

SYDNEY OLYMPIC PARK NEW HIGH SCHOOL SSDA

LANDSCAPE DESIGN REPORT

PREPARED FOR
SCHOOLS INFRASTRUCTURE NSW
17 SEPTEMBER 2021

ACKNOWLEDGEMENT TO COUNTRY

Urbis acknowledges the traditional country of the Wann-gal people. We recognise and respect their cultural heritage, beliefs and continuing relationship with the land, and that they are the proud survivors of more than two hundred years of dispossession.

We reiterate our commitment to addressing disadvantages and attaining justice for Aboriginal and Torres Strait Islander peoples of this community.

ISSUE AUTHORISATION

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Title: Connecting Land
Artists: Tarris King and Sarita King
Clan: Gurindji

Connecting Land is an expression of the beauty of the Australia Landscape. People's connection to the country and the lessons that caring for the land can teach us. Respect for the lands of Australia and creating a positive impact for people is at the centre of shaping great Australian cities and communities

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EXECUTIVE SUMMARY

This Landscape Design Report has been prepared by Urbis on behalf of the NSW Department of Education. It supports a State Significant Development Application Sydney Olympic Park new high school at 7-11 Burroway Road, Wentworth Point. The design features outdoor learning, play and recreational areas (both covered and uncovered) and associated site landscaping and public domain improvements.

The purpose of this landscape report is to demonstrate the landscape design intent for the subject site.

RESPONSE TO SEARS

The landscape design report is required by the Secretary’s Environmental Assessment Requirements (SEARs) for SSD-11802230. This table identifies the SEARs and relevant reference within this report.

Sears Item	Response Location
<div>Provide a detailed site-wide landscape strategy, that:<ul style="list-style-type: none">Details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage.Provides evidence that opportunities to retain significant trees have been explored and/or informs the plan.Considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation.Demonstrates how the proposed development would:<ul style="list-style-type: none">Contribute to long term landscape setting in respect of the site and the streetscape.Mitigate the urban heat island effect and ensure appropriate comfort levels on-site.Contribute to objectives to increase urban tree canopy cover.</div>	<div>Section 1.0 Landscape Design Section 3.0 Site Access & Circulation Section 5.0 Landscape Planting Strategy Section 6.0 Fencing Strategy Section 7.0 Planting Schedule Section 8.0 Indicative Plant Species</div>
A detailed landscape plan prepared by a suitably qualified person.	Refer Part C Landscape Plans



LANDSCAPE DESIGN CONCEPTS

1.0 INTRODUCTION

THE PROPOSAL

The proposed development is for the construction of a school whereby the project is known as Sydney Olympic Park new high school. The school is to be developed in two stages. The SSD application will seek consent for both Stage One and Stage Two. While Stage Two is submitted as part of this proposal, construction is subject to approval of additional funding.

Stage One will provide for a Stream 5 high school, catering for up to 850 students. Stage Two will bring the school up to a stream 9 school capability catering up to 1,530 students.

The design features a six storey building. To the north of the site, a hall building (for sports and performance) is proposed.

The play space required to meet the need of students for Stage One can be generally accommodated onsite, within the 9,511sqm available. Additional play space may be required to accommodate the increased student numbers anticipated during Stage 2. The proposed adjoining play space comprises an area of around 8,800sqm, and will be subject to a Joint Use Arrangement and available for public use outside school hours. The future Wentworth Point Peninsula Park will result in an open space area of approximately 4ha.

The remainder of the peninsula (TfNSW land) is under review and will be subject to a separate approval process. Redevelopment of this land will include the new access road proposed off Burroway Road along the eastern boundary of the subject site and is proposed to include car parking, drop-off zones and delivery zones.

SITE DESCRIPTION

The proposed development is located within the peninsula of Wentworth Point at 7-11 Burroway Road, Wentworth Park across parts of three lots; Lot 202 DP1216628, Lot 203 DP1216628 and Lot 204 DP1216628. The site forms part of the Wentworth Point Planned Precinct, which was rezoned in 2014 for the purposes of high density residential, public recreation, school and business purposes.

The site is approximately 9,511sqm in area, with a frontage of approximately 91m to Burroway Road. It currently contains vacant land, which is cleared of all past development, and almost entirely cleared of native vegetation.

The surrounding area is generally characterised by high rise residential and mixed-use developments. The site is directly adjacent to the Wentworth Point Peninsula Park and immediately east of Wentworth Point Public School.



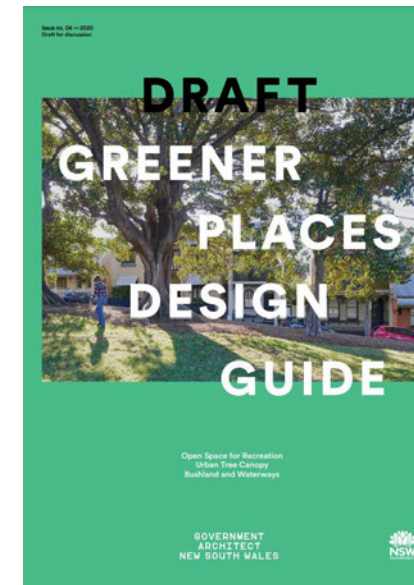
2.0 RELEVANT POLICIES AND GUIDELINES



BETTER PLACED - DESIGN GUIDE FOR SCHOOLS

In May 2018, the Government Architect New South Wales (GANSW) released the *Design Guide for Schools* in collaboration with the Department of Education to assist school communities and project teams in planning projects, as well as consent authorities and designers in assessing school development applications. It is also intended to help in preparing school proposals for complying development certificates.

The design guide promotes and champions good design process and outcomes for schools across NSW. It aims to help deliver schools that respond positively to their physical, social and environmental context and support the delivery of excellent learning environments.

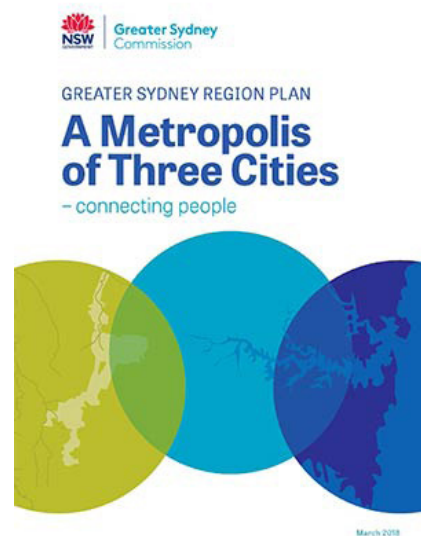


DRAFT GREENER PLACES DESIGN GUIDE

In June 2020, the Government Architect New South Wales (GANSW) released the *Draft Greener Places Design Guide* to provide information on how to design, plan, and implement green infrastructure in urban areas throughout NSW. The draft guide provides strategies, performance criteria and recommendations to assist planning authorities, and design and development communities to deliver green infrastructure.

The Greener Places design guide explains green infrastructure, why we need it and the benefits of providing it. The major components that make up the green infrastructure network fall into three categories:

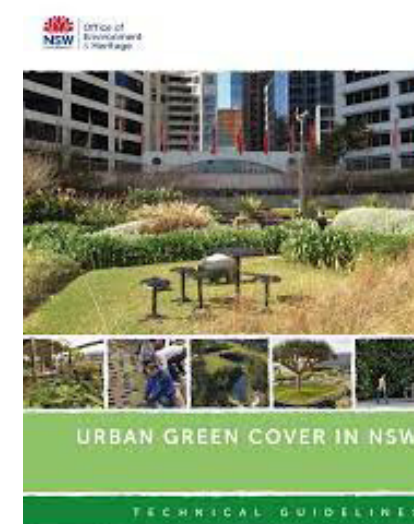
1. **Open space for recreations: green infrastructure for people**
2. **Urban tree canopy: green infrastructure for climate adaptation and resilience**
3. **Bushland and waterways: green infrastructure for habitat and ecological health.**



GREATER SYDNEY REGION PLAN - A METROPOLIS OF THREE CITIES

In March 2018, the Greater Sydney Commission (GSC) released the *Greater Sydney Region Plan* (the Region Plan) articulating a 40-year vision to transform Greater Sydney into 'A Metropolis of Three Cities' - the Western Parkland City, The Central River City and the Eastern Harbour City.

The Region Plan establishes a 20-year plan to rebalance growth and deliver its benefits more equally and equitably to residents across Greater Sydney. It is built upon a vision where most residents live within 30-minutes of their jobs, education and health facilities, services and great places.



