



# New Liverpool Primary School

## Landscape Concept Design

May 2021



# 1. Planning Secretary’s Environmental Assessment Requirements

SEARS REQUIREMENTS	RELEVANT SECTION OF THE REPORT
<b>4. Built Form and Urban Design</b>	
Provide a detailed landscape strategy, including:	
• Consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation having regard to the proposed and existing schools on the site	Section 2 and 3
• Details of the number of trees to be removed and the number of trees to be planted on the site.	Section 3.4
• Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	Section 2, 3.1 and 3.1.2

# 2. Design Principles

The landscape design approach for the New Liverpool Primary School (NLPS) is underpinned by Educational Facilities Standards and Guidelines (EFSG). It has also been also been guided by the Government Architect NSW (GANSW) guidelines: Better Placed- Design Guide for Schools and Environmental Design in Schools, and Greener Places - Urban Tree Canopy Guide.



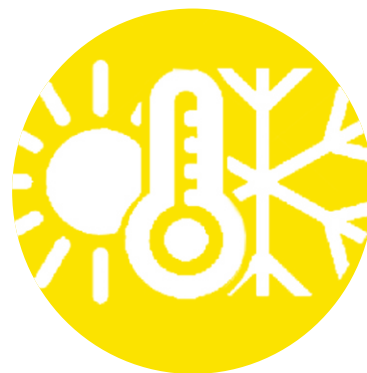
## 1. Nature & Well-Being

Maximise vegetation to connect students with nature, improve well-being and enhance the environment



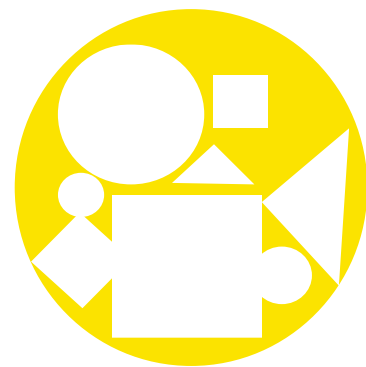
## 2. Active

Provide a variety of formal and informal active play spaces to improve physical and mental health and well-being



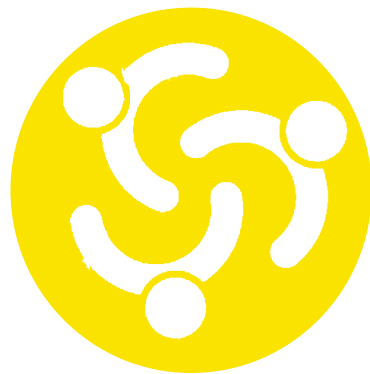
## 3. Comfortable

Design for cool spaces in summer and warm spaces in winter



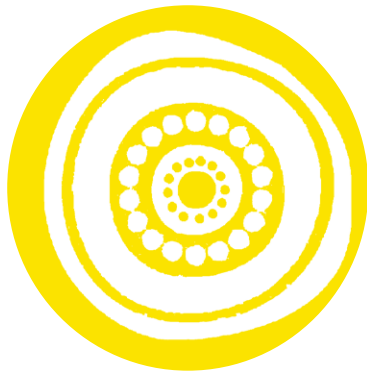
## 4. Diverse

Provide a variety of spaces for different developmental needs including physical, social, cognitive and emotional



## 5. Inclusive

A campus that is welcoming and accessible



## 6. Indigenous

Respond to and enhance the existing Indigenous context



## 7. Site Responsive

Respond to the existing vegetation, sloping landform, micro-climate and soils



## 8. Sustainable & Biodiverse

Support the long-term global environmental goals and improve biodiversity

## 3. Landscape Concept

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


















### 3.1 Landscape Plan

The landscape plan responds to the design objectives by providing a variety of places for play, social interaction and outdoor learning. A large number of movable and fixed seats are positioned throughout the site, often under canopy trees, to facilitate small or larger group interactions. Planting is largely a mix of native and exotic canopy trees with some shrubs and ground covers. Further information on the planting strategy can be found in Section 3.4.

