

Royal Institute for Deaf and Blind Children Macquarie University

Landscape Design Report
For SSDA
November 2020
Revision B

O C U L U S

RIDBC Design Report

Project Number: S20-003
Project Address: Macquarie University, NSW

b	Issue	Date	By	Checked
A	SSDA	02.10.20	WW/CM	KS
B	SSDA	11.11.20	WW/HL	KS

O C U L U S
Landscape Architecture
Urban Design
Environmental Planning
Level 1, 5 Wilson Street, Newtown, NSW, 2042
PO BOX 307
P. 02 9557 5533
e. australia@oculus.info

Contents

Introduction		5
1.1	Purpose of Report	6
1.2	Reference Documents	7
1.3	Location & Context	8
1.4	Site Understanding	9
1.5	Response to Indigenous and Cultural Heritage	10
 Landscape Design Principles and Strategies		 12
2.1	Landscape Design Principles	13
2.2	Landscape Design Strategies	14
 Landscape Concept Design		 18
3.1	Landscape Master Plan	19
3.2	Landscape Typologies	20
3.3	School Landscape Spaces	21
3.4	Consulting Services Building Spaces	33
 Landscape Materials		 48
4.1	Materials, Furniture & Fixtures Schedule	49
4.2	Planting Schedule	50
4.3	Sensory Landscape Experience	51



1.0

Introduction

1.1 Purpose of Report

Purpose of Report

This report has been prepared by OCULUS in support of the State Significant Development Application for the Royal Institute for Deaf and Blind Children’s Centre of Excellence. The landscape design has been co-ordinated with the broader consultant team to reflect a holistic and considered landscape design response.

This report communicates the design intent for all areas of the site, focusing on mediating between the existing conditions and new built form, while providing a high quality functional and flexible facility for the RIDBC. This will include the Pre-School and School accommodation in a single storey pavilion addressing Culloden Road, and the main RIDBC building of up to three storeys, including basement level:

Of particular concern in developing the landscape design has been retaining and replacing significant tree species, increasing canopy cover (and vegetation generally), and creating a variety of clear and legible landscape spaces across the campus to support a modern teaching and work place environment.

In addition to the above, this report outlines how the landscape proposal incorporates the Education SEPP Design Quality Principles included in the ‘GANSW Better Design Schools’ document (listed over leaf), provides the ‘detailed landscape strategy’ required by SEAR’s (amongst other items relevant to landscape) and responds to comments made on the draft scheme by the GANSW office and the Macquarie University Design Review Panel;

SEAR’s Items

- The landscape design will address the SEAR’s, in particular under 4. Built Form and Urban Design
- Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools.
 - Provide a detailed site-wide landscape strategy, including:
 - Consideration of equity and amenity of outdoor Play spaces, and integration with built form, security, Shade, topography and existing vegetation.
 - Details of the number of trees to be removed and the Number of trees to be planted on the site.
 - Address CPTED Principles.



IMAGE. Existing *Eucalyptus punctata*
CREDIT. Oculus



IMAGE. Existing grove of trees in turf
CREDIT. Oculus



IMAGE. Existing *Syncarpia glomulifera*
CREDIT. Oculus



IMAGE. Looking south-west Gymnasium Rd and West Precinct Rd
CREDIT. Oculus

1.2 Reference Documents

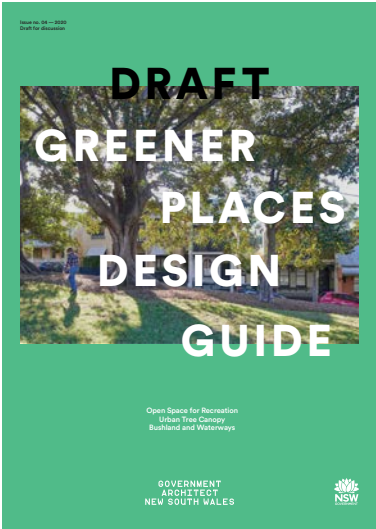


Elements of designing with Country:

- 01. Nature
- 02. People
- 03. Design

Design approaches:

- 05. Architecture/Urban Design
- 04. Passive Design
- 06. Biophilic Design



- 01. Open space for Recreation
- 02. Urban tree canopy
- 03. Bushland and Waterways



- 1. Understand our physical surroundings.
- 2. Understand how our surroundings affect people.
- 3. Adopt strategies that will benefit people and our surroundings.

Strategies:

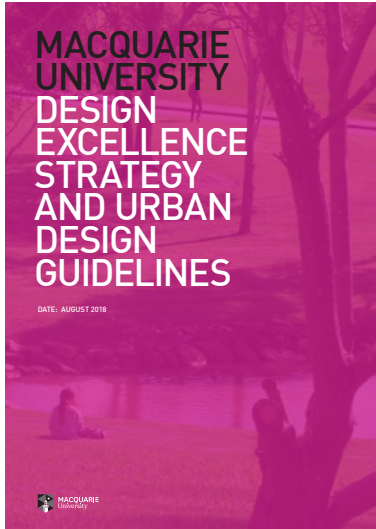
- 01. Passive Design
- 02. Biophilic Design
- 03. Specialist environmental design



- 01. Context, amenity & character
- 02. Sustainable, efficient & durable
- 03. Accessible & inclusive
- 05. Amenity
- 04. Health & Safety
- 06. Whole of life, flexible & adaptive
- 07. Aesthetics



- 1. Find
Communicate the purpose and location of play elements and facilities.
- 2. Fit
Provide a range of play opportunities for people of all abilities and sizes.
- 3. Choose
Enable exciting individual experiences and social interaction.
- 4. Join In
Create opportunities for everyone to connect.
- 5. Thrive
Challenge and involve people of all capabilities.
- 6. Belong
Create a place that's welcoming and comfortable.



The Master Plan:

- Vision
- Principles
- Zones
- Functions
- Access

Public Domain:

- Public Domain Framework
- Gateways
- Primary Spaces
- Secondary Spaces
- Streets and Links

Built Form

Sustainability



- 01. Introduction
- 02. Precinct Planning Framework
- 03. Public Domain
- 05. Built Form
- 04. Lot Controls

1.3 Location & Context

Site Location

The site is located in the north-western part of Macquarie University at the corner of Gymnasium and Culloden Roads. Gymnasium Road acts as an extension of Waterloo Road and forms the main northern gateway to the university. Therefore, the site occupies a prominent strategic location both in terms of the university and its interface with the surrounding urban context.

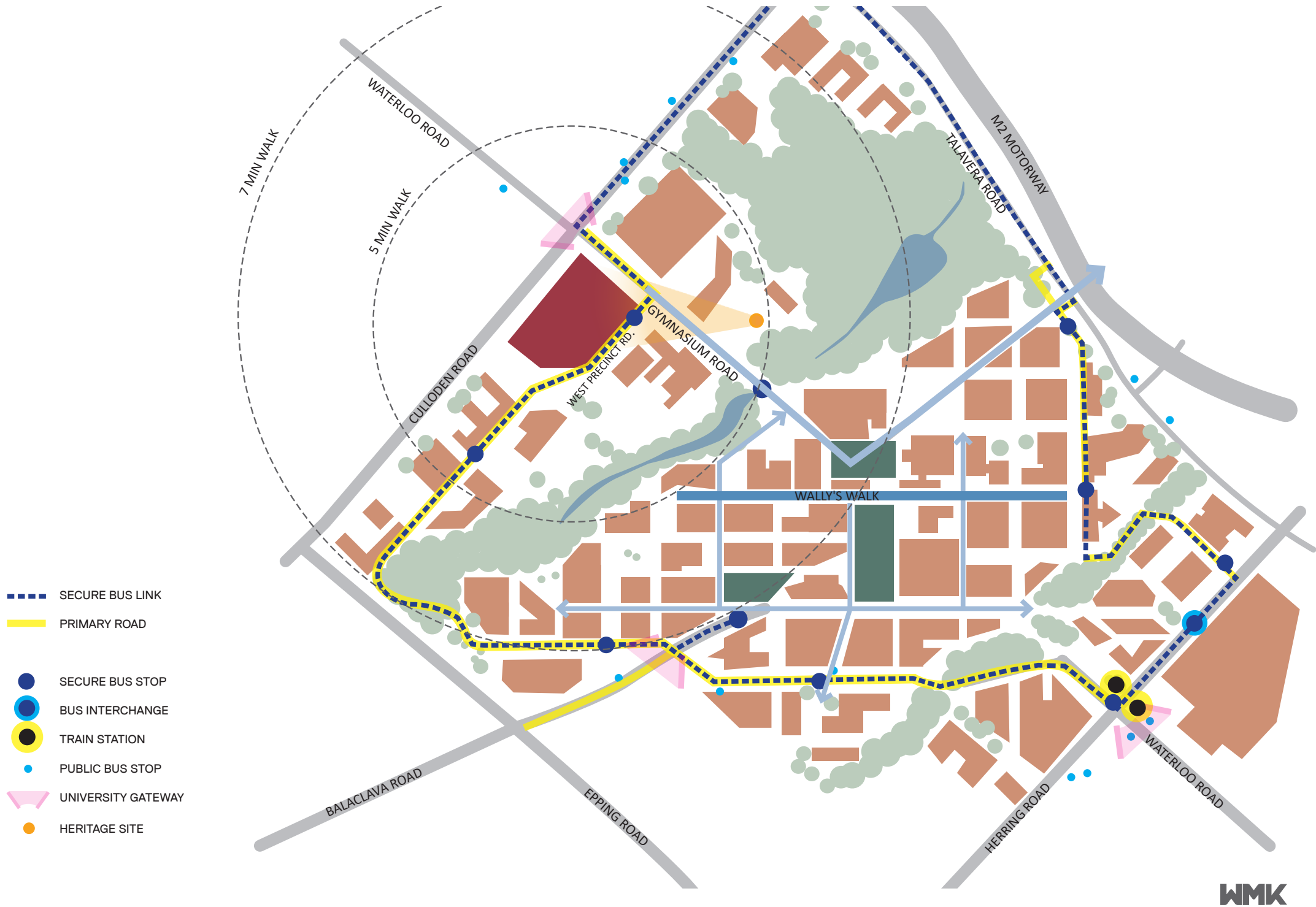
Context

The 2014 Masterplan for Macquarie University retains and builds off the original 'Campus in a Park' idea, preserving the existing green spaces which are mainly focused along creek lines. The University has a denser, more formal heart located in the centre of the Campus, which becomes more dispersed and informal towards the edges.

A revised strategy of constructing decked, multilevel parking facilities towards the peripherals of the campus over the current surface-heavy parking lots which occupy a large percentage of land-use will free up more possibilities for new faculty and research buildings. As part of this strategy, the existing temporary car parks to the north-east and south of the site will be removed in time.

Gymnasium Road is planned to undergo a new streetscape upgrade, with colourful street trees lining the road, and the intersection with Waterloo Road reconfigured to create a more direct entry to the University. In addition, West Precinct Road will be further extended and upgraded to form the main internal road through the west part of the Campus. Both Gymnasium Road adjacent to the site and West Precinct Road are classed as Primary Roads in the Masterplan. They also act as primary bicycle routes and the University's shuttle bus route.

In landscape terms, the native tree plantations which have occupied significant areas of the Campus since the 1980s, create the overall landscape structure for the Campus. The Masterplan proposes to largely retain these plantings, with more formal plantings of native and exotic species associated with the roads, buildings and spaces between.



1.4 Site Understanding

Site Analysis

The site for the RIDBC Centre of Excellence is bordered by Culloden Road to the north-west, Gymnasium Road to the north-east and West Precinct Road to the south and south-west. On the other side of West Precinct Road to the south sits the University’s swimming facility, whilst to the south-west is a temporary at-grade car park.

The site sits on a ridgeline with a high point in the western part of the site at RL 79.00 which falls to a low point at RL 71.00 in the southern part of the site adjacent to West Precinct Road. The site has extensive views over the rest of the Campus, only limited by the existing vegetation.

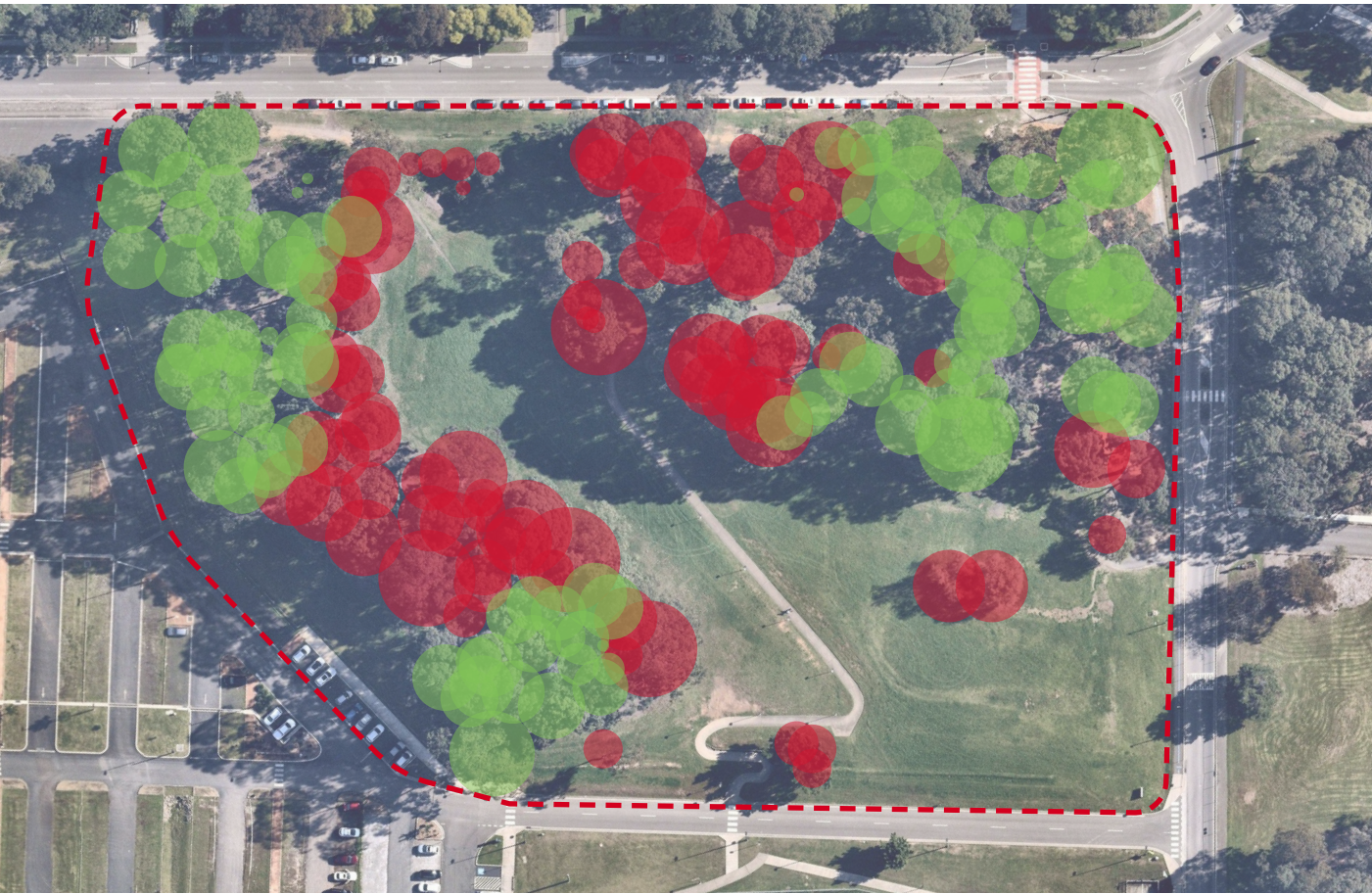
The site is currently vacant but has two large groupings of existing native trees approximately 35 years old in the northern and south-west parts of the site. These trees provide a backdrop of vegetation and frame views from the site.

There is currently a footpath along Gymnasium Road from the intersection with Culloden Road into the Campus. There is no existing footpath along Culloden Road between the pedestrian crossing near the Gymnasium Road intersection and the bus parking area to the west of the site. There is also no existing footpath along the north side of West Precinct Road between Gymnasium Road and the first pedestrian crossing opposite the swimming facility.

A sinuous footpath traverses the site from the intersection of Culloden and Gymnasium Roads to West Precinct Road, providing an alternate pedestrian access into the Campus, particularly for those accessing the swimming facility. The proposed building will extinguish this minor pedestrian route.

It will be important that the landscape strategy for the project considers the wider pedestrian circulation network and how the proposed building will tie into this. The University Masterplan reinforces the principle of using streets as the primary pedestrian as well as vehicle routes. The missing links in the current street footpath provision will require to be addressed in order to provide a well-connected pedestrian network. A through site pedestrian connection linking Culloden Road with West Precinct Road will also be important to provide an alternative pedestrian route on the western side of the proposed buildings.

Existing Trees



LEGEND

- Existing Tree proposed for retention (166)
- Existing Tree proposed for removal (121)

The site contains planted native and exotic tree species of varying ages and stages of maturity. There does not appear to have any remnant vegetation on site and the site has been highly modified with the removal of native under storey and ground cover plants and shrubs. The trees located on the site together with other indigenous trees in the surrounding area are lightly connected to ecological communities nearby.

The dominant tree species is *Eucalyptus microcorys* (Tallowwood), a native tree naturally occurring from the Central Coast of NSW north into Queensland, which makes up 45% of the trees on site. *Eucalyptus saligna* (Sydney Blue Gum), a native tree naturally occurring from mainly Gosford–Wyong area and Sydney’s North Shore, makes up 26% of all trees on site. Other notable tree species include *Corymbia citriodora* (Lemon-scented Gum), *Corymbia maculata* (Spotted Gum), *Eucalyptus botryoides* (Bangalay), as well as two specimens of *Eucalyptus scoparia* (Wallangara White Gum) which are listed as endangered in NSW under the NSW Biodiversity Conservation Act (2016).

- The Arboriculture Impact Assessment prepared by Australis Tree Management assessed a total of 287 trees on the site.
- One-hundred and sixty-six (166) trees are located on the subject site and proposed for retention
 - One-hundred and twenty-one (121) trees on site are proposed for removal or relocation
 - as they are located within or close to the proposed development envelope
 - Two-hundred and sixty-seven (267) trees are protected by council
 - Twenty (20) trees are exempt from council protection
 - Fifteen (15) trees on site are dead. Prior to removal the dead trees should be assessed by an ecologist to comment regarding habitat capabilities and management.

The trees recommended for removal have major encroachments in accordance with AS4970-2009, i.e.. encroachments greater than 10% of the TPZ or inside the SRZ where their retention is considered to be not viable. These trees are likely to suffer greatly by the proposed works and may to become unstable as well as significantly reducing their life expectancies. A number of trees proposed for retention have encroachments of less than 10% that are outside the structural root zone (SRZ). These are considered to be ‘Minor’ in accordance with AS4970-2009 and generally do not require detailed root investigations. The AIA also provides detailed recommendations for tree protection measures.