URBAN GREEN COVER IN NSW - TECHNICAL GUIDELINES

In 2015, the Government of NSW and Office of Environment and Heritage released the *Urban Green Cover in NSW Technical Guidelines* articulate practical advice, best practice and guidelines to increase the resilience of NSW settlements and communities to climate change, specifically to increase temperatures in urban settings.

The technical guidelines offer built environment professionals working in state and local government and the private sector practical information and typical details to encourage best practice applications of green cover, so as to minimise urban heat impacts across NSW.

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3.0 LANDSCAPE DESIGN VISION

To create a series of vibrant, diverse, inclusive and interconnected learning and play spaces that foster a greater connection to nature.

We have developed an integrated landscape design response which will:

- Provide multiple connections with the natural environment;
- Respond to the architectural scheme by ensuring seamless transitions from indoors to outdoors;
- Connect with the external spaces and playground environment in an engaging and playful way;
- Enrich the learning experience through an educational landscape setting which provides a variety of scales, active and passive spaces and which achieves synergy between diverse, collocated precincts;
- Maximise outdoor learning opportunities that are flexible and allow customization and
- Offers a safe and secure learning and play environment

4.0 LANDSCAPE DESIGN PRINCIPLES

OUTDOOR LEARNING



- Provide a variety of external learning and collaboration opportunities catering for a range of different group sizes;
- Covered outdoor spaces (COLA) integrated with the built form;
- The Central Courtyard provides flexible learning spaces with movable furniture that can be adapted to different size groups;
- Indigenous Productive and Kitchen Gardens are proposed

FREE PLAY



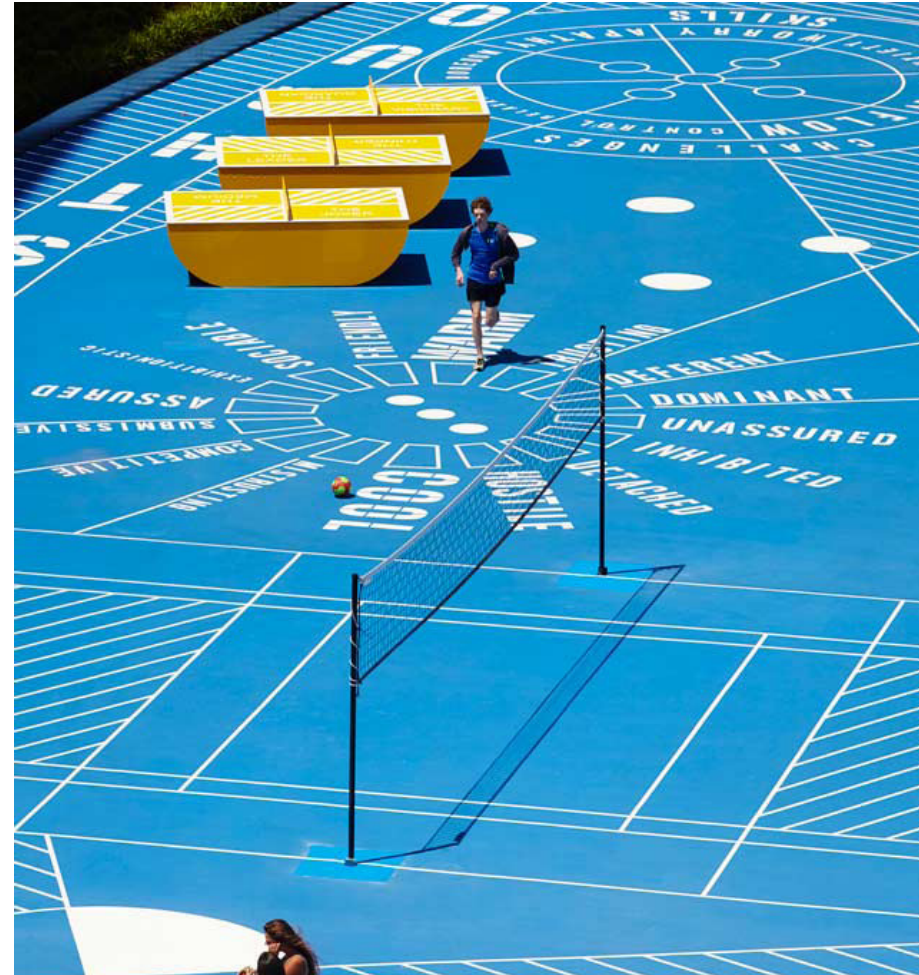
- Provide a variety of informal free play opportunities;
- Covered outdoor spaces integrated with the built form;
- External spaces designed to be diverse, flexible and easily adaptable by students;
- Provide opportunities for small and medium size groups of children to come together

BIOPHILIA



- Provide multiple opportunities to connect to nature;
- Improved sustainability and ecology response to mitigate Urban Heat and enhance building cooling;
- Increased Natural Green Canopy;
- Green roofs to improve the thermal properties of the building envelope and provide shared landscape amenity for adjacent buildings

STRUCTURED PLAY



- Provide a series of structured, active play opportunities;
- Provide opportunities for small, medium and large groups of students to interact and play;
- Provide seating opportunities adjacent to structured play

CIRCULATION



- Improved views and physical connections to the river;
- Improved connectivity and distribution of external spaces;
- Enhanced views and physical connections to all external and internal spaces;
- Reinforced integration with the locality's public open space network

5.0 LANDSCAPE DESIGN

SITE PLANNING

Built form directly addresses the street fronts, with the main school entry and drop-off zone occurring on Burroway Road with secondary (Community) entries located on the proposed road on the eastern boundary.

The multi-storey building blocks along the street front create a strong geometry and organisational framework for access and circulation throughout the site. This is further reinforced by the covered walkway, highlighting the main school pedestrian spine.

The outdoor spaces include:

- Entry forecourt
- Central Courtyard and lawns
- Multi-sports courts/assembly area and structured playspaces
- Covered Amphitheatres adjacent to the COLA's
- Outdoor learning areas/break-out spaces
- Productive garden
- Support Unit outdoor play spaces
- Green roof to improve biodiversity and habitat

The external spaces have been designed to be flexible and multifunctional spaces. Balancing structured play and free play programs which provide opportunities to consolidate outdoor learning with play spaces, multi-sports courts with assembly areas.

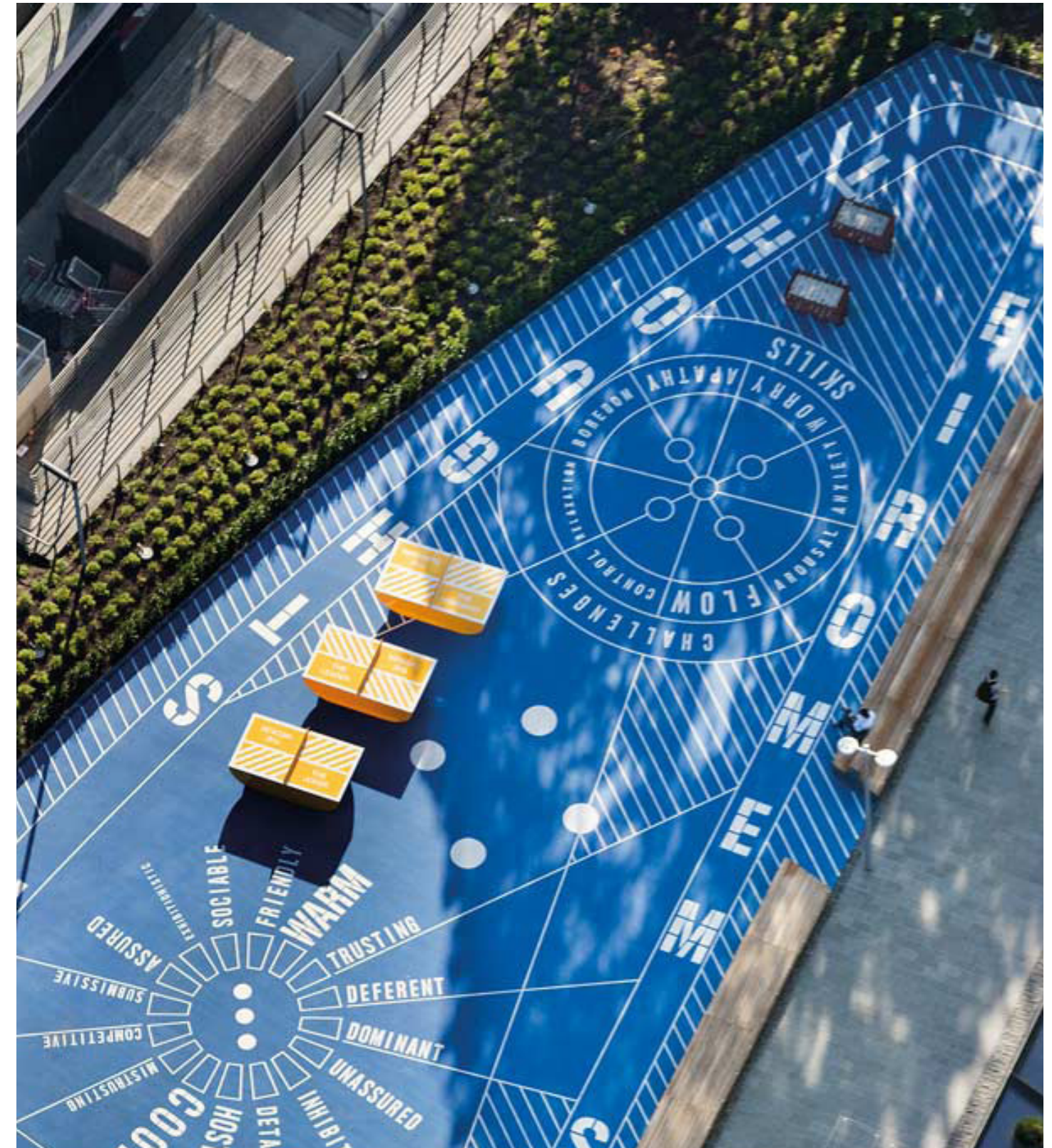
This has provided a diversity of outdoor spaces which are collaborative and flexible that respond to the school environment.

