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NEW LIVERPOOL PRIMARY SCHOOL

ACKNOWLEDGEMENTS

We would like to acknowledge the traditional custodians of the land, the Darug Nation. We acknowledge that this land was also accessed by peoples of the Dhurawal Nations.

We acknowledge the input of the SINSW, DOE and CBRE personnel and particularly the members of the local school communities.



As signatories to this declaration, fitzpatrick+partners seek to:

- Raise awareness of the climate and biodiversity emergencies and the urgent need for action amongst our clients and supply chains
- Advocate for faster change in our industry towards regenerative design practices and a higher Governmental funding priority to support this.
- Establish climate and biodiversity mitigation principles as the key measure of our industry's success: demonstrated through awards, prizes and listings.
- Share knowledge and research to that end on an open source basis.
- Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.
- Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice.
- Include life cycle costing, whole life carbon modelling and post occupancy evaluation as part of our basic scope of work, to reduce both embodied and operational resource use.
- Adopt more regenerative design principles in our studios, with the aim of designing architecture and urbanism that goes beyond the standard of net zero carbon in use.
- Collaborate with engineers, contractors and clients to further reduce construction waste.
- Accelerate the shift to low embodied carbon materials in all our work.
- Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail.
- In Australia, we as architects are aware that Aboriginal and Torres Strait Islander peoples have long espoused the cultural, social, economic and environmental benefits embedded in the holistic relationship of Caring for Country.



<https://www.liverpoolchampion.com.au/story/1178677/well-taught-school-kids-take-road-safety-in-hand/>

BACKGROUND

SINSW have identified key drivers facilitating the need for a new public primary school in the Southern Suburbs of Sydney.

These drivers primarily relate to predicted population growth in the Liverpool district beyond the capacity of existing DoE assets.

SITE

The new Liverpool Primary School is located within the grounds of the existing Liverpool Boys and Girls High School in the Liverpool Central Business District (CBD), at 18 Forbes Street, Liverpool. The proposed new Liverpool Primary School is located in the eastern portion of the existing school grounds. The site is legally described as Lot 1 in DP 1137425.

DEVELOPMENT OVERVIEW

This application seeks consent for the construction and operation of a new Liverpool Primary School. This will include construction of a new school building for core school facilities, teaching spaces, support units, preschools as well as associated landscaping and open space improvements. A detailed description of development is provided by Ethos Urban within the EIS.

PROJECT INFORMATION

New Liverpool Primary School

Address: 18 Forbes Street
Liverpool NSW 2170

Campus Site Area:
(Lot 1 in DP 1137425)
74,800m²

New Liverpool Primary School
Site Area: 19,865m²

Existing GFA: 18,400m²

Proposed GFA: 8,180m²

Use: Public Primary Education to cater for:
1200 Students (K-6) + 40 Support Unit Students + 40 Pre School Students
98 Staff

Zoning: SP2 - Infrastructure (health services facility and educational establishment)

Height: The overall building height of the proposed is 14.8m and sits within the LEP Height Control (35m height limit)

Density: The proposed density of the New School is 0.35:1 FSR

Parking: 33 on grade dedicated staff parking spaces delivered under seperate approval

ESD: The project is targeting an equivalent / self certified 4 Star Green Star rating.

Flooding: The site is affected by the Liverpool City Centre PMF, so the building RL is set at a compliant RL of 9.3 which also allows for reasonably seamless transitions from the surrounding footpaths. The Georges River PMF sits at 10.8, but as this peak is expected to take 48hrs to reach any risk will be mitigated with an appropriate management plan. **See 2-05.**

Bushfire: The proposed development does not fall under any Bushfire Protection controls.

Outdoor Play: The open play areas are designed in accordance with the EFSG's 10m² per student

UNENCUMBERED PLAY AREA

PRIMARY SCHOOL	12,000m ² = 10m ² per student open space
SUPPORT UNIT	400m ² = 10m ² per student open space
PRESCHOOL	400m ² = 10m ² per student open space

HIGH SCHOOLS	23,000m ² = 13m ² per student open space
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The allocation of open play space does not adversely impact the existing High School's open playspace requirements. Student capacity for the High Schools is up to 2000 students, conservative calculations allow for 23000m² of unencumbered play including grassed area sized to accommodate a full sized rugby field.

NEW LIVERPOOL PRIMARY SCHOOL

DESIGN PRINCIPLES

The following design principles have been developed by the Project Design Team, Schools Infrastructure NSW and the Project Reference Group to outline the objectives and vision for the New Liverpool Primary School.



Student Focused

Provide secure and safe spaces for students to collaborate and prosper.



Value for Investment

Maximise return on investment through efficiency in design and clear prioritisation of project objectives.



Education Focused

Well designed learning communities allow for both traditional and contemporary pedagogies.



Responsive Design

The design of the school should be durable and responsive for longevity and future generational needs.



Community Focused Design

Design for inclusiveness by providing community accessible facilities.



Considered Landscape Approach

A landscape that provides a variety of spaces for play, social interaction, outdoor learning and connection to nature.



Minimise Disruption

Minimise where possible disruption to surrounding operations through the use of modular design and off-site fabrication.



Indigenous Overlay

Engage with the local community to establish design strategies that both celebrate and welcome First Nations People

NEW LIVERPOOL PRIMARY SCHOOL

COMMUNITY FOCUSED DESIGN

Schools were traditionally a place of gathering for the community. With busy lives, this concept has been shortened to the quick wave at the drop off.

Yet in communities affected by financial, cultural, health or immigration issues, the concept of community is sometimes the only helping hand offered.

The existing schools within the Liverpool Education Precinct have reinvented this concept of community meeting place as one of their core responsibilities. Their direct school community is affected not by one but in many cases all of these core issues. The schools acts as a healing place, a place to shelter, to learn, to make new relationships, and act as a gateway for the children, the immediate family, and even the remote family. It is a place that fosters safe connections.

The school is seen as a place that acts openly in the best interests of not only its students, but their families. These activities are directed by the staff of the school, outside experts and sometimes even the students. These duties often exceed the traditional, and the building design has a role to support not only the student and their families, but the staff that create this environment of caring.

It is key to the success of the New Primary School that the root concerns and the process of recovery or just accepting such are expressed as understood. This will reinforce the school within its community.

As generations pass, these concerns will change, and the built form will need to respond to these different concerns, but with the right approach, the school community will remain forever strong.

Design for inclusiveness by providing community accessible facilities encourages the community to collectively create a sense of belonging and a safe place for young learners (in reference to NSW DoE Education Principle 2). As such, schools should be designed with clear planning techniques.

- Design with a social consciousness to create positive environmental, social and economic outcomes;
- Design good wayfinding by providing clear directional and navigational signs and graphics;
- Design to cater for various age groups;
- Design a clear internal pedestrian axis in the form of a continuous path that connects all other internal pedestrian streets and buildings;
- Planning for after hours use of school facilities while maintaining security and safety also.



NEW LIVERPOOL PRIMARY SCHOOL

LIVERPOOL INNOVATION PRECINCT

fitzpatrick+partners were commissioned in the third quarter of 2018 to develop a master plan for the Liverpool Innovation Precinct which includes an expectation of future development of the health precinct associated with Liverpool Hospital to the south of the school site.

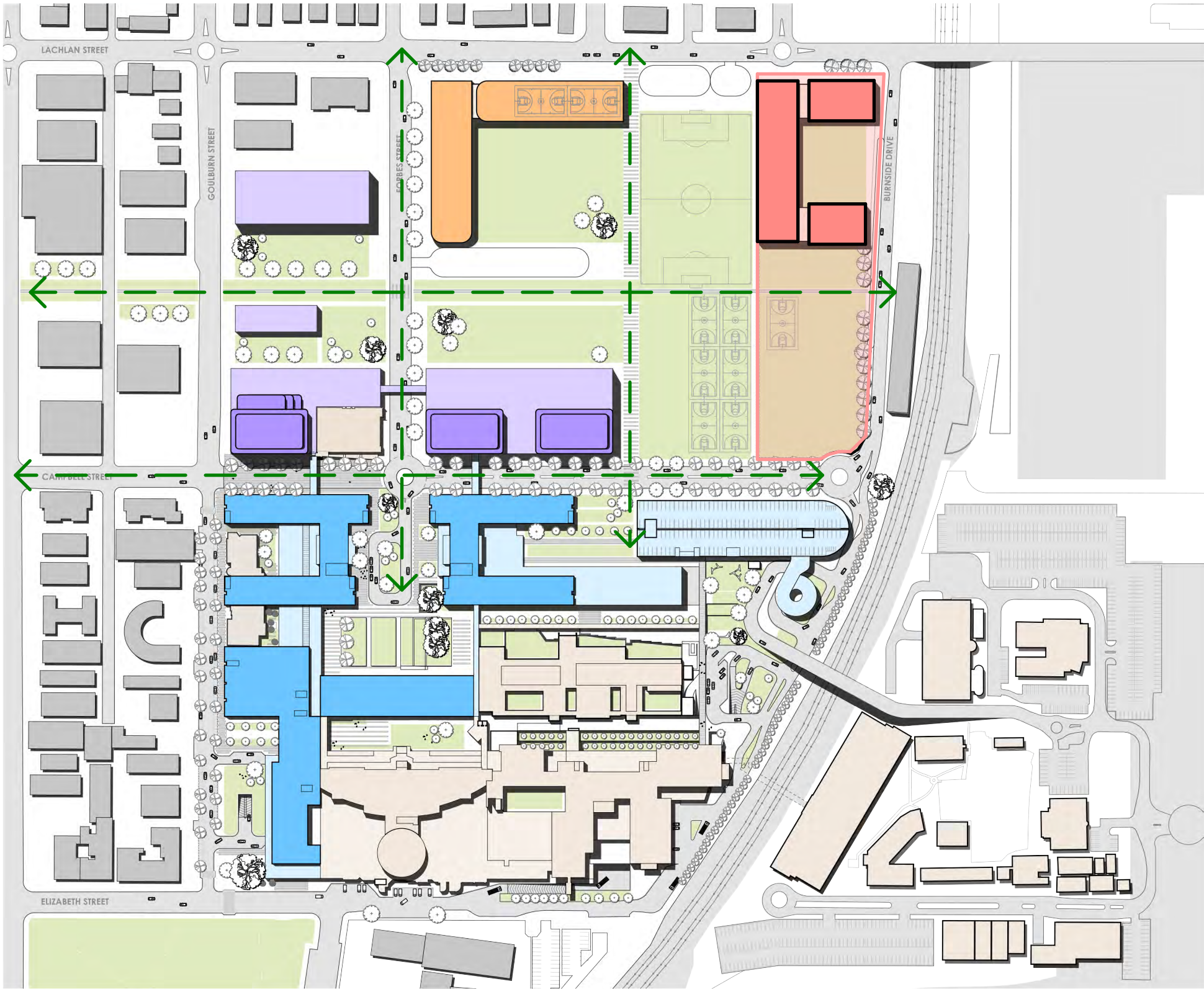
The Liverpool Innovation Precinct Vision is a long term strategy to reinforce the relationships between health, research and education.

This vision outlines a natural progression and hierarchy of educational facilities on the Forbes Street site with key linkages to tertiary and research facilities to the west and the hospital and university research and learning facilities to the south of the site.

Although this vision relies upon bigger picture developments, the proposal for the New Liverpool Primary School aligns with these future linkages and supports the flow of Primary, Secondary, Tertiary, Health philosophy.

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PRECINCT LINKS
- PROPOSED PRIMARY SCHOOL SITE
- PROPOSED PRIMARY SCHOOL BUILDING FOOTPRINT
- POTENTIAL HIGH SCHOOL DEVELOPMENT
- POTENTIAL FUTURE HOSPITAL DEVELOPMENT
- POTENTIAL FUTURE LIP DEVELOPMENT
- EXISTING HOSPITAL (AND RELATED) BUILDINGS
- EXISTING LOCAL CONTEXT
- EXISTING & POTENTIAL FUTURE OPEN SPACE



NEW LIVERPOOL PRIMARY SCHOOL

SITE LOCATION

The New Liverpool Primary School is located at the eastern boundary on the existing Liverpool Girls & Boys High School site on Forbes Street.

The proposed school sits within the Liverpool Innovation Precinct as identified by the Greater Sydney Commission (GSC).

Liverpool has been identified as a 'Collaboration Area' and a 'Health and Education Precinct' in the Greater Sydney's Commission's South West District Plan.

In 2016, the Liverpool Innovation Committee was formed comprising key stakeholders and decision makers with representatives across business, health, education, transport and local council.

In August 2017, the Liverpool Innovation Committee commissioned a report by PWC Australia titled 'Reimagining... the Liverpool Health, Education, Research and Innovation Precinct'. The report outlined a vision for the future of Liverpool including:

- Σ how health, education and research is undertaken individually and collaboratively to drive innovation
- Σ the industries that will drive the Liverpool economy
- Σ the technologies that will underpin the next wave of economic progress
- Σ the public's perception of Liverpool as an economic entity

The Liverpool Innovation Committee is commissioning a functional and viable strategy to successfully ensure Liverpool's future growth and eminence. It represents an alliance of stakeholders including:






- Σ South Western Sydney Local Health District
- Σ Liverpool Public Hospital
- Σ South West Sydney Primary Health Network
- Σ Ingham Institute of Applied Medical Research
- Σ Sydney Business Chamber
- Σ NSW Health Infrastructure
- Σ NSW Department of Education
- Σ Liverpool City Council
- Σ South West Sydney TAFE
- Σ University of Wollongong (UOW)
- Σ University of New South Wales (UNSW)
- Σ Western Sydney University (WSU)

- COLLABORATION AREA
- LIVERPOOL INNOVATION PRECINCT
- MAIN VEHICLE NETWORK
- NEW PRIMARY SCHOOL
- TRAIN STATION

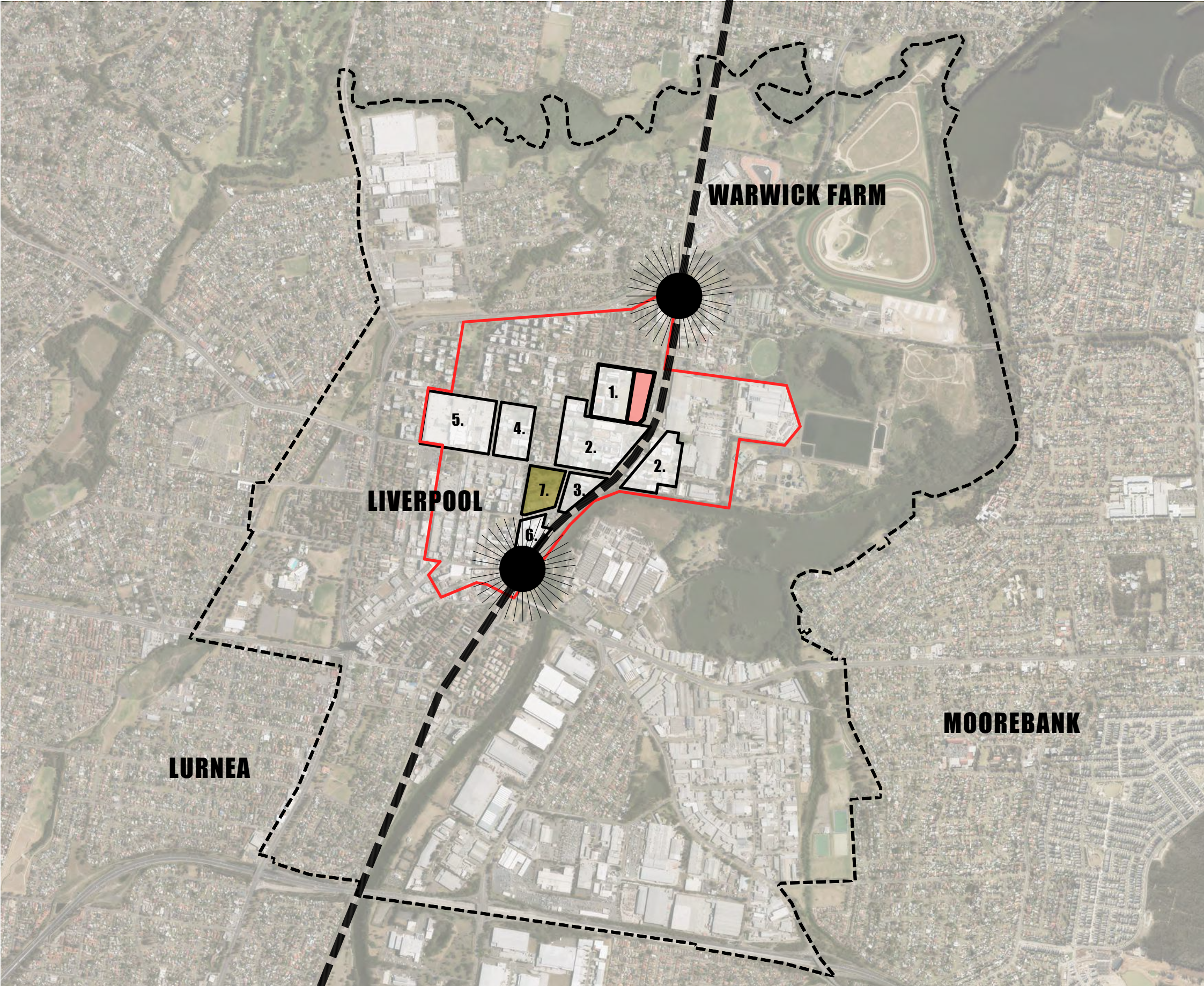


NEW LIVERPOOL PRIMARY SCHOOL SURROUNDING KEY SITES

- 1. LIVERPOOL BOYS & LIVERPOOL GIRLS HIGH SCHOOLS
- 2. LIVERPOOL HOSPITAL
- 3. TAFE LIVERPOOL
- 4. ALL SAINTS CATHOLIC COLLEGE
- 5. WESTFIELD LIVERPOOL
- 6. LIVERPOOL BUS DEPOT
- 7. BIGGE PARK

