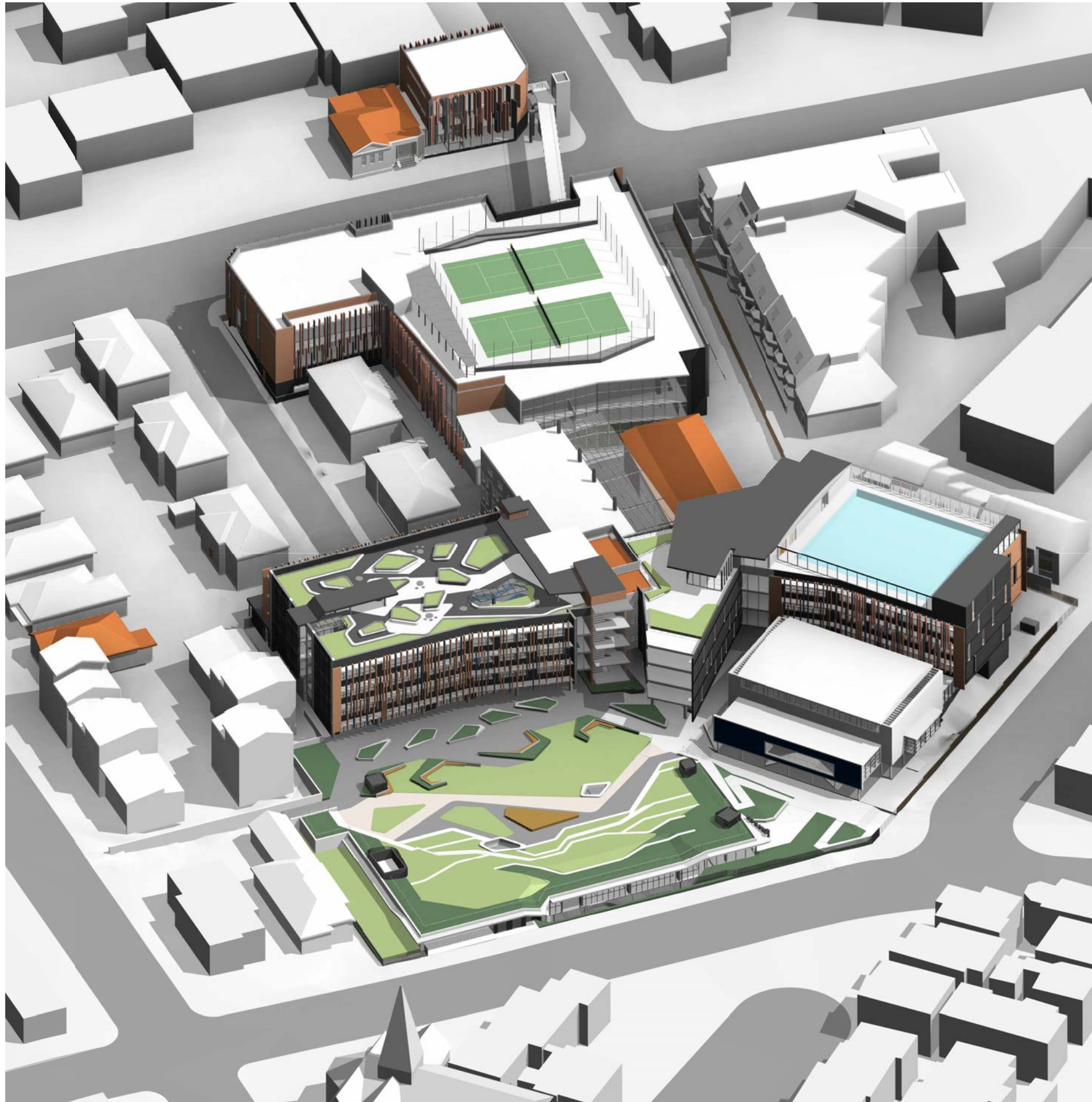




REDLANDS SCHOOL

MASTER PLAN AND NEW LEARNING HUB

DEVELOPMENT PARAMETERS

June 2015



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- A** ENVELOPE STUDY
- B** MASTER PLAN DIAGRAMS
- C** LEARNING HUB DIAGRAMS

Future Room Requirements			
Teaching Staff	Number of Staff	Staffrooms	Classrooms
English	10	1	• 8 classrooms – 8 rooms*55-70sqm
Mathematics	9	1	• 8 classrooms – 8*50-60sqm
Science	11	1	• 8 classrooms – 8*80-90sqm
History	6	1	• 6 classrooms – 5*55-70sqm, 1*40sqm
Social Science	9	1	• 6 classrooms – 6*55-70sqm • Geo-Science room – opportunities for practical lessons Years 7-12 – 1*70sqm.
PDHPE & Sport	7	2	• 4 court multipurpose Sports Stadium (including Administration area, storage facilities (for sports equipment, 350 exam tables and chairs) and possibly a stage for assemblies • 25m swimming pool & 10m learn-to-swim pool (with change rooms, toilets etc) • Fitness Centre • Student change rooms and office spaces • Minimum 2 classrooms – 2*50-60sqm
Languages	9	1	• 8 classrooms – 4*60-70sqm (Junior classrooms), 4*40sqm (Senior classrooms)
Music	5	1	• 4 Classrooms – 3*70sqm, 1*40sqm. • Office, Storage and resource spaces – 100sqm • Private tuition rooms – shared with Drama – minimum 15 spaces (10*10sqm, 3*15sqm, 2*20sqm)
Design and Innovation (TAS)	5	1	• 4 classrooms - 2*70sqm, 1*70sqm, 1*50sqm • Storage and workshop spaces – 150sqm • Outdoor workshop - 50sqm
Drama	4	1	• 1 Theatre – seating 350 (tiered). • 2 classrooms – 2*100sqm (may also be used by Ballet/Dance) • Office, storage and resource spaces – 100sqm
Visual Arts	5	1	• 4 classrooms - 4*70sqm • Kiln space – 15sqm • Office and storage spaces – 50sqm • Outdoor drying space – 20m
Ballet/Dance	2		• No rooms required (continue to be based on Junior Campus)
Christian Studies	2	1	• 2 classrooms – 2*50-60sqm
Learning Plus	2	1	• 1 classroom – 1*60sqm

