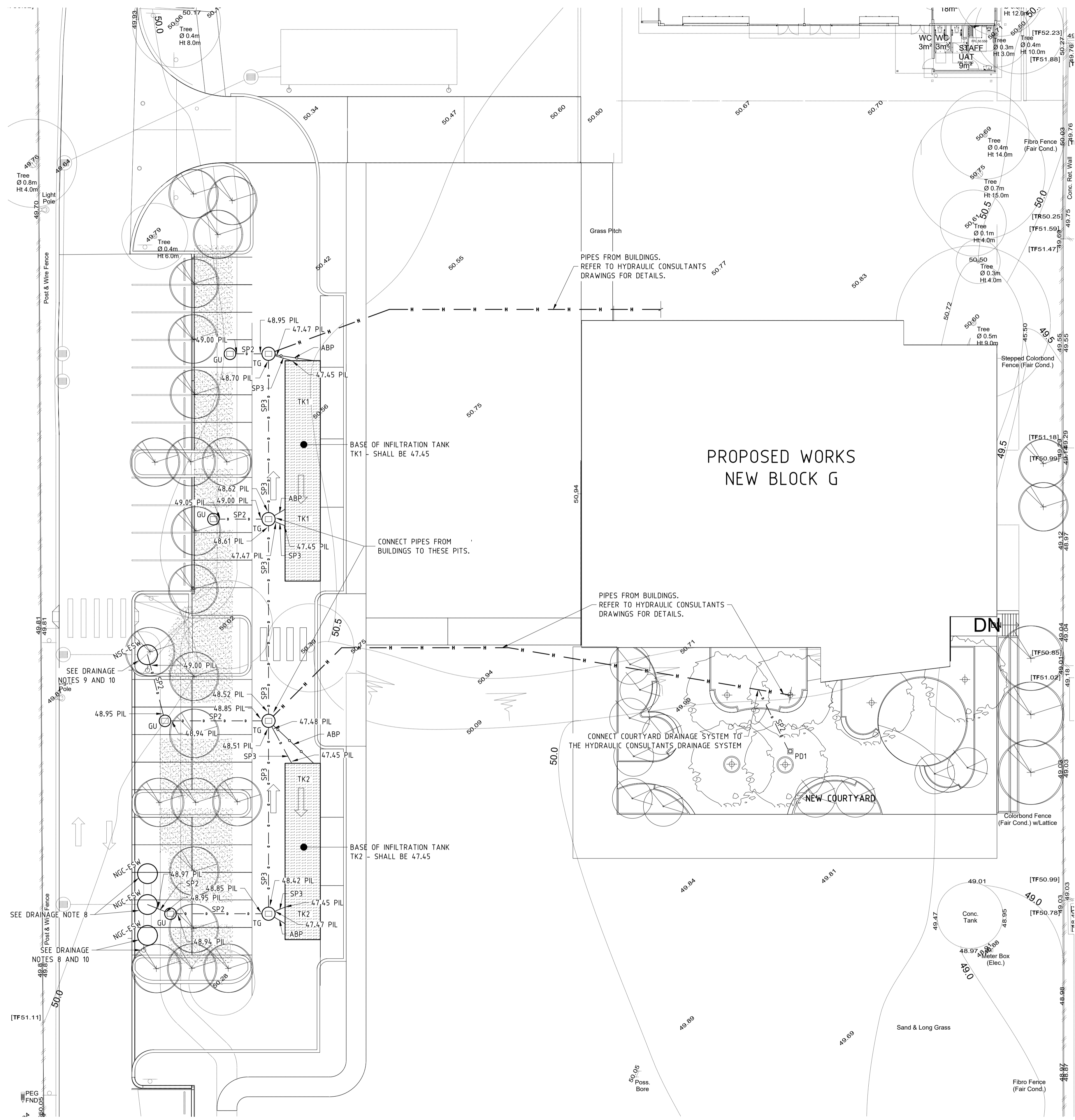




DIAL 1100
BEFORE YOU DIG



LEGEND

HATCHING LEGEND

NEW STRUCTURAL SOIL

DRAINAGE LEGEND

TK1 NEW STORMWATER INFILTRATION TANK

SW1 SOAKWELL - GRATED COVER
1.8m Ø x DEPTH TO SUIT PIPES
AND BAFFLE AS REQUIRED

GU GULLY PIT - GRATED COVER

TG TRAPPED GULLY PIT
GRATED COVER

ABG NEW AIR BREATHER GRATE

PD1 PAVEMENT PIT
REFER TO DETAILS

NGC-ESW NEW GRATED COVER FOR EXISTING SOAKWELL
SEE DRAINAGE NOTE 8

NSC-ESW NEW SOLID COVER FOR EXISTING SOAKWELL
SEE DRAINAGE NOTE 9

ABP/ABP2 NEW AIR BREATHER PIPE
TO BE SP1 REFER TO DETAILS

NEW DRAINAGE PIPE
REFER DRAINAGE NOTE 4 FOR PIPE COVER

PIPES FROM BUILDINGS
REFER TO HYDRAULIC DRAWINGS

SP1 PVC DRAINAGE PIPE
100Ø 1:100 GRADE

SP2 PVC DRAINAGE PIPE
150Ø 1:100 GRADE

SP3 PVC DRAINAGE PIPE
225Ø 1:200 GRADE

PIL NEW PIPE INVERT LEVEL

PROPOSED WORKS
NEW BLOCK G

NEW CARPARK - CENTRAL SITE

SCALE 1:200

C	CP	07.03.24	GENERALLY REVISED
B	CP	25.01.24	PRELIMINARY ISSUE
A	CP	20.10.23	PRELIMINARY ISSUE
ISS BY	DATE	DESCRIPTION	

THIS DRAWING IS FOR STRUCTURAL INFORMATION ONLY AND SHOULD NOT BE USED FOR DIMENSIONING. REFER TO THE ARCHITECT'S DRAWINGS FOR ALL SETOUT AND DIMENSIONS.

