



North Sydney Public School

Landscape Architecture

SSDA DESIGN REPORT

16.11.2021

TaylorBrammer



01 | Site Analysis

SITE CONTEXT

Locality

North Sydney Public School is a NSW Government Primary School located in the suburb of Waverton. It is one of three demonstration schools in NSW.

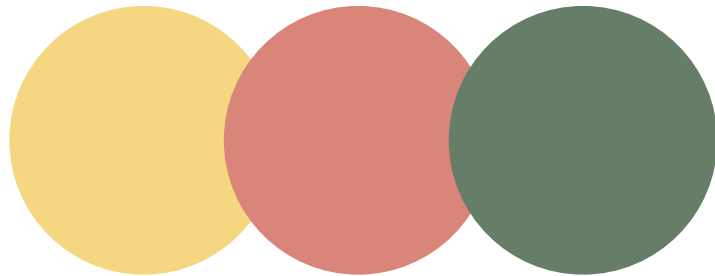
The site is bounded by McHatton Street to the north, Bay Road to the South and The Pacific Highway to the east.

The School is positioned in a high density residential community and is located approximately 650m from Waverton Station. Student drop off areas are allocated along McHatton Street and Bay Road frontages. A bus stop is also located on the Bay Road frontage.

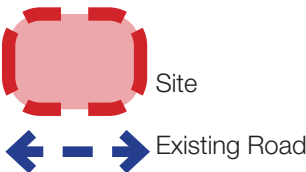
The site reflects the established vegetation consistent with the local area boasting large specimen trees which create valued shade an amenity across the site.

A number of significant elements are found onsite including the existing fencing to Bay Road and the Pacific Highway frontages which is heritage listed, whilst a number of trees have also been identified as significant.