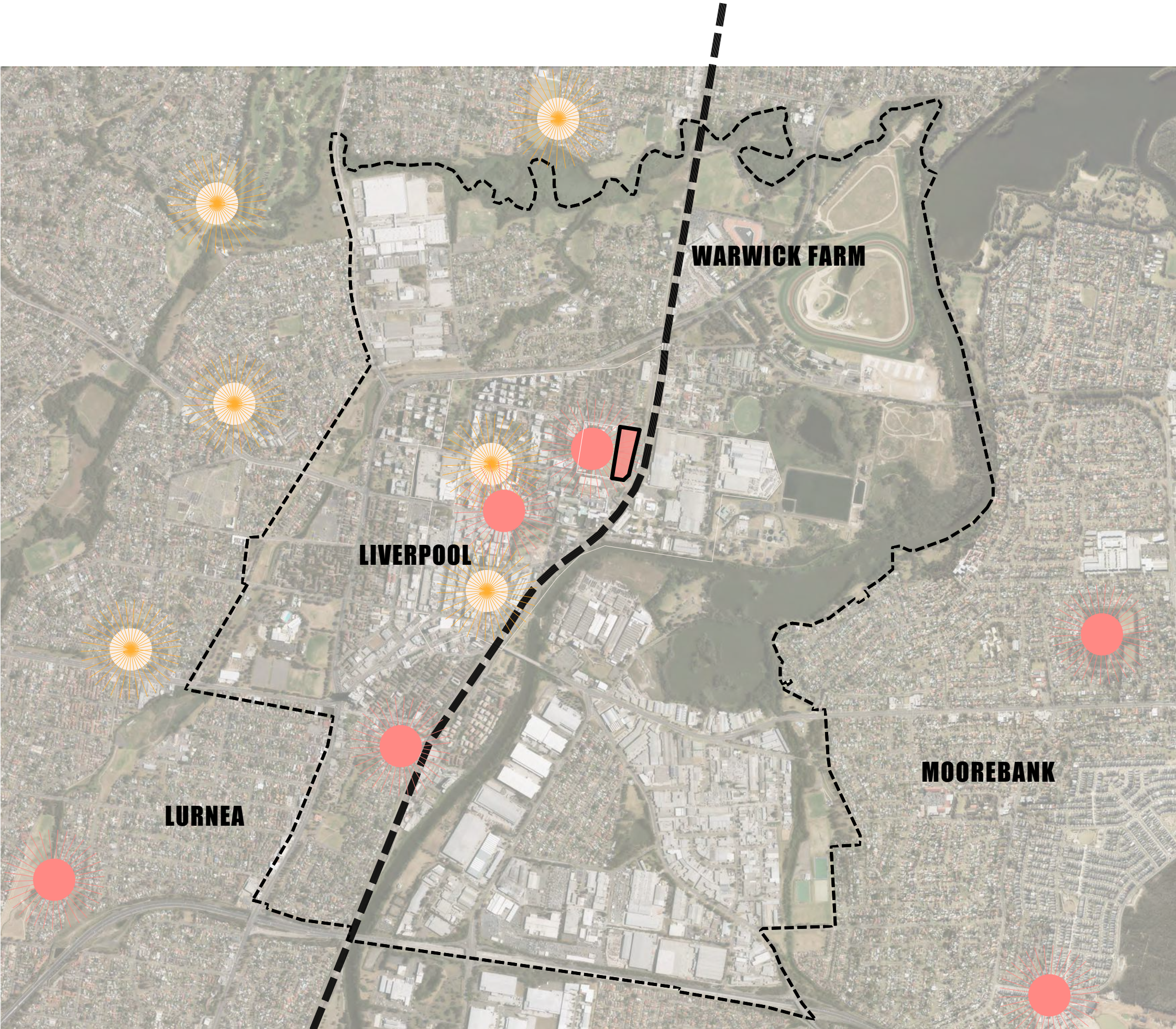
-  THE SITE
-  KEY SITES
-  COLLABORATION AREA
-  LIVERPOOL INNOVATION PRECINCT
-  TRAIN STATION

fitzpatrick
+partners



SOUTHERN SUBURBS CLUSTER

NEW LIVERPOOL PRIMARY SCHOOL
EXISTING SCHOOLS



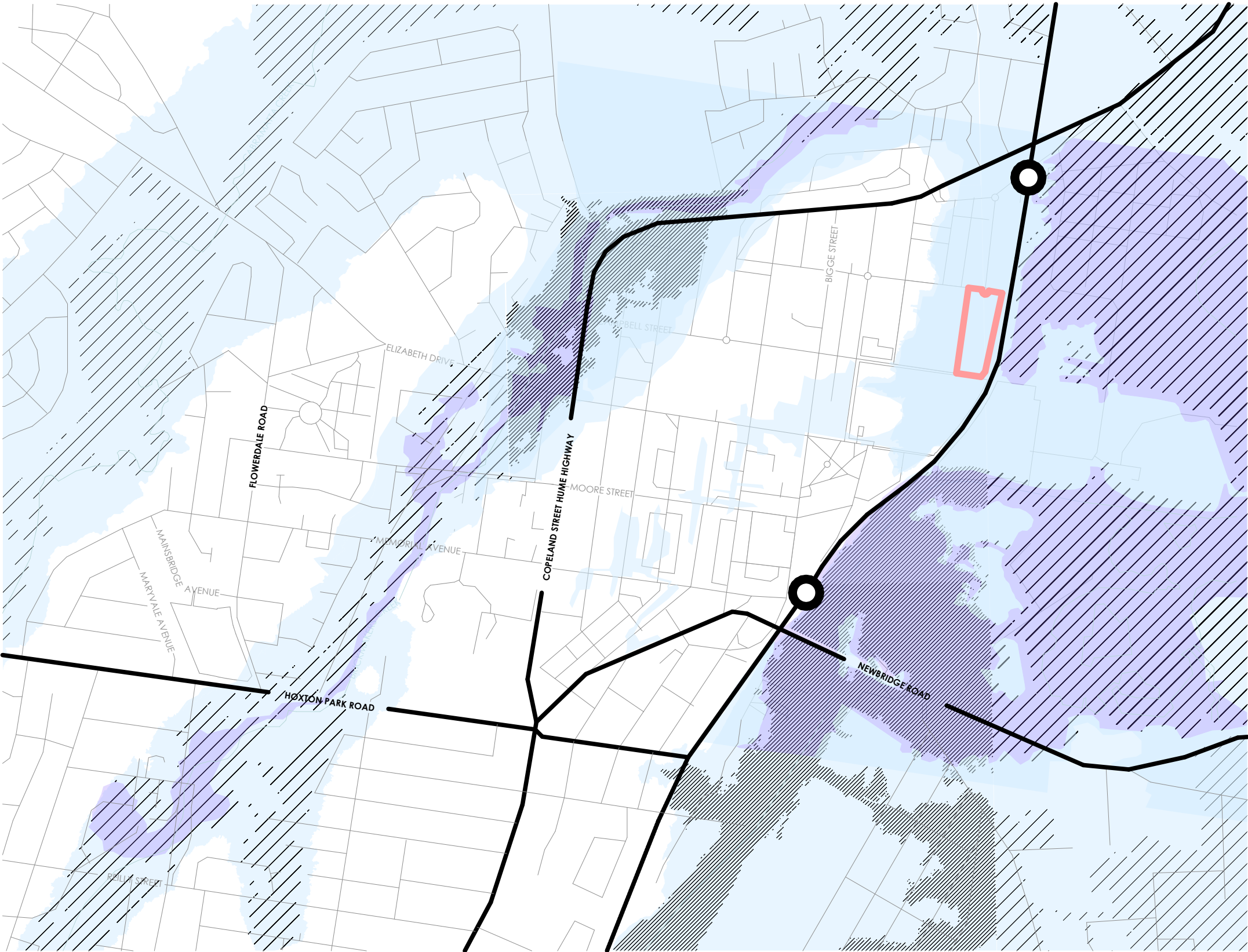
-  THE SITE
 -  EXISTING PRIMARY SCHOOLS
 -  COLLABORATION AREA
 -  LIVERPOOL INNOVATION PRECINCT
 -  EXISTING HIGH SCHOOLS
- fitzpatrick
+partners

NEW LIVERPOOL PRIMARY SCHOOL
GREEN SPACE NETWORK



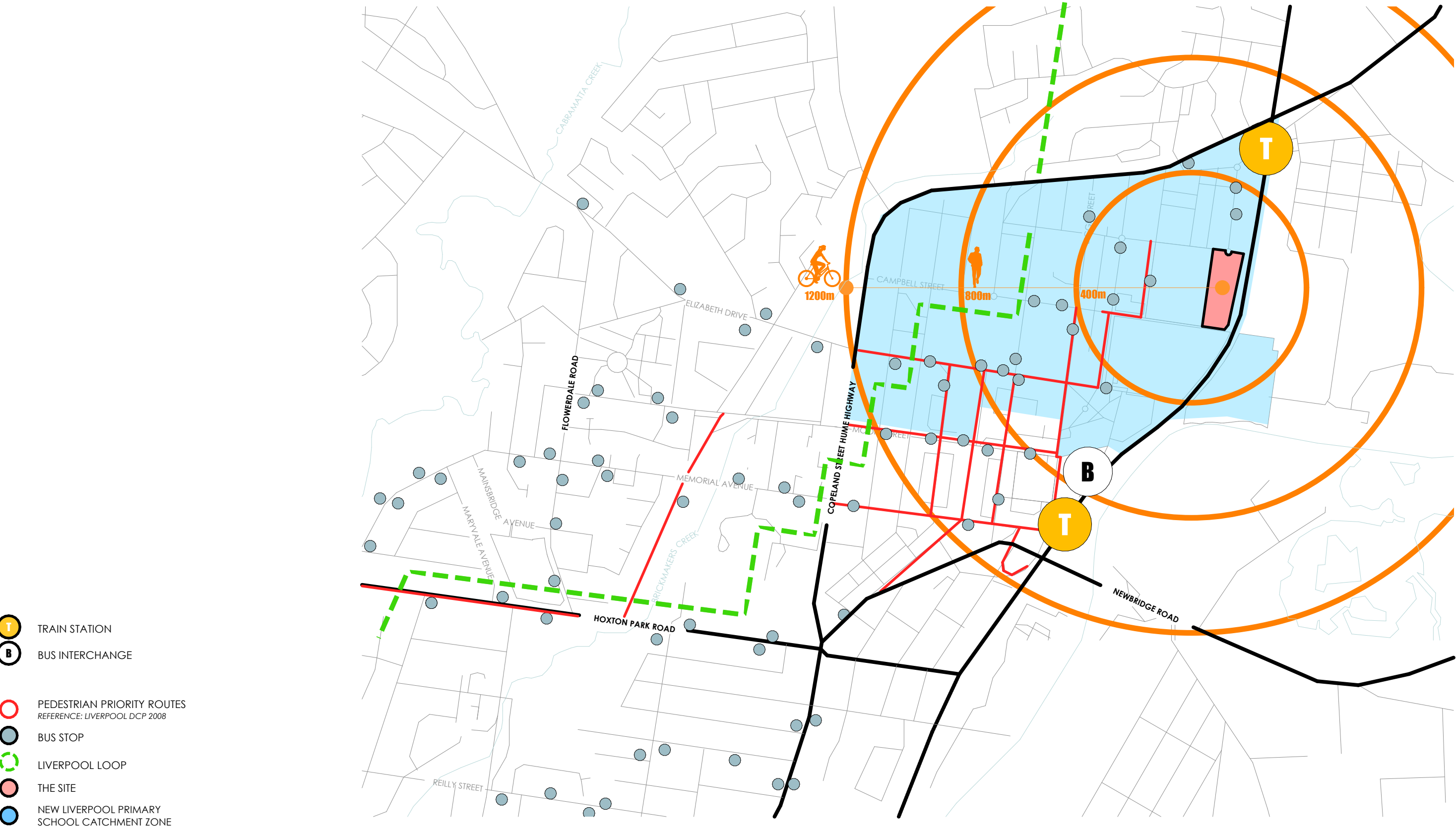
NEW LIVERPOOL PRIMARY SCHOOL

FLOOD



- THE SITE
- GEORGES RIVER PMF:10.8
- LIVERPOOL CBD PMF: 9.3
- FLOOD PLANNING AREA

NEW LIVERPOOL PRIMARY SCHOOL
ACTIVE TRANSPORT LINKAGES



- TRAIN STATION
- BUS INTERCHANGE
- PEDESTRIAN PRIORITY ROUTES
REFERENCE: LIVERPOOL DCP 2008
- BUS STOP
- LIVERPOOL LOOP
- THE SITE
- NEW LIVERPOOL PRIMARY SCHOOL CATCHMENT ZONE

NEW LIVERPOOL PRIMARY SCHOOL

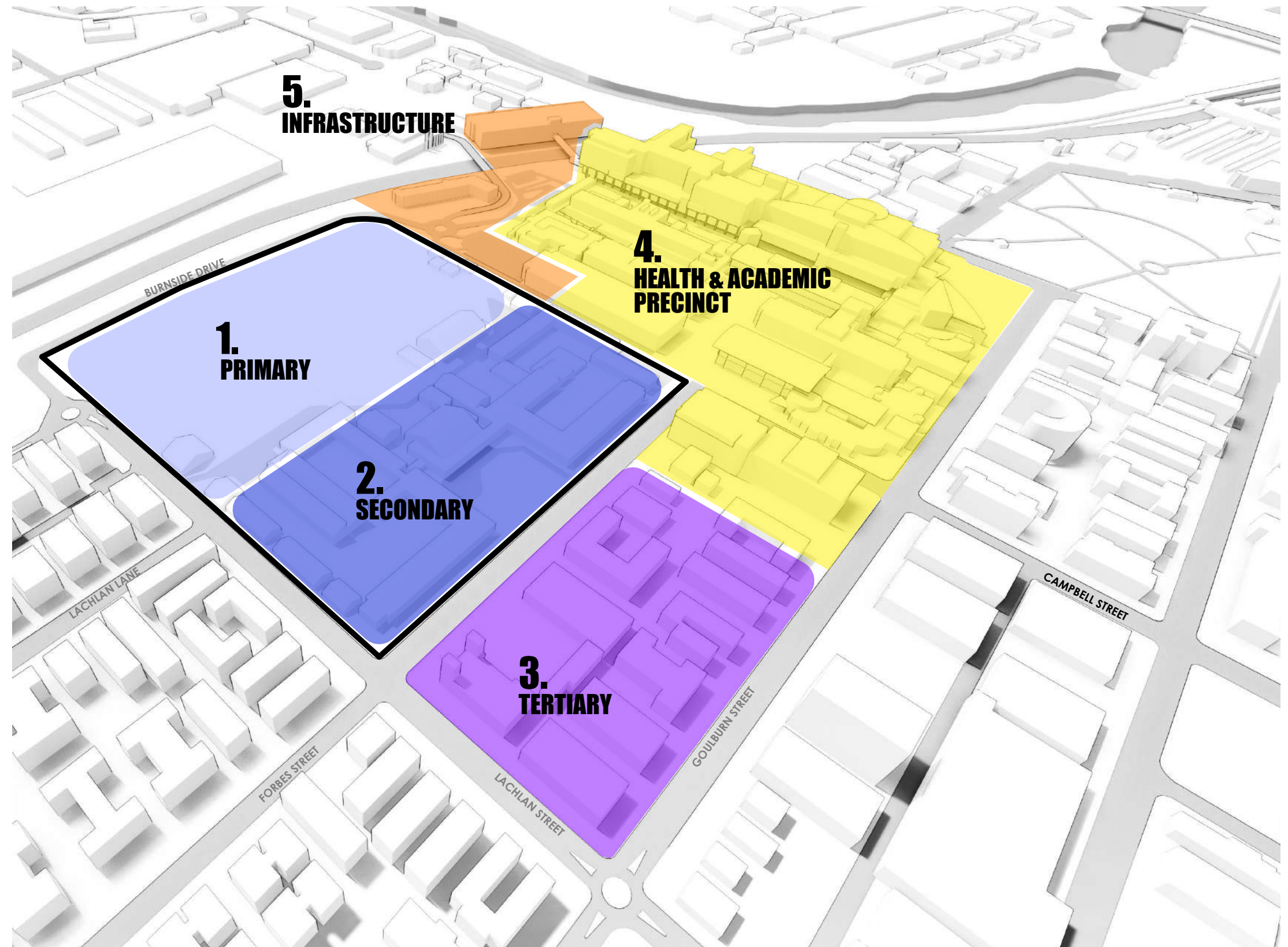
ZONING HIERARCHY

The precinct surrounding the New Liverpool primary school site is strongly positioned to develop complimentary industries with a focus on:

- medical technology and innovation
- specialist education and clinical skills training
- specialist medical clinics
- private sector hospital health providers
- tertiary education institutions (note that UNSW & UWS have teaching functions at Liverpool Hospital with the University of Wollongong recently establishing a major campus within the Liverpool CBD), and specialist research institutions (currently the Ingham Institute) is centred in the Liverpool CBD adjacent to the Hospital campus and Forbes Street site)

The development of the masterplan for Liverpool Hospital Campus has also addressed the future development of the surrounding precinct allowing new clinical and support services on the campus to better integrate to future education, research and commercial development within the Liverpool City.

Existing educational and research hub and future continual development forms a natural progression and hierarchy of educational facilities on the Forbes Street site with key linkages to tertiary and research facilities to the west of the site, and the hospital and university research and learning facilities to the south of the site.



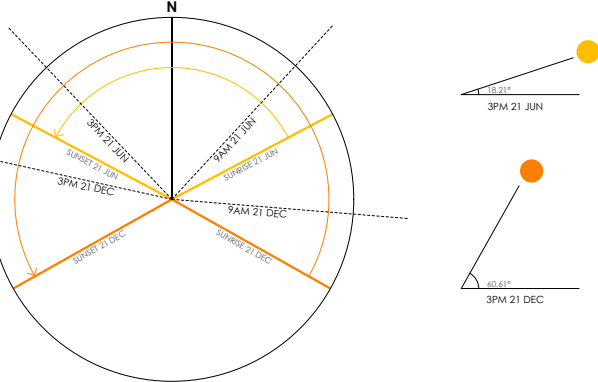
NEW LIVERPOOL PRIMARY SCHOOL

EXISTING SITE CONDITIONS

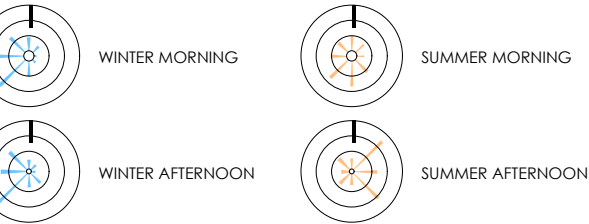
An investigation into the site's existing condition has been undertaken including existing grades, sun & wind orientation, flood impact and existing infrastructure.

An understanding of the site's inherent characteristics is important in establishing building placement, orientation and scale.

