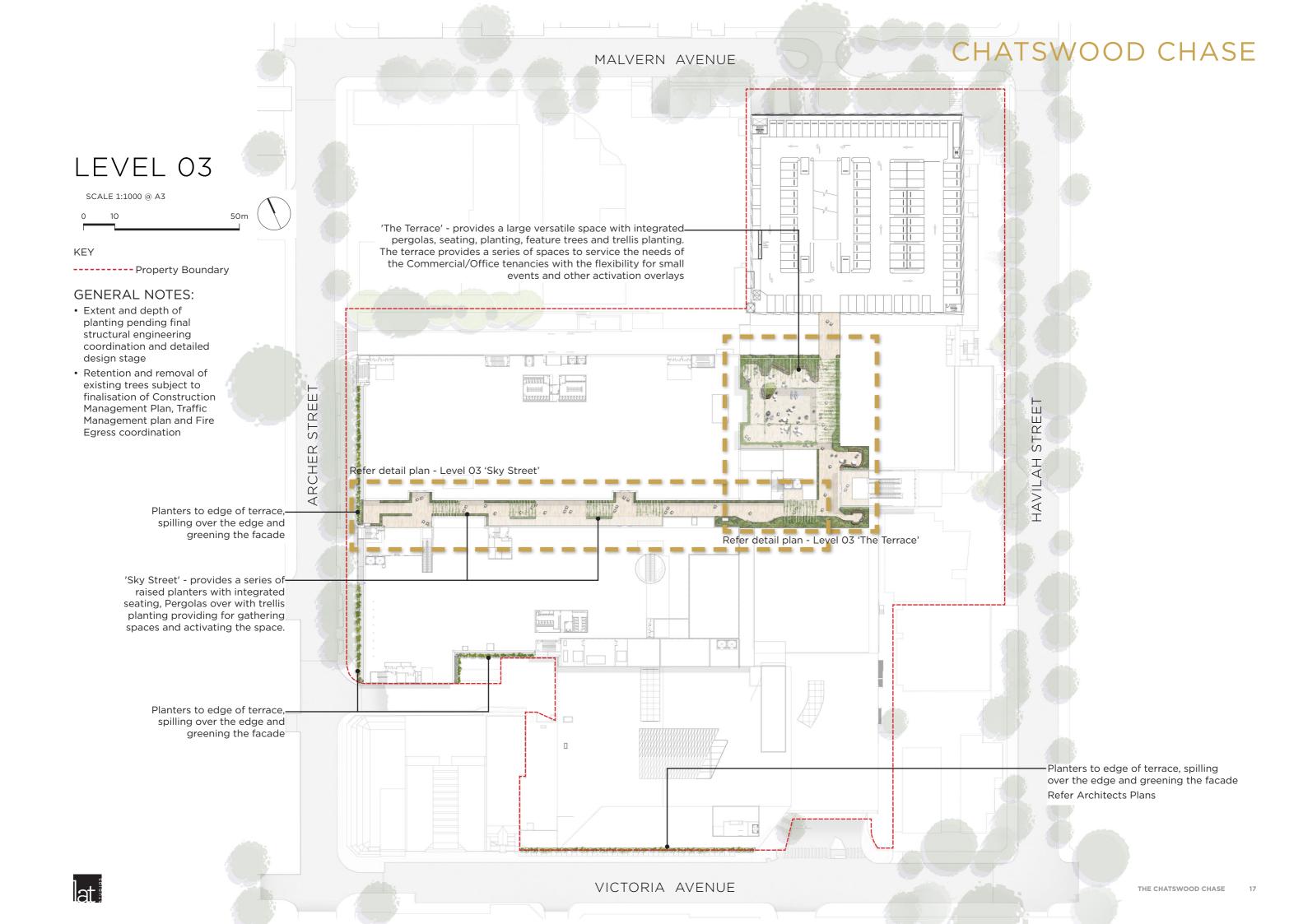


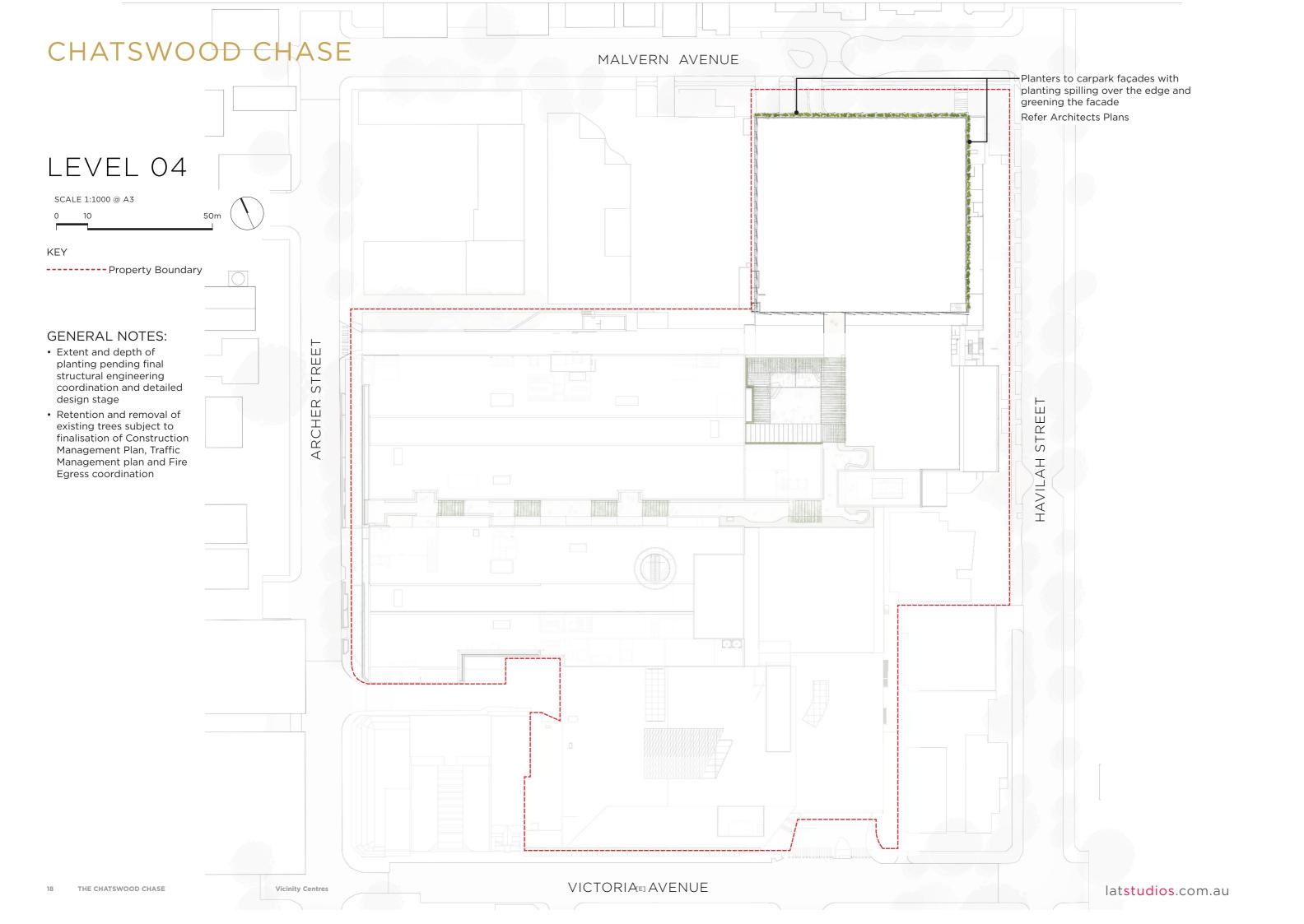








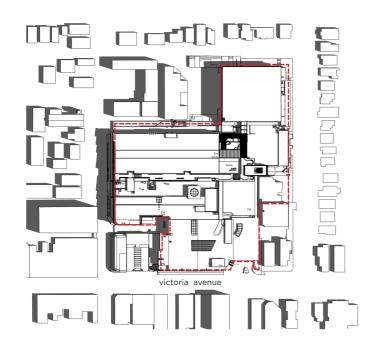




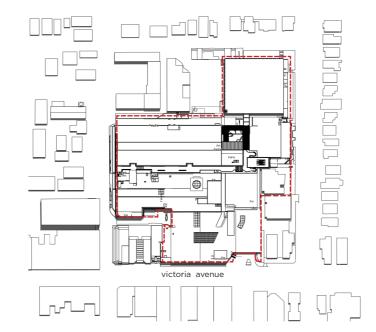


## SUN STUDIES









DEC 4PM



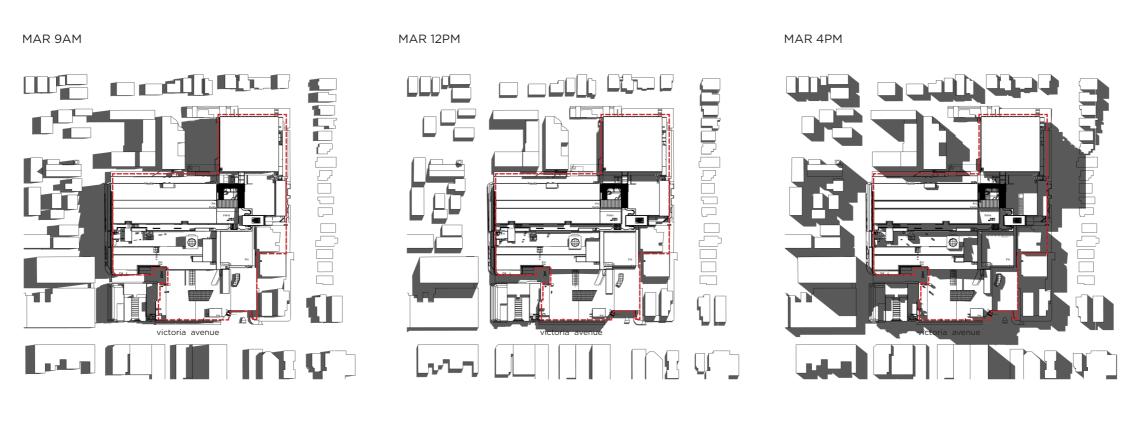








JUN 9AM JUN 12PM JUN 4PM

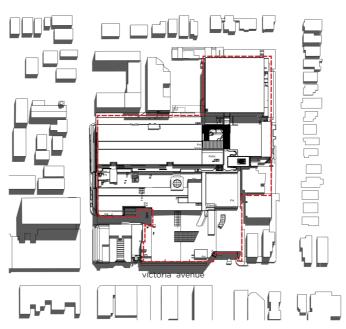




SEP 9AM



SEP 12PM







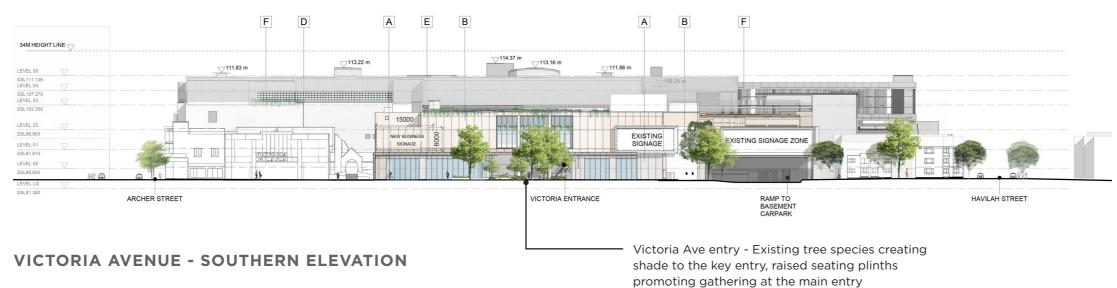




# 2.0 ELEVATIONS

## VICTORIA AVE + ARCHER ST

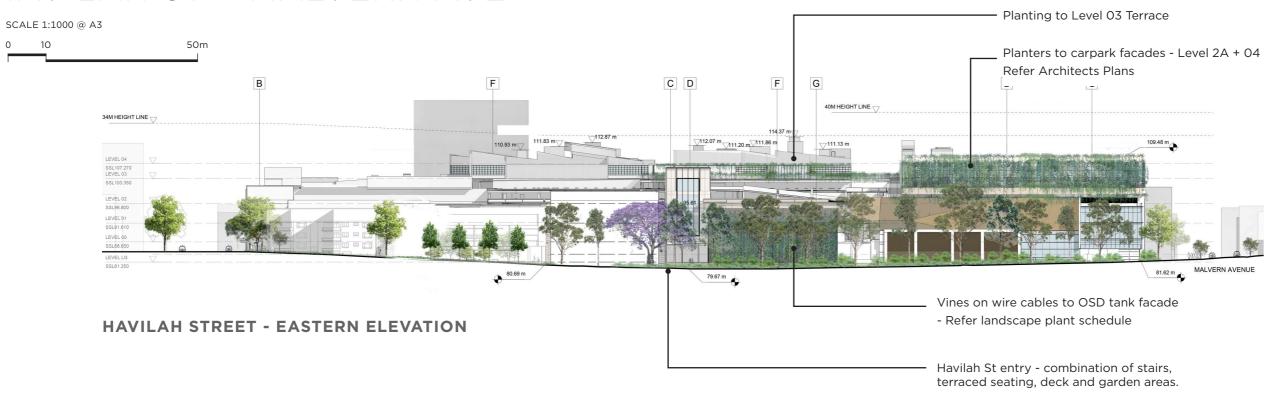


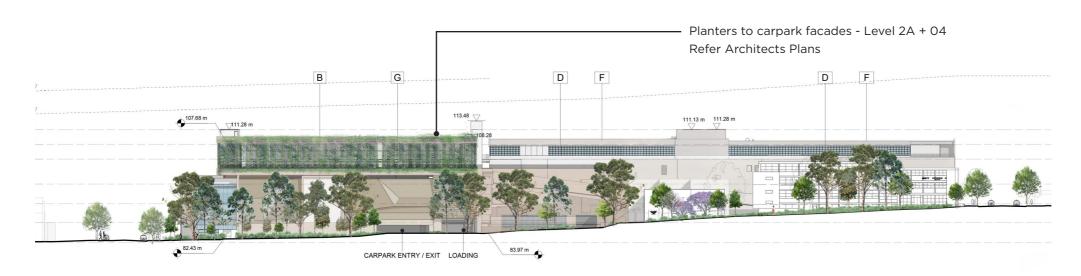




**ARCHER STREET - WESTERN ELEVATION** 

## HAVILAH ST + MALVERN AVE





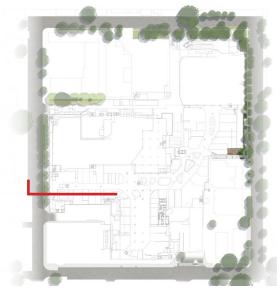