A Redlands Education

Real World Education

- Redlands Learning Platform
- Co-education
- Internationally Minded

Extensive Opportunities

- Academic
- Sport
- Performing Arts
- Outdoor Education
- Service

Supportive Culture

- Structured
- Values
- Mutual Respect

Flexibility

Choice

Participation

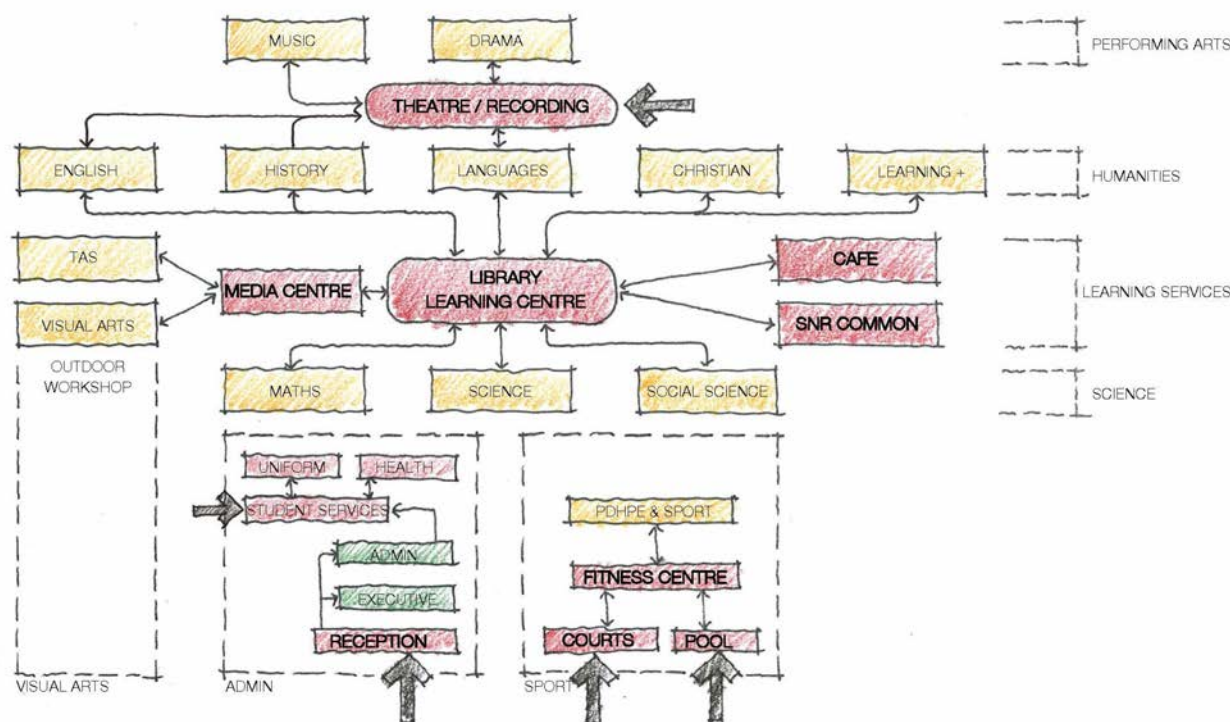
Excellence

Well-Balanced

Let your light shine

Individual Achievement

Life Confidence

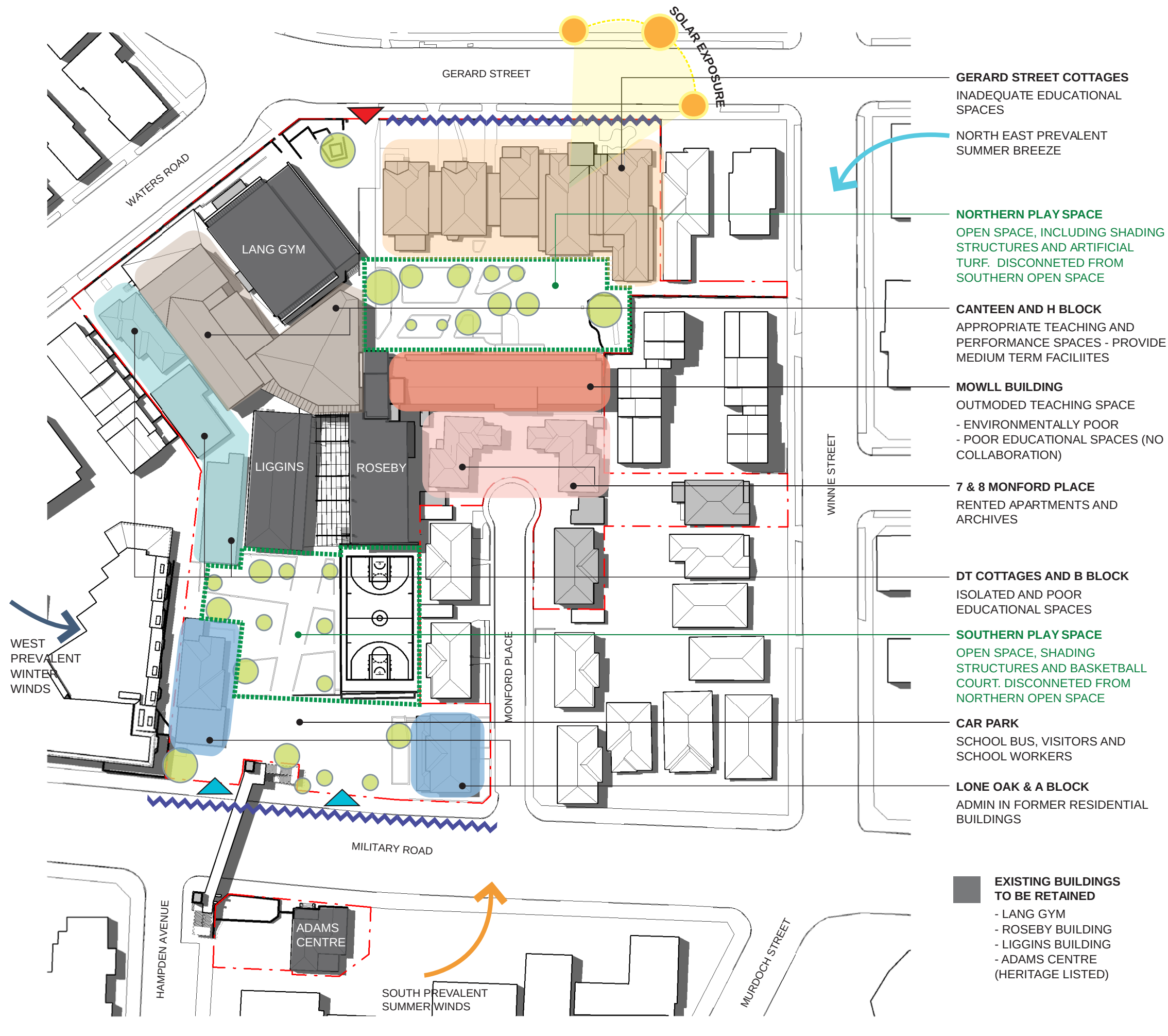


The 8 Strategic Goals of the Redlands Senior Campus Masterplan Brief

- 1 • Drive an Excellent Academic Program
- 2 • Provide a Fulfilling, Diverse Extra-Curricular Experience
- 3 • Create an Inclusive, Supportive and Secure Pastoral Environment
- 4 • Attract and Retain Exceptional Staff
- 5 • Achieve Productive Industry, Community and Parental Partnerships
- 6 • Maintain a Robust and Flexible Operational Infrastructure
- 7 • Develop an Efficient, Effective, Expressive and Environmentally Sustainable Facilities
- 8 • Embody an Inclusive, Transparent and Strong Governance Model



ENVELOPE STUDY EXISTING SCHOOL



GERARD STREET COTTAGES
INADEQUATE EDUCATIONAL SPACES

NORTH EAST PREVALENT SUMMER BREEZE

NORTHERN PLAY SPACE
OPEN SPACE, INCLUDING SHADING STRUCTURES AND ARTIFICIAL TURF. DISCONNECTED FROM SOUTHERN OPEN SPACE

CANTEEN AND H BLOCK
APPROPRIATE TEACHING AND PERFORMANCE SPACES - PROVIDE MEDIUM TERM FACILITIES

MOWLL BUILDING
OUTDATED TEACHING SPACE
- ENVIRONMENTALLY POOR
- POOR EDUCATIONAL SPACES (NO COLLABORATION)

7 & 8 MONFORD PLACE
RENTED APARTMENTS AND ARCHIVES

DT COTTAGES AND B BLOCK
ISOLATED AND POOR EDUCATIONAL SPACES

SOUTHERN PLAY SPACE
OPEN SPACE, SHADING STRUCTURES AND BASKETBALL COURT. DISCONNECTED FROM NORTHERN OPEN SPACE

CAR PARK
SCHOOL BUS, VISITORS AND SCHOOL WORKERS

LONE OAK & A BLOCK
ADMIN IN FORMER RESIDENTIAL BUILDINGS

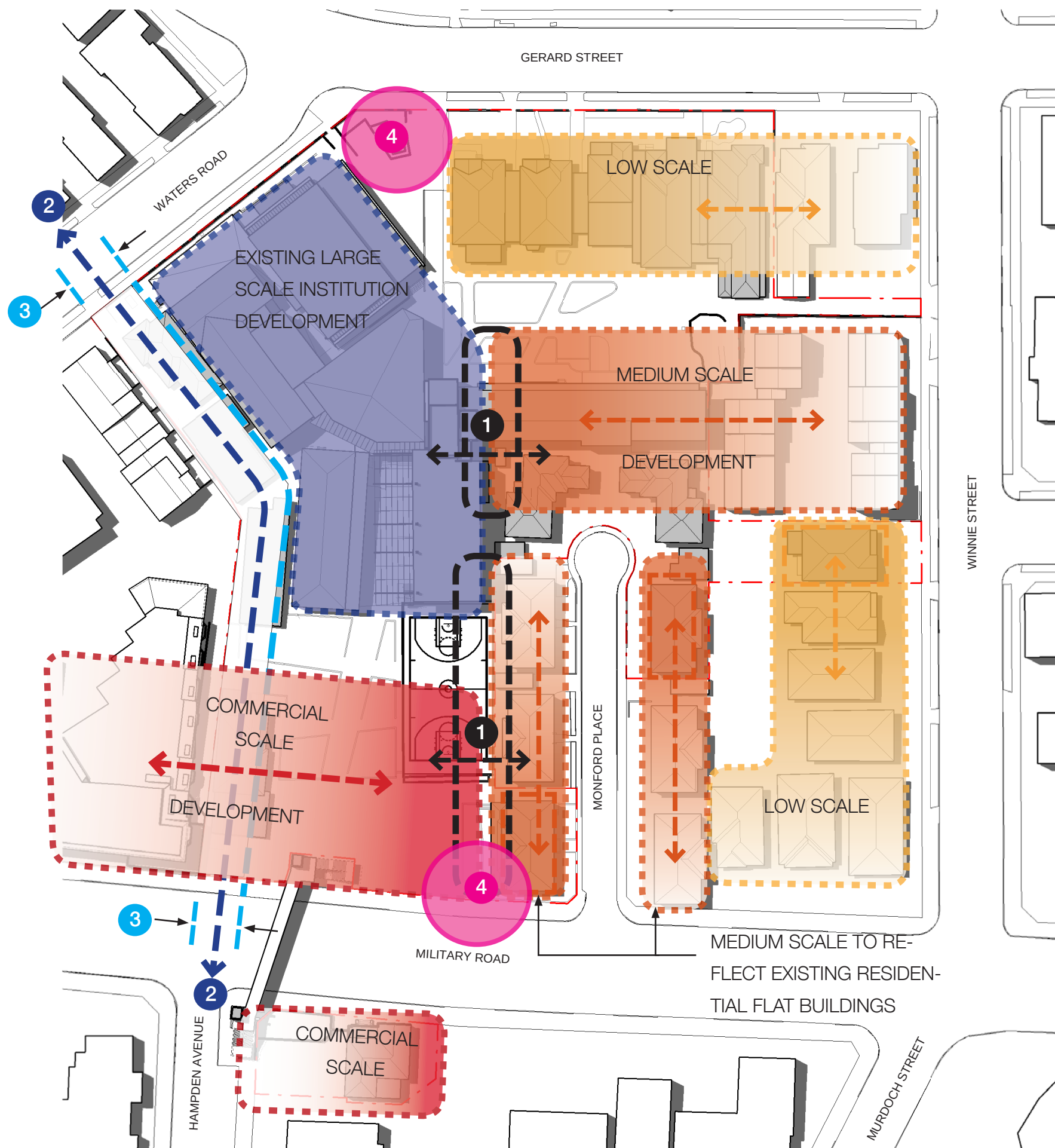
EXISTING BUILDINGS TO BE RETAINED
- LANG GYM
- ROSEBY BUILDING
- LIGGINS BUILDING
- ADAMS CENTRE (HERITAGE LISTED)