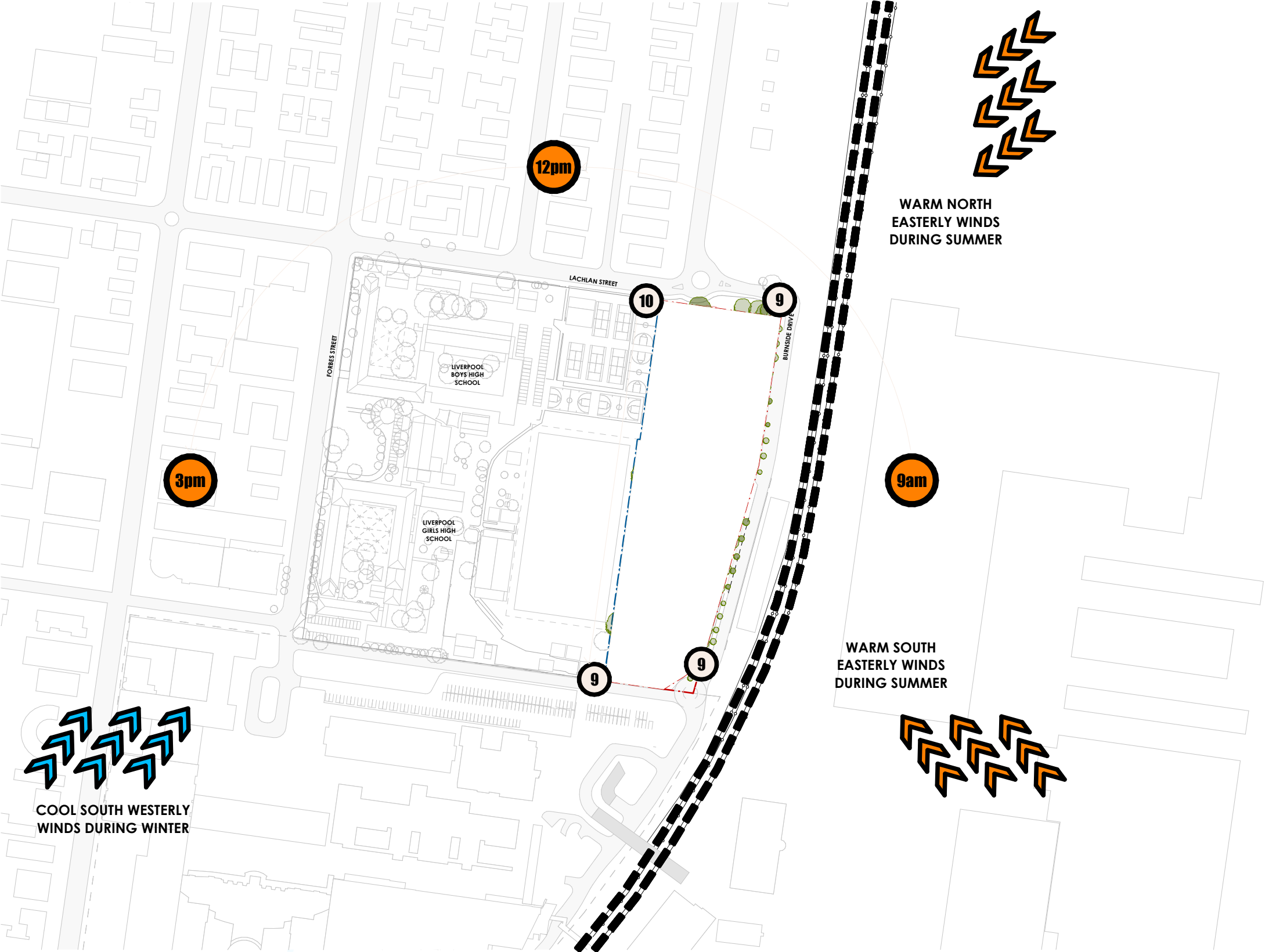
SUN AZIMUTH & ALTITUDE



WIND SPEED & DIRECTION



- THE SITE
- RAIL LINE
- RELATIVE LEVEL
- COOL WIND
- WARM WIND
- SUN ORIENTATION



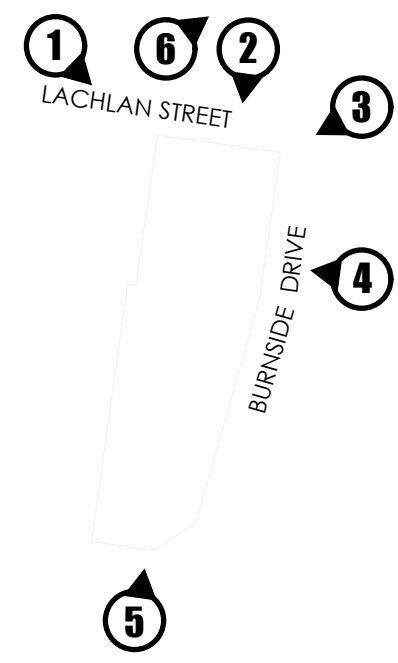
NEW LIVERPOOL PRIMARY SCHOOL

EXISTING SITE CONDITIONS

The New Liverpool Primary School is located on the north east portion of the existing Liverpool Boys High School and Liverpool Girls High School site on Forbes Street.

Generally, four storey brick "walk up" apartment buildings surround the site to the north. The Liverpool Hospital Precinct and its proposed multilevel car park are located at the site's southern boundary.

The eastern boundary fronts the existing rail corridor along Burnside Drive. The southern most point of Burnside Drive is one of three main vehicle entry points for Liverpool Hospital including visitor parking, staff parking, loading and delivery and service vehicles.



1. LOOKING EAST @ LACHLAN STREET TOWARDS BURNSIDE DRIVE



4. LOOKING WEST @ BURNSIDE DRIVE



2. LOOKING SOUTH @ LACHLAN STREET



5. LOOKING NORTH @ HOSPITAL ROUNDABOUT



3. LOOKING SOUTH @ NORTHEAST CORNER OF SITE



6. LOOKING NORTH @ SITE CONTEXT @ LACHLAN STREET

NEW LIVERPOOL PRIMARY SCHOOL

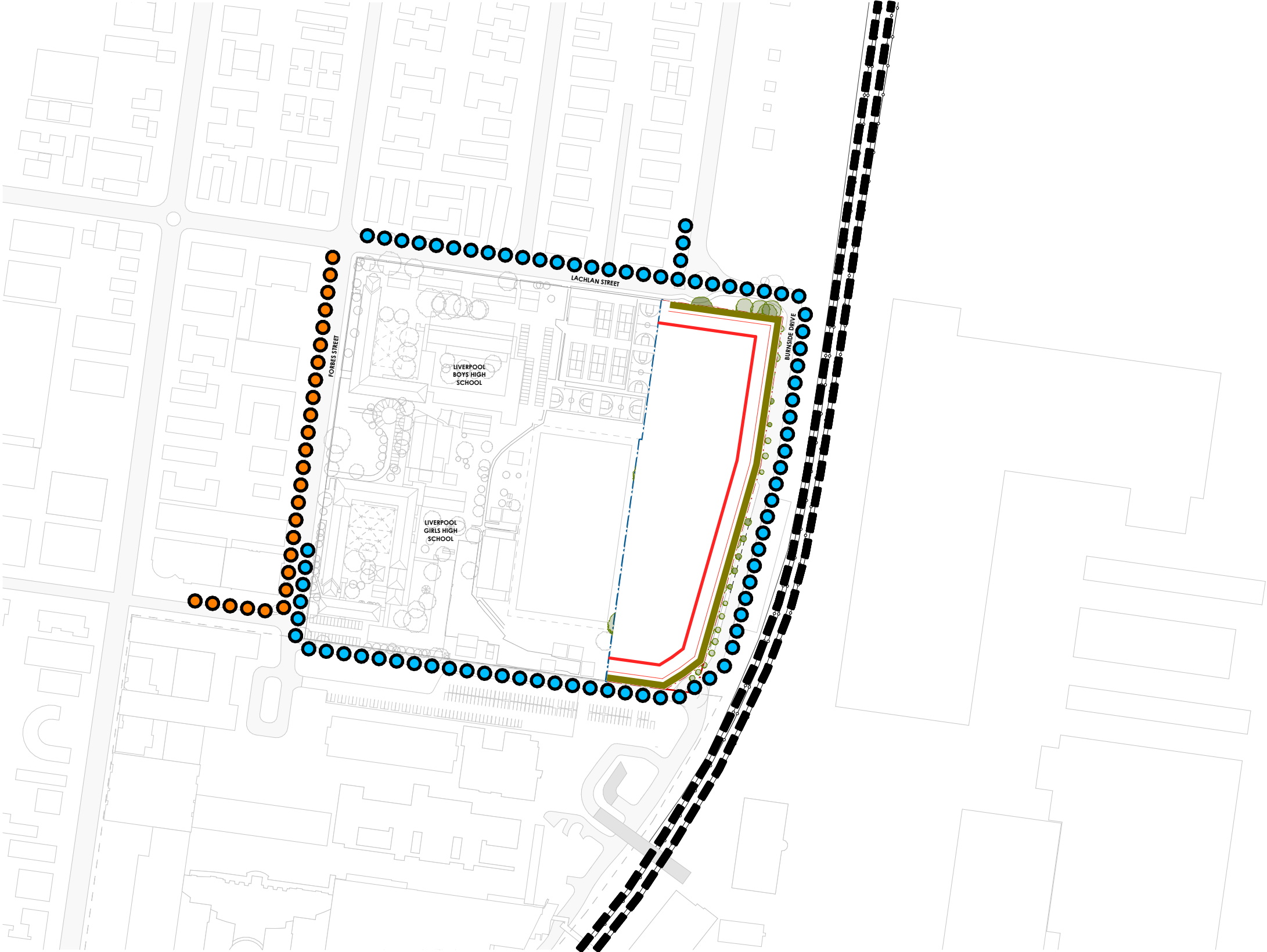
PLANNING CONTROLS

As outlined in the Liverpool LEP 2008, the site has a height limit of 35 metres.

Vehicle entry points are allowed at Lachlan Street, Burnside Drive and to the southern boundary of the site.

Forbes Street is considered a high priority pedestrian route.

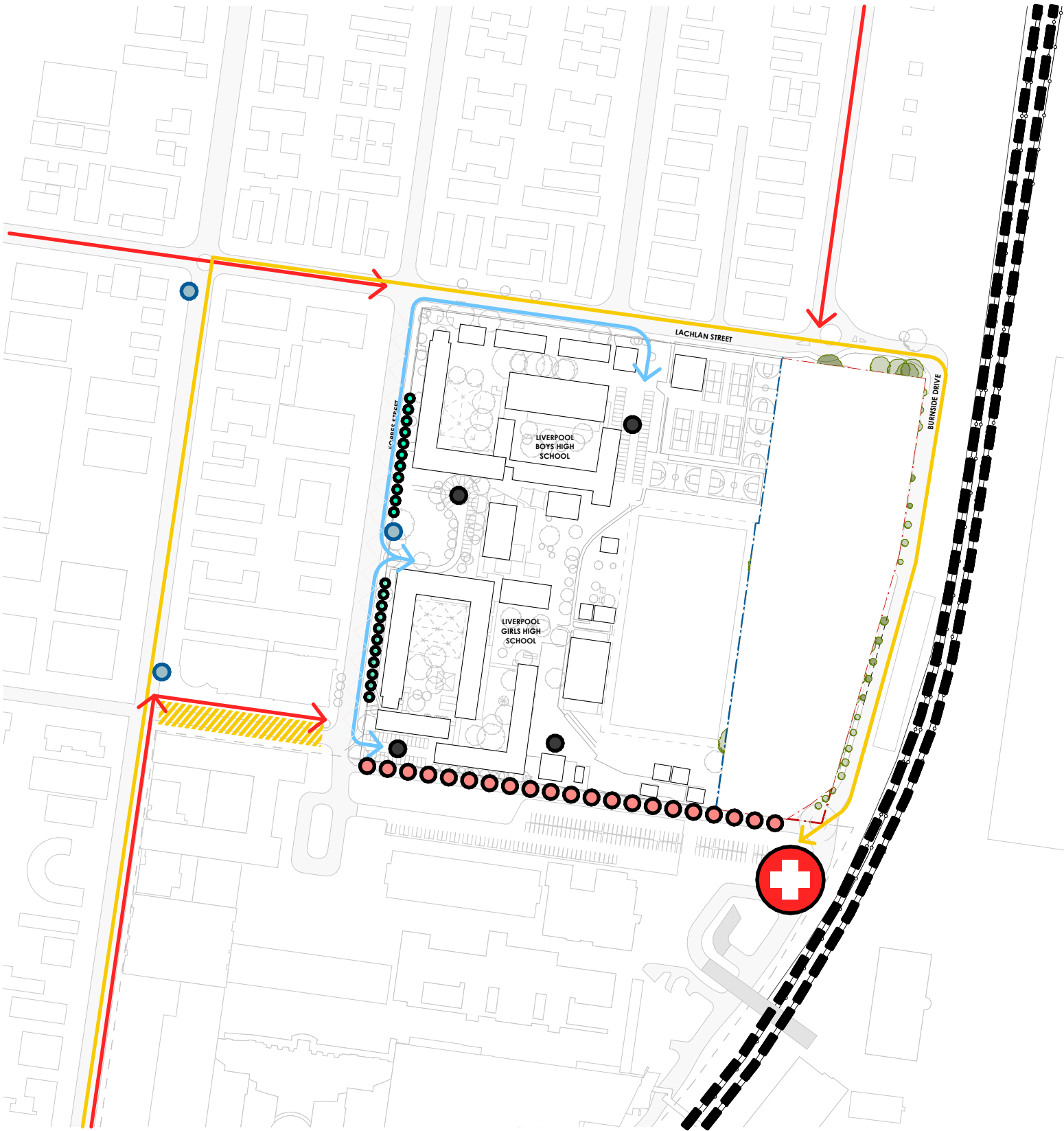
DCP setbacks and provisions are provided on this plan - see key below for details.



- THE SITE
- 4.5 - 5 METRE LANDSCAPE SETBACK
- 6 METRE SETBACK UP TO 7 METRES SFH
- 12 METRE SETBACK UP TO 35 METRES SFH
- PEDESTRIAN PRIORITY ROUTE
- VEHICLE ENTRY POINTS ALLOWED
- RAIL LINE

NEW LIVERPOOL PRIMARY SCHOOL
EXISTING TRAFFIC CONDITIONS

- THE SITE
- DROP OFF/BUS ZONE ON STREET (HIGH SCHOOLS)
- BUS STOP
- MAIN VEHICLE APPROACH
- VEHICLE APPROACH TO HOSPITAL
- ADJACENT VEHICLE ENTRY POINTS
- HIGH CONGESTION 8-9AM & 3-4PM
- LIVERPOOL HOSPITAL ENTRY
- CAMPBELL STREET (POTENTIAL FUTURE SHARED ZONE)
- TWO WAY PRIVATE ROAD
- EXISTING ON SITE STAFF PARKING



SOUTHERN SUBURBS CLUSTER

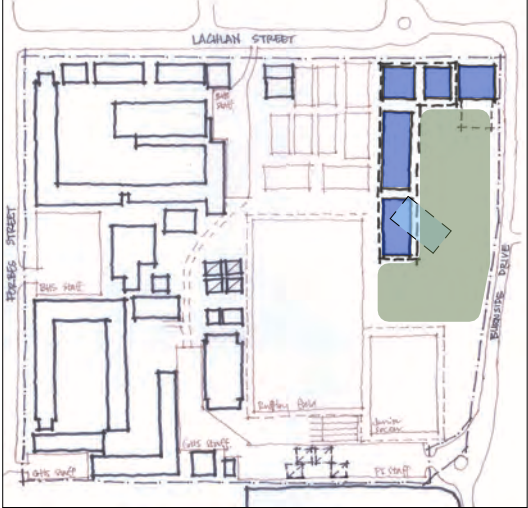
NEW LIVERPOOL PRIMARY SCHOOL

BUILDING CONFIGURATION STUDY

The placement of built form on the site has been determined with consideration of site constraints, brief requirements, stakeholder input and the overarching design objectives established in Masterplanning and Concept Design Phases.

Key criteria were established to grade the success of the proposed footprint against the above and to rationalise the location and orientation of the building and ultimately identified the C shaped footprint as the most successful for the site and brief.

A. AS PER CONCEPT DESIGN REPORT _ DEC 2019



SITE PLANNING

- ORIENTATION
- TRAIN TRAFFIC NOISE MITIGATION
- SUPPORTS DFMA EDUCATION PLANNING
- SUPPORT DFMA CONSTRUCTION PLANNING

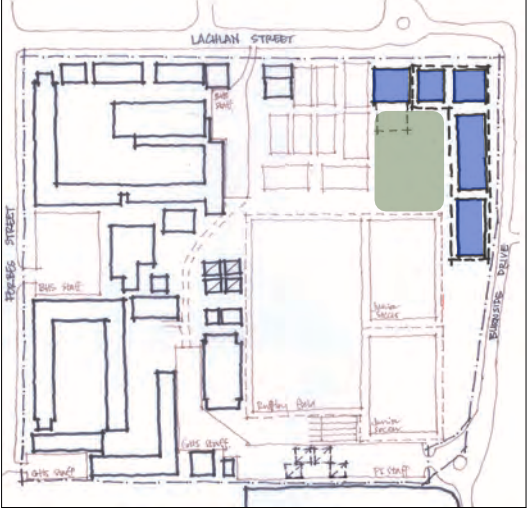
PRG & SINSW CRITERIA ESTABLISHED MARCH 2020

- RETAINS HIGH SCHOOL RUGBY FIELD
- FULL SOCCER FIELD TO PRIMARY
- RETAINS HIGH SCHOOL HARD COURTS
- IMPROVES HS ACCESS TO FIELDS
- PS EQUITY OF ACCESS TO FIELDS

SDRP FEEDBACK

- DIRECT PUBLIC ACCESS TO SHARED FACILITIES
- CREATES SAFE AND WELCOMING ENTRY
- BUILT FORM SEPARATION BETWEEN HS AND PS

B.



SITE PLANNING

- ORIENTATION
- TRAIN TRAFFIC NOISE MITIGATION
- SUPPORTS DFMA EDUCATION PLANNING
- SUPPORT DFMA CONSTRUCTION PLANNING

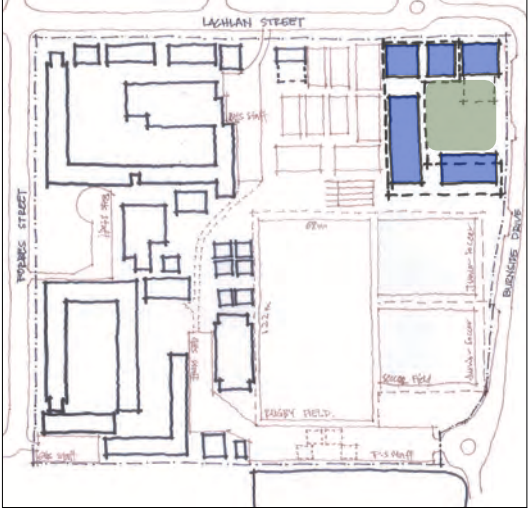
PRG & SINSW CRITERIA ESTABLISHED MARCH 2020

- RETAINS HIGH SCHOOL RUGBY FIELD
- FULL SOCCER FIELD TO PRIMARY
- RETAINS HIGH SCHOOL HARD COURTS
- IMPROVES HS ACCESS TO FIELDS
- PS EQUITY OF ACCESS TO FIELDS

SDRP FEEDBACK

- DIRECT PUBLIC ACCESS TO SHARED FACILITIES
- CREATES SAFE AND WELCOMING ENTRY
- BUILT FORM SEPARATION BETWEEN HS AND PS

C. ENDORSED SCHEMATIC DESIGN SCHEME 2021



SITE PLANNING

- ORIENTATION
- TRAIN TRAFFIC NOISE MITIGATION
- SUPPORTS DFMA EDUCATION PLANNING
- SUPPORT DFMA CONSTRUCTION PLANNING

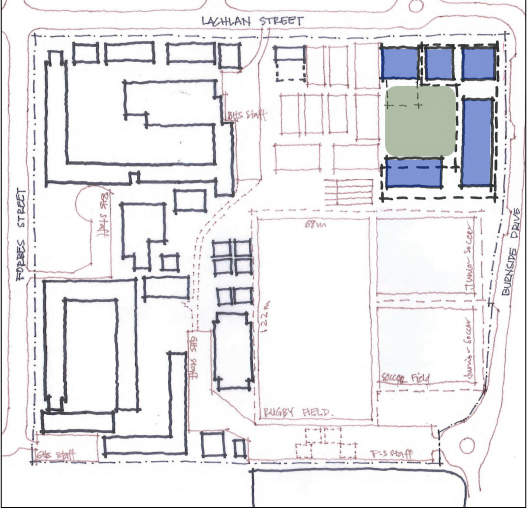
PRG & SINSW CRITERIA ESTABLISHED MARCH 2020

- RETAINS HIGH SCHOOL RUGBY FIELD
- FULL SOCCER FIELD TO PRIMARY
- RETAINS HIGH SCHOOL HARD COURTS
- IMPROVES HS ACCESS TO FIELDS
- PS EQUITY OF ACCESS TO FIELDS

SDRP FEEDBACK

- DIRECT PUBLIC ACCESS TO SHARED FACILITIES
- CREATES SAFE AND WELCOMING ENTRY
- BUILT FORM SEPARATION BETWEEN HS AND PS

D.



