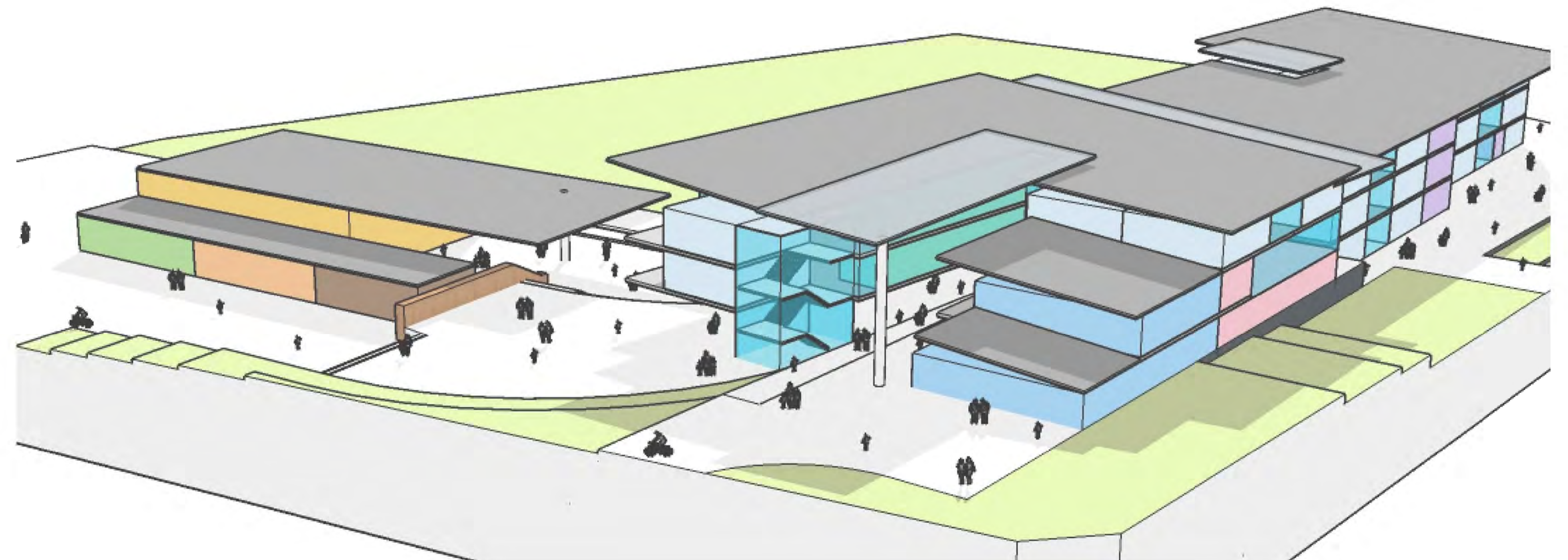


DOCUMENT DESIGN HISTORY			
Date of Issue	Version	Status	Issued
26/04/2018	V1	CDR - Preliminary	SV
17/05/2018	V2	CDR - Preliminary	SV
05/06/2018	V3	CDR-GANSW Issue	SV
06/06/2018	V3	CDR-GANSW Issue Revised	SV
14/06/2018	V4	CDR-TSG Issue	SV
29/06/2018	V5	CDR-TSG Issue Revised	SV
12/07/2018	V6	CDR-SEARS	SV



Drawing No	Drawing Name	Scale
CDR 000	COVER SHEET	NTS
CDR 001	DRAWING LIST	NTS
CDR 002	SEXECUTIVE SUMMARY AND SCOPE OF WORK	NTS
CDR 003	PROJECT BACKGROUND AND DESCRIPTION	NTS
CDR 004	SITE DESCRIPTION AND ANALYSIS - PRECINCT MASTERPLAN	NTS
CDR 005	SITE DESCRIPTION AND ANALYSIS – SITE MASTERPLAN	NTS
CDR 006	STANDARD DoE EFSG EDUCATION PRINCIPLES	NTS
CDR 007	STANDARD DoE EFSG EDUCATION PRINCIPLES – DESIGN RESPONSE	NTS
CDR 008	STANDARD DoE EFSG EDUCATION PRINCIPLES – DESIGN RESPONSE	NTS
CDR 009	PROJECT SPECIFIC EDUCATION PRINCIPLES DIAGRAM	NTS
CDR 010	EXAMPLES OF BEST PRACTICE AND PRECEDENCE - LOCAL	NTS
CDR 011	EXAMPLES OF BEST PRACTICE AND PRECEDENCE – OVERSEAS	NTS
CDR 012	DESIGN STATEMENT & SITE LOCATION PLAN	NTS
CDR 013	SITE CONTEXT AND ANALYSIS	NTS
CDR 015	GF LEARNING MODULE DIAGRAMS	AS SHOW
CDR 016	L1 LEARNING MODULE DIAGRAMS	AS SHOW
CDR 017	L2 LEARNING MODULE DIAGRAMS	AS SHOW
CDR 101	SITE OPPORTUNITIES AND DESIGN INTENT	1:500
CDR 200	GROUND FLOOR - SPACE PLANNING	1:200
CDR 201	LEVEL 1 – SPACE PLANNING	1:200
CDR 202	LEVEL 2 – SPACE PLANNING	1:200
CDR 401	3D VIEWS – SITE MASSING	NTS
CRD 402	3D VIEWS – BLOCK MASSING	NTS