1.5 Response to Indigenous and Cultural Heritage

- Acknowledging the traditional custodians of the land
- Indigenous engagement
- Biophillic Design/Passive Design/ Urban Design
- Opportunities for outdoor gathering spaces
- Opportunities for indigenous gardens
- Opportunities for indigenous artwork



Integrated Artwork
Textured Imagery
Concrete Relief Mould
Landscape Walls
Architectural Walls

Input
Local artist
Local imagery
Design



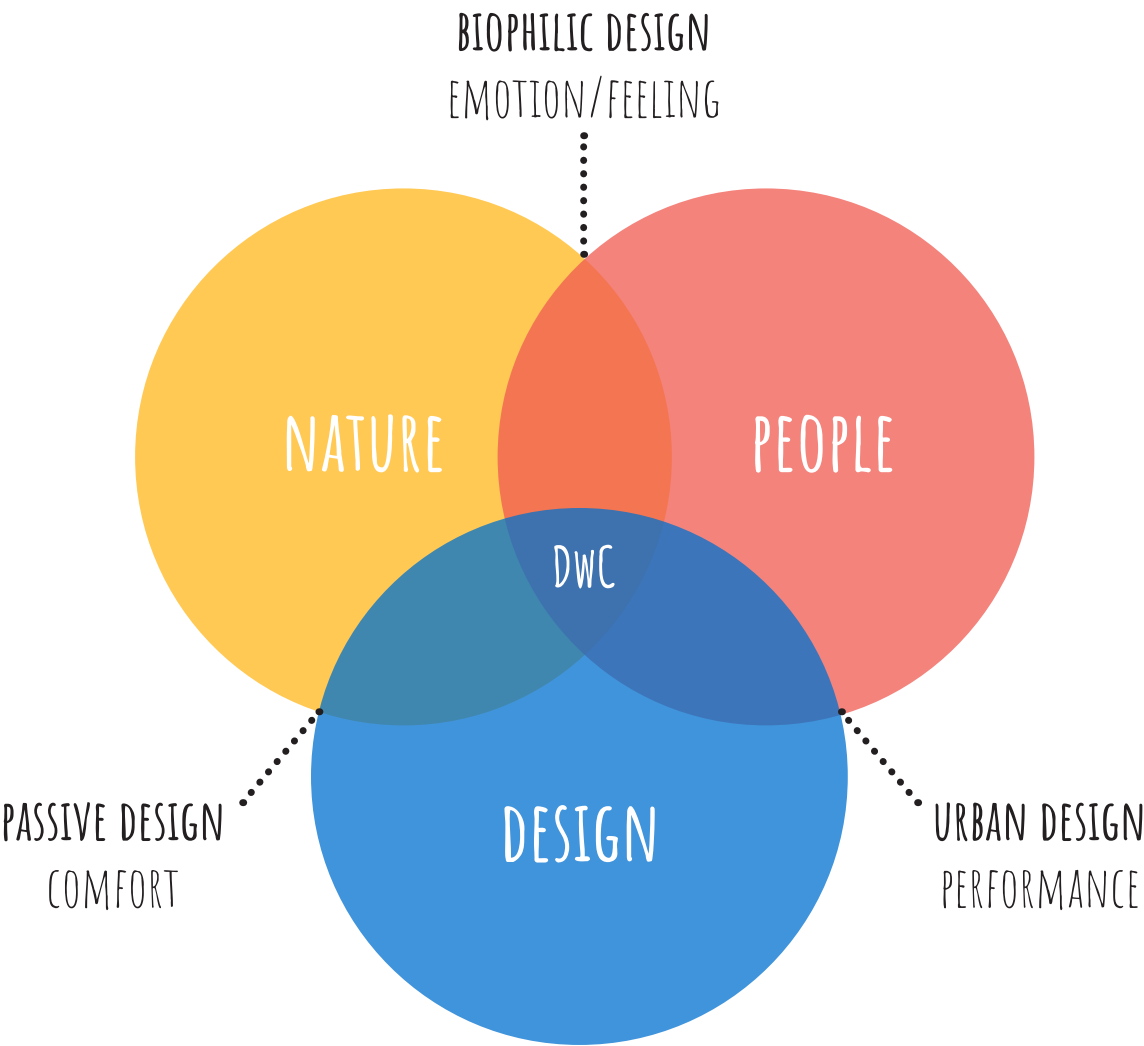
Native Plant Species
Edible / Culinary Plants
Cultural Significance
Education and Learning

Input
Local uses
Meaning



Landform overlay
Colours
Form
Pattern
Naming

Input
Local artist
Local imagery
Design
Naming



Page left intentionally blank

2.0

Landscape Design
Principles and Strategies

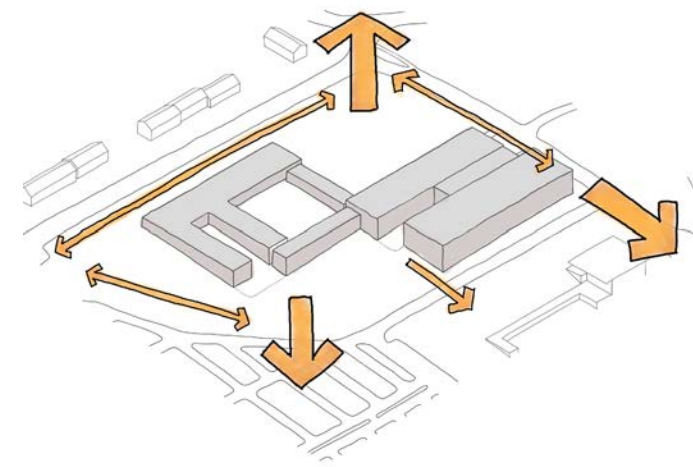
2.1 Landscape Design Principles



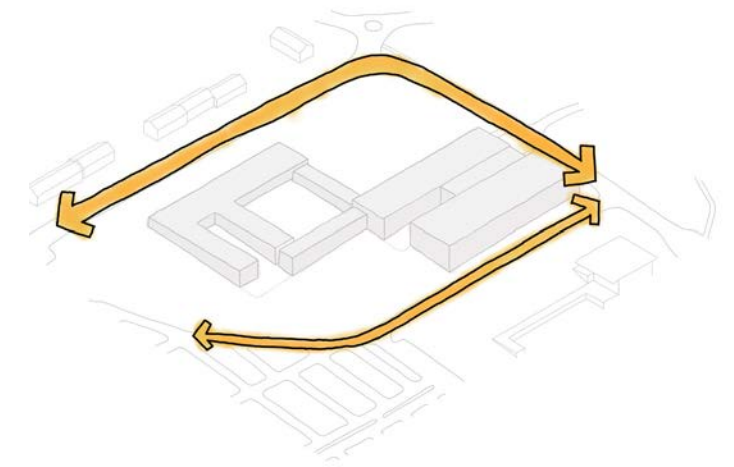
Respond to existing topography



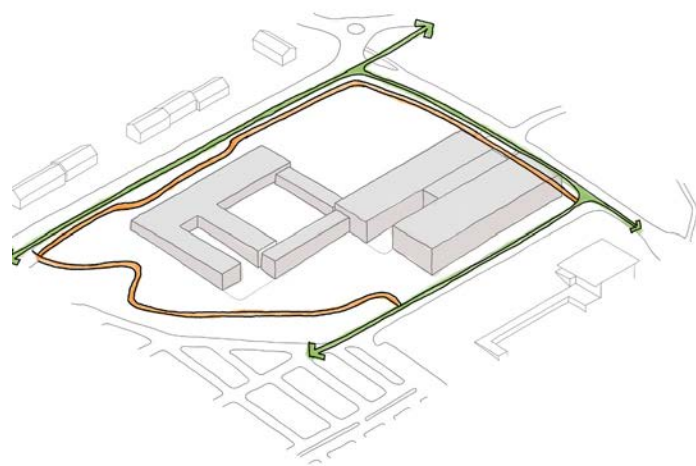
Retain as many existing trees as possible



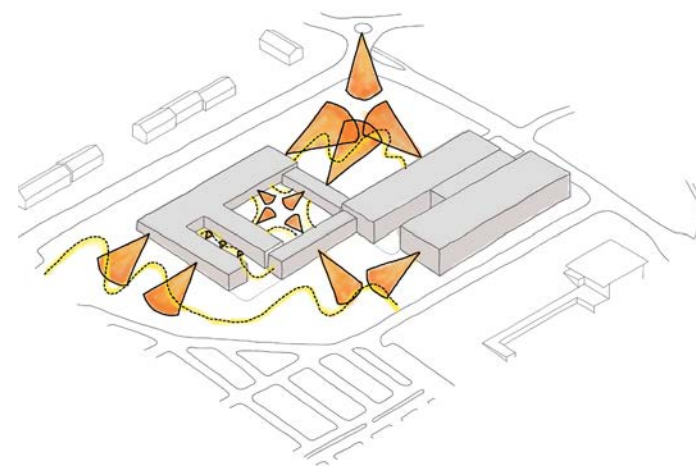
Respond to wider context including MU master plan & DGs



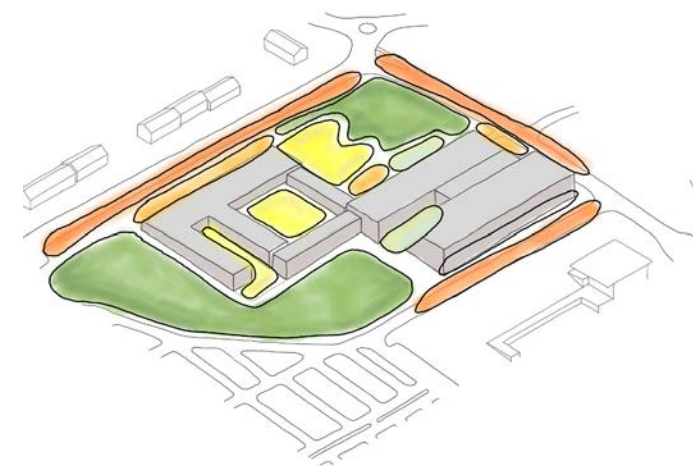
Address adjacent street frontages



Integrate with the wider pedestrian and cycle network



Create strong visual & physical connections with the landscape



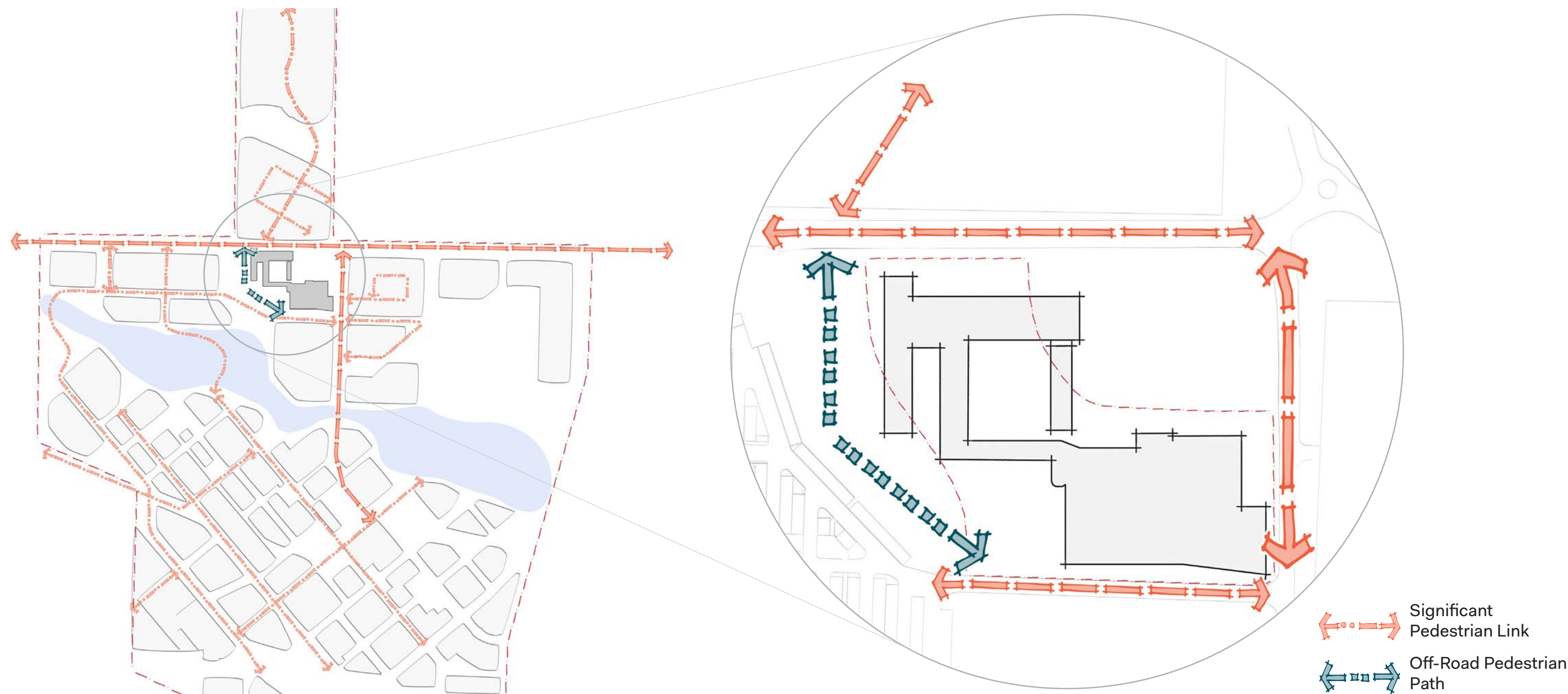
Create diverse landscape spaces which address the varied needs of students, staff and visitors



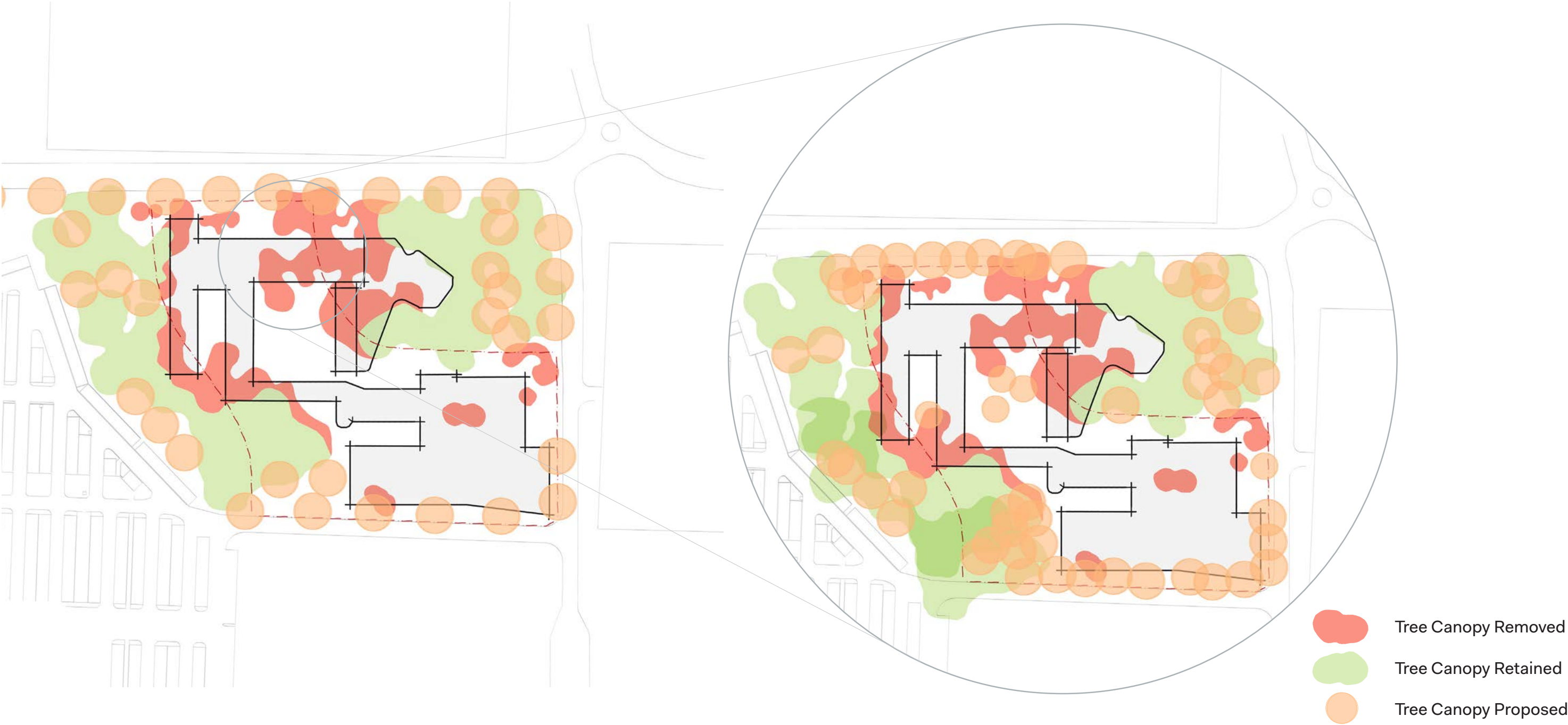
Create rich, interesting and educational sensory landscape outdoor environments