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CLIENT

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JOB
NEW BUILDING - BLOCK G
ADVENTIST CHRISTIAN SCHOOLS (WA)
LANDSDALE

TITLE
CIVIL SITE PLAN
PROPOSED BUILDING SITE
STORMWATER DRAINAGE WORKS

SCALES
AS SHOWN

DRAWN	DATE	CHECKED	DATE
sqn C.PURNELL	00-00-2019	sqn M.KUSTR	
DESIGNED	DATE	DIRECTOR	DATE
sqn M.KUSTR		sqn	

IN THE ABSENCE OF THE DIRECTORS SIGNATURE THIS DRAWING SHALL BE TREATED AS PRELIMINARY.

JOB NUMBER	DRAWING NUMBER	ISSUE NO.
23182	C-02	C

SCALES 1:100 0 2000 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 26000 28000 30000

LANDSCAPE ARCHITECTURE

-
**LANDSDALE CHRISTIAN
SCHOOL**
-

77 Queensway Rd, Landsdale

ISSUE SUMMARY

[240301_DA Report](#)

240202_Concept Presentation to Client

231106_Interim Concept Design

CARRIER AND POSTMUS ARCHITECTS (CAPA STUDIO)

LANDSCAPE ARCHITECTURE

CONNECTED - CRAFTED - CONSIDERED



**LANDSDALE
CHRISTIAN SCHOOL**

Client



MATTHEWS & SCAVALLI
ARCHITECTS

Architecture

**CAPA
STUDIO**

Landscape Architecture

LANDSCAPE INTRODUCTION



A considered and integrated landscape and architectural approach can provide great benefit for the school community in assessing current stock and in envisaging new futures.

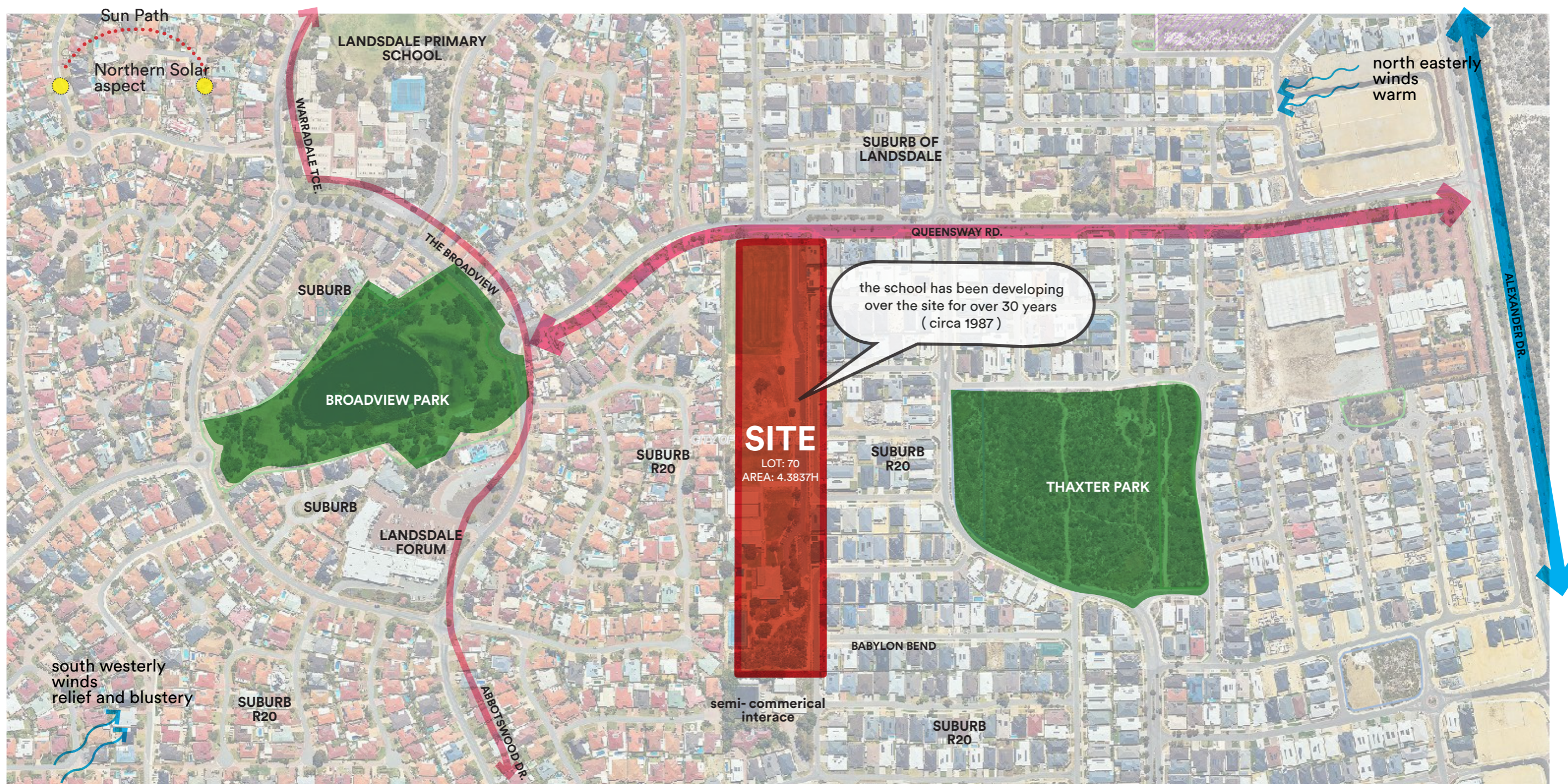
The landscape amenities can be an important asset for the school community. They provide a physical identity for the school, and important interface with the local community, opportunities for physical and passive recreation engagement for the students and a valuable natural asset for education.