## PROJECT BACKGROUND

The new Catherine Field primary school will be built in the Narellan primary school cluster of Catherine Field (Part), in the Sydney Metro South West district. The South West District is identified in the Greater Sydney Commission's metropolitan plan "A Plan for Growing Sydney" as a significant focus for intensive growth and infrastructure investment over next 20 years. The draft South West District Plan also applies to this area. The Cluster falls within the Camden Local Government Area (LPG) and includes 9 schools, which Catherine Field New Primary School is part off.

Catherine Field (Part) is in the South West Growth Centre, which is undergoing a significant development. The South West Growth Centre will have a significant number of dwellings and very high projected population growth. This is expected to generate increase in numbers of primary school age children, and demand for teaching space, and facilities to at least 2031.

## PROJECT DESCRIPTION

The new primary school at Catherine Field (Part) will be located on a site within a Greenfield Development that is expected to generate substantial population and school age population growth. The site allocated for the school is approximately 2.0 Ha and has a direct connection to a 5.0 Ha future Open Space to its Northern boundary, and full road access to the rest of the site's 3 boundaries.

The construction will be delivered in a single stage.

Single stage construction will include:

- 44 new teaching spaces to accommodate 1012 students.
- Core Facilities, Staff Facilities and Administration to Core 35 Standard
- Infrastructure
- Parking facilities
- Site will undergo substantial landscape treatment to provide contemporary educational and recreational facility.



NEW ORAN PARK PRECINTC - IMAGE



LIFE IN CATHERINE FIELD - IMAGE

The proposed site for Catherine Field New Primary School is located within rapidly developing new precinct of Catherine Field.

**ROADS AND TRANSPORT**

The submission from the major developer, Greenfields Development Company, is proposing a revised regional road hierarchy whereby Oran Park Centre will be directly linked with new emerging suburbs that includes Catherine Field












**SW BUS SERVICE PLAN**

TfNSW is currently reviewing the long term bus network for the SWGC and the Precinct

**School Location**

The school site will continue to be co-located with a Council's local parks, to provide passive open space for both school and nearby residents, and have new road access.

**LEGEND**

-  Precinct plan boundary
-  Parks
-  Sporting fields
-  Environment conservation
-  Low to medium density residential
-  Low density residential
-  Selected site for new school
-  Major road
-  Key local road network
-  Historic driveway
-  Potential local roadway



ARIAL VIEW OF THE PRECINCT - NTS

**BRIEF DESCRIPTION**

Site allocated to the new school is currently a vacant lot of 2.0 Ha of land, surrounded by future medium to low residential allotments, open green space and conservation land.

The Norther boundary is bordering onto Future Green Space. The Space will be shared with local residents. The Council requires a portion of the Green Space to be accessible to public at all times and will contain new sporting fields.

There is a wide area of conservation land with a creek, that cuts through the Precinct east of the site.

The three remaining boundaries will have new road access.

- New widened road along site's Western boundary, which will connect the school to major precinct roads and allow for increased local traffic and new bus service for residents and school.
- Two new secondary roads, along site's South and East boundaries will serve as service/delivery roads and to provide vehicular access to adjoining residential allotments.

**LEGEND**

- Subject Site Boundary
- - - Proposed Green Space
- - - Future Residential
- New Widened Road
- New Secondary Road
- Proposed Bus Stop



ARIAL VIEW OF PROPOSED SITE - NTS

### The NSW DoE Educational Facilities will:

- Principle 1:** First and foremost, focus on the needs of learners and learning.
- Education Principle 2:** Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community.
- Education Principle 3:** Be aesthetically pleasing.
- Education Principle 4:** Provide **contemporary, sustainable learning environments** that:
- > Promote learning for students and teachers through collaboration, social interaction and active investigation
  - > Encourage learner self-management and self-direction
  - > Support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry and authentic project and problem based learning
  - > Facilitate learning and connection anywhere, anytime by providing seamless access to ICT and integration of learning resources throughout the learning spaces
  - > Be integrated into, and maximise the use of the natural environment
  - > Enable aspects of the buildings, building design and outdoor spaces to be learning tools in themselves—for example, learning from the ecologically sustainable features of the design and associated energy management systems
  - > Are age and stage appropriate
- Education Principle 5:** Embed the potential for **re-configurability**, both in the present for multi-purpose use and over time for changing needs.