2.2 Landscape Design Strategies

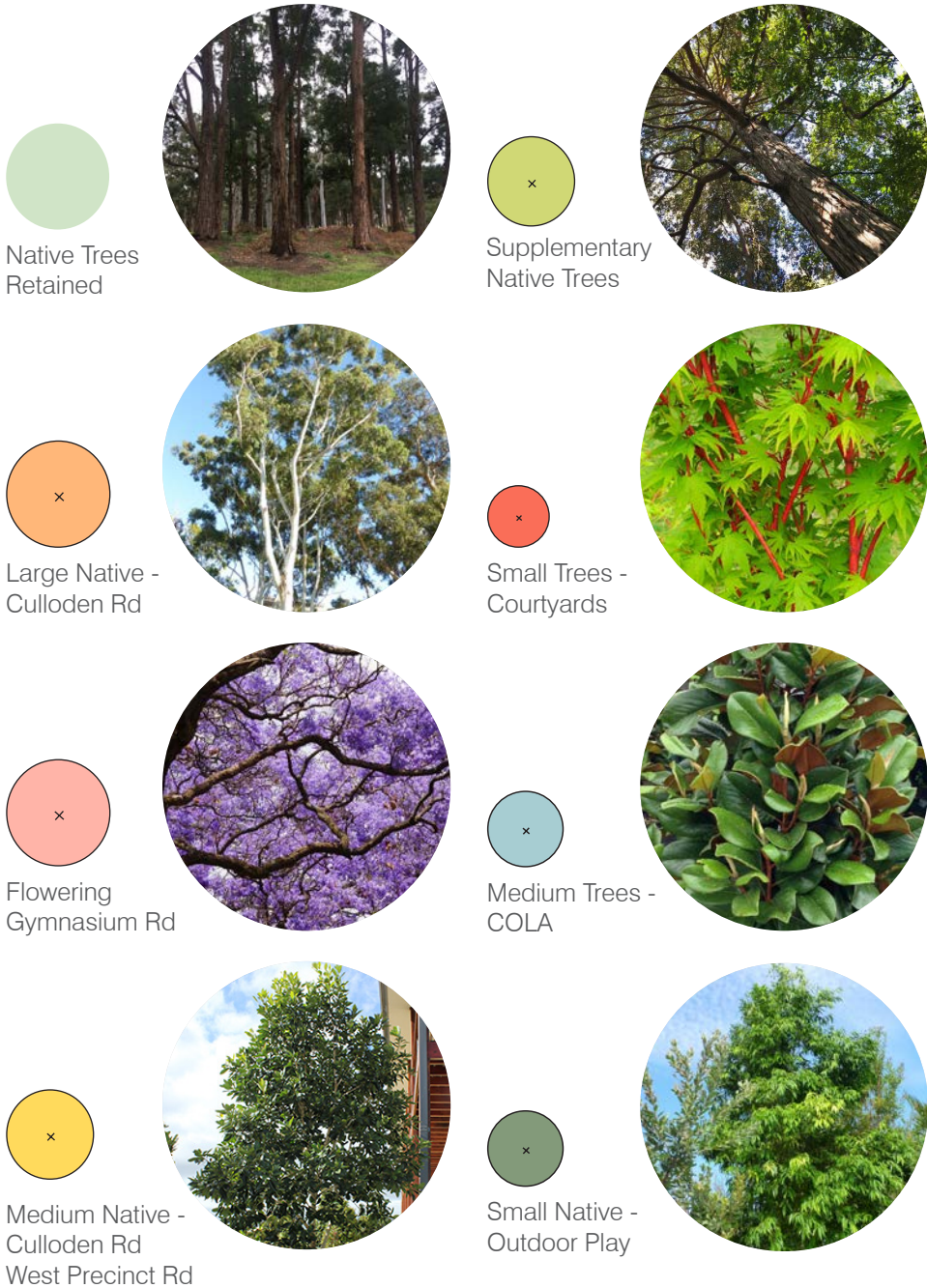
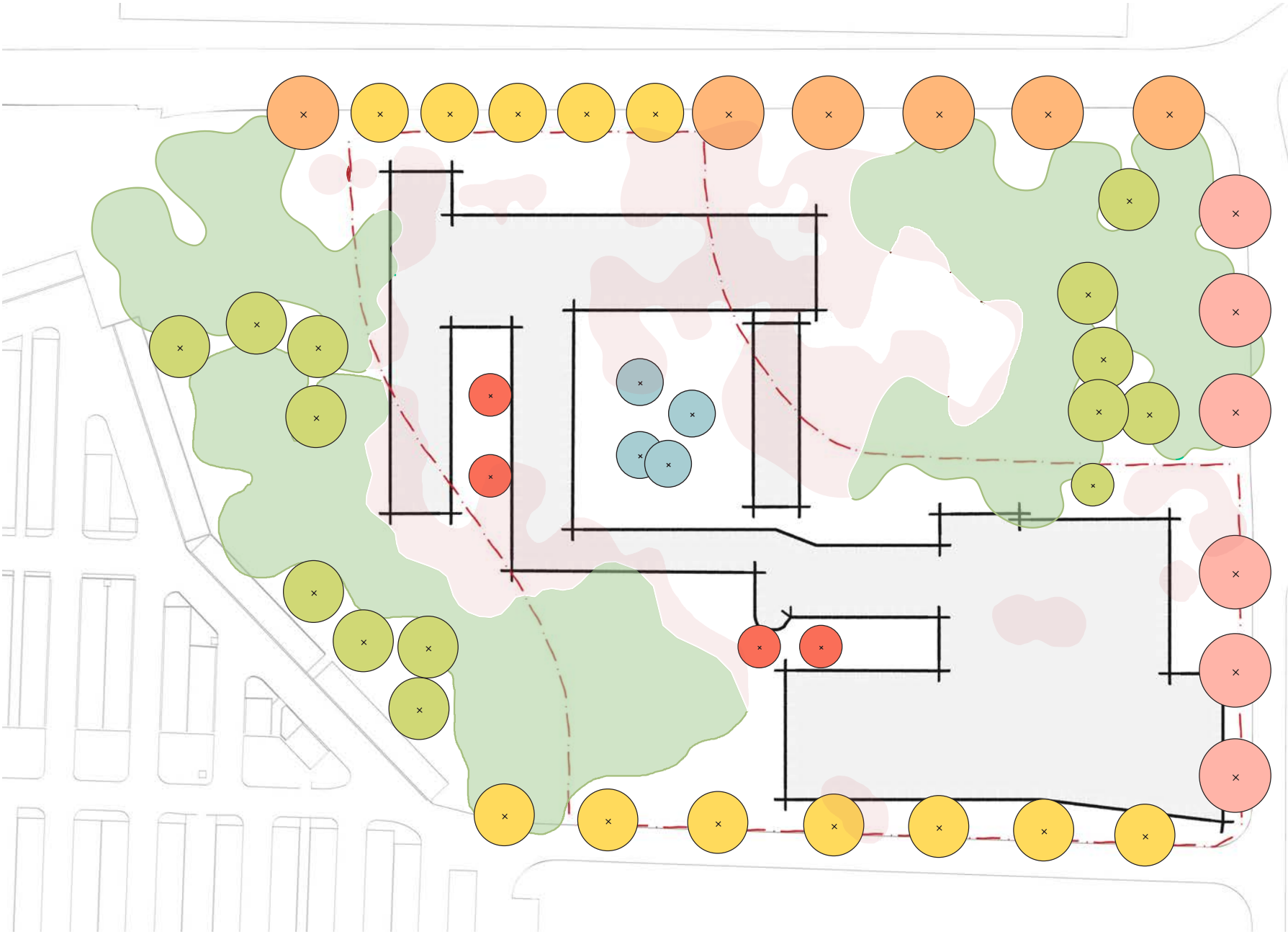
Campus Circulation



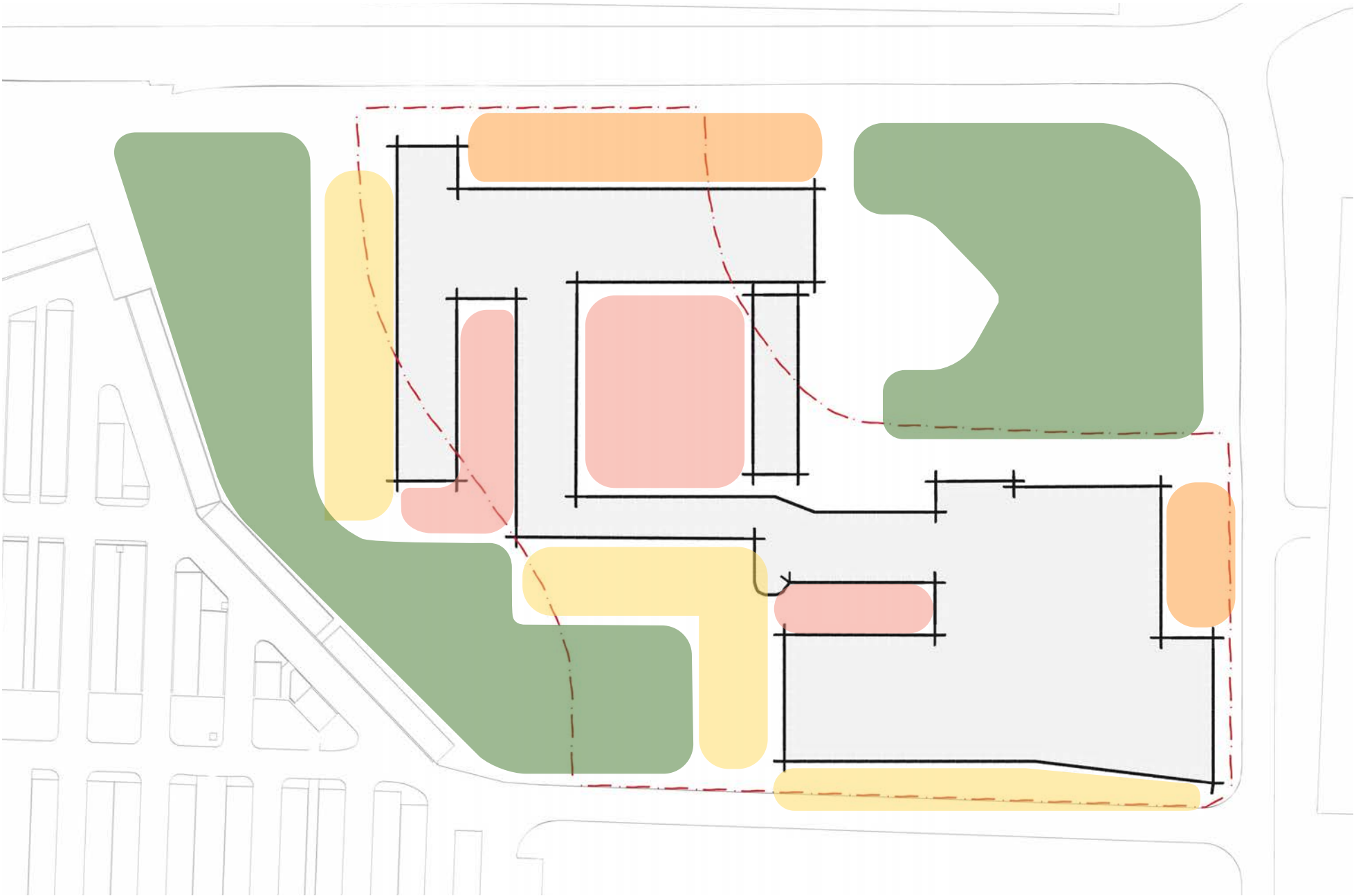
Tree Management




Tree Planting Strategy




Mass Planting Strategy







Existing Landscape Condition







Entry Planting



Textured Planting



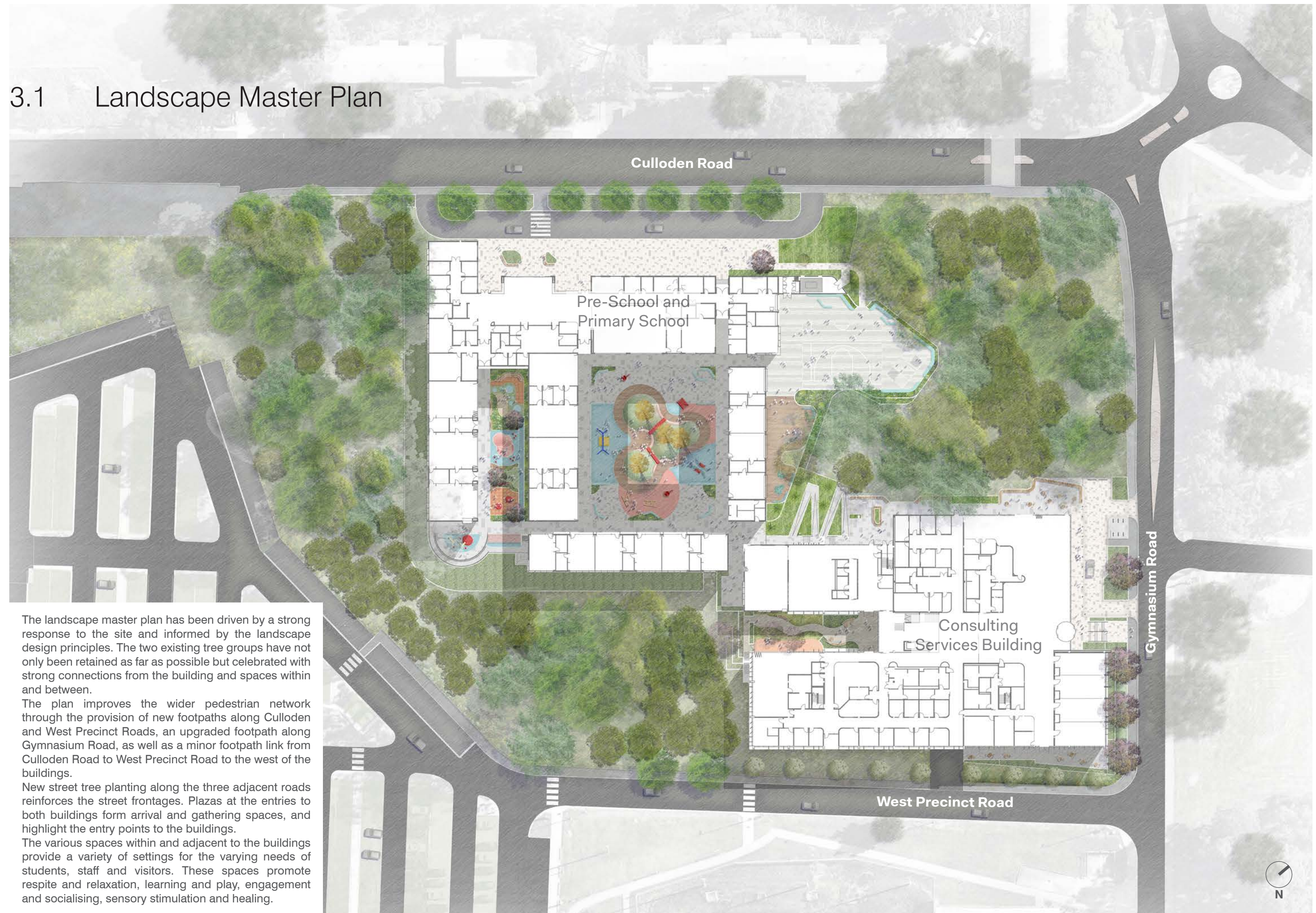
Turf Batters & Planted Terraces



3.0

Landscape Concept
Design

3.1 Landscape Master Plan



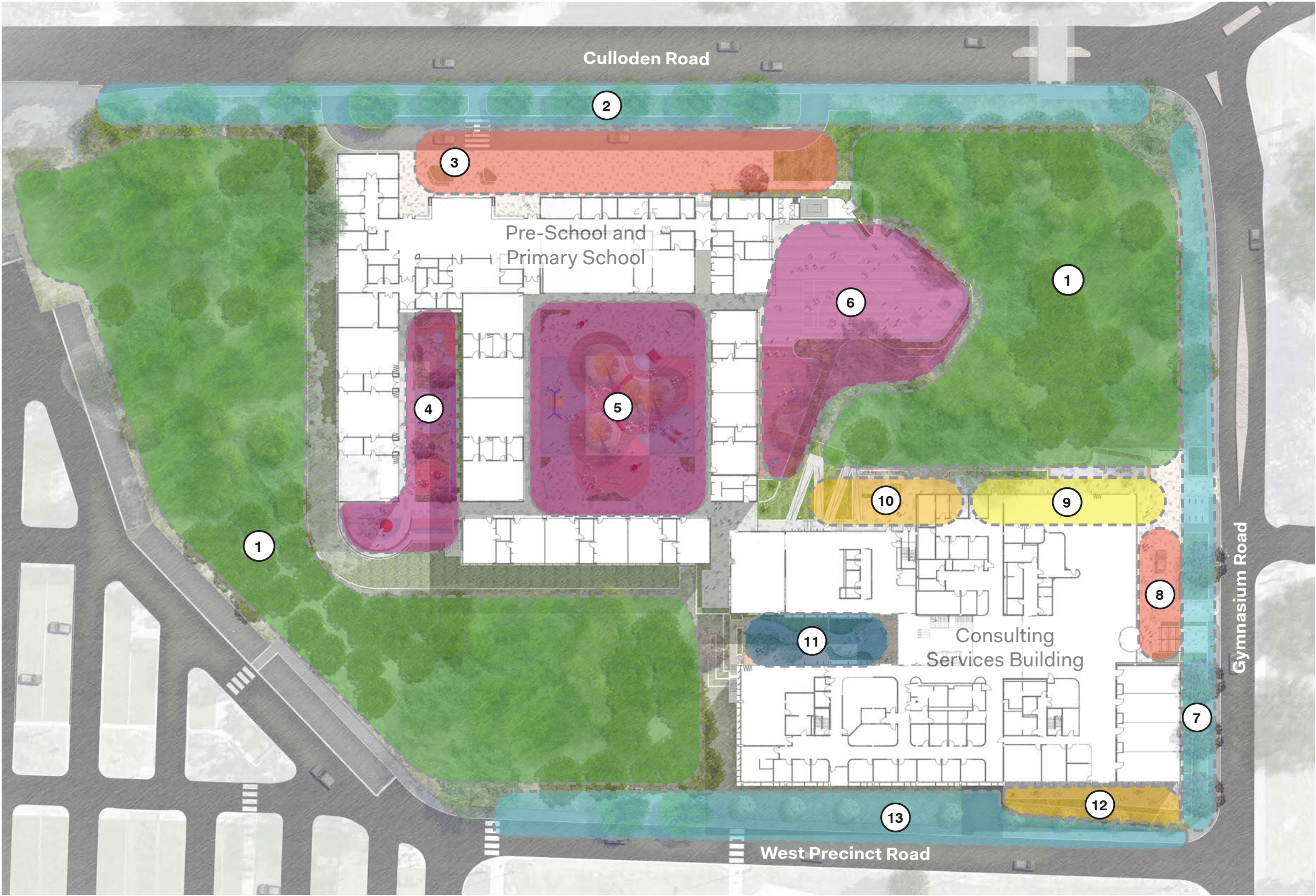
The landscape master plan has been driven by a strong response to the site and informed by the landscape design principles. The two existing tree groups have not only been retained as far as possible but celebrated with strong connections from the building and spaces within and between.

The plan improves the wider pedestrian network through the provision of new footpaths along Culloden and West Precinct Roads, an upgraded footpath along Gymnasium Road, as well as a minor footpath link from Culloden Road to West Precinct Road to the west of the buildings.

New street tree planting along the three adjacent roads reinforces the street frontages. Plazas at the entries to both buildings form arrival and gathering spaces, and highlight the entry points to the buildings.

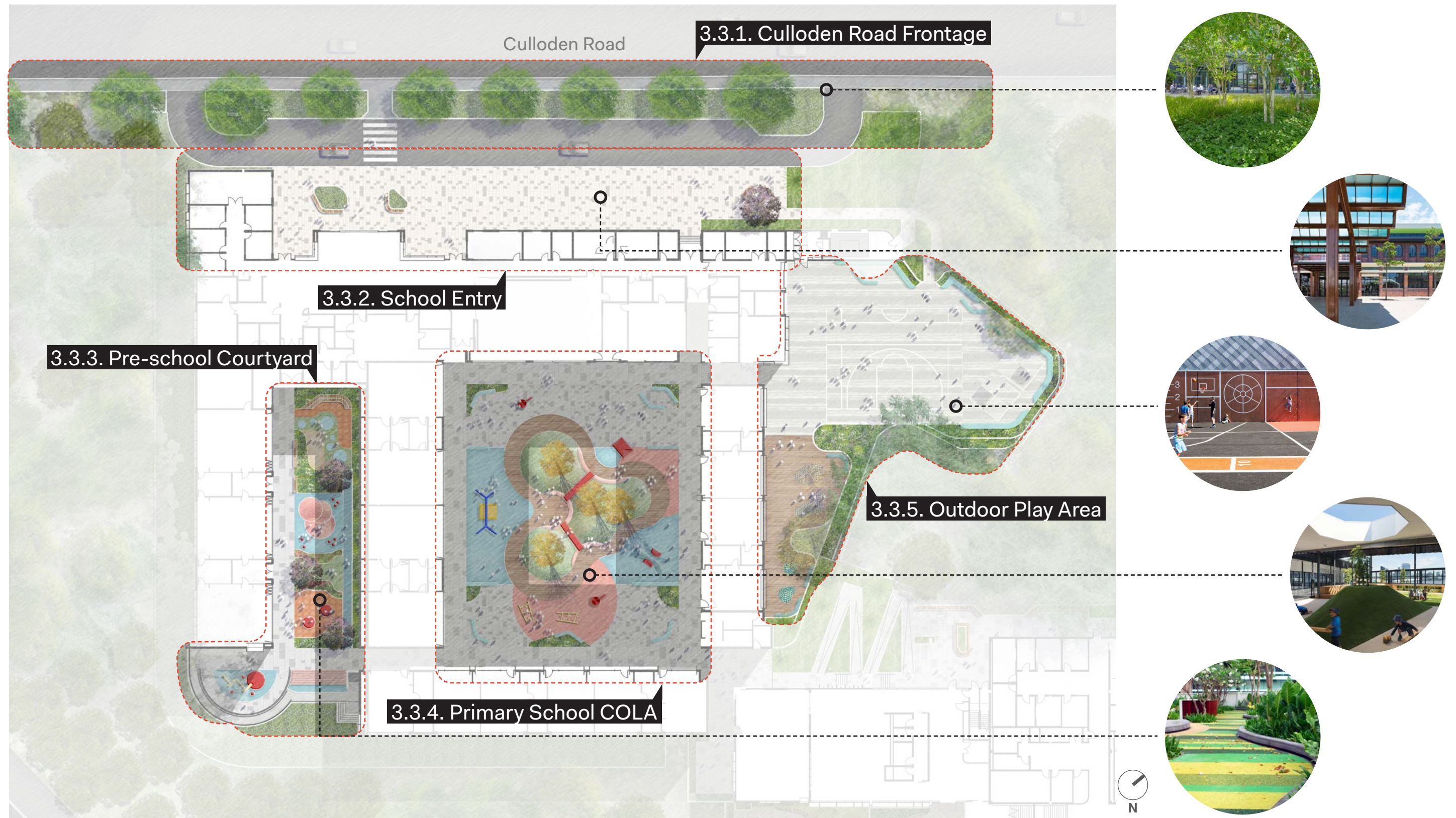
The various spaces within and adjacent to the buildings provide a variety of settings for the varying needs of students, staff and visitors. These spaces promote respite and relaxation, learning and play, engagement and socialising, sensory stimulation and healing.