LANDSCAPE SETTING

The landscape design respects and responds to its natural environment, including Aboriginal cultural heritage. The plant selection for the site has been chosen to be sensitive of local ecosystems, with a majority of species being chosen from within local communities including endangered communities of the Sydney Turpentine-Ironbark Forest and Swamp-oak Floodplain Forest that are endemic to the area around Wentworth Point and Sydney Olympic Park.

The proposed tree and other planting including indigenous productive gardens will enhance opportunities for play and learning. Integrated landscape, planting and Water Sensitive Urban Design (WSUD) principles will be incorporated to enhance amenity and landscape performance.

The overall landscape design aims to improve the amenity within school grounds and for uses adjacent to the school.



6.0 ARBORICULTURAL ASSESSMENT

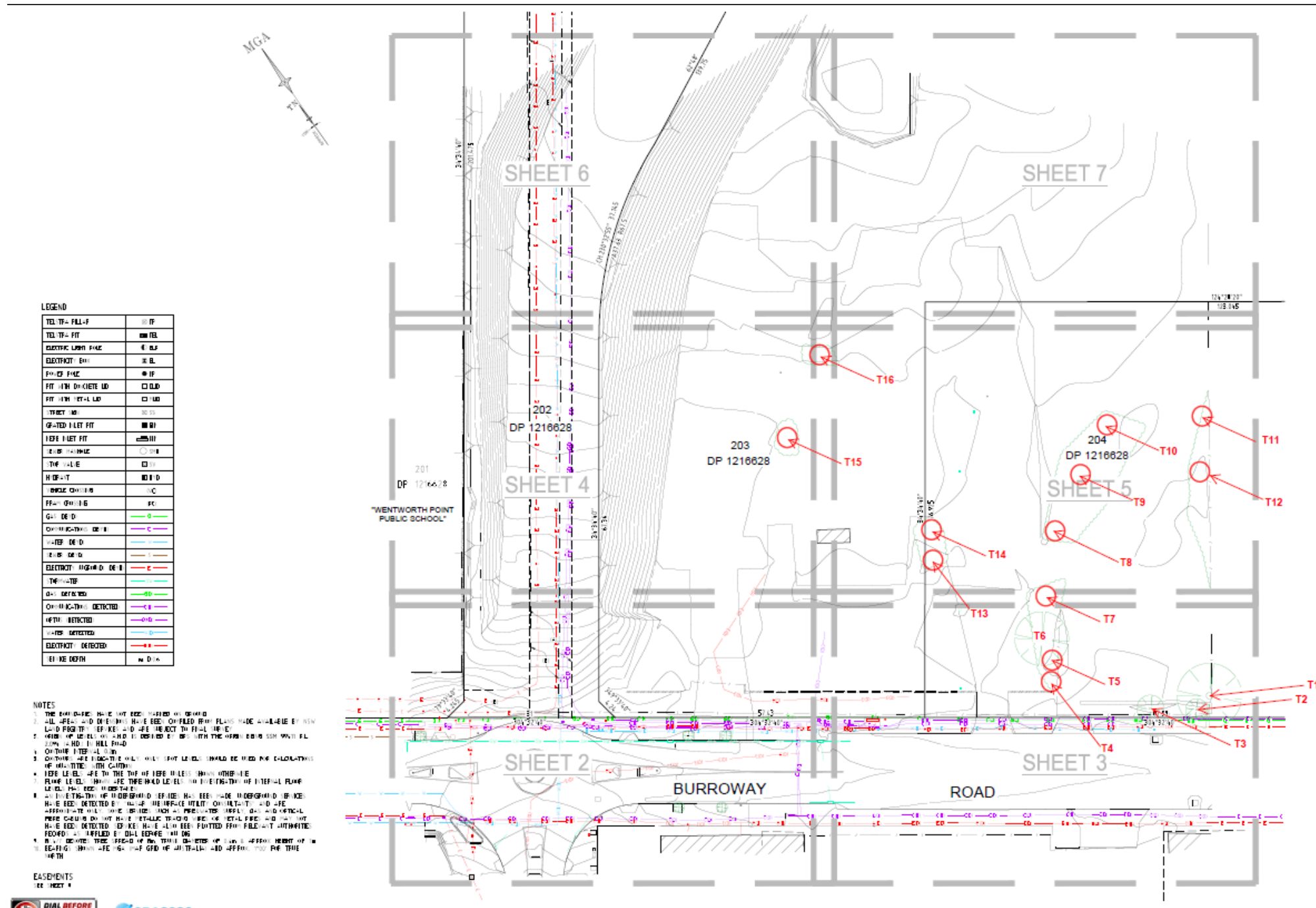
Tree IQ undertook a Visual Tree Assessment¹ (VTA) and determined the impact of the proposed works on the trees, and where appropriate, recommended the use of sensitive construction methods and tree protection methods to minimise adverse impacts.

Twenty-six (26) trees (and tree groups) were assessed using the Visual Tree Assessment2 (VTA) criteria and notes. Trees 1-12 and 17-26 are located outside of the site with Trees 13-16 located within the site boundaries. The trees comprise of a mix of locally indigenous, Australian-native and exotic species. Five (5) species are represented with *Casuarina glauca* (Swamp She Oak) being the dominant species on site.

A number of juvenile *Avicennia marina* (Grey Mangrove) are located on the Parramatta River shoreline plus small, semimature to early-mature weed species including *Cinnamomum camphora* (Camphor Laurel), *Olea europaea* subsp. *Cuspidata* (African Olive), *Celtis sinensis* (Chinese Hackberry) and *Erythrina crista-galli* (Cocks Comb Coral Tree) located within the area of rough grass bordering the shoreline.

The supplied plans show that Trees/Tree Groups 13, 14, 15 and 16 will need to be removed to accommodate the proposed building footprint.

Refer to Tree IQ Arborist report for additional detail.