**MALVERN AVENUE - NORTHERN ELEVATION** 



# 3.0 SECTIONS

## SECTION A ARCHER STREET

KEY PLAN



Planters to building façades - Level 3 with cascading planting

Refer Architects Plans

Existing street tree to be retained

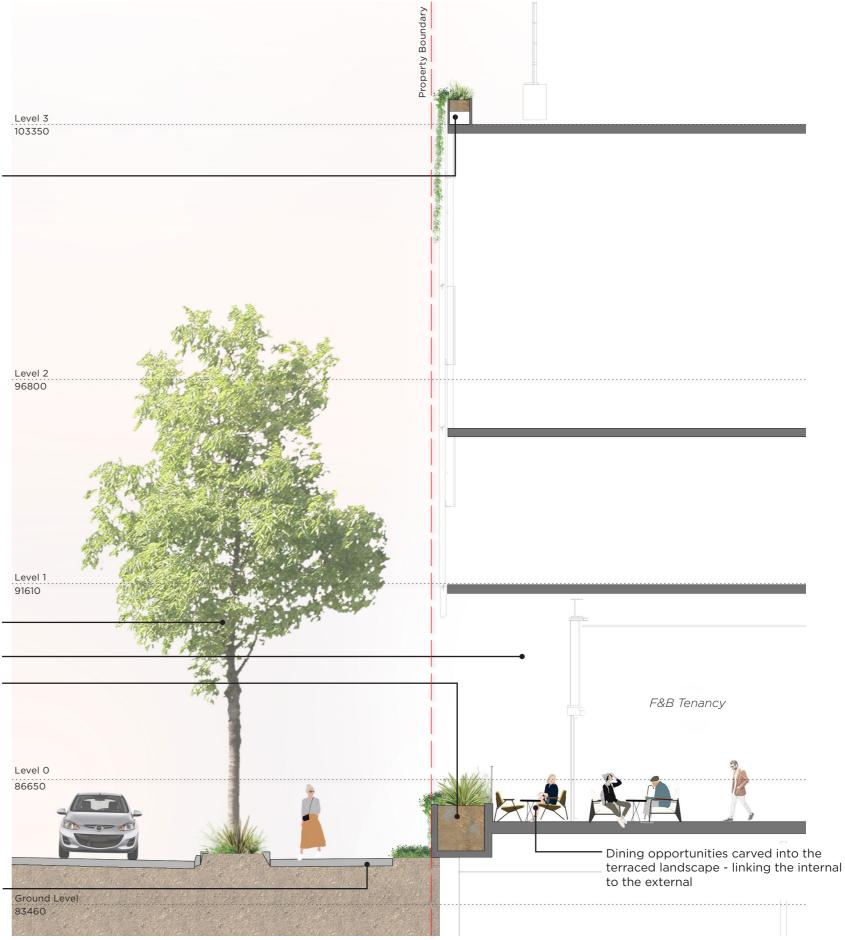
Mall entry to the rear of the terrace

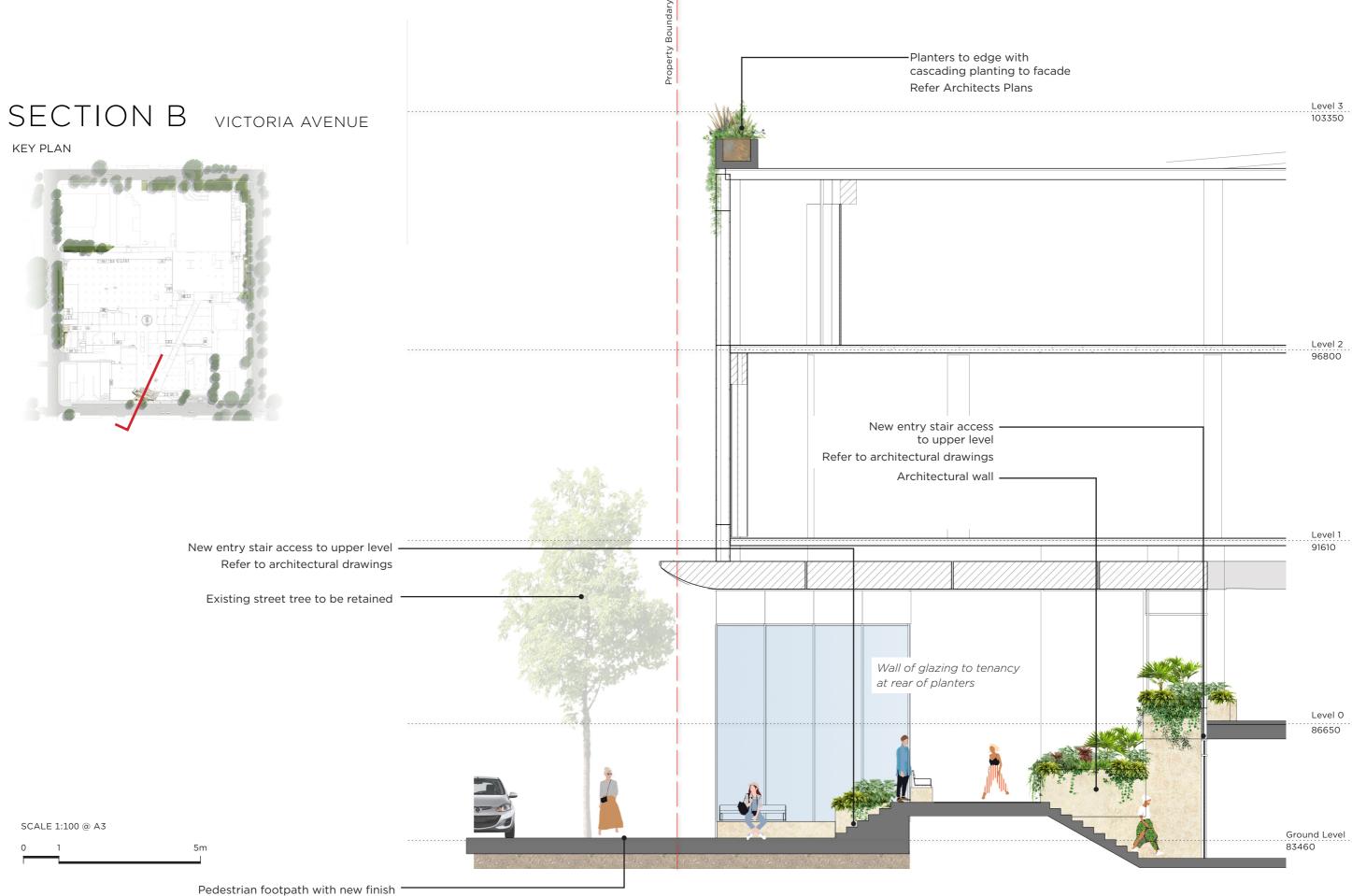
Terraced landscape with raised planters creating screened dining opportunity. CPTED principles applied with the use of low planting

Pedestrian footpath with new finish.

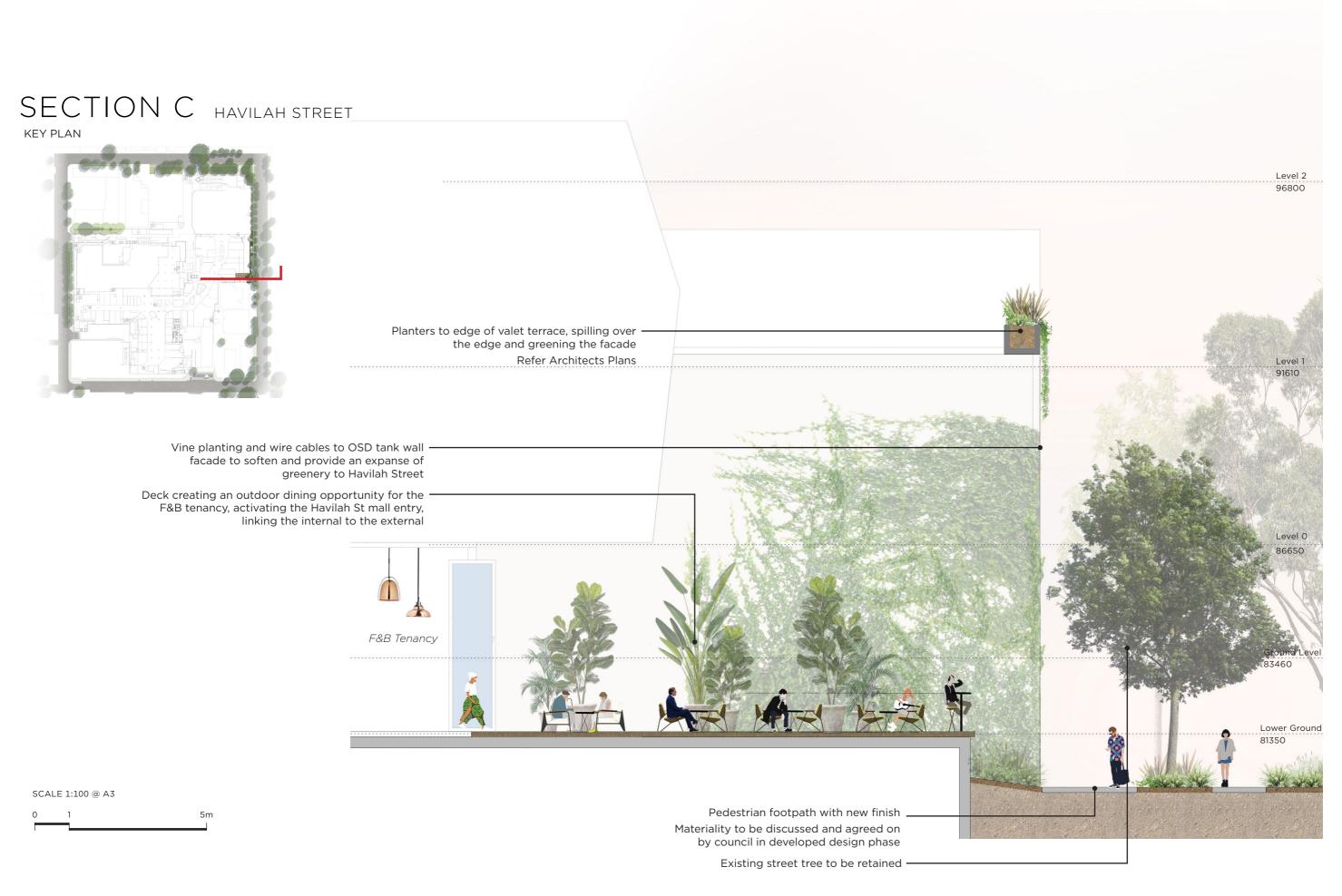
Materiality to be discussed and agreed on by council in developed design phase

