

90 - 120 REGENT STREET REDFERN

LANDSCAPE DA REPORT

FEBRUARY 2021

ISSUE D



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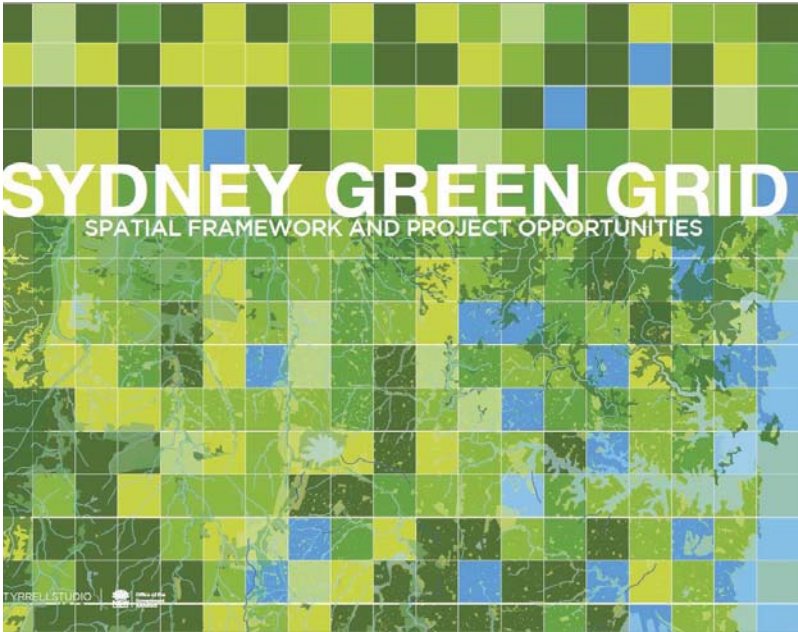
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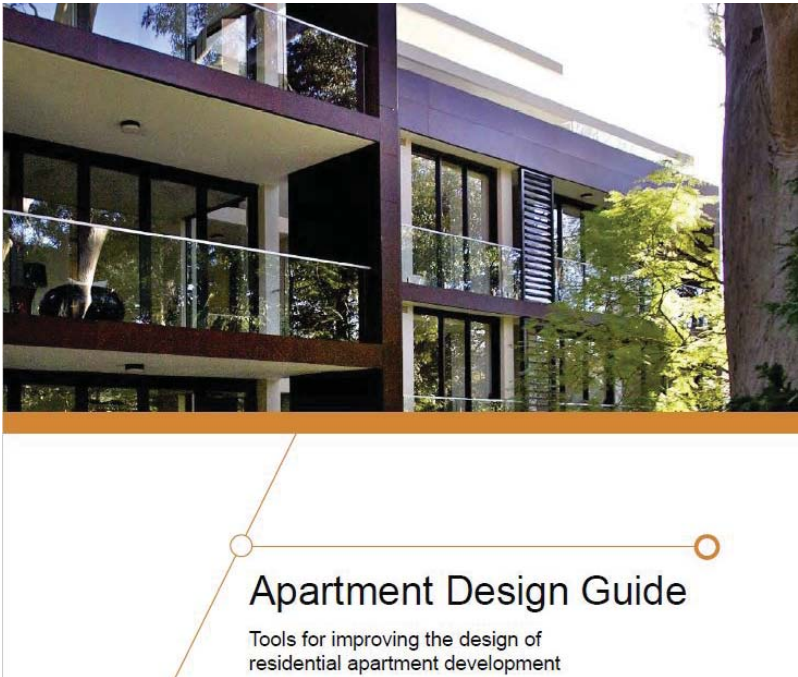
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INTRODUCTION SYDNEY GREEN GRID 2017 (GANSW)



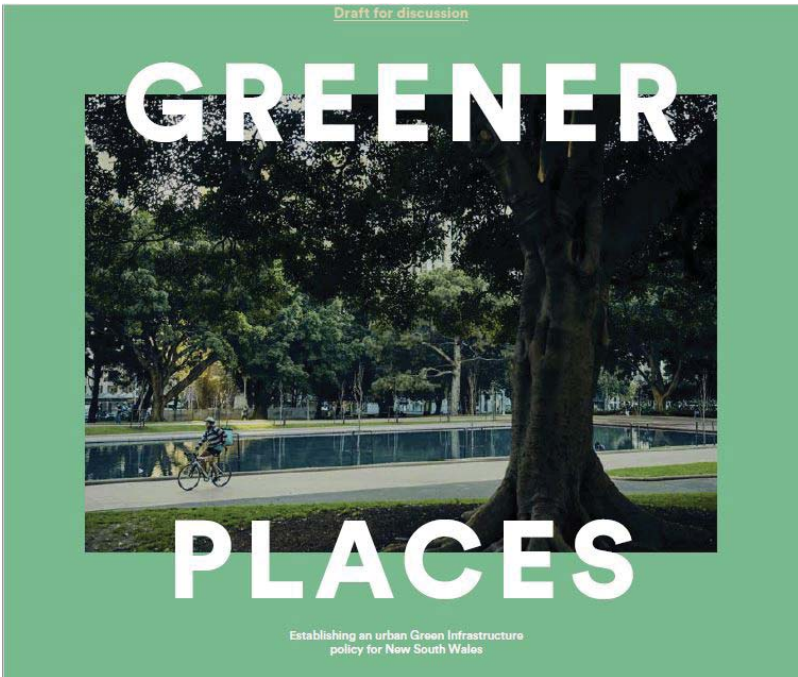
- The site on Regent St is located within a key urban renewal corridor of Sydney. – P115
- “With significant transformations underway [in the Redfern-Waterloo area] opportunity to provide additional high quality open space as well as a connected network to support future growth” – P116.
- A series of key strategic opportunities have been identified and include: “Continue lane-way revitalisation within the CBD... to activate under-utilised public spaces.” – P121

APARTMENT DESIGN GUIDE 2015 (DPE NSW)



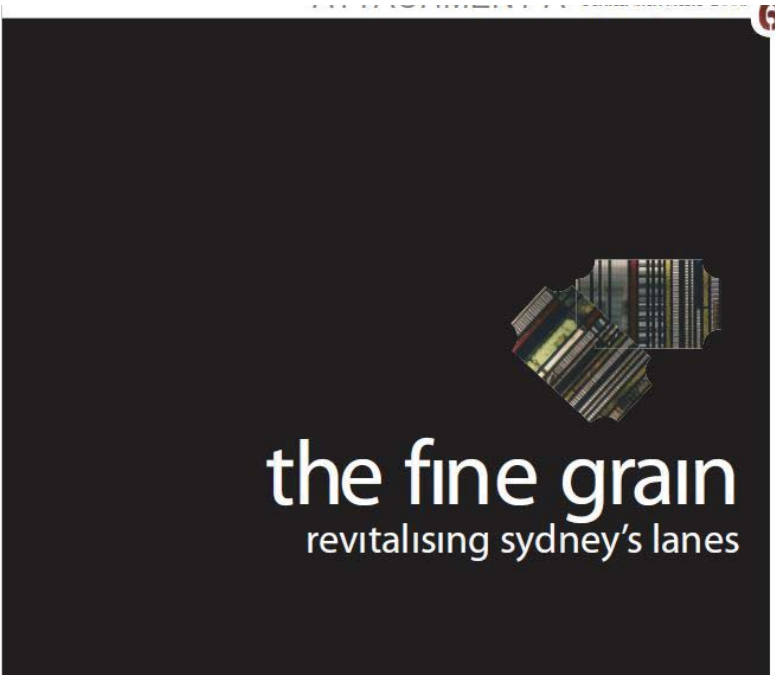
- Principle 5 – Good landscape design enhances the development’s environmental performance by... solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours’ amenity, provides for practical establishment and long term management. – P13
- Minimum soil volume standards are outlined in the document for Planting on Structures. – P116

GREENER PLACES (GANSW)



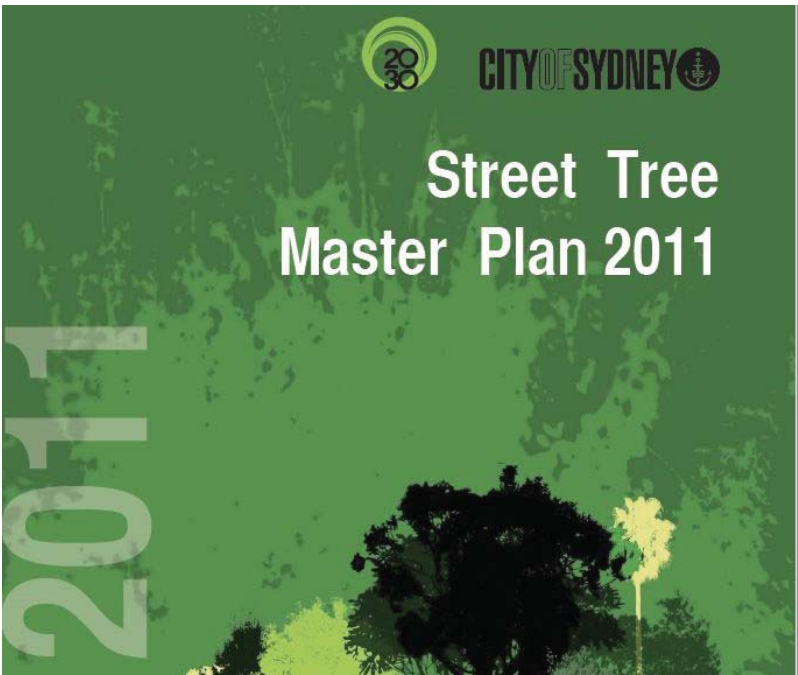
- Integration: Greener Places considers Green Infrastructure as being integrated with other urban infrastructure such as built form, transport infrastructure and water management systems to create high quality urban environments. – P32
- Connectivity: Greener Places promotes the creation of a network of high quality open spaces that connect with town centres, public transport hubs, rivers, creek and employment and residential areas – creating a network of open space. The network includes physical and functional connections that benefit people and wildlife. – P34
- Multi-functionality: Multifunctional green spaces should be high quality and high performing, producing ecological, social, environmental and economic benefits. Multi-functionality represents the ability of Green Infrastructure to deliver multiple ecosystem, environmental and other services simultaneously. –P36