Existing Site Colour Palette



Legend

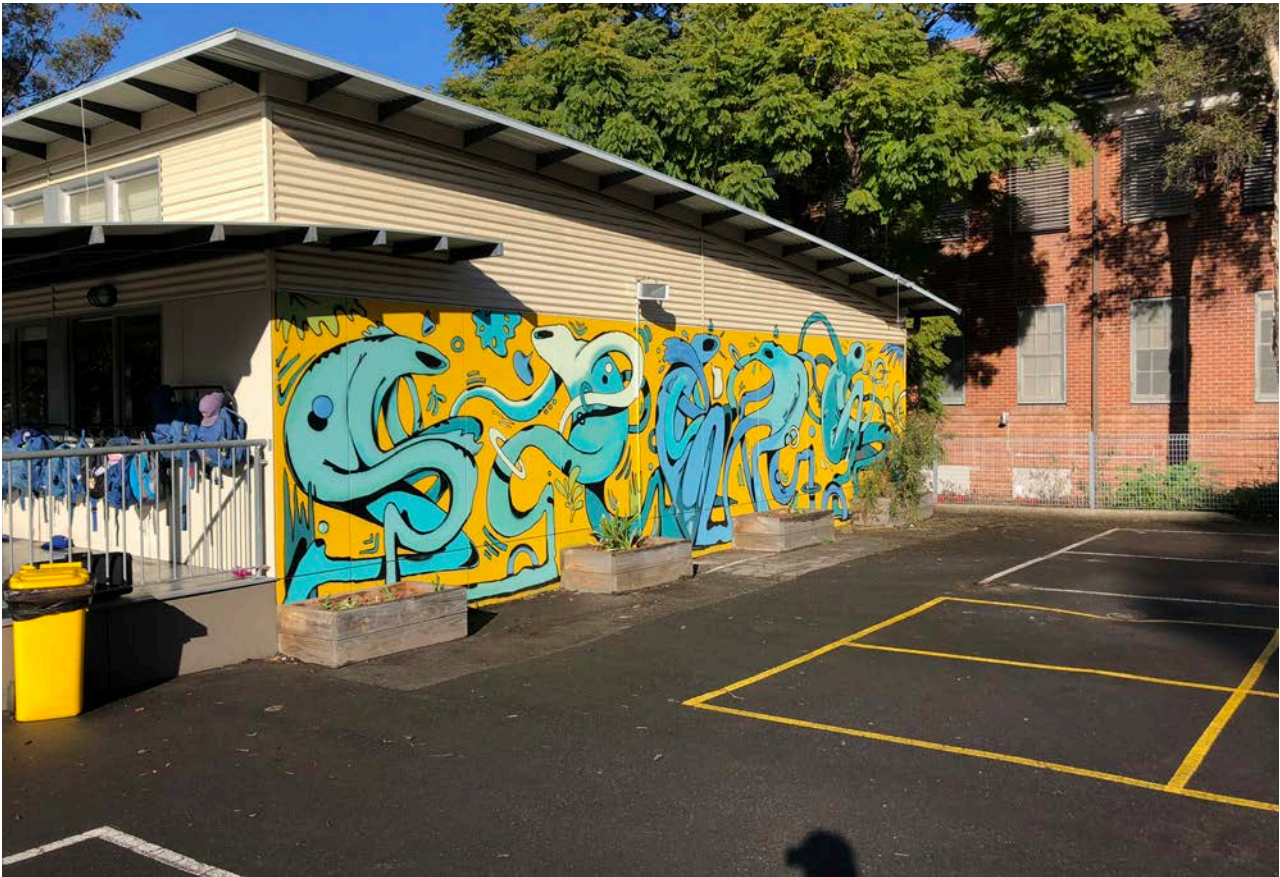


Local Context Map, Sourced Nearmap 2019

EXISTING SITE



EXISTING CHARACTER



Demountable building; Image by TBLA 2019



Administration entry; Image by TBLA 2019



Significant level changes across the site; Image by TBLA 2019



Cultural landscape character of mixed health and maturity; Image by TBLA 2019







Marker tree planting; Image by TBLA July 2019

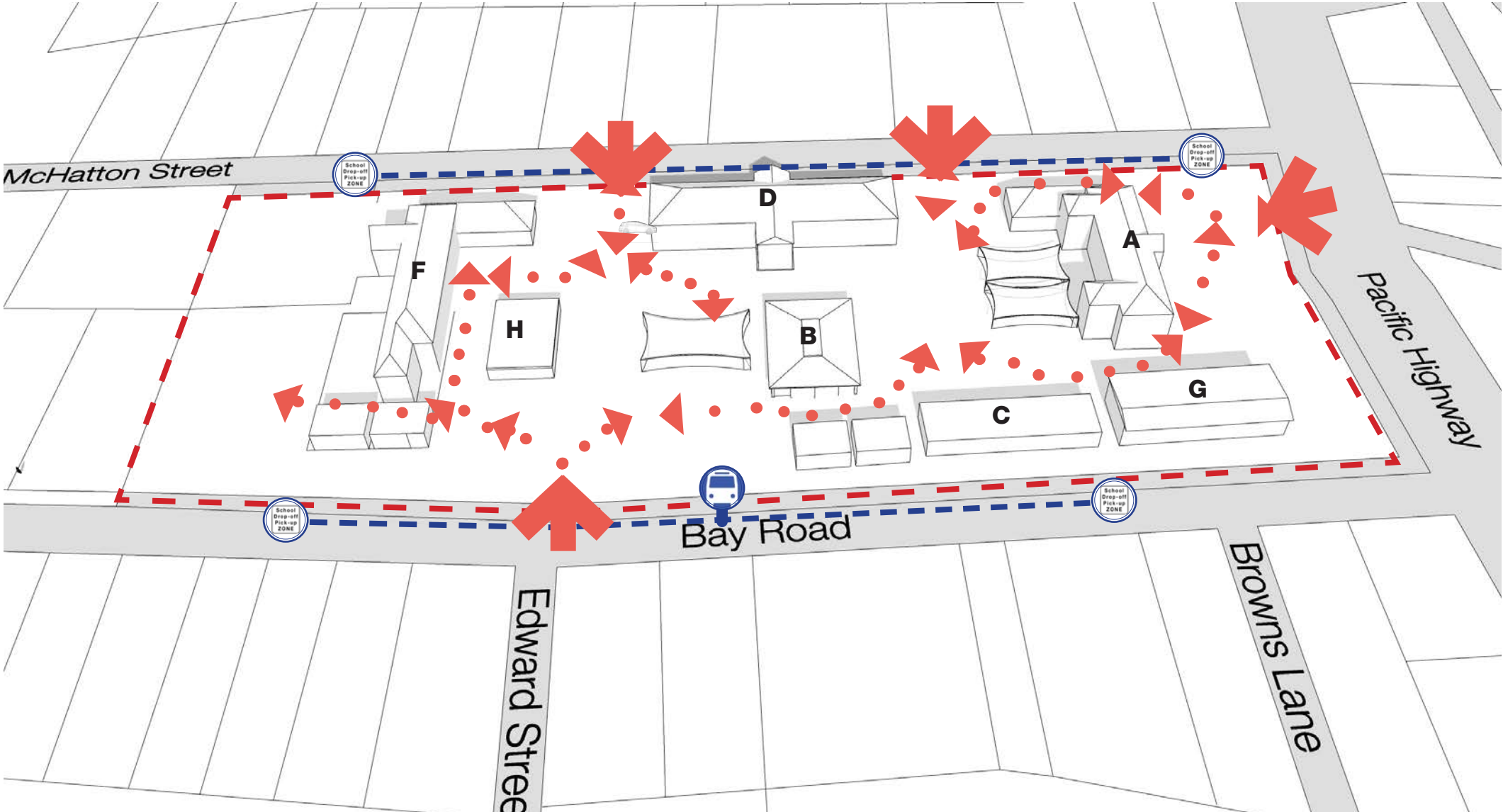


Heritage entry gates; Image by TBLA 2019

ACCESS AND MOVEMENT

Legend

-  Pedestrian entry point
-  Bus Bay
-  Kiss and Drop Zone
-  Pedestrian circulation



Google Images 2021

TOPOGRAPHY

Legend


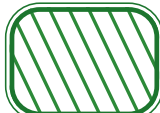

- High Point from McHatton Street
- Mid Level Central Courtyard
- Low Point - buffer zone sloping down to Bay Road



Images by TBLA July 2019

EXISTING VEGETATION

Legend


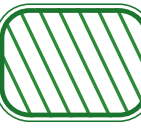



-  Cultural Planting - Large Marker Pine Tree
-  Cluster of significant Angophora Costata trees
-  Tree identified as highly significant, as identified in Arborist report prepared by Arboreport August, 2021

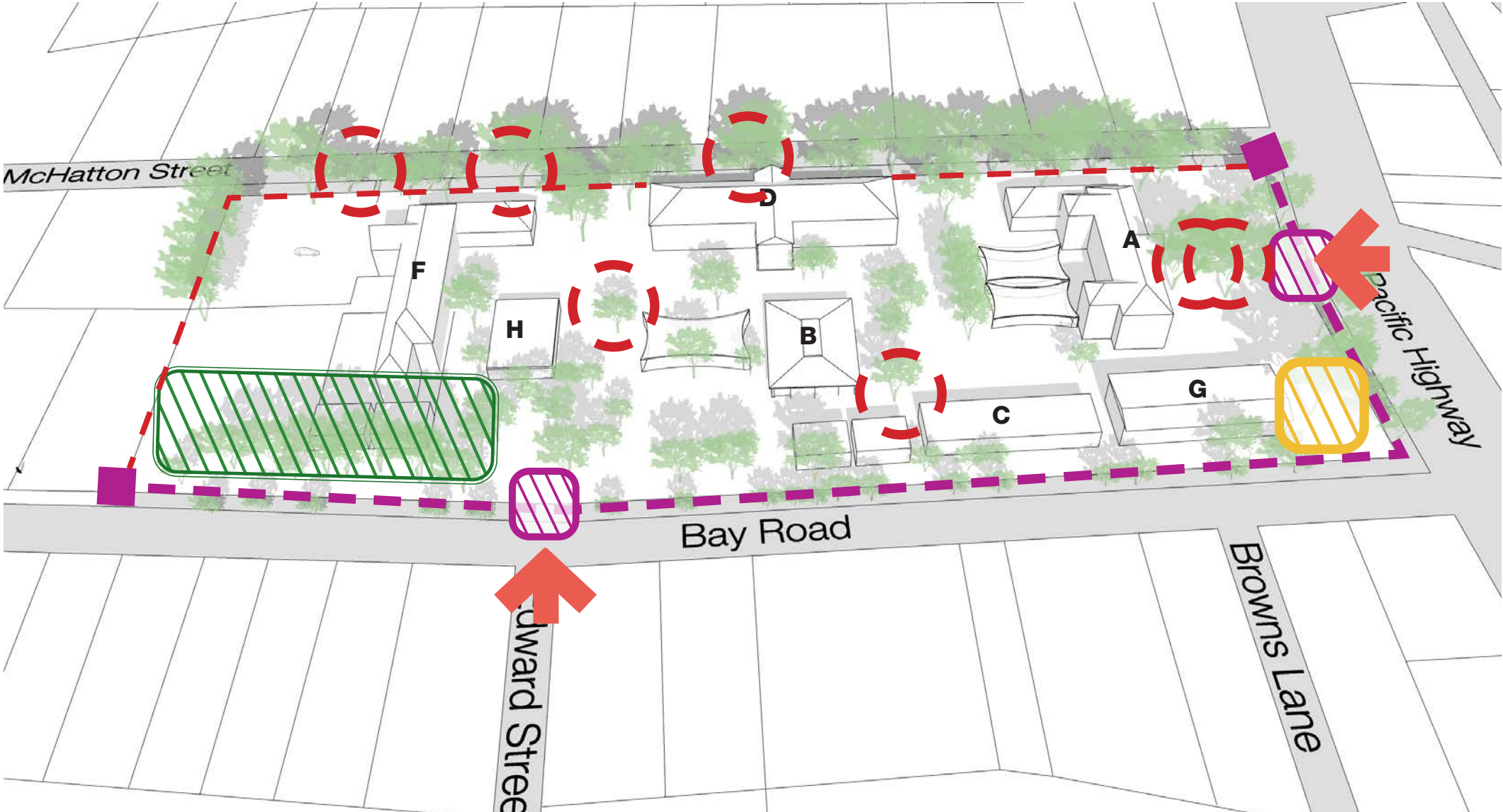


Images by TBLA July 2019

SIGNIFICANT LANDSCAPE ELEMENTS

Legend

-  Cultural Planting - Large Marker Pine Tree
-  Cluster of significant Angophora Costata trees
-  Tree identified as highly significant, as identified in Arborist report prepared by Arboreport August, 2021
-  Heritage boundary sandstone wall, gates and fencing
-  Entry