The key elements in the landscape plan (Figures 1, 2, and 3) include:

- ① **Entrance from Lachlan Street** – facilitates movement while protecting existing trees. Permeable pavers are proposed to allow stormwater infiltration, and two feature trees to contribute to the streetscape and school identity.
- ② **Seating/ Outdoor Learning Area** – a flexible space with movable furniture positioned close to the canteen. Synthetic turf softens the surface and delineates the passive from active space
- ③ **Nature Play** – a shaded area in amongst the trees with some shrub planting to encourage students to connect with nature. The space to also includes stepping logs, rocks and seating areas to accommodate different sized groups.
- ④ **Active Play** – includes a flexible, large open space with a
- ⑤ **multi-purpose court and adjacent line marking for games.** The multi-purpose court can also be used for school assemblies and large community gatherings.
- ⑥ **Screen planting**– close to the COLA and preschool to block views towards the railway line
- ⑦ **Kitchen and Bushtucker Garden** – provides opportunities for learning and creates an opportunity to respond to the aboriginal context. There is also an opportunity for a yarning circle to the south of the building (near the sports field) but isn't included in this SSDA
- ⑧ **Outdoor play for support unit** – a flexible lawn space screened by planting for privacy. Shade is provided by a formal shade structure.



- KEY**
-  PROPOSED NATIVE TREE
  -  PROPOSED FEATURE TREE
  -  EXISTING TREE (MEDIUM RETENTION VALUE)
  -  TREE TO BE REMOVED
  -  NATIVE SHRUBS
  -  NATIVE SHRUB/GROUND COVER/GRASS PLANTING
  -  EXISTING TURF TO BE RETAINED/MADE GOOD
  -  PROPOSED TURF
  -  SYNTHETIC TURF (40MM NOMO COOL - SUPPLIER: GRASSMAN)
  -  CONCRETE (4% ONYX)
  -  PAVING TO MATCH EXISTING ON LACHLAN ST
  -  PERMEABLE PAVING (CHARCOAL- SUPPLIER: HYDROPAVERS)
  -  ORGANIC MULCH (SOURCED ON SITE)
  -  MOVABLE/ FIXED METRO FURNITURE (TIMBER 'LOOK' COATED ALUMINIUM - GRILLEX.COM.AU)
  -  RAINWATER TANK
  -  RAISED VEGETABLE GARDENS (COLOURBOND - IRONSTONE)
  -  SITE BOUNDARY
  -  ROOF/ SHADE STRUCTURE (SUPPLIER TBC)
  -  FENCE
  -  1 ENTRY FORECOURT
  -  2 SEATING/ OUTDOOR LEARNING
  -  3 NATURE PLAY AND SEATING
  -  4 LINEMARKING FOR ACTIVE PLAY
  -  5 MULTI-PURPOSE COURT & ASSEMBLY
  -  6 PLANTING TO SCREEN VIEWS
  -  7 KITCHEN AND BUSHTUCKER GARDENS
  -  8 SUPPORT UNIT PLAY AREA

0 10 20 30 M



Figure 1. Landscape Masterplan



3.1.1 Detailed Plan A



**KEY**

	PROPOSED NATIVE TREE		ORGANIC MULCH (SOURCED ON SITE)
	PROPOSED FEATURE TREE		MOVABLE/ FIXED METRO TABLE SETTING (TIMBER 'LOOK' COATED ALUMINIUM - GRILLEX.COM.AU)
	EXISTING TREE (MEDIUM SIGNIFICANCE/RETENTION VALUE)		SITE BOUNDARY
	TREE TO BE REMOVED		ROOF/ SHADE STRUCTURE (TO BE SPECIFIED)
	NATIVE SHRUBS		FENCE
	SHRUB/ GROUND COVER/ GRASS PLANTING		1 ENTRY (PERMEABLE PAVING)
	SYNTHETIC TURF (40MM NOMO COOL - SUPPLIER: GRASSMAN)		2 SEATING/ OUTDOOR LEARNING AREA WITH SYNTHETIC TURF AND MOVABLE FURNITURE
	CONCRETE (4% ONYX)		3 NATURE PLAY AREA WITH ORGANIC MULCH, TREES AND SHRUBS. STEPPING/ SEATING LOGS TO BE PROVIDED LATER BY THE SCHOOL.
	PAVING TO MATCH EXISTING ALONG LACHLAN STREET		4 LINE MARKING FOR ACTIVE PLAY
	PERMEABLE PAVING (CHARCOAL - SUPPLIER: HYDROPAVERS)		5 MULTI-PURPOSE GAMES COURT AND ASSEMBLY AREA