EXISTING TREES WITHIN OPEN PLAY AREA

NOISE FROM ROAD

PEDESTRIAN ENTRY / EXIT

PEDESTRIAN & VEHICULAR ENTRY / EXIT



ENVELOPE STUDY ADJOINING SCALES

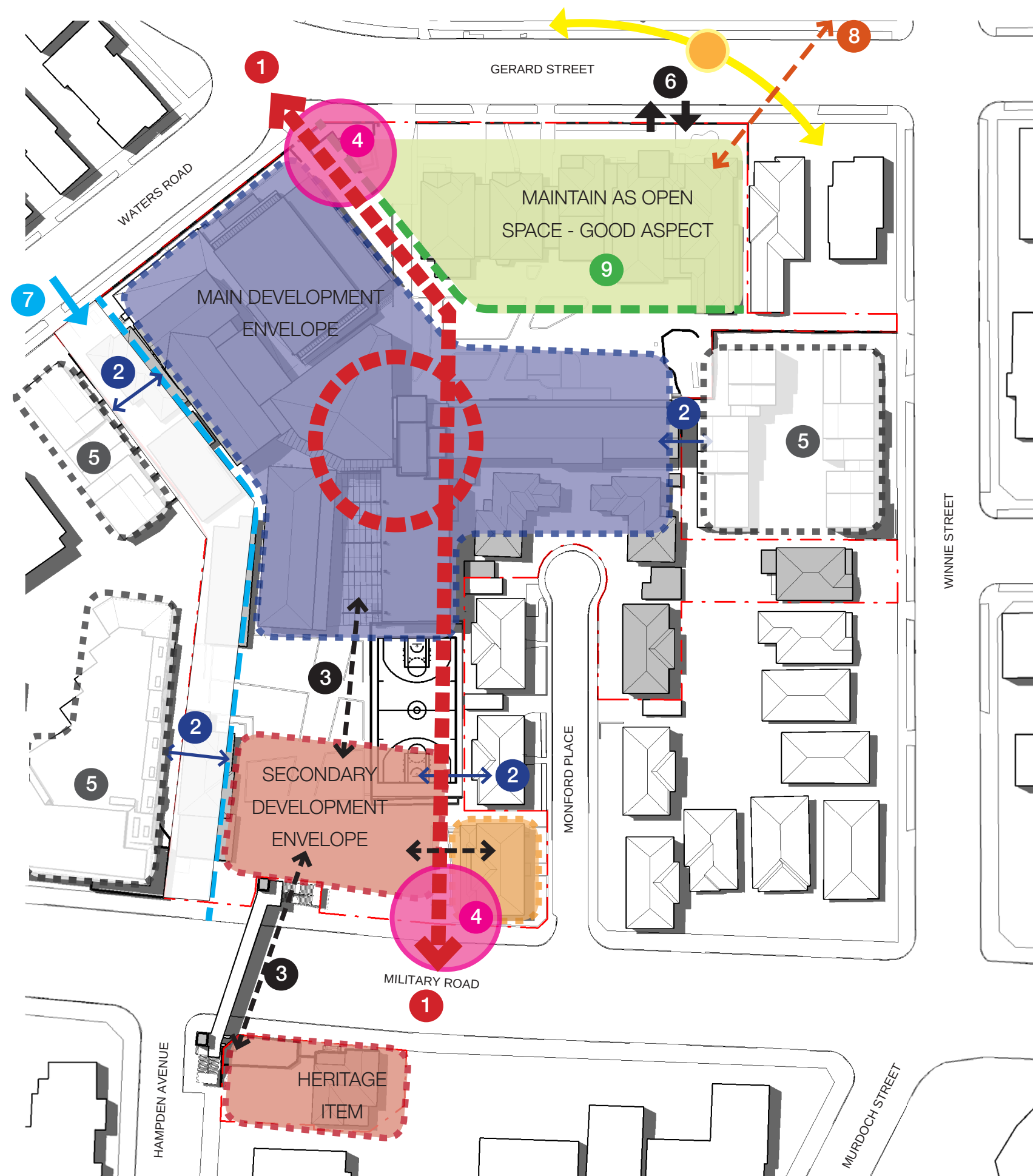
- 1** SCALE INTERFACE
- 2** POTENTIAL VEHICULAR ACCESS - Allows for safe drop off / pick up of buses
- 3** SETBACK FOR SOLAR ACCESS
- 4** FOCAL POINT

REDLANDS - ADJOINING ENVELOPE INFLUENCES

ENVELOPE STUDY
DEVELOPMENT
OPPORTUNITIES

OPTION 1 - DISPARATE ENVELOPES
- DISPARATE OPEN /
GREEN SPACE





ENVELOPE STUDY DEVELOPMENT OPPORTUNITIES

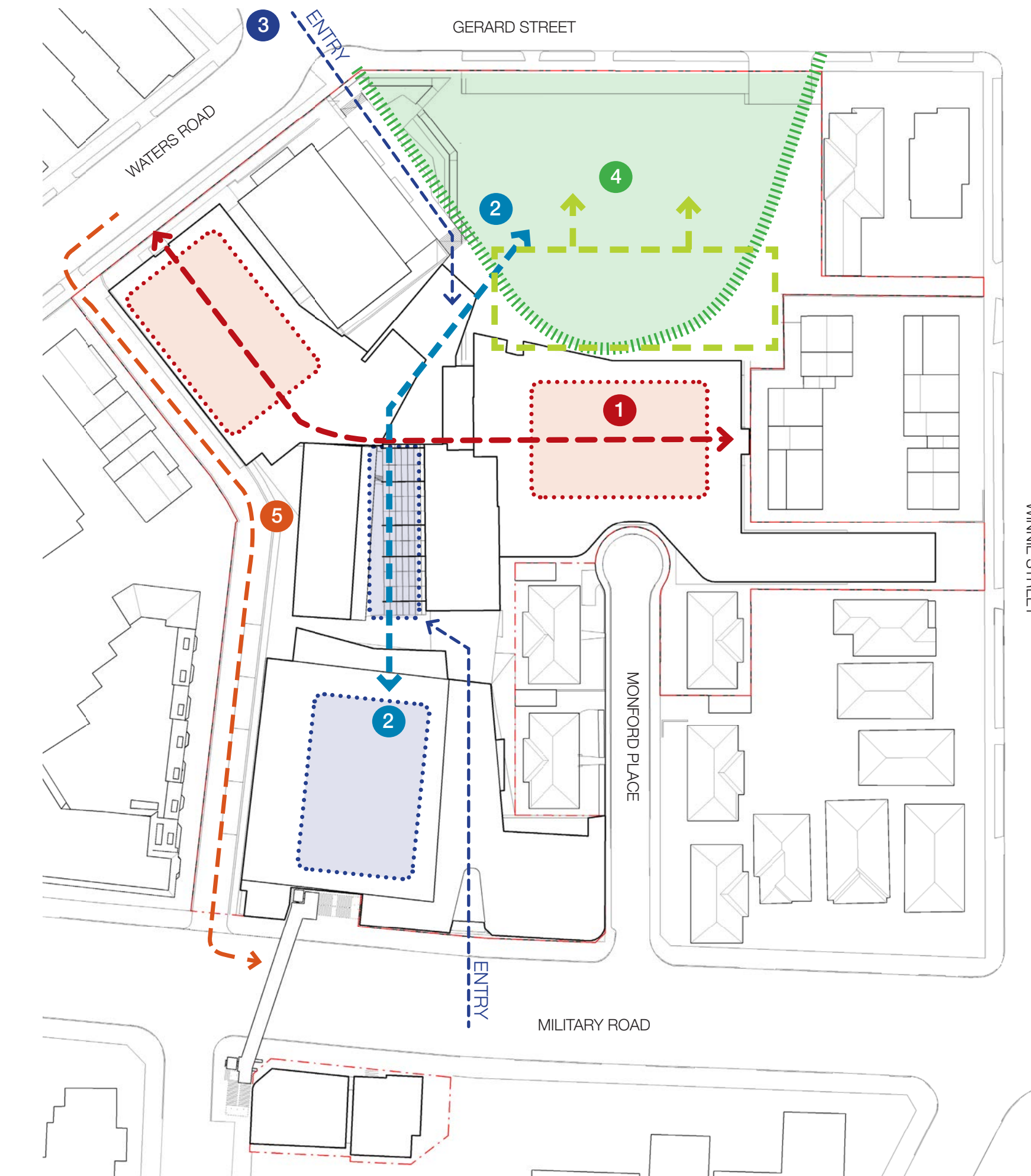
OPTION 2 - CONSOLIDATED ENVELOPE

- CONSOLIDATED OPEN /
GREEN SPACE

- 1 MAIN SPINE AND LOG-ICAL HEART OF THE SCHOOL
- 2 CONSIDER INTERFACE
- 3 CONNECTIVITY
- 4 FOCAL POINT
- 5 MATCH SCALE
- 6 SAFE ENTRY / EXIT FOR CARS
- 7 MOVE MAIN ENTRY TO QUIET STREET
- 8 RELATIONSHIP TO ST PETERS CHURCH
- 9 OPEN SPACE FACING NORTH USE FALL OF LAND FOR FACILITIES UNDER