SITE PLANNING

- ORIENTATION
- TRAIN TRAFFIC NOISE MITIGATION
- SUPPORTS DFMA EDUCATION PLANNING
- SUPPORT DFMA CONSTRUCTION PLANNING

PRG & SINSW CRITERIA ESTABLISHED MARCH 2020

- RETAINS HIGH SCHOOL RUGBY FIELD
- FULL SOCCER FIELD TO PRIMARY
- RETAINS HIGH SCHOOL HARD COURTS
- IMPROVES HS ACCESS TO FIELDS
- PS EQUITY OF ACCESS TO FIELDS

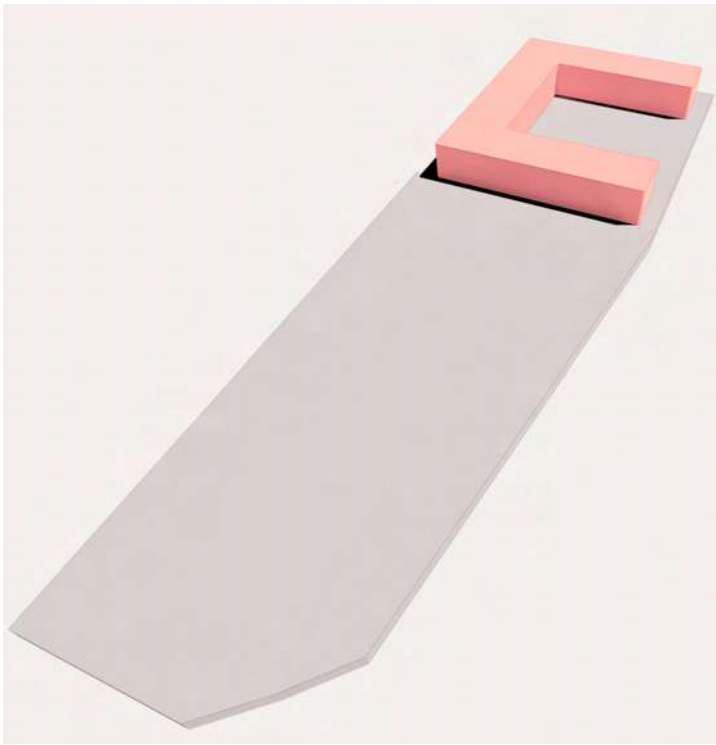
SDRP FEEDBACK

- DIRECT PUBLIC ACCESS TO SHARED FACILITIES
- CREATES SAFE AND WELCOMING ENTRY
- BUILT FORM SEPARATION BETWEEN HS AND PS

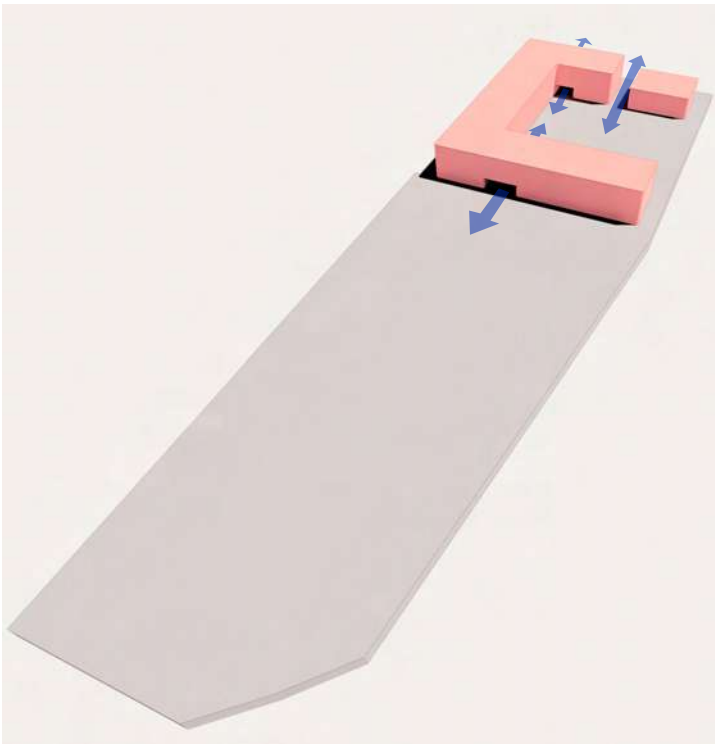
- G GREEN - GOOD OUTCOME
- A AMBER - SATISFACTORY OUTCOME
- R RED - POOR OUTCOME

NEW LIVERPOOL PRIMARY SCHOOL

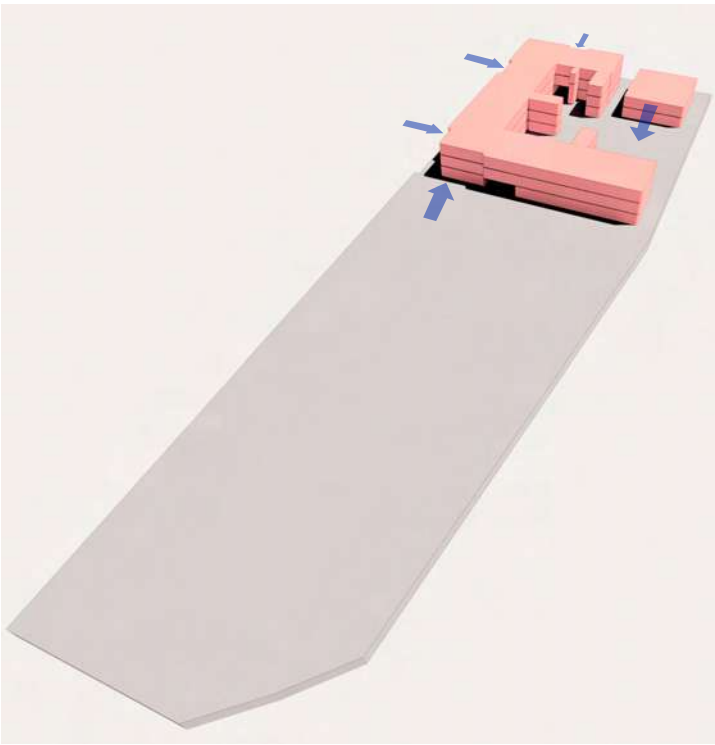
THE DESIGN STORY



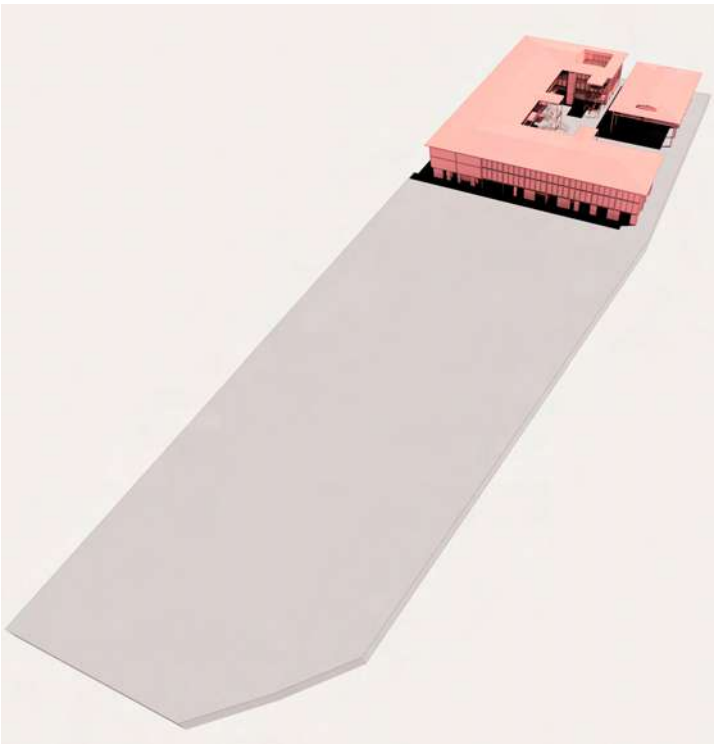
1. BUILDING PLACEMENT BULK AND SCALE



2. CIRCULATION VIA SEPARATION



3. ARTICULATION AND ADD ON ELEMENTS



4. THE BUILT FORM

NEW LIVERPOOL PRIMARY SCHOOL

THE DESIGN INTENT

OVERVIEW

Our design approach encompasses architectural and educational design objectives that drive the creation of successful school planning.

We have referenced and consolidated the NSW DoE Education Principles, New PS Education Rationale and Government Architect NSW Guide for Schools Design into two key components that inform our design;

- Architectural Design Objectives;
- Education Planning Principles.

We understand that education design should logically centre on educational needs, and not be directed by aesthetic or form influences.

It is logical that the form and aesthetic of educational buildings reflects the internal function of the building and also enhance the user's experience.

This aligns with The NSW DoE Education Principle 1: *"First and foremost, focus on the needs of learners and learning"*.

This creates buildings which are designed in response to current social issues; we simply refer to this as designing with a social awareness. Through this process we respectively address the functional, environmental and cultural issues within the community of users.

Our solution considers the well being of the building users, aided by providing balance between sun and shade, open and closed, private and public, warm and cool, and always safe, always logical.

When these simple rules are followed, the buildings created are understood, a delight to use, have an inherent responsiveness to change and therefore achieve the ultimate environmental outcome; longevity and active use.

MASSING AND BUILT FORM

The building form and proportion takes its cues from both the neighbouring context and its logical programme.

The purposefully defines an approach which sits comfortably as a well-mannered element in keeping with the surrounding residential fabric, and balances its scale and function in an aesthetic with which responds to the future adjacent context.

SIMPLICITY

The school building has been carefully defined both in plan and vertical dimension to create an overall volume which has a visually pleasing proportion and balance and rarely (and purposefully) deviates on all four facades. This is further enhanced by the regular modularisation of the façade; the object is pure and repetitive in all elevations.

The volume is then broken into subsets of the overall form, responding to the structural grid, vertical stacking and internal functions.

FACADE SCALE AND MODULATION

The modularisation of the façade is further articulated by vertical and horizontal shade devices which have been carefully placed to maximise the buildings performance and mitigate heat gain, especially on the east and west elevations.

At Lachlan Street, the facade line is set in at the main entry, acting as a directional indicator or "signage" as to where to go. This creates a playfulness and interest to an otherwise formal façade.

ENVIRONMENTAL

The façade also addresses the necessary environmental performance criteria as an integral part of the solution. The use of double glazing and shade devices appropriately address the issues of light penetration to the homebases, and minimise internal glare.

Operable windows are also provided on all elevations, taking advantage of cool north easterly breezes where possible.

The ratio of solid panels and glazed panels appropriately address BCA requirements. The verticality of these panels enhance and contribute to the regular patterning of the façade.

MATERIALITY

The building is comprised of brick, fibre cement panels and metal sun shades in warm hues, complimenting the native landscape and surrounding buildings. The selection is warm and textural while also providing a robust and durable material palette.



SOUTHERN SUBURBS CLUSTER

NEW LIVERPOOL PRIMARY SCHOOL

STAGING

STAGE 1

CONSTRUCTION OF NEW CARPARK, PLAYING FIELD, HARDSTAND WASTE AREA TO SOUTH OF SITE, INCLUDING EARTH WORKS, STORMWATER SYSTEMS (INCLUDING OSD) AND FINISH TREATMENTS.

STAGE 2

WIDENING OF BURNSIDE DRIVE, NEW ON STREET PARKING / KISS & DROP.

RELOCATION OF IN GROUND ELECTRICAL ASSET AND EXISTING LIGHT POLES.

NEW ROUNDABOUT

STAGE 3

CONSTRUCTION OF IN GROUND WATER AND SEWER PIPEWORK TO EXISTING STREET CONNECTIONS

CONSTRUCTION OF NEW PADMOUNT KIOSK SUBSTATION AND CONNECTIONS

CONSTRUCTION OF COMMS CONNECTIONS TO STREET

HATCHED AREAS DENOTE WORKS TO BE DELIVERED UNDER ALTERNATE PLANNING PATHWAYS

- STAGE 1 WORKS
- STAGE 2 WORKS

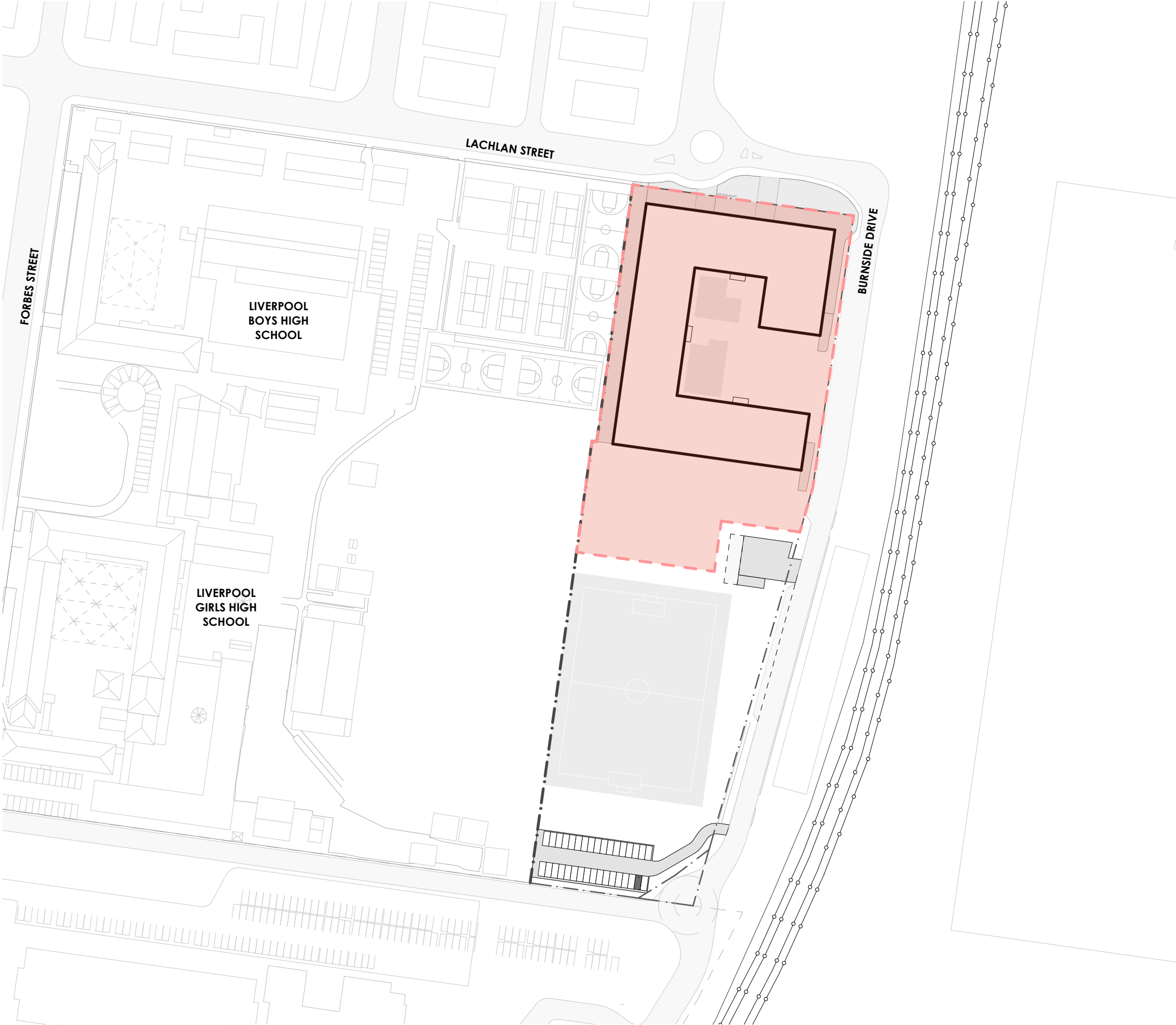


NEW LIVERPOOL PRIMARY SCHOOL
STAGING

STAGE 4

NEW BUILDING WORKS,
ASSOCIATED CIVIL, STORMWATER
AND LANDSCAPING WORKS AND
TREE PLANTING WITHIN THE
HATCHED ZONE.

BUS BAY TO LACHLAN STREET
(NOT PART OF SSDA APPROVAL).