0 10 20 M

SCALE 1:500 @ A3



Nature Play



Active Play



Figure 2. Landscape Detailed Plan A



3.1.2 Detailed Plan B



Figure 3. Landscape Detailed Plan B

**KEY**

- PROPOSED NATIVE TREE
- EXISTING TREE (MEDIUM SIGNIFICANCE)
- TREE TO BE REMOVED
- EXISTING TURF TO BE RETAINED/ MADE GOOD
- PROPOSED TURF
- SHRUB/ GROUND COVER/GRASS PLANTING
- SYNTHETIC TURF (40MM NOMO COOL - SUPPLIER: GRASSMAN)
- CONCRETE (4% ONYX)
- ORGANIC MULCH (LOCALLY SOURCED)
- MOVABLE/ FIXED METRO TABLE SETTING (TIMBER 'LOOK' COATED ALUMINIUM - GRILLEX.COM.AU)
- RAINWATER TANK
- RAISED VEGETABLE GARDENS (COLOURBOND - IRON)
- SITE BOUNDARY
- ROOF/ SHADE STRUCTURE (TO BE SPECIFIED)
- FENCE
- TIMBER EDGE
- 7 KITCHEN AND BUSHTUCKER GARDENS
- 8 SUPPORT UNIT PLAY AREA

0 10 20 M  
SCALE 1:500 @ A3

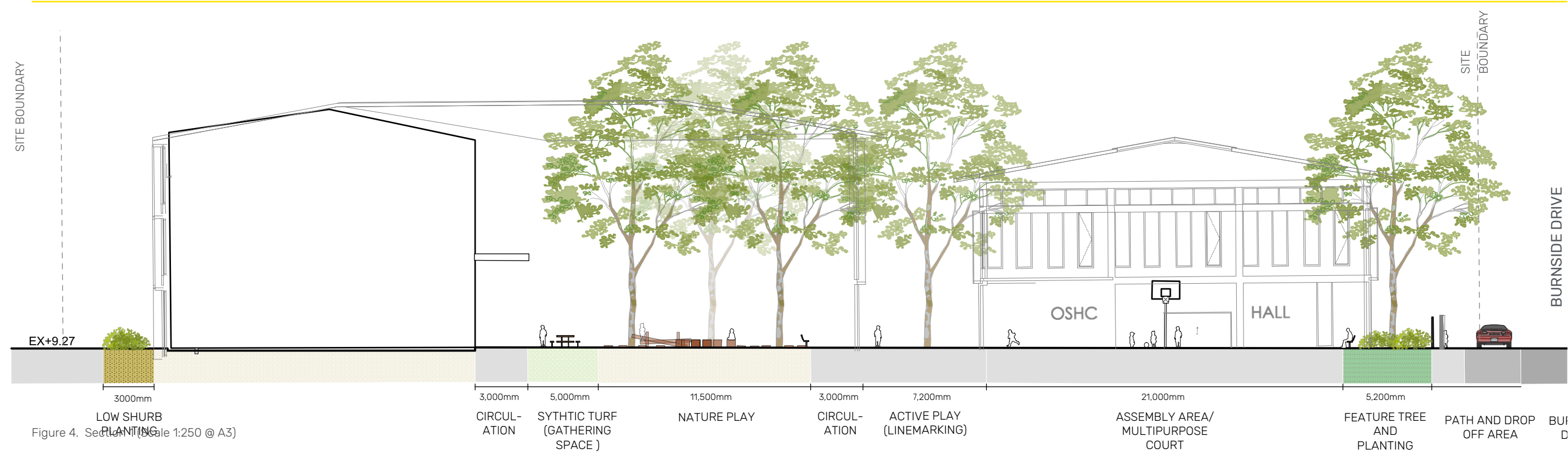
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Raised colourbond garden bed (1m x 3m colour iron stone supplier: [gardenbeds.kingspanwater.com.au](http://gardenbeds.kingspanwater.com.au))