THE FINE GRAIN – REVITALISING SYDNEY’S LANES 2008 (COS)



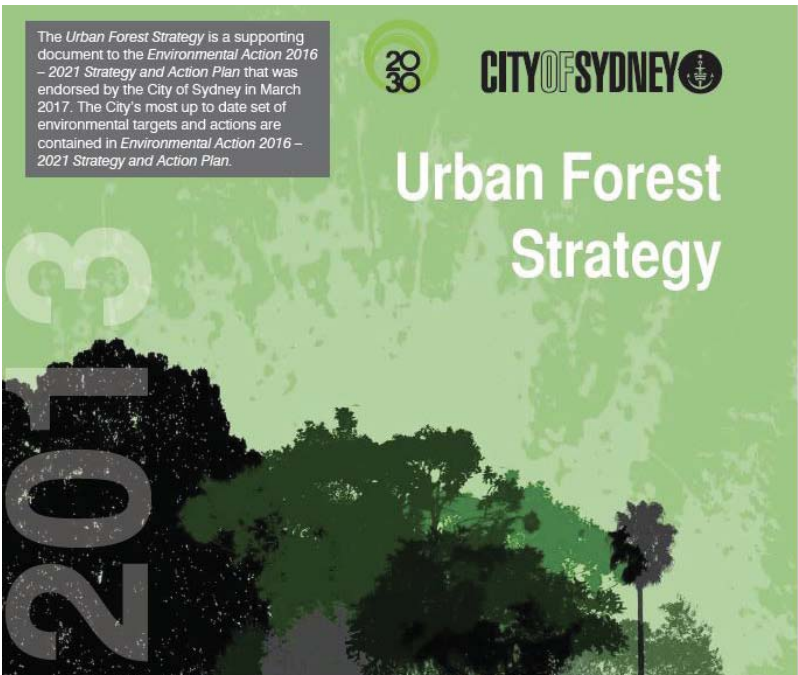
- “The majority of Sydney’s lanes continue to effectively perform the role they were built for. That is, the delivery of goods and the removal of refuse. These uses however do not create vibrancy and interest that the City of Sydney is seeking. Active and interesting lanes require other uses to locate there, such as small shops, bars, cafés and art galleries. These uses generally locate in city lanes for the simple reason that these spaces off major thoroughfares is inexpensive. Over time many of the small retail spaces in lanes in Sydney have been removed as blocks have been consolidated to build large office buildings. This report suggests ways to re-establish the supply of small retail spaces, particularly at street level.” – P3
- Objective 2: Increase the supply of small scale spaces on streets and lanes. – P4

STREET TREE MASTERPLAN 2011 (COS)



- Street Trees to the Regent St frontage are nominated as Platanus acerifolia (London Plane) and street trees to the Marian St frontage are nominated as Pistacia chinensis in the Street Tree masterplan (existing street trees are in accordance with this)

URBAN FOREST STRATEGY 2013 (COS)



- To protect and maintain any existing urban forest – The City will prioritise the maintenance and protection of existing trees in order to maximise the benefits already received from this asset. (P 2-1)
- Increase Canopy cover – The City will increase the canopy cover from 15.5% to 23.25% by 2030, and then to 27.13% by 2050, through targeted programs for trees located in streets, parks and private property. (P 2-1)
- Improve urban forest diversity – The City will improve the age spread of our street and park trees. We will also increase species diversity, while ensuring the population does not comprise of more than 40% for any one family, 30% for any one genus and 10% for any particular species.

SITE ANALYSIS | LANDSCAPE CONTEXT



Contextual Aerial Image – Not to scale

INTRODUCTION

This report supports a State Significant Development Application (SSDA - 10382) submitted to the Minister of Planning and Public Spaces. This SSDA seeks consent for the design, construction and operation of the student housing development at 90-120 Regent St, Redfern.

This report demonstrates the landscape design intent for the public domain and private communal open spaces within the development. Refer to the design statement on page 9 for a detailed explanation on design intent and guidance.

SITE LOCATION

The site is located on Regent Street, one of Redfern’s prominent commercial strips and only a few minutes walk southeast from the station. The district is undergoing mass redevelopment, with the major upgrade of the Redfern station as a catalyst. The area has a present mix of medium and high density residential and commercial buildings, with retail along the streets, creating a highly urban setting. The proposed scheme, tying into the Marian Street pedestrian link from the station, will support the upgraded Precinct, offering greater access to open space and paths, with pedestrian and community needs at the forefront of the design thinking.

THE LOCAL ENVIRONMENT

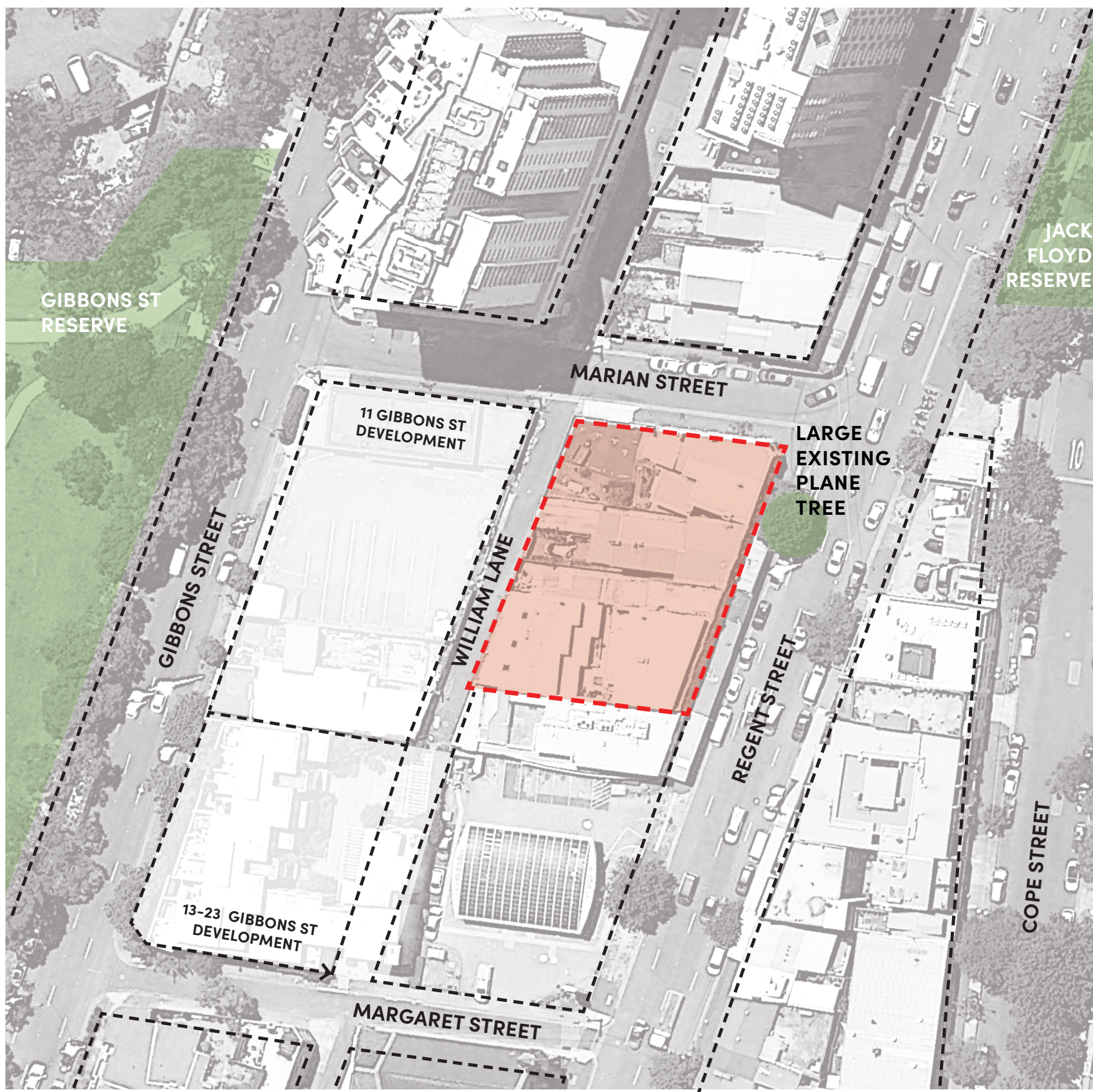
A number of green spaces mark the district surrounding the site. Gibbons Street Reserve between the site and Redfern Station provides a pleasant green buffer to the busy Gibbons St roadway.

Jack Floyd Reserve across Regent St provides a small local park with an open lawn and benches under a scattering of indigenous trees, and the 4.8 hectare Redfern Park is a short 10min walk to the east. To the west, development of Australian Technology Park has seen the creation of a number of quality new open spaces in close proximity to the site, including ‘Innovation Plaza’ and ‘Vice Chancellor’s Oval’.