3.2 Landscape Typologies

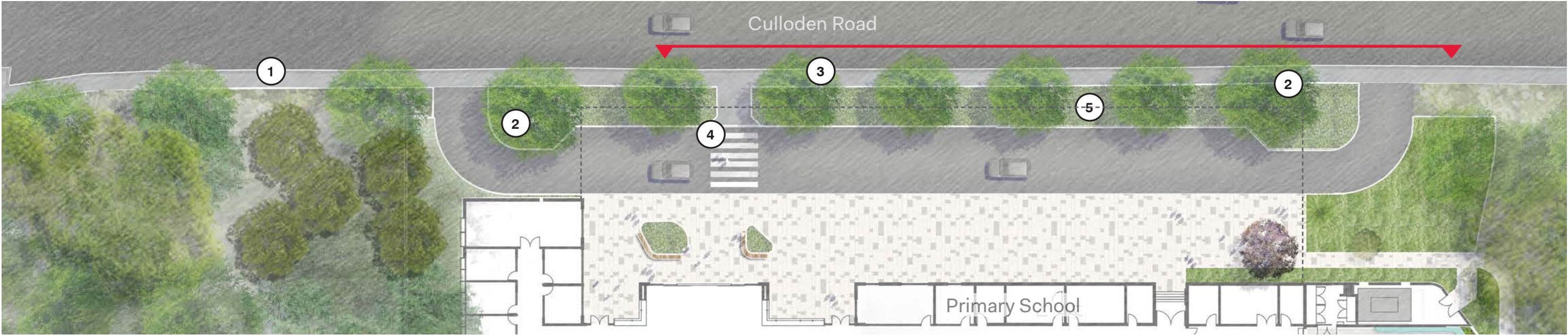


- LEGEND**
- 1 Existing Landscape Zone
 - 2 Culloden Road Frontage
 - 3 School Entry Plaza
 - 4 Pre-School Courtyard
 - 5 Primary School COLA
 - 6 Primary School Outdoor Play Area
 - 7 Gymnasium Road Frontage
 - 8 CSB Entry Plaza
 - 9 CSB Cafe Terrace
 - 10 CSB Staff Terrace
 - 11 CSB Courtyard
 - 12 CSB Eastern Terrace
 - 13 West Precinct Road Frontage

3.3 School Landscape Spaces

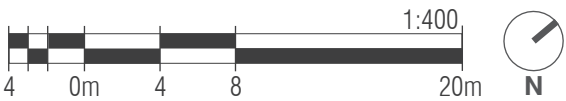


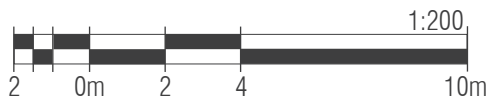
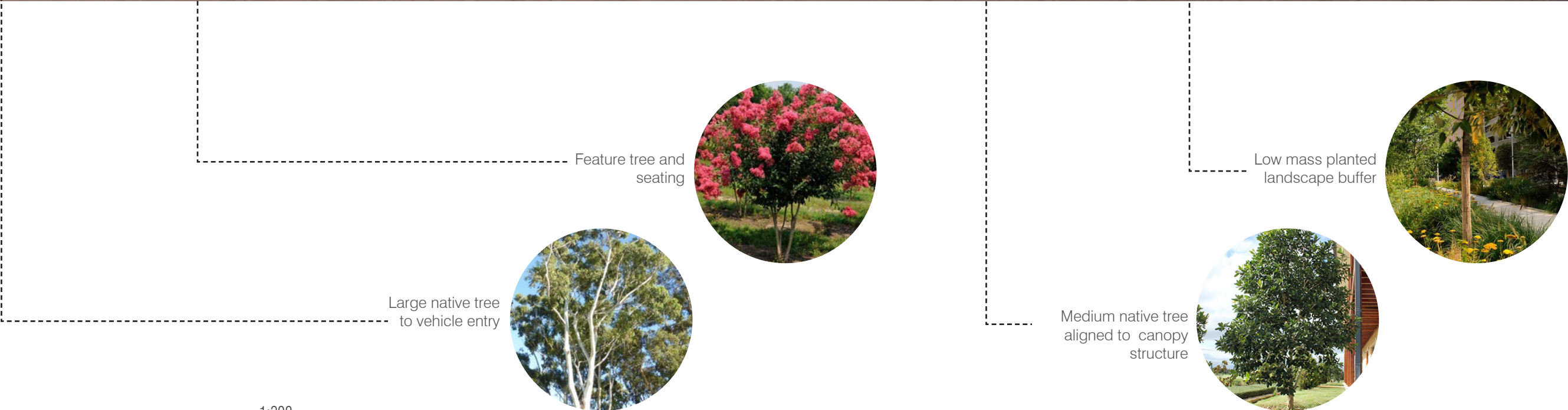
3.3.1. Culloden Road Frontage



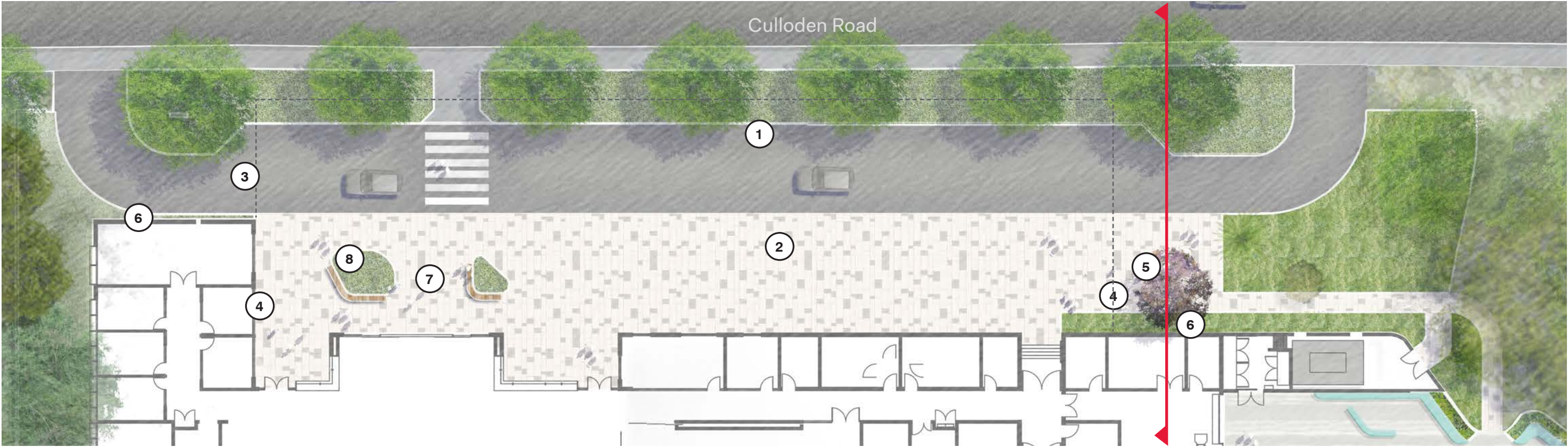
The Culloden Road frontage provides a landscape buffer between the school building and the road. A new footpath is provided along the road between the Gymnasium Road intersection and the existing footpath to the west of the site. A landscape verge is located between this footpath and the School drop off area. This is planted with low level native grasses and ground covers, allowing views to the school from the street. A row of native trees is planted along the street frontage, with large sized trees marking the entry/exit points to the drop-off area, and medium sized trees positioned to align with the canopy structure behind.

- LEGEND**
- 1 New pedestrian footpath to back of kerb
 - 2 Large trees to vehicle entry / exit
 - 3 Medium trees aligned to canopy openings
 - 4 Pedestrian crossing
 - 5 Low mass planted landscape buffer





3.3.2. School Entry Plaza



The Entry Plaza to the School aims to provide a welcoming and functional gathering and arrival space for students, staff and visitors. The space needs to accommodate drop off for buses and taxis/cars. A large overhead canopy is proposed to provide sun and rain protection. The space is treated as a simple paved plaza, providing clear sight lines between the School and the drop-off area. The paving will be a high quality precast concrete unit paver, complementing that used for the public domain footpath banding, as well as the insitu concrete base of the buildings. At the north-east end of the plaza, a feature tree will be located with seating around to enable people to wait outside to be collected. Two blank sections of wall facing the plaza, one at each end, will have planters at their base with climbing plants to green the facade in these locations.

LEGEND

1

Parallel parking

2

Bus parking

3

Extent of canopy

4

Entry seating

5

Feature tree

6

Facade planting

7

Concrete unit paving

8

Raised Planters

4

0m

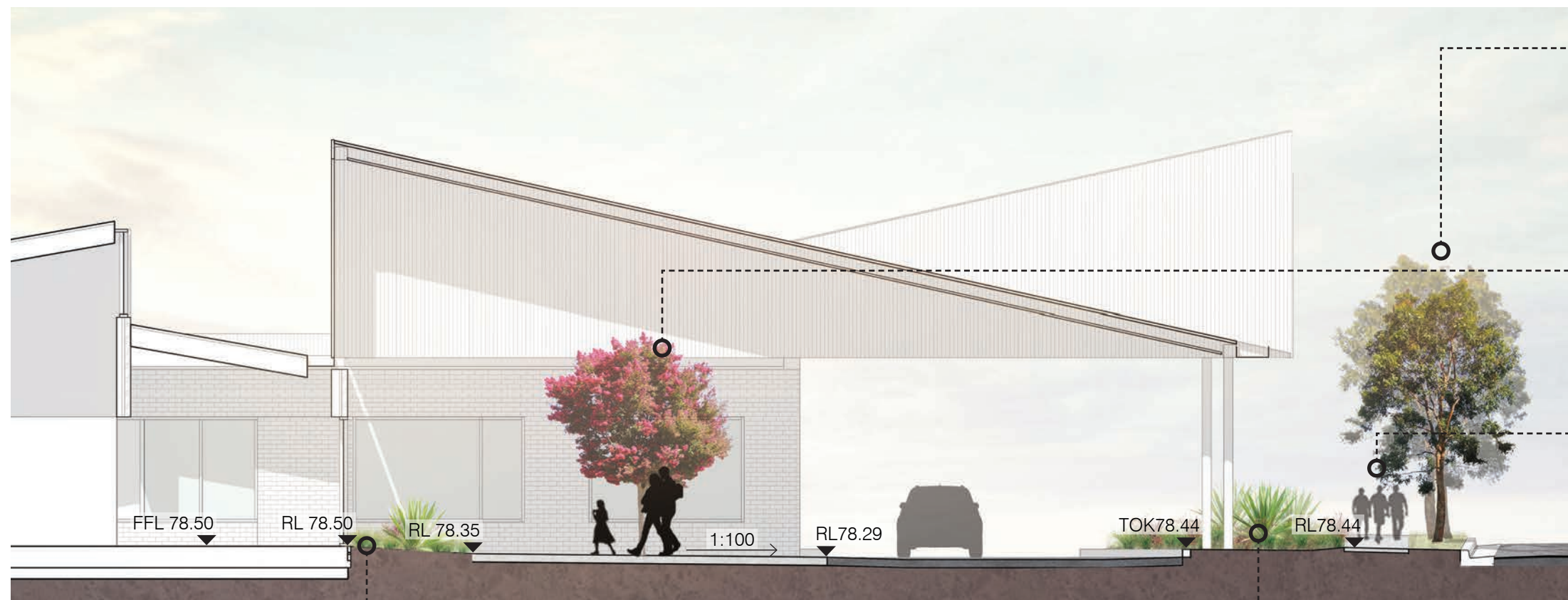
4

8

20m

1:400

N



Medium native tree



Small feature tree with seating



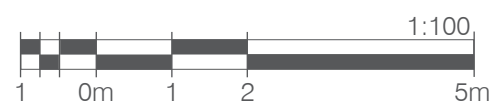
Public pedestrian path



Flush mass planting to verge



Climbing planting to building wall

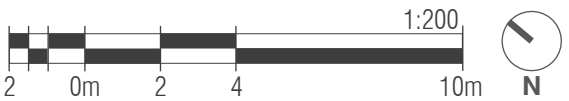
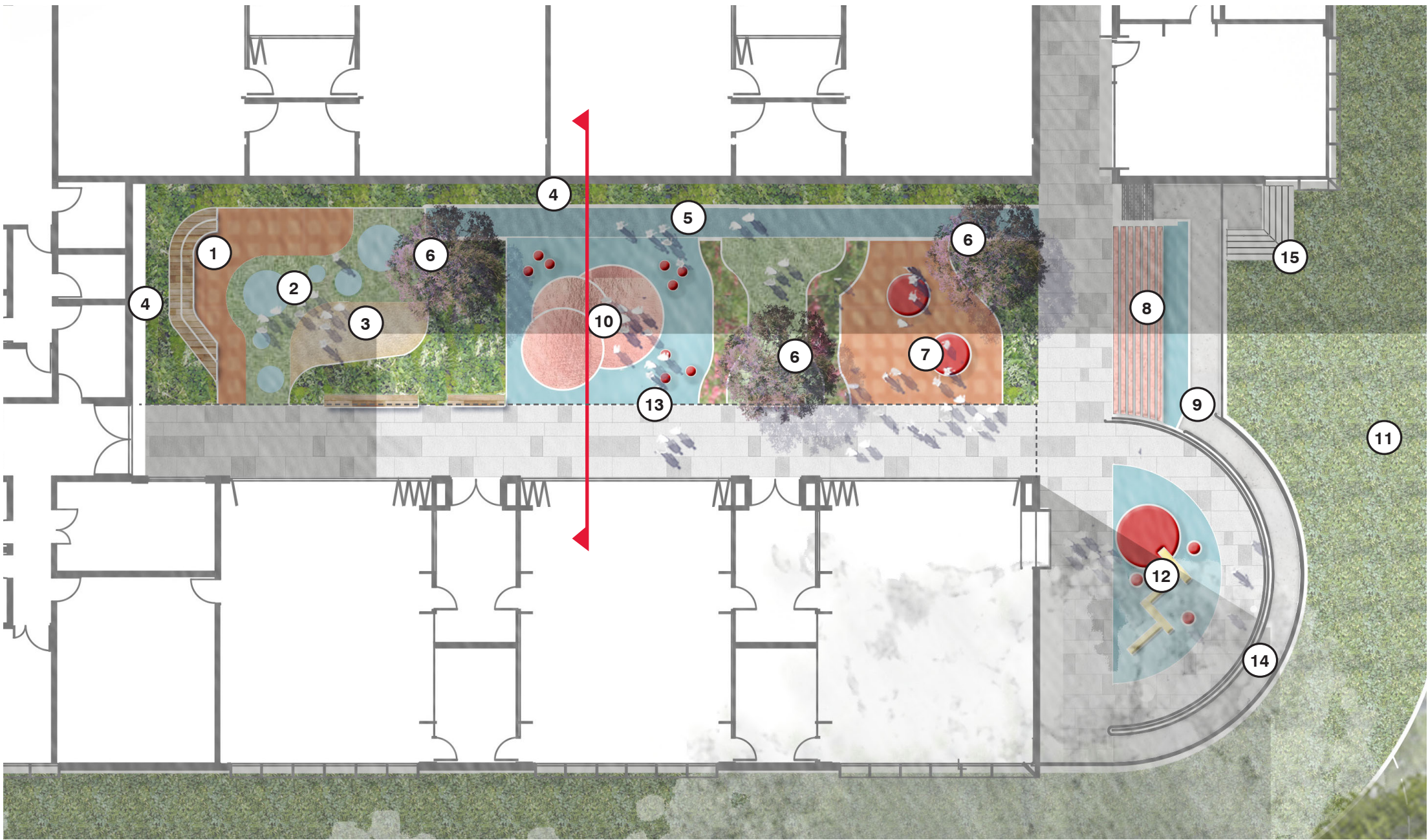


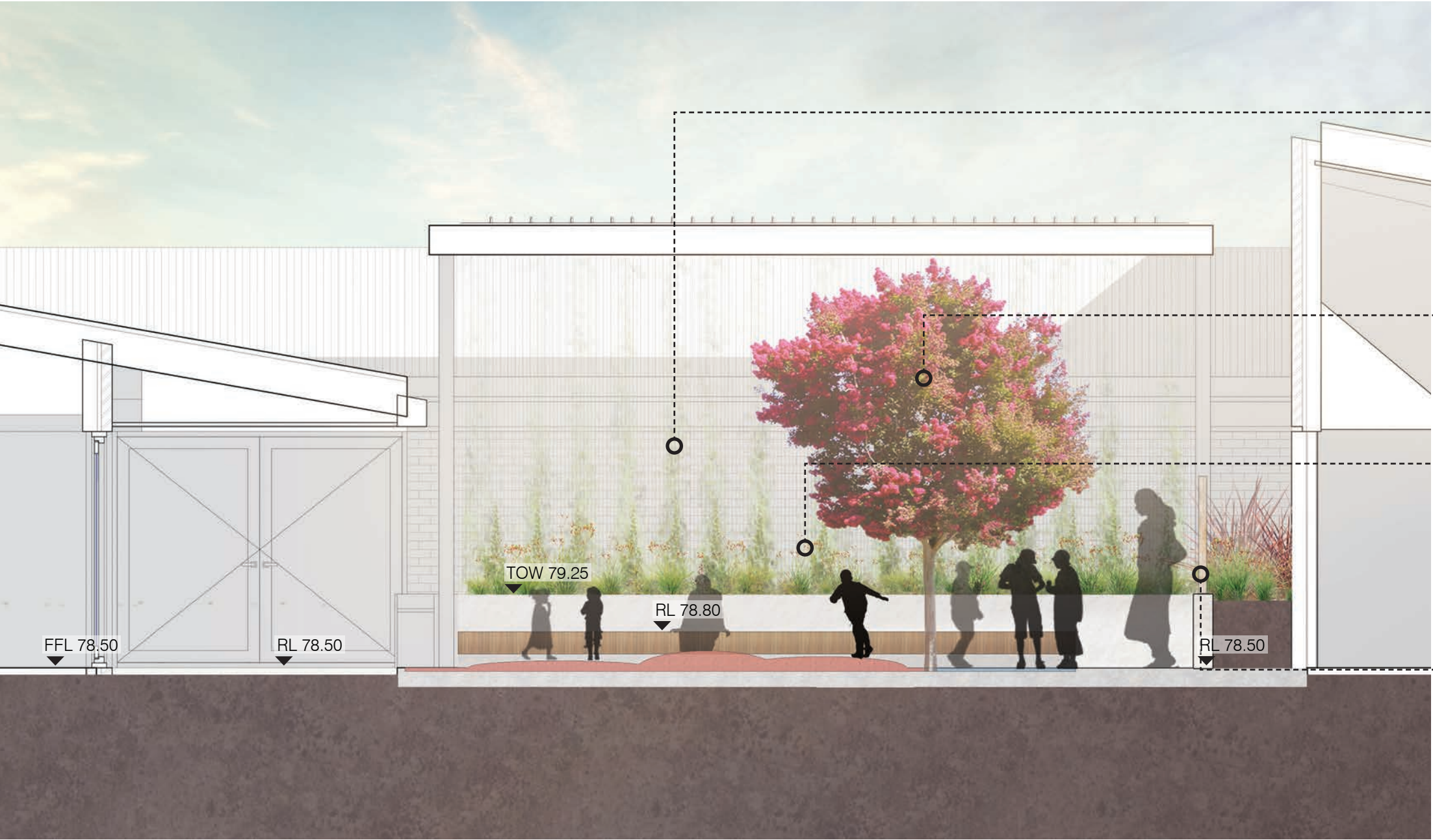
3.3.3. Pre-School Courtyard

The Pre-School Courtyard has four main zones to cater to different needs of children: a respite space at the northern end; a more passive sensory play space; a more active play space; and then a water play area. The first three spaces are covered. There is also a small amphitheatre which looks onto the existing landscape to the south.