BELLEVUE HILL PUBLIC SCHOOL NSW - LEARNING HUB/LIBRARY by Group GSA



SEYMOUR COLLEGE, YURREBILLA CENTRE SA, by Swasnbury Penglese

**Education Principle 1:****First and foremost, focus on the needs of learners and learning**

- Provide stimulating learning environments through the use space and furniture
- Provide multi-use spaces with connections to the outdoors
- Provide variety of learning spaces that can respond to the future focus learning teaching methods with flexible spatial design within larger open plan spaces
- Personalised – learning is shaped with individuals in mind
- Action orientated – enabling group collaboration
- Just in time – learning can be adapted to a rapidly changing world
- Learning as a social exchange – mixing the formal & informal
- Reaching all learners – especially engaging the whole student group
- Effective pedagogy through flexible and specific curricula learning spaces that also support assembly and physical activities
- Offer an engaging and supportive student experience suited to range of learning styles.
- Offer flexible and well connected teaching and learning spaces.
- Have the capacity to support comprehensive curriculum delivery

**Education Principle 2:****Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community**

- Provide a safe and secure environment for students, staff and visitors
- Where appropriate create partnerships between the school and the community
- Share facilities in the form of halls, courts and libraries where appropriate
- A welcoming and central location readily accessible from the town centre
- Take into consideration shared access to local facilities
- Allow response to significant changes in student numbers
- Offer a safe and secure learning and working environment that invites community participation and engagement
- Support teachers in their roles as student mentors and members of a professional community
- Be mindful of the needs of learners at different learning stages
- A school environment which inspires community beliefs and identity
- Equitable access throughout the school
- Welcoming environment that respects the history of the local area
- Relationships first – every person matters; and
- Reputation – to be known positively as a school meeting the aims of the vision and mission
- Safe – where people look out for each other a duty of care is met
- Enhancing health, well-being and mental health



HOME BASE UNIT & ENCLOSED PRACTICAL ACTIVITY- HARBORD PS HARBORD NSW  
by NSW Government Architects Office



HOME BASE UNIT & PRACTICAL ACTIVITY - CAMBERWELL HIGH SCHOOL VIC  
by Hayball Architects

**Education Principle 3:**

Be aesthetically pleasing.

- Create inviting, pleasant spaces connected to the natural environment
- Fun imaginative and safe environment using colours and textures
- Landscaping with variety of materials and areas to create natural learning and gathering spaces
- Empathetic to the range of users
- Sense of belonging for all users

**Education Principle 4:**

Provide contemporary, sustainable learning environments

- Maximise natural lighting and acoustic solutions as key objectives
- Passive design and maximum use of natural light and ventilation
- Outdoor spaces used as learning tools maximising technology
- Seamless access to ICT and integrated learning
- Encouraging self-management and educating through responsibility
- Supporting teaching strategies, project collaboration, social interaction and active investigation
- Being well known – each person feels that they are known by those around them
- Dynamic – where appropriate the building is considered a learning tool
- Be flexible and allow customisation to suit different community contexts by providing both core and optional space types
- Treat the entire school as a library by offering a central resource hub supported by distributed resource nodes as required
- Maximise outdoor learning opportunities
- Create a healthy and environmentally sustainable environment that serves as a tool for learning
- Offer technology-enabled settings with an emphasis on mobility
- Be configured to maximise meaningful and functional relationships and links between people, disciplines and resources

**Education Principle 5:**

Embed the potential for re-configurability, both in the present for multi-purpose use and over time for changing needs.

- Maximise use of the site for teaching
- Multi-purpose spaces with efficient user movement around the school
- Provision of buildings and services that can adapt to future learning requirements
- Focus on varying skills for learning
- Respond to varied access and usage patterns.
- Learner agency – supporting student voice and engagement