LEGEND

- Site boundary
- Public Open spaces
- Trainlines
- Train Station
- Waterloo Metro Station
- Local Bus Stops
- Distance to open space
- Existing & proposed cycle routes
- Redfern shopping & entertainment streets

SITE ANALYSIS | LANDSCAPE CONTEXT

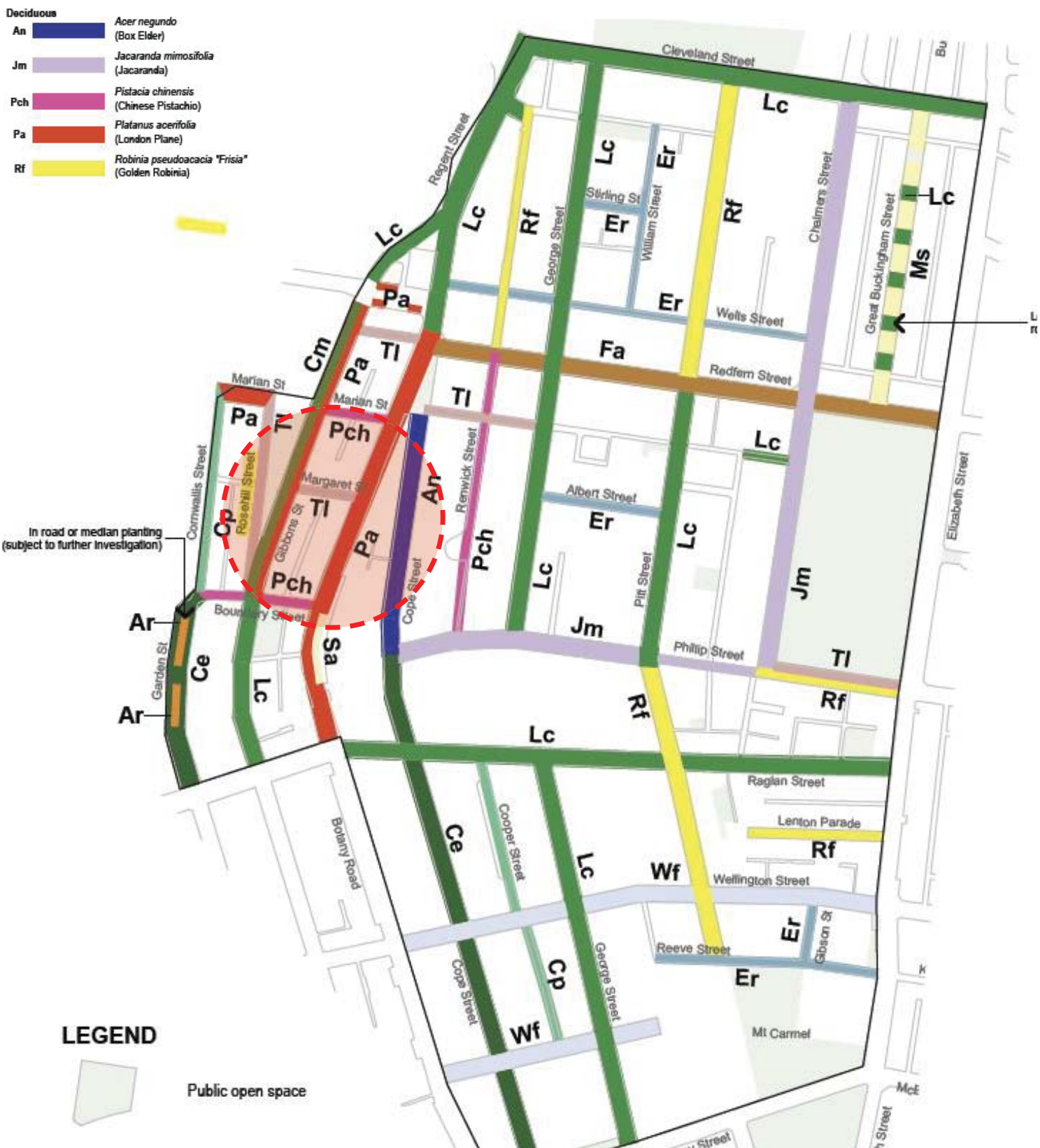


Contextual Aerial Image - Not to scale



Important aspects of the local environment

SITE ANALYSIS | STREET TREES



TREE RETENTION

The design intent is to retain and protect the existing mature *Platanus acerifolia* (London Plane) planted along the Regent St frontage. There is also opportunity to create a more continuous street tree canopy along Regent St by planting additional *Platanus* trees along the footpath edge at 9 metre intervals in accordance with CoS street tree masterplan.

The two small *Pistacia chinensis* along Marian St are also earmarked for retention with the possibility to add an additional tree of the same species along the street edge.

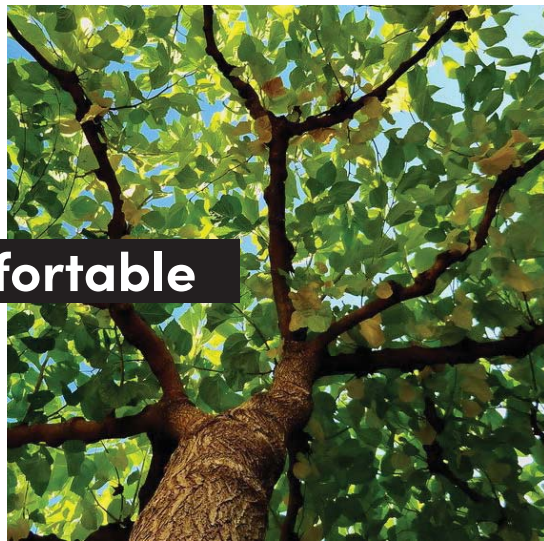


Street View - Existing *Platanus acerifolia*



Street View - Existing *Pistacia chinensis*

comfortable



street amenity



inside/outside



social



local



YEAR-ROUND ENVIRONMENTAL COMFORT

The Sydney climate offers warm summer nights and cool winter evenings. Ensuring the outdoor terraces will be comfortable year-round will foster a more social and connected community.

GENUINE, SOCIAL PLACES FOR ALL

Delivering flexible spaces for the entire student community offering a diverse array of amenity.

CONTRIBUTE STREETScape AMENITY

Ensuring the public open space provides a variety of slow spaces for people to congregate and inhabit.

CONNECTED WITH LOCAL CHARACTER

Drawing on the character and ecological value of neighbouring open spaces, notably Gibbons Street Reserve & Redfern Park.

INSIDE / OUTSIDE CONNECTIONS

Maxising the connectivity between apartments and social spaces while providing for passive surveillance and improved views out of private rooms and terraces.



PUBLIC DOMAIN

The objective of this project is to create a vibrant street destination, complemented by residential apartments above that enjoy a strong connection with nature by way of large balcony planters and rooftop terraces. Highly articulated façades deliver a dynamic visual outcome, whilst providing the setting for a diverse range of micro-landscapes for communal use.

Along Regent St the aim is to continue the cloak of existing London Plane trees along the facade of the proposed building, providing shade in summer and a green outlook for residents in surrounding blocks. William Lane and Marian St are more intimate streetscapes, catering for unique urban breakout spaces and further street greening. William lane with its newly proposed connection to Margaret St aims to be a new urban destination with the building’s carved out entrance at its northern edge.

LANDSCAPE & COMMUNAL OPEN SPACE

Extensive landscaping to terraces and rooftops of the development will also contribute to the urban tree canopy, providing positive outcomes for micro-climate, biodiversity, and habitat, whilst optimising opportunities for social interaction between residents. The landscape will be designed with the end-user in mind, ensuring a balance of planting and open views, practical establishment and long term management strategies.

LEVEL 2

Level 2 provides residents with three rooftop terraces each with their own unique character and uses.

The Western Terrace, overlooking William Lane includes a flush timber deck outdoor study area, flexible urban carpet (astrotruf) and a breakout space for the adjacent gym. A thick planting buffer with vertical climbers and screening shrubs along the courtyard’s inner edge provides visual privacy for internal rooms. The Eastern Terrace overlooking Regent St, provides recessed seating nooks separated by low planters allowing climbers to grow up the inner face of the facade. A raised planted edge provides visual privacy between private rooms and the communal terrace similar to that of the western terrace. The Northern Terrace provides an outdoor cinema, BBQ facilities, a variety of seating opportunities with a backdrop of low planters and views over Marian St.

LEVEL 3

Level 3 rooftop planting consists of hardy native grasses, cascading ground-covers and screening shrubs which provide a buffer from services and a green outlook from surrounding streets and apartment views.

URBAN ELEMENTS

Elements such as paving, furniture, fencing and lighting will be developed further during detailed design. Refer page 24 for proposed materials & finishes.

PROTECTION FROM THE ELEMENTS

Access to sun, shade, shelter and natural ventilation have been maximised by selecting a variety of tree species to suit varying requirements throughout the site and the use of awning structures on podium and rooftops. Where trees have been used a mixture of tropical, light-canopied and heavy shade trees have been chosen to create a diversity of spaces that ensure comfortable levels of protection in a range of conditions.

VIEWS/PRIVACY

The design acknowledges the opportunity to provide landscaping that is both visually appealing from rooms and that encourages inhabitation of communal open space. In doing so, visual privacy needs have been addressed through tree and plant selection. The desire for an outlook to public areas is balanced with the need for privacy internally and externally, during day and night.

AMENITY

The design incorporates a variety of amenity such as community BBQ facilities, an outdoor cinema, a variety of seating offerings, bike storage etc.. This is in line with providing a rich collection of spaces and activities for the young generations occupying the building. Many of these spaces are sheltered by either planting or awnings that will provide summer shade and protect people from the elements.

ACCESSIBILITY

All residents of the new development can access and enjoy the communal areas. Universal access to AS1428 has been incorporated into communal spaces, connecting walkways and building entries without compromising design quality.

Gently graded pathways will provide accessibility for all age groups and degrees of mobility; ensuring that residents can access site amenities comfortably. Paths are rationally laid out into a clear and identifiable pathway network assisting orientation for visitors, and access to and from building entries and service areas.

LIGHTING

Lighting of external spaces will be provided to ensure access points are well lit, improving visibility and the sense of safety. Lighting of the communal open spaces will ensure safe levels of illumination for movement, whilst considering the impact on private residences. Unobtrusive lighting will be incorporated where appropriate to enable night time recreational use. Public domain lighting compliant with CoS standards.

DRAINAGE & IRRIGATION

The detailed design will specify drainage cell to all soft landscape zones on structure.

Consideration has been given to the incorporation of low water demand and low maintenance plant species in all areas to reduce mains consumption and fertilizer contamination of drainage water.

Irrigation will be provided to all soft landscape areas on structure.

LANDSCAPE AREAS

Total site area: 1287m²

Level ground – paving area: 161m²
Level 2 – softscape area: 85m²
Level 2 – paving area: 335m²
Level 3 – softscape area: 35m²

Total softscape area: 120m², 9.3% of total site area.
Total external paving area: 496m², 38.5% of total site area.

SOIL

The planting will comprise a complementary mix of indigenous and exotic species. Soil requirements will therefore differ according to varying soil chemistries enjoyed by individual species. For indigenous vegetation, soil profiles will be provided which have modest nutrient levels, particularly phosphorus. Suggested material would equal Australian Native Landscapes ‘Low P’ mixture. In areas where exotic species are to be planted an industry standard organic soil mixture will be provided. Consideration will be given to the planting arrangement to ensure that species that are sensitive to nutrient will be grouped together.