LEGEND

- 1 Landscape 'cosy' seat
- 2 Imaginative seating elements
- 3 Sand pit
- 4 Screen planting to wall
- 5 Secondary circulation path
- 6 Feature sensory tree planting
- 7 Active play (trampolines)
- 8 Softfall amphitheatre
- 9 Security gate
- 10 Sensory driven play
- 11 Terraces and battering to building edge
- 12 Water play area
- 13 Extent of hard canopy
- 14 Ramped egress route
- 15 Egress route





Facade planting to



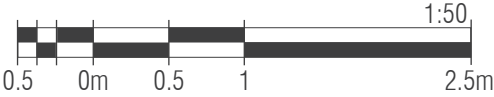
Feature tree
planting



Low mass
planting



Palisade partition
fencing



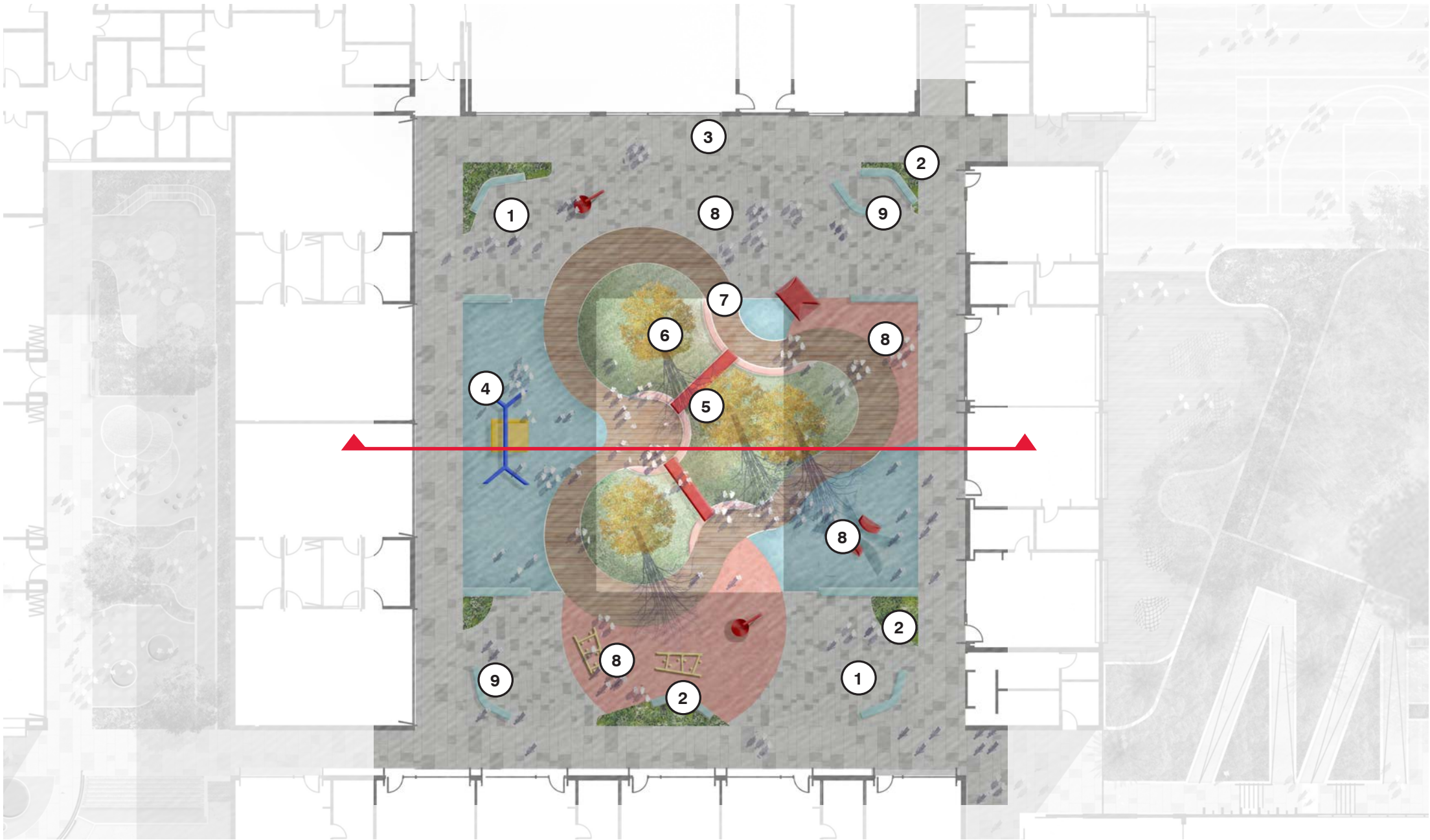
3.3.4 Primary School COLA

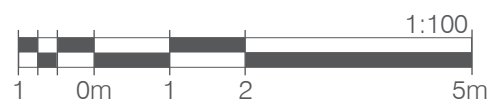
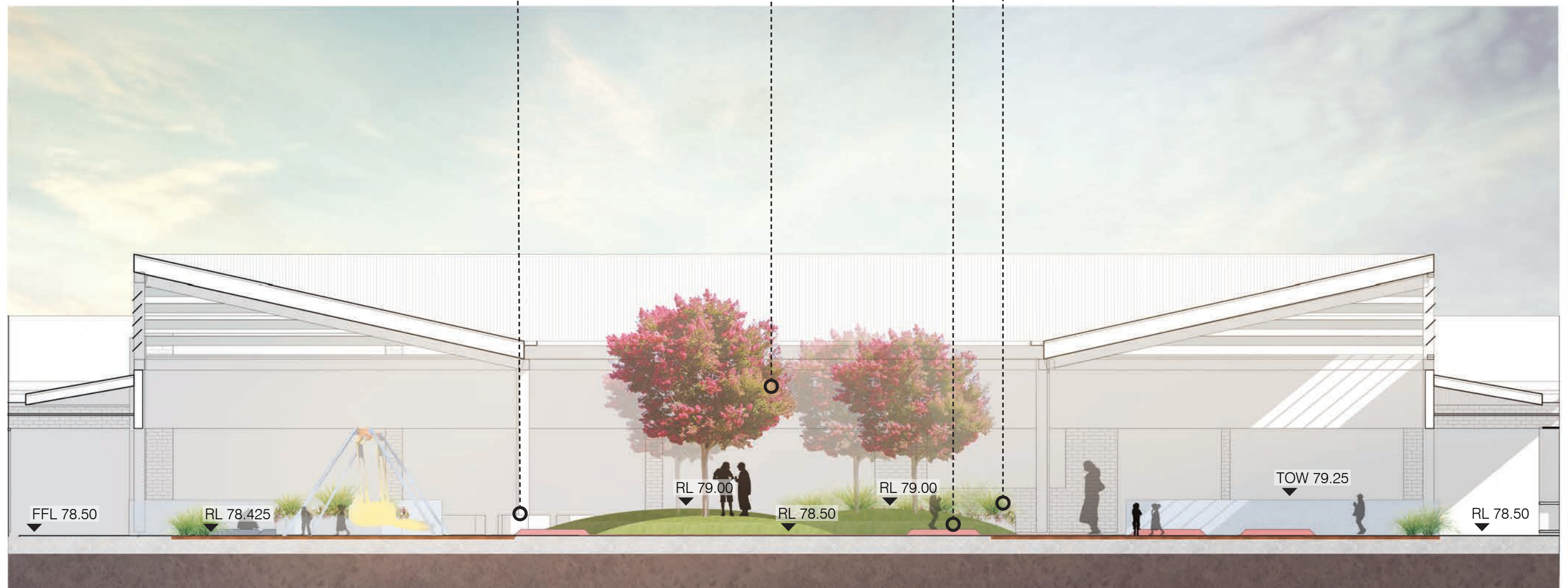
The central courtyard and covered outdoor learning area (COLA) for the primary school is intended to act as the ‘heart’ of the school. There are classrooms on three sides of the space with the hall on the other. The space is covered around the edges with the central part open to the sky.

The courtyard has a number of zones including a more open zone adjacent to the hall, sensory and active play areas, passive retreat / break-out spaces in the corners, and a series of large mounds in the centre with feature tree planting and tunnels through to connect the different areas around. A perimeter path provides easy access to the adjoining internal spaces as well as providing the opportunity for lessons to spill out of the adjacent classrooms into the space.

LEGEND

- 1 Passive breakout spaces
- 2 Lush shade tolerant planting
- 3 Concrete unit paving
- 4 Liberty swing
- 5 Artificial turf mounds and tunnels
- 6 Feature trees in mounds
- 7 Extent of canopy
- 8 Sensory play
- 9 Retreat breakout spaces





3.3.5 Primary School Outdoor Play Area

The outdoor play area for the Primary School is located on the north-east side of the school in an opening in the existing tree grove. As this area is elevated above existing ground level, more so further south, the intent is to have this space as an elevated deck structure supported on piers to minimise impacts on the adjacent trees. This will also enable the children to feel like they are close to and within the existing trees.

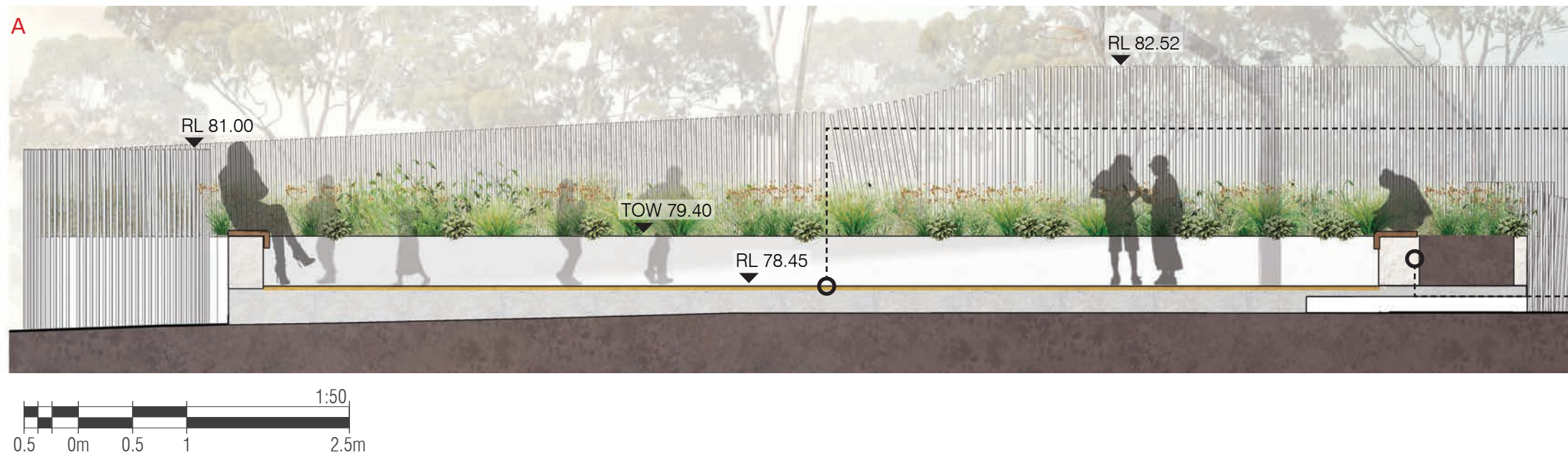
This space will form the main active play area for the school and the main area will accommodate a variety of sports such as basketball, handball, soccer and cricket through line marking of the surface. The southern part of the space will have two net structures located within openings in the deck, one of which will be centred around an existing tree.

The edges of the play area will have seating, low level planting and the security fence integrated into the design of the edge. The space has been designed so that all areas are visible from the school.

LEGEND

- 1 Existing trees to remain
- 2 Handball courts
- 3 Seating
- 4 Multi-purpose half court
- 5 Security fence
- 6 Low mass planting
- 7 Accessible netting





Multi-purpose court



Seating and mass planting



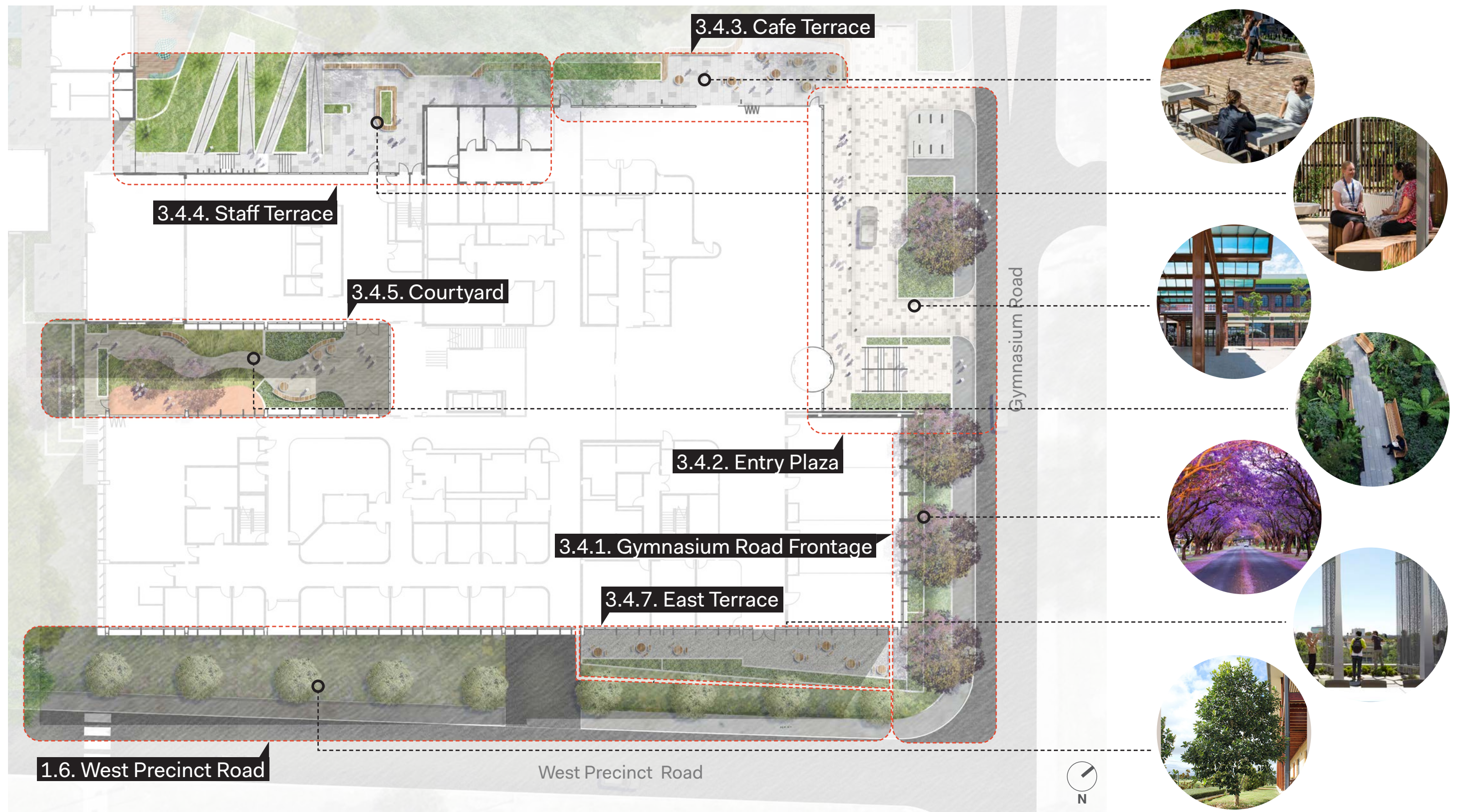
Outdoor learning seating



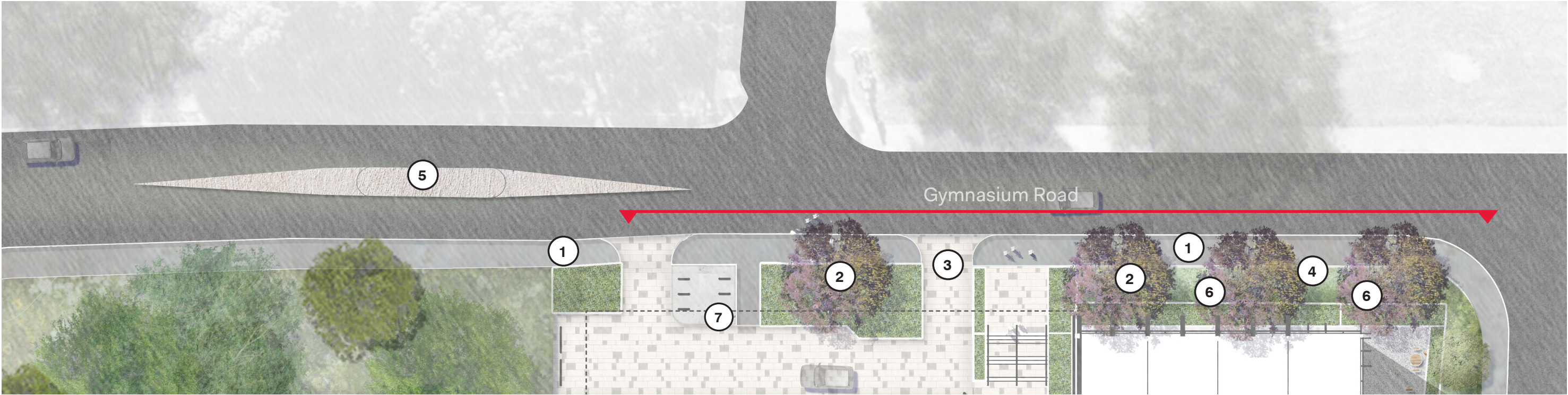
Accessible netting to existing tree

Page left intentionally blank

3.4 Consulting Services Building Spaces



3.4.1. Gymnasium Road Frontage



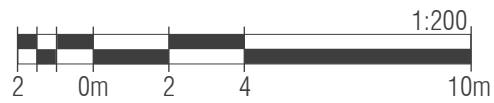
Gymnasium Road is a major gateway into the University Campus for vehicles, shuttle bus, bicycles and pedestrians. The proposed landscape treatment responds to this and the Macquarie University Urban Design Guidelines.