Angophora Costata



Heritage listed gate



Marker tree

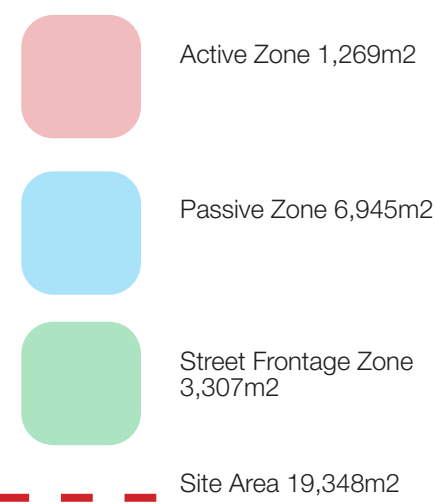


Heritage listed wall and fence

Images by TBLA July 2019

EXTERNAL USES

Legend





Existing Area Calculations	
Site Area	19,348m ²
Active Zone	1,269m ²
Passive Zone	6,945m ²
Total Active/Passive Space 8,214m²	
857 Students (2019 Enrol)	9.58m ² /ea
Target:	
1012 Students x 10m ² /ea =	10,120m ²
Note: calculations are based off survey by Project Surveyors	



EXISTING CANOPY COVER

Legend

-  Existing Canopy Tree
-  Site Area 19,348m2



Existing Canopy Calculations

Site Area	19,348m ²
Existing Tree canopy	6,251m ²
Total Canopy Cover	32%



02 | Landscape Strategy

LANDSCAPE DESIGN STRATEGY

The landscape design intends to build on the existing landscape character of the site and create a combination of active and passive outdoor spaces which offer not only a place of recreation but also a layering of education values and function space building on the pre-existing learning spaces. The design aims to build upon the strong sense of place which the site currently holds through its connection to Country, heritage buildings, fences and walls, culturally significant plantings and a range of significant endemic species.

The landscape strategy has been developed by expanding on the following design principles which underpin the overall design approach:

- 1. Develop existing outdoor learning
- 2. Interact with nature
- 3. Culture
- 4. Foster a sense of Community
- 5. A Site specific expression
- 6. Respect the heritage of the place

From Bay Road, a new accessible entry is proposed which aligns with the heritage listed McHatton Building. Formal paving with delicate inlays present an opportunity for storytelling and discovery. Leading through to the new entry plaza, connection to County is strengthened through a prominent artefacts display. Secure lines have been carefully considered and are intended to tie into proposed building lines.

The landscape frontage to Bay Road offers an opportunity for replenishment tree and understory planting to promote and enhance the already evident native landscape character and strengthen the site’s canopy cover in accordance with SINSW targets. This is also an opportunity to provide a further connection to Country through significant plant selections.

Currently, the existing topography of the site creates a sense of disconnect from the main active courtyard to the Bay Road interface. The design aims to ameliorate this by incorporating a terraced seating space with integrated planting which connects the ground floor entry through to the upper main courtyard.

The main courtyard is being improved through new fixed playground equipment and 2 large synthetic turf areas providing additional active play areas for both primary and infant students. Further to this, it is proposed that acrylic line-markings and colour is added to the existing asphalt for play activities.

Several significant trees have been identified on site. Specimens found in the main courtyard currently present issues with exposed roots. To ensure the protection of these trees and remove hazards, the design suggests elevated decking surrounding significant existing trees providing students with passive outdoor spaces benefiting from the canopy cover above.

A designated Yarning Circle has been proposed further building on the site’s connection to Country. There is an opportunity for native replenishment planting surrounding this area with species selected for their cultural significance.

Texturally the landscape is sympathetic to the site and inspired by the indigenous recognition of sandstone meeting the sea. Sandstone seating walls and terracing will be used in the new landscape with reclaimed timber from fallen trees to be incorporated throughout the design. A harmonious combination of existing surfaces, gravel, synthetic turf timber and sandstone will be highlighted throughout the school creating a material palette that is conscious of heat island mitigation. The planting character suggests a mix of flowering native plant species Inspired by cultural values of the site contributing to canopy cover and further reduction of urban heat island mitigation.

The overall design aims to create a layered landscape that connects the students to the cultural and environmental values of the site. Provides adequate shade and amenity, whilst proving a series of outdoor learning spaces which provide passive and active amenity.



DESIGN THEMES

1. Develop existing outdoor learning

Create new learning environments associated with the new building
2. Interact with nature

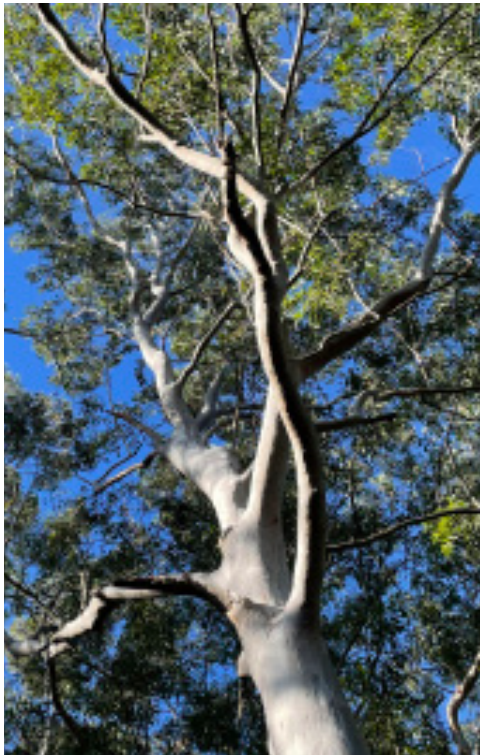
Create design outcomes which connect people with nature
3. Culture

Curate site specific art to stimulate the mind and spirit
4. Foster a sense of Community

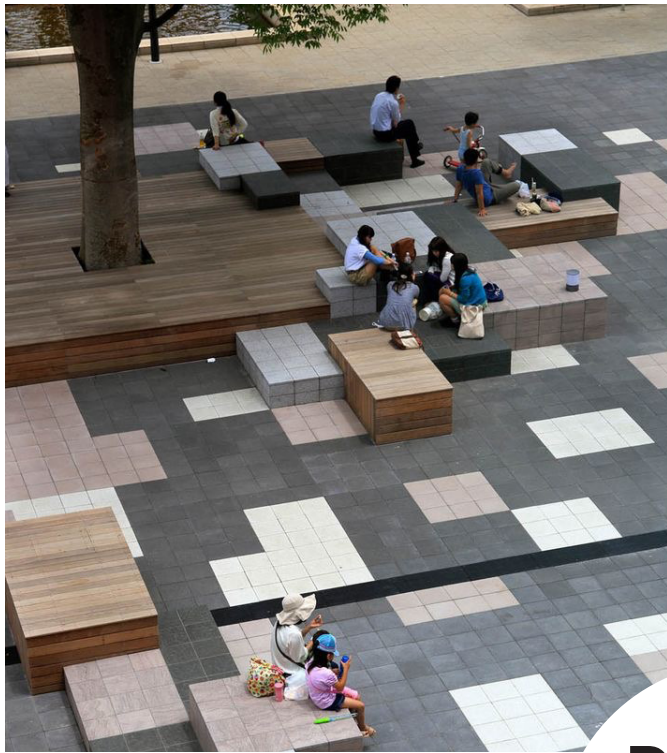
Consult with all community to develop human scaled spaces for rest and to encourage learning
5. A Site specific expression

Create a respectful and meaningful landscape in response to the Country of the place
6. Respect the heritage of the place