STAGE 4 WORKS

NEW LIVERPOOL PRIMARY SCHOOL

GROUND PLAN: ACCESS AND CIRCULATION

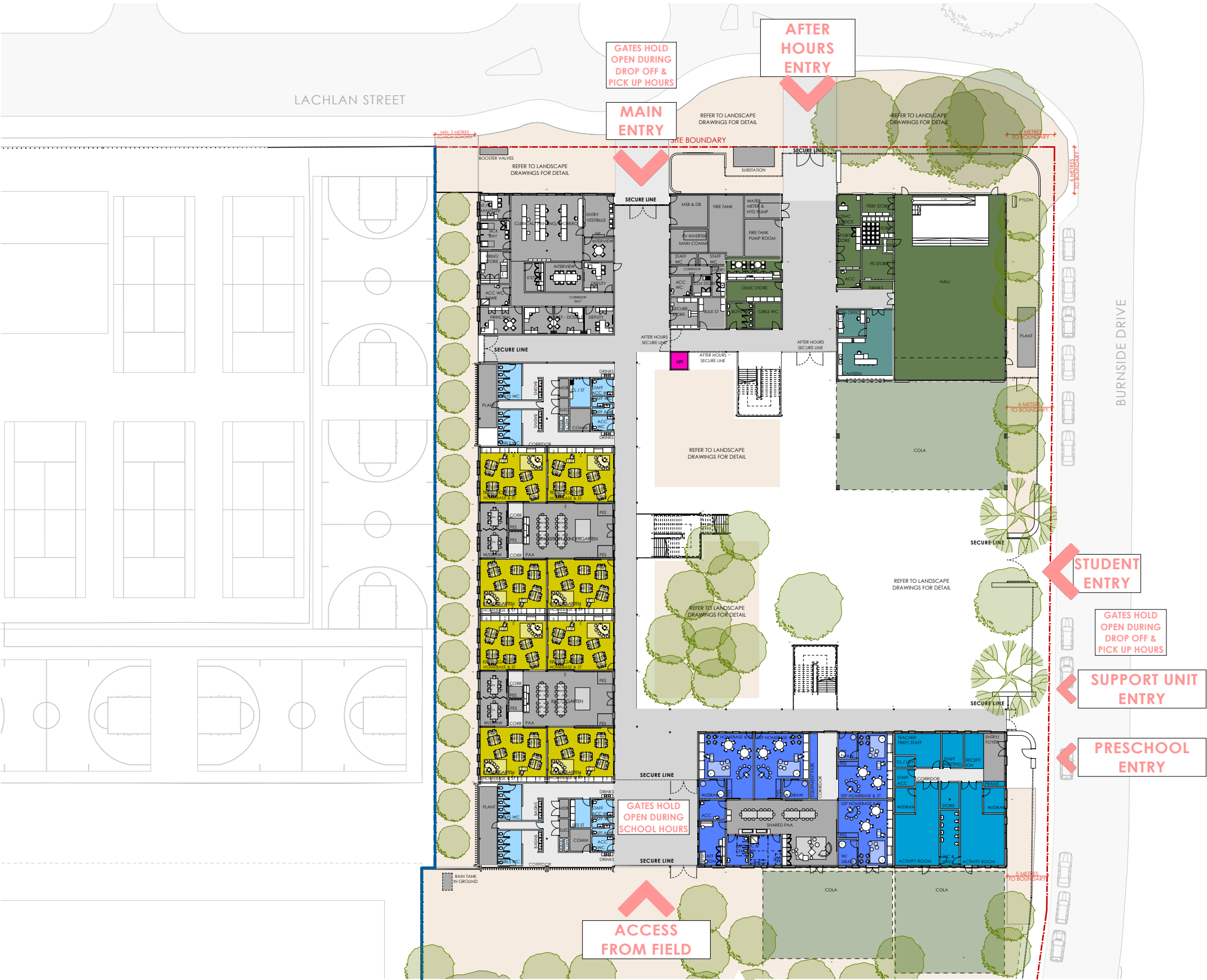
Main Entry for New Liverpool Primary School is located on the prominent Lachlan Street frontage, on an established bus route and linking to Warwick Park Train Station via Hart Street. Established trees to this frontage are to be retained where possible with a 6 meter building setback from the already generous public footpath creating an attractive, comfortable shaded space at the front of the school.

After Hours Entry from Lachlan Street gives controlled access to the Hall, Canteen, OSHC and lift / stairs to access the Library and Special Programme areas on L1.

Main student access is via Burnside Drive, with direct access from kerb side drop off. Students enter through the school gates, under the COLA into the courtyard area.

There is also direct access from Burnside Drive to the Preschool and Support Unit.

- AFTER HOURS SECURE LINE
- COLA
- COMMUNITY & SHARED FACILITIES
- CANTEEN
- LIBRARY
- ADMINISTRATION & STAFF
- TEACHING & LEARNING AREAS
- SPECIAL PROGRAMS UNIT
- SUPPORT UNIT
- PRESCHOOL
- CIRCULATION
- AMENITIES
- SERVICES



NEW LIVERPOOL PRIMARY SCHOOL

LEVEL 1 PLAN

Level 01 houses homebases, student amenities.

The library and staff areas are located within the northern portion of the building so that they are centrally located within the "heart" of the school.

The library and special programs unit can be accessed after hours via the lift or stairs adjacent.

- AFTER HOURS SECURE LINE
- COLA
- COMMUNITY & SHARED FACILITIES
- CANTEEN
- LIBRARY
- ADMINISTRATION & STAFF
- TEACHING & LEARNING AREAS
- SPECIAL PROGRAMS UNIT
- SUPPORT UNIT
- PRESCHOOL
- CIRCULATION
- AMENITIES
- SERVICES



NEW LIVERPOOL PRIMARY SCHOOL

LEVEL 2 PLAN

- COLA
- COMMUNITY & SHARED FACILITIES
- CANTEEN
- LIBRARY
- ADMINISTRATION & STAFF
- TEACHING & LEARNING AREAS
- SPECIAL PROGRAMS UNIT
- SUPPORT UNIT
- PRESCHOOL
- CIRCULATION
- AMENITIES
- SERVICES



NEW LIVERPOOL PRIMARY SCHOOL

LANDSCAPE PLAN

The landscape concept for the New Liverpool Primary School provides a variety of active, passive and flexible play spaces for children of different ages, genders and backgrounds. It includes a hierarchy of spaces radiating from the central assembly area including intimate places for smaller groups and wide open spaces for large gatherings and active play. Trees and understory planting are maximised across the site to provide shade and encourage students to connect with nature. While some exotic feature trees are proposed, there is a predominance of native plant species from the Cumberland Plain Woodland Community, which reinforces the native ecology and encourages habitat for local fauna.

A key Design Principle for New Liverpool Primary School is the connection it makes with the community it serves. Entries on Lachlan Street seek to both manage and welcome visitors and users, creating a public domain which is flexible and inviting to socialise around pick up & drop off. The public domain on Lachlan Street seeks to protect and enhance the quality of space created by existing mature trees while introducing amenities such as seating and further planting to encourage activation of the space.

Refer to Spackman Mossop Michaels Landscape Design Package for more details.

KEY

PROPOSED NATIVE TREE

PROPOSED NATIVE FEATURE TREE

EXISTING TREE (MEDIUM RETENTION VALUE)

TREE TO BE REMOVED

TURF/ ACTIVE PLAY

NATIVE SHRUB/GROUND COVER/GRASS PLANTING

SYNTHETIC TURF

CONCRETE (NON REFLECTIVE OXIDE TBC)

CONCRETE PAVING

ORGANIC MULCH

TIMBER FURNITURE (SPOTTED GUM)

RUBBER SOFTFALL

RAINWATER TANK

SITE BOUNDARY

ROOF/ SHADE STRUCTURE

FENCE

1

ENTRY FORECOURT

2

SEATING/ OUTDOOR LEARNING

3

SHADE SAIL

4

NATURE PLAY AND SEATING

5

ACTIVE PLAY AND TABLE TENNIS

6

MULTI-PURPOSE COURT & ASSEMBLY

7

LINE MARKING FOR ACTIVE PLAY

8

PLANTING TO SCREEN VIEWS

9

KITCHEN AND BUSHTUCKER GARDENS

10

LINE MARKING FOR ACTIVE PLAY

11

SUPPORT UNIT PLAY AREA

12

PRESCHOOL PLAY AREA

13

SCREEN PLANTING

The landscape plan for New Liverpool Primary School is a detailed site plan showing the building layout, play areas, and landscaping details. The plan is oriented with Lachlan Ave at the top and Burnside Drive on the right. The school building is a large, multi-story structure with several wings. To the left of the building is a large open area labeled 'AREA BEING APPROVED UNDER A DIFFERENT PLANNING PATHWAY - (EXEMPT DEVELOPMENT)'. To the right of the building is another large open area labeled 'AREA BEING APPROVED UNDER A DIFFERENT PLANNING PATHWAY - (REF)'. The plan includes 13 numbered callouts corresponding to the key: 1. ENTRY FORECOURT, 2. SEATING/ OUTDOOR LEARNING, 3. SHADE SAIL, 4. NATURE PLAY AND SEATING, 5. ACTIVE PLAY AND TABLE TENNIS, 6. MULTI-PURPOSE COURT & ASSEMBLY, 7. LINE MARKING FOR ACTIVE PLAY, 8. PLANTING TO SCREEN VIEWS, 9. KITCHEN AND BUSHTUCKER GARDENS, 10. LINE MARKING FOR ACTIVE PLAY, 11. SUPPORT UNIT PLAY AREA, 12. PRESCHOOL PLAY AREA, 13. SCREEN PLANTING. The plan also shows existing trees, proposed native trees, and proposed native feature trees. The site boundary is indicated by a red dashed line. The plan is labeled 'DETAILED PLAN A' and 'DETAILED PLAN B'.

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+partners

3-09

SOUTHERN SUBURBS CLUSTER

STATE SIGNIFICANT DESIGN REPORT

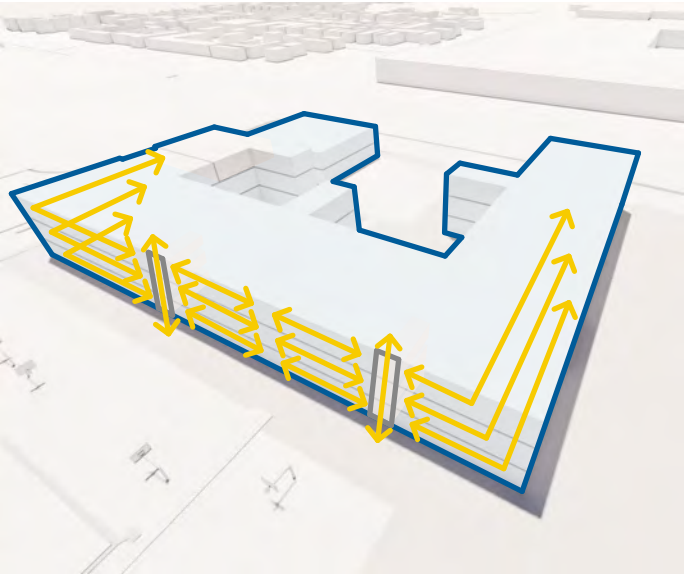
NEW LIVERPOOL PRIMARY SCHOOL

BUILDING SERVICES, WAYFINDING & SIGNAGE STRATEGY

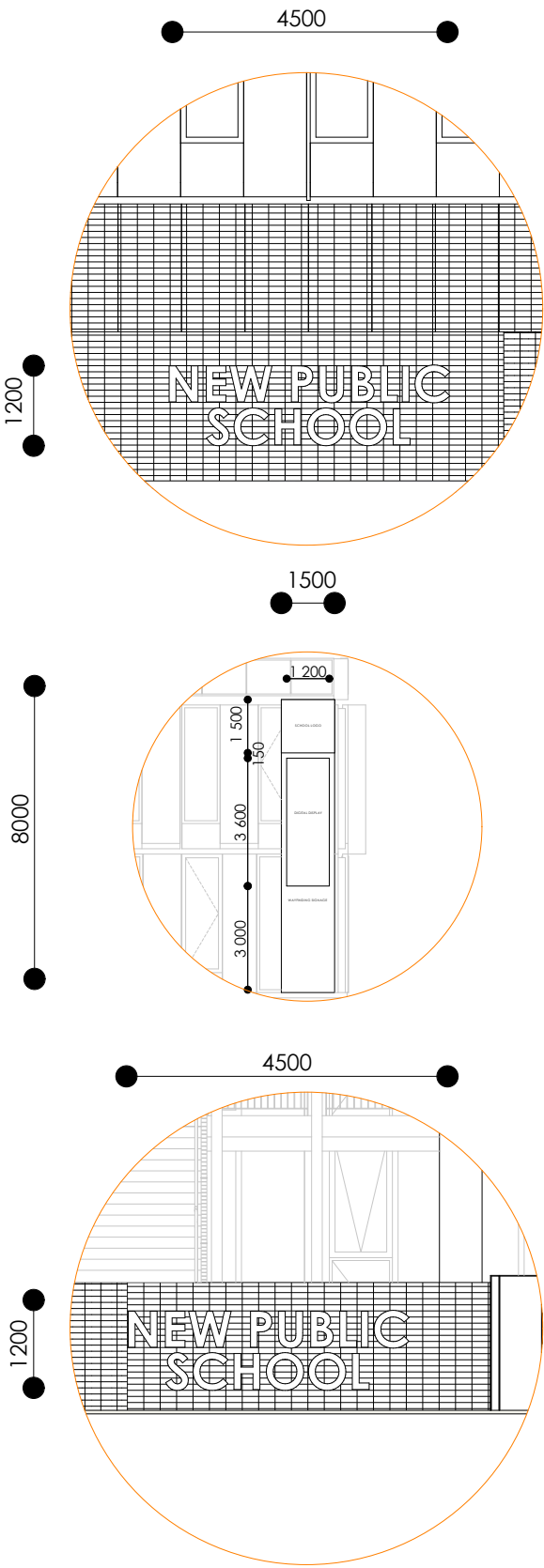
BUILDING SERVICES STRATEGY
The plant strategy adopted involves a localised strategy which aims to limit the amount of reticulation within the building. The majority of the plant is located within the six amenities pods (two per floor). These are stacked to optimise riser locations and create an ease of maintenance access.

The plant is strategically integrated into the building and concealed behind the façade. Ventilation is maintained by louvres, whilst appropriate acoustic strategies are to be implemented such as vibration dampening and acoustically rated walls in order to achieve appropriate learning conditions to home bases and adjacent schools.

The main plant includes mainly condenser units in order to meet the requirements for air-conditioning in every space. The plant also incorporates exhaust units, comms rooms, distribution boards, and electrical and mechanical risers. The ground floor houses MMC, and PV inverters, servicing the roof PV cells.



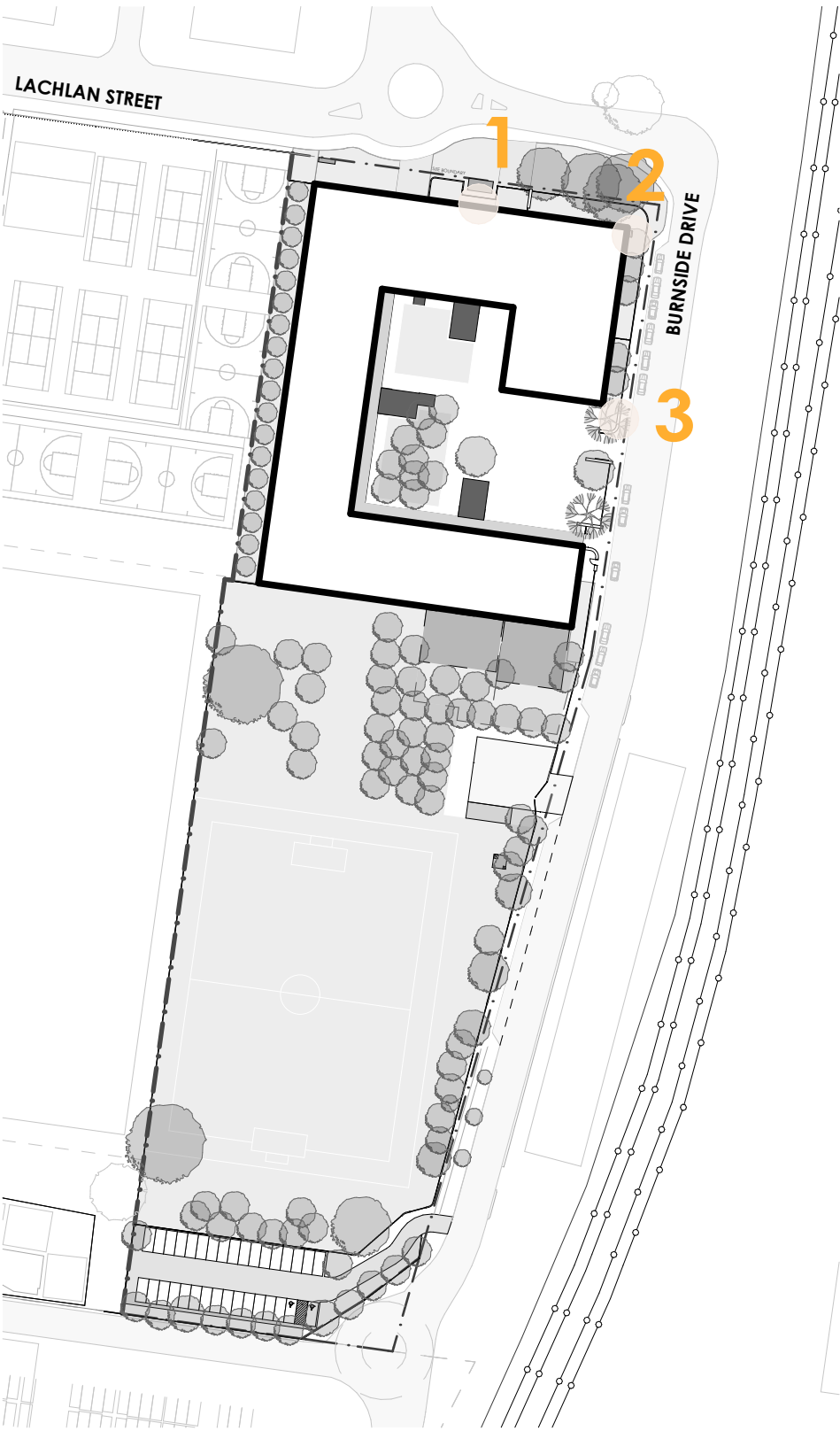
WAYFINDING & SIGNAGE STRATEGY



1
FRONT ENTRY SIGNAGE
SCHOOL NAME + LOGO
BRUSHED CHARCOAL METAL FINISH
APPROX 1200 x 4500

2
SIDE ENTRY INFORMATION SIGNAGE
PYLON CHARCOAL POWERCOATED
METAL CLADDING
APPROX 8000 x 1500
1500 x 1200 ZONE FOR PIN FIXED SCHOOL
LOGO WITH LED BACK LIGHTING
3600 x 1200 DIGITAL DISPLAY PANEL
WHITE POWDERCOATED METAL
WAYFINDING LETTERING

3
SIDE ENTRY DROP OFF ZONE SIGNAGE
SCHOOL NAME + LOGO
BRUSHED CHARCOAL METAL FINISH
APPROX 4500 x 1200



SOUTHERN SUBURBS CLUSTER

NEW LIVERPOOL PRIMARY SCHOOL
ARTIST IMPRESSION LACHLAN STREET ENTRY



SOUTHERN SUBURBS CLUSTER

NEW LIVERPOOL PRIMARY SCHOOL
ARTIST IMPRESSION BURNSIDE ROAD ENTRY



SOUTHERN SUBURBS CLUSTER



MAIN ENTRY



COURTYARD



AERIAL VIEW

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COLA

SOUTHERN SUBURBS CLUSTER

NEW LIVERPOOL PRIMARY SCHOOL

FIRST NATIONS ENGAGEMENT

The first inhabitants of Western Sydney were the Dharug people, approximately 40,000 years ago. The Cabrogal clan of the Dharug were more specific to the Liverpool district, named after the cohbra grubs they harvested on the banks of the waterways (Leane, 2014).
In 2011, 2,677 people in Liverpool identified as Aboriginal or Torres Strait Islander, making up 1.5 per cent of the population (Liverpool City Council, 2016).

With such a long and evolving Indigenous History, this new civic building has the opportunity to engage with the local community to establish design strategies to both celebrate and welcome First Nations People.