The existing footpath along the road will be upgraded. A line of colourful deciduous street trees (Jacarandas) will be planted to highlight this important gateway. These will be viewed against the backdrop provided by the existing native tree group and the buildings.

The entry to the Consulting Services Building will be located off Gymnasium Road (refer to section 1.2).This will have clearly defined entry and exit points, as well as feature planting to reinforce the sense of arrival.

Further south towards West Precinct Road, as the ground falls away from the building, a series of planted terraces will step up to soften the base of the building

- LEGEND
- 1 1.8m Wide Footpath to Back of Kerb
 - 2 Colourful Avenue Street Tree Planting
 - 3 Port Cochere Vehicle Entry
 - 4 Turf planting
 - 5 Existing Pedestrian Crossing to Remain
 - 6 Terraced Planting
 - 7 Extent of Canopy



Jacaranda
mimosifolia



Layered mass,
planting terrace



1.8m wide asphalt
pedestrian footpath



Bike parking



3.4.2. Entry Plaza

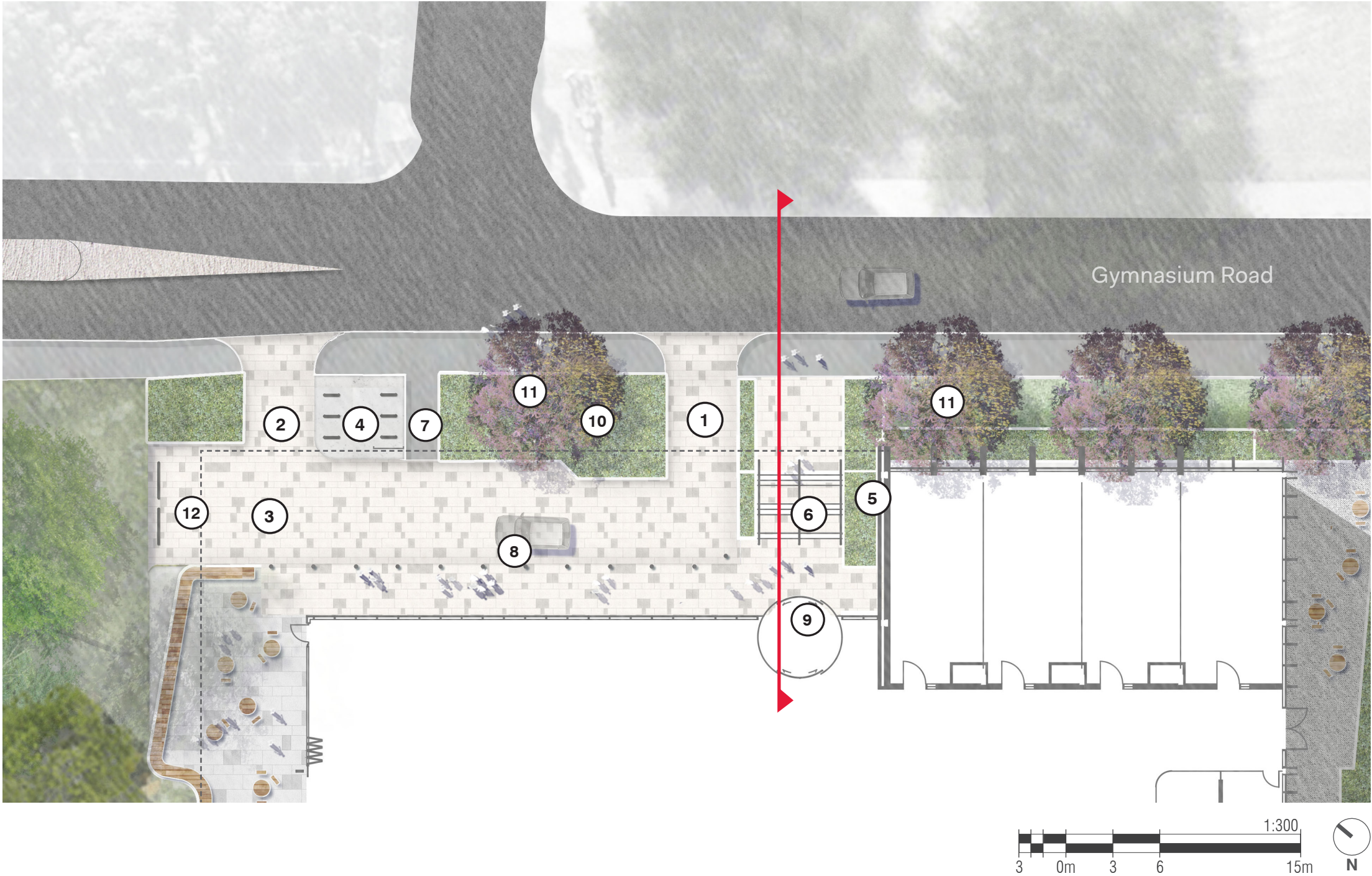
The entry plaza is designed as a shared space to be traversed by both vehicles at slow speeds and pedestrians. A generous set of stairs will lead people directly to the main entry to the building from Gymnasium Road, with accessible entry provided across the plaza.

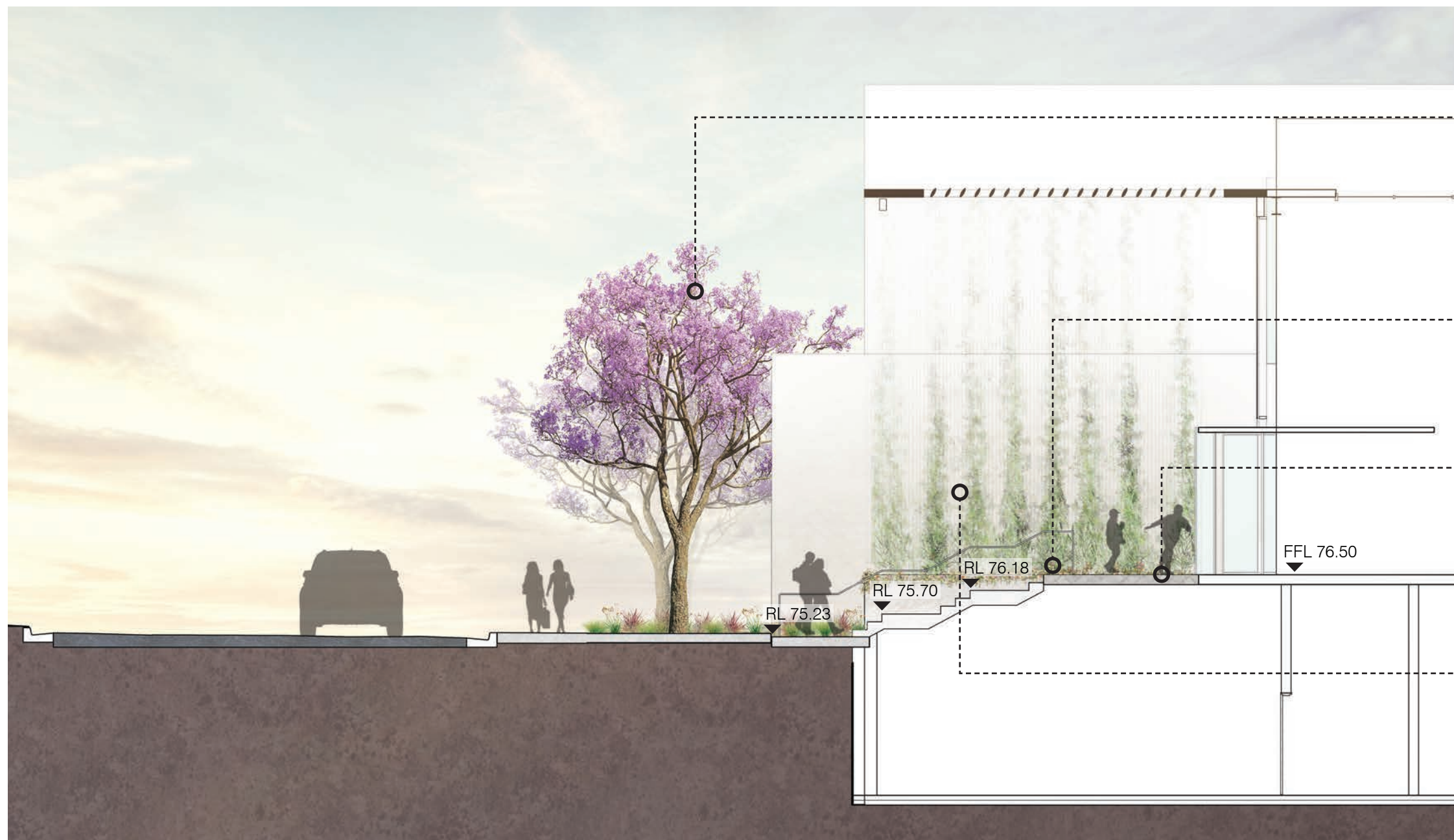
Parking for two cars will be located at the north-west end of the space, with a bicycle parking area in the central island. The rest of this island will be planted with low level feature planting and a Jacaranda tree.

The entry stair will be flanked by planters which will help to define the entry and accommodate the change in level on either side of the stair. The southern planter will include climbing plants to create a green wall.

LEGEND

- 1 Vehicle Entry
- 2 Vehicle Exit
- 3 Short Term Visitor Parking
- 4 Bike Parking
- 5 Terraced Planters
- 6 Stair Access
- 7 Equitable Access Route
- 8 Shared Area
- 9 Building Entry
- 10 Low Feature Planting
- 11 Colourful Street Tree
- 12 Extend of Canopy Above





Jacaranda mimosifolia street tree



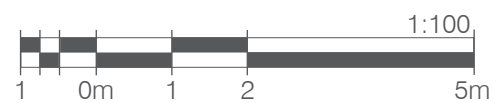
Flush mass planting to stair



Concrete unit paving



Climbing planting to building wall

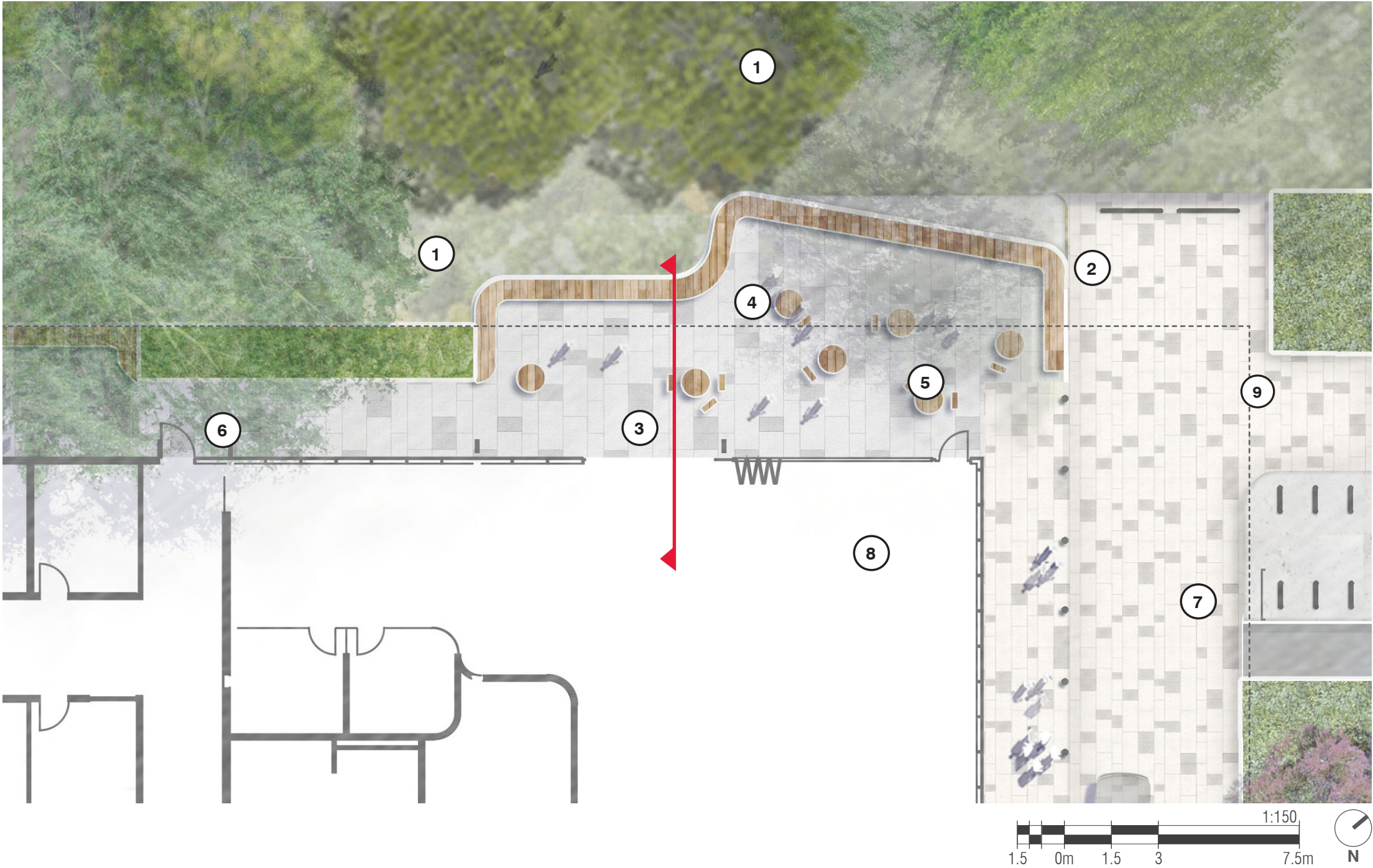


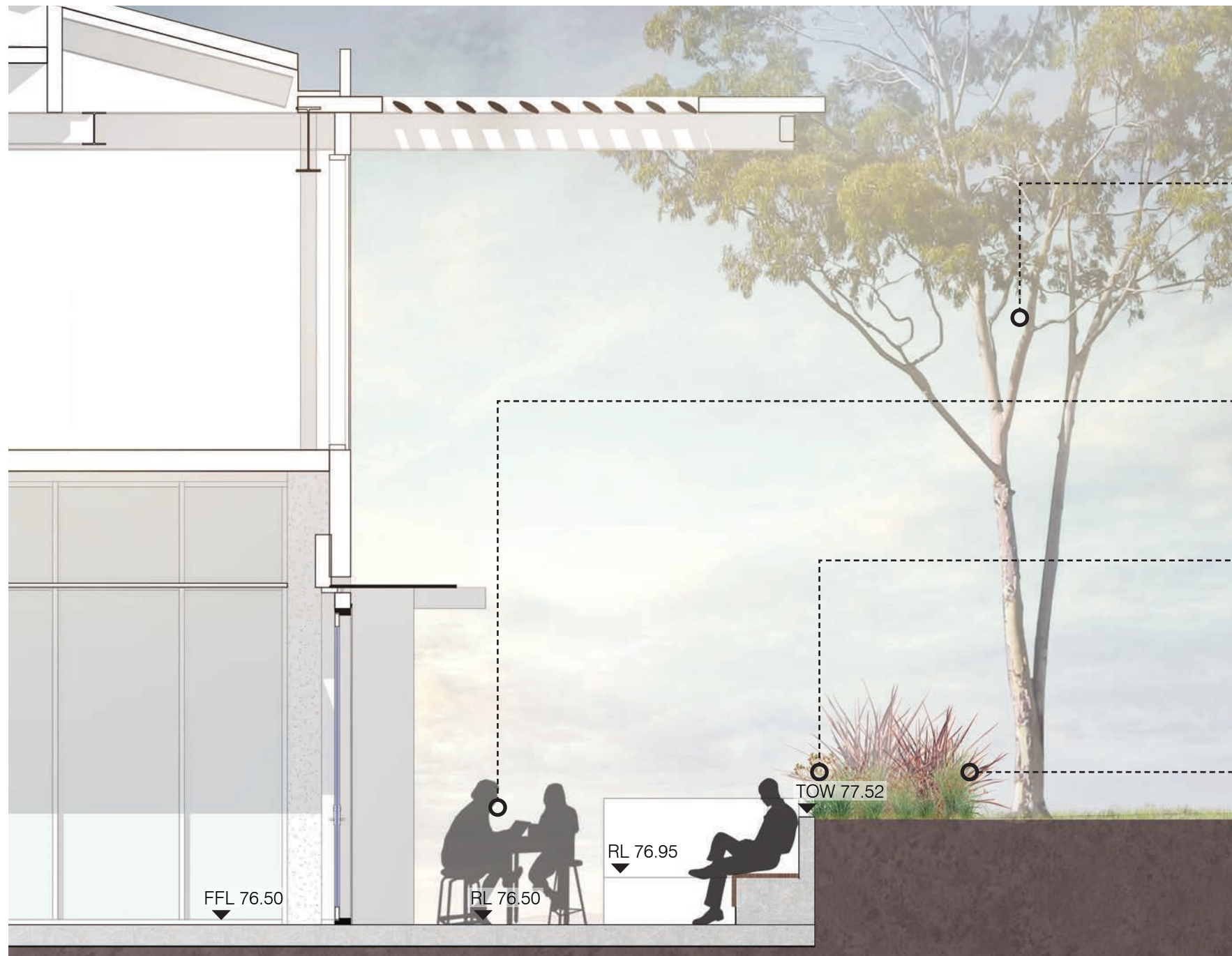
3.4.3. Cafe Terrace

The cafe terrace provides outdoor dining for staff and the public. The space is accessed internally via the cafe or directly from the porte cochere. Retaining walls with integrated seating mitigate the level change from natural grade. Moveable cafe dinning settings allows flexibility for everyday or event use.