ENVELOPE STUDY RETAINED CAMPUS ELEMENTS

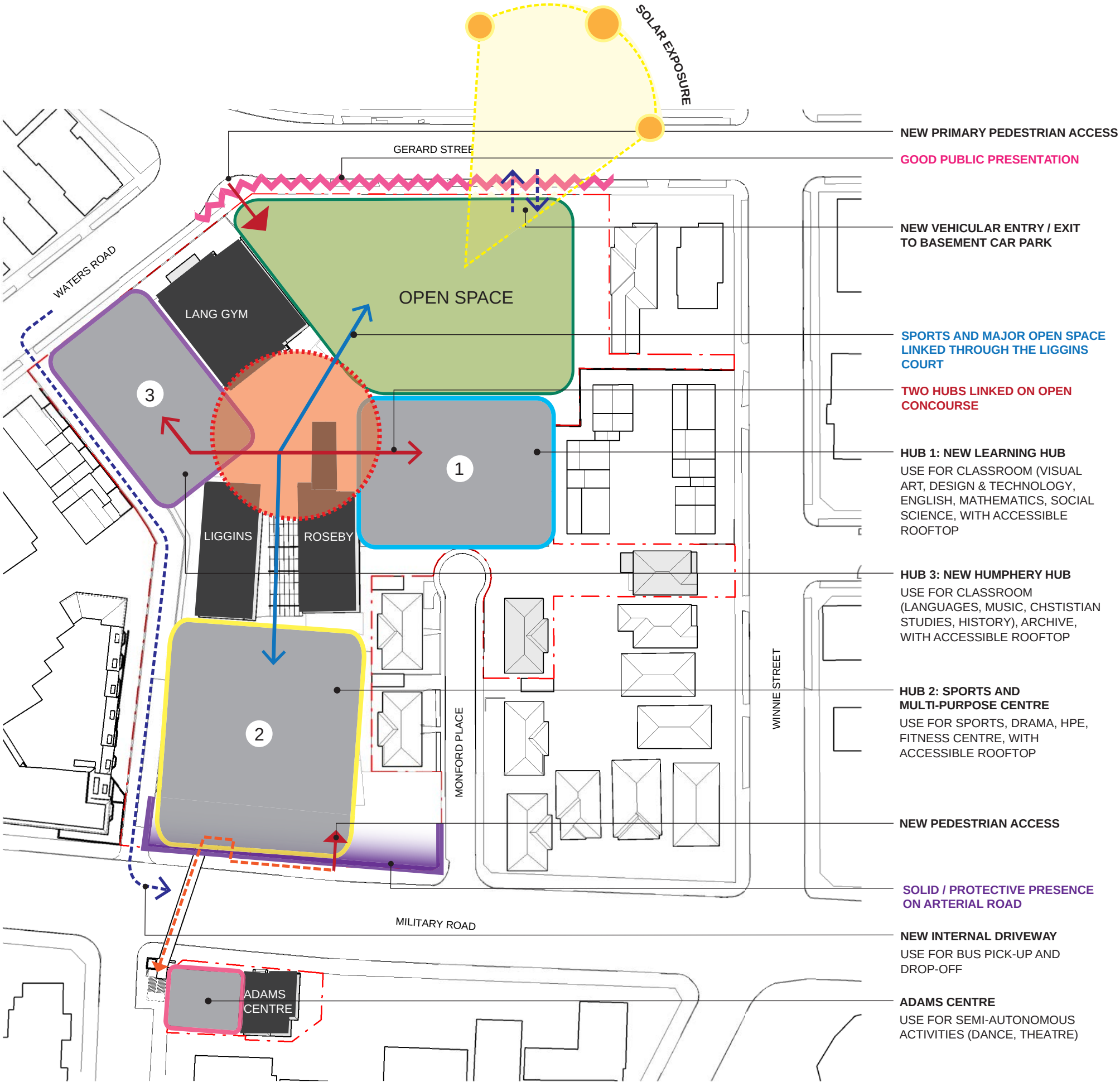
- 1 North orientated existing green space retained
- 2 1980's Liggins Building retained
- 3 Recently constructed Roseby Science Building retained.
- 4 1990's award winning Lang Gymnasium retained
- 5 Main Pedestrian Spine & Entry retained. Two primary outdoor spaces retained.
- 6 6 Winnie St Cottage re-tained for school support services.
- 7 Adams Centre retained. Former Cremorne Post Of- fice (locally heritage listed item)
- 8 Existing residential flat building retained for cur- rent use.



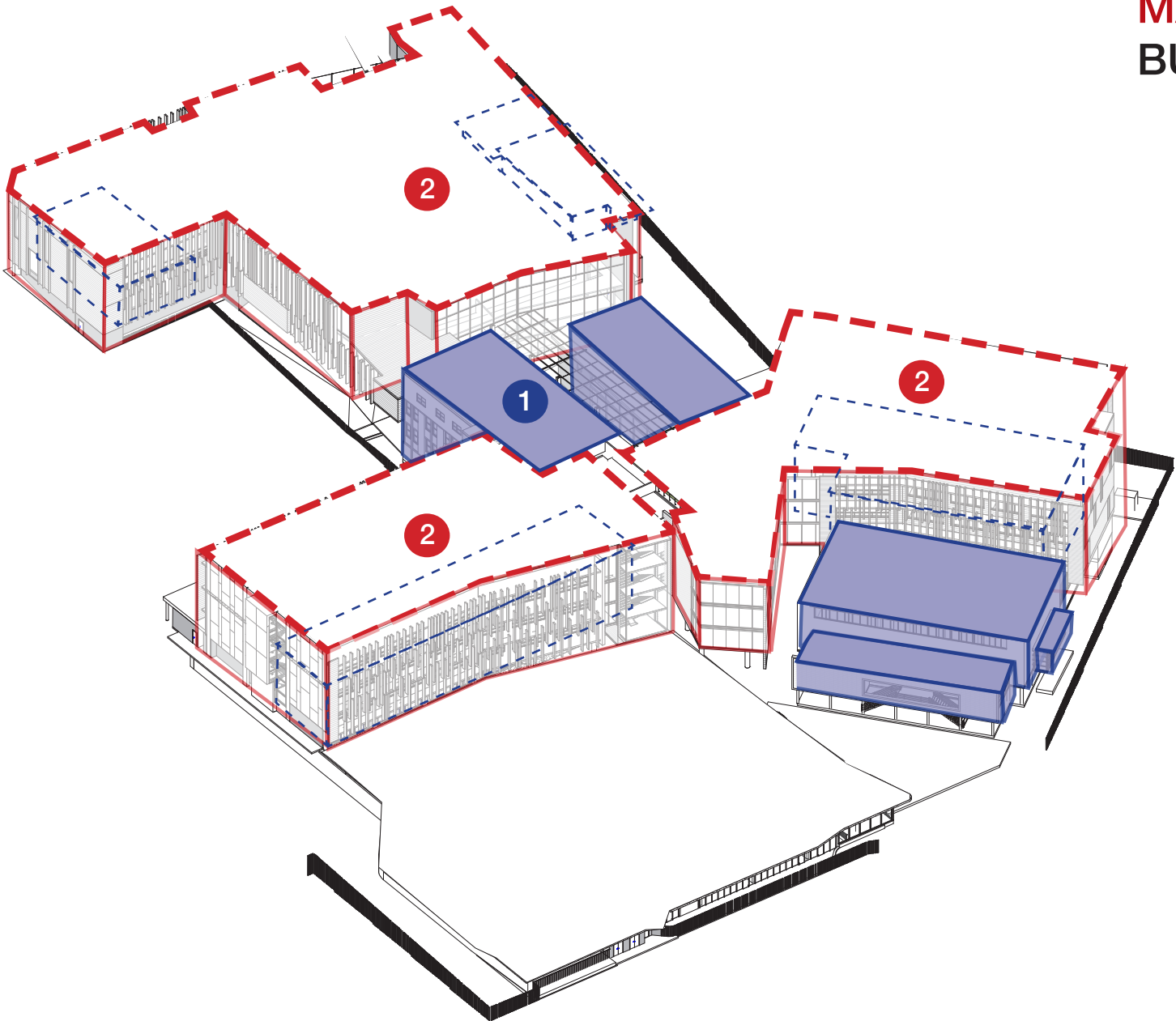
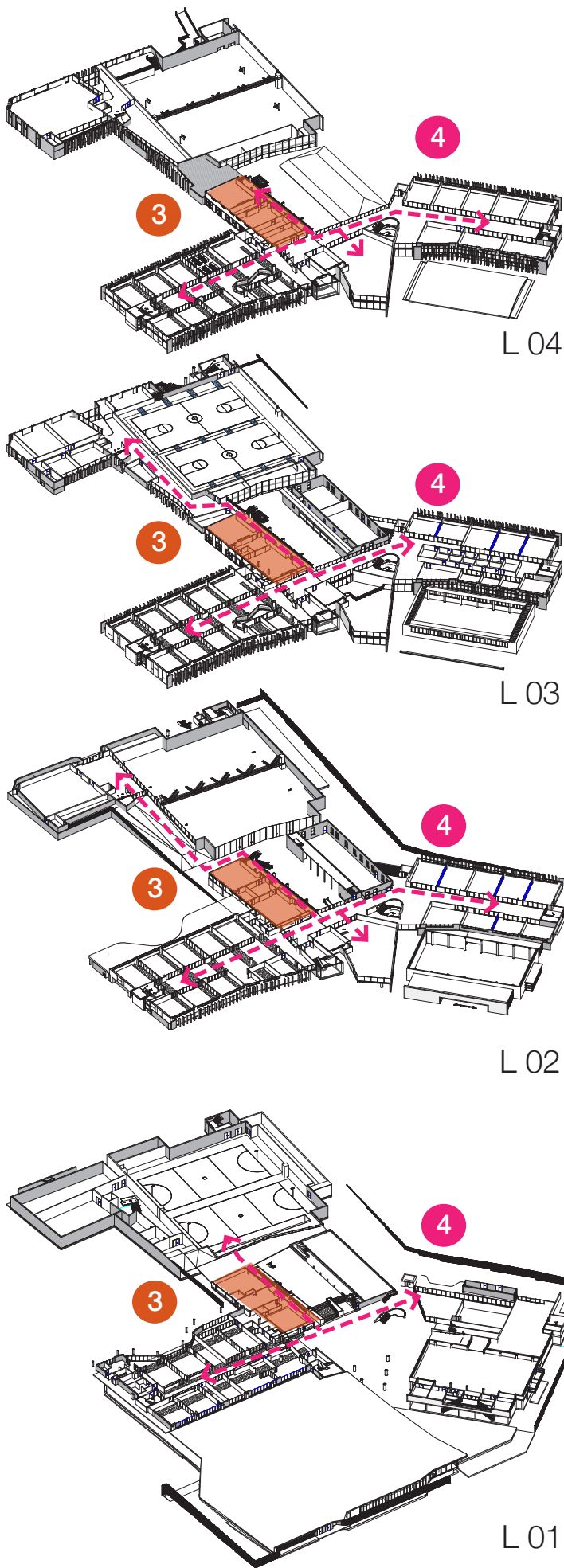
ENVELOPE STUDY SITE ORGANISATION