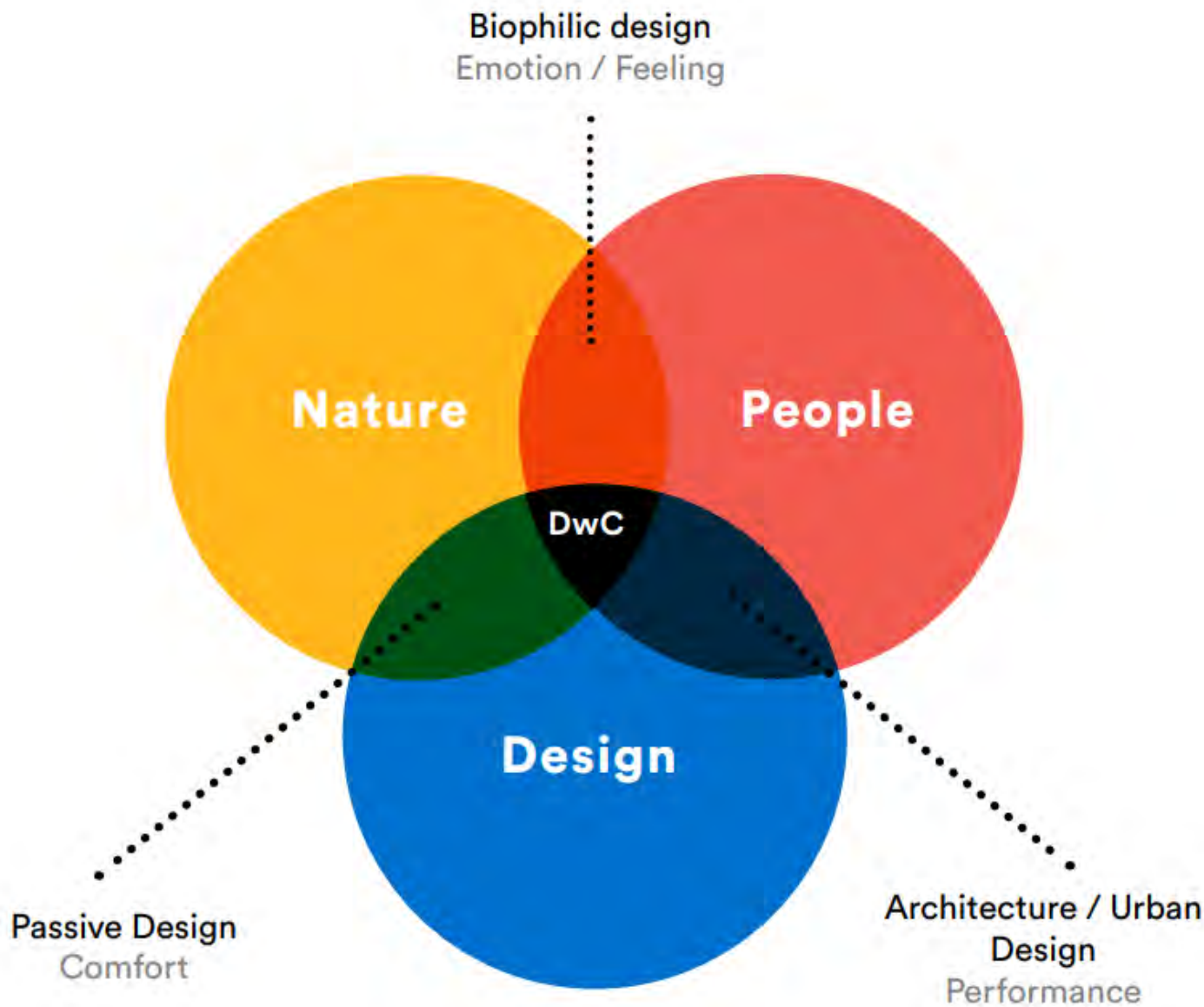
With the support of SINSW the design team have begun the process of identifying the most appropriate representative to collaborate with on the New School and are committed to a process which aligns with the principles established by the GANSW's 'Designing with Country' paper and the The Australian Indigenous Design Charter.

The below is particularly critical to ensure authentic representation of Indigenous Culture in the design:

- Indigenous Lead
First Nations People should be leading or co-leading the indigenous elements in the design
- Community Involvement
The local indigenous community should be engaged in the process
- Appropriate use of indigenous design
All indigenous design elements must be approved by involved First Nations People / Community / Elders.

There are many opportunities for input in this project, including but not limited to imagery and public art, space and landscape design, and the use of local language in wayfinding and storytelling around the school. The design also priorities passive design strategies to connect users to the environment around them. **See 4-05.**

Our approach draws inspiration from the adjacent diagram, taken from the 'Designing with Country' paper which describes the essential relationships between design, people and nature and the opportunities which arise from those connections.



NEW LIVERPOOL PRIMARY SCHOOL

SEPP RESPONSE

DESIGN RESPONSE TO THE QUALITY PRINCIPLES ESTABLISHED BY THE STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017.

01. CONTEXT, BUILT FORM & LANDSCAPE

The design proposal for New Liverpool Primary School considers the existing and future potential of the site.

- The design was developed with consideration of the following:
- Planning controls related to the site as described in the Liverpool LEP 2008 and DCP 2008. The architectural response proposes a building height which meets controls and is appropriate to the scale of neighbouring 3/4 storey residential properties, aligns with zoning controls and responds appropriately to site analysis of pedestrian, bike and traffic conditions in accordance with the abovementioned documents. **See 2-10, 2-11.**
 - The site setbacks have been established to allow 6 meters clear to boundary which when added to the existing road reserve provides a generous public domain to Lachlan Avenue for the school community to passively gather and socialise at pick up and drop off. This setback balances the objective of minimising impacts to the existing High School sites by locating the Primary School building clear of their existing hardcourts and with enough green space for a full sized Rugby Field to be reserved. **See 3-10, 4.02.**
 - The landscape design is an integral component of the school design. Every effort has been made to retain existing trees and propose new trees to increase naturally shaded areas and encourage students to connect with nature. **See 3-10 + Landscape Design Package.**

02. SUSTAINABLE, EFFICIENT, DURABLE

The design proposal for New Liverpool Primary School combines positive environmental, social and economic outcomes. **See 4-05.**

- The design provides natural ventilation where appropriate for better air circulation.
- The design provides well insulated external and internal walls to prevent excessive heat gain and loss.
- The design maximises natural light to internal learning spaces.
- The proposal will specify energy efficient fittings and fixtures including photovoltaic panels.
- The design allows for Rain water collection for landscape irrigation.
- The design will specify sustainable, low embodied energy materials where possible.

03. ACCESSIBLE & INCLUSIVE

The design proposal for New Liverpool Primary School provides good wayfinding and is welcome, accessible and inclusive to people with differing needs and capabilities. **See 3-09.**

- The proposal provides a strong street address to Lachlan Street and clearly defined main entry point.
- The proposal separates after hours entry to facilitate clear access to out of hours and shared community facilities.
- Kiss & Ride drop off / pick up is located kerb side on Burnside Drive, with clear sight lines from cars to the school gate.
- Support Unit and PreSchool have dedicated entries and short term parking adjacent.
- The site is level, mitigating requirement for landscaped or ramped level changes to the ground plane
- The building form facilitates a range of outdoor play spaces, catering to students of various confidence levels from intimate contained play within the courtyard to large open green space to the south.

04. HEALTH & SAFETY

The design proposal for New Liverpool Primary School optimises health, safety and security within it's boundaries and the surrounding public domain, while creating a welcoming and accessible environment.

- The design establishes clear site access strategy, open and visible entry for students at the beginning and end of the school day, controlled entry for visitors through the school day via administration with secure entry to specific school areas considered appropriate for after hours community use. **See 3-06.**
- The building promotes passive supervision by providing clear site lines between external and internal spaces.
- The ground plane planning limits private vehicle requirements on site by engaging with green travel strategies, connecting with safe pedestrian and bicycle routes, and easy connectivity to public transport. **See 2-06.**
- Landscape Design provides active courtyards and play areas. **See 3-10 + Landscape Design Package.**
- Site planning reduces building footprint to maximise ground plane play areas. **See 3-01.**
- Building configuration eliminates entrapment or secluded spots to deter anti-social activities. **See 4-06.**
- The proposal provides adequate night lighting solutions. **See 4-02.**

05. AMENITY

The design proposal for New Liverpool Primary School delivers pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities while also considering the amenity of adjacent developments and the local neighbourhood.

- The design identifies and facilitates shared use of school assets for community use out of hours, including the Communal Hall, Special Programmes Rooms, Library and Southern Sports Field with access to adjacent amenities. **See 3-06, 3-07.**
- Homebase design considers both traditional and contemporary pedagogies where various teaching modes that can occur throughout the course of the school day.
- The design allows for a range of different internal and external learning spaces.
- The site is adjacent to the south west rail corridor; the building facade will be treated appropriately to mitigate noise impacts.
- The building form prioritises spatial planning to maximise connection of indoor space to nature, both directly with operable windows and spaces for outdoor learning, and indirectly with outlook to green space on all sides.

06. WHOLE OF LIFE, FLEXIBLE & ADAPTIVE

The design proposal for New Liverpool Primary School considers future needs and takes a whole of life approach underpinned by site wide strategic and spatial planning.

- Internal planning designed for users to easily reconfigure homebase spaces to suit different teaching and learning modes.
- Planning supports modular design and construction methods which support future site developments being interchangeable and reusable.
- Masterplanning aligns with the vision for the Liverpool Innovation Precinct. **See 1-05.**
- The architectural and structural design solution seeks to reduce the volume of materials used.
- Materials selection prioritises robust, durable and hard wearing products that are readily available. **See 3-03.**

07. AESTHETICS

The design proposal for New Liverpool Primary School is designed with good proportions and balanced composition of elements, responding to positive elements from the site and surrounds.

- The proposal will provide a new multi level school facility that will renew and strengthen the school's presence within its locale.
- Modularisation of the façade establishes a thoughtfully proportioned and balanced design which can respond simplistically to the environmental requirements of each façade aspect. **See 3-03.**
- Materiality complements the natural and built surrounds.

SEARS RESPONSE

SEARs REQUIREMENTS	RELEVANT SECTION OF THE REPORT
4. Built Form and Urban Design	
Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	See SSD Report Section 2, 3, 4
Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours.	See SSD Report Section 3
Provide details of any digital signage boards, including size, location and finishes.	Drawing 0018 & SSD Report Section 3.10
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.	SSD Report Section 3.15
Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	SSD Report Section 3.10
Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.	SSD Report See section 2
Provide a detailed landscape strategy, including: <ul style="list-style-type: none">- 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.- details of the number of trees to be removed and the number of trees to be planted on the site.	See SSD Report Section 3.09 and Landscape report (appendix)
Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	SSD Report Section 4.03, 4.04
Address CPTED Principles.	SSD Report Section 4.06
Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility having regard to the proposed and existing schools on the site.	See SSD Report section 3
Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	SSD Report Section 3.14
5. Environmental Amenity	
Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts.	Section 4.01, 4.02
Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building and likely future development).	SSD Report Section 3.11, 3.12, 3.13
Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers.	Section 4.02

Identify any proposed use of the proposed facility outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures.	See Drawing 0011 & SSD Report Section 4
Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers.	SSD Report Section 1.02
Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	Section 4.01, 4.02 and acoustic and wind reports (appendix)
6. Staging	
Provide details regarding the staging of the proposed development (if any).	SSD Report Section 3.04, 3.05
Plans and Documents	
Architectural drawings showing key dimensions, RLs, scale bar and north point, including: <ul style="list-style-type: none">- Plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program- illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes- Details of proposed signage, including size, location and finishes- Detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality- Site plans and operations statement demonstrating the afterhours and community use strategy	See SSD Report Section section 2 and accompanying Architectural SSDA Drawing Set
Site Analysis and Context Plans, including: <ul style="list-style-type: none">- Any future development and expansion zones- Open space network- Active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links- precinct scale plans showing the relationship of the proposed development to any proposed development on surrounding land- Provide a precinct scale plan showing relationship of the proposal to any proposed development on surrounding land	See SSD Report Section Section 1.2 and accompanying Architectural SSDA drawing set
Cross sectional drawings showing ground surface, rail tracks, sub soil profile, and structural design of the proposed primary school with sub ground support adjacent to the rail corridor (land, assets and easements)	See accompanying Architectural SSDA Drawing Set and Civil report (appendix)
Shadow diagrams	Section 4.01
View analysis, photomontages and architectural renders, including from those from public vantage points	Section 3.11, 3.12, 3.13, 4.03, 4.04
Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: <ul style="list-style-type: none">- Integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed, including articulation of playground spaces	SSD Report Section 3.09 and Landscape report (appendix)

<ul style="list-style-type: none">- Plan identifying significant trees, trees to be removed and trees to be retained or transplanted	
Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: <ul style="list-style-type: none">- architectural design statement- Diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal- Detailed site and context analysis- Analysis of options considered to justify the proposed site planning and design approach- Visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items- Summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) (where applicable) and responses to this advice- Summary report of consultation with the community and response to any feedback provided	See SSD Report Sections1, 2, 3, 4

NEW LIVERPOOL PRIMARY SCHOOL

CHILDCARE PLANNING GUIDELINE ASSESSMENT

Component	Proposal
Part 2 - Design Quality	
Principle 1 - Context	The proposed preschool is located on ground level of the New Public School development at the southern end of the site alongside Burnside Drive.
Principle 2 – Built form	The preschool is accommodated in the New Public School for Liverpool which is being assessed under SSDA.
Principle 3 – Adaptive learning spaces	The internal fitout and playground have been designed to align with the Child Care Guidelines.
Principle 4 – Sustainability	Sustainability targets for the proposed building are aligned with the SINSW Sustainability Pathway. Refer to the ESD report accompanying SSDA.
Principle 5 – Landscape	The preschool outdoor area aligns with the Child Care Guidelines.
Principle 6 – Amenities	The preschool provides indoor and outdoor space to provide a variety of experiences. Secure access is provided to the preschool.
Principle 7 – Safety	The preschool provides a welcoming, safe and accessible environment for all users.
Part 3 - Matters for Consideration	
3.1 Site selection and location	The proposed location within the overall development has been selected to maximize security and accessibility, while complying with space requirements.
Objective: To ensure that appropriate zone considerations are assessed when selecting a site.	
Objective: To ensure that the site selected for a proposed child care facility is suitable for the use.	
Objective: To ensure that sites for child care facilities are appropriately located.	
Objective: To ensure that sites for child care facilities do not incur risks from environmental, health or safety hazards.	
3.2 Local character, streetscape and the public domain interface	The Preschool is captured in the New Primary School building envelope. The SSDA Report for the New School demonstrates the building's consideration of local character and streetscape.

Component	Proposal
Objective: To ensure clear delineation between the child care facility and public spaces.	The preschool is within the secure fencing of the New Primary School with dedicated access from Burnside Drive. The preschool outdoor area is securely fenced from the Primary School's play areas.
Objective: To ensure that front fences and retaining walls respond to and complement the context and character of the area and do not dominate the public domain.	
	Refer to SSDA Report.
3.3 Building orientation, envelope and design	The building envelope is being assessed under SSDA. Refer to SSDA Report.
Objective: To respond to the streetscape and site, while optimizing solar access and opportunities for shade.	
Objective: To ensure that the scale of the child care facility is compatible with adjoining development and the impact on adjoining buildings is minimized.	
Objective: To ensure that setbacks from the boundary of a child care facility are consistent with the predominant development within the immediate context.	
Objective: To ensure that the built form, articulation and scale of development relates to its context and buildings are well designed to contribute to an area's character.	
Objective: To ensure that buildings are designed to create safe environments for all users.	
Objective: To ensure that child care facilities are designed to be accessible by all potential users.	
3.4 Landscaping	The proposed preschool is located within the school grounds. Refer Landscape Report prepared by Spackman Mossop Michaels included in SSDA for information regarding the streetscape landscaping.
Objective: To provide landscape design that contributes to the streetscape and amenity.	
C18	
Appropriate planting should be provided along the boundary integrated with fencing. Screen planting should not be included in calculations of unencumbered outdoor space.	The preschool playground area includes outdoor area that allow a variety of play spaces, materials and surfaces including synthetic turf and softfall - the softscape design will explore options for small garden shortcuts and tactile/ aromatic plant species. Refer Landscape Report prepared by Spackman Mossop Michaels.
Use the existing landscape where feasible to provide a high quality landscaped area by:	
• reflecting and reinforcing the local context	
• incorporating natural features of the site, such as trees, rocky outcrops and vegetation communities into landscaping.	

Component	Proposal
C19	There is no onsite carparking proposed for the preschool.
Incorporate car parking into the landscape design of the site by:	
• planting shade trees in large car parking areas to create a cool outdoor environment and reduce summer heat radiating into buildings taking into account streetscape, local character and context when siting car parking areas within the front setback	
• using low level landscaping to soften and screen parking areas.	
3.5 Visual and acoustic privacy	As below.
Objective: To protect the privacy and security of children attending the facility.	
C20	The preschool is not within a mixed use development.
Open balconies in mixed use developments should not overlook facilities nor overhang outdoor play spaces.	
C21	The preschool is setback 5 meters from Burnside Drive behind secure fencing.
Minimize direct overlooking of indoor rooms and outdoor play spaces from public areas through:	
• appropriate site and building layout	
• suitably locating pathways, windows and doors	Staff areas are located to the north of the preschool minimizing overlooking from Primary School users.
• permanent screening and landscape design.	
	The planting strategy outlined in the SSDA Landscape Report prepared by Spackman Mossop Michaels provides landscape buffers to the outdoor play area.
Objective: To minimize impacts on privacy of adjoining properties.	As below.
C22	The Preschool is located within the New Liverpool Public School site, to the southern end of the building where there are no adjoining developments.
Minimize direct overlooking of main internal living areas and private open spaces in adjoining developments through:	
• appropriate site and building layout	
• suitable location of pathways, windows and doors	
• landscape design and screening.	
Objective: To minimize the impact of child care facilities on the acoustic privacy of neighboring residential developments.	As below.
A new development, or development that includes alterations to more than 50 per cent of the existing floor area, and is located adjacent to residential accommodation should:	The Preschool is located within the New Liverpool Public School site, to the southern end of the building where there are no adjoining developments.
• provide an acoustic fence along any boundary where the adjoining property contains a residential use. (An acoustic fence is one that is a solid, gap free fence).	
• ensure that mechanical plant or equipment is screened by solid, gap free material and constructed to reduce noise levels e.g. acoustic fence, building, or enclosure.	

NEW LIVERPOOL PRIMARY SCHOOL

CHILDCARE PLANNING GUIDELINE ASSESSMENT

Component	Proposal
C24 A suitably qualified acoustic professional should prepare an acoustic report which will cover the following matters: <ul style="list-style-type: none">• identify an appropriate noise level for a child care facility located in residential and other zones• determine an appropriate background noise level for outdoor play areas during times they are proposed to be in use• determine the appropriate height of any acoustic fence to enable the noise criteria to be met.	Refer to New Liverpool Primary School SSDA Acoustic Report (prepared by others).
3.6 Noise and air pollution Objective: To ensure that outside noise levels on the facility are minimised to acceptable levels.	As below.
C25 Adopt design solutions to minimise the impacts of noise, such as: <ul style="list-style-type: none">• creating physical separation between buildings and the noise source• orienting the facility perpendicular to the noise source and where possible buffered by other uses• using landscaping to reduce the perception of noise• limiting the number and size of openings facing noise sources• using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens)• using materials with mass and/or sound insulation or absorption properties, such as solid balcony balustrades, external screens and soffits• locating cot rooms, sleeping areas and play areas away from external noise sources.	The preschool activity rooms and outdoor play area face into the Hardstand area of the school which will be primarily used outside of preschool hours. There are residential buildings to the north of the New Primary School site but this is buffered by the new building. The preschool playground is over 30 meter from a rail corridor to the east, refer to SSDA Acoustic Report for further detail of noise impact.
C26 An acoustic report should identify appropriate noise levels for sleeping areas and other non play areas and examine impacts and noise attenuation measures where a child care facility is proposed in any of the following locations: <ul style="list-style-type: none">• on industrial zoned land• where the ANEF contour is between 20 and 25, consistent with AS 2021 – 2000• along a railway or mass transit corridor, as defined by State Environmental Planning Policy (Infrastructure) 2007• on a major or busy road• other land that is impacted by substantial external noise.	Refer to New Liverpool Primary School SSDA Acoustic Report (prepared by others).
Objective: To ensure air quality is acceptable where child care facilities are proposed close to external sources of air pollution such as major roads and industrial development.	As below.