The landscape design proposal has been developed hand in hand with the architect. Carpark spaces have been designed as opportunities with water collection in mind, with subterranean structural soil providing an infrastructure for significant tree canopies.

External spaces for the new classrooms are sited adjacent to the oval, with generous northern solar access and shaded tree canopies. Diversity of spaces and functional opportunities have also been provided for students and staff.



crafted spaces and valuing Landsdale's endemic places



The Landsdale Christian school site is located in a tract of land, linear in nature (90 x 470m) and surrounded by single/double storey residential dwellings. With the locale formerly a Banksia Woodland, there are a number of valuable Australian planting specimens that are meritorious for preservation and incorporation in the school landscape strategy. The entry of the school is currently via one entry point the main road to Queensway Rd, with the Administration at the rear of the site.

A new staging of works is bringing the administration into the centre of the site.

SITE ANALYSIS

Existing Areas + Characters

















- ⇄ **KEY ITEMS**
- MEDIUM TREES/BANKSIA
 - PLAYGROUND/NATURE PLAY
 - ADMINISTRATION
 - LARGE TREES
 - SPORTS COURTS
 - EARLY LEARNING/PRE-PRIMARY
 - LARGE SIGNIFICANT TREES
 - LAWN AREAS
 - PRIMARY SCHOOL
 - BANKSIA WOODLAND AREA
 - SPORTS OVAL
 - HIGH SCHOOL