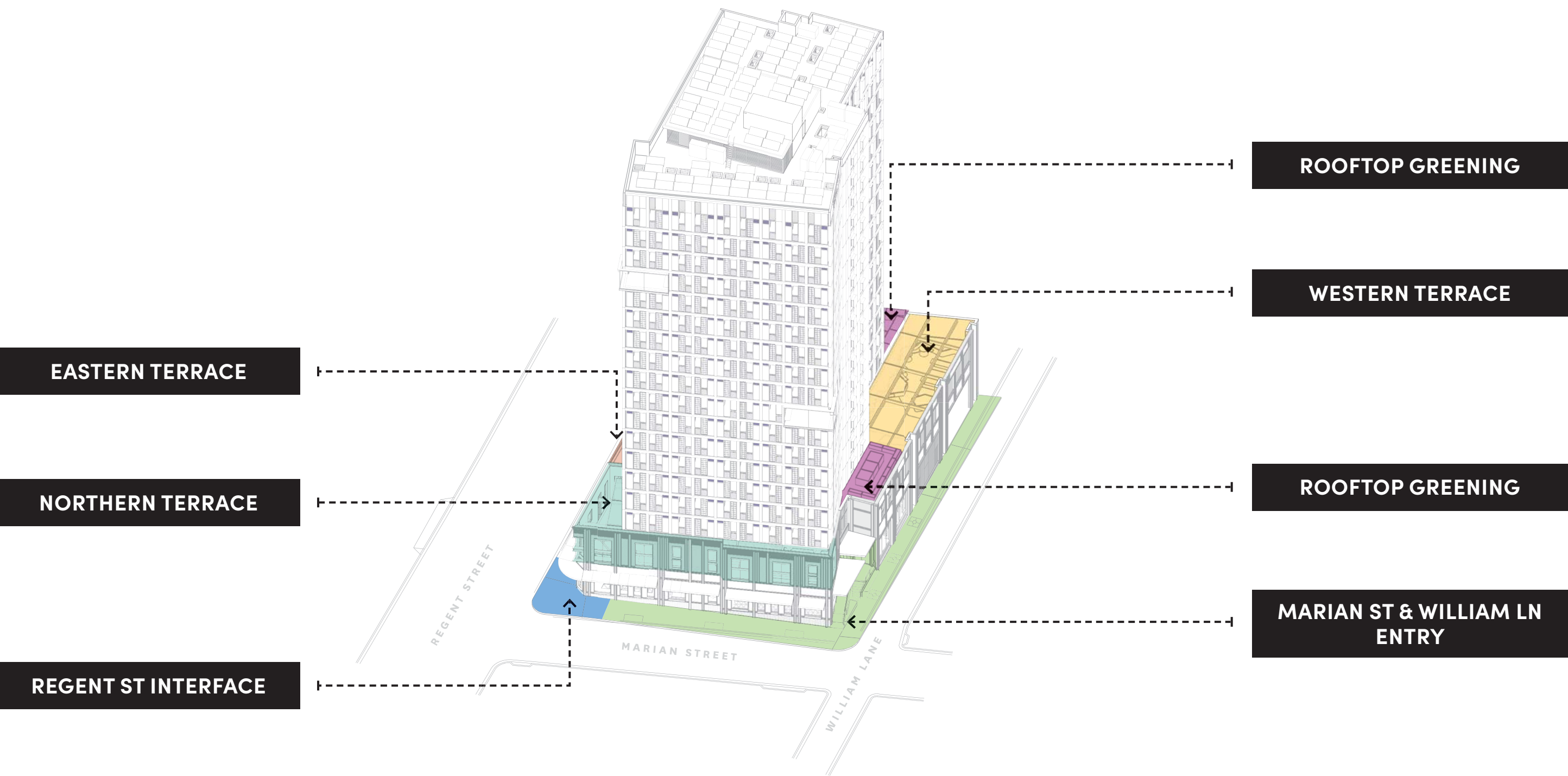
PLANT ESTABLISHMENT & MAINTENANCE

A landscape maintenance contractor will be engaged to keep all plant material in a state of health and vigour after practical completion. The appointed contractor must provide the Superintendent with a proposed maintenance works program for approval. The landscape contractor must keep a logbook of all maintenance works undertaken and include ‘works to date’ information with all progress payment invoices. Works will include, but not be limited to:

- Monitoring the irrigation system on a weekly basis to ensure plants are not under or over irrigated,
- Replacing dead plant material to achieve a complete cover of planting without obvious gaps in planting at final completion,
- Replenishment of mulch as required to provide cover to the soil surface minimizing weed encroachment,
- Suppression of weed growth,
- Low phosphorus nutrient will be provided to indigenous plant groupings, and a broad spectrum fertiliser applied to exotic plant groupings to satisfy differing chemical requirements,
- Selective pruning / crown lifting / canopy shaping of trees to remove potential future structural defects, establish branching above head height, etc.

A diverse mix of drought tolerant species will ensure long-term resilience, minimise ongoing energy inputs for maintenance, and have positive outcomes for biodiversity.

KEY SPACES | LANDSCAPE


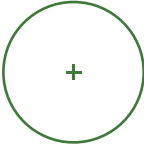


GROUND LEVEL | PUBLIC DOMAIN LANDSCAPE PLAN




KEY

- 1. William Lane entry and breakout space. Sandstone seating blocks under new trees & edge seating beside staircase.
- 2. Regent St entry. Gently sloped walkway between street footpath and entry.
- 3. Bench seating along Marian St against external facade to activate street edge.
- 4. William Lane to connect to Margaret St through 13-23 Gibbonst St's through site-link.

Tree Strategy

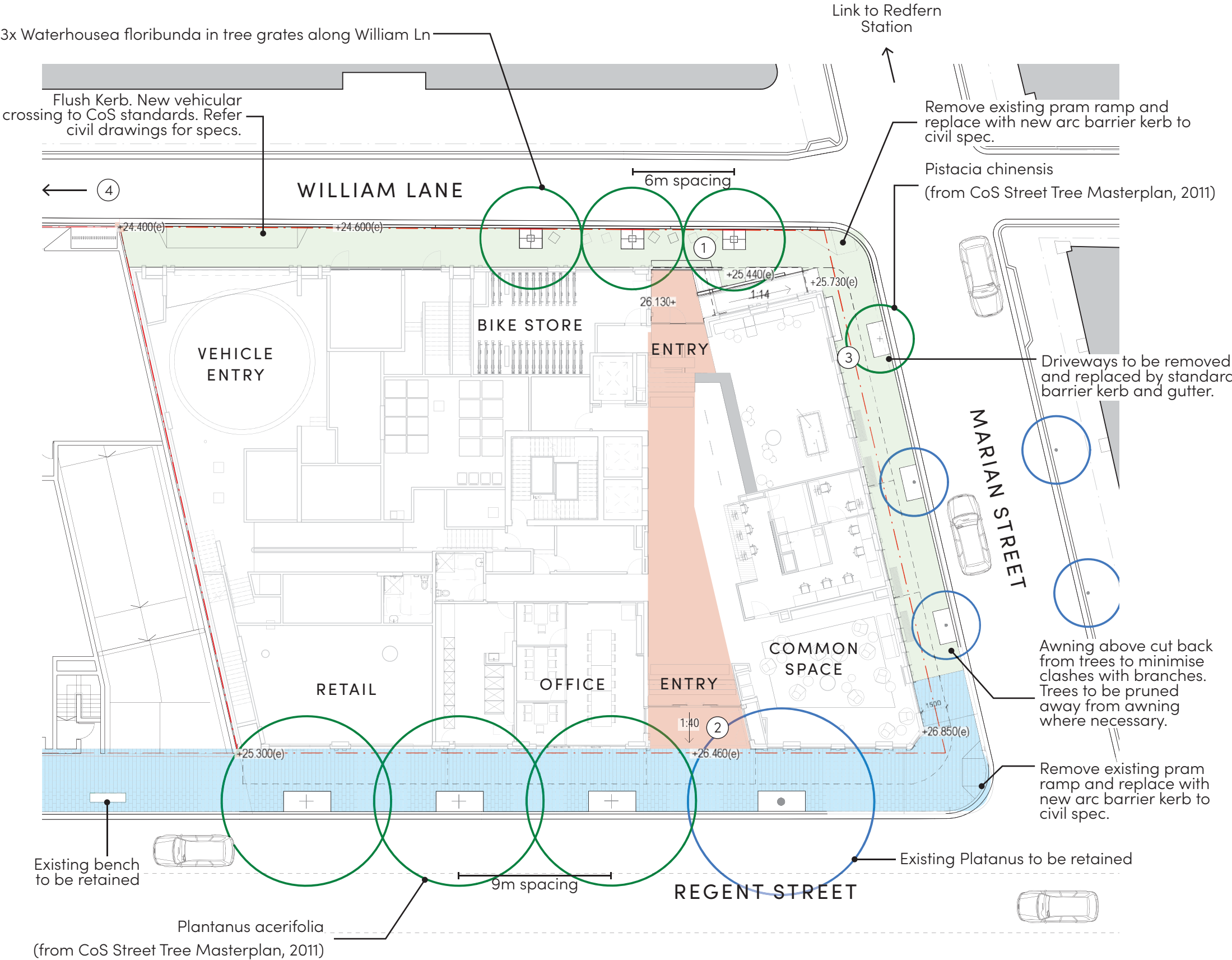
-  Existing Trees to be retained
-  Proposed Trees

Paving Strategy

-  Concrete unit paving (Council's Street Design Code)
-  In-situ concrete paving (Council's Street Design Code)
-  Internal Street connection (refer arch drawings)

NOTE

All tree grates in accord with CoS standards (William Lane).
Existing trees to be protected as per standards. Refer Arborist report.
All building entrances to meet existing street levels.