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# SECTION D CARPARK FACADE PLANTERS



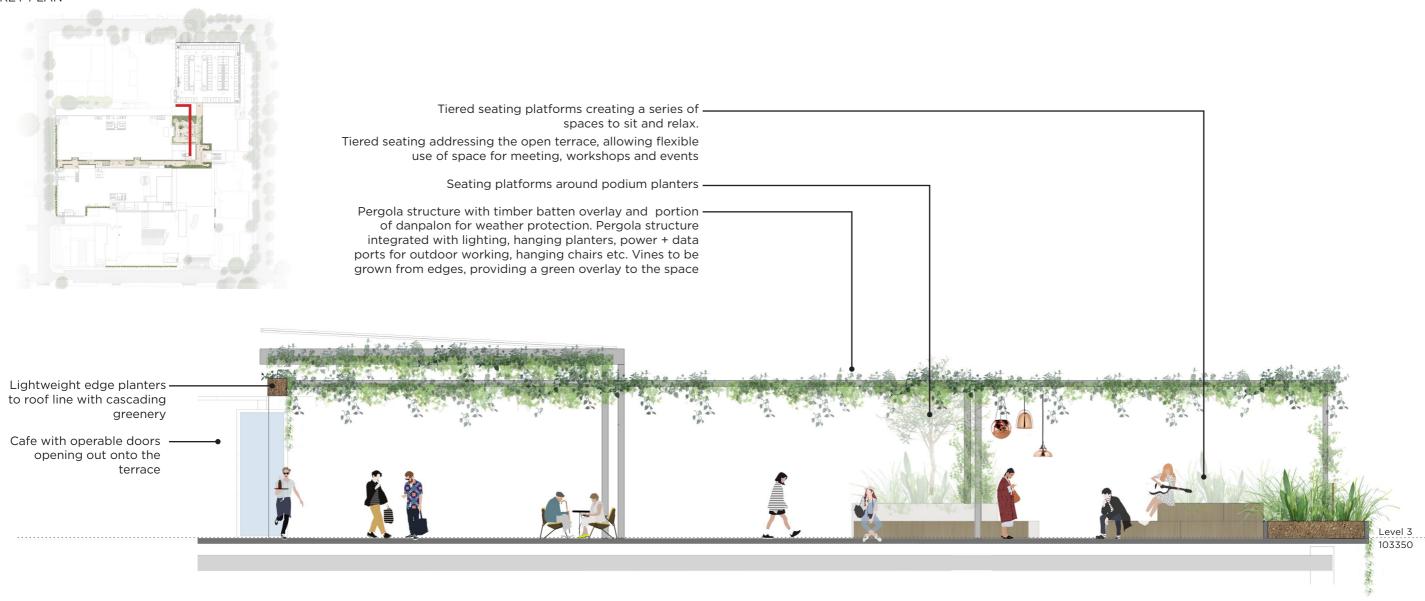
Planters to car park edges - Level 4 with cascading planting Refer Architects Plans Planters to car park edges - Level 2A -with cascading planting Refer Architects Plans





## SECTION E LEVEL 03 TERRACE

KEY PLAN





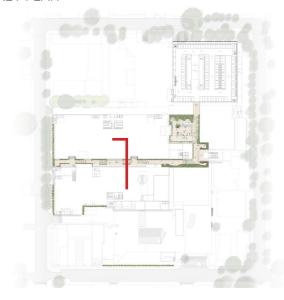
# SECTION F LEVEL 03 TERRACE KEY PLAN - Pergola structure with timber batten overlay and a portion of danpalon for weather protection. Pergola structure integrated with lighting, hanging planters, power + data ports for outdoor working, hanging chairs etc. Vines to be grown from edges, providing a green overlay to the space Lightweight edge planters to roof line with cascading greenery Level 3 103350 Meeting room with portal opening onto the terrace Lightweight planters to the terrace edge with cascading greenery



SCALE 1:100 @ A3

## SECTION E LEVEL 03 TERRACE

KEY PLAN



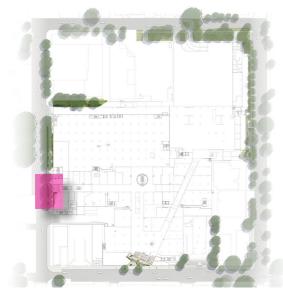




# 4.0 DETAILED PLANS

## ARCHER STREET

KEY PLAN



Existing trees and raised garden beds to be retained with new understorey planting and planter wall finishes

Pedestrian footpath with new finish Materiality to be discussed and agreed on by council in developed design phase

> Mall entry with feature tiled finish Refer to architectural drawings

Existing trees and raised garden beds to be retained with new understorey planting and planter wall finishes

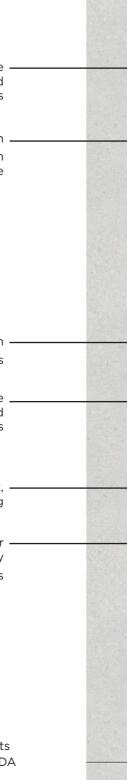
Raised garden bed with lush, shade tolerant, native planting

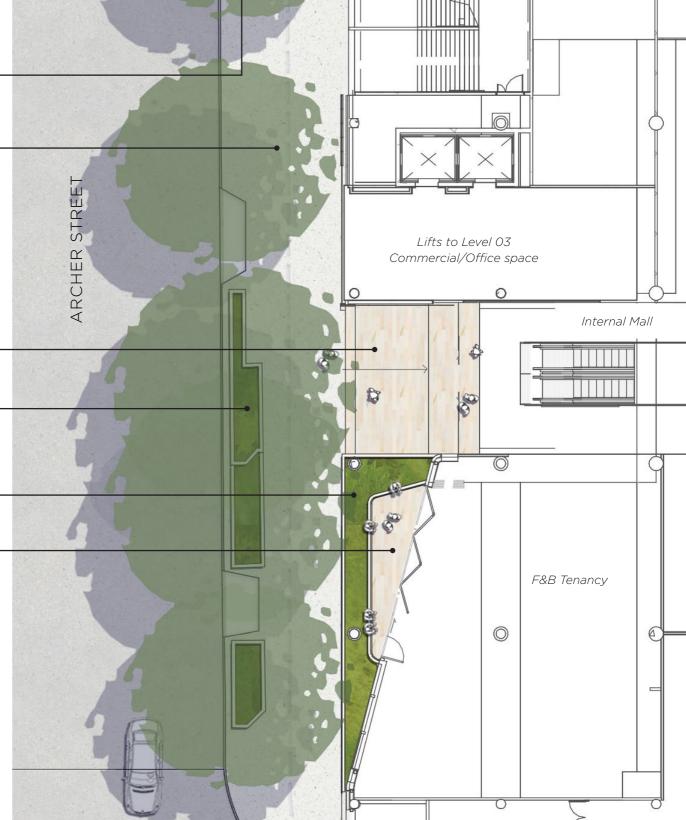
Landscape terrace providing an outdoor dining opportunity for the F&B tenancy

Refer to architectural drawings

#### NOTE:

Incidental furniture to address the requirement for public seats with backs and armrests for DDA compliance