Respect and restore existing heritage and environmental values of the place



DESIGN PRECEDENCES



Interact with nature



Respect the heritage of the place



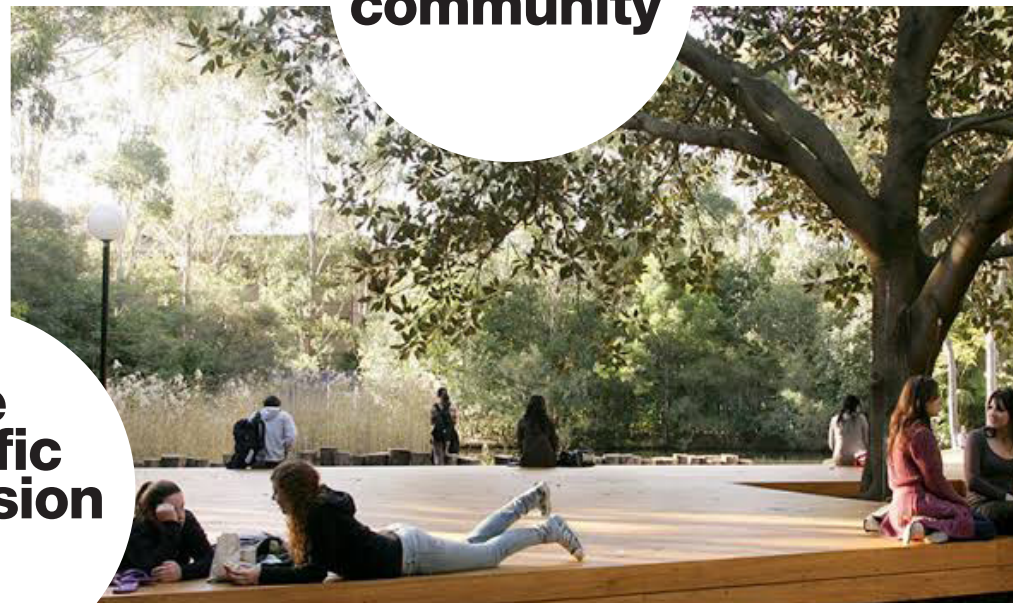
Culture



Develop existing outdoor learning



Site specific expression



Foster a sense of community



LANDSCAPE MASTERPLAN



LEGEND

- 01

NEW MULTIPURPOSE HALL
- 02

NEW COVERED OUTDOOR LEARNING AREA (COLA)
- 03

NEW ADMINISTRATION, LIBRARY AND CLASSROOM FACILITIES
- 04

NEW FORMALISED ACCESSIBLE ENTRY WITH FEATURE PAVING INLAYS
- 05

BLOCK SEATING ELEMENTS OF VARIED SIZES
- 06

YARNING CIRCLE WITH TREE REPLENISHMENT PLANTING
- 07

IDENTIFIED SIGNIFICANT TREE (TREE 16) RETAINED AND PROTECTED
- 08

NEW PEDESTRIAN CONNECTION TO BUILDING G
- 09

EXISTING BITUMEN SURFACE TREATED WITH APPLIED ACRYLIC FINISH
- 10

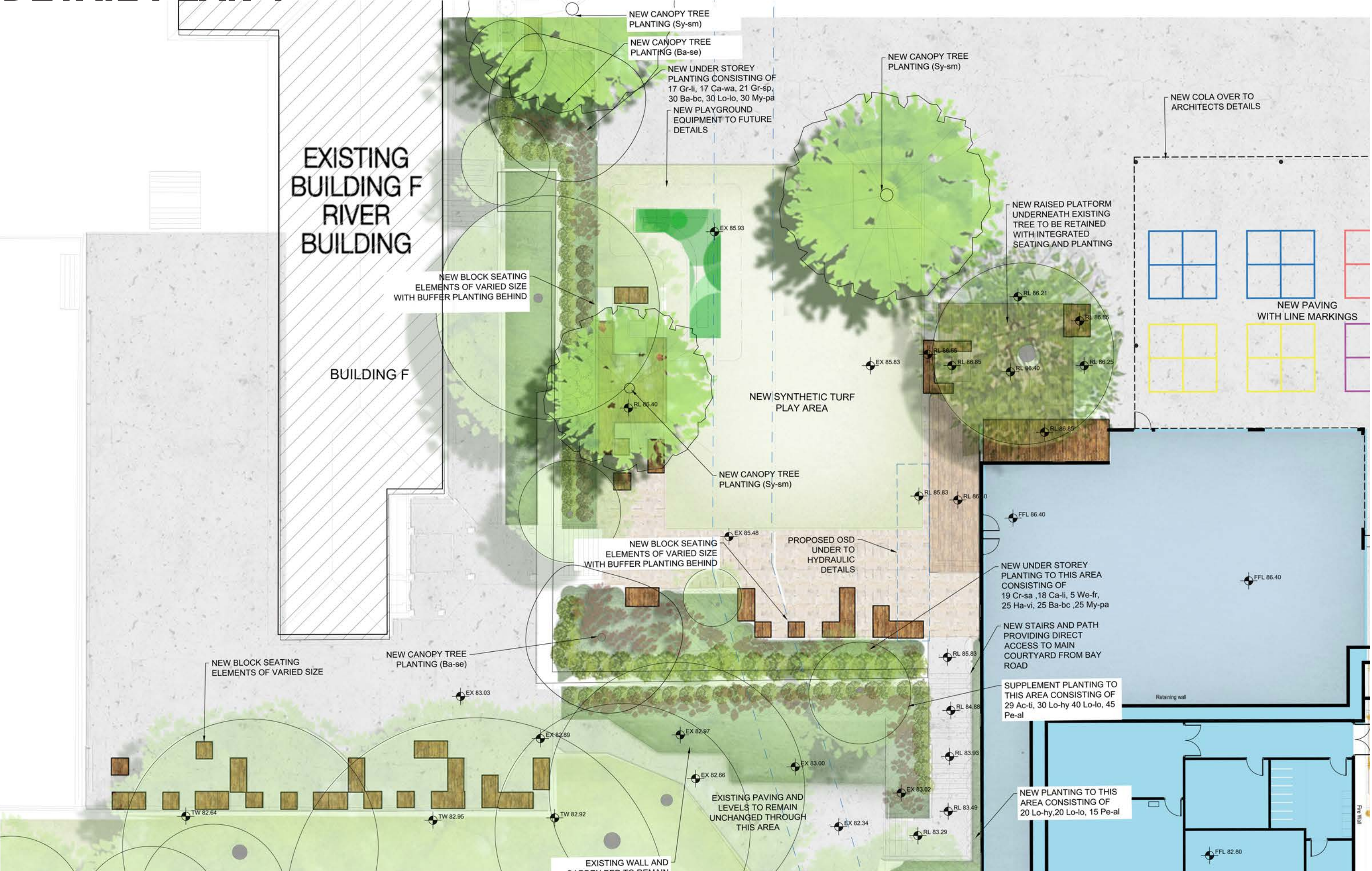
EXISTING HERITAGE ENTRY GATE AND FENCE RETAINED WITH NEW PLANTING TO BAY ROAD FRONTAGE
- 11