Component	Proposal
C27 Locate child care facilities on sites which avoid or minimize the potential impact of external sources of air pollution such as major roads and industrial development.	The preschool is located adjacent to Burnside Drive which is a private road primarily used for access to Liverpool Hospital to the south of the site.
C28 A suitably qualified air quality professional should prepare an air quality assessment report to demonstrate that proposed child care facilities close to major roads or industrial developments can meet air quality standards in accordance with relevant legislation and guidelines. The air quality assessment report should evaluate design considerations to minimize air pollution such as: <ul style="list-style-type: none">• creating an appropriate separation distance between the facility and the pollution source. The location of play areas, sleeping areas and outdoor areas should be as far as practicable from the major source of air pollution• using landscaping to act as a filter for air pollution generated by traffic and industry. Landscaping has the added benefit of improving aesthetics and minimizing visual intrusion from an adjacent roadway• incorporating ventilation design into the design of the facility.	The preschool is not located adjacent to a major road or in an industrial zone.
3.7 Hours of operation Objective: To minimise the impact of the child care facility on the amenity of neighbouring residential developments.	As below.
C29 Hours of operation within areas where the predominant land use is residential should be confined to the core hours of 7.00am to 7.00pm weekdays. The hours of operation of the proposed child care facility may be extended if it adjoins or is adjacent to non-residential land uses. Within mixed use areas or predominantly commercial areas, the hours of operation for each child care facility should be assessed with respect to its compatibility with adjoining and co-located land uses.	The preschool is expected to operate Monday to Friday, 8.30am - 3.30pm (staff), 9am -3pm (children) during school days, excluding public holidays.
3.8 Traffic, parking and pedestrian circulation Objective: To provide parking that satisfies the needs of users and demand generated by the center.	The preschool will be accessed directly from Burnside Drive where there will be a dedicated drop off and pick up zone.
Objective: To provide vehicle access from the street in a safe environment that does not disrupt traffic flows.	As below.

Component	Proposal
C31 Off-street car parking should be provided at the rates for child care facilities specified in a Development Control Plan that applies to the land.	Refer Traffic Report
C32 In commercial or industrial zones and mixed use developments, on street parking may only be considered where there are no conflicts with adjoining uses, that is, no high levels of vehicle movement or potential conflicts with trucks and large vehicles.	The preschool is not located in commercial or industrial zone or mixed use development. Refer Traffic Report
C33 A Traffic and Parking Study should be prepared to support the proposal to quantify potential impacts on the surrounding land uses and demonstrate how impacts on amenity will be minimized. The study should also address any proposed variations to parking rates and demonstrate that: <ul style="list-style-type: none">• the amenity of the surrounding area will not be affected• there will be no impacts on the safe operation of the surrounding road network.	Refer Traffic Report
Objective: To provide vehicle access from the street in a safe environment that does not disrupt traffic flows.	As below.
C34 Alternate vehicular access should be provided where child care facilities are on sites fronting: <ul style="list-style-type: none">• a classified road• roads which carry freight traffic or transport dangerous goods or hazardous materials. The alternate access must have regard to: <ul style="list-style-type: none">• the prevailing traffic conditions• pedestrian and vehicle safety including bicycle movements• the likely impact of the development on traffic.	The preschool is not located with frontage to a classified road or a road which carries freight traffic or transport of dangerous goods or hazardous material.
C35 Child care facilities proposed within cul-de-sacs or narrow lanes or roads should ensure that safe access can be provided to and from the site, and to and from the wider locality in times of emergency.	The preschool is not located within a cul-de-sac or narrow road. Refer Traffic Report
Objective: To provide a safe and connected environment for pedestrians both on and around the site.	As below.

NEW LIVERPOOL PRIMARY SCHOOL

CHILDCARE PLANNING GUIDELINE ASSESSMENT

Component	Proposal
C36 The following design solutions may be incorporated into a development to help provide a safe pedestrian environment: <ul style="list-style-type: none">• separate pedestrian access from the car park to the facility• defined pedestrian crossings included within large car parking areas• separate pedestrian and vehicle entries from the street for parents, children and visitors• pedestrian paths that enable two prams to pass each other• delivery and loading areas located away from the main pedestrian access to the building and in clearly designated, separate facilities• in commercial or industrial zones and mixed use developments, the path of travel from the car parking to the center entrance physically separated from any truck circulation or parking areas• vehicles can enter and leave the site in a forward direction.	The pedestrian path into the preschool is directly off Burnside Drive. With the exception of doors / gates the path of travel is wide enough to accommodate two passing prams.
C37 Mixed use developments should include: <ul style="list-style-type: none">• driveway access, manoeuvring areas and parking areas for the facility that are separate to parking and manoeuvring areas used by trucks• drop off and pick up zones that are exclusively available for use during the facility's operating hours with spaces clearly marked accordingly, close to the main entrance and preferably at the same floor level. Alternatively, direct access should avoid crossing driveways or manoeuvring areas used by vehicles accessing other parts of the site parking that is separate from other uses, located and grouped together and conveniently located near the entrance or access point to the facility.	The preschool is not within a mixed use development.
C38 Car parking design should: <ul style="list-style-type: none">• include a child safe fence to separate car parking areas from the building entrance and play areas• provide clearly marked accessible parking as close as possible to the primary entrance to the building in accordance with appropriate Australian Standards• include wheelchair and pram accessible parking.	There is no onsite carparking proposed for the preschool.
Part 4 - Applying the National Regulations to development proposals	
4.1 Indoor space requirements - Regulation 107 - Education and Care Services National Regulations Every child being educated and cared for within a facility must have a minimum of 3.25m2 of unencumbered indoor space. If this requirement is not met, the concurrence of the regulatory authority is required under the SEPP.	40 children @ 3.25m ² = 130m ² (65m ² per activity room) Internal fit out provides for a minimum of 65m ² of unencumbered indoor space per activity room. Refer floor plans.

Component	Proposal
It is recommended that a child care facility provide: <ul style="list-style-type: none">• a minimum of 0.3m3 per child of external storage space• a minimum of 0.2m3 per child of internal storage space.	40 children @ 0.3m ³ = 12m ³ Proposed outdoor storage = 12m ³ 40 Children @ 0.2m ³ = 8m ³ Proposed indoor storage = 18m ³
4.2 Laundry and hygiene facilities - Regulation 106 Education and Care Services National Regulations There must be laundry facilities or access to laundry facilities; or other arrangements for dealing with soiled clothing, nappies and linen, including hygienic facilities for storage prior to their disposal or laundering. The laundry and hygienic facilities must be located and maintained in a way that does not pose a risk to children. Child care facilities must also comply with the requirements for laundry facilities that are contained in the National Construction Code.	Laundry facilities are provided.
On site laundry facilities should contain: <ul style="list-style-type: none">• a washer or washers capable of dealing with the heavy requirements of the facility• a dryer• laundry sinks• adequate storage for soiled items prior to cleaning• an on site laundry cannot be calculated as usable unencumbered play space	As above, refer floor plans.
4.3 Toilet and hygiene facilities - Regulation 109 Education and Care Services National Regulations A service must ensure that adequate, developmentally and age-appropriate toilet, washing and drying facilities are provided for use by children being educated and cared for by the service; and the location and design of the toilet, washing and drying facilities enable safe use and convenient access by the children. Child care facilities must comply with the requirements for sanitary facilities that are contained in the National Construction Code.	The toilet facilities have been designed as per the requirements of the NCC. An adult hand basin has been provided in each of the children's toilet areas.
Toilet and hygiene facilities should be designed to maintain the amenity and dignity of the occupants	Partitions between the toilet pans to a maximum of 900mm can be provided. Adequate sightlines have been achieved with the provision of half-height glazing between the toilets and the activity room.
4.4 Ventilation and natural light - Regulation 110 Education and Care Services National Regulations Services must be well ventilated, have adequate natural light, and be maintained at a temperature that ensures the safety and wellbeing of children. Child care facilities must comply with the light and ventilation and minimum ceiling height requirements of the National Construction Code. Ceiling height requirements may be affected by the capacity of the facility.	Full height glazing between the activity rooms and outdoor play area allow for adequate natural light. The classrooms will also benefit from mechanical ventilation and ceiling fans.

Component	Proposal
4.5 Administrative space - Regulation 111 Education and Care Services National Regulations A service must provide adequate area or areas for the purposes of conducting the administrative functions of the service, consulting with parents of children and conducting private conversations.	Office, meeting and foyer spaces have been provided.
4.6 Nappy change facilities - Regulation 112 Education and Care Services National Regulations Child care facilities must provide for children who wear nappies, including appropriate hygienic facilities for nappy changing and bathing. All nappy changing facilities should be designed and located in an area that prevents unsupervised access by children. Child care facilities must also comply with the requirements for nappy changing and bathing facilities that are contained in the National Construction Code.	Nappy change facilities are not required as children are aged 3-5 years.
4.7 Premises designed to facilitate supervision - Regulation 115 Education and Care Services National Regulations A centre-based service must ensure that the rooms and facilities within the premises (including toilets, nappy change facilities, indoor and outdoor activity rooms and play spaces) are designed to facilitate supervision of children at all times, having regard to the need to maintain their rights and dignity.	All rooms and facilities will provide full and half height glazing appropriately located to allow for supervision of children.
Child care facilities must also comply with any requirements regarding the ability to facilitate supervision that are contained in the National Construction Code.	The proposed preschool design complies with requirements.
4.8 Emergency and evacuation procedures - Regulations 97 and 168 Education and Care Services National Regulations Regulation 168 sets out the list of procedures that a care service must have, including procedures for emergency and evacuation. Regulation 97 sets out the detail for what those procedures must cover including: <ul style="list-style-type: none">• instructions for what must be done in the event of an emergency• an emergency and evacuation floor plan, a copy of which is displayed in a prominent position near each exit• a risk assessment to identify potential emergencies that are relevant to the service.	The future preschool operator will prepare a detailed operations plan of management that will include an emergency evacuations procedure plan.
Multi-storey buildings with proposed child care facilities above ground level may consider providing additional measures to protect staff and children. For example: <ul style="list-style-type: none">• independent emergency escape routes from the facility to the ground level that would separate children from other building users to address child protection concerns during evacuations• a safe haven or separate emergency area where children and staff can muster during the initial stages of a fire alert or other emergency. This would enable staff to account for all children prior to evacuation.	The proposed preschool is located on Ground level.
An emergency and evacuation plan should be submitted with a DA	Refer to BCA Report.

NEW LIVERPOOL PRIMARY SCHOOL

CHILDCARE PLANNING GUIDELINE ASSESSMENT

Component	Proposal
4.9 Outdoor space requirements - Regulation 108 Education and Care Services National Regulations An education and care service premises must provide for every child being educated and cared for within the facility to have a minimum of 7.0m2 of unencumbered outdoor space.	40 children @ 7.m² = 280m² minimum. The total preschool playground area totals 400m² . Refer to Landscape Report.
If this requirement is not met, the concurrence of the regulatory authority is required under the SEPP.	External play space complies with requirements.
4.10 Natural environment - Regulation 113 Education and Care Services National Regulations The approved provider of a centre-based service must ensure that the outdoor spaces allow children to explore and experience the natural environment. Creating a natural environment to meet this regulation includes the use of natural features such as trees, sand and natural vegetation within the outdoor space.	The preschool playground area includes outdoor area that allow a variety of play spaces, materials and surfaces including synthetic turf and softfall - the softscape design will explore options for small garden shortcuts and tactile/ aromatic plant species. Refer Landscape Report prepared by Spackman Mossop Michaels.
4.11 Shade - Regulation 114 Education and Care Services National Regulations The approved provider of a centre-based service must ensure that outdoor spaces include adequate shaded areas to protect children from overexposure to ultraviolet radiation from the sun.	The outdoor play space includes a large shade structure in the outdoor play area. Proposed trees provide additional dappled shade.
Outdoor play areas should: <ul style="list-style-type: none">• have year-round solar access to at least 30 per cent of the ground area, with no more than 60 per cent of the outdoor space covered.• provide shade in the form of trees or built shade structures giving protection from ultraviolet radiation to at least 30 per cent of the outdoor play area• have evenly distributed shade structures over different activity spaces.	The preschool can achieve a yearly average of 30 per cent solar access to outdoor play area without taking into consideration the impact of built shade structure required for 30 per cent ultraviolet radiation protection.
4.12 Fencing - Regulation 104 Education and Care Services National Regulations Any outdoor space used by children must be enclosed by a fence or barrier that is of a height and design that children preschool age or under cannot go through, over or under it.	1200mm high fence is provided to the outdoor play area, which is enclosed within the school grounds.
Child care facilities must also comply with the requirements for fencing and protection of outdoor play spaces that are contained in the National Construction Code.	The balustrade complies with the NCC.
Design considerations for side and rear boundary fences could include: <ul style="list-style-type: none">• being made from solid prefinished metal, timber or masonry• having a minimum height of 1.8 metres• having no rails or elements for climbing higher than 150mm from the ground.	1800mm high fence is provided to the eastern boundary facing Burnside Drive.

Component	Proposal
4.13 Soil assessment - Regulation 25 Education and Care Services National Regulations Subclause (d) of regulation 25 requires an assessment of soil at a proposed site, and in some cases, sites already in use for such purposes as part of an application for service approval. With every service application one of the following is required:	Refer Contamination Assessment for SSDA.
<ul style="list-style-type: none">• a soil assessment for the site of the proposed education and care service premises• if a soil assessment for the site of the proposed child care facility has previously been undertaken, a statement to that effect specifying when the soil assessment was undertaken• a statement made by the applicant that states, to the best of the applicant’s knowledge, the site history does not indicate that the site is likely to be contaminated in a way that poses an unacceptable risk to the health of children.	Refer Contamination Assessment for SSDA.
An assessment of soil for a children’s service approval application may require three levels of investigation: <ul style="list-style-type: none">• Stage 1 - Preliminary investigation (with or without soil sampling)• Stage 2 - Detailed site investigation• Stage 3 - Site specific human health risk assessment.	

NEW LIVERPOOL PRIMARY SCHOOL

ENVIRONMENTAL IMPACTS

SOLAR IMPACT

The proposed school has minimal over-shadowing impact on neighbouring properties throughout the year with the majority of shadows contained on the school campus itself.

The school's own field located south of the building captures the bulk of the shadow. On the west there is no additional shadowing on the existing high school buildings, and the train line on the east receives some minor shadowing late in the winter afternoon.



NEW LIVERPOOL PRIMARY SCHOOL

ENVIRONMENTAL IMPACTS

ACOUSTIC IMPACT

A Noise and Vibration Assessment has been carried out and included in this SSDA submission.

The report provides an assessment of potential noise from excavation, construction and ongoing operation of the school and the potential impacts on surrounding areas, including the Hospital to the south, the residential areas to the north and the neighbouring schools to the west.

VIEW IMPACT

The proposed school results in minimal loss of views from neighbouring buildings.

The apartment buildings along Lauchlan street typically have east and west oriented balconies and living spaces, with minimal views towards the school. There are no buildings directly north of the school

The new school proposes landscaped entry forecourts, gardens and tree plantings, greatly improving the overall appearance and visual amenity of Lachlan street and Burnside dr corner.

A View Impact Assessment of the building form has been carried out and included on page 4 -03 & 4 -04 of this report.

LIGHT SPILL

The lighting strategy for the school will be developed during the detail design phases of the project and will consider the environmental impact of light pollution and glare on the surrounding precinct.

All lighting shall be designed and documented in accordance with AS/NZs1680 and AS/NZs 4282-1997 Control of the obtrusive effects of outdoor lighting.