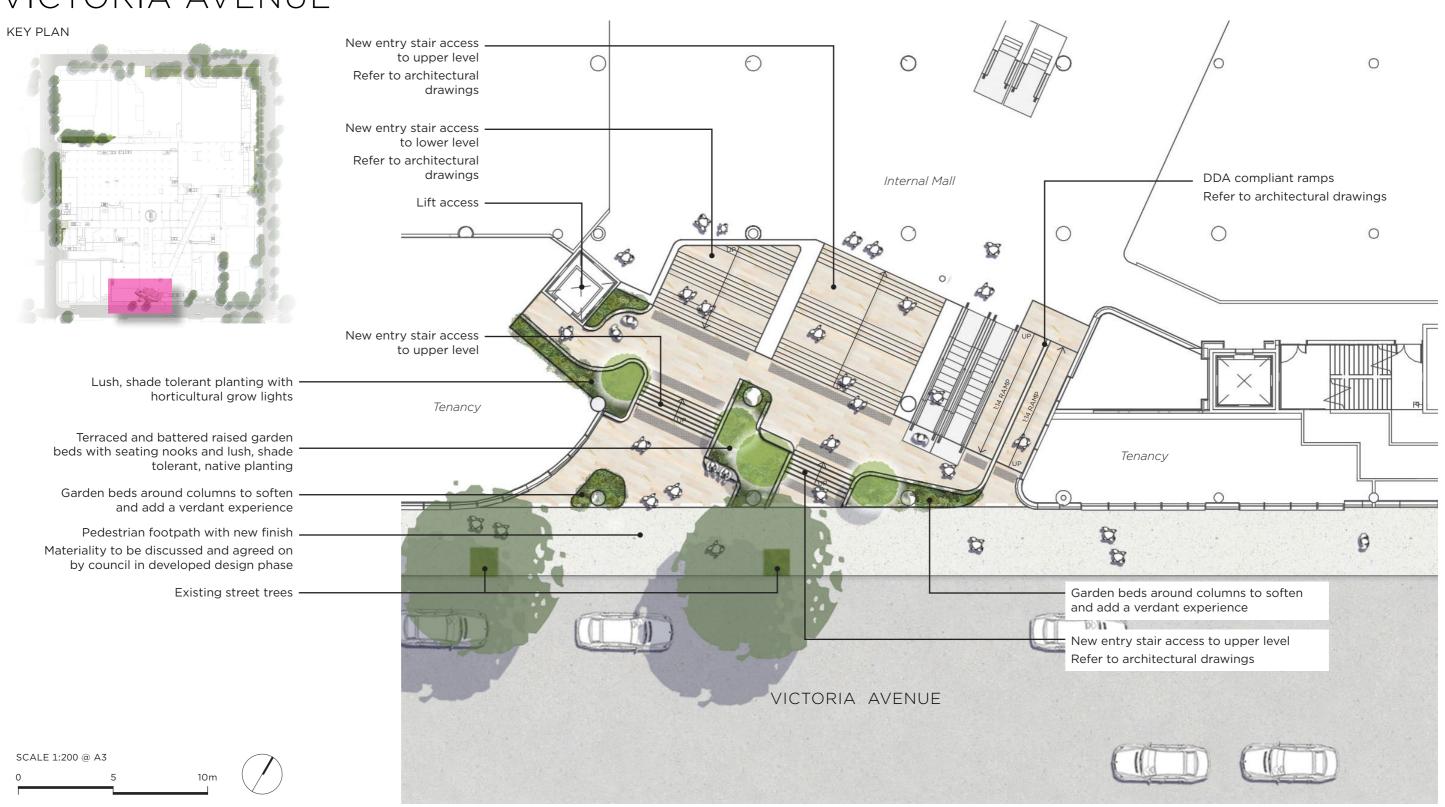








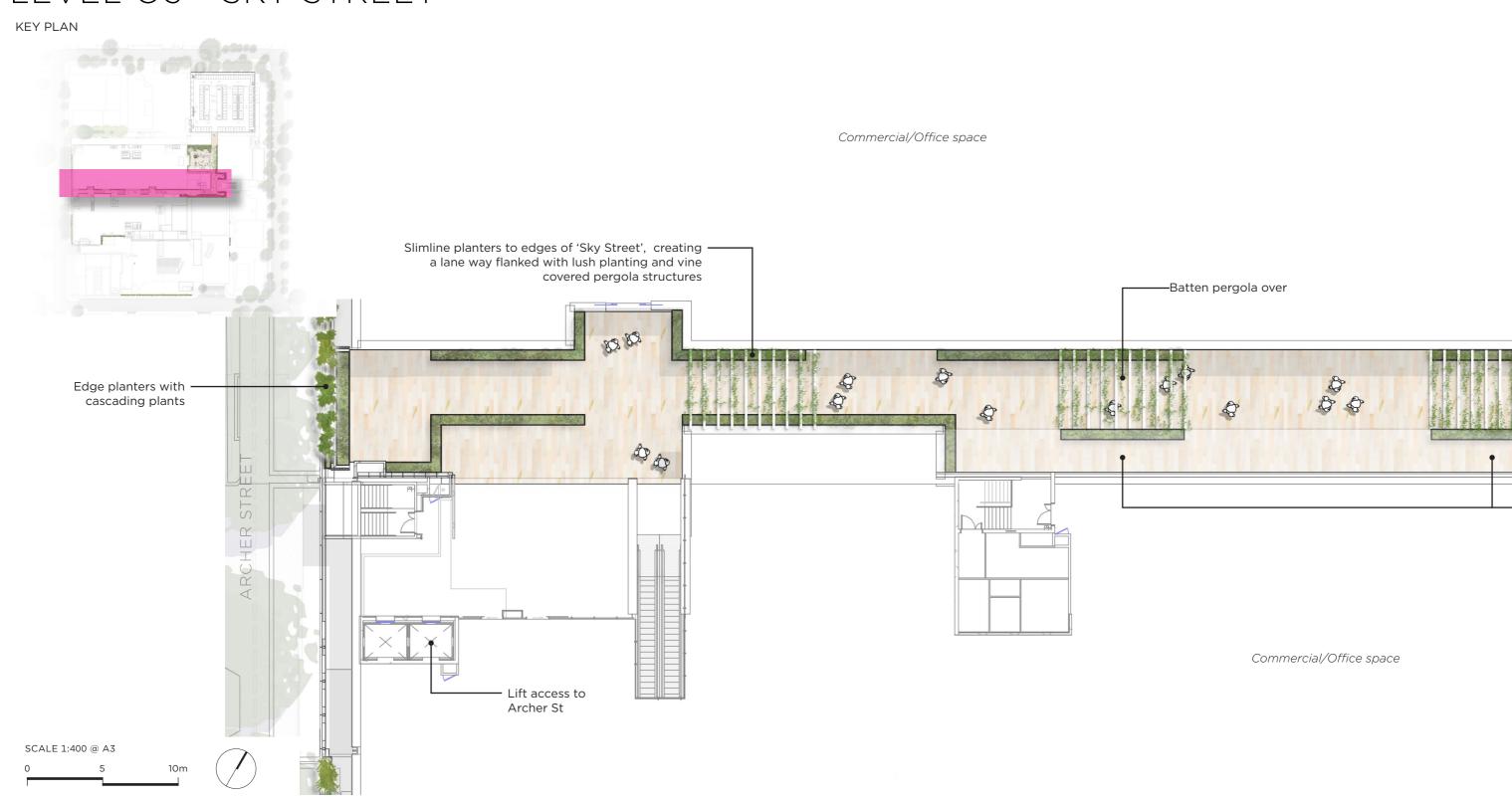
## VICTORIA AVENUE

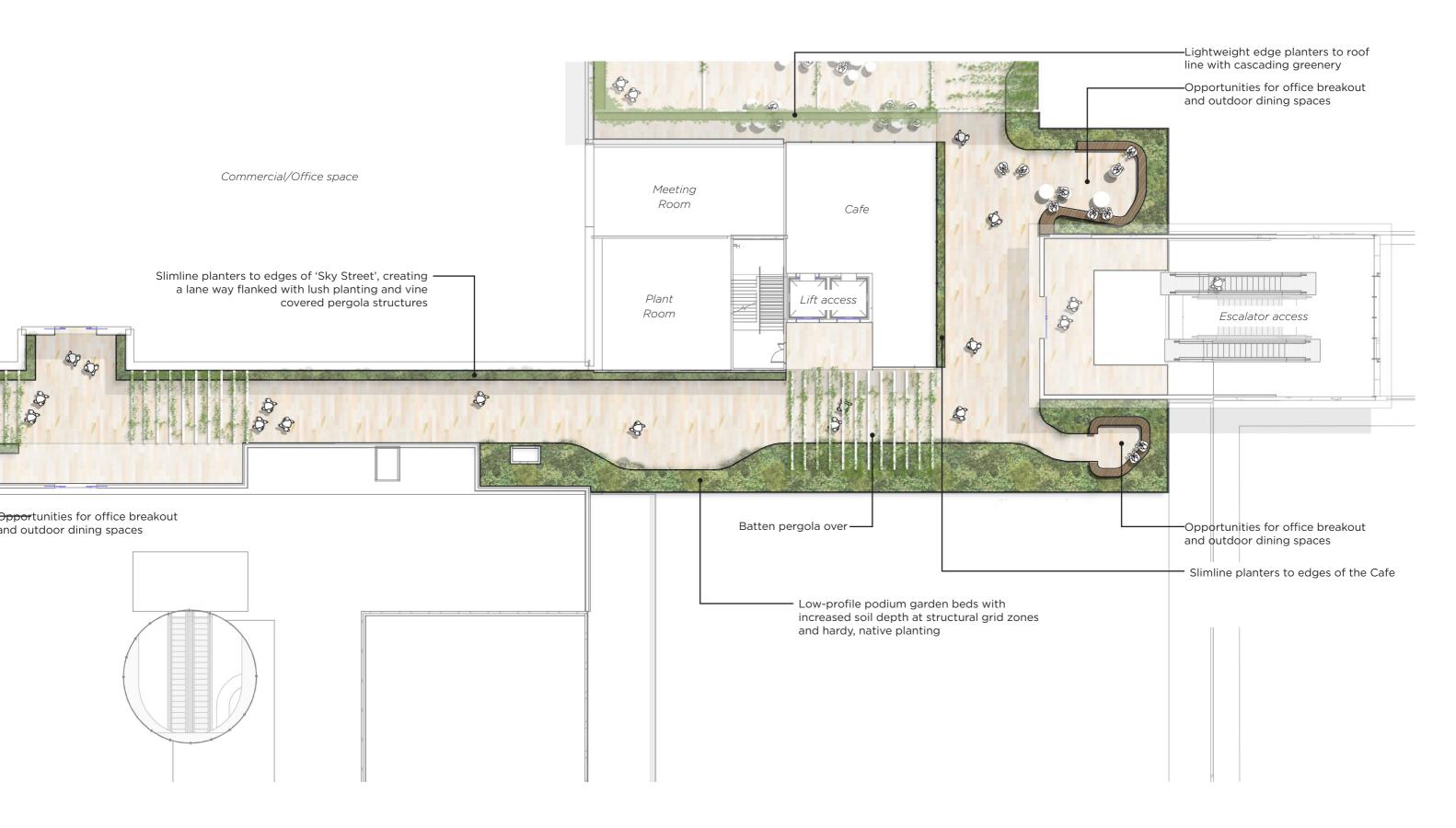




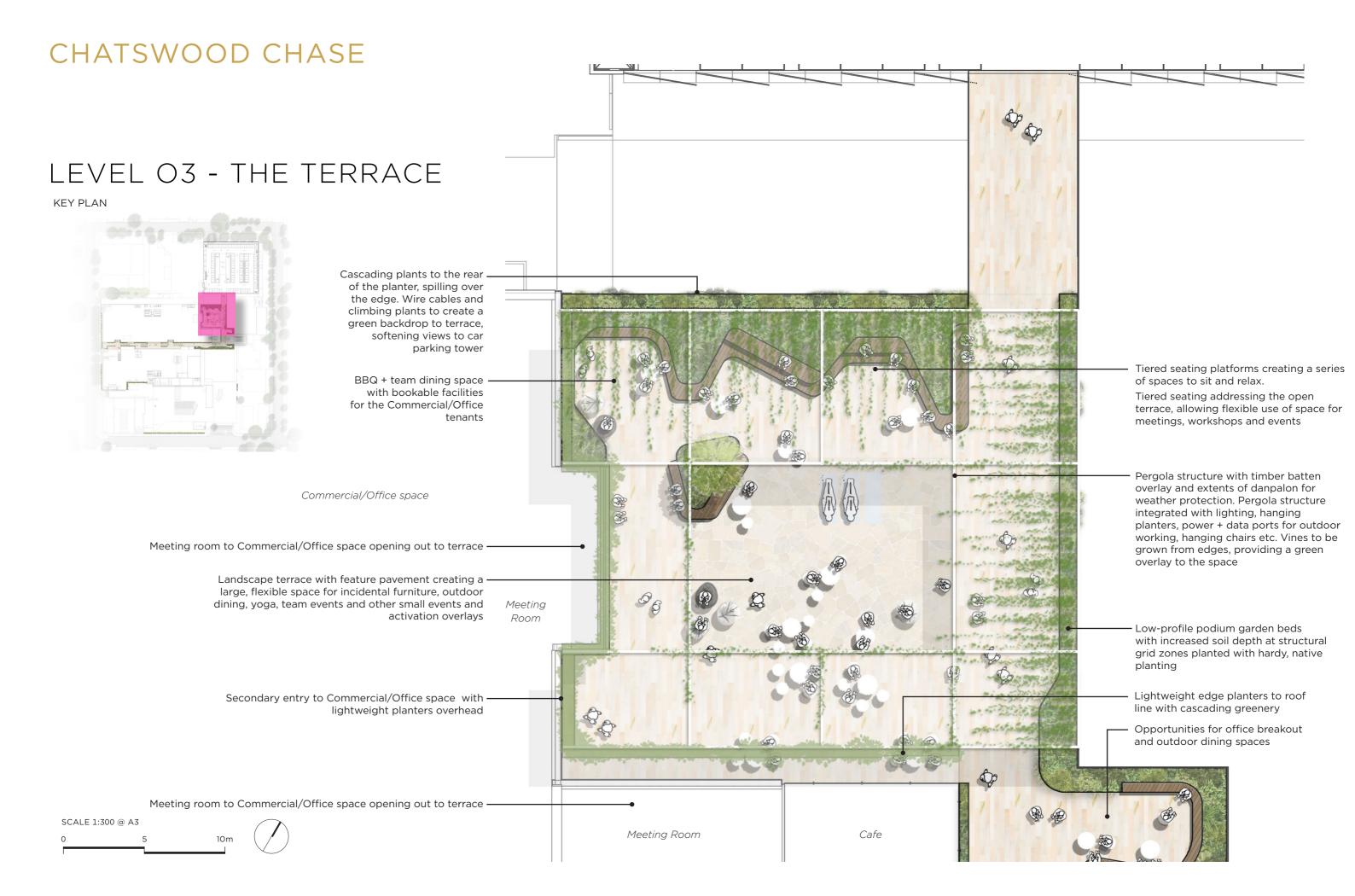


## LEVEL 03 - SKY STREET







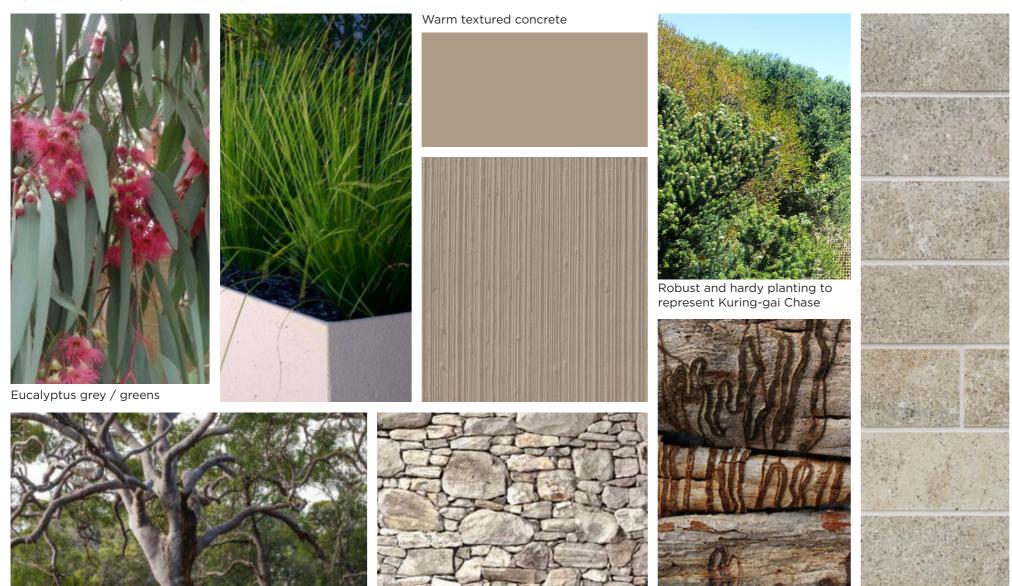




# 5.0 MATERIAL PALETTE

# THE RIDGE

The palette consists of Sydney native landscapes, that are hardy but present a soft colour palette and provide texture and detail through delicate fine foliage and flowers. Grey/green foliage and low wind swept forms represent the regenerative landscape character.



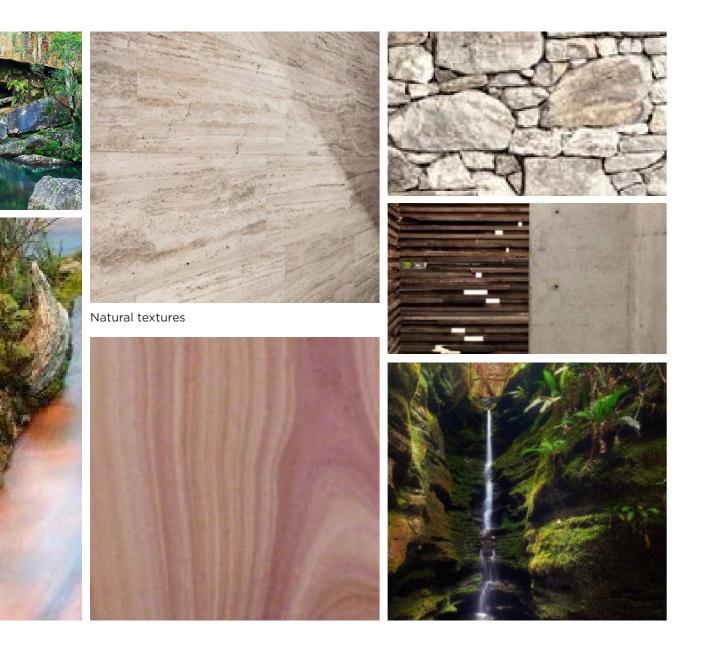
### THE GORGE

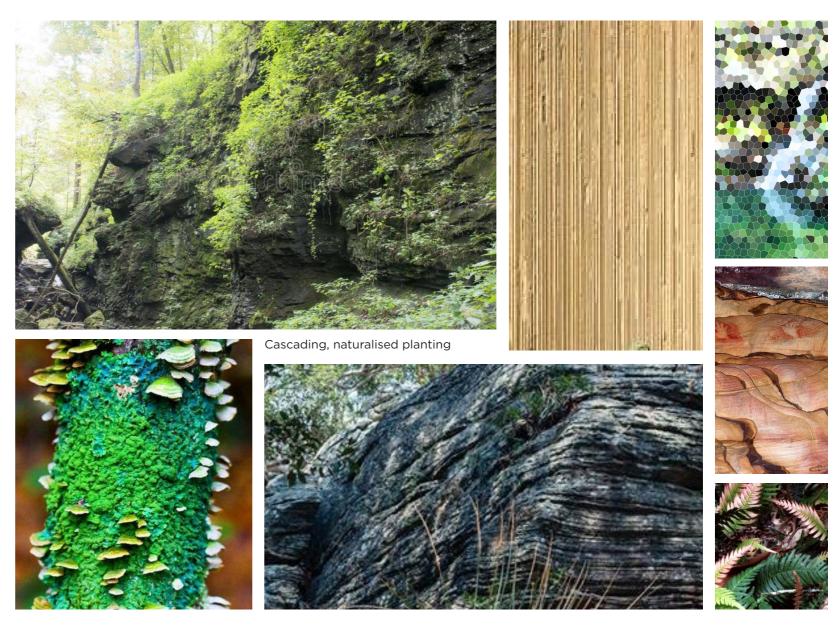
Speaking to the layered geology of the Kuringai Chase, revealing historic strata. This will be a response through materiality - colours, forms, textures on vertical plane.



# THE GULLY

Inspired by the rich understory of the Kuringai Chase, the Gully talks to the protected extents of space, with dappled light and textured forms complimented by a verdant layer of greenery.





# 6.0 PLANTING PALETTE

#### THE RIDGE LEVEL 03

Exposed and sculpted by the elements, The Ridge lends itself to diverse palette of hardy and interesting planting.

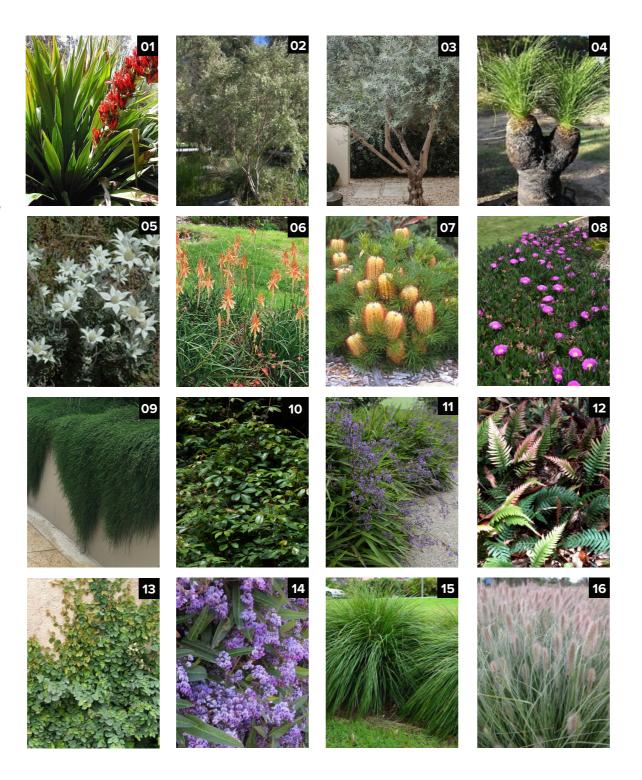
#### **SMALL TREES + SHRUBS**

- 01. Doryanthes excelsa Gymea Lily
- 02. Leptospermum brachyandrum Weeping Tea Tree
- 03. Olea europea Swan Hill Fruitless
- 04. Xanthorrhoea media Grass Tree

#### **UNDERPLANTING + CLIMBERS**

- 05. Acinotus helianthi Flannel Flower
- 06. Aloe 'Topaz'
- 07. Banksia 'Birthday Candles'
- 08. Carpobrotus glaucescens 'Pig Face'
- 09. Casuarina 'Cousin It' Cousin It
- 10. Cissus hypoglauca Native Grape
- 11. Dianella caerulea Flax Lily
- 12. Doodia aspera Prickly Rasp Fern
- 13. Ficus pumila Creeping Fig
- 14. Hardenbergia violacea Purple Coral Pea
- 15. Lomandra longifolia Tanika
- 16. Pennisetum alopecuroides Nafray
- 15. Macrozamia communis Burrawong
- 16. Trachelosperum jaminoides Star Jasmine

Images shown demonstrate the proposed character and form of the proposed softscape planting works within rooftop planting areas and edges.



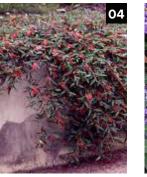