Coated aluminum furniture – fixed or movable (supplier: [grillex.com.au](http://grillex.com.au))



3.2 Section 1



3.3 Materials





### 3.4 Planting

A mix of native and exotic tree planting is proposed to provide shade and encourage students to connect with nature. Exotic trees have been chosen primarily for their extensive canopies providing shade in summer, but also for their aesthetic and deciduous characteristics. Understorey planting is proposed in key locations near the main entrance and along the western edge of the building to prevent high school students approaching the windows. Some suggested plant species are in Figure 5 and the details of the proposed tree and shade numbers are below.

#### Trees - SSD area only (inside the site boundary)

- Existing trees to be retained: **1**
- Existing trees to be removed: **12** (all are medium significance and retention value (Aborist Report, Birds Tree Consultancy, 2019)
- Proposed trees: **30**

#### Trees - SSD area only (directly outside the site boundary)

- Existing trees to be retained: **4**
- Existing trees to be removed: **3** (all are medium significance and retention value (Aborist Report, Birds Tree Consultancy, 2019)

#### Shade in Outdoor Spaces - SSD area only

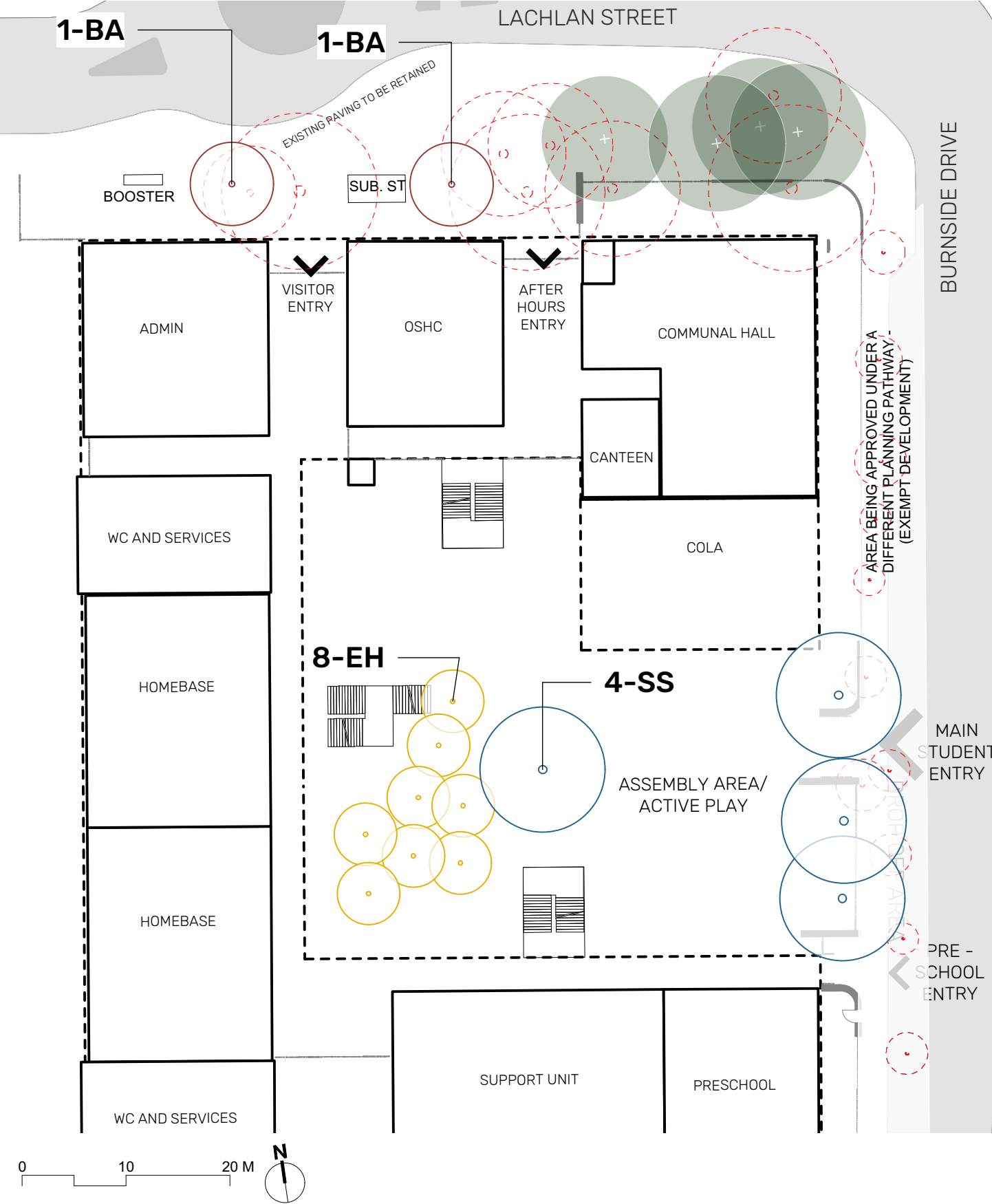
- Approximately **870m2** of shade is proposed to be provided by trees (proposed mature trees and existing)
- Approximately **1375m2** of shade proposed is provided by shade structures, sails and eaves
- The total shade proposed is **2245m2** which is approximately **22%** of the site area (northern section for the SSD planning pathway)