- 1 Two learning hubs clearly linked on open concourse replacing Mowll Building and Humphery Building volumes.
- 2 Sports + Major Open Space linked through Liggins Court
- 3 Primary pedestrian entry from Gerard Street enhanced. The Military Road entry now given less emphasis
- 4 Primary outdoor space formed by expanding open space and demolition of outmoded cottages.
> passive play/green space
> entry forecourt
- 5 Visitor parking + Bus pick-up and drop-off

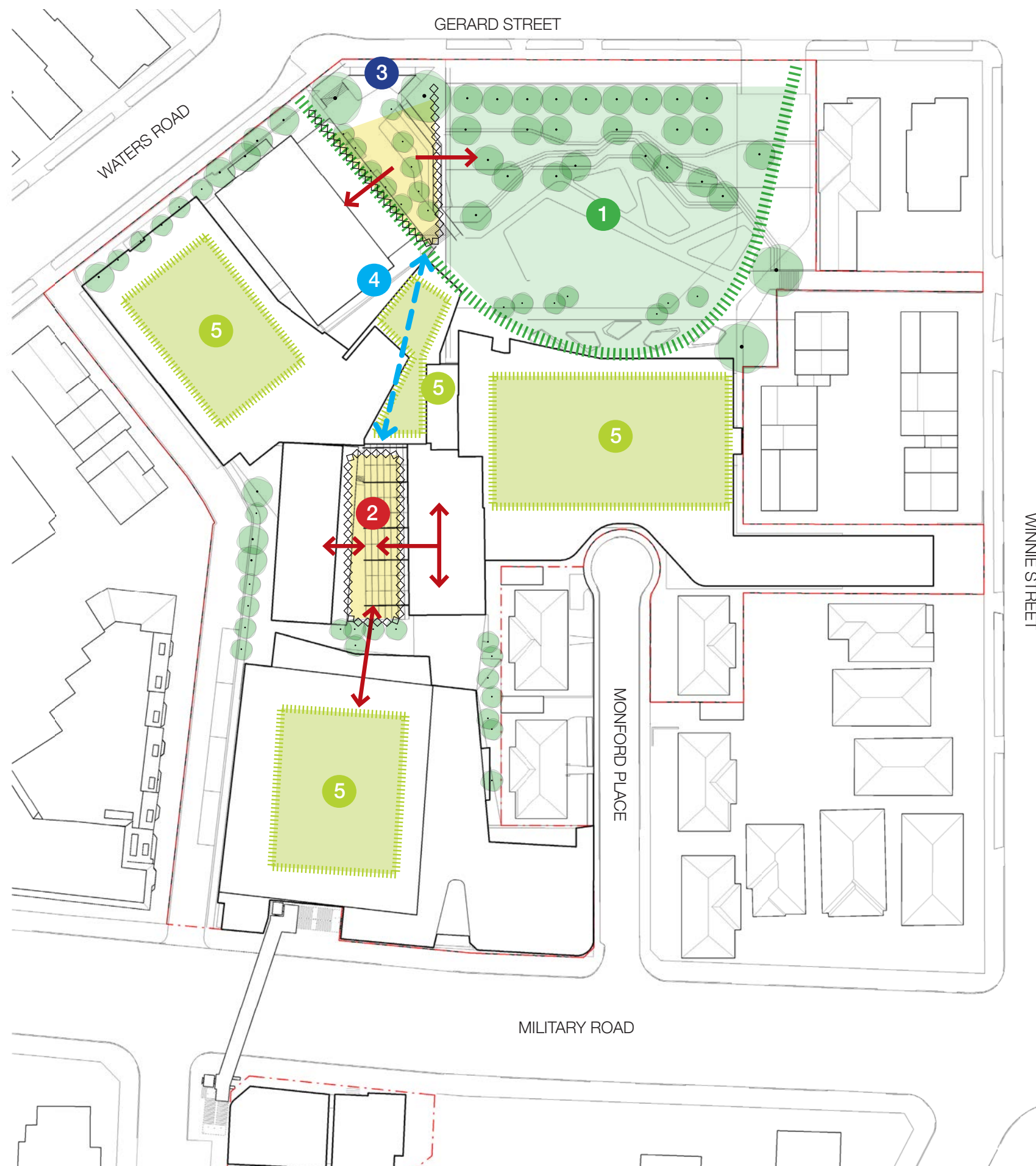
MASTER PLAN ORGANISATION



MASTER PLAN BUILDING FORMS STUDY

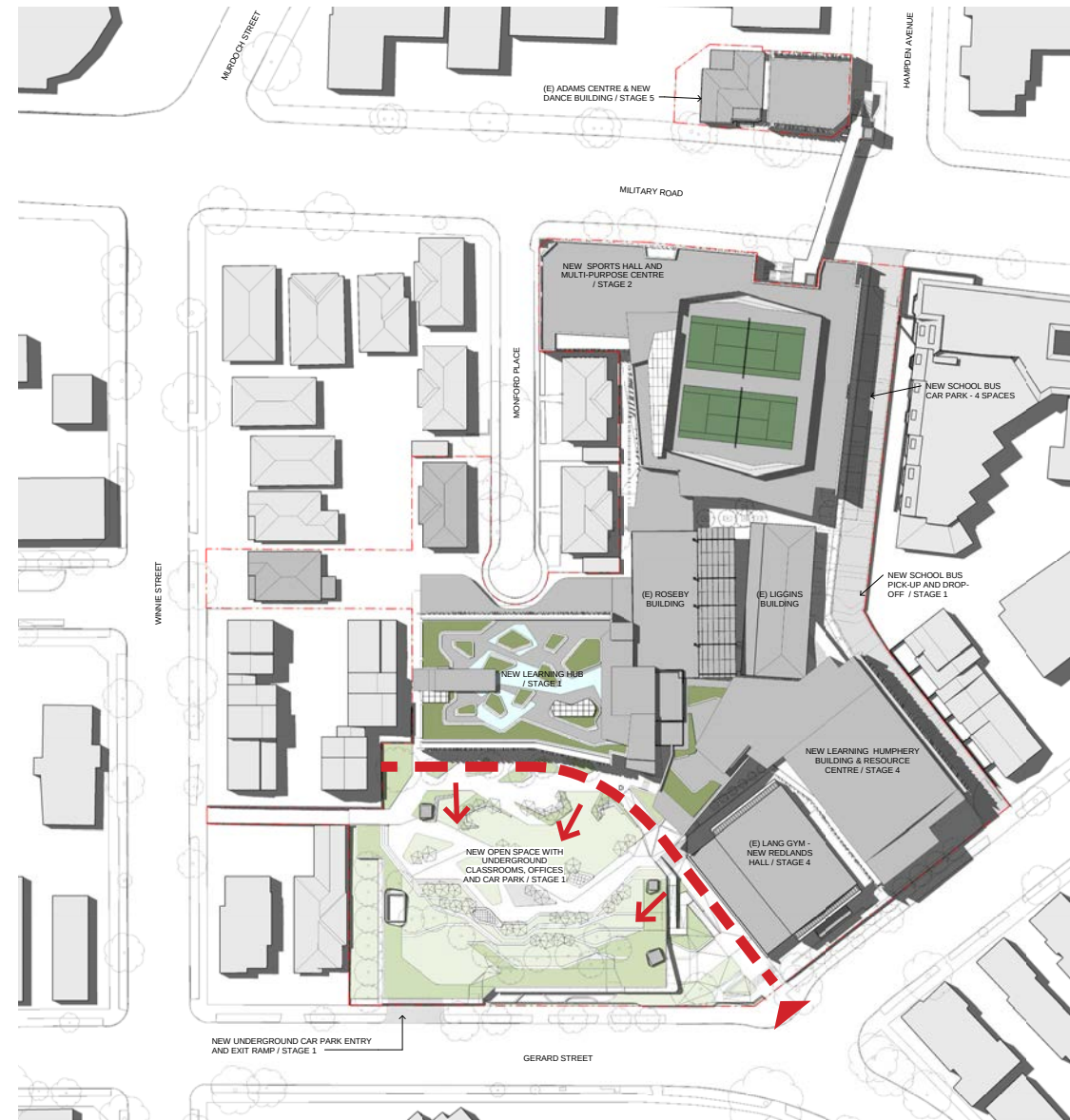
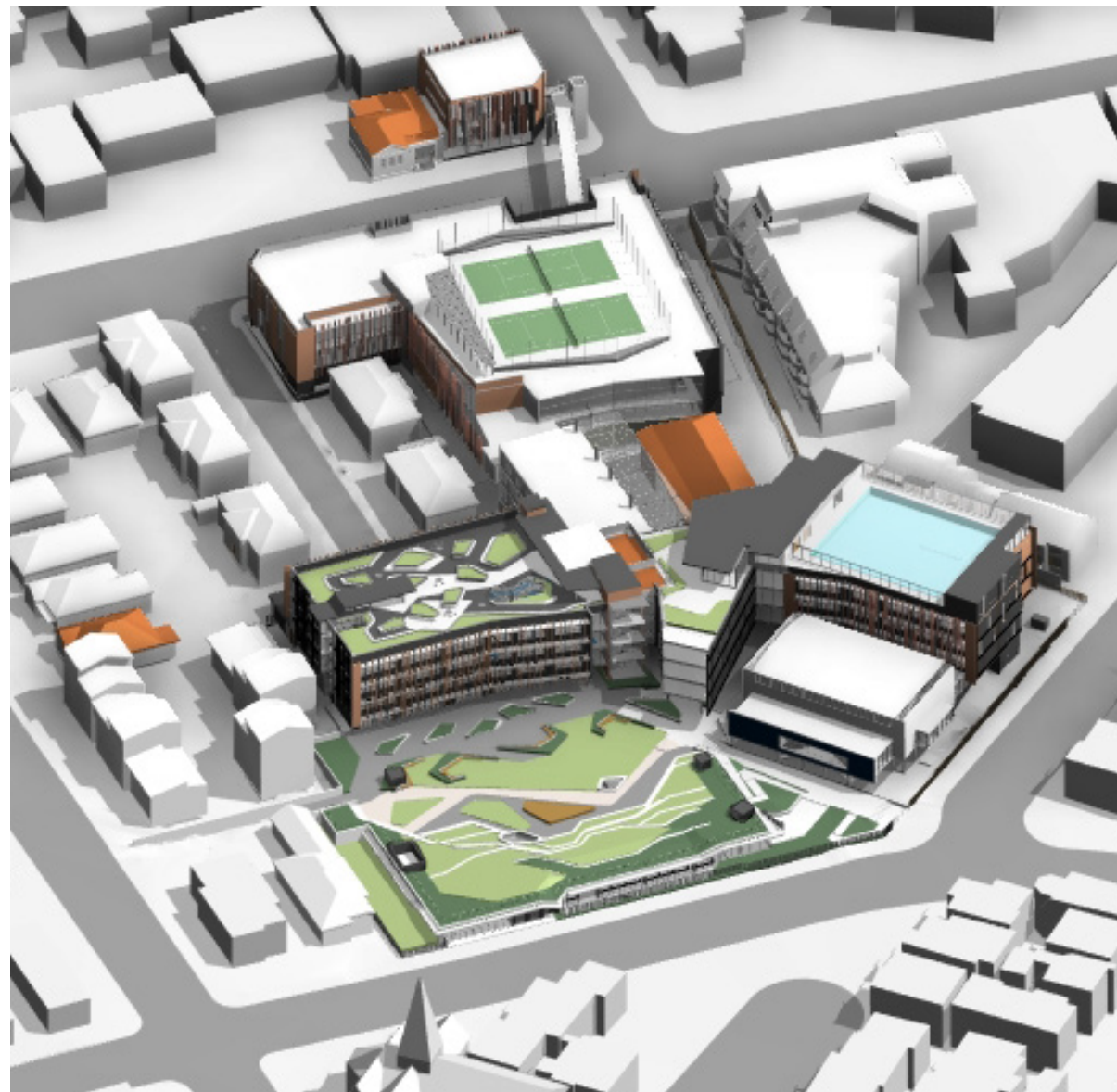