1:250@A3 N

GROUND LEVEL | VIEWS



View 1: William Lane & Marian St Entry



View 2: Street Corner Breakout Space - William Lane



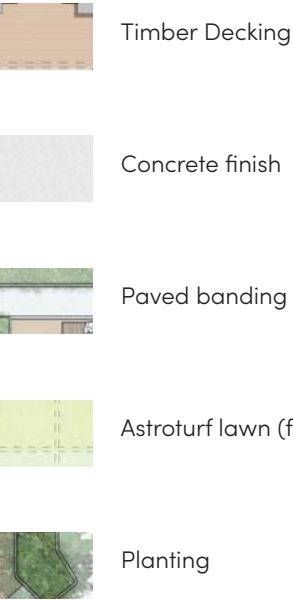
View 3: Corner of Regent & Marian St



LEVEL 2 | LANDSCAPE PLAN

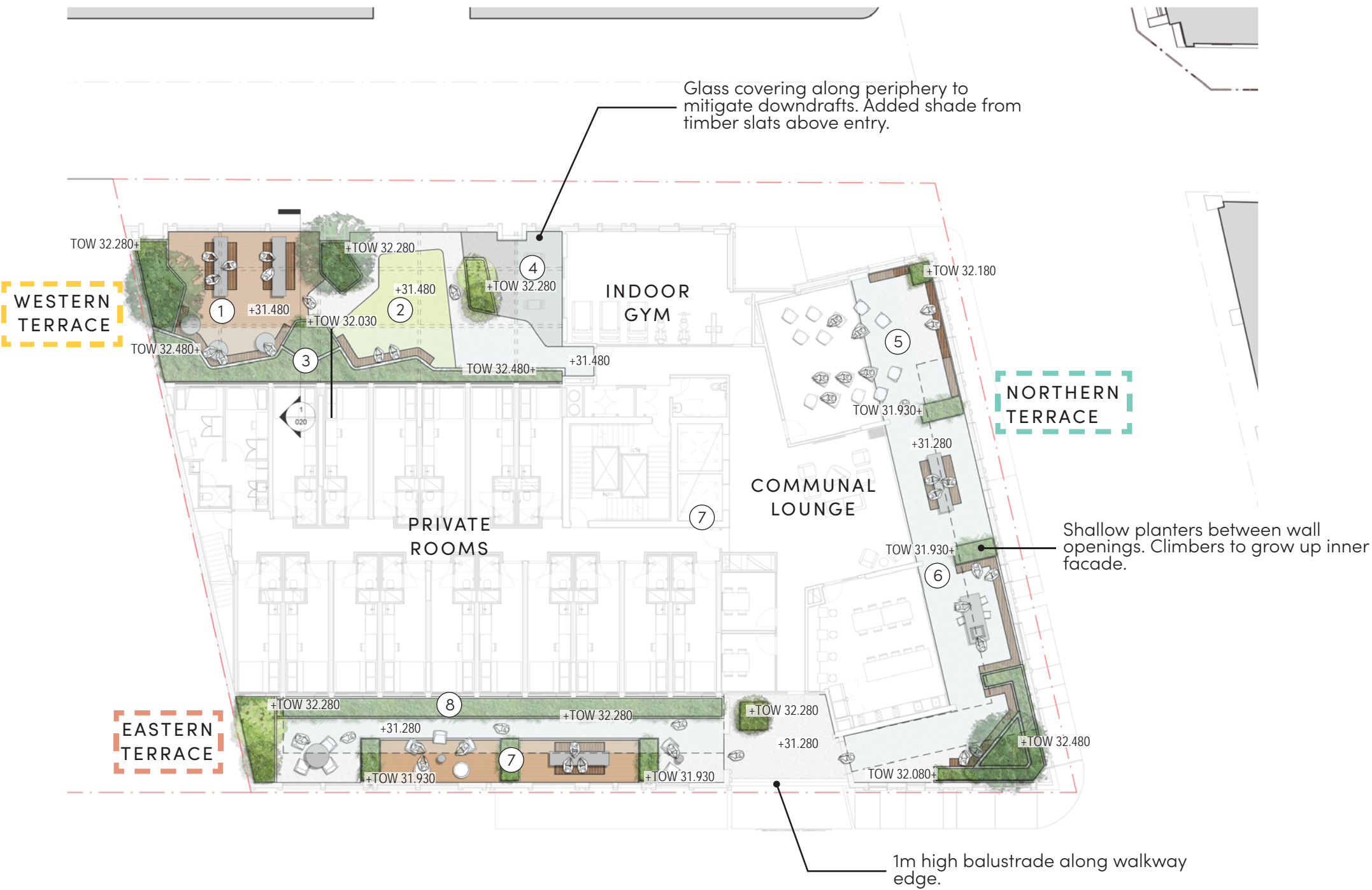
KEY

- 1. Outdoor study area: Seating and tables on timer decking surrounded by planting.
- 2. Flexible astro-turf urban carpet. Un-programmed open space for students.
- 3. Raised planter with climbing wires as barrier providing visual privacy between private rooms and communal terrace. See section on pg.15 for section details.
- 4. Breakout space for adjacent gym.
- 5. Outdoor cinema seating with low planters providing peripheral greening.
- 6. BBQ and Seating / outdoor study opportunities with views over Marian St. Corner planting with small tree to provide canopy and green outlook.
- 7. Eastern Terrace, with recessed seating offerings and low free standing planter boxes.
- 8. Raised planted edge providing visual privacy between private rooms and communal terrace.



NOTE

Refer page 22 for detailed planting plan.

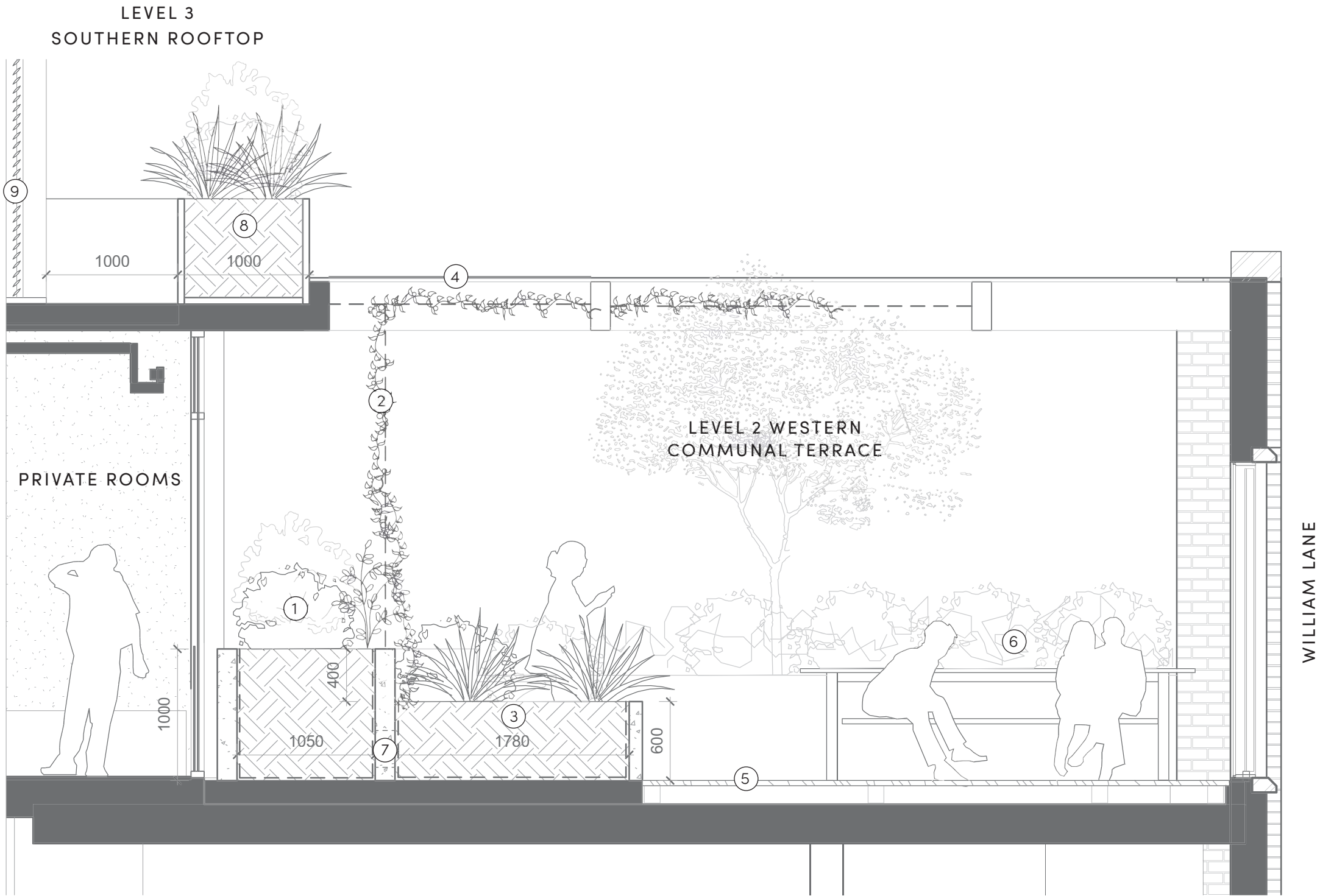


1:250@A3 N

LEVEL 2 | WESTERN COMMUNAL TERRACE - SECTION

KEY

- 1. 1m high Edge planter providing visual buffer to private rooms.
- 2. Climbers as specified on pg. 23 to grow up wire cables increasing visual privacy and providing green outlook. Cables also attached horizontally along structural frame to allow climber to extend.
- 3. Low planter defining terrace spaces while maintaining visual connections.
- 4. Glass awning protecting outdoor spaces from down-draft winds, while allowing light into adjacent rooms.
- 5. Flush timber decking provides material differentiation of the outdoor study area.
- 6. Study benches are arranged amongst planted edges.
- 7. Cut-outs through retaining wall for shared root volume between planters.
- 8. 0.8m high Perimeter planter masking rooftop services. Species specified on pg. 23
- 9. Louvred screen as noise barrier for services.



NOTE

Refer page 14 for location of section cut.