TERRACED CONNECTION BETWEEN LOWER GROUND LEVEL AND EXISTING SYNTHETIC TURF PLAY AREA
- 12

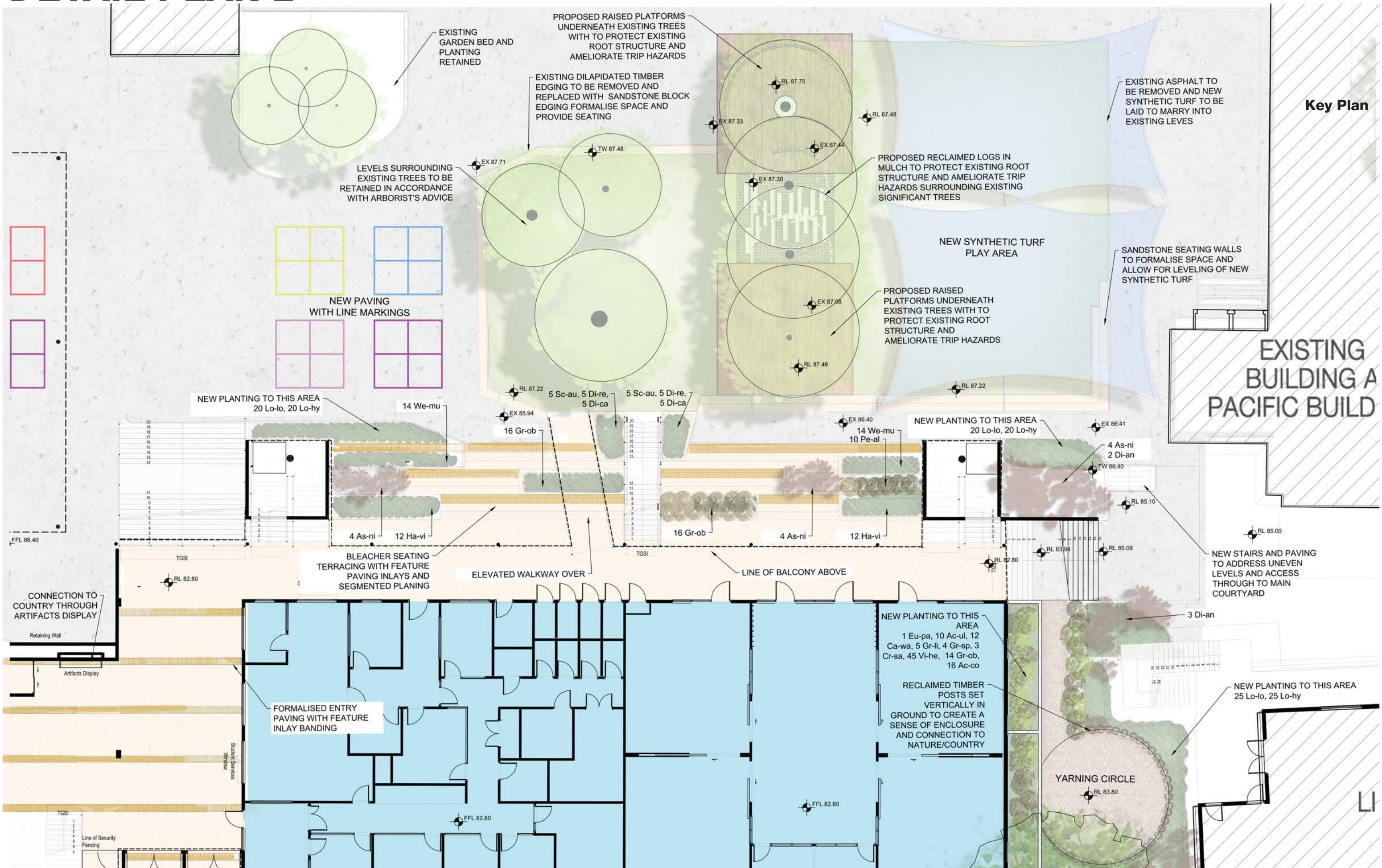
NEW FIXED PLAY AND ARTIFICIAL TURF AREAS
- 13

NEW COVERED BICYCLE PARKING AREA (55 BIKES)

DETAIL PLAN 1



DETAIL PLAN 2



DETAIL PLAN 3

NEW STAIRS AND PATH PROVIDING DIRECT ACCESS TO MAIN COURTYARD FROM BAY ROAD

SUPPLEMENT PLANTING TO THIS AREA CONSISTING OF 29 Ac-ti, 30 Lo-hy 40 Lo-lo, 45 Pe-al

NEW ENTRY SEATING AREA DURING SCHOOL DROP/OFF PICK/UP

NEW NATIVE SHADE TOLERANT PLANTING CONSISTING OF 4 As-ni, 20 Bl-nu

NEW NATIVE TREE AND SUPPLEMENT GROUNDCOVER PLANTING CONSISTING OF 1 An-hi, 13 Di-an, 4 Ku-am, 3 Ba-er, 10 We-mu, 15 Ac-co, 30 Di-re, 20 Di-ca

NEW PLANTING TO THIS AREA CONSISTING OF 20 Lo-hy, 20 Lo-lo, 15 Pe-al

NEW PLANTING TO THIS AREA 20 Lo-lo, 20 Lo-hy

14 We-mu

4 As-ni 12 Ha-vi

BLEACHER SEATING TERRACING WITH FEATURE PAVING INLAIS AND SEGMENTED PLANING

ELEVATED WALKWAY OVER

LINE OF BALCONY ABOVE

FORMALISED ENTRY PAVING WITH FEATURE INLAY BANDING

NEW NATIVE TREE AND SUPPLEMENT GROUNDCOVER PLANTING CONSISTING OF 1 Eu-ra, 2 Ca-se, 1 Eu-pa, 1 Po-fe, 6 Di-an, 15 Ku-am, 8 Ba-ro, 12 Ac-ul, 28 We-mu, 18 Ac-co, 20 Di-re, 20 Di-ca, 20 Pe-al