- 1 Proposed building form is consistent with the existing Roseby Building
- 2 Proposed height of buildings allows for a consistent and simple form of building to be maintained over the construction of masterplan
- 3 Proposed buildings level will align with existing floor levels
- 4 All buildings are connected with external walkways for efficient circulation and accessibility



MASTER PLAN OPEN SPACE

- 1 Primary open space over car park
 > combination of :
 - passive play
 - shaded seating
 - some deep soil planting
- 2 Liggins court to be reconsidered as more social space actively tied to canteen and sports hall
- 3 Entry forecourt on Gerard Street becomes key ceremonial space with backdrop of Lang Gym (New Redlands Hall)
- 4 Liggins court and entry forecourt linked through covered space under library hub
- 5 Use of roof space for educational purposes
 - > science + sustainability
 - > sport
 - > passive recreation



MASTER PLAN OPEN SPACE

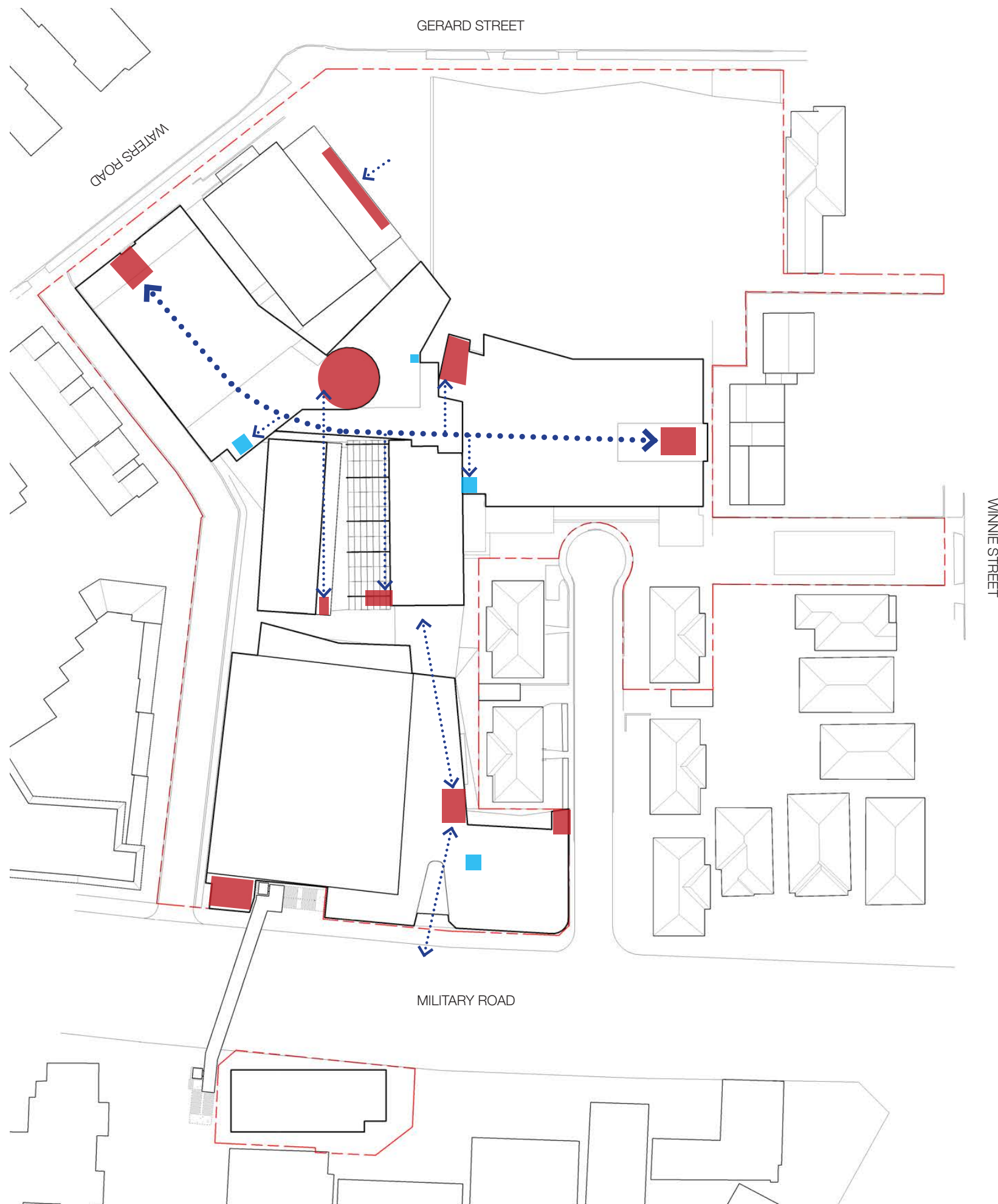
The arc of buildings formed by the new learning hubs and Library will frame a significant new green space with a new entry forecourt on the Gerard Street Frontage providing the school with a new presentation.





MASTERPLAN BOUNDARY ANALYSIS

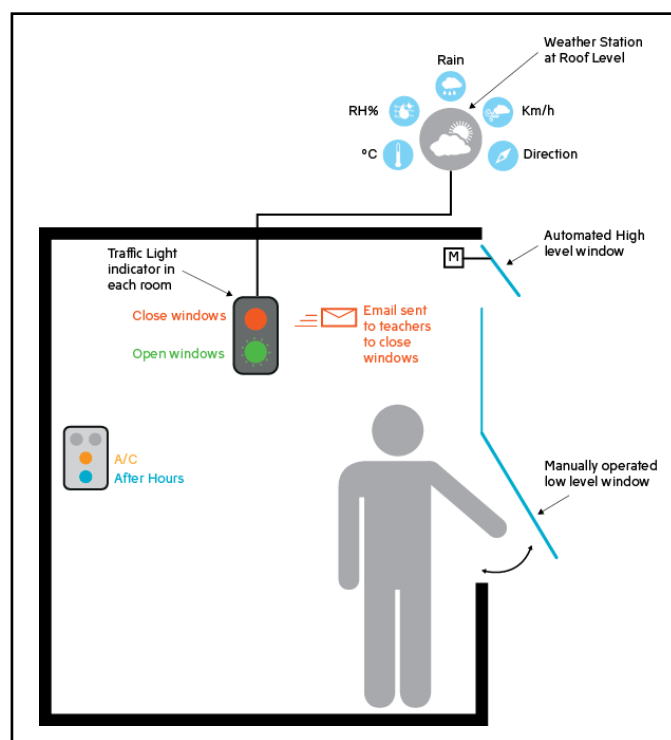
- 1** Enlarge soft landscape area with deep soil trees to reduce the disturbance from arterial road
- 2** Keep setback to the adjacent residential buildings
- 3** Solid / protective presence on arterial road
- 4** Heavy traffic noise from Military Road
- 5** Traffic noise from Gerard Street