#### THE GORGE EDGES + ABOVE

The planters to the carpark facade, trellises and pergolas consist of robust, sprawling and spreading species that combine cascading colour with upright forms responding to the proposed depth of planter at approximately 400mm + 600mm.

#### **UNDERPLANTING, CLIMBERS + DRAPERS**

- 01. Anigozanthos Big Red
- 02. Casuarina 'Cousin It' Cousin It
- 03. Cissus hypoglauca Native Grape
- 04. Grevillea Poorinda Royal Mantle
- 05. Hardenbergia violacea Purple Coral Pea
- 06. Lomandra longifolia Tanika
- 07. Pandorea pandorana Wonga wonga Vine
- 08. Pennisetum alopecuroides Nafray
- 09. Rhipsalis capiliformis 'Mistletoe Cactus'
- 10. Russellia eqestiformis Firecracker Plant
- 11. Trachelosperum asiaticum Jasmine
- 12. Westringia fruticosa Mundi











#### THE GULLY GROUND + LOWER LEVELS

The forest floor, the Gully is layered geology, discovery, surprise & delight. The forest floor is created by overarching canopies dappled light and leaf fall.

#### TREES + SHRUBS

- 01. Ceratopetalum gummiferum Christmas Bush
- 02. Angophora hispida Dwarf Apple Gum
- 03. Cyathea cooperii Scaly Tree Fern
- 04. Monstera deliciosa Swiss Cheese Plant
- 05. Ficus maclellandii 'Allii Petit'

#### **UNDERPLANTING + CLIMBERS**

- 06. Aspidistra elatior Cast Iron Plant
- 07. Asplenium australasium Bird Nest Fern
- 08. Asplenium bulbiferum Mother Spleenwort
- 09. Blechnum indicum Water Fern
- 10. Cissus hypoglauca Native Grape
- 11. Dendrobium speciosum Sydney Rock Orchid
- 12. Dichondra repens Kidney Weed
- 13. Doodia aspera Prickly Rasp Fern
- 14. Doryanthes excelsa Gymea Lily
- 15. Grevillea Poorinda Royal Mantle
- 16 Liriope Emerald Cascade
- 17. Lomandra longifolia Tanika
- 18. Microsorium diversifolium Kangaroo Fern
- 19. Viola hederacae Native Violet
- 20. Xanthorrhoea media Grass Tree



# 7.0 PLANTING SCHEDULE

The following species list is an indicative mix intended for Chatswood Chase.

Species selected are a mix of readily available species, those native to the Chatswood region and a mix derived from native species found in the Kuringai Chase National Park and the Barangaroo Reserve. Key selected exotic species have been included due to there complimentry form or their adaptability to the unique growing conditions of Chatswood Chase.