LEGEND

- 1 Existing Trees to Remain
- 2 Mass Planting
- 3 Concrete Unit Pavers
- 4 Retaining Wall with Integrated Seating
- 5 Moveable Cafe Furniture
- 6 Connection to Staff Terrace
- 7 CSB Entry Plaza
- 8 Cafe
- 9 Extent of Canopy Above





Existing Trees to remain



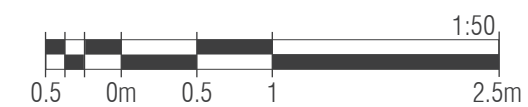
Moveable cafe furniture setting



Retaining wall with integrated timber seating



Mass planting and turf to existing landscape



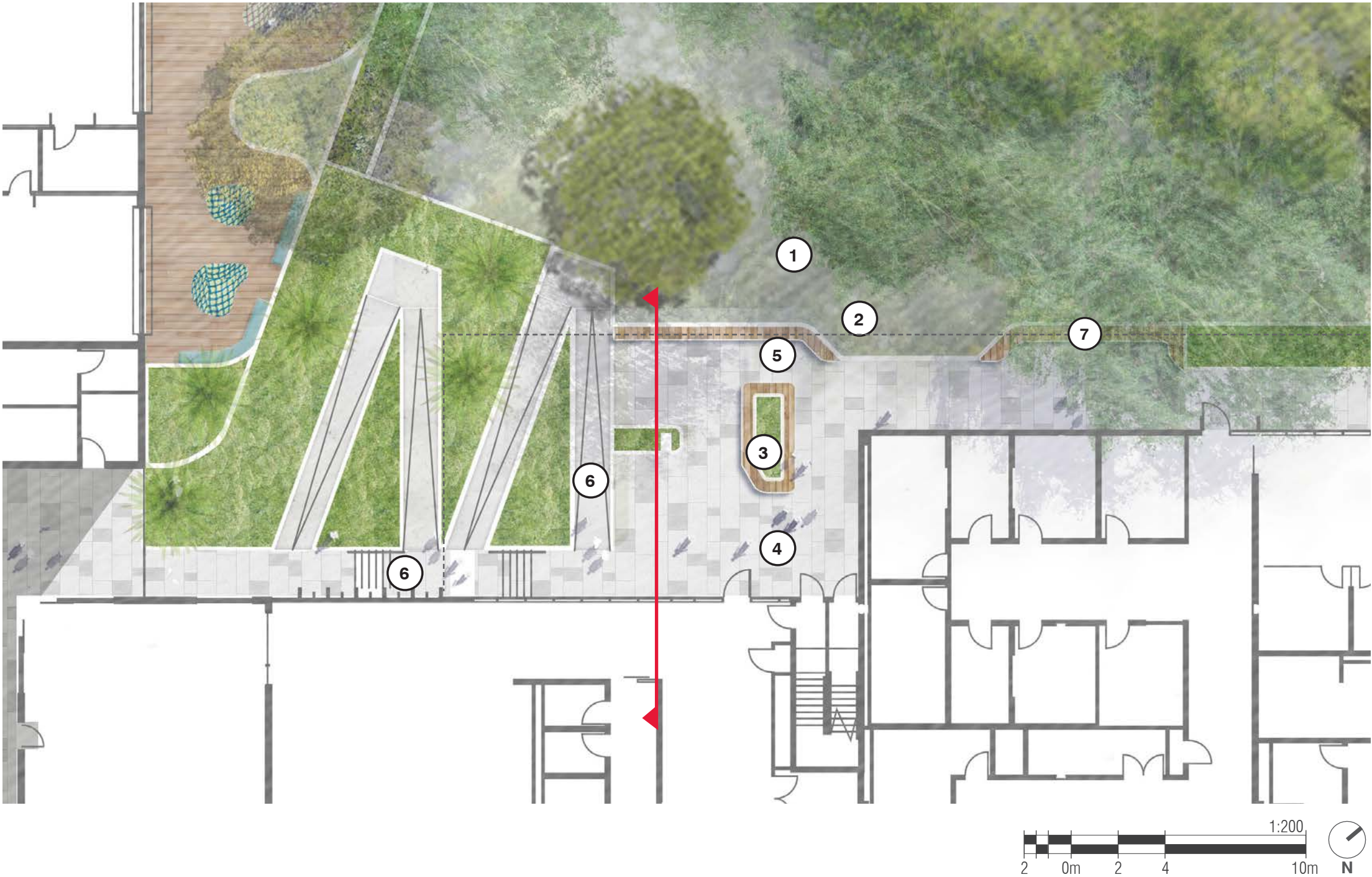
3.4.4. Staff Terrace

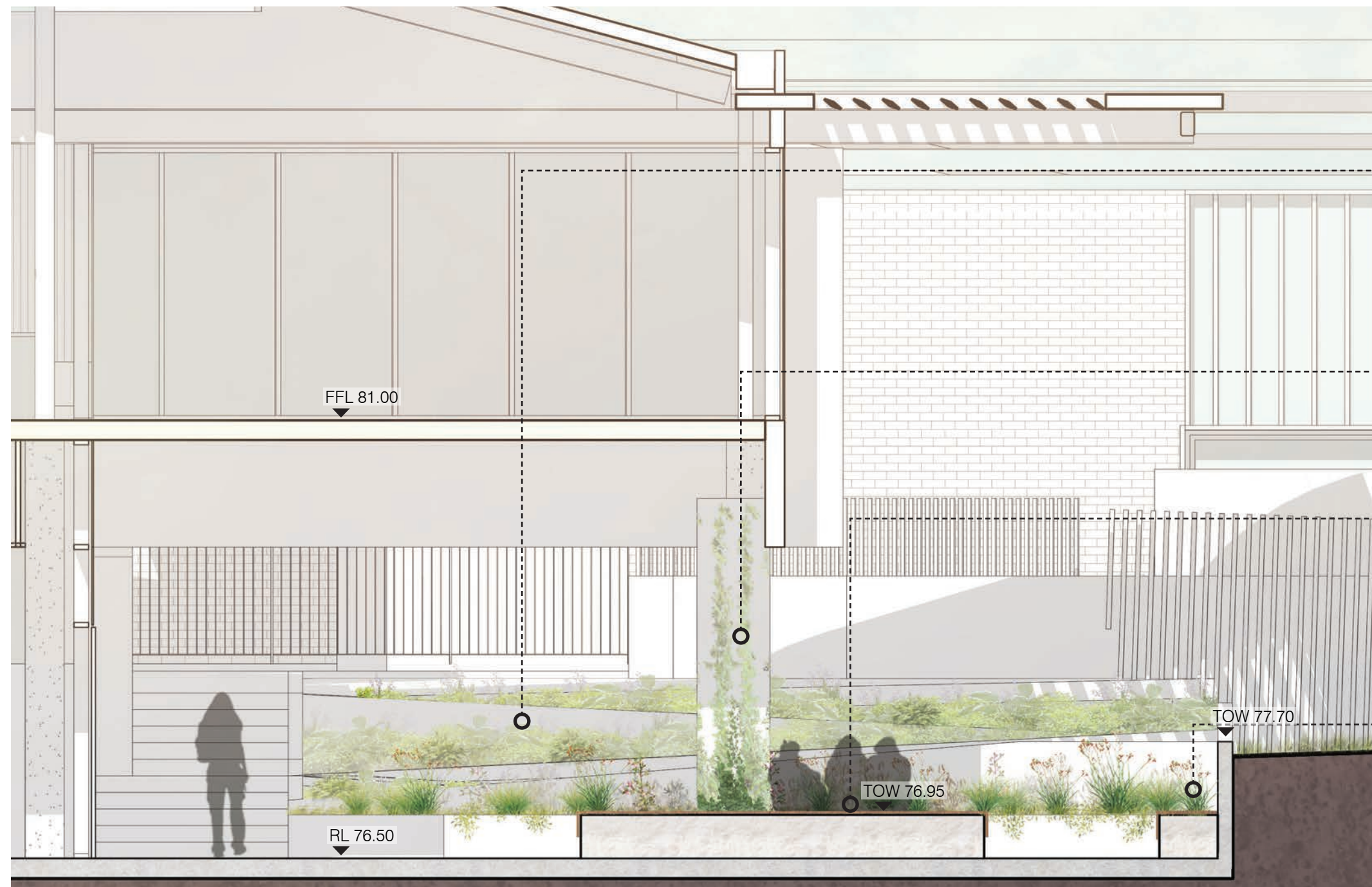
This terrace, with its northerly aspect and views to the adjacent existing trees, will provide a breakout space for staff. A number of seating edges will be provided integrated into the edges of the central planter and the low retaining wall to the existing ground level.

Adjacent to the terrace is the ramped and stair access to the School. The lengths of ramps have been designed with planters between to soften and accommodate the various different levels.

LEGEND

- 1 Existing Trees to Remain
- 2 Turf to Existing Trees
- 3 Integrated Seat and Planter
- 4 Concrete Unit Pavers
- 5 Retaining Wall with Integrated Seating
- 6 Ramp and Stair Access to School
- 7 Extent of Canopy Above

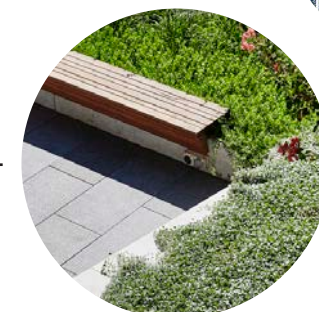




Landscaped
ramp and stair



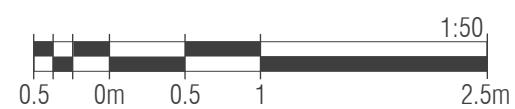
Climbing plants to
building columns



Planter with integrated
timber seating



Retaining wall with
integrated timber
seating



3.4.5. CSB Courtyard

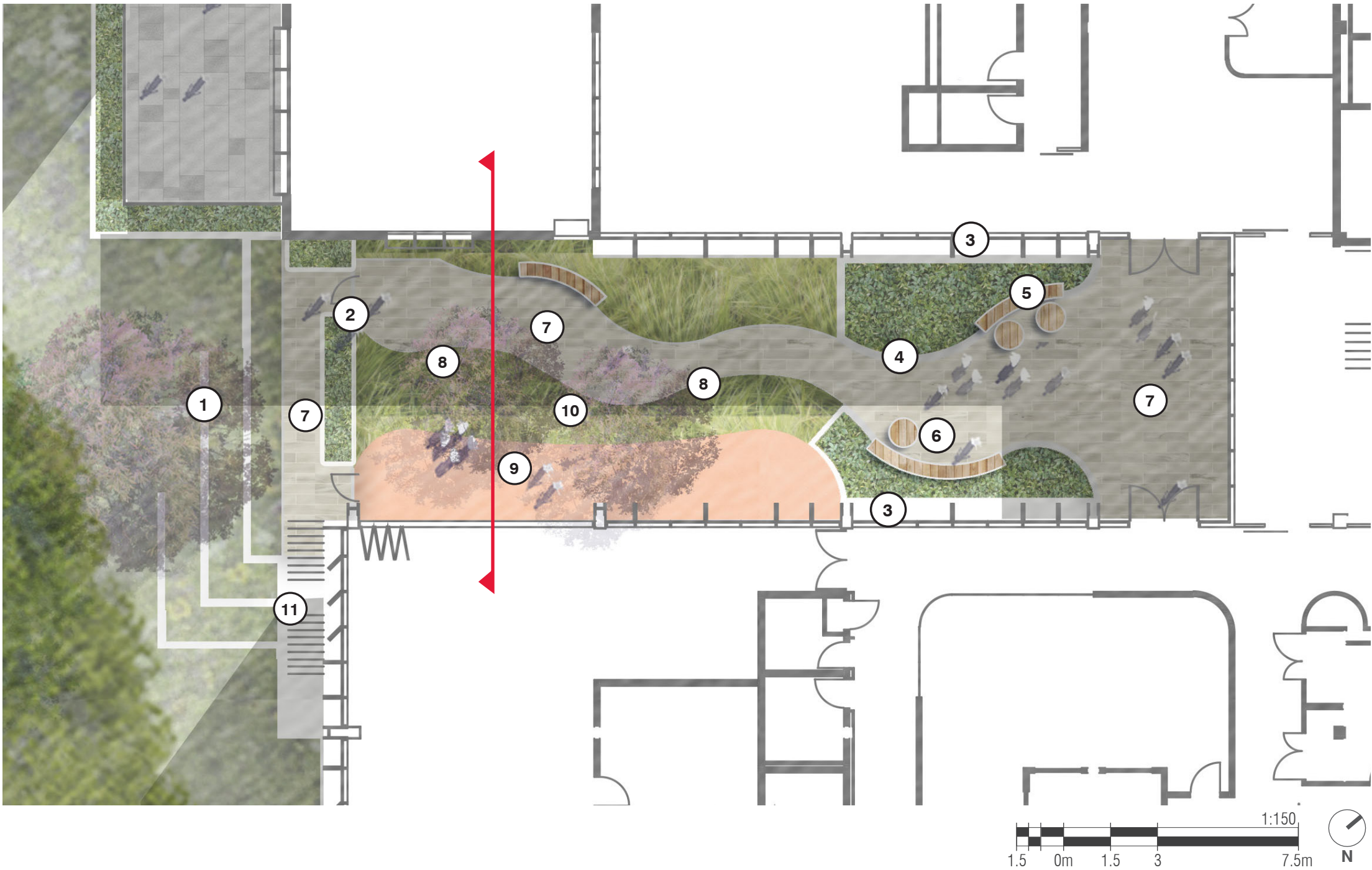
This secure courtyard will provide a valuable break-out space as well as visual amenity to the users of the Consulting Services Building. It will be visible from the staff room and library along one side, the consulting rooms along the other, and the foyer at one end. The other end will open out onto the existing landscape to the south-west.

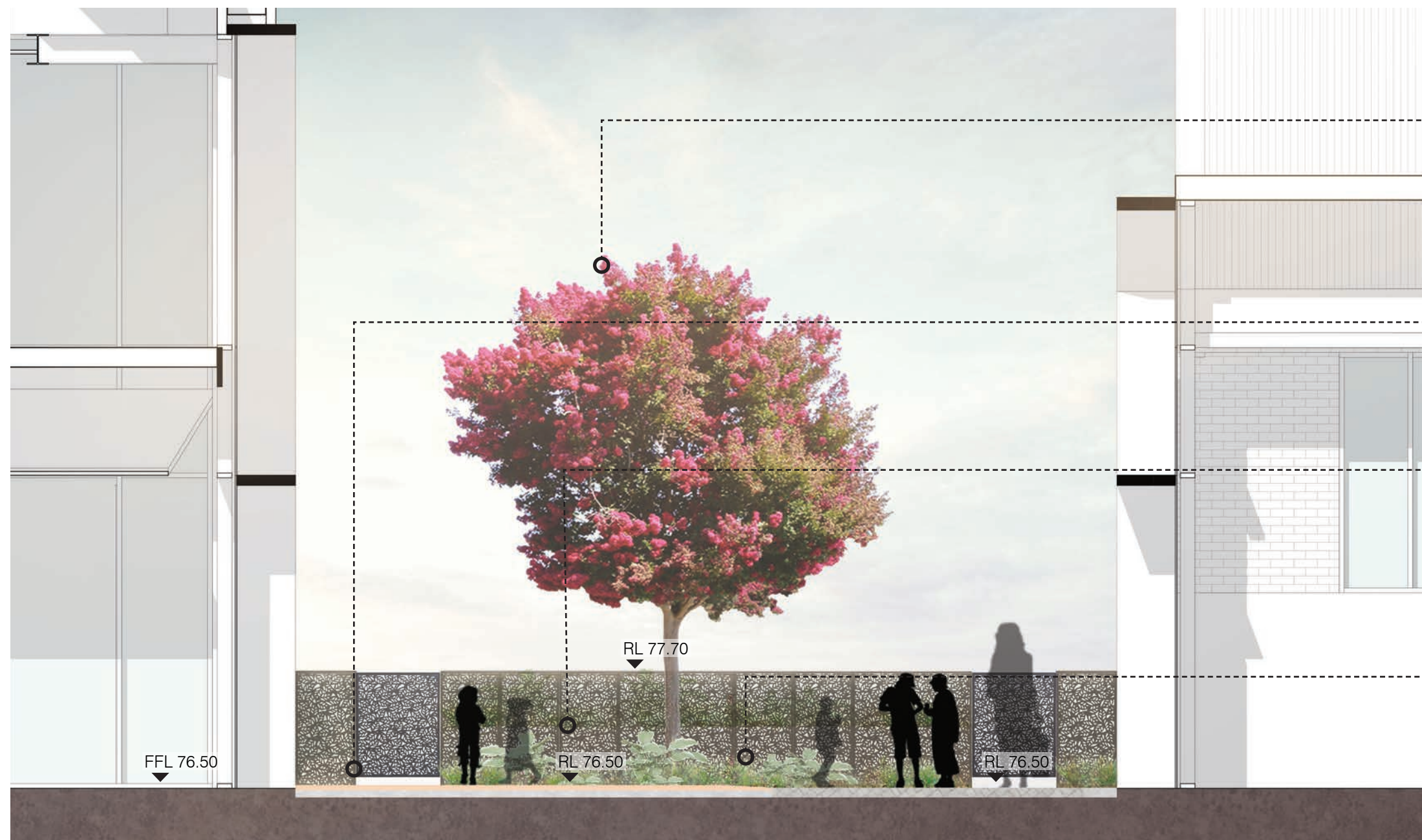
A paved area adjacent to the entry doors will provide a seating space flanked by low planters. A softfall area will open out from the consulting rooms creating a flexible play and outdoor learning space defined by a planted edge.

The open end of the courtyard will transition into the existing landscape via a series of terraced turf steps, with an egress path off to one side.

LEGEND

- 1 Terraced Turf Steps
- 2 Security Fence/Balustrade
- 3 Gravel Offset from Glazing to Extent of Mullions
- 4 500mm Planter (On Structure)
- 5 Bench Seating to Wall
- 6 Moveable Outdoor Furniture Setting
- 7 Concrete Unit Pavers
- 8 Tree in Deep Soil
- 9 Softfall Play / Outdoor Learning Area
- 10 Screen Planting, Low Height Wall and Fence to Play Area
- 11 Egress Stair





Feature Tree



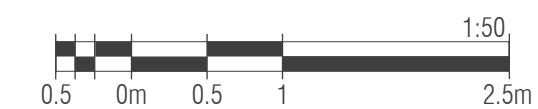
Outdoor play and learning space



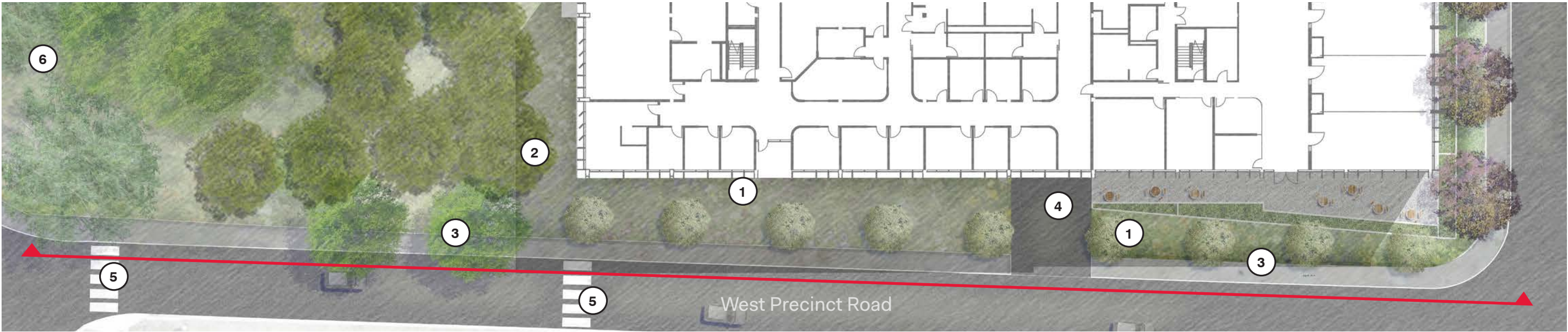
Fence and planting to play space



Low mass planting



3.4.6. West Precinct Road Frontage



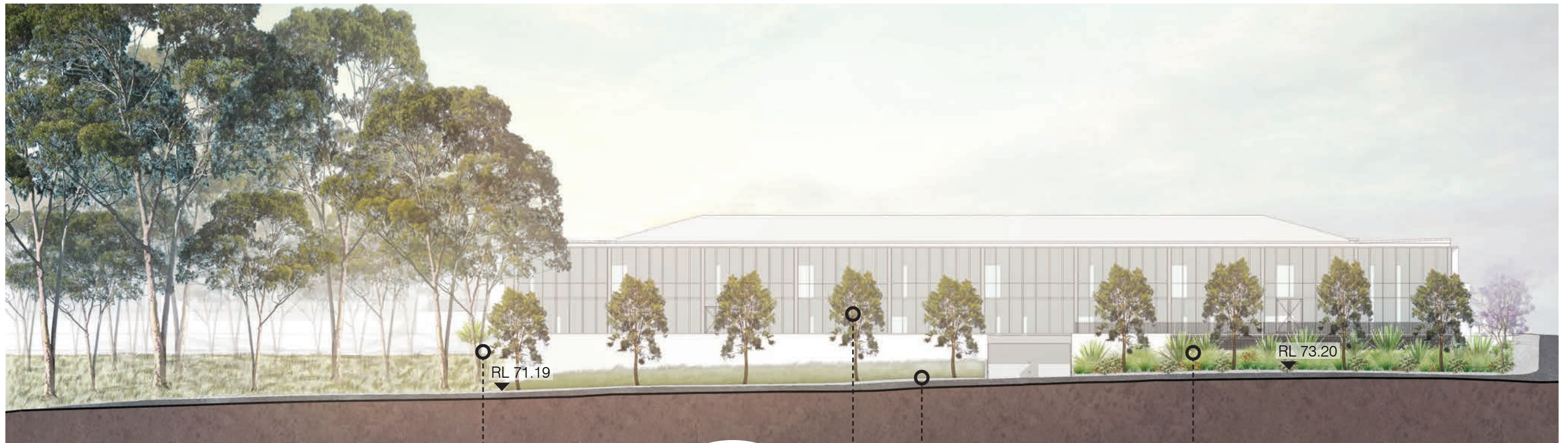
Although currently not functioning as a primary road, West Precinct Road will increase in importance as it is upgraded and surface car parking is removed. In addition to private vehicles, it will also serve as a shuttle bus, cycle and pedestrian route.