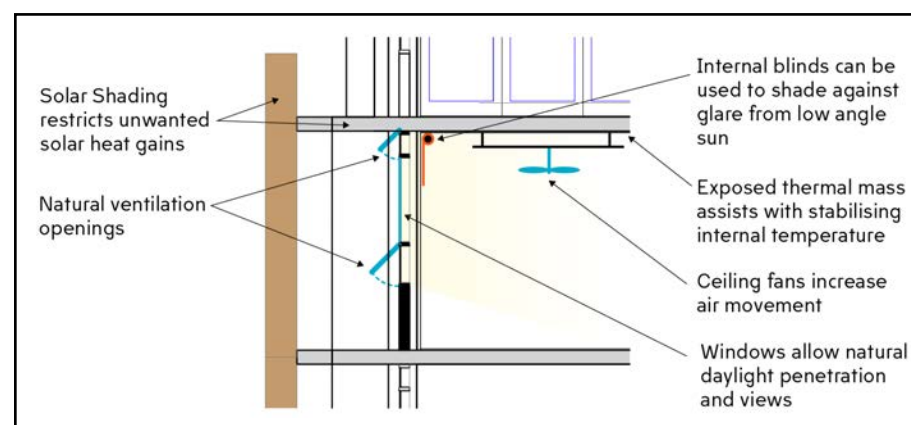
CIRCULATION

- > Clear arrangement of stairs and lifts on main spine
- > Special / iconic stair in Stage 4 associated with library
- > Replace existing Roseby lift

CONTROLS



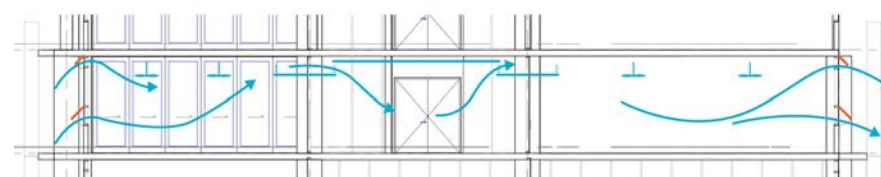
PASSIVE DESIGN STRATEGIES



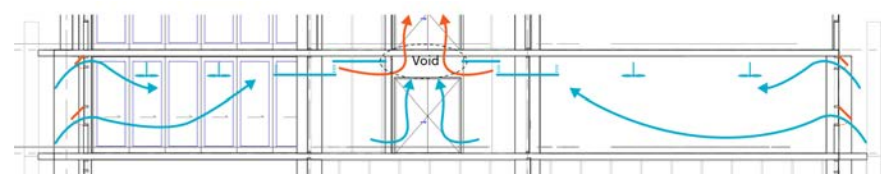
MIXED MODE VENTILATION PRINCIPLES



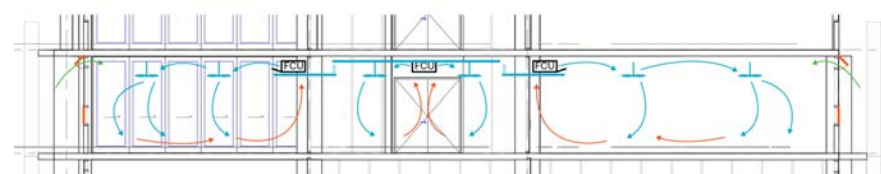
Natural Cross Ventilation Mode



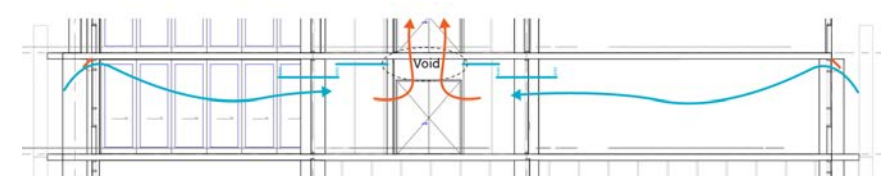
Natural Stack Ventilation (Bouyancy)



Tempering Mode

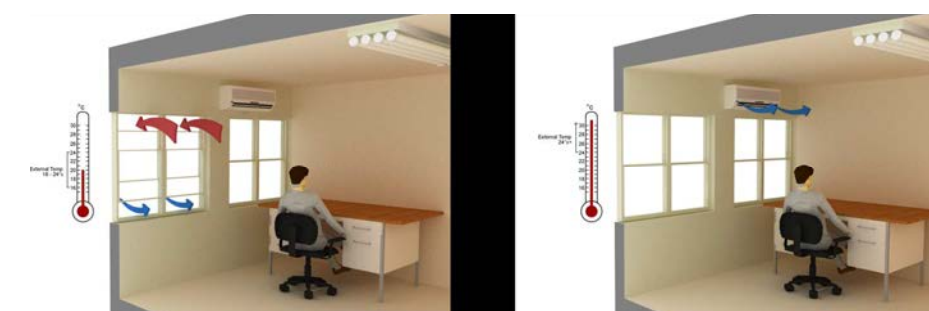


Night Purge



MIXED MODE VENTILATION PRINCIPLES

- > Natural Cross Ventilation Mode
- > Natural Stack Ventilation
- > Tempering Mode
- > Night Purge



DEFINITION

TEMPERED AIR SYSTEM

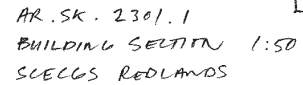
No mechanical fan to boost airflow. Instead the system selected to provide heating to the classrooms during the winter months would also provide limited cooling during the summer.

When external temperatures rise above a pre-set limit a visual indication in each of the classrooms would inform the teaching staff to close the large windows. This may take the form of a traffic light system; green for natural ventilation mode and red for tempered cooling mode. Once the windows are closed, a fan coil unit housed in a bulkhead in the ceiling of each classroom would activate and recirculate cooler air within the space. Note that this system would not provide full air conditioning; it would merely reduce the peak temperatures in the space by 3 or 4 degrees to within more acceptable comfort levels.

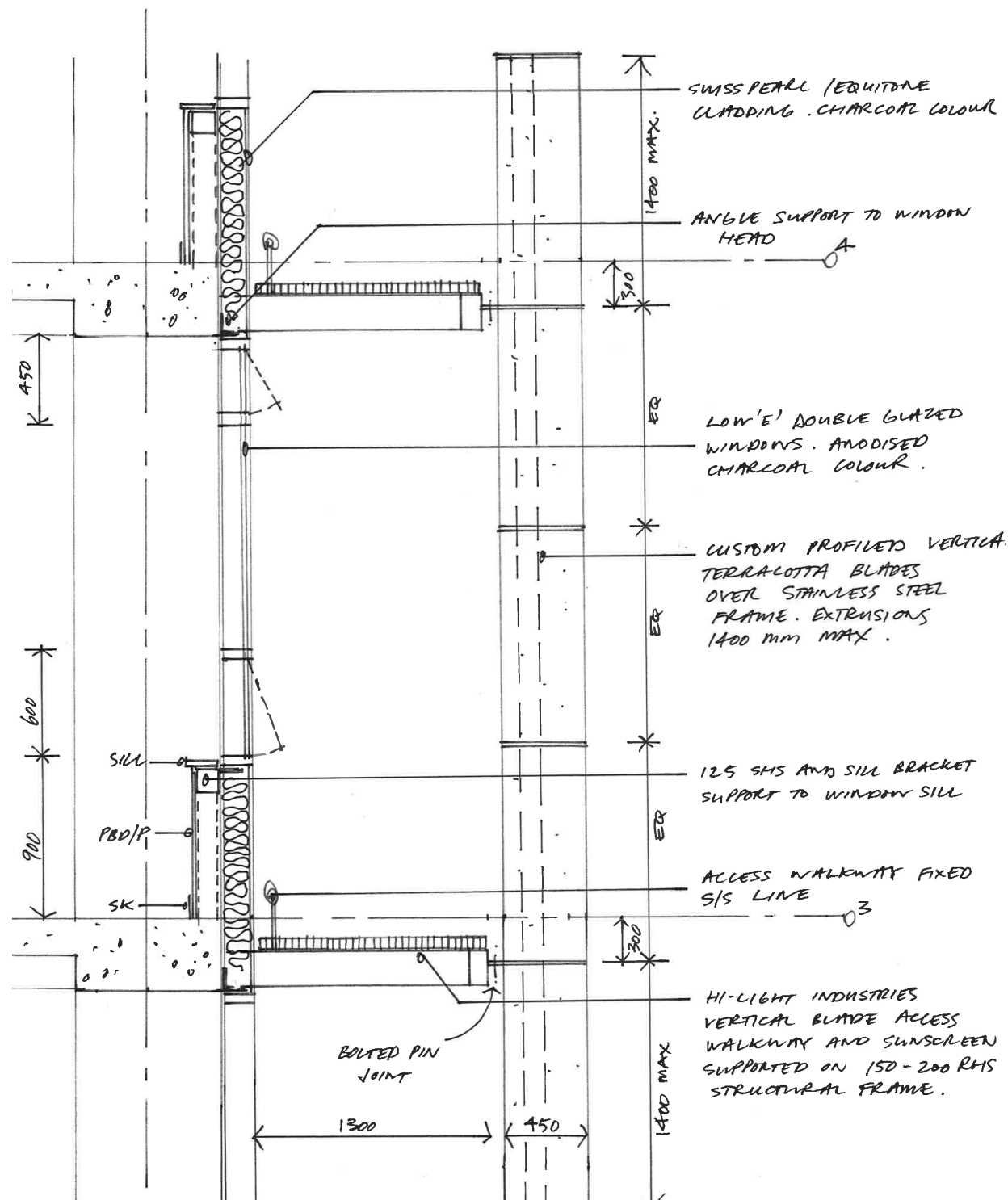
Natural night purge would be employed, whereby secure penetrations on the façade and central zone would be opened to encourage air movement through the spaces, flooding the classrooms with cool air.