LEVEL 2 | VIEWS - WESTERN TERRACE



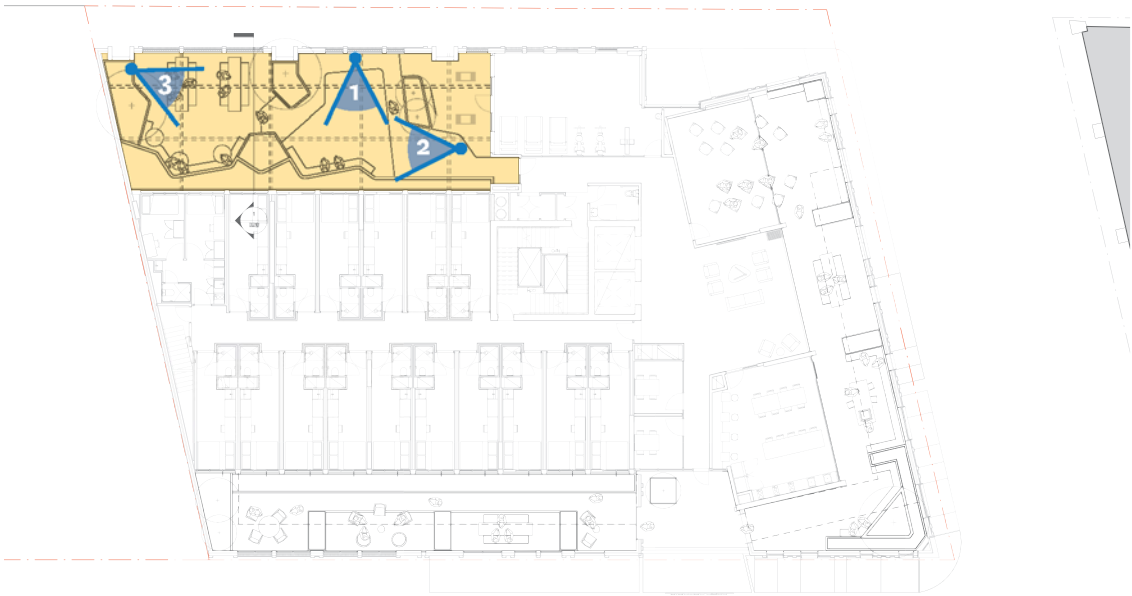
View 1:



View 2:



View 3:



LOCATION PLAN



LEVEL 2 | VIEWS - EASTERN & NORTHERN TERRACES



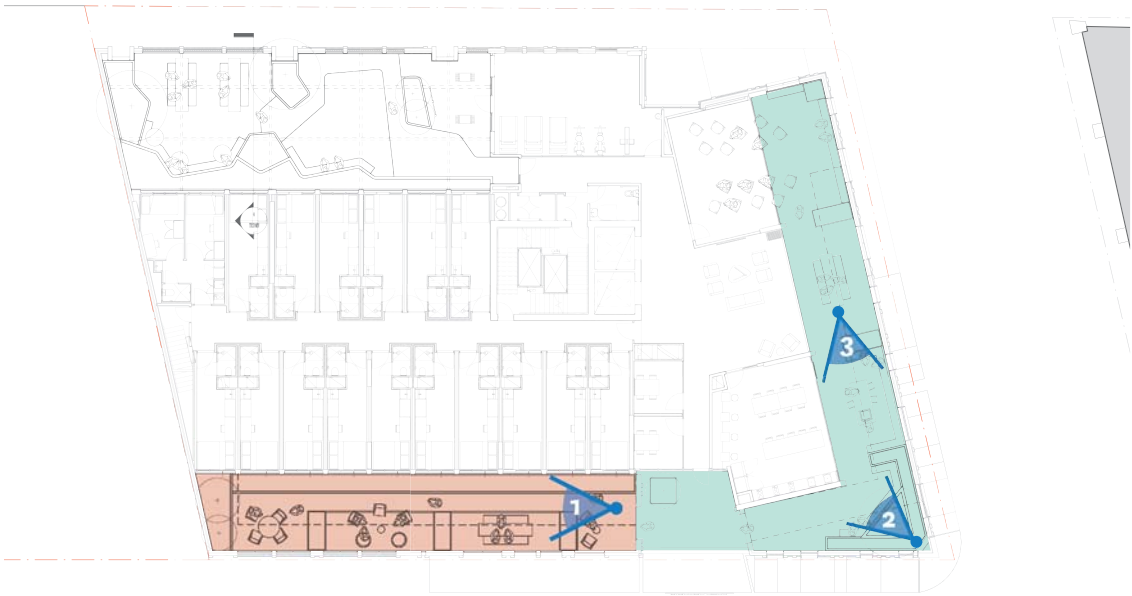
View 1:



View 2:



View 3:



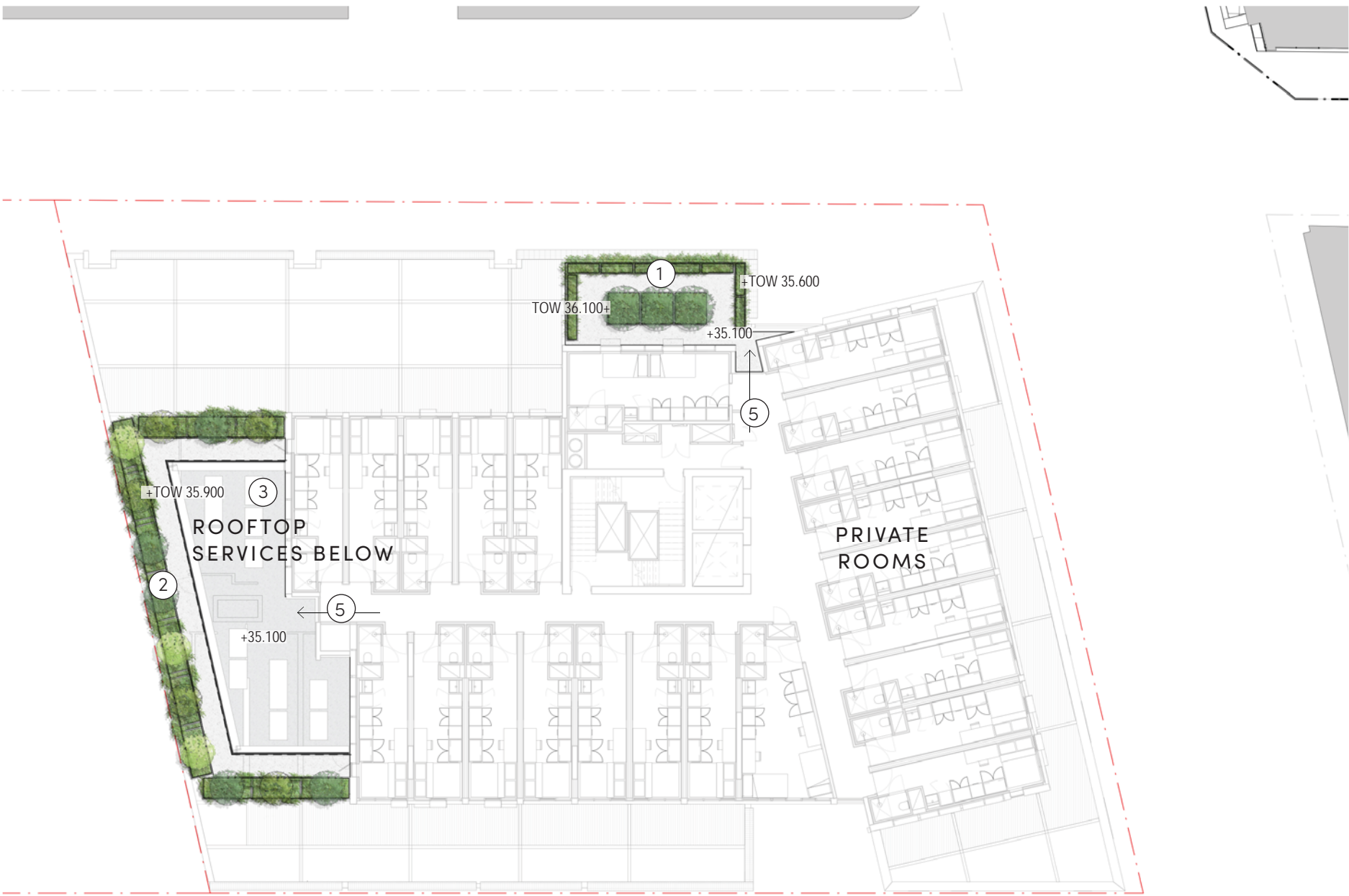
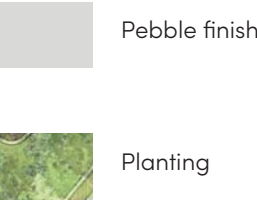
LOCATION PLAN



LEVEL 3 | LANDSCAPE PLAN

KEY

- 1. Inaccessible rooftop terrace. Prefabricated planter boxes with indigenous grasses and cascading groundcovers. Visible from William lane entry. Central planter boxes provide added greening from small trees.
- 2. Dense planting strip as buffer to rooftop services from Regent St.
- 3. Stone pebble finish to rooftop.
- 4. Maintenance access is provided via hallway doors. External maintenance access to pergola will be via scaffolding platforms with harness attachments - from beneath the pergola only.



NOTE

Refer page 22 for detailed planting plan.