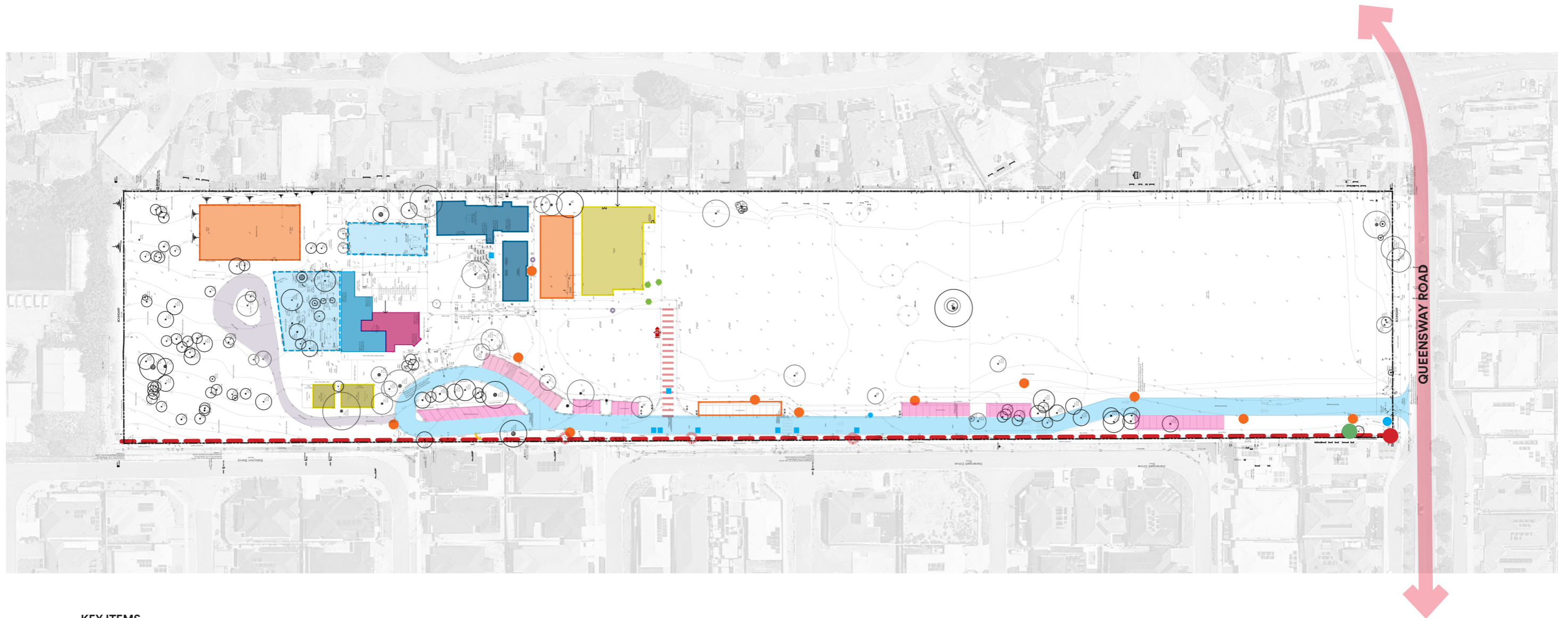




KEY ITEMS

- | | | |
|---|---|--|
|  MAIN ROAD (QUEENSWAY RD.) |  PRIMARY PEDESTRIAN LINK |  ADMINISTRATION |
|  PRIMARY VEHICLE CIRCULATION |  EXISTING PROMENADE_3m WIDE PATH |  EARLY LEARNING/PRE-PRIMARY |
|  FIRE ACCESS |  CLASSROOM LINKS |  PRIMARY SCHOOL |
|  PEDESTRIAN CROSSING |  PLAYGROUND/NATURE PLAY |  HIGH SCHOOL |
|  PEDESTRIAN GATE ACCESS |  SPORTS COURTS | |





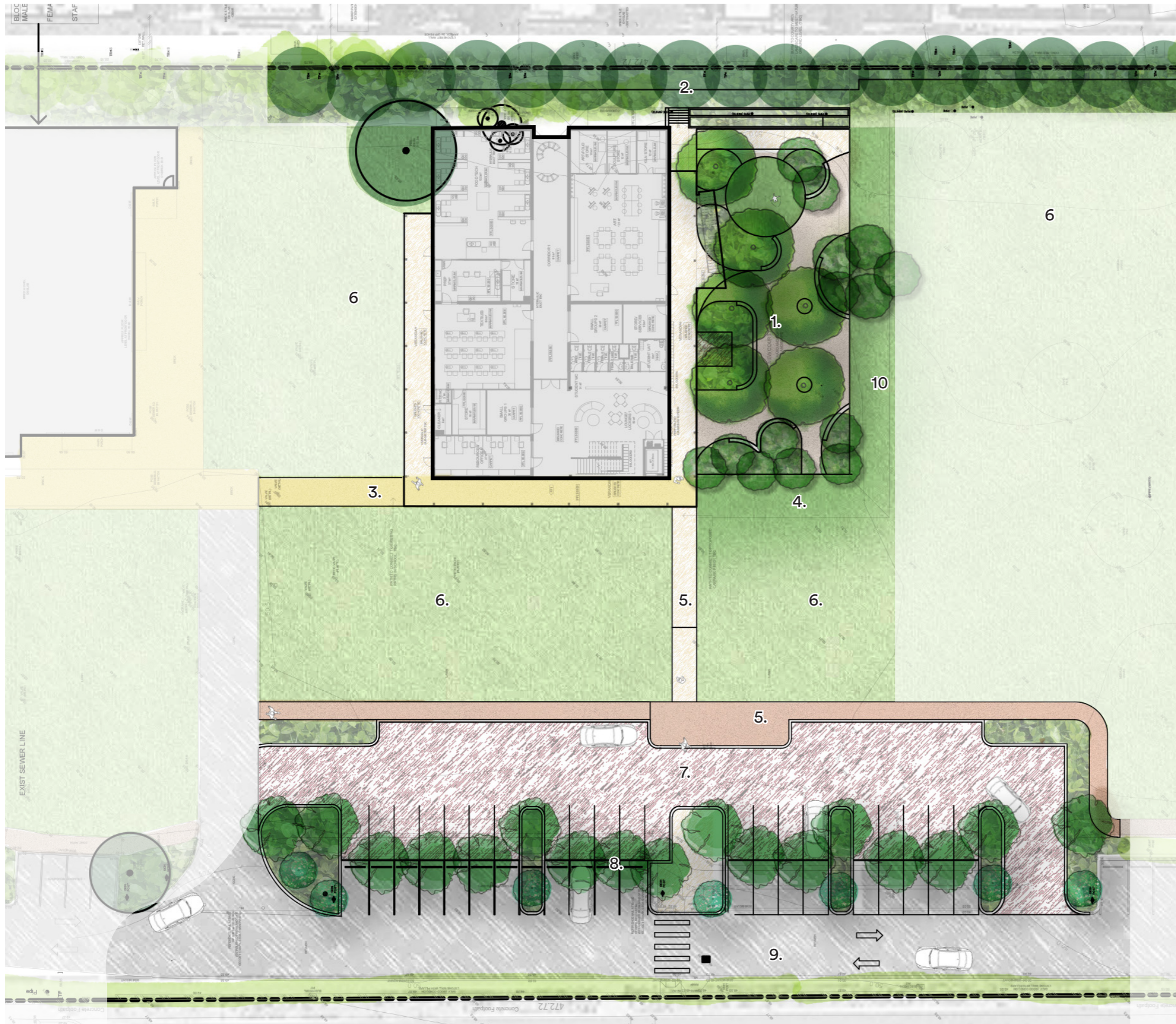
KEY ITEMS

- | | | | | |
|--------------------------------|---------------------|----------------------------|--------------------------|--------------------------|
| UNDERGROUND POWER DISTRIBUTION | FIRE HYDRANT | ADMINISTRATION | FIRE ACCESS | EXISTING PARKING BAYS |
| ELECTRICAL PILLAR | ELECTRICAL PIT | EARLY LEARNING/PRE-PRIMARY | SEWER HATCHES | PLAYGROUND/NATURE PLAY |
| WATER METER | TELEPHONE LINE | PRIMARY SCHOOL | MANHOLE COVER | SPORTS COURTS |
| LIGHT POLE | STORMWATER DRAINAGE | HIGH SCHOOL | SERVICE VEHICULAR ACCESS | PRIMARY VEHICULAR ACCESS |