B

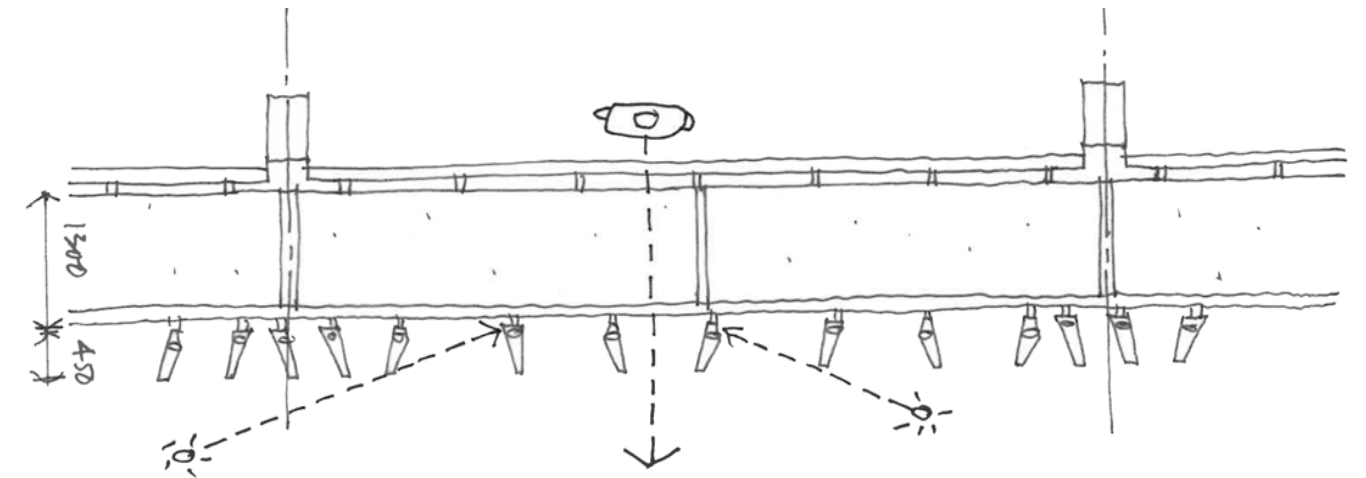
- > Integrated as educational tool



LEARNING HUB FACADE PRINCIPLES



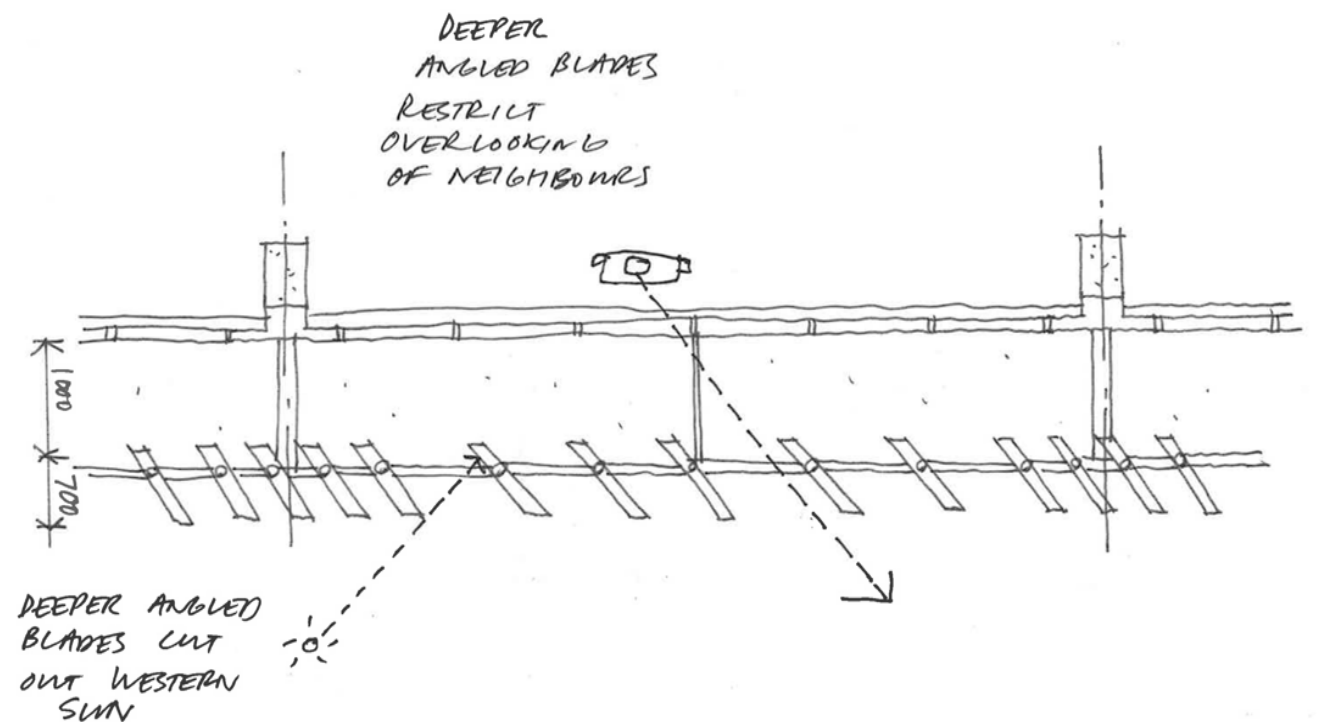
Sectional Detail of Facade



VERTICAL BLADES
CUT OUT LOW ANGLE
EASTERN AND WESTERN
SUN

VERTICAL BLADES
MAXIMISE VIEWS
OVER SCHOOL GROUNDS.

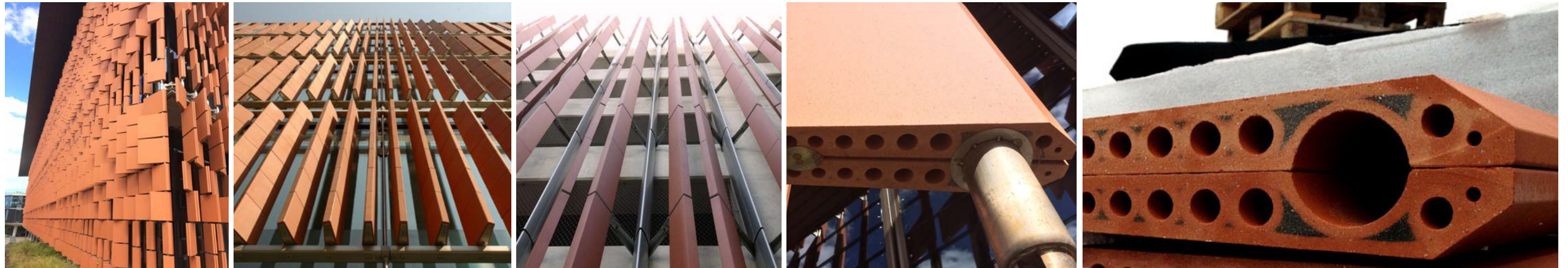
Plan Details | Stage 1 - Northern Facade



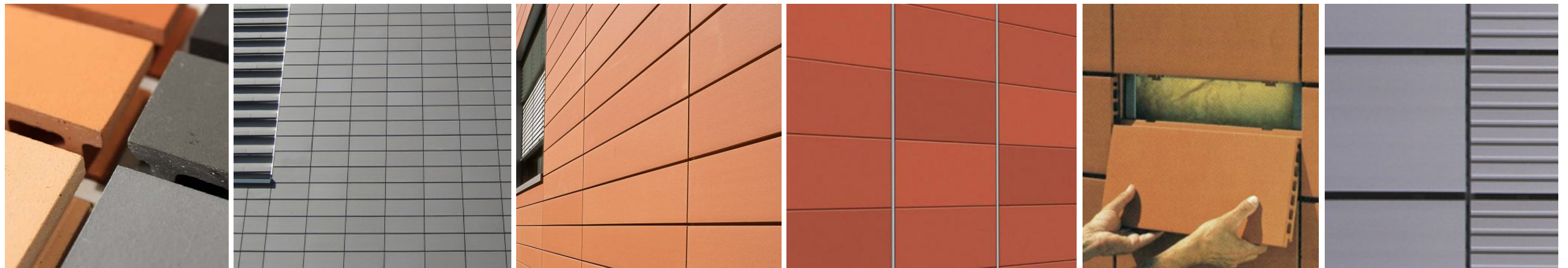
Plan Details | Stage 4 - Western Facade

LEARNING HUB FACADE PRINCIPLES

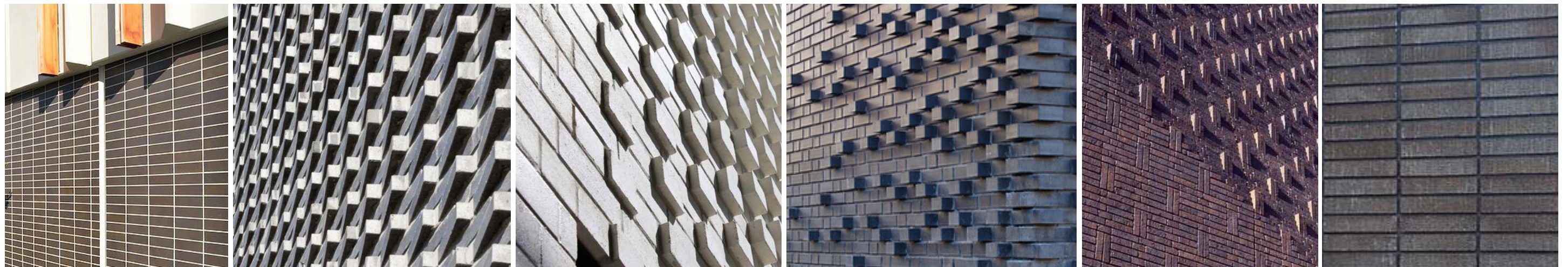
TERRACOTTA ANGLED BLADES SCREEN



TERRACOTTA FACADE TILES



BRICK



LEARNING HUB FACADE PRINCIPLES



LEARNING HUB FACADE PRINCIPLES



LEARNING HUB FACADE PRINCIPLES