1:250@A3 N

LEVEL 2 | VIEWS - ROOFTOP PLANTING



View 1:



View 2:



View 3:



LOCATION PLAN

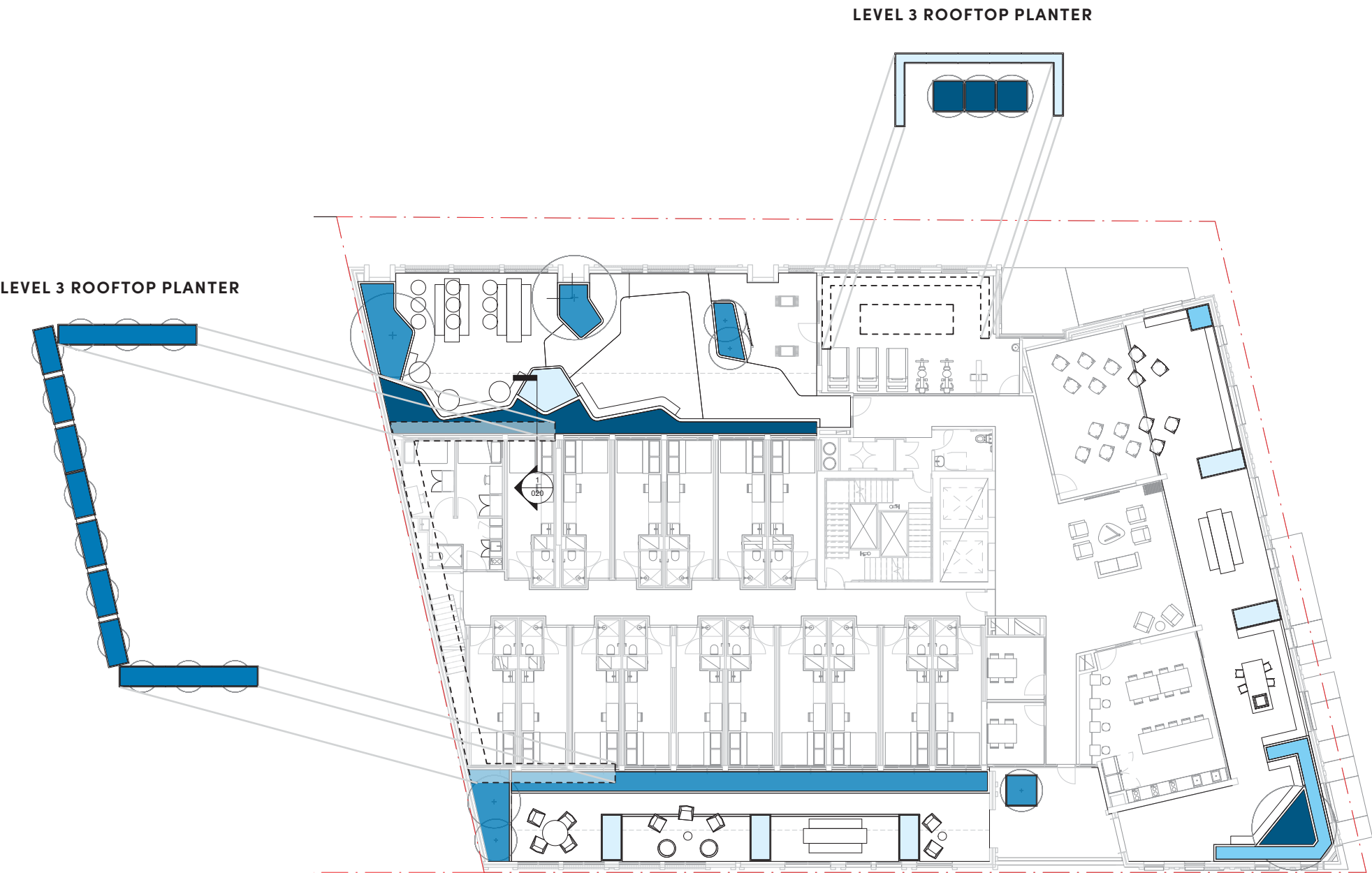
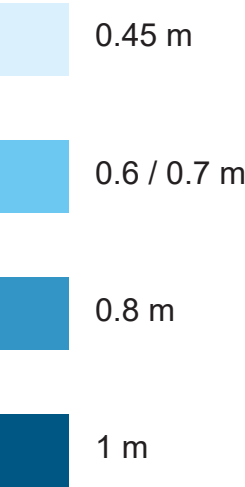


CHARACTER | LANDSCAPE



SOIL DEPTH PLAN | LANDSCAPE

KEY



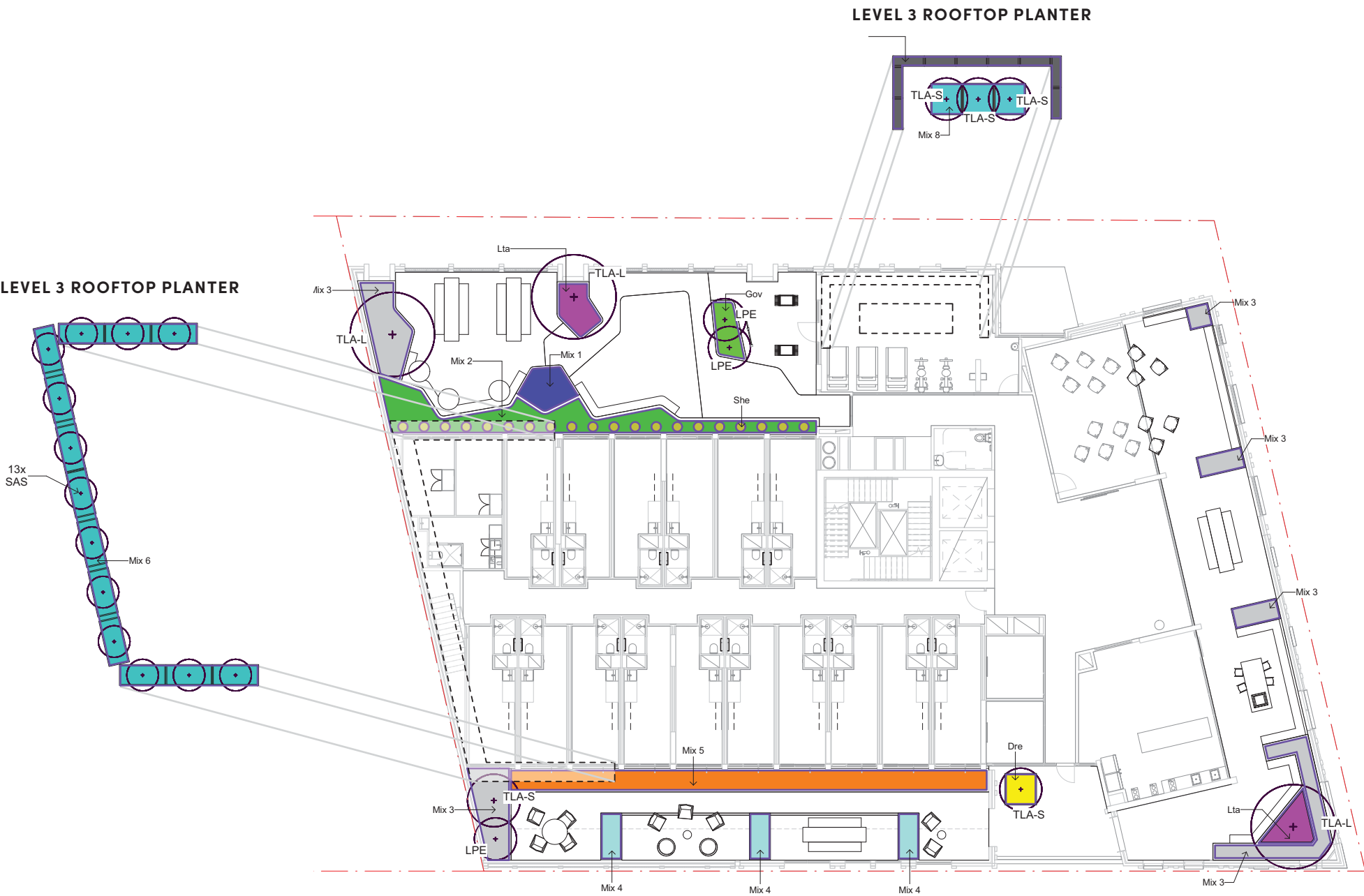
NOTE
All soil depths/volumes comply with ADG guidelines.
Refer page 22 for detailed planting palette.

PLANTING PLANS | UNDERSTOREY & TREES

KEY

- Mix 1
- Mix 2
- Mix 3
- Mix 4
- Mix 5
- Mix 6
- Mix 7
- Mix 8
- Lomandra tanika
- Dianella revoluta
- Sollya heterophylla

NOTE
Refer page 23 for detailed planting palette.



PLANTING PALETTE | LANDSCAPE

TREE & LARGE SHRUB SPECIES					
CODE	BOTANICAL NAME	COMMON NAME	SIZE AT INSTALL	SPACING	QUANTITY
CPI	Pistacia chinensis	Chinese pistache	200L	As Shown	1
LPE	Leptospermum petersonii	Lemon-scented Teetree	75L	As Shown	3
PXA	Platanus × acerifolia	London Plane	400L	As Shown	3
SAS	Syzygium 'aussie southern'	Lilly Pilly	40L	As Shown	13
TLA-L	Tristaniopsis laurina - L	Water Gum	400L	As Shown	3
TLA-S	Tristaniopsis laurina - Small	Water Gum	400L	As Shown	5
WFL	Waterhousea floribunda	Weeping Lilli Pilli	200L	As Shown	3

Grand total: 31

GROUNDCOVERS, CLIMBERS & SMALL SHRUBS						
CODE	BOTANICAL NAME	COMMON NAME	CENTRES(m m)	POT SIZE	QUANTITY	TOTAL AREA
Dre	Dianella revoluta	Blueberry Lily	300	300mm	22	2 m²
Gov	Goodenia Ovata	Hop goodenia	300	200mm	30	3 m²
Lta	Lomandra tanika	Mat rush	300	300mm	76	7 m²
Mix 1	Even Mix of: Cordyline stricta Crinum pedunculatum Goodenia ovata Blechnum cartilagineum Pellaea falcata	.. Slender Palm Lily Swamp Lily Hop goodenia Gristle Fern Sickle Fern	300	200mm	42	4 m²
Mix 2	Even Mix of: Lomandra hystrix Dietes robinsoniana Ficinia nodosa	.. Green mat-rush Lord howe wedding lily Knotted club-rush	300	200mm	184	17 m²
Mix 3	Mix of: Goodenia Ovata Pandorea jasminoides	.. Hop goodenia Bower plant	300	200mm	278	25 m²
Mix 4	Even Mix of: Ficinia nodosa Viola hederacea Hymenosporum flavum 'gold nugget' Goodenia ovata 'Edna Walling Coverup' Acmena smithii 'Allyn Magic' Pandorea jasminoides	.. Knotted club-rush Native Voila Native Frangipani Goodenia Tenacity Lilly Pilly Bower plant	300	200mm	63	6 m²
Mix 5	Even Mix of: Cordyline stricta Goodenia ovata Blechnum 'silver lady' Centella asiatica dichondra 'silver falls'	.. Slender Palm Lily Hop goodenia Minature tree fern Indian pennywort Silver dichondra	300	200mm	229	21 m²
Mix 6	Even mix of: Carissa macrocarpa Dichondra 'silver falls' Liriope ' Evergreen Giant'	.. Natal Plum Silver dichondra Turf lily	200	200mm	666	27 m²
Mix 7	Even mix of: Lomandra tanika Carpobrotus glaucescens 'yellow'	.. Mat Rush Hottentot fig	400	200mm	34	5 m²
Mix 8	Even mix of: Lomandra tanika Dianella revoluta	.. Mat Rush Flax-lily	400	200mm	39	6 m²
She	Sollya heterophylla	Bluebell creeper.	400	300mm	20	3 m²

INDICATIVE PLANTING PALETTE



Tristaniopsis laurina



Leptospermum petersonii



Cordyline stricta



Crinum pedunculatum



Goodenia ovata



Blechnum cartilagineum



Pellaea falcata



Lomandra hystrix



Dietes robinsoniana



Ficinia nodosa



Pandorea jasminoides



Viola hederacea



Hymenosporum flavum
'gold nugget'



Acmena smithii 'Allyn
Magic'



Dichondra 'silver falls'



carpobrotus glaucescens
'yellow'

NOTE

Refer to page 22 for detailed planting plan.