ENVIRONMENT AND ECOLOGY

- Multiple opportunities to connect and engage with nature;
- Improved sustainability and ecology response to mitigate Urban Heat and enhance building cooling;
- Increased Natural Green Canopy;
- Green roofs and arbours to improve the thermal properties of the building envelope and provide shared landscape amenity for adjacent buildings;
- A celebration of the existing ecological and environmental systems on the site

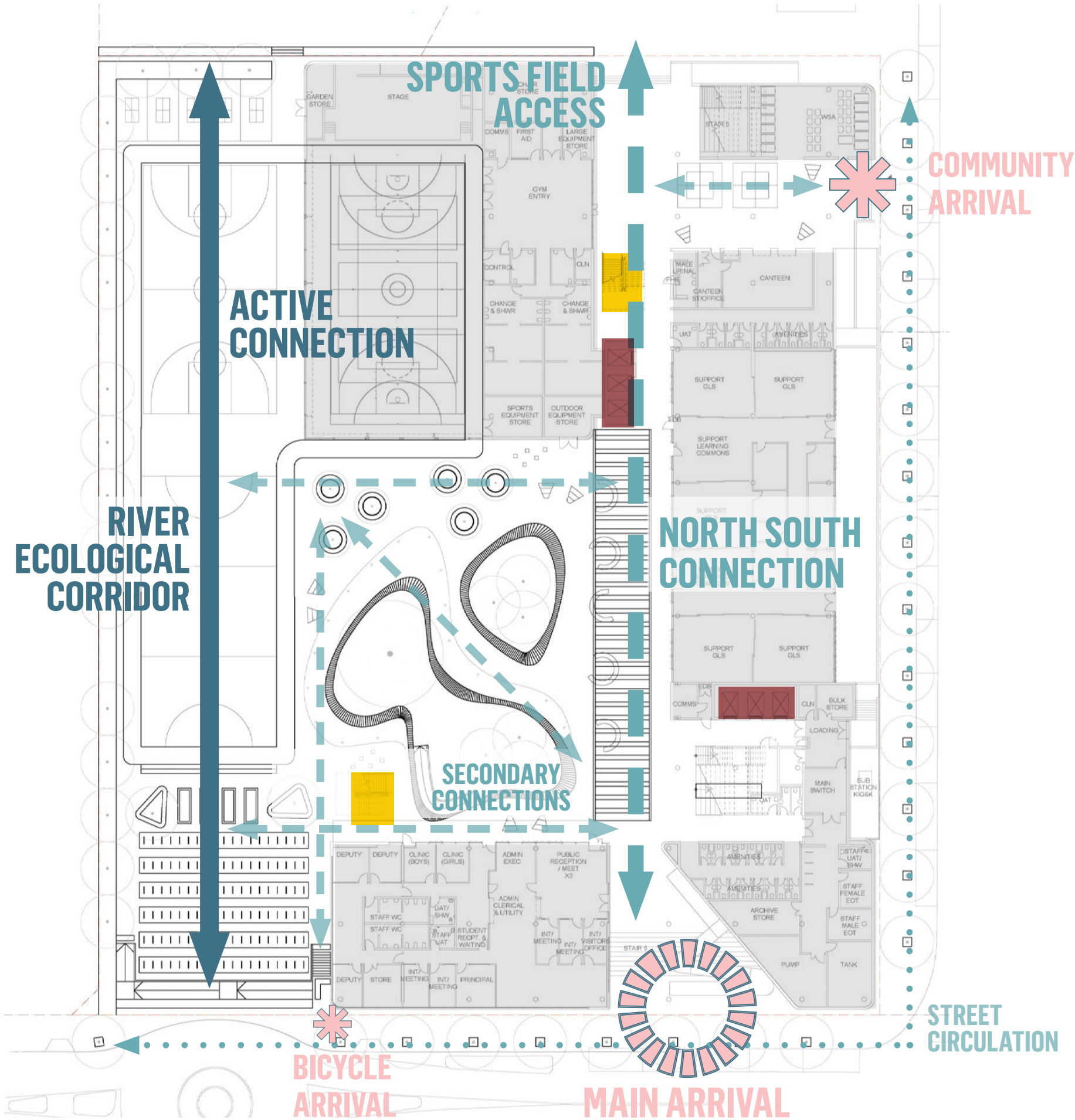


SITE ACCESS AND CIRCULATION

The building along the street front creates a strong geometry and organisational framework for access and circulation throughout the site. The main arrival is off Burroway Road, a community arrival is situated to the North East Corner off the proposed new access road by others. Internal access is ordered off the Primary covered North South link, with secondary access via the external spaces

- LEGEND:
- Staircase Access
 - Lift Access

NOT TO SCALE



The landscape design provides opportunities for both active, structured play and flexible, free play and learning through a diverse range of typologies including:

- Covered amphitheatres and gathering spaces;
- Covered outdoor spaces integrated within the built form;
- Indigenous Productive Gardens;
- Informal outdoor seating nodes integrated within the landscape setting

- Covered amphitheatres and gathering spaces;
- Covered outdoor spaces integrated within the built form;
- Indigenous Productive Gardens;
- Informal outdoor seating nodes integrated within the landscape setting



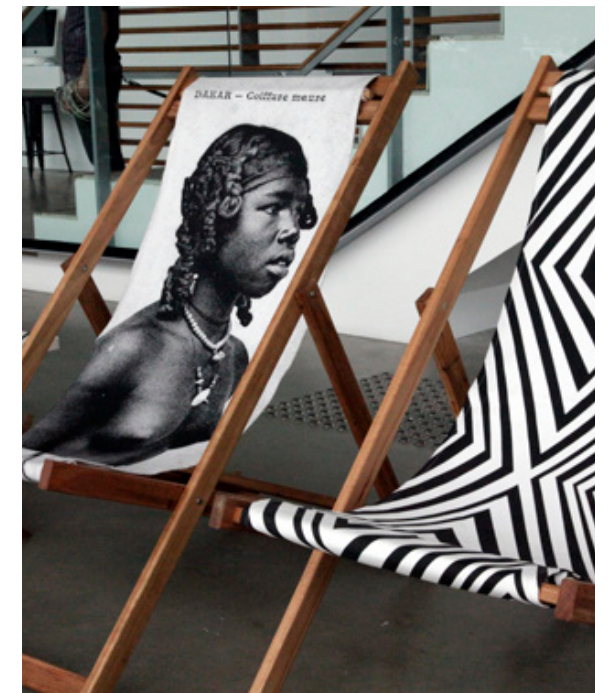
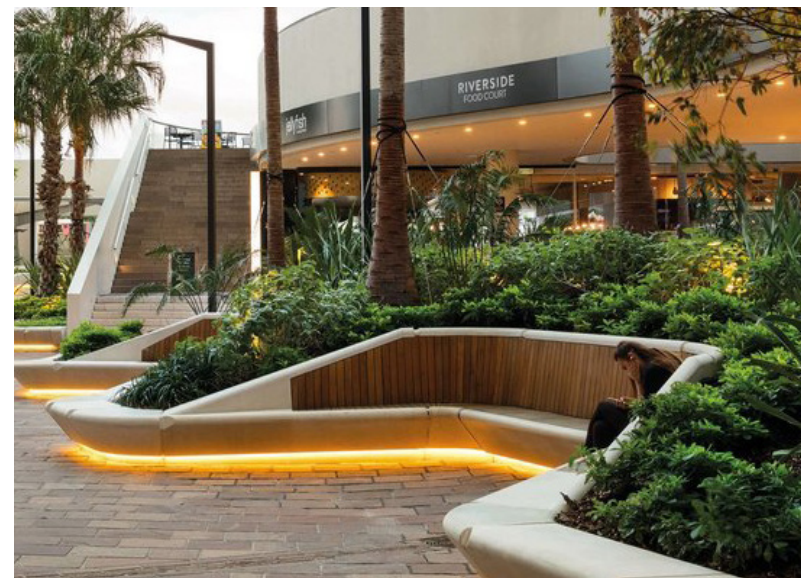
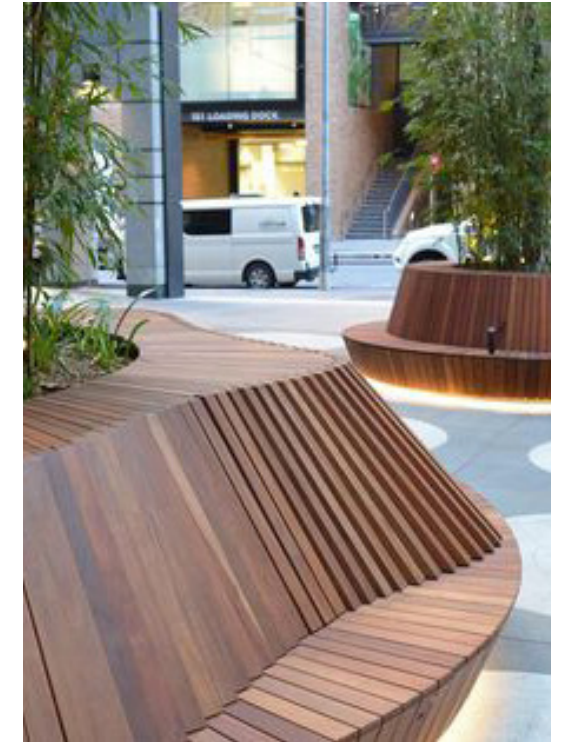
The landscape design provides opportunities for a variety of gathering spaces at different sizes and scales. These spaces cater for a wide range of uses including formal and informal gathering and social zones, learning programs and play areas.