#### Trees



Figure 5. Proposed plant images





LEGEND

- Existing Tree Retained
- Existing Tree Removed
- Backhousia citriodora* - BC
- Brachychiton acerifolius* - BA
- Cupaniopsis anacardioides* - CA
- Eucalyptus haemastoma* - EH
- Jacaranda mimosifolia* - JM
- Sapium sebiferum* - SS
- Zelkova serrata* 'green vase' - ZS

TREE SCHEDULE - SHEET 1

NEW TREES					
LATIN NAME	COMMON NAME	HEIGHT (mm)	SPREAD (mm)	POT SIZE (mm)	QUANTITY
<i>Brachychiton acerifolius</i>	Bottle Tree; Illawarra Flame Tree	30000	8000	200L	2
<i>Eucalyptus haemastoma</i>	Scribbly Gum	10000	6000	200L	8
<i>Sapium sebiferum</i>	Chinese Tallow Tree	10000	12000	200L	4

SCALE 1:500 @ A3 Figure 6. Planting plan 1 of 2



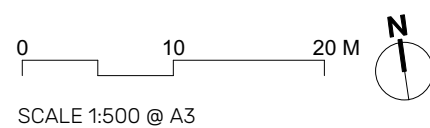
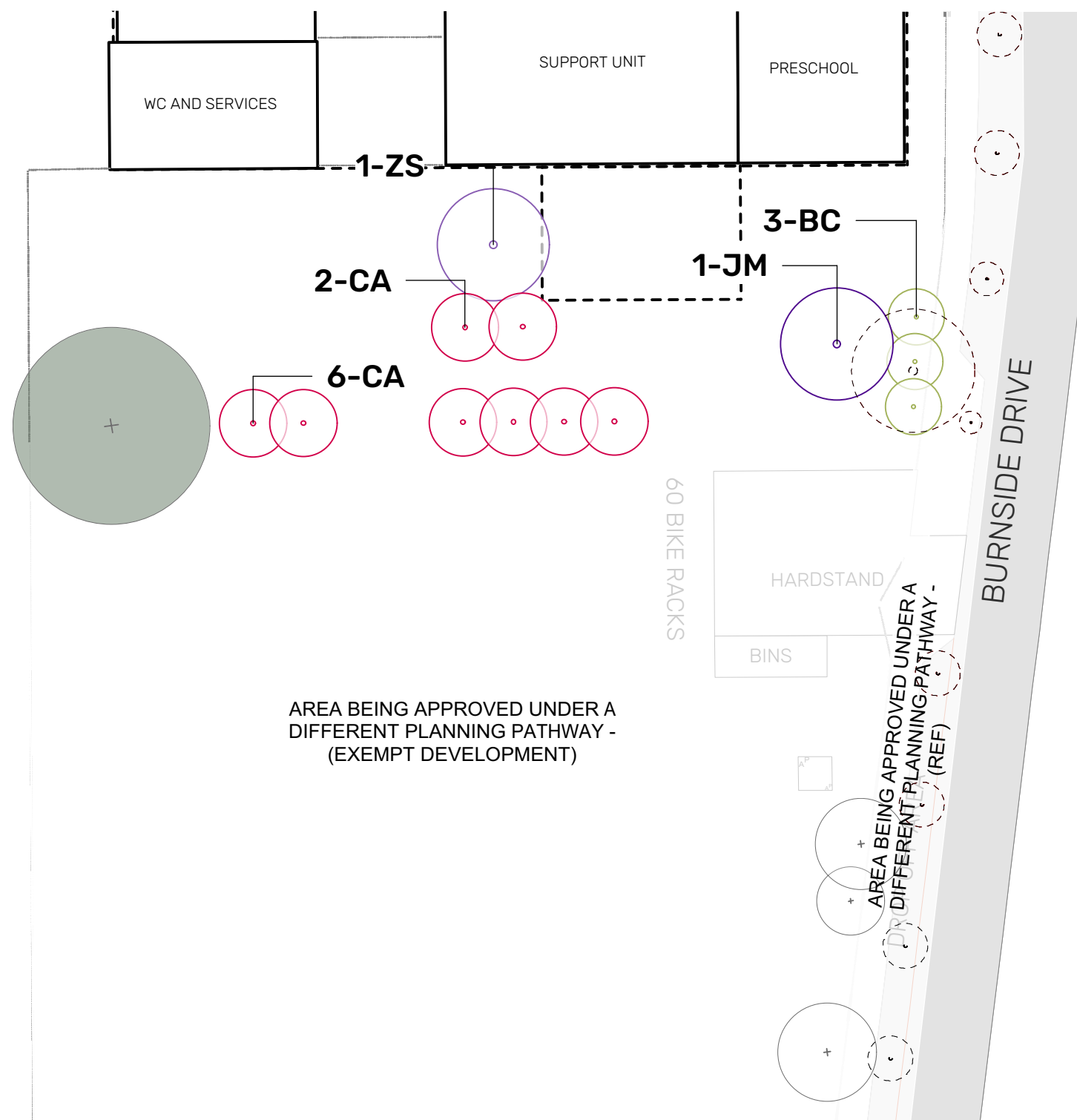











Figure 7. Planting plan 2 of 2

## LEGEND

-  Existing Tree Retained
-  Existing Tree Removed
-  *Backhousia citriodora* - **BC**
-  *Brachychiton acerifolius* - **BA**
-  *Cupaniopsis anacardioides* - **CA**
-  *Eucalyptus haemastoma* - **EH**
-  *Jacaranda mimosifolia* - **JM**
-  *Sapium sebiferum* - **SS**
-  *Zelkova serrata* 'green vase' - **ZS**

## TREE SCHEDULE - SHEET 2

NEW TREES					
LATIN NAME	COMMON NAME	HEIGHT (mm)	SPREAD (mm)	POT SIZE (mm)	QUANTITY
<i>Backhousia citriodora</i>	Lemon Scented Myrtle	6000	5000	200L	<b>3</b>
<i>Cupaniopsis anacardioides</i>	Tuckeroo	10000	6000	200L	<b>8</b>
<i>Jacaranda mimosifolia</i>	Jacaranda	10000	10000	200L	<b>1</b>
<i>Zelkova serrata</i> 'green vase'	Japanese Zelkova	14000	10000	200L	<b>1</b>