MATERIALS PALETTE | LANDSCAPE

STRATEGY

The material palette for landscape components will echo the architectural character of the development. The hardscape elements will portray urban tones and textures, while relating to nature simultaneously. The aim is to soften the ground plane and compliment the lush planting that guides pedestrian movement through and into the site.

All furniture and fixtures for the site will:

- Be durable, functional and low maintenance
- Improve ease of access
- Invite use by inhabitance
- Reflective of a contemporary design character
- Adaptable to the needs of the community.

LANDSCAPE ELEMENTS



VARIETY OF LOOSE FURNITURE



COMMUNAL OUTDOOR TABLE



TIMBER SEATING BENCH



TIMBER SLATS PERGOLA STRUCTURE



STAINLESS STEEL GROWER CABLES



BBQ FACILITIES



GRC PLANTER BOXES



RAISED IN-SITU CONCRETE PLANTER



SoC CONCRETE UNIT PAVING



HONED CONCRETE



TREE GRATE TO CoS STANDARDS



TIMBER DECKING

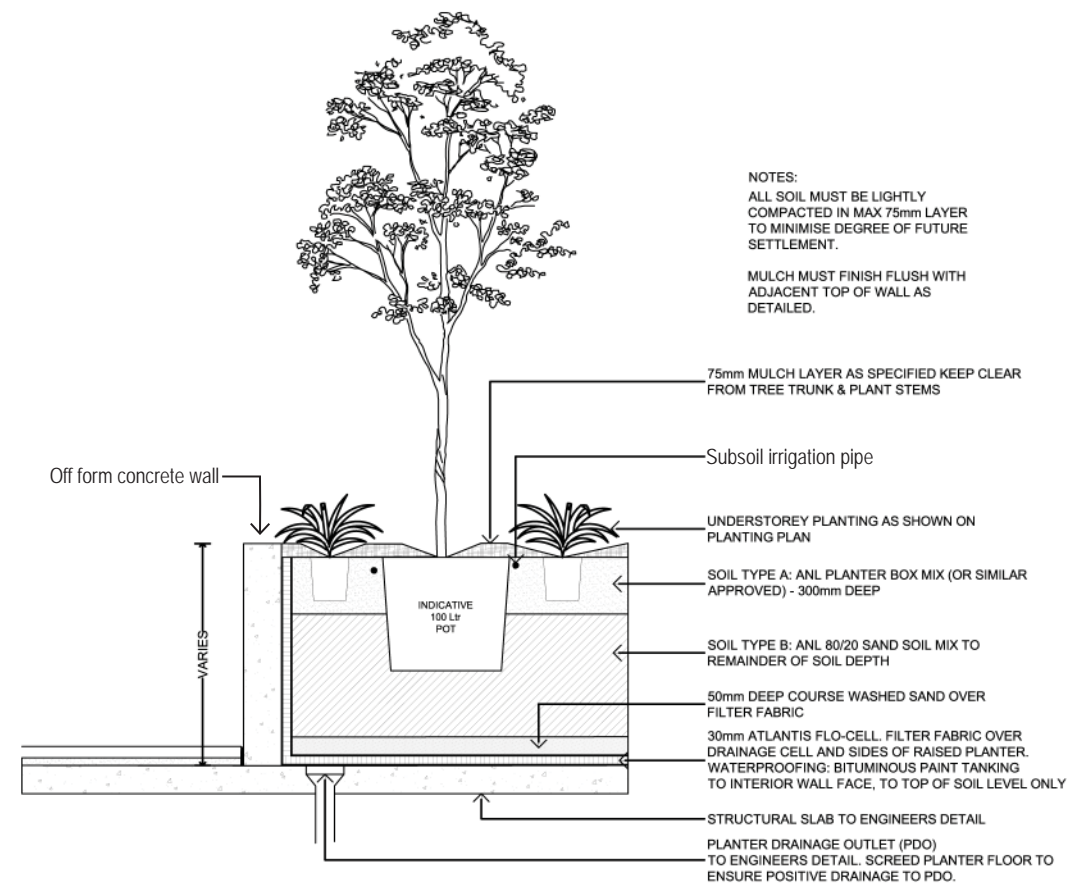


ARTIFICIAL TURF AS FELXIBLE URBAN CARPET

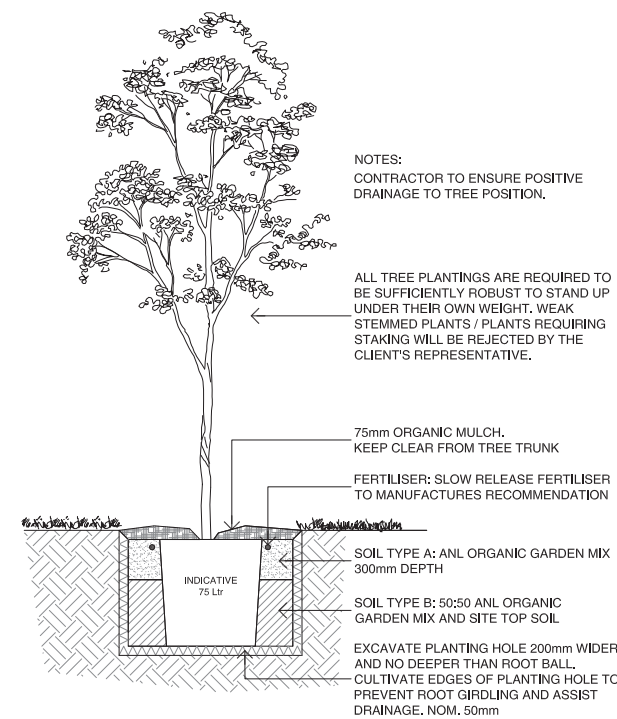
MATERIALS PALETTE | URBAN CARPET REFERENCES



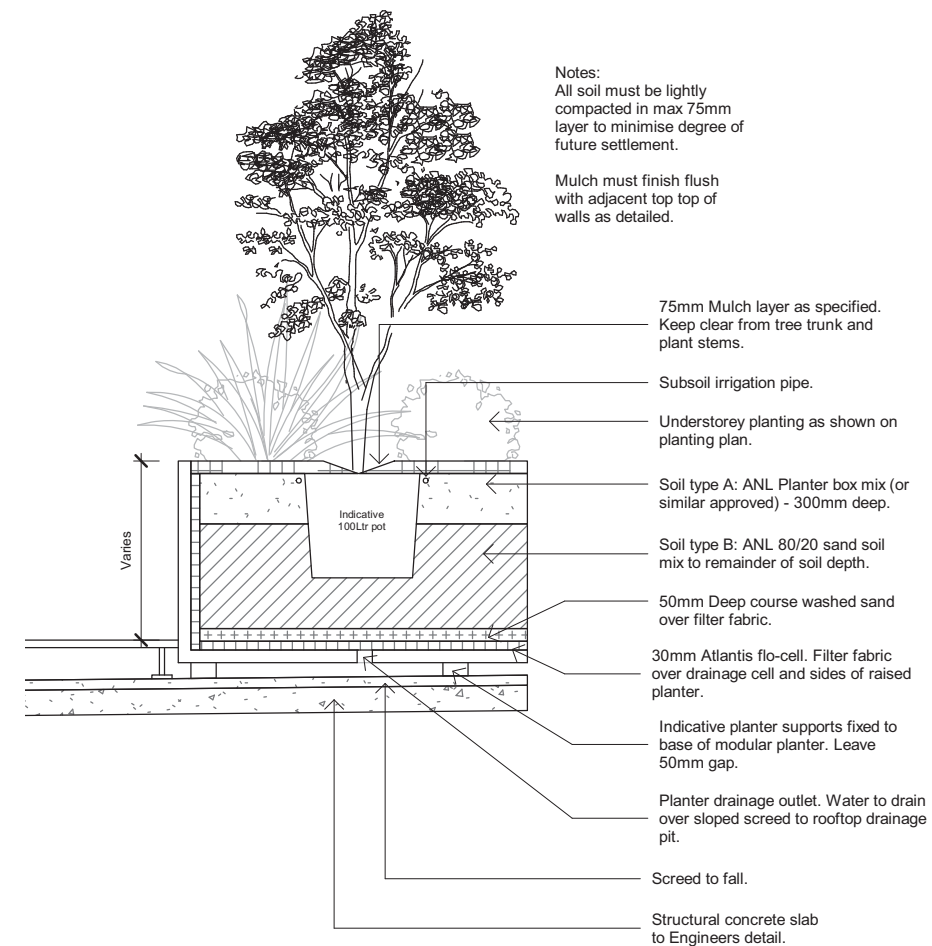
TYPICAL DETAILS | LANDSCAPE



1. TYPICAL DETAIL - PLANTING ON STRUCTURE (IN-SITU) 1:40 @A3



2. TYPICAL DETAIL - TREE PLANTING IN SOIL 1:40 @A3



3. TYPICAL DETAIL - PLANTING ON STRUCTURE (PREFABRICATED) 1:40 @A3



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