LANDSCAPE SITE PLAN



KEY ITEMS

1. **PROPOSED LANDSCAPE TERRACE**
Shade trees surrounded by small flowering feature trees. Refer to Landscape Terrace Plan
2. **LANDSCAPED BOUNDARY**
Small evergreen trees along boundary fence.
3. **CENTRAL PATH**
Primary path connecting proposed area to existing.
4. **GREEN EDGES**
Lawn to edges of new courtyard to connect existing lawn area.
5. **NEW LINKING PATH**
Secondary path connecting car park to courtyard and learning areas.
6. **EXISTING LAWN**
Existing lawn to be retained.
7. **NEW CAR PARK TREE PLANTING**
Proposed new car park. Refer to architectural for materials.
8. **NATIVE PLANTING**
Row of tall native trees with feature small trees to car park garden.
9. **EXISTING DRIVEWAY**
Existing bitumen driveway.
10. **NEW LAWN**



LANDSCAPE PLAN

Courtyard Garden



FEATURE SHADE TREES
Gleditsia triacanthos inermis 'Shademaster'



SMALL FEATURE TREE
Lagerstroemia indica x *L. fauriei* 'Zuni Crepe Myrtle'

KEY ITEMS

1. **TALL HEDGING**
Waterhousea floribunda 'Whisper Weeping Lilly Pilly' (200LT)
2. **NATIVE GARDEN**
 Selection of native planting.
3. **LAWN**
 Circular lawn area.
4. **SHADE TREES**
Gleditsia triacanthos inermis 'Shademaster' (500 lt)
5. **FIXED FURNITURE**
 Integrated shade seating
6. **LOOSE FURNITURE**
 Outdoor lounge and dining furniture.
7. **SMALL FEATURE TREES**
Lagerstroemia indica x *L. fauriei* 'Zuni Crepe Myrtle' (200 LT)
8. **NEW CONCRETE PAVING**
 Earthy hue segmental concrete paving to compliment the existing paving.
9. **NEW PAVING**
 Muted tone concrete paving
10. **EXISTING PAVING**
 Existing segmental paving.



KEY ITEMS

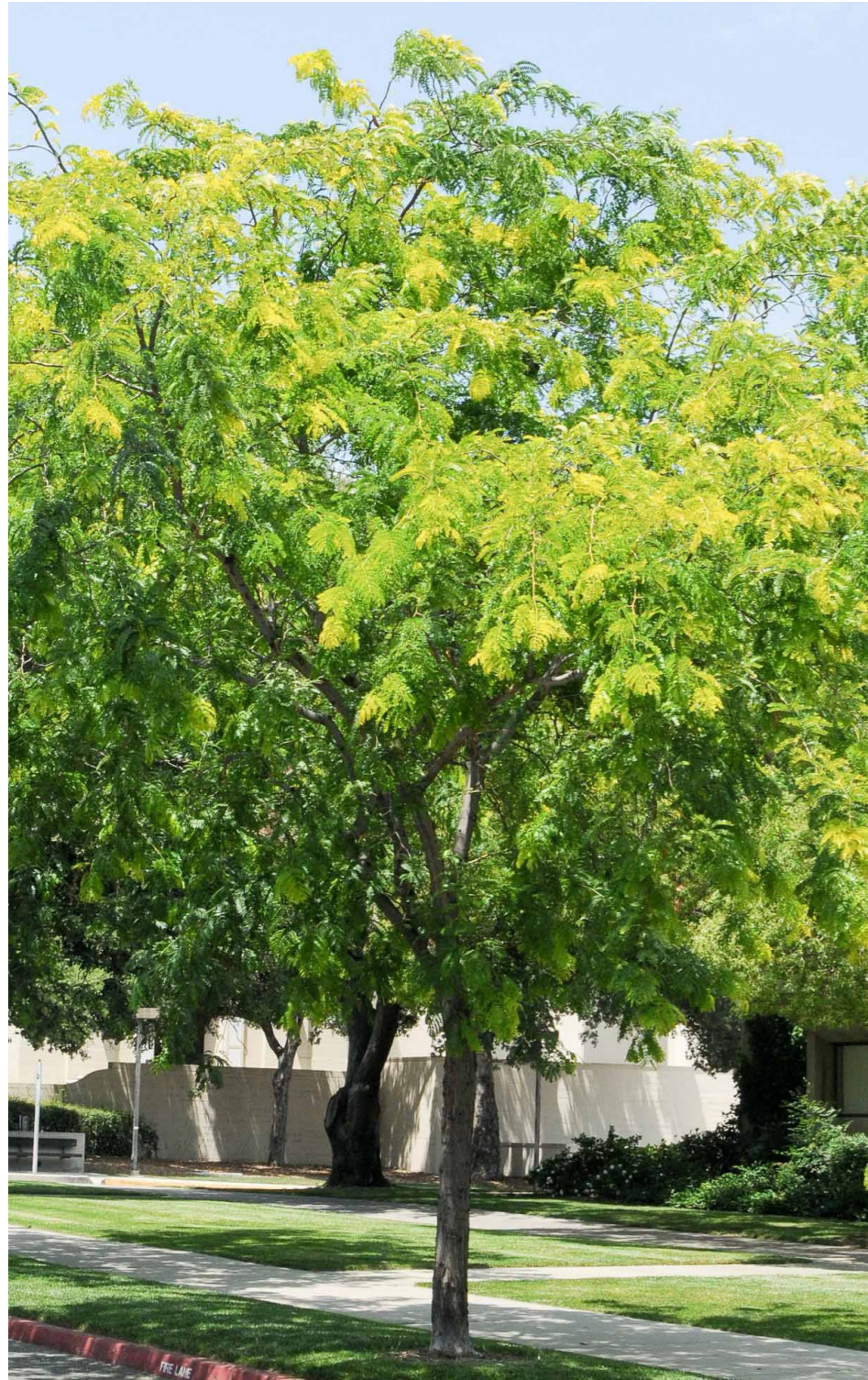
1. **NEW PAVING**
New concrete paving connecting existing pedestrian link.
2. **NEW CAR PARK**
Area to be filled with structural soil underneath paving. Hardscape selection by architects.
3. **LANDSCAPED CROSSING ISLAND**
Safe passage for crossing surrounded by native planting.
4. **TALL NATIVE TREES**
Corymbia maculata 'Spotted Gum' (150lt) set in diamonds with structural soil under carbays.
5. **SMALL FEATURE TREES**
Eucalyptus caesia 'Silver Princess' (150lt)
6. **EXISTING DRIVEWAY**
Existing bitumen driveway
7. **NEW CARPARKING**
Refer to arch dwgs
8. **EXISTING FIRE ACCESS**
Entry to new car park connecting to existing fire access.