LEGEND:

- [illegible]

8.0 PRECEDENT IMAGERY

BREAK OUT SPACES



ACTIVE AREA / SPORTS COURTS



COVERED OUTDOOR LEARNING AREA (COLA)



CENTRAL TREE



FLEXIBLE FURNITURE



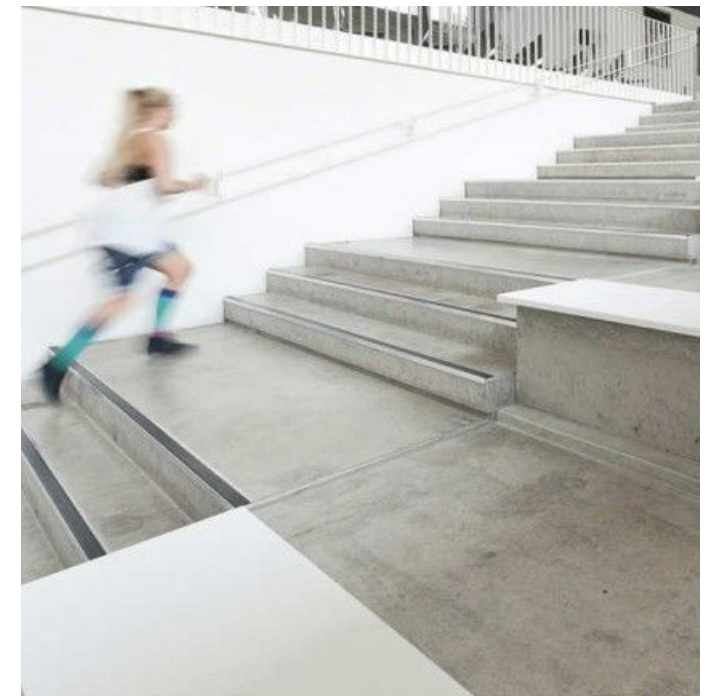
BIODIVERSITY GREEN ROOF



PRODUCTIVE GARDEN



INVITING ARRIVAL



9.0 PLANTING STRATEGY







The Planting Strategy identifies the following 5 typologies:

- Streetscape Planting
- Productive Gardens
- Central Courtyard
- Western Edge
- Green Roof

Within the site boundary the landscape design proposes a total of 31 new trees, offering a total green canopy cover of approximately 10%. The inclusion of architectural arbours and shade canopies increases this canopy cover to a total of 15%. An additional 3% ground level COLA is proposed by the architects.

Please refer to Part B Planting Design, 11. Plant Schedule for proposed plants to each of the typologies

LEGEND:

-  Streetscape Planting
-  Productive Garden
-  Central Courtyard
-  Western Edge
-  Green Roof
-  Screen Planting



NOT TO SCALE



10.0 FENCING STRATEGY

The vision for Sydney Olympic Park new high school is to foster permeability of the physical environment to encourage movement and connections. This includes visual connections from the street.

The overarching principles for the Precinct Plan's fencing strategy are:

- Minimise the visual impact of fences/barriers on the streets;
- Ensure an open and transparent design response and
- Be unobtrusive

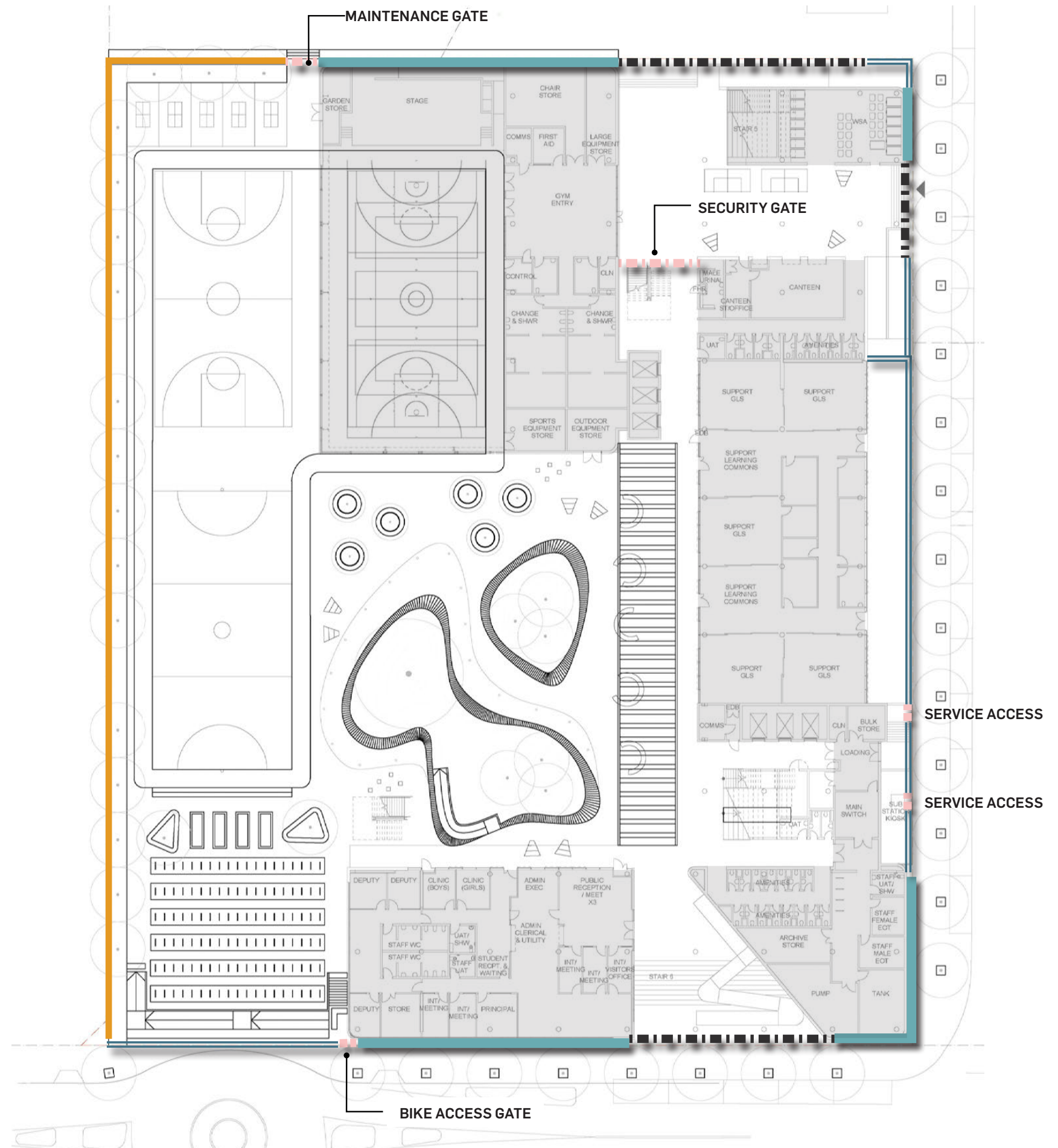
Generally vertical bar railings, powder coated black with planting is preferred.

Low Visual Impact will be achieved by:

- Eliminating fencing where possible (using the building as the secure line);
- Using planting & landform in conjunction with fencing to reduce visibility of fencing;
- Integrate planting with fences.

LEGEND:

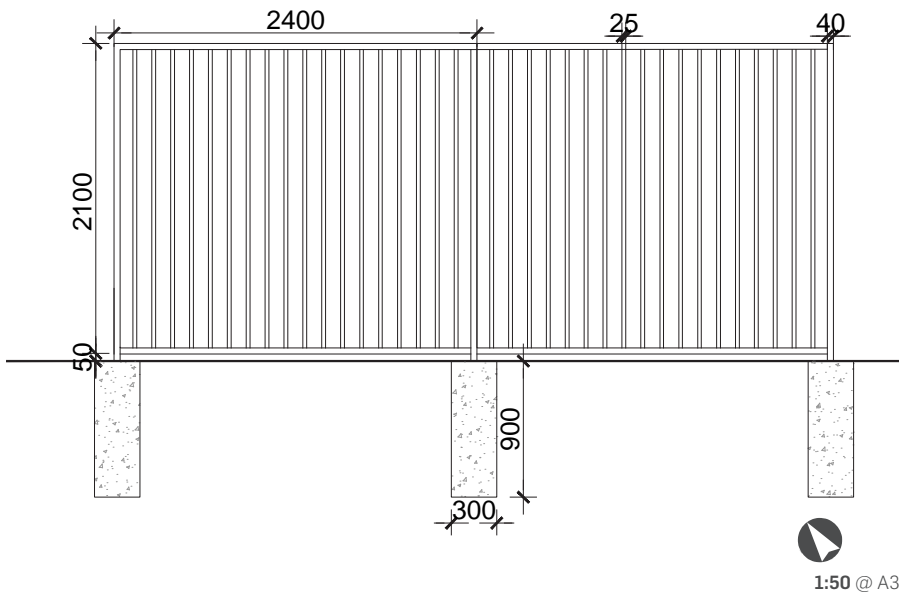
- 2.1m High Fixed Boundary Fence
- 2.4m Sports Field / Courts Fence
- Building As Boundary
- Sliding Gates
- School Gates