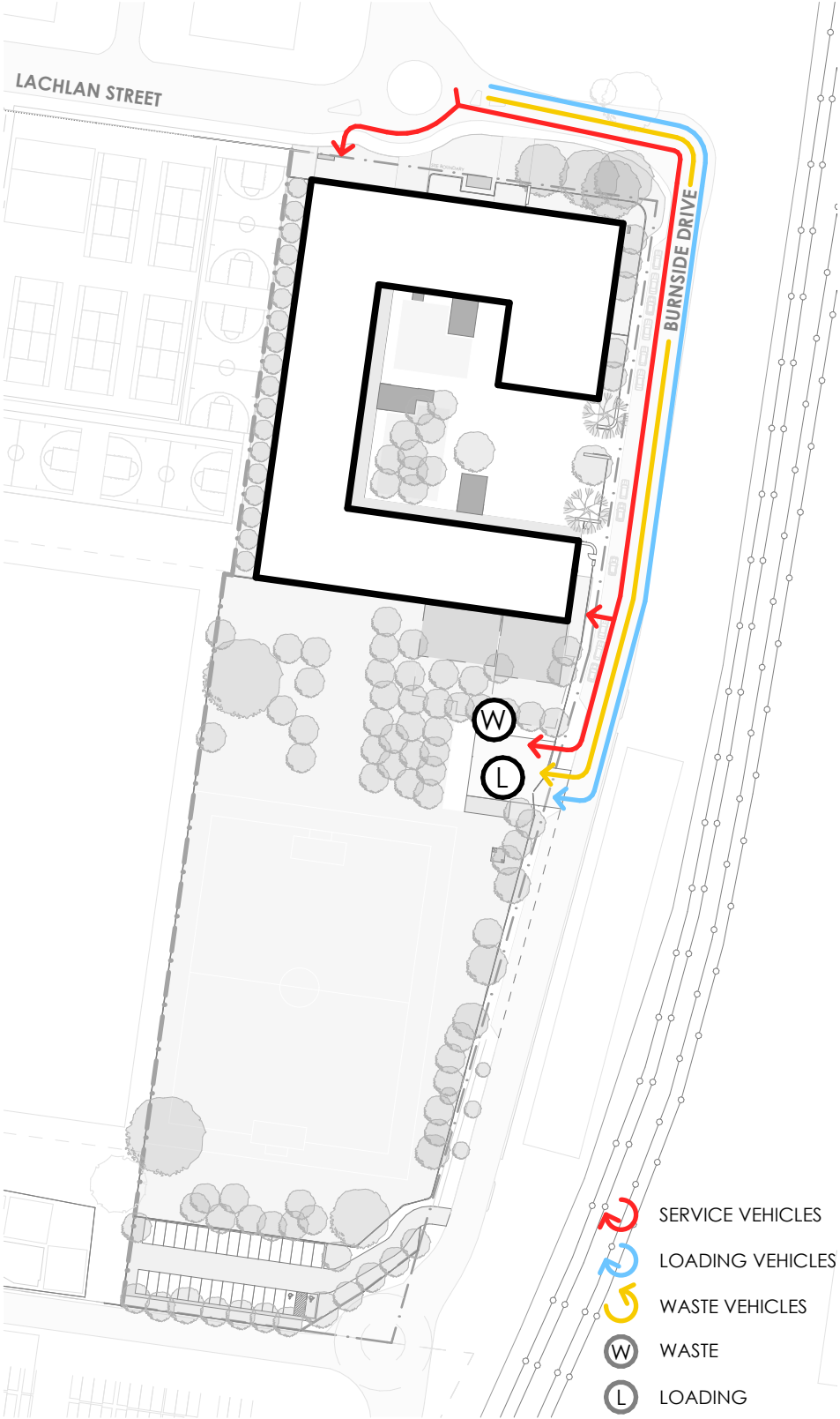
It is anticipated that the impact of light spill on neighbouring properties will be minimal due to the following:

- The school faces south east onto the train line which would protect against the majority of the light spill into the northern residential areas
- Balcony and courtyard lighting are internalised within the footprint of the building.
- School hours and management of the building are to be considered when balancing security and safety measures

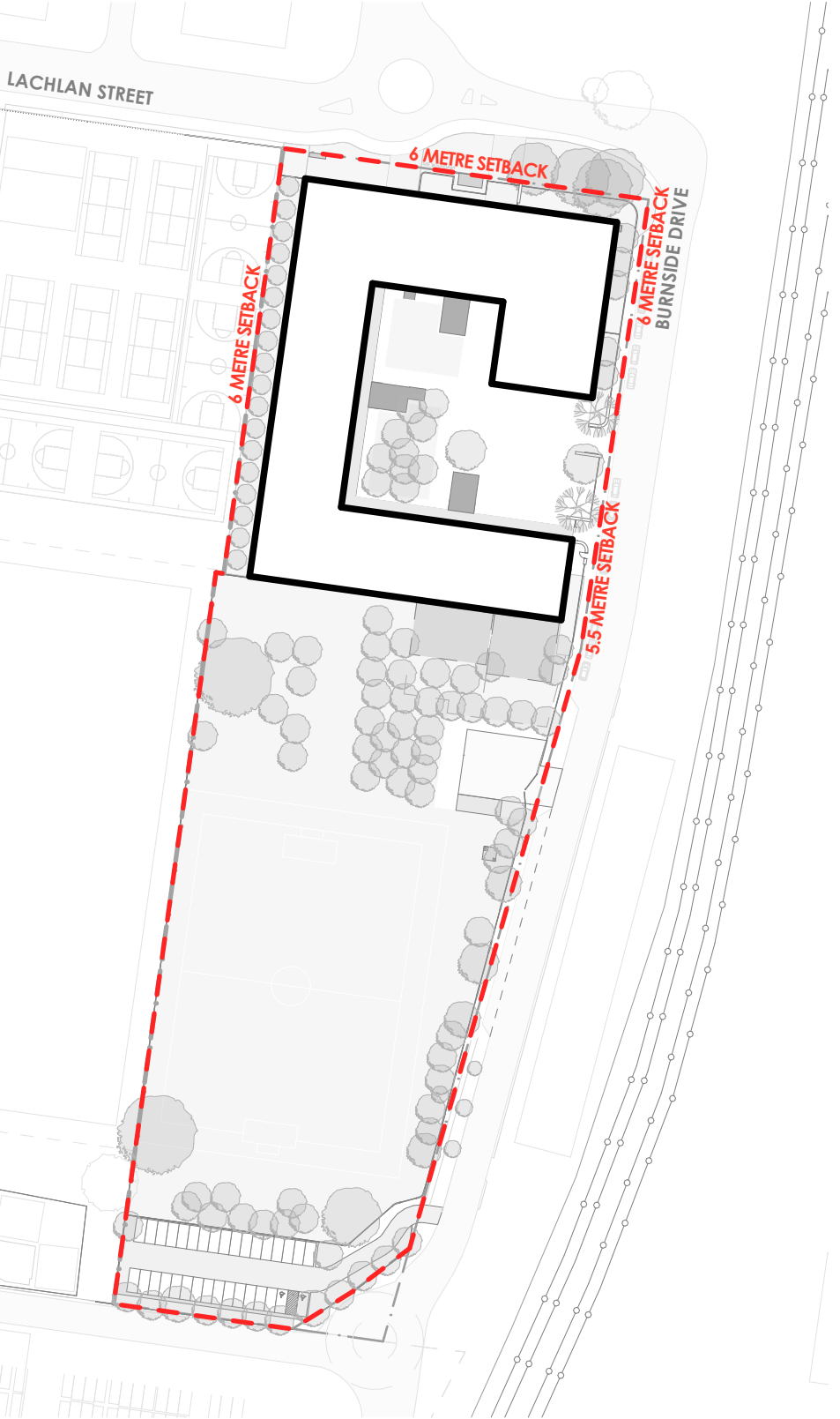
WIND IMPACT

A Wind Assessment has carried out and included in this SSDA submission.

SERVICE, WASTE & LOADING



SETBACKS



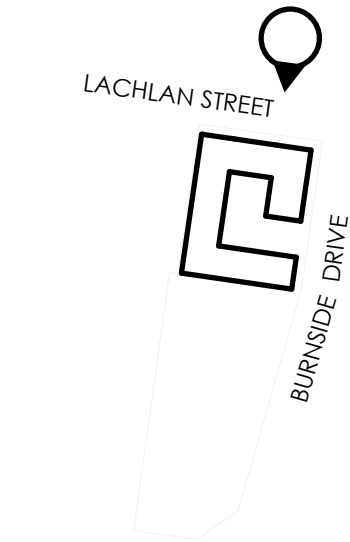
NEW LIVERPOOL PRIMARY SCHOOL
VIEW IMPACT ASSESSMENT



EXISTING VIEW FROM HART STREET LOOKING SOUTH



VIEW WITH PROPOSED BUILDING IN PLACE



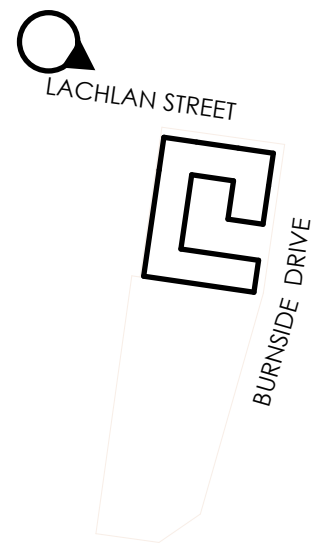
NEW LIVERPOOL PRIMARY SCHOOL
VIEW IMPACT ASSESSMENT



EXISTING VIEW FROM LACHLAN STREET LOOKING EAST



VIEW WITH PROPOSED BUILDING IN PLACE



NEW LIVERPOOL PRIMARY SCHOOL

SUSTAINABILITY

The project seeks to maximise environmental initiatives to reduce the carbon footprint of the Liverpool New Primary School, both during construction and operation.

The project team is committed to exceeding sustainability targets where possible and appropriate. An example of some of the initiatives being explored are listed adjacent.

The project is targeting an equivalent / self-certified 5 Star Green Star rating using the Green Building Council of Australia's (GBCA) Design and As-built rating tool (DAB) version 1.3.

Initiatives will be considered across all Green Star categories including:

- Management
- Indoor environment quality (IEQ)
- Energy
- Transport
- Water
- Materials
- Land use and ecology
- Emissions
- Innovation

The key sustainability objectives for the new building include:

- Provision of a comfortable and healthy indoor environment
- Minimisation of non-renewable resource consumption
- Cost-effectiveness of energy usage over the building life span
- Reliability and ease of maintenance of the building
- Minimisation of waste during the construction and operation of the building
- Identification and appropriate remediation / disposal of in-ground hazardous materials



Supporting and encouraging walking / cycling to school



Interactive landscapes that encourage connection with nature



Specify robust, durable and responsibly sourced materials



Rain water retention and reuse on site



Access to natural light and ventillation



Energy generation on site

NEW LIVERPOOL PRIMARY SCHOOL

CPTED

OVERVIEW

The Crime Prevention through Environmental Design (CPTED) guidelines under Section 79C of the EP&A Act 1979 are based on key principles for designing buildings and places that are safe, secure and deter criminal behaviour.

These key principles include:

- Surveillance
- Access Control
- Territorial Reinforcement
- Place Management & Maintenance
- Vulnerability

Liverpool New Primary School has adopted the principles of CPTED in developing the design through Masterplan to Schematic Design to establish a safe and secure environment for staff, students, carers, visitors and the community. Details for each of the principles are outlined adjacent:

SURVEILLANCE

- Passive surveillance will be encouraged through the incorporation of design features that maximise visibility of users in common areas. The following principles will be adopted and / or addressed to achieve this:
- The building wraps around a central courtyard space, providing unrestricted sight lines between spaces and minimises blind spots.
 - Open circulation corridors wrap the internal edge of the building, with visual connection into the courtyard spaces and around the building.
 - Open stairs provide visual connection from both the building open courtyard
 - Centralizing the Library on L1 provides an equity of access from Homebase areas, minimising distance for students to access.
 - Providing opportunities for managed out of hours use, both of areas within the built form and the sports field to the south extending the hours of site activation.
 - Providing lighting to ensure safe use and effective surveillance of the space after hours.

ACCESS CONTROL

- Access Control delineates spaces open to the public from the main school areas. The design allows for this in the following ways:
- Limiting the number of public entries to the School and securing these outside of drop off / pick up hours.
 - Providing a clear Main School Entry on Lachlan Street for visitors to check in through Reception without need to enter the main school area before gaining access to the main school areas.
 - Providing a clear After Hours entry on Lachlan Street for OHSC and Community Use which limits access to those facilities approved for out of school hours access.
 - Provision for CCTV monitoring of Main School Entry

TERRITORIAL REINFORCEMENT

- Territoriality provides social regulation through definition of spaces. This has been addressed on the site in the following ways:
- Clearly defining spaces into public, shared and private school use through physical barriers and appropriate wayfinding.
 - Clearly defining entry points
 - Ensuring that circulation patterns are clear and do not allow for accidental access to restricted areas.
 - Reinforcing public areas by introducing amenities such as seating and other elements of activation attracting desired users of the space therefore deterring undesirable activity.
 - Appropriate site enclosure strategy using fencing and built form.

PLACE MANAGEMENT AND MAINTENANCE

- Maintenance is a reinforcement of ownership of property where as decline in space management and maintenance signifies reduced jurisdiction by the owners of the space and therefore less control in relation to access. The following principles are addressed to achieve this:
- Fall protection from open circulation areas with fully enclosed mesh
 - External spaces are designed with robust finishes requiring minimal maintenance
 - Plant areas located off secured corridors
 - Appropriate enclosure of and clear observation lines to open areas that pose risk to students / public such as plant, loading and staff parking areas.

VULNERABILITY

- The aspect of how vulnerable a person feels in a space will impact on the use of that space limiting its activation and value, this is particularly important for primary aged students and for those effected by cultural, health or immigration issues. The design addresses this in the following ways:
- Effective lighting of spaces both natural and artificial
 - Provision of clear exit (escape) pathways allowing users of a space the option of more than one route out of an area.
 - Avoiding blind spots in spaces and ensuring that distance visibility is available to all users of the space.



NEW LIVERPOOL PRIMARY SCHOOL

GANSW & SDRP REVIEW

OVERVIEW

The State Design Review Panel (SDRP) program was established to deliver the principles and ambitions of Better Placed and to provide a consistent, state-wide approach to reviewing the design quality of State Significant projects.

The Liverpool New Primary team have had the opportunity to present to the Panel on two occasions, once at Concept Design Phase and again recently in the Schematic Design Phase of the project.

Generally, the feedback has been supportive and complimentary of the design approach and work undertaken to date. The project team has welcomed the process and developed the design to take into account commentary provided where possible.

The following is a brief summary of the sessions held and the design response to commentary provided.

SDRP REVIEW 1
23.10.19

The design and approach of the overall Liverpool New Primary Concept Design Plan was well received and supported, in particular:

- Inclusion of space for voids, circulation and building articulation within the block diagrams
- Location of the hall and other shared-use facilities to facilitate community access
- The opportunity for the library to be directly connected to the ground level outdoor space
- Masterplanning to facilitate incorporation of passive design strategies
- Site permeability, including both east/west and north/south links

Based on the formal feedback from the SDRP, the following items were developed and incorporated into the final SSDA design submission:

- Clear separation between the High School and Primary School sites with appropriate fencing strategy
- Clear location and expression of entry points creating flexible and inviting places for parents to socialise
- Expansion of opportunities for community use on the site to include playing fields
- Building configuration and Landscape Design which breaks down the scale of open space
- Open space which accommodates different users i.e., Support Unit and PreSchool Students
- Masterplan approach which supports the future vision of the Liverpool Innovation Precinct

SDRP REVIEW 2
03.03.21

The SDRP was complementary of the team's response to the commentary from SDRP 1 and generally supported the further development of the project, in particular:

- Landscape design considerations
- The proportion of spaces, architectural expression and overall planning, especially the location of the hall and other shared use facilities to facilitate community access.
- The separation of the High School and Primary School sites through built form
- The location and expression of entry points

Based on the formal feedback from the SDRP, the following items were developed and incorporated into the final SSDA design submission:

- Further detail of the central courtyard space to indicate break down of space using landscape, shade structures and programme.
- Clarification of ground cover materials in the courtyard space
- Planting to the Western boundary separating the High School from the Primary School.
- Inclusion of east / west link to support future vision of the Liverpool Innovation Precinct
- Clear demonstration of fencing strategy and separation of After Hours access.
- Weather protection to open stairs and walkways
- Further setback of the breezeway and building above the Main Entry to allow more natural light to this area.
- Active frontages to the breezeways to support passive surveillance.
- Further development and demonstration of Sun Shading to the Western Facade.
- Further clarification of outdoor learning areas within the built form and in the landscape.
- Further clarification of materiality.
- Opportunity to reuse water collected on site for irrigation.
- Further demonstration of light and ventilation strategies

ITEMS FOR FUTURE SDRP REVIEW

- Review ahead of Schematic Design completion to ensure the design integrity is maintained through the very early contractor involvement (VECI) process.
- Further development of design opportunities identified in consultation with the local indigenous community.

NEW LIVERPOOL PRIMARY SCHOOL

WORKING GROUP ENGAGEMENT

OVERVIEW

Through all phases of the project, we have had the opportunity to meet with a Working Group made up of key staff from neighbouring schools and key members of SINSW's operations team to test design against the functional needs of future users.

The feedback received at these sessions has been invaluable in ensuring the buildings, access, services, layouts and landscape will be fit for purpose.

The adjacent table is the Comments Register developed out of the Schematic Design Working Groups. It tracks feedback and ensures all comments are addressed to the satisfaction of the group or otherwise clarified.

This is a live document which evolves as the project develops.



Topic	Comment	Response/Action	Status
SITE & LANDSCAPE			
Site Security	Gates to separate main school grounds from Southern field, while allowing after hours access to southern amenities.	Included in latest planning for review. Supported by User Group at User Group 2.	Closed
	Gates to separate community shared facilities from main school to support after hours use. Agree COLA can be accessed through Hall if appropriate.	Included in latest planning for review. Supported by User Group at User Group 2.	Closed
Site Drainage	Drainage issues on current site should be addressed in Schematic Design	Noted.	Noted.
SCHOOL & COMMUNITY USE			
Amenities	Distribution of Amenities including Staff facilities reviewed and supported	Noted.	Noted.
TEACHING & LEARNING			
Homebase Units	<div>Feedback on planning provided including:<ul style="list-style-type: none">- Personal effects storage to be split to front and rear of PAA- Preference for Personal effects storage to flip to Homebase walls with central circulation to withdrawal- Option to divide Withdrawal Space into 2 smaller areas with sliding or folding doors- More consideration to be given to operable walls, F+P suggest sliding for regular use or stacking doors for less frequent use (operationally more cumbersome)- More detail to be given at next User Group to confirm Homebase layout and teaching wall taking into consideration feedback re. student sight lines.</div> <div>More detail to be given at next User Group to confirm homebase storage taking into consideration preference for storage to be consolidated and not obtrusive</div>	<div>Included in latest planning for review. Supported by User Group at User Group 2.</div> <div>Note further design review required on PES / Withdrawal room to close out comments. User Group support current planning, PES to outer walls of PAA supports Withdrawal Space division and centralised PAA wet area.</div> <div>Note: loose furniture in Homebases are indicative to demonstrate flexibility of space for different teaching styles.</div>	Closed
	PAA basin to be set lower to Ground Floor Homebases to suit younger students.	Update planning	F+P to review and present

Topic	Comment	Response/Action	Status
	<div>Homebase FF&E layouts presented, demonstrating flexibility of use.</div> <div>Writing wall details discussed and feedback received. Balance of open shelves for 30-36 tote trays, enclosed lower storage (allowing for IT below Smart Screen), larger cupboard doors for writing and pin boards to each end.</div>	<div>Homebase strategy generally supported.</div> <div>Writing wall to be reviewed to capture comments.</div>	F+P to review and present
Library	SPUs to open up to library for flexible use	Included in latest planning for review. Supported by User Group at User Group 2.	F+P to present
	SPUs to have dual access, through library and externally	Included in latest planning for review. Supported by User Group at User Group 2.	F+P to present
	Group support void to Main Entry below but concerned about the impact on functionality.	FF&E layout to be reviewed.	F+P to review and present
	Room configuration to allow for two class groups to use at the same time. More consideration needed to zones and visibility from Librarian's desk.	FF&E layout to be reviewed.	F+P to review and present
KLA Storage	Request for storage areas on each level.	Design to convert 1 cleaner store on each floor to KLA Storage	F+P to present
ESL Teaching Space	CBRE confirm scope for ESL teaching is captured in the briefed 44 Homebases	Noted.	Noted.
STAFF & ADMIN			
Administration planning	<div>Feedback on planning provided including:<ul style="list-style-type: none">- Flip large interview room with interview / business manager room- Large interview room to accommodate 6 chairs and table- Copy area to be closed off to office space, noting acoustic issues.- Sick Bay to accommodate 4 students</div>	Included in latest planning for review.	F+P to present
NEXT STEPS			
<div>Present and Review of Administration and Staff areas</div> <div>Present and Review Landscape Strategy</div> <div>SINSW to advise on opportunity to review Support Unit and PreSchool with Users.</div>			



Architecture is the fine balance between innovative design solutions and the practical importance of fitting buildings to people, the environment and budgets.

Since its foundation, we have created an inspiring architectural response to unique problems throughout Australasia.

Our work originates from a particular stream of architecture that is independent of the self-conscious style based approach and is more about technical problem solving.

Our approach is much closer to engineering than the high aesthetic ground, but is not unaware or unconcerned about the aesthetic outcome. Instead, we see this as more of a result of good thinking, than as a goal in and of itself.

We create and inventive solutions related to the immediate environment and the context of the project, resulting in buildings that are a pleasure in which to live and work.

Our studio does not limit itself to a particular scale or typography or project, preferring to work across all scales and building uses, where we believe we can add value to the design and construction process.

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