SMALL FEATURE TREE
Corymbia maculata 'Spotted Gum'



SMALL FEATURE TREE
Eucalyptus caesia 'Silver Princess'



Landscape Terrace Trees

FEATURE SHADE TREES
 Gleditsia triacanthos 'Shademaster'
 12m h x 7m w
 500 lt stock



SMALL FEATURE TREES
 Lagerstroemia indica x L. fauriei 'Zuni Crepe Myrtle'
 4m h x 3m w
 200 lt stock



Terrace Plantings

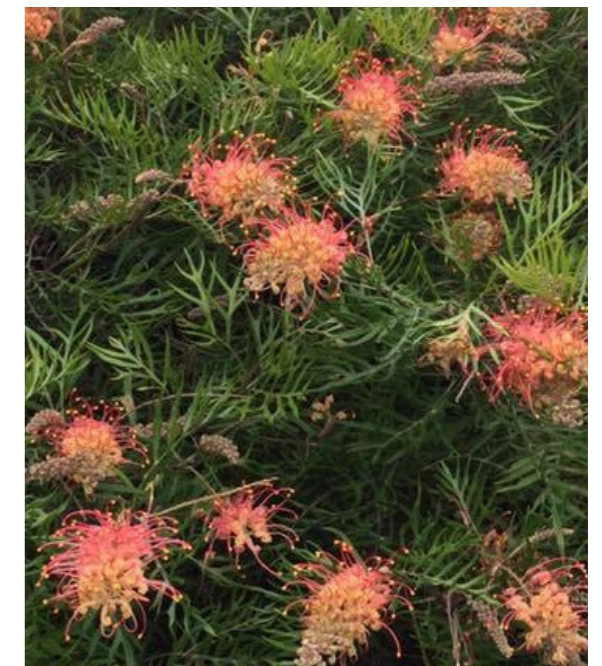
FEATURE SHADE PLANTS
 Philodendron xanadu, Aspidistra elatior 'Cast iron plant' (4 per m2)



GROUND PLANTING
 Lomandra 'tanika' + Lomandra 'lime tuff' mix
 70cm h x 60cm w (4 per m2)



CONTRAST PLANTING
 Olearia axillaris 'Little Smokie' + Westringia sp.
 1m h x 1m w
 2 per m2



FEATURE NATIVE SHRUB
 Grevillea Superb
 2m h x 2m w
 Feature planting



Entry Trees

FEATURE SHADE TREES
Corymbia maculata 'Spotted Gum'
15m h x 8m w
150 lt stock



SMALL FEATURE TREES
Eucalyptus caesia 'Silver Princess'
8m h x 4m w
150 lt stock



ACCENT FEATURE PLANT
Poa labillardieri esdale 'Bluegrass'
60cm h x 45cm w (4 per m2)



FEATURE PLANT
Lomandra 'tanika' + *Lomandra 'lime tuff'* mix
70cm h x 60cm w (4 per m2)



CONTRAST PLANTING
Adenanthos cuneatus 'Coral carpet' +
Westringia sp.
2 per m2)