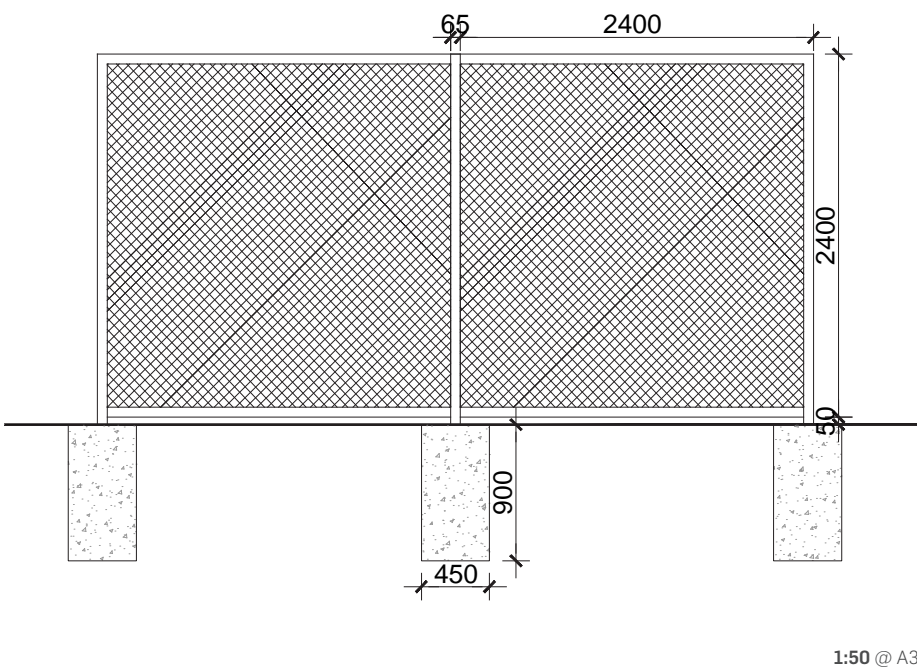
INDICATIVE FENCING



2.1m High fixed fence with planting to boundary



2.4m Sports field / court fence



Pivot/ Sliding Gates

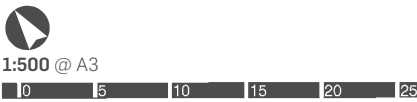
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11.0 LANDSCAPE CONCEPT DESIGN SITE PLAN

GROUND FLOOR

LEGEND:

- 1 Main Arrival
- 2 Amphitheatre Seating
- 3 Central Courtyard
- 4 Running Track
- 5 Sports Courts
- 6 First Nations Productive Garden
- 7 Bicycle Stands / Parking
- 8 Table Tennis
- 9 Ecological Planting Corridor
- 10 Community Arrival
- 11 COLA Break Out Area
- 12 Northern Access
- 13 Seating Wall
- 14 Multi Purpose Sports Field
- 15 Outdoor Learning Space
- 16 Screen Planting
- 17 Indicative Street Tree Planting



11.1 LANDSCAPE CONCEPT DESIGN DETAIL PLAN

GROUND FLOOR CENTRAL COURTYARD DETAIL

- LEGEND:
- 1 North South Green Arbour
 - 2 Raised Lawn Area
 - 3 Feature Tree Fig
 - 4 Raised Seating Planter
 - 5 Shaded Arbour Structure
 - 6 First Nations Productive Garden
 - 7 Seated Tree Planter
 - 8 Moveable Furniture / Seating Elements
 - 9 Amphitheatre Seating Steps



12.0 LANDSCAPE CONCEPT SECTIONS

SECTION A

LEGEND:

- ① Planted Arbour
- ② Seating Nodes
- ③ Small Shade Trees
- ④ Seating Wall
- ⑤ Shade Canopy
- ⑥ Raised Lawn Mounds
- ⑦ Multi Purpose Sports Field
- ⑧ Running Track
- ⑨ Ecological Planting Corridor

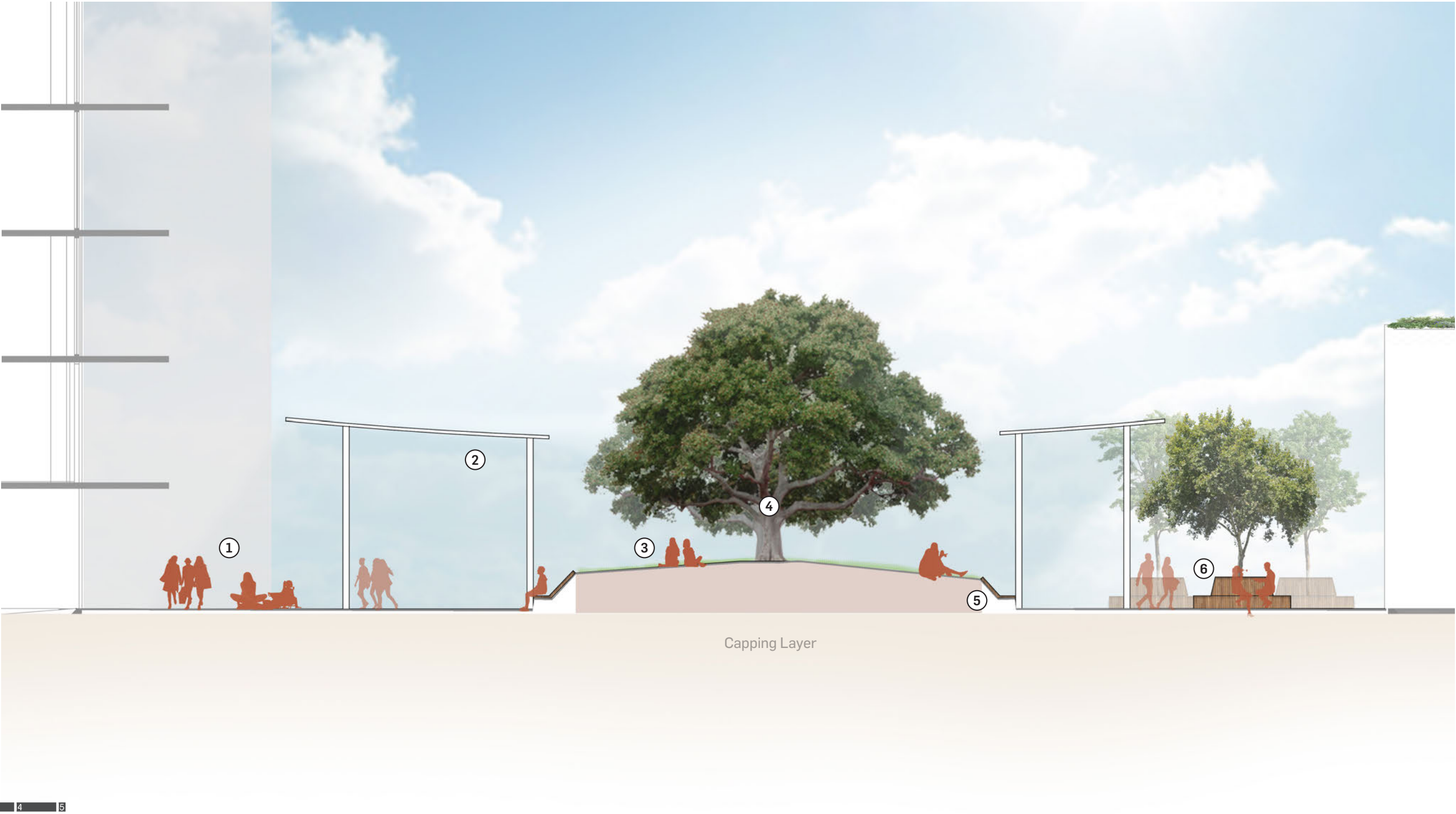


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SECTION B

- LEGEND:
- ① Flexible Seating
 - ② Shade Canopy
 - ③ Raised Lawn Mound
 - ④ Feature Fig Tree
 - ⑤ Wall Seating
 - ⑥ Seating Planters
 - ⑦ Green Roof



13.0 LANDSCAPE CONCEPT DESIGN GREEN ROOF

- LEGEND:**
- ① 1m Wide Gravel Edge / Maintenance Path
 - ② Biodiversity Green Roof
 - ③ Access Stairs / Seating Steps





B

PLANTING DESIGN

14.0 INDICATIVE PLANT SCHEDULE

Planting selection for the site has been chosen to be sensitive of local ecosystems, with a majority of species being chosen from within local communities including endangered communities of the Sydney Turpentine-Ironbark Forest and Swamp-oak Floodplain Forest that are endemic to the area around Wentworth Point and Sydney Olympic Park.