The planting schedule and design shall be evolved and diversified further in the developed design phase.

ARCHER STREET	(GULLY)						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (m)	MATURE SPREAD (m)	CONTAINER SIZE	DENSITY	STAKE or GUY (Y/N)
ASP bul	Asplenium bulbiferum	Mother Spleenwort	1.2m	1.2m	200mm	6/m <sup>2</sup>	N
ASP ela	Aspidistra elatior	Cast Iron Plant	0.4m	0.6m	200mm	6/m <sup>2</sup>	N
BLE ind	Blechnum indicum	Fishbone Water Fern	1m	1m	200mm	2/m <sup>2</sup>	N
CIS hyp	Cissus hypoglauca	Native Grape	4m	2m	200mm	6/m <sup>2</sup>	N
CYA aus*	Cyathea australis	Black Tree-fern	1-3m	2-3m	45L (CT 1500mm)	As Shown	S
DIC rep	Dichondra repens	Kidney Weed	0.15m	2m	200mm	6/m <sup>2</sup>	N
DEN spe	Dendrobium specioum	Sydney Rock Orchid	0.4m	0.6m	200mm	6/m <sup>2</sup>	N
DOO asp	Doodia aspera	Prickly Rasp fern	0.4m	0.6m	200mm	6/m <sup>2</sup>	N
FIC pum	Ficus pumila	Creeping fig	8-15m	3-5m	200mm	2/m <sup>2</sup>	N
VIO hed	Viola hederacae	Native Violet	0.1m	0.5m	200mm	6/m <sup>2</sup>	N
MAC com	Macrozamia communis	Burrawang	1-2m	2-4m	25L (CT 500mm)	As Shown	S
MIC div	Microsorium diversifolium	Kangaroo Fern	0.4m	0.6m	200mm	6/m <sup>2</sup>	N

VICTORIA A	VICTORIA AVE ENTRY (GULLY)									
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (m)	MATURE SPREAD (m)	CONTAINER SIZE	DENSITY	STAKE or GUY (Y/N)			
ASP aus	Asplenium australasium	Bird Nest Fern	1.2m	1.2m	300mm	6/m <sup>2</sup>	N			
ASP ela	Aspidistra elatior	Cast Iron Plant	0.4m	0.6m	200mm	6/m <sup>2</sup>	N			
BLE nud	Blechnum nudum	Fishbone Water Fern	1m	1m	200mm	2/m <sup>2</sup>	N			
CYA aus*	Cyathea australis	Black Tree-fern	1-3m	2-3m	45L (CT 1500mm)	As Shown	Y			
DEN spe	Dendrobium specioum	Sydney Rock Orchid	0.4m	0.6m	200mm	6/m <sup>2</sup>	N			
DIC rep	Dichondra repens	Kidney Weed	0.15m	2m	200mm	6/m <sup>2</sup>	N			
DOO asp	Doodia aspera	Prickly Rasp fern	0.4m	0.6m	200mm	6/m <sup>2</sup>	N			
FIC pum	Ficus pumila	Creeping fig	8-15m	3-5m	200mm	2/m <sup>2</sup>	N			
FIC mac*	Ficus maclellandii	Allii Petit	1-2m	2-4m	400mm (CT 1000mm)	As Shown	Υ			
LOM Ion	Lomandra longifolia Tanika	Tanika	0.5-0.6m	0.5-0.6m	200mm	5/m <sup>2</sup>	N			
MAC com	Macrozamia communis	Burrawang	1-2m	2-4m	25L (CT 500mm)	As Shown	Υ			
MIC div	Microsorum diversifolium	Kangaroo Paw Fern	0.3m	0.9m	200mm	6/m <sup>2</sup>	N			
MON del	Monstera deliciosa	Swiss Cheese Plant	2-3m	2-3m	200mm	1/m <sup>2</sup>	N			
VIO hed	Viola hederacae	Native Violet	0.1m	0.5m	200mm	6/m <sup>2</sup>	N			
XAN med	Xanthorrhoea media	Grass Tree	4m	1.5m	45L (CT 1m)	As shown	Υ			

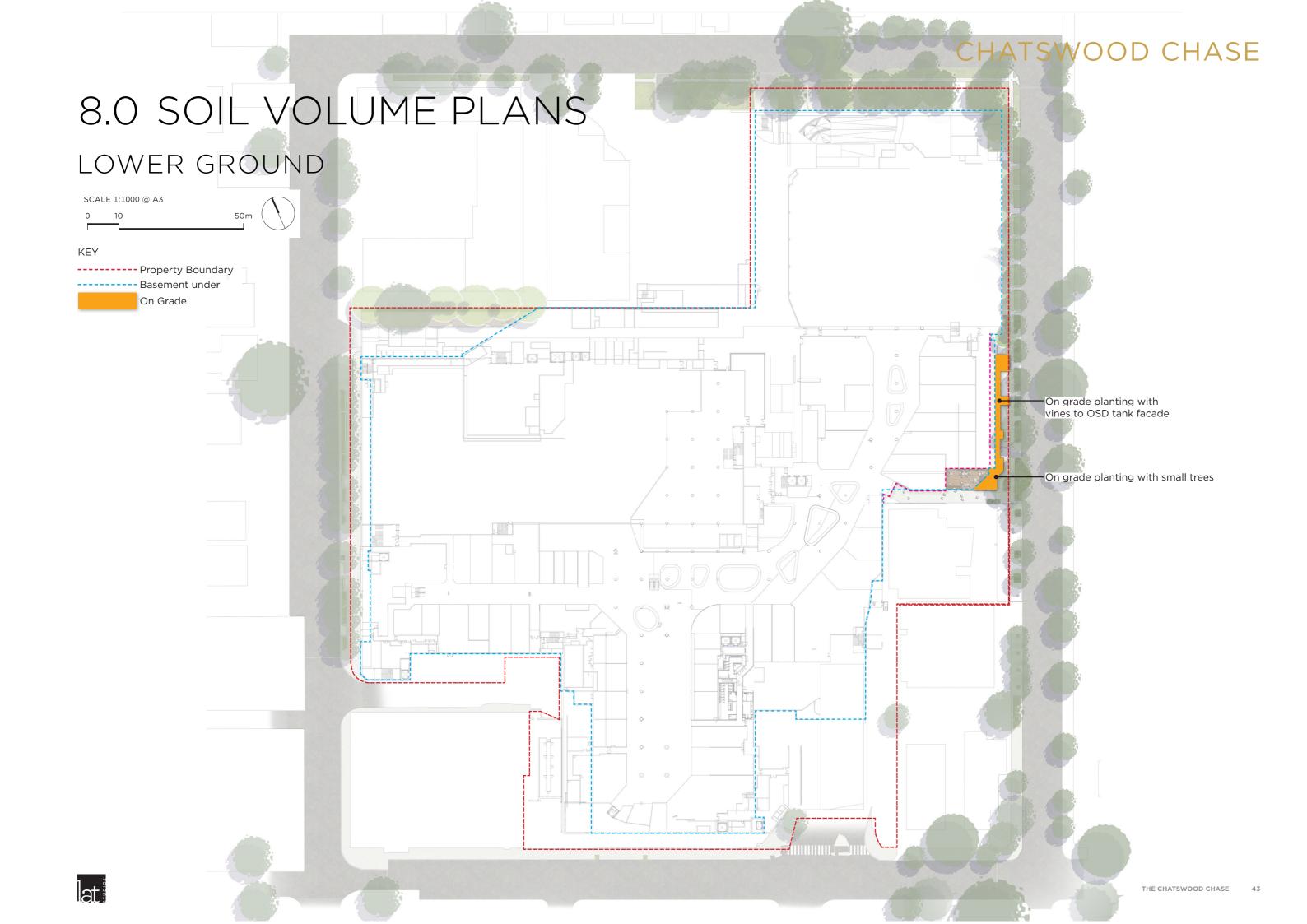
ure these species are procured with a suitable nursery. Ensure the Landscape Architect has approved nursery stock prior to confirming the procurement contract.

CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (m)	MATURE SPREAD (m)	CONTAINER SIZE	DENSITY	STAKE or GU (Y/N)
CER gum*	Ceratopetalum gummiferum	Christmas Bush	10m	3m	400L	As shown	Y
ANG his*	Angophora hispida	Dwarf Apple Gum	10m	3m	400L	As shown	Y
BLE ind	Blechnum indicum	Fishbone Water Fern	1m	1m	200mm	2/m <sup>2</sup>	N
CUL dub	Culcita dubia	False Bracken	1.2m	1.5m	200mm	6/m <sup>2</sup>	N
DIC rep	Dichondra repens	Kidney Weed	0.15m	2m	200mm	6/m <sup>2</sup>	N
DOR pal	Doryanthes excelsa	Gymea Lily	3m	4m	300mm	1/2m <sup>2</sup>	N
DOO asp	Doodia aspera	Prickly Rasp fern	0.4m	0.6m	200mm	6/m <sup>2</sup>	N
LOM Ion	Lomandra longifolia	Mat Rush	1m	1-2m	200mm	1/m <sup>2</sup>	N
MIC div	Microsorum diversifolium	Kangaroo Paw Fern	0.3m	0.9m	200mm	6/m <sup>2</sup>	N
VIO hed	Viola hederacae	Native Violet	0.1m	0.5m	200mm	6/m <sup>2</sup>	N
WES fru	Westringia fruticosa	Coastal Rosemary	1.5m-2m	1.5-2m	200mm	1/2m <sup>2</sup>	N
XAN med*	Xanthorrhoea media	Grass Tree	4m	1.5m	45L (CT 1m)	As shown	Y