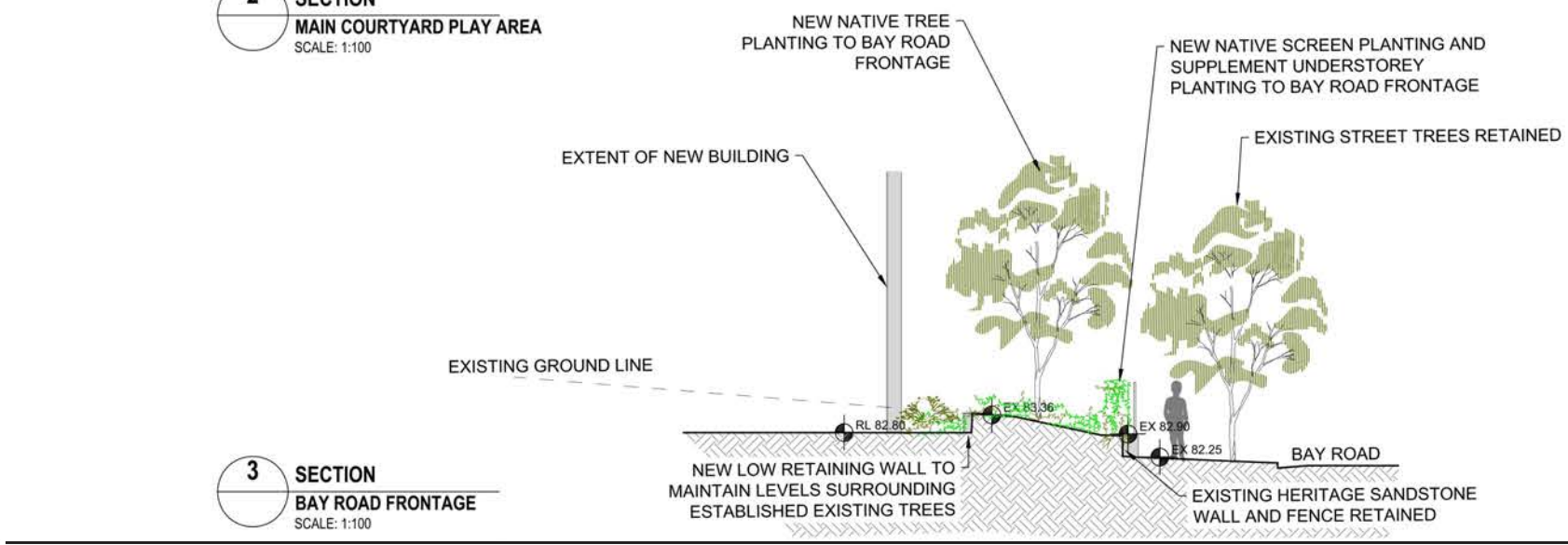
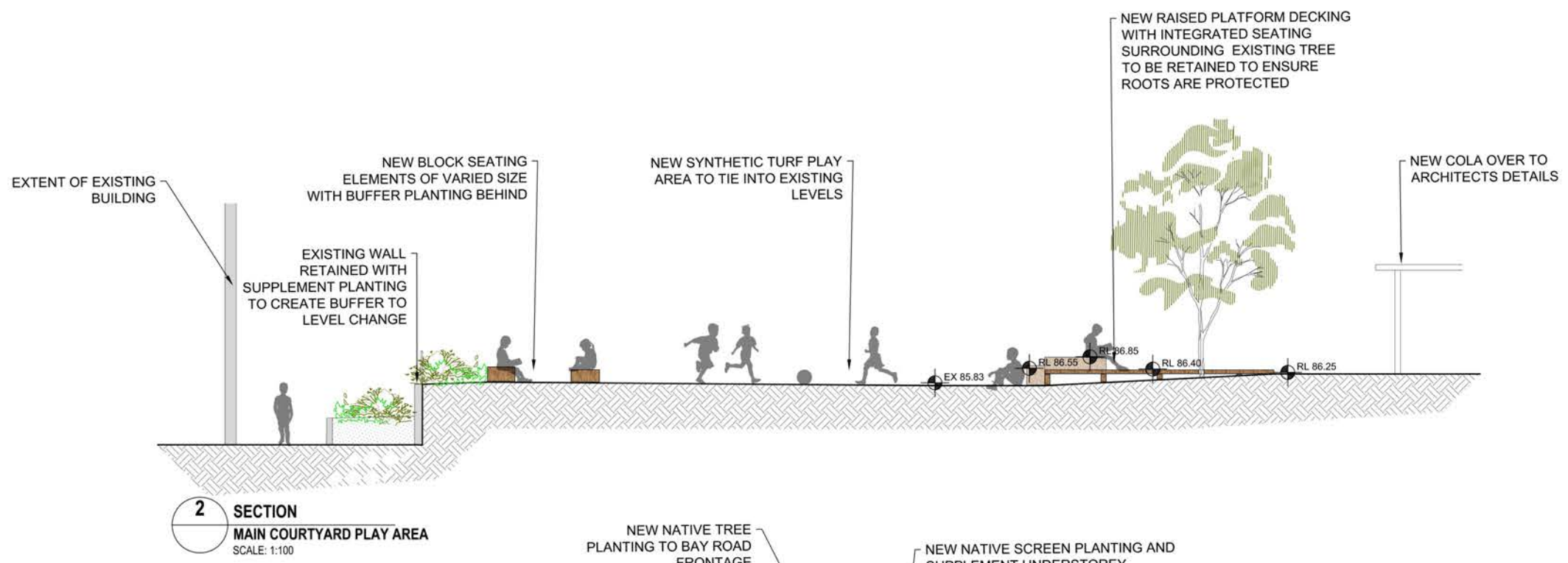
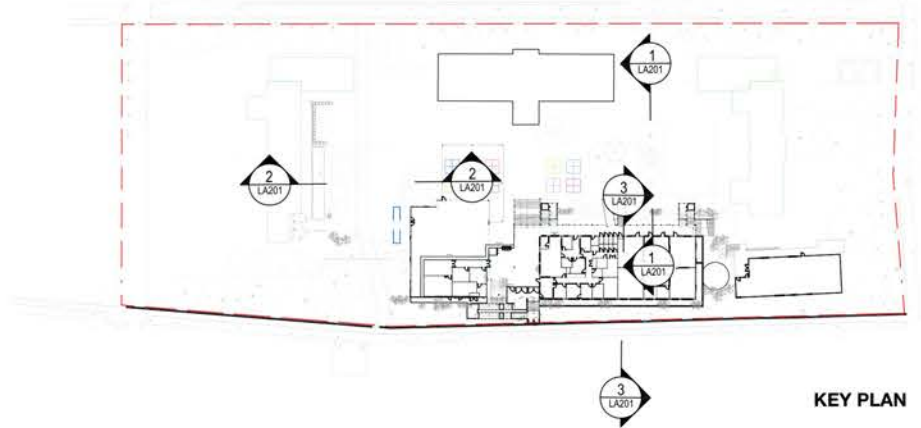
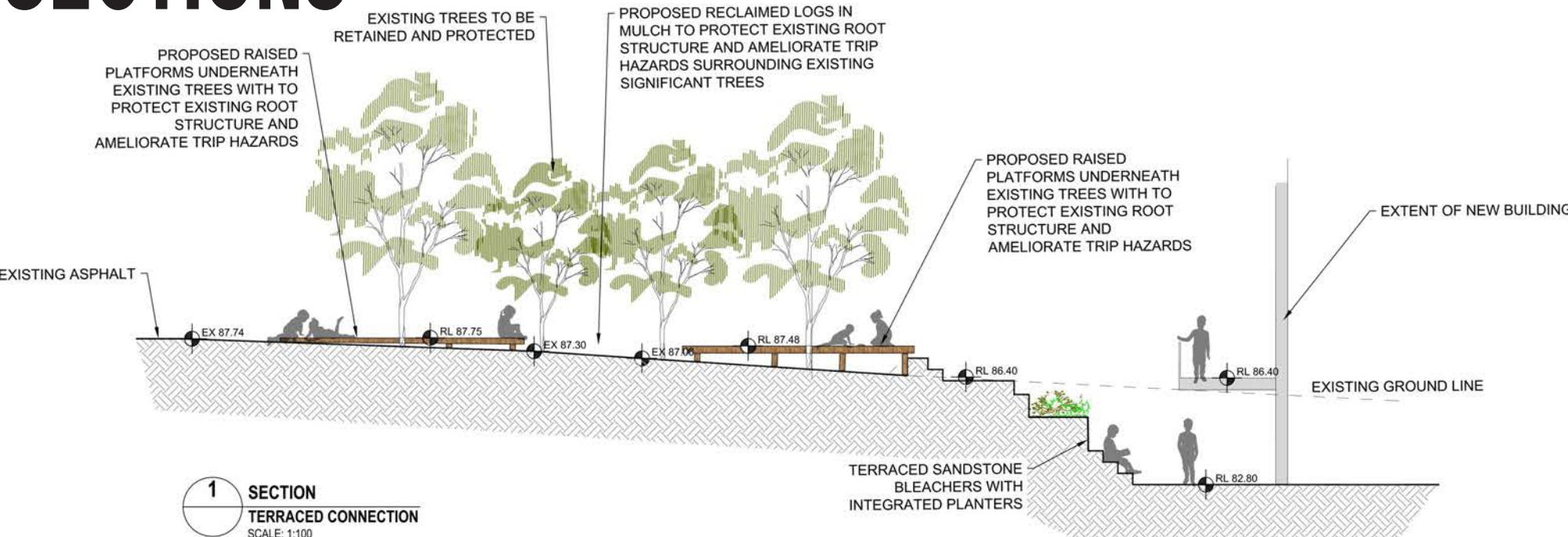
EXISTING FENCE AND LOW WALL RETAINED WITH NEW NATIVE HEDGING (Sy-ca) TO FENCELINE

NEW ACCESSIBLE ENTRY FROM BAY ROAD WITH NEW SECURE GATES

EXISTING FENCE AND LOW WALL RETAINED WITH NEW NATIVE HEDGING (Sy-ca) TO FENCELINE

BAY ROAD

SECTIONS



PLANTING PALATE

PLANTING CHARACTER

THE PROPOSED PLANTING CHARACTER FOR THE SITE AIMS TO MAINTAIN CONSISTENCY WITH THE LOCAL CHARACTER OF NORTH SYDNEY LGA.