Specialised planting has also been incorporated for the use on a green roof and the edible garden. Within these groupings there are native and endemic species that can contribute to education within the school and local community, such as the inclusion of native food sources within the edible garden.

The current scheme sits at 92% native species with 73% endemic to the local area excluding specialised planting for the productive garden

N = Native
CS = Endemic to Coastal Saltmarsh
TI = Endemic to Sydney Turpentine-Ironbark Forest
SF = Endemic to Swamp-oak Floodplain Forest
E = Exotic

* Appears in multiple locations

STREET INTERFACE

Street Trees					
	<i>Botanic name</i> <i>Common name</i>	<i>Mature HxW(m)</i>		<i>Pot</i>	<i>/m²</i>
Burroway Road					
1	<i>Cupaniopsis anarcardioides</i> Tuckeroo (to match existing)	10 x 5	SF	400 L	
2	<i>Platanus 'Digitata'</i> Plane Tree (match existing)	15 x 12	E	400 L	
Eastern Road					
3	<i>Melaleuca ericifolia</i> Swamp Paperbark	9 x 5	SF	400 L	
4*	<i>Callistemon salignus</i> Willow Bottlebrush	8 x 8	TI	400 L	
Street Groundcovers					
5*	<i>Carpobrutus glaucescens</i> Pigface	0.3 x 1.5	N	200 mm	4
6	<i>Chrysocephalum apiculatum</i> Yellow Buttons	0.3 x 0.5	N	200 mm	4
7*	<i>Dianella caerulea</i> Flax Lily	0.4 x 0.4	TI SF	200 mm	4
8	<i>Lomandra longifolia 'Tanika'</i> Lomandra Tanika	0.5 x 0.5	TI SF	200 mm	4

BIODIVERSITY GREEN ROOF

Green Roof					
	<i>Botanic name</i> <i>Common name</i>	<i>Mature HxW(m)</i>		<i>Pot</i>	<i>/m²</i>
40*	<i>Carpobrutus glaucescens</i> Pigface	0.3 x 1.5	N	200 mm	4
41*	<i>Dichondra repens</i> Kidney Weed	0.1 x 0.4	TI	140 mm	12
42	<i>Goodenia hederacea</i> Forest Goodenia	0.2 x 0.8	TI	200 mm	8
43*	<i>Kennedia rubicunda</i> Dusky Coral Pea	0.2x 1	TI	140 mm	8
44	<i>Myoporum parvifolium</i> Creeping Myoporum	0.3 x 1.5	N	140 mm	8
45	<i>Oxalis exilis</i> Yellow Sorrel	0.1 x 0.3	TI	100 mm	12
46*	<i>Pratia purpurascens</i> Purplish Pratia	0.1 x 0.5	TI	140 mm	12
47*	<i>Viola banksii</i> Native Violet	0.1 x 0.3	SF	140 mm	12

WESTERN BOUNDARY

Large Trees					
	<i>Botanic name</i> <i>Common name</i>	<i>Mature HxW(m)</i>		<i>Pot</i>	<i>/m²</i>
9	<i>Eucalyptus paniculata</i> Grey Ironbark	25 x 15	TI	400 L	
10	<i>Syncapria glomulifera</i> Turpentine	16 x 8	TI	400 L	
Small Trees and Hedging					
11	<i>Acacia implexa</i> Hickory Wattle	10 x 6	TI	45L	
12	<i>Acacia longifolia</i> Golden Wattle	6 x 4	TI	45L	
13	<i>Allocasuarina torulosa</i> Rose She-oak	10 x 7	TI	45L	
14	<i>Casuarina glauca</i> Swamp She-oak	12 x 7	SF	45L	
15	<i>Kunzea ambigua</i> White Kunzea	3 x 2	TI	200 mm	
16	<i>Melaleuca 'Claret Tops'</i> Honey Myrtle	1.2 x 1	N	200 mm	
17	<i>Melaleuca decora</i> White Feather Myrtle	6 x 4	TI	45L	
18	<i>Waterhousea floribunda</i> Weeping Lilly Pilly	10 x 8	N	45L	

PRODUCTIVE GARDEN

Productive Garden					
	<i>Botanic name</i> <i>Common name</i>	<i>Mature HxW(m)</i>		<i>Pot</i>	<i>/m²</i>
48	<i>Aloysia triphylla</i> Lemon Verbena	3 x 3	E	45L	
49	<i>Citrus hystrix</i> Kaffir Lime	6 x 3	E	45L	
50	<i>Dwarf citrus</i> Dwarf Lemon	2 x 0.5	E	45L	
51	<i>Olea species</i> Fruiting Olive	5 x 3	E	45L	
52	<i>Citrus australasica</i> Finger Lime	6 x 3	N	45L	
53	<i>Olea paniculata</i> Native Olive	10 x 5	N	45L	
54	<i>Pittosporum angustifolium</i> Gumbi gumbi	6 x 4	N	45L	
55	<i>Rubus parvifolius</i> Native Raspberry	2 x 1	TI	45L	
56	<i>Syzygium smithii</i> Lilly pilly	5 x 2.5	SF	45L	

CENTRAL COURTYARD

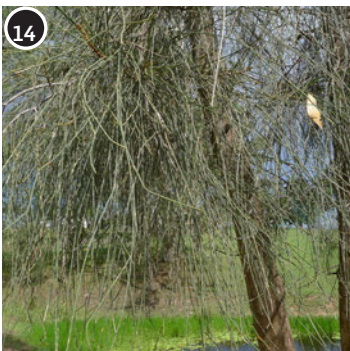
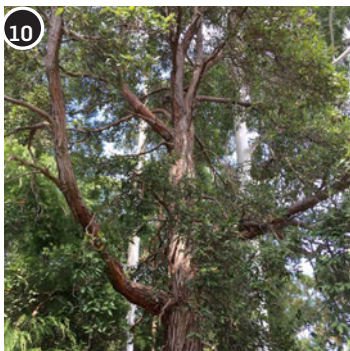
Small Trees					
	<i>Botanic name</i> <i>Common name</i>	<i>Mature HxW(m)</i>		<i>Pot</i>	<i>/m²</i>
19*	<i>Callistemon salignus</i> Willow Bottlebrush	8 x 8	TI	400 L	
20	<i>Elaeocarpus reticulatus</i> Blueberry Ash	10 x 4	TI	400 L	
21	<i>Tristaniopsis 'Luscious'</i> Water Gum	12 x 5	N	400 L	
22	<i>Pittosporum undulatum</i> Native Daphne	12 x 7	TI	400 L	
Feature Tree					
23	<i>Ficus rubiginosa</i> Port Jackson Fig	20 x 20	N	Ex Ground	
Grasses and Groundcovers					
24	<i>Blechnum indicum</i> Silver Lady Fern	0.9 x 1.2	SF	300 mm	2
25	<i>Crinum pedunculatum</i> Swamp Lily	1.5 x 1	SF	300 mm	2
26*	<i>Dianella caerulea</i> Flax Lily	0.4 x 0.4	TI SF	200 mm	4
27	<i>Hardenbergia violacea</i> Purple Coral Pea	0.5 x 2	TI	200 mm	4
28*	<i>Pratia purpurascens</i> Purple Pratia	0.2 x 0.5	TI	200 mm	8
Accent Planting & Shade					
29*	<i>Blechnum indicum</i> Silver Lady Fern	0.9 x 1.2	SF	300 mm	2
30*	<i>Dianella caerulea</i> Flax Lily	0.4 x 0.4	TI SF	200 mm	4
33	<i>Philodendron</i> Philodendron Xanadu	0.7 x 1	E	200 mm	4
34	<i>Sansevieria trifasciata</i> Mother in Laws Tongue	0.5 x 0.3	E	200 mm	8
Cascading & Edge Planting					
35*	<i>Dichondra repens</i> Kidney Weed	0.1 x 0.5	TI	140 mm	8
36	<i>Dichondra agrentea</i> Silver Falls	0.1 x 0.5	E	140 mm	8
37	<i>Viola banksii</i> Native Violet	0.1 x 0.3	SF	140 mm	12
Climbers					
38	<i>Kennedia rubicunda</i> Dusky Coral Pea	0.2 x 1	TI	140 mm	8
39	<i>Pandorea pandorana</i> Wonga Wonga Vine	0.3 x 1.5	TI	140 mm	8