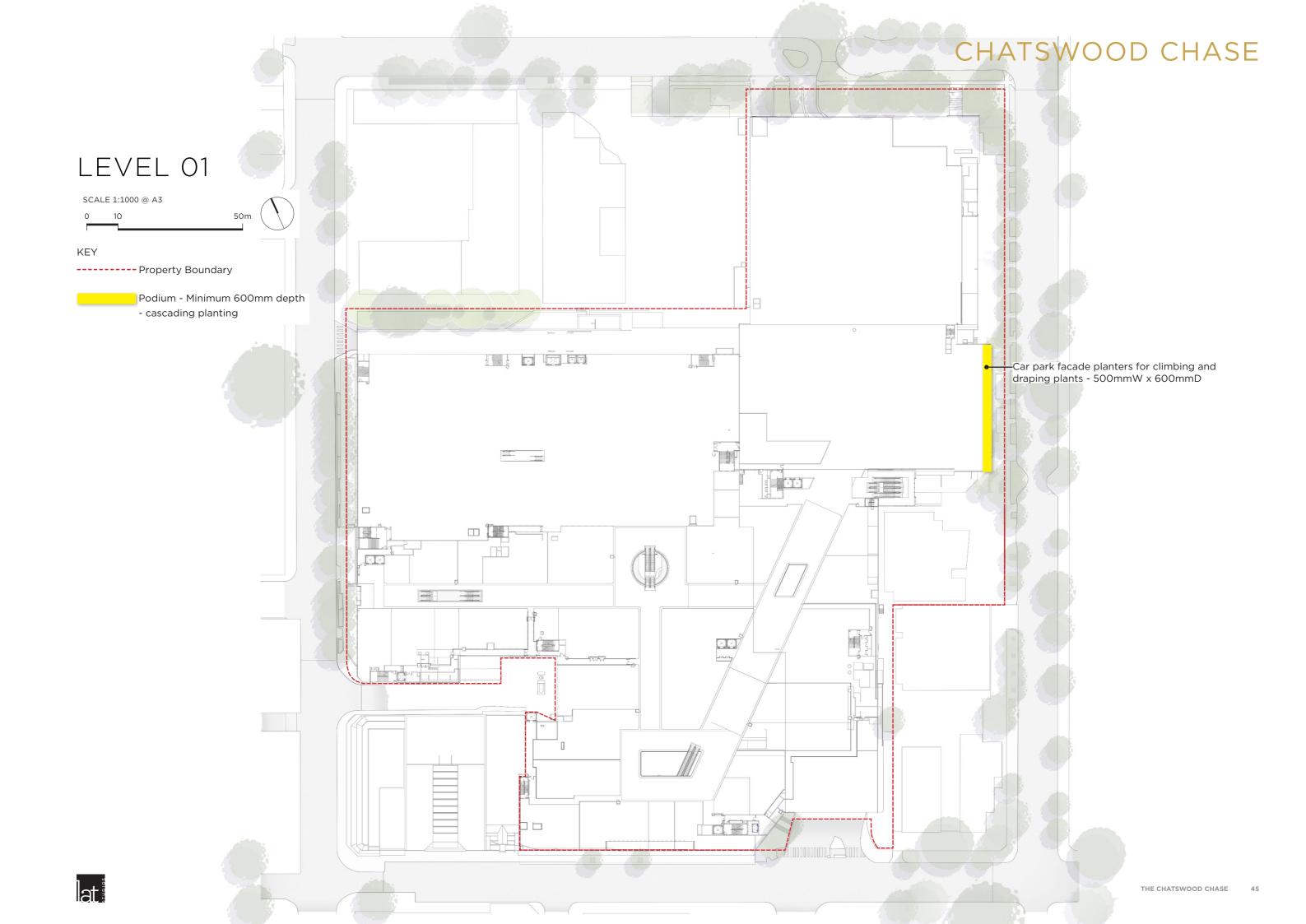
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (m)	MATURE SPREAD (m)	CONTAINER SIZE	DENSITY	STAKE or GUY (Y/N)
ANI 'BR'	Anigozanthos 'Big Red'	Big Reg Kangaroo Paw	0.5m	0.6m	200mm	5/m <sup>3</sup>	N
CAS cou	Casuarina 'Cousin It'	Cousin It	0.9m	1.2m	200mm	3/m²	N
CIS ant	Cissus antarctica	Kangaroo Vine	4m	2m	200mm	6/m <sup>2</sup>	N
CIS hyp	Cissus hypoglauca	Native Grape	9m	2.2m	200mm	3/m²	N
GRE 'PRM'	Grevillea	Poorinda Royal Mantle	0.3m	1.2m	200mm	3/m <sup>3</sup>	N
HAR vio	Hardenbergia violacea	Purple Coral Pea	Up to 6m	Up to 6m	200mm	1/m²	N
LOM lon	Lomandra longifolia Tanika	Tanika	0.5-0.6m	0.5-0.6m	200mm	5/m <sup>2</sup>	N
PAN pan	Pandorea pandorana	Wonga wonga Vine	3-6m	3-8m	200mm	3/m <sup>2</sup>	N
PEN alo	Pennisetum alopecuroides	Nafray	1.2m	1m	200mm	5/m <sup>2</sup>	N
RHI cap	Rhipsalis caplifrmis	Mistletoe Cactus	0.3m	1m	200mm	5/m <sup>3</sup>	N
RUS equ	Russelia equestiformis	Firecracker Plant	0.7m	1m	200mm	4/m <sup>4</sup>	N
TRA jas	Trachelospermum jasminoides	Star Jasmine	2m	1.5m	200mm	3/m <sup>2</sup>	N
WES fru	Westringia fruticosa	Mundi	0.3m	1m	200mm	1/2m²	N

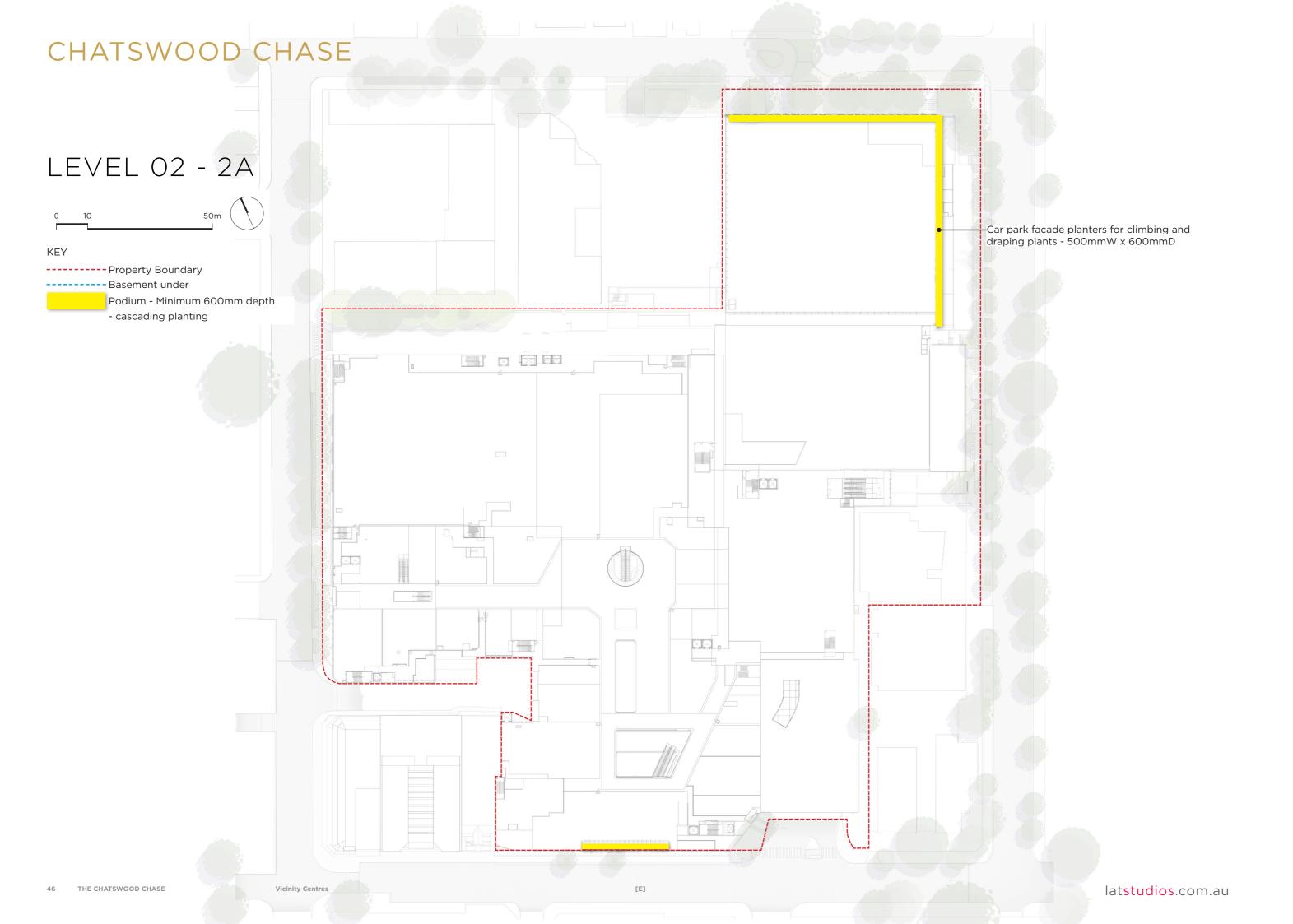
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (m)	MATURE SPREAD (m)	CONTAINER SIZE	DENSITY	STAKE or GU' (Y/N)
DOR pal	Doryanthes excelsa	Gymea Lily	3m	4m	300mm	1/2m <sup>2</sup>	N
LEP bra*	Leptospermum brachyandrum	Weeping Tea Tree	5m	3m	45L	As shown	S
OLE eur*	Olea europea	Olive Tree	8m	3m	400L	As shown	G
XAN med*	Xanthorrhoea media	Grass Tree	4m	1.5m	45L (CT 1m)	As shown	G
ACI hell	Acinotus hellianthi	Flannel Flower	0.5m	1m	200mm	3/m <sup>2</sup>	N
ALO 'TZ'	Aloe 'Topaz'	Topaz	0.5m	1m	200mm	3/m <sup>3</sup>	N
BAN 'BC'	Banksia 'Birthday Candles'	Birthday Candles	0.2m	1.5m	200mm	2/m <sup>2</sup>	N
CAR gla	Carpobrotus glaucenscens	Pigs Face	1m	1m	200mm	4/m²	N
CAS cou	Casuarina 'Cousin It'	Cousin It	0.9m	1.2m	200mm	3/m <sup>2</sup>	N
CIS ant	Cissus antarctica	Kangaroo Vine	4m	2m	200mm	6/m <sup>2</sup>	N
CIS hyp	Cissus hypoglauca	Native Grape	4m	2m	200mm	6/m <sup>3</sup>	N
DIA cae	Dianella caerulae	Flax Lily	0.4m	0.6m	200mm	6/m²	N
DOO asp	Doodia aspera	Prickly Rasp fern	0.4m	0.6m	200mm	6/m <sup>2</sup>	N
FIC pum	Ficus pumila	Creeping fig	8-15m	3-5m	200mm	2/m <sup>2</sup>	N
HAR vio	Hardenbergia violacea	Purple Coral Pea	Up to 6m	Up to 6m	200mm	1/m²	N
LOM Ion	Lomandra longifolia Tanika	Tanika	0.5-0.6m	0.5-0.6m	200mm	5/m <sup>2</sup>	N
VIO hed	Viola hederacae	Native Violet	0.1m	0.5m	200mm	6/m <sup>2</sup>	N
PEN alo	Pennisetum alopecuroides	Nafrav	1.2m	1m	200mm	5/m²	N

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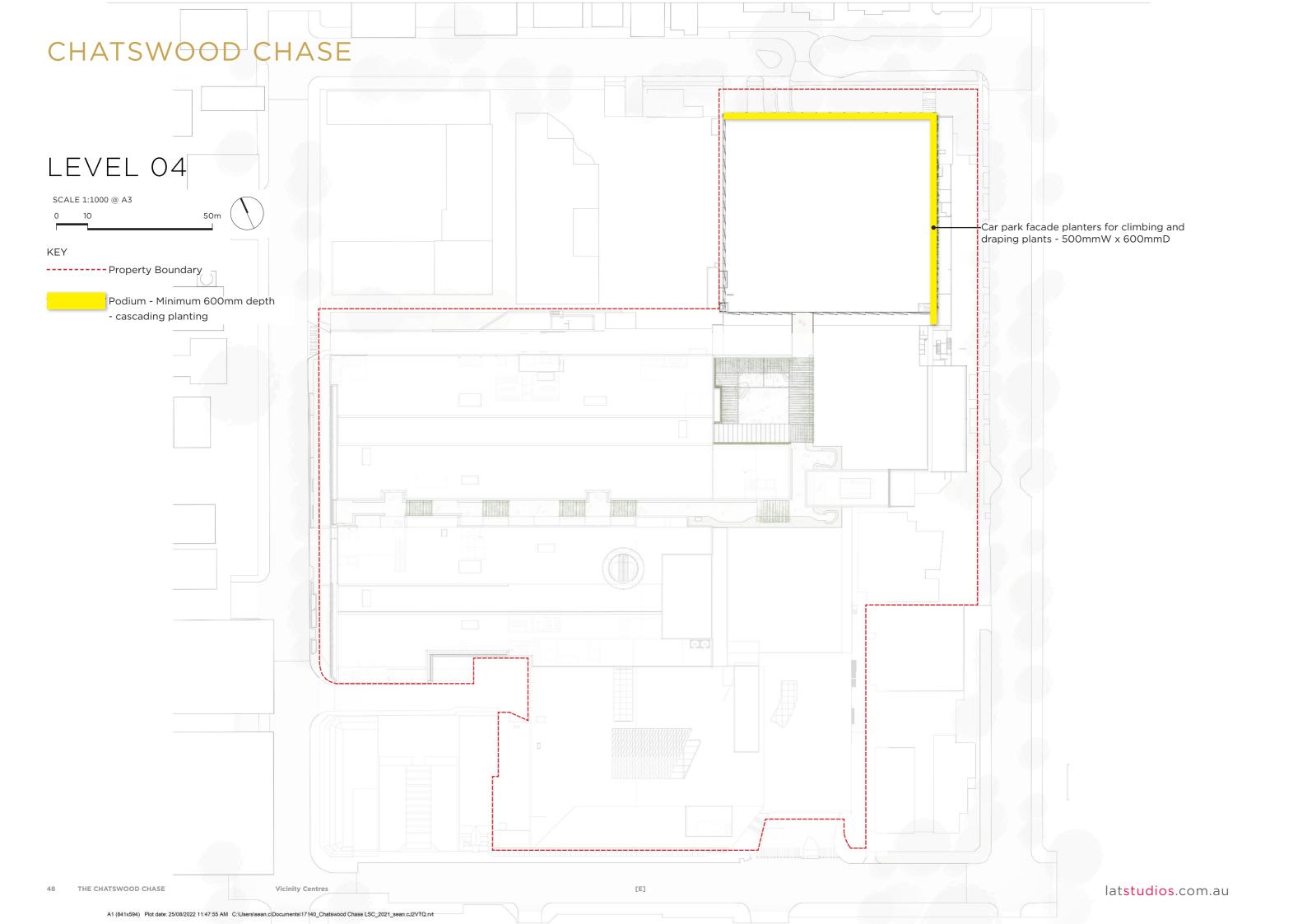