A footpath will be provided to the back of kerb between Gymnasium Road and the existing footpath and pedestrian crossings further west. Medium sized native trees (as per the MU Urban Design Guidelines) will be planted as street trees behind the footpath.

From here, the landscape will slope up to the base of the Consulting Services Building to help conceal the basement level.

LEGEND

- 1 Native Street Tree
- 2 Turf Batter to Building
- 3 1.8m Wide Pedestrian Footpath
- 4 Vehicle Entry to Basement
- 5 Retained Pedestrian Crossing
- 6 Infill Native Tree Planting



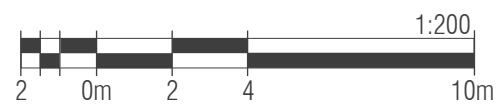
Medium sized
native street
trees



Layered mass
planting terrace



Turf mounded to
base of building

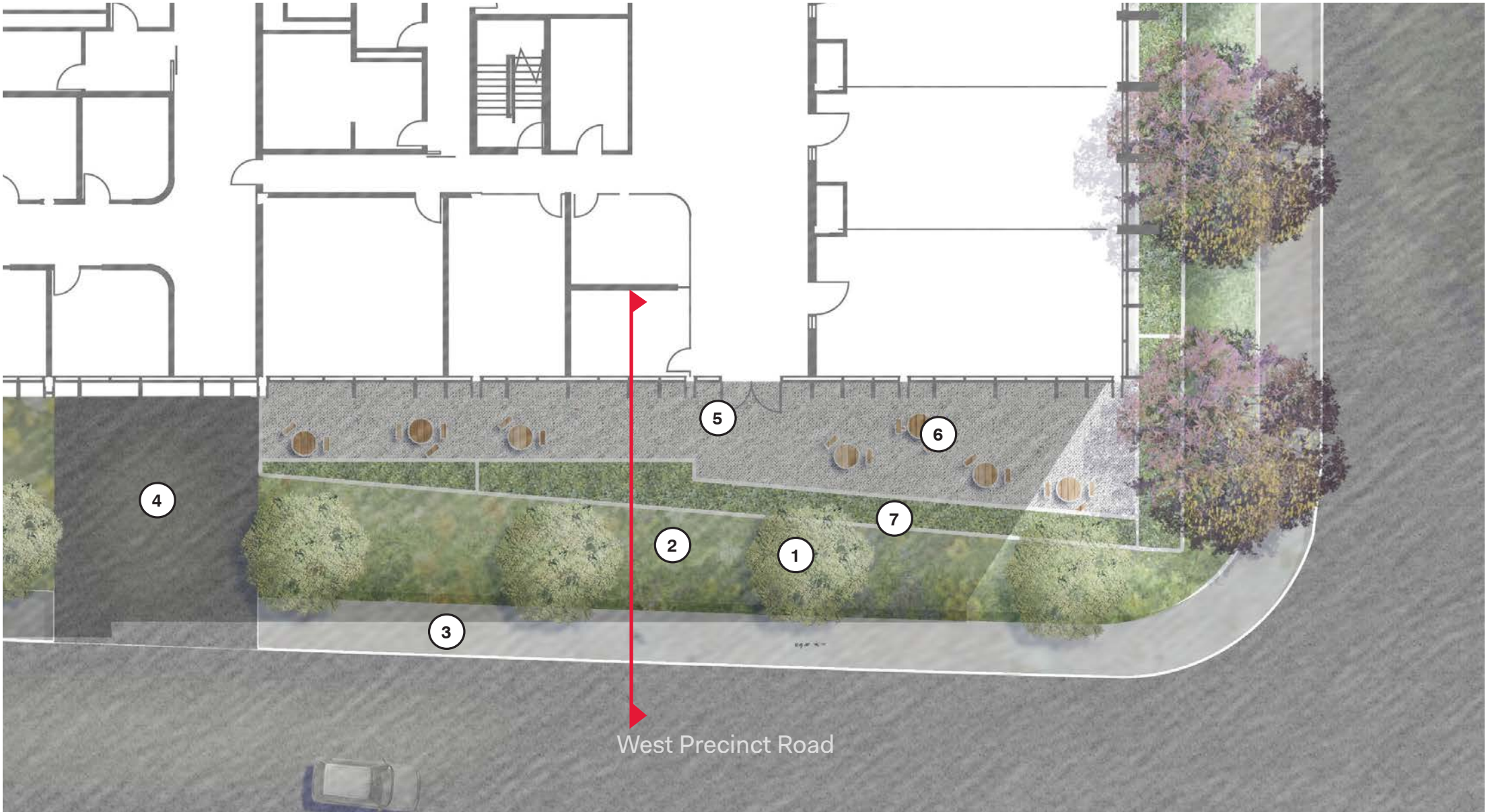


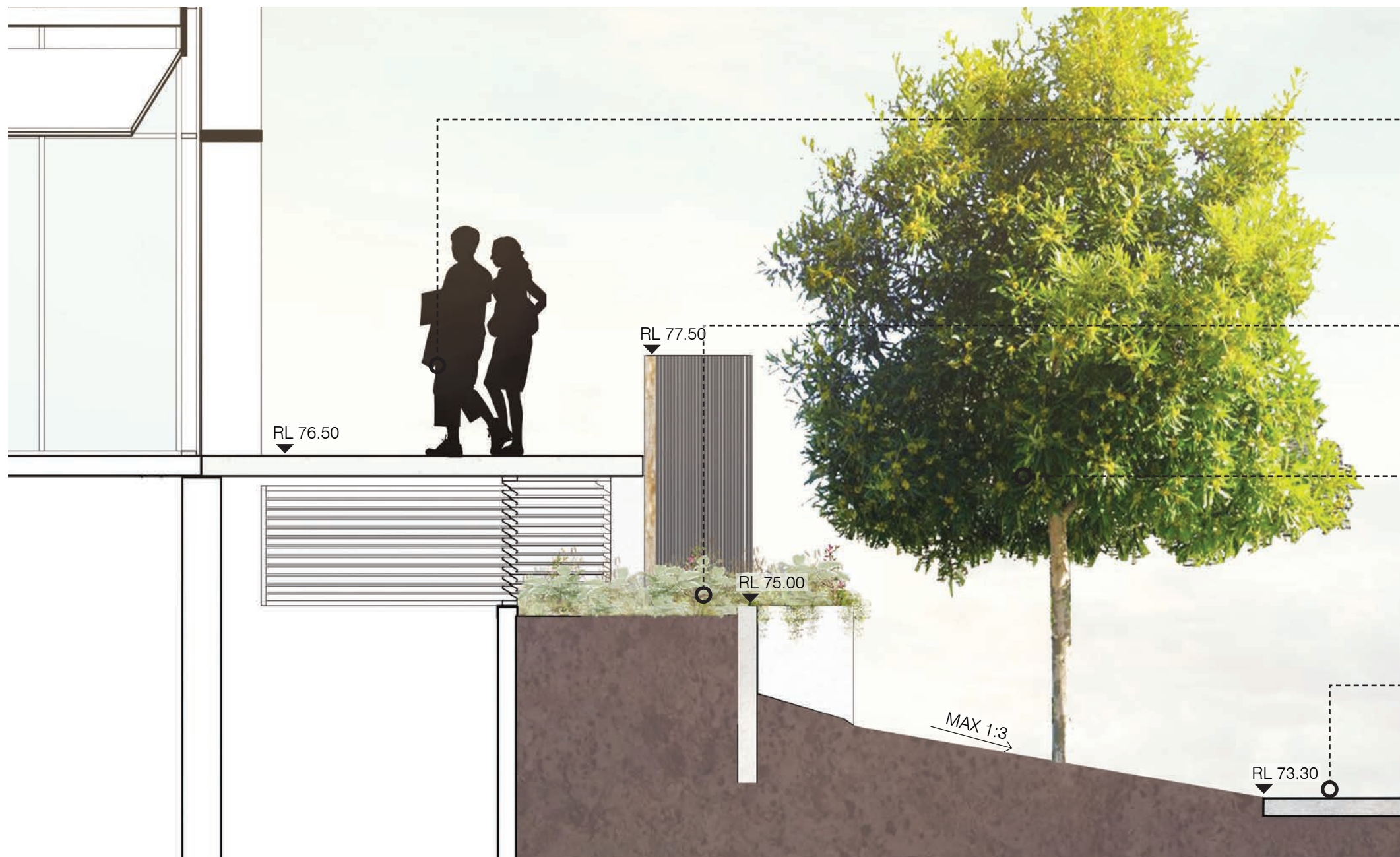
3.4.7. East Terrace

The East Terrace will provide another breakout area for users of the Consulting Services Building. The terrace will have an elevated outlook over the rest of the Campus to the south. It will consist of a simple paved terrace with flexibility for moveable outdoor furniture. Along its outer edge will be a terraced planter which will help address the change in level between the terrace and the existing ground. At the base of the terraced planter wall, there will be a turf batter down to the footpath along West Precinct Road.

LEGEND

- 1 Native Street Tree
- 2 Turf Batter to Building
- 3 1.8m Wide Pedestrian Footpath
- 4 Vehicle Entry to Basement
- 5 Concrete Unit Paving to Terrace
- 6 Moveable Outdoor Furniture
- 7 Terraced Planter





Outdoor Terrace Area with Seating



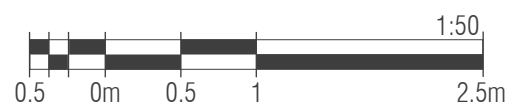
Layered mass planting terrace



Tristaniopsis laurina street tree



1.8m wide pedestrian footpath



4.0

Landscape Materials

4.1 Materials, Furniture & Fixtures Schedule

The material palette for the landscape is driven by the idea of stimulating each of the 5 senses, to create a variety of sensory experiences. The materials selected are used to define spaces to encourage tactile and spatial mapping. Texture and contrast are varied through finishes, while sound and light are varied through materials. Play spaces within the school have a softer and brighter feel, whilst the Consulting Services Building spaces and entries to both buildings are more restrained.

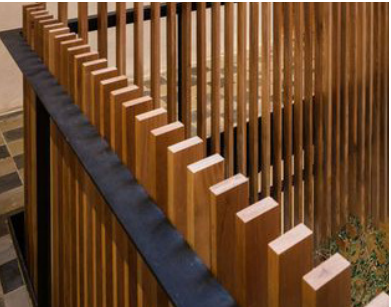
FENCES & WALLS



1.2m Palisade Fence



1.8m Security Perimeter Fence



Timber Screen Fence



Corten Steel Retaining walls (up to 600mm)



Off-form Shuttered Concrete Retaining walls



Rendered Blockwork Retaining Wall

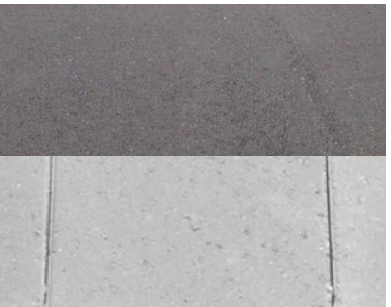
PAVING



Pedestrian Concrete Unit Pavers - Entry Plazas and internal courtyard paving



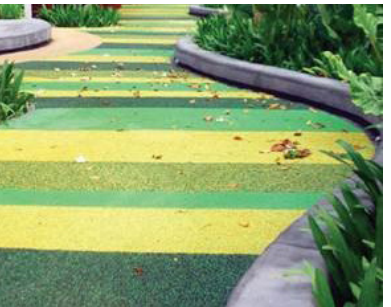
Vehicular Trihex - Natural 80mm Paving - Plaza Shared and Vehicle Zones



Concrete Paver Banded Asphalt Footpath - Gymnasium Rd and West Precinct Rd



Broom finished concrete footpath - Culloden Rd



Softfall surfacing to play areas, mounds and amphitheater



Artificial turf to play areas and mounds

FURNITURE



Hardwood Timber Bench



Hardwood Timber Decking Platforms and Seating



Hardwood Timber Seating Edges



Stainless Steel Handrails to AS1428



Water Play



Play Equipment

SOFTSCAPE



Feature Sensory Tree Planting



At Grade Textured Planting



Facade Screen Planting



Layered, Cascading Planting



Sensory Planting



Street Tree Planting

4.2 Planting Schedule

Trees

Botanical Name	Common Name	Mature Height and Spread	Key Sense	Native
<i>Acer palmatum 'Senkaki'</i>	Coral Bark Maple	6m x 5m	● ●	
<i>Angophora floribunda</i>	Rough-barked Apple	30m x 10m	●	×
<i>Backhousia citriodora</i>	Lemon Myrtle	8m x 4m	● ●	×
<i>Lagerstroemia indica</i>	Crepe Myrtle	6m x 4m	● ●	
<i>Jacaranda mimosifolia</i>	Jacaranda	10m x 8m	●	
<i>Syncarpia glomulifera</i>	Turpentine	25m x 12m	●	×
<i>Eucalyptus pilularis</i>	Blackbutt	70m x 12m	●	×
<i>Eucalyptus punctata</i>	Grey Gum	35m x 10m	●	×
<i>Eucalyptus saligna</i>	Sydney Blue Gum	30m x 10m	●	×
<i>Tristaniopsis laurina</i>	Water Gum	15m x 6m	●	×
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	12m x 6m	●	×

Shrubs and Ground Covers

Botanical Name	Common Name	Mature Height and Spread	Key Sense	Native
<i>Arthropodium strictus</i>	Chocolate Lilly	0.5m x 0.3m	● ●	×
<i>Arthropodium milleflorum</i>	Vanilla Lilly	0.5m x 0.3m	● ●	×
<i>Aspidistra elatior</i>	Cast Iron Plant	0.6m x 0.45m		
<i>Atriplex cinerea</i>	Grey Saltbush	0.3m x 0.3m	● ●	×
<i>Austromyrtus dulcis</i>	Midgen Berry	0.5m x 0.5m	● ●	×
<i>Billardiera scandens</i>	Apple Berry	1m x 3m	● ●	×
<i>Carpobrotus rossii</i>	Pig Face	0.4m x 3m	● ●	×
<i>Calathea zebrina</i>	Zebra Plant	1m x 0.5m	●	
<i>Correa alba</i>	White Correa	1m x 1.5m	● ● ●	×
<i>Crassula ovata</i>	Jade Plant	0.6m x 0.6m	● ●	
<i>Crassula arborescens</i>	Silver Dollar Plant	0.12m x 0.15m	●	
<i>Crassula arborescens ssp. undulatifolia</i>	Ripple Jade	1m x 1m	● ●	
<i>Ctenanthe burle-marxii</i>	Fishbone Prayer Plant	0.3m x 0.5m	●	
<i>Dichondra repens</i>	Kidney Weed	0.3m x 5m		×
<i>Dichondra 'Silver Falls'</i>	Silver Falls	0.2m x 1.5m	●	×
<i>Eremophila glabra prostrate</i>	Common Emu Bush	0.3m x 1m	●	×
<i>Ficus elastica</i>	Rubber Plant	3m x 2m	●	
<i>Ficus lyrata</i>	Fiddle Leaf Fig	3m x 1m	●	
<i>Grevillea lanigera</i>	Woody Grevillea	1.5m x 1.5m	●	×
<i>Gaura lindheimeri 'White Butterfly'</i>	White Gaura	1.2m x 0.9m	●	
<i>Gaura lindheimeri 'Pink Fantasy'</i>	Pink Fantasy	1m x 0.8m	●	
<i>Hibbertia scandens</i>	Snake Vine	3m x 5m	●	×
<i>Leptospermum petersonii</i>	Lemon-scented Tea Tree	5m x 2m	● ●	×
<i>Lomandra longifolia</i>	Lomandra	1.2m x 1m	●	×
<i>Mentha australis</i>	Native Mint	0.7m x 1m	●	×
<i>Myoporum parvifolium</i>	Creeping Boobialla	0.3m x 0.3m	●	×
<i>Philodendron 'Xanadu'</i>	Philodendron 'Xanadu'	1m x 1m	●	
<i>Philodendron 'Little Phil'</i>	Philodendron 'Little Phil'	0.35m x 0.35m	●	
<i>Philodendron 'Rojo Congo'</i>	Rojo Philodendron	1m x 1m	●	
<i>Sansevieria trifasciata</i>	Snake Plant	1.2m x 0.4m	●	
<i>Senecio 'Blue Chalk Sticks'</i>	Blue Chalk Sticks	0.6m x 0.9m	● ●	
<i>Viola hederacea</i>	Native Violet	0.2m x 1m	● ● ●	×

Sense Legend

●

 See

●

 Hear

●

 Touch

●

 Smell

●

 Taste



Jacaranda mimosifolia



Acer palmatum 'Senkaki'



Lagerstroemia indica 'Infiniti Watermelon'



Tristaniopsis laurina



Arthropodium strictum



Carpobrotus rossii



Senecio serpens



Mentha australis



Leptospermum petersonii



Viola hederacea



Hibbertia scandens



Grevillea lanigera



Crassula arborescens ssp. undulatifolia



Atriplex cinerea



Lomandra hystrix



Correa alba

4.3 Sensory Landscape Experience