A MIX OF FLOWERING NATIVE PLANT SPECIES HAVE BEEN SELECTED TO CORRESPOND TO THE EXISTING VEGETATION ACROSS THE SITE.

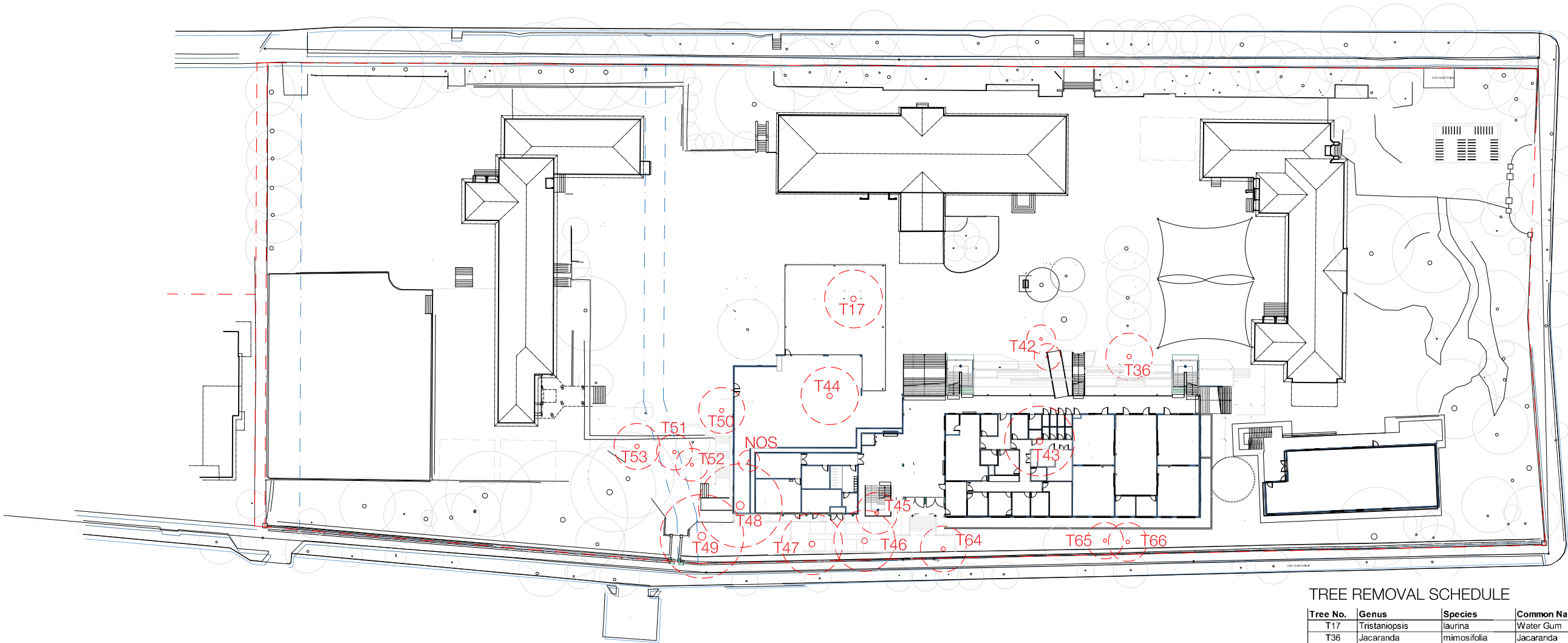
PLANT SELECTIONS ARE SYMPATHETIC TO THE SITE'S ENVIRONMENTAL CONDITIONS, ENSURING THAT PLANT SPECIES OFFER HARDINESS TO ENSURE LONGEVITY.

PLANT SCHEDULE

	BOTANICAL NAME	COMMON NAME	HEIGHT (m)	SIZE	Qty
TREES					
An-hi	<i>Angophora hispida</i>	Dwarf Apple	2-4m	100L	3
Ba-in	<i>Banksia integrifolia</i>	Coastal Banksia	6	100L	2
Ba-se	<i>Banksia Serrata</i>	Old Man Banksi	8m	100L	2
Ca-se	<i>Callicoma serratifolia</i>	Black Wattle	4m	100L	3
Ce-gu	<i>Ceratopetalum gummiferum</i>	NSW Christmas Bush	3m	100L	2
Eu-pa	<i>Eucalyptus paniculata</i>	Grey Iron Bark	20m	100L	3
Eu-ra	<i>Eucalyptus racemosa</i>	Scribbly Gum	12m	100L	1
Po-fe	<i>Pomaderris ferruginea</i>	Rusty Pomaderris	4m	100L	1
Sy-sm	<i>Syzygium smithii</i>	Lilly Pilly	12m	100L	3
SHRUBS					
Ac-ul	<i>Acacia ulicifolia</i>	Prickly Moses	1m	300mm	22
Ac-ti	<i>Acmena smithii 'Red Tip'</i>	Lilly Pilly	2	300mm	29
As-ni	<i>Asplenium Nidus</i>	Birds Nest Fern	1.2	45L	16
Ba-er	<i>Banksia ericifolia</i>	Heath Banksia	2m	300mm	3
Ba-ro	<i>Banksia robur</i>	Swamp Banksia	2m	300mm	8
Ca-li	<i>Callistemon linearis</i>	Narrow-leaved Bottlebrush	1.5m	300mm	18
Ca-wa	<i>Callistemon 'White ANZAC'</i>	Bottlebrush	1m	300mm	29
Cr-sa	<i>Crowea saligna</i>	Pink Crowea	1m	300mm	21
Di-an	<i>Diksonia antarctica</i>	Wolly tree fern	2	75L	24
Gr-li	<i>Grevillea linearifolia</i>	White Spider Flower	2m	300mm	22
Gr-sp	<i>Grevillea speciosa</i>	Red Spider Flower	2m	300mm	25
Ku-am	<i>Kunzea ambigua</i>	Tick Bush	1m	300mm	19
Pu-da	<i>Pultenaea daphnoides</i>	Large-leaf Bush-pea	2m	300mm	14
Sy-Ca	<i>Syzygium Cascade</i>	Lilly Pilly	2m	300mm	167
We-fr	<i>Westringia fruticosa</i>	Coastal Rosemary	1.5m	300mm	5
GROUNDCOVERS					
Ac-co	<i>Acacia cognata</i>	Dwarf acacia	0.5	150mm	49
Ba-bc	<i>Banksia 'Birthday Candles'</i>	Prostrate Banksia	0.5	150mm	55
Bl-nu	<i>Blechnum nudum</i>	Blechnum	0.75	150mm	20
Di-ca	<i>Dianella caerulea</i>	Blue Flax Lily	0.75	150mm	50
Di-re	<i>Dianella revoluta</i>	Flax Lily	0.75	150mm	60
Gr-ob	<i>Grevillea obtusifolia</i>	Prostrate Grevillea	0.3	150mm	46
Ha-vi	<i>Hardenbergia violacea</i>	False Sasparilla	0.3	150mm	49
Lo-hy	<i>Lomandra hystrix</i>	Matt Rush	0.5	150mm	115
Lo-lo	<i>Lomandra longifolia</i>	Fine-leaved Matt Rush	0.5	150mm	155
My-pa	<i>Myoporum parvifolium 'Yareena'</i>	Creeping Boobialla	0.15	150mm	55
Pe-al	<i>Pennisetum alopecuroides 'Nafray'</i>	Swamp Foxtail	1	150mm	90
Sc-au	<i>Scaevola 'Aussie Salute'</i>	Fan Flower	0.3	150mm	10
Vi-he	<i>Viola hederacea</i>	Native Violet	0.3	150mm	45
We-mu	<i>Westringia 'Mundi'</i>	Prostrate Coast Rosemary	0.5	150mm	66