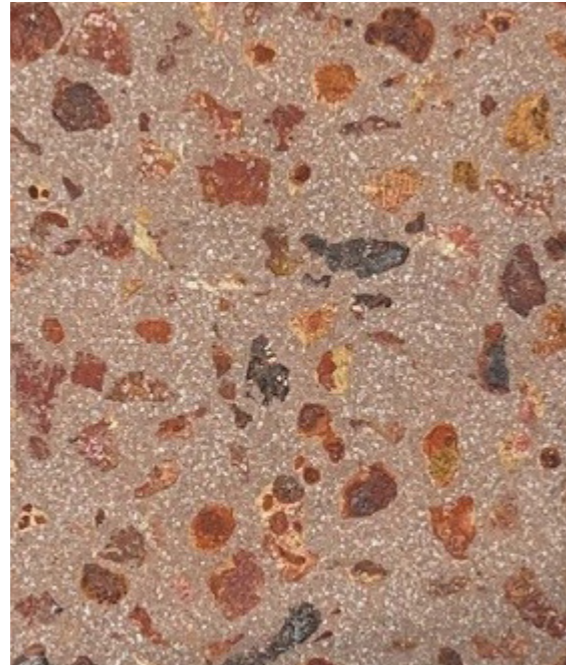


FEATURE PLANT
Banksia menziesii dwarf + *Banksia petiolaris* mix
1.5m h x 1.5m w, 60cm h x 4m w
feature planting

HARDSCAPE PALETTE
_indicative

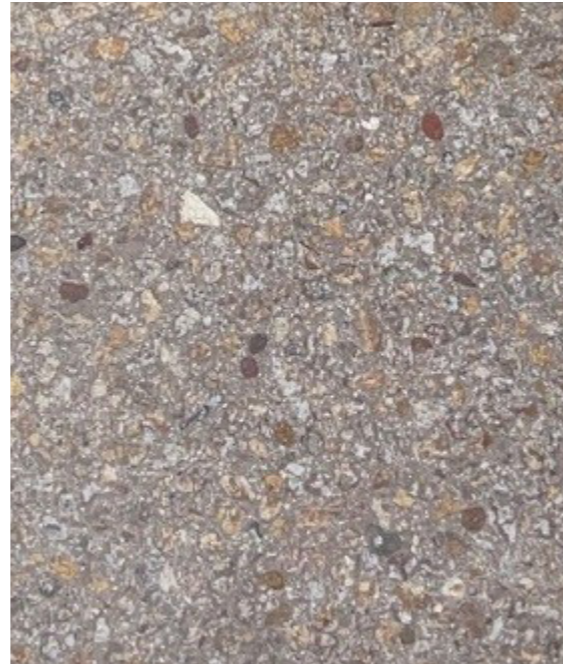


EXISTING PAVERS
Mono-tonal segmental pavers



Terrace Paving

CONCRETE /SEGMENTAL PAVERS
Colour: New Amber
Size: 400 x 300 x 60mm
Finish: Shot blast
Supplier: UrbanStone



CONCRETE /SEGMENTAL PAVERS
Colour: Custom
Size: 400 x 300 x 60mm
Finish: Shot blast
Supplier: UrbanStone



CONCRETE /SEGMENTAL PAVERS
Colour: Custom
Size: 400 x 300 x 60mm
Finish: Shot blast
Supplier: UrbanStone