# CHATSWOOD CHASE LEVEL 03 SCALE 1:1000 @ A3 KEY ----- Property Boundary Podium - 200mm green roof profile Podium - 600mm green roof profile Increased soil depth over structural grid to support small tree/shrub Podium - Minimum 600mm depth - 1000mm length planter alternating on and off grid -Increased soil depth over structural grid to support vine growth $\times]\times$





# 9.0 PLANNING PAREMETERS

# COUNCIL REQUIRMENTS

#### Willoughby City Council (WCC)

Street Tree Master Plan

#### **Urban Tree Management Policy - Volume 3**

The project site sits within Street Tree Precinct 1: Chatswood CBD, and is required by council to include a selection of the following street tree species:

PRECINCT 1: CHATSWOOD CBD Proposed street tree specie	s					
Tree Species	Common Name	evergreen	deciduous	habit/form'	verge width <sup>2</sup>	power-lines <sup>3</sup>
Backhousia myrtifolia	Grey Myrtle	Е	-	cr	N	Υ
Elaeocarpus eumundi	Eumundi Quandong	Е		cu	М	Ν
Eucalyptus paniculata (BGHF)*	Narrow-leaved Ironbark	Е		os	W	N
Magnolia grandiflora 'Exmouth'	Southern Magnolia cv.	Е	-	cu	М	N
Magnolia grandiflora 'Little Gem'	Southern Magnolia cv.	Е		cu	N	Υ
Platanus x acerifolia	London Plane	-	D	os	W	N
Platanus x orientalis	Oriental Plane	-	D	os	W	N
Pyrus calleryana 'Cleveland Select'	Ornamental Pear	-	D	cr	M	N
Pyrus calleryana 'Capital'	Ornamental Pear	-	D	cn	N	N
Tristaniopsis laurina spp	Water Gum '	Е	-	cr	М	Υ

NOTES: Species are shown in alphabetical order and do not denote dominance or ranking.

rnabit Form of TREE
c = compact/dense foliage; o = open crown/ canopy;
upright = u; r = rounded; s = spreading; n = narrow/columnar or pyramidal.

<sup>2</sup>MINIMUM VERGE WIDTH (incl. footpath): N = narrow (<2.5 metres) M = medium (2.5-4.0 metres) W = wide (>4.0 metres)

 $^3$ PLANTING UNDER POWER-LINES (incl. ABC): Item denotes suitability for planting under overhead power-lines or aerial bundled cabling: N = NO; Y = YES

\*BGHF LOCAL NATIVE SPECIES recommended for Pacific Highway plantations subject to adequate verge width and location of services.

#### Other relevant WCC design policy documents

- Chatswood CBD Planning and Urban Design Strategy
- Willoughby Tree Management Policy;
- Regulatory controls (WLEP 2012 Tree and Bushland Preservation)
- Willoughby Natural Heritage Register



# PODIUM PLANTING WORKS

#### **Planting depths**

Landscape works on podium will include containerised planting in 'raised planters'. Planting on podium will comply to the following minimum depths;

- Trees min. 1000mm
- Small shrubs and ground covers 600mm
- Groundcovers 300mm

Planters will be mounded where possible to reduce the height of adjacent vertical walls and limit structural loading and increase / transition in soil depths

Facade planters and lightweight planters are varied in depths and widths in order to satisfy Structural requirements. The Extensive green roof soil mix is to be used to ensure plant growth is sufficiently supported.

#### Irrigation

The landscape works are to include a reticulated drip irrigation system. Note, confirmation of the use of rainwater source to be confirmed through design development (connected primarily to non-town water source and potable water supply as required for system function and top-up) to all containerised planting, gardens at grade and common planters / roof gardens. Drainage to all raised planters will be connected to the overall storm water system. The final location of the holding tanks will be confirmed through detailed design with the Hydraulic Consultant and Architect.

#### **Specification notes**

All plants shall be true to scheduled nomenclature, well formed, and hardened off nursery stock. Form and habit shall be normal for the plant as scheduled.

#### Standards:

- Conform to the following referenced documents:
- AS 4419-2003 Soils for landscaping and garden use
- AS 3743-2003 Potting Mixes
- AS 4454-2003 Composts, soil conditioners and mulches

- NATSPEC Guide: Specifying Trees a guide to assessment of tree quality (Clark, R. 2003)
- AS 4373-2007 Pruning of amenity trees

#### Maintenance regime

Following the date of the Willoughby City Council approval of the landscape works 'On Maintenance', the contractor shall be responsible to maintain the Landscape for a 12 month period or until 'Off Maintenance' approval is achieved with WCC.

Summary of Work shall include but not limited to:

- · Watering of garden beds and trees
- Weeding of garden beds, trees and pavements
- Supply and installation of mulch to maintain minimum depths as specified
- Monitoring of the vertical garden system and replacement of any failed sections
- Pruning, trimming and tree surgery
- Regular pruning of carpark facade trellis to ensure ventilation to carpark
- Pest and disease control of garden beds, planting and
- · Replacement of dead, failed or significantly diseased (50% of foliage) plants and trees
- Removal of rubbish and debris from garden areas
- Keeping of log book

Watering: Coordinate the water supply and confirm the watering regime against State and Local Government legislation and restrictions at time of maintenance period. Program of watering shall ensure health and vigour of all vegetation is maintained. Without restrictions the contractor shall provide a minimum water application of 25mm per week to each area of vegetation.

Weeding: Spray or hand removal of all broad leaf plants and grasses considered invasive to the locality. Spray treatment is by non-residual Glyphosate.

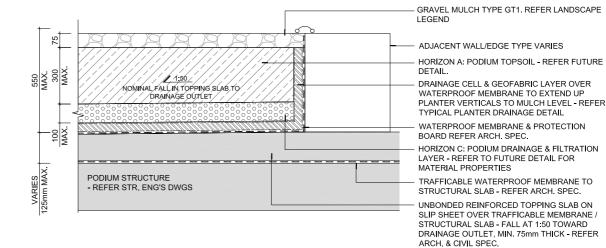
Fertilising: Application of the approved slow release fertilisers shall be strictly in accordance to manufacturer's specifications and rates, to ensure health and vigour of all vegetation is maintained.

Beyond the time frame of a standard maintenance period (12 months) the landscape works will require replenishment of planting to maintain its high levels of health and appearance.

#### Typical Detail A

The following typical construction details are to be used where ground cover planting/lawn occurs on podium

Note: To reduce the quantity of vertical walls within the landscape these depths will be achieved through mounding where appropriate. At the point where the plant is to be installed will the depths stipulated are to be achieved.



#### Typical Detail A

[E]

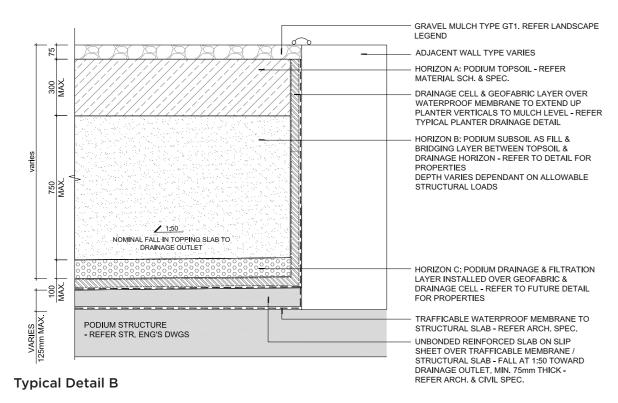
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# PODIUM PLANTING WORKS

#### Typical Detail B

The following typical construction details are to be used where shrub planting/tree planting occurs on podium

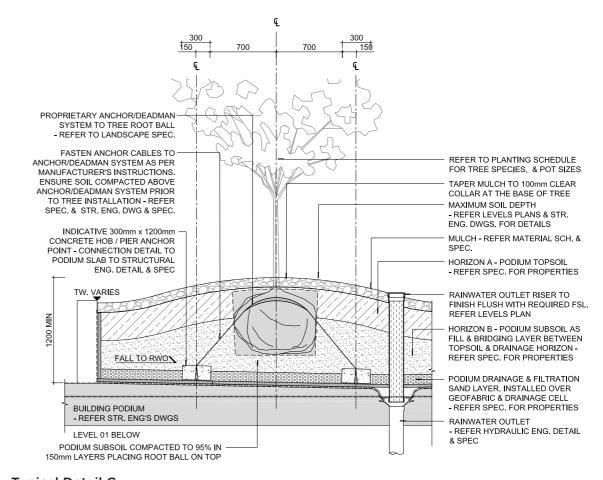
Note: To reduce the quantity of vertical walls within the landscape these depths will be achieved through mounding where appropriate. At the point where the plant is to be installed will the depths stipulated are to be achieved.



#### Typical Detail C

The following typical construction details are to be used where tree planting occurs on podium

Note: To reduce the quantity of vertical walls within the landscape these depths will be achieved through mounding where appropriate.



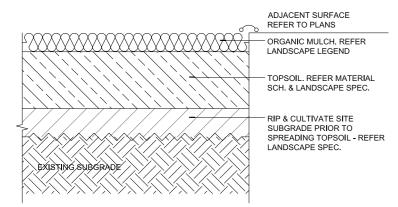
Typical Detail C



# NATURAL GROUND PLANTING WORKS

#### Typical Detail D

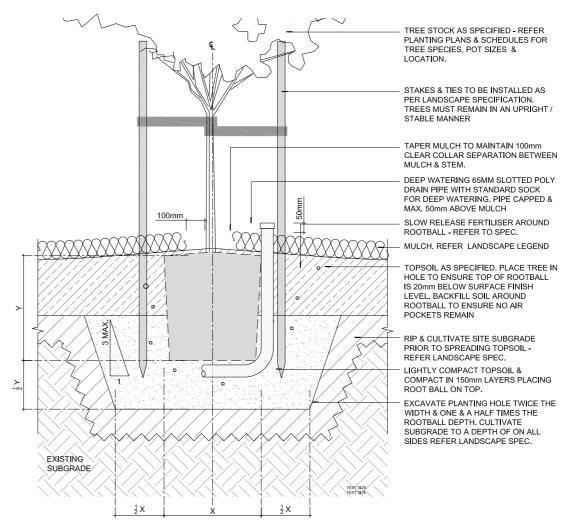
The following typical construction details are to be used where ground cover planting/lawn occurs on natural ground.



Typical Detail D

#### Typical Detail E

The following typical construction details are to be used where tree planting occurs on natural ground.



Typical Detail E

THE CHATSWOOD CHASE Vicinity Centres [E]

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# Creativity at all scales