TREE REMOVAL/RETENTION



TREE REMOVAL SCHEDULE

Tree No.	Genus	Species	Common Name	Height	Spread	Significance	Removed
T17	Tristaniopsis	laurina	Water Gum	12	13	Medium	Y
T36	Jacaranda	mimosifolia	Jacaranda	9	10	Low - Medium	Y
T42	Lophostemon	confertus	Brush Box	10	3	Low	Y
T43	Eucalyptus	paniculata	Grey Ironbark	21	13	Medium - High	Y
T44	Eucalyptus	punctata	Grey Gum	15	7	Low - Medium	Y
T45	Liquidambar	styraciflua	Sweet Gum	12	6	Low - Medium	Y
T46	Eucalyptus	nicholii	Narrow-leaved Black Peppermint	11	8	Low	Y
T47	Eucalyptus	camaldulensis	River Red Gum	16	9	Medium	Y
T48	Melia	azedarach	White Cedar	10	13	Low - Medium	Y
T49	Pinus	radiata	Radiata Pine	18	11	Low	Y
T50	Syzygium	oleosum	Blue Cherry	11	5	Medium	Y
T51	Celtis	australis	European Nettle Tree	10	5	Low	Y
T52	Casuarina	cunninghamiana	River Sheoak	12	4	Low	Y
T53	Celtis	australis	Hackberry	10	8	Low	Y
T64	Erythrina	x sykesii	Indian Coral Tree	8	8	Low	Y
T65	Lagerstroemia	indica	Crepe Myrtle	6	6	Low	Y
T66	Schefflera	actinophylla	Umbrella Tree	7	7	Low	Y

*NOS refers to trees for removal which are not included in the arborist report.
Tree information as per arborist report prepared by Arboreport Vegetation Management consultants prepared August 2021.

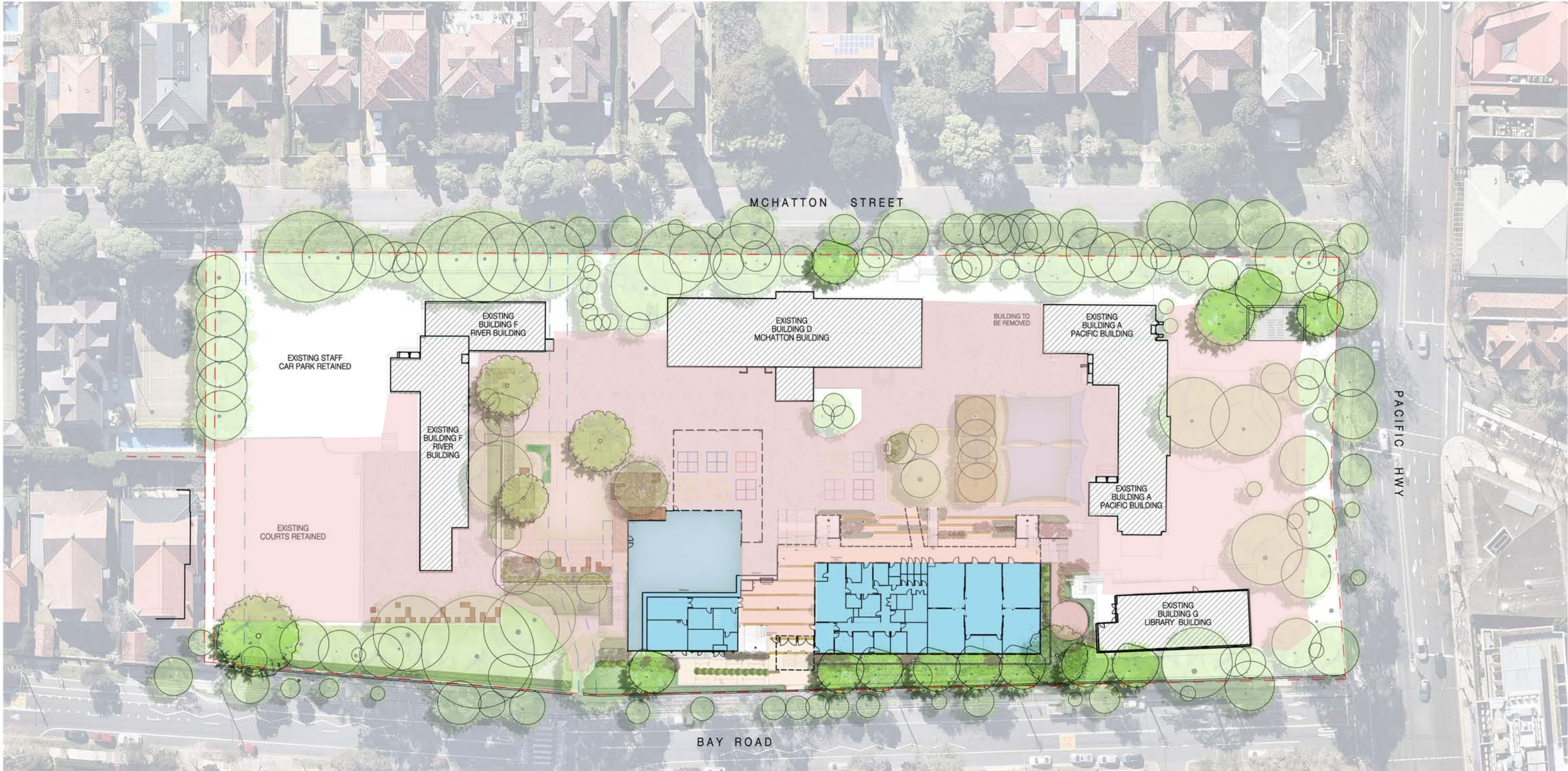
PROPOSED TREE CANOPY



Proposed Canopy Calculations

Site Area	19,348m ²
Existing Tree canopy	6,251m ²
Existing Canopy Cover	32%
Proposed Tree canopy	6,360m ²
Proposed Canopy Cover	33%

PROPOSED PLAY SPACE



Legend

--- Site Area 19,348m²



Active/Passive Play 9,527m²

Existing Area Calculations

Site Area	19,348m ²
Target Student No.	1012
Total Play Space before development	8,214m ²
Total Play Space after development	9,527m²
1012 Students	9.41m ² /ea