15.0 INDICATIVE PLANT SPECIES

STREETSCAPE



WESTERN BIODIVERSITY CORRIDOR



CENTRAL COURTYARD



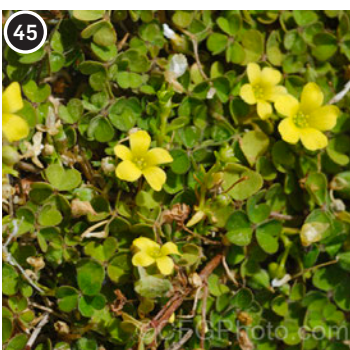
ACCENT / EDGE PLANTING



CLIMBERS



GREEN ROOF



EDIBLE GARDEN





C

LANDSCAPE PLANS



LEGEND:

- 1 Main Arrival
- 2 Amphitheatre Seating
- 3 Central Courtyard
- 4 Running Track
- 5 Sports Courts
- 6 First Nations Productive Garden
- 7 Bicycle Stands / Parking
- 8 Table Tennis
- 9 Ecological Planting Corridor
- 10 Community Arrival
- 11 COLA Break Out Area
- 12 Northern Access
- 13 Seating Wall
- 14 Multi Purpose Sports Field
- 15 Outdoor Learning Space
- 16 Screen Planting
- 17 Indicative Street Tree Planting

A SSDA ISSUE
REV DESCRIPTION
YV MK 15.09.2021
DWN CHK DATE

BURROWAY ROAD

ALL DRAWINGS ARE DESIGNED TO BE PRINTED AND READ IN COLOUR
IT IS THE CONTRACTORS' RESPONSIBILITY TO PRINT DRAWINGS IN COLOUR TO AVOID ANY POTENTIAL DISCREPANCIES IF DRAWINGS ARE PRINTED IN BLACK AND WHITE



SYDNEY OLYMPIC PARK HIGH SCHOOL
GROUND FLOOR CONCEPT PLAN

Angel Place, Level 8, 123 Pitt Street | Sydney NSW 2000 Australia | +61 2 8233 9900 | URBIS Pty Ltd | ABN 50 105 256 228

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CLIENT
SCHOOLS
INFRASTRUCTURE
NSW

1:250 @ A1
2.5 5 7.5 10 12.5m
1:500 @ A3

PROJECT NO.
P0033179
DRAWING NO.
L001

DATE
15/09/2021
REVISION
A



LEGEND:

- ① 1m Wide Gravel Edge / Maintenance Path
- ② Biodiversity Green Roof
- ③ Access Stairs / Seating Steps

A	SSDA ISSUE	YV	MK	15.09.2021
REV	DESCRIPTION	DWN	CHK	DATE

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CLIENT
**SCHOOLS
INFRASTRUCTURE
NSW**

PROJECT NO.
P0033179
DRAWING NO.
L002

DATE
15/09/2021
REVISION
A

1:250 @ A1
2.5 5 7.5 10 12.5m
1:500 @ A3



**SYDNEY OLYMPIC PARK HIGH SCHOOL
ROOFTOP CONCEPT PLAN**

Angel Place, Level 8, 123 Pitt Street | Sydney NSW 2000 Australia | +61 2 8233 9900 | URBIS Pty Ltd | ABN 50 105 256 228



APPENDICES

SDRP Comments on Reference Scheme by GroupGSA (note – the responses provided are by Urbis in relation to the current proposal. Although the comments were directed towards a different scheme, most are still valid).

SDRP Comments	Urbis' Response
Planting palettes -provide a palette that represents a living connection to Country, for example including species from the local salt marsh ecology. Incorporate this palette at active and passive outdoor learning spaces.	<p>The Urbis planting selection for the site has been chosen to be sensitive of local ecosystems, with a majority of species being chosen from within local communities including endangered communities of the Sydney Turpentine-Ironbark Forest and Swamp-oak Floodplain Forest that are endemic to the area around Wentworth Point and Sydney Olympic Park.</p> <p>Specialised planting has also been incorporated for the use on a green roof and the edible garden. Within these groupings there are native and endemic species that can contribute to education within the school and local community, such as the inclusion of native food sources within the edible garden.</p>
<p>Ecological healing and restoration – these ambitions are not evident in the concept design. Integrate ecological aspirations with a project-wide approach to connecting with Country. The following opportunities are recommended for their capacity to make manifest the attributes of Country:</p> <ul style="list-style-type: none"> - Plant species that support and restore local bio-diversity and ecology - The site's use and treatment of water. 	<p>See above response.</p> <p>The intention is the local plant communities including endangered plant communities are incorporated into the sitewide planting design.</p> <p>Water Treatment Strategies include:</p> <ul style="list-style-type: none"> - Water Sensitive Urban Design (WSUD) principals have been realised into the landscape design in a way that celebrates a sustainable water cycle. - Water Sensitive Urban Design (WSUD) principles have been realised into the landscape design in a way that celebrates a sustainable water cycle. - Where possible storm water runoff will be directed to the lawn and garden beds and - Rainwater tanks will be provided for irrigation. Irrigation will be provided to all soft landscape areas and will be specified within the tender package.

SDRP Comments on Current Proposal

SDRP Comments	Urbis' Response
Country	
2. Planting - Expand the use of endemic Indigenous plants beyond the single First Nations productive garden to be throughout the site. This is an opportunity for the landscape to be part of the pedagogy.	Endemic and indigenous species have been included into the planting palette, the intention is these species are incorporated into the overall sitewide planting design (not just the productive garden).
3. Green roof - Integrate endemic and Indigenous plants into the green roof and consider enabling monitored access to this area so that it can become part of the school.	Endemic and indigenous species have been included into the rooftop planting palette that can contribute to education within the school.
Landscape Strategy	
4. Communal courtyard – The practicality of using movable tree planters to create spatial flexibility is questioned and the creation of a sufficiently large outdoor gathering space is recommended.	<p>We have added a page that defines and describe the types of playground gathering spaces within the school grounds.</p> <p>We are providing a range of outdoor flexible gathering spaces for large, medium, and small gathering opportunities within the landscape design.</p> <p>The extra-large outdoor gathering spaces are provided to the multipurpose courts and between the internal gym and the adjacent external multipurpose sports court (refer to the playground gathering spaces diagram).</p> <p>The moveable tree planters have been replaced with permanent tree planters and seating benches/furniture to the northern edge of the central courtyard. These elements provide flexible spaces for small and medium size gatherings.</p>
5. Treecover - Provide detail on the proposed canopy cover percentage to provide comfort in relation to heat and other biophilic benefits.	<p>Within the site boundary the landscape design proposes a total of 38 new trees, offering a total green canopy cover of approximately 12%.</p> <p>The inclusion of architectural arbours and shade canopies increases this canopy cover to a total of 17%.</p> <p>Plus an additional 3% Ground Level COLA proposed by the architects.</p>

6. Planting palette – Provide more detail on plant selection at the next review.	<p>Refer to our Landscape Design Report for the Indicative Plant Schedule.</p> <p>Planting selection for the site has been chosen to be sensitive of local ecosystems, with a majority of species being chosen from within local communities including endangered communities of the Sydney Turpentine-Ironbark Forest and Swamp-oak Floodplain Forest that are endemic to the area around Wentworth Point and Sydney Olympic Park.</p> <p>Minimum soil depths are in accordance with both Council's and the 'Apartment Design Guide':</p> <ul style="list-style-type: none"> - Turf 200mm soil depth - Ground Cover 300-450mm soil depth - Shrubs 500-600mm soil depth - Small Trees (6-8m high) 800mm soil depth - Medium Trees (8-12m high) 1000mm soil depth - Large Trees (12-18m high) 1200-1500mm soil depth <p>All soil volumes are subject to review against tree species, location, desired effect and current industry best practice standards. An arborist or soil scientist will provide specific advice about the volume of soil that planting requires.</p>
Sustainability	
17. Green roofs – Consider the wider application of green roofs for the scheme, with particular focus on the increased efficacy of solar panels when combined with green roofs.	Refer to Architects report
Items to be provided	
1. A detailed landscape strategy including tree canopy cover and planting palette.	The landscape design strategy, confirmation of the tree canopy cover and planting palette have been provided in the landscape design report
3. Further development of considerations of Country particularly expansion of Indigenous planting and further integration of Aboriginal narratives in the building and built-form.	Endemic and indigenous species have been included into the planting palette, the intention is these species are incorporated into the overall sitewide planting design