Brick seats/ low walls

BRICKS
Colour: Nouveau Grey
Size: 230 x 110 x 76mm
Supplier: Midland Brick

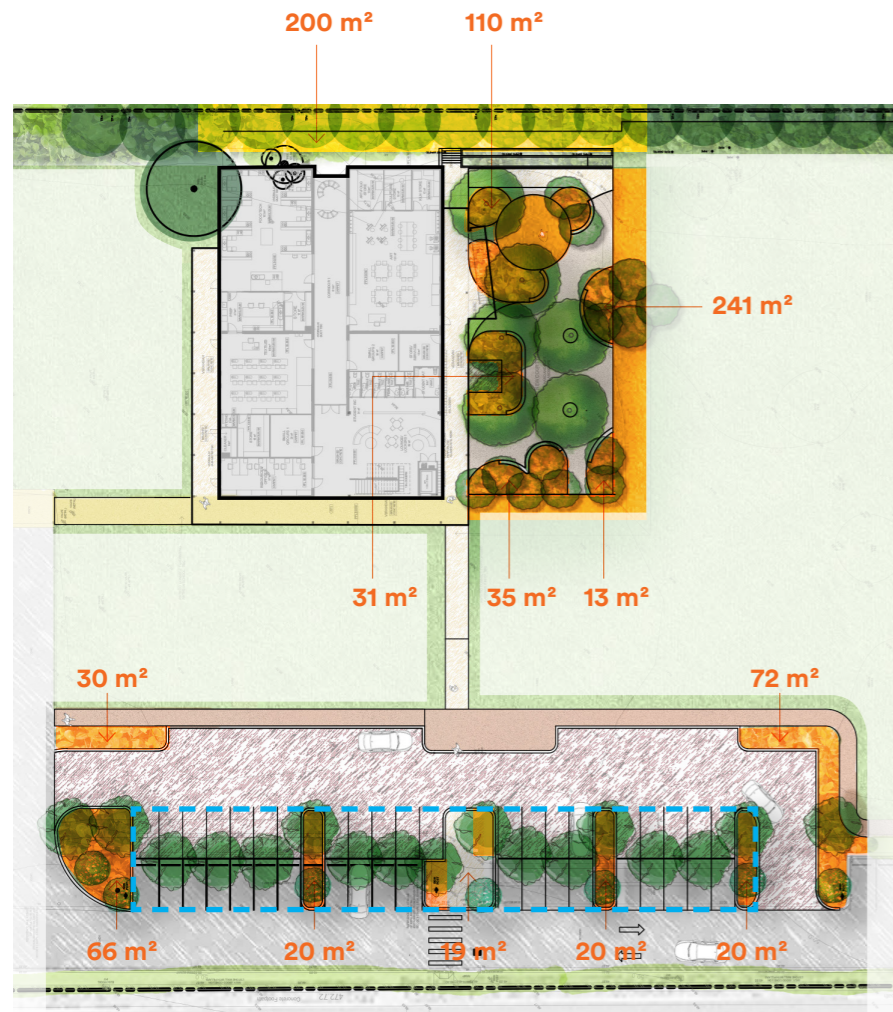


Courtyard Furniture

LINEAR CURVED BENCH
Colour: Bondi Blue
Size: TBC
Supplier: Street Furniture



CAFE TABLE + STOOLS
Colour: TBC
Supplier: Street Furniture



DEEP SOIL ZONES
SCALE: NTS



TREE CANOPY COVERAGE
SCALE: NTS



OVERALL LANDSCAPE SITE PLAN
SCALE: NTS

DEEP SOIL ZONES	
Overall Site Area	43837m ²
Proposed Site Area	approx. 4700 m ²
Proposed Site Deep Soil Zones	877m ²
Structural Soil Zones	945m ²
Landscaping Ratio to proposed site area	18.6%

TREE CANOPY METRIC	
Site Area	43837m ²
Existing Trees	More than 100 existing trees as well as existing banksia woodlands
New Trees	21 small trees 6 medium trees 17 street trees 15 boundary trees
Summary:	Element objective of improving the tree canopy long term will be achieved.

LEGEND

- Small Trees (21 off)
- Medium Trees (6 off)
- Existing Trees (100 +)
- Medium Trees in Structural Soil Zones
- Deep Soil Zones
- Structural Soil Zones to carbays
- Existing Banksia Woodlands
- Boundary Trees (15 +)

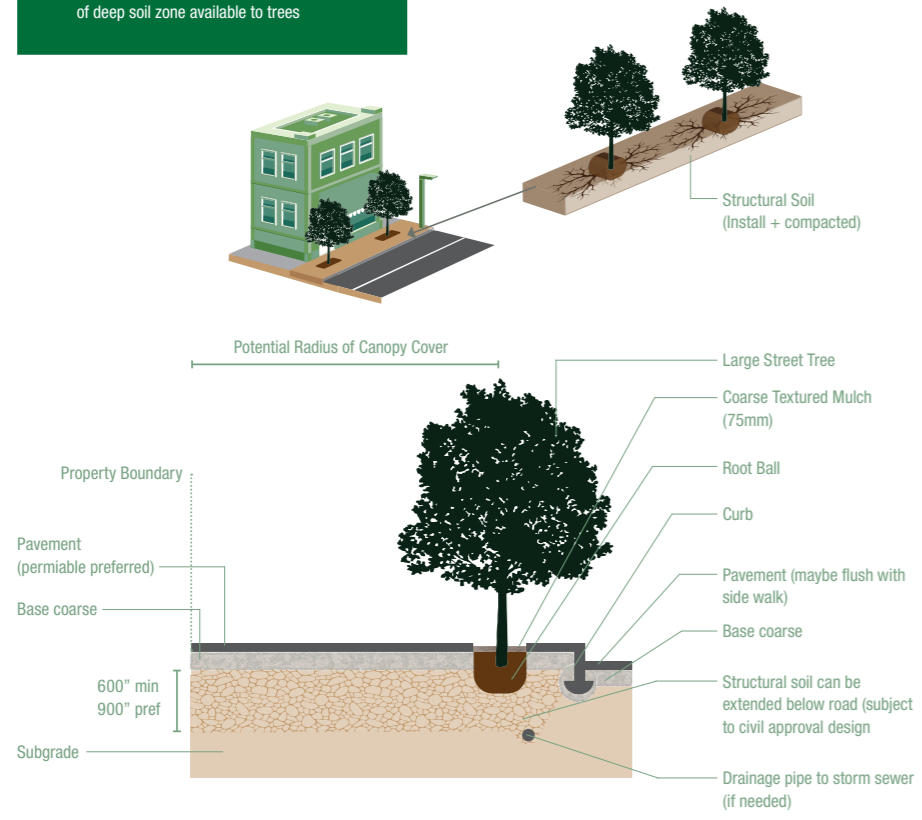
Eclipse Structural Soil is specifically designed to provide a high strength growing medium suitable for large street trees, while providing an engineered surface suitable for paving. The material is a mix of coarse blue metal aggregate, and sandy loam textured soil - Aquamor™ Soil Blend. Once compacted, structural soil is matrix supported, preventing further compaction within the pore spaces ensuring soils remains loose and friable. This allows for tree roots to easily penetrate and minimises ground heaving. Plant available water, drainage and organic matter content are carefully specified to maintain water and nutrient holding capacity within the soil.

- High strength growing medium suitable for large street trees.
- High quality engineering surface suitable for paving.
- Allow for canopy development.
- Resist ground heaving.
- Does not restrict root growth.

ECLIPSE STRUCTURAL SOIL

TYPICAL TREE PLANTING ARRANGEMENT

← A continuous - structural soil base under the entire sidewalk greatly increases the volume of deep soil zone available to trees



LOCAL CASE STUDY: Lake Street, Cannington



LOCAL CASE STUDY: Lake Street, Cannington