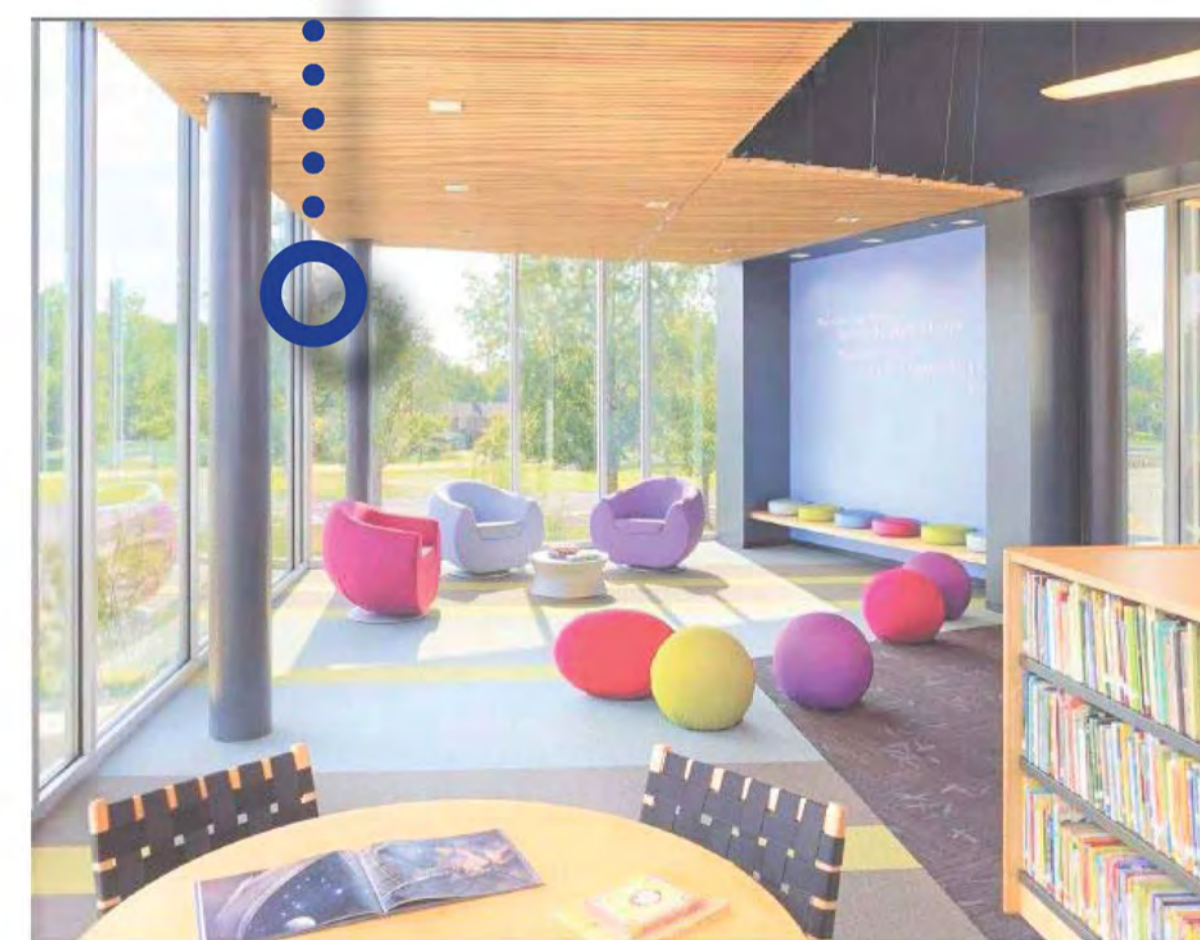
ENCLOSED LEARNING STREET - HARBORD PUBLIC SCHOOL HARBORD NSW  
by NSW Government Architects Office



ENCLOSED LERNING STREET - ANZAC PARK PUBLIC SCHOOL CAMMERAY NSW  
by NSW Government Architects Office



LIBRARY - HARBORD PUBLIC SCHOOL NSW - PRECEDENCE



ENCLOSED LEARNING STREET - GOODSTART EARLY LEARNING QLD- PRECEDENCE



building entry + administration

Coatesville Primary School, Victoria



presentation + display + withdrawal space

Mernda Central College, Victoria



break out space + outdoor learning street



library - learning hub

Coatesville Primary School, Victoria



HOME BASE + LARGE GROUP LEARNING

Goodstart Early Learning Queensland



shared practical activity area + covered learning



library - learning hub

Coatesville Primary School, Victoria



quiet learning space

Mernda Central College, Victoria

Mernda Central College, Victoria



school hall - community shared



group learning



presentation + display + withdrawal space



break out space + outdoor learning



library - learning hub



HOME BASE + LARGE GROUP LEARNING



open play area + covered learning



school hall - community shared

DESIGN STATEMENT

THE BRIEF

- Develop whole of school facilities to meet the Education Facility Standard Guidelines (EFSG) Core 35 requirements.
- Masterplan the works to best capture site opportunities for specific educational and environmental sustainable outcomes.
- Provide future learning environments that offer flexibility and options that accommodate various teaching models and future focus learn principles.
- Maximize open space and define a community realm to the onsite environment.
- Provide a front of school entry to express public address and access.

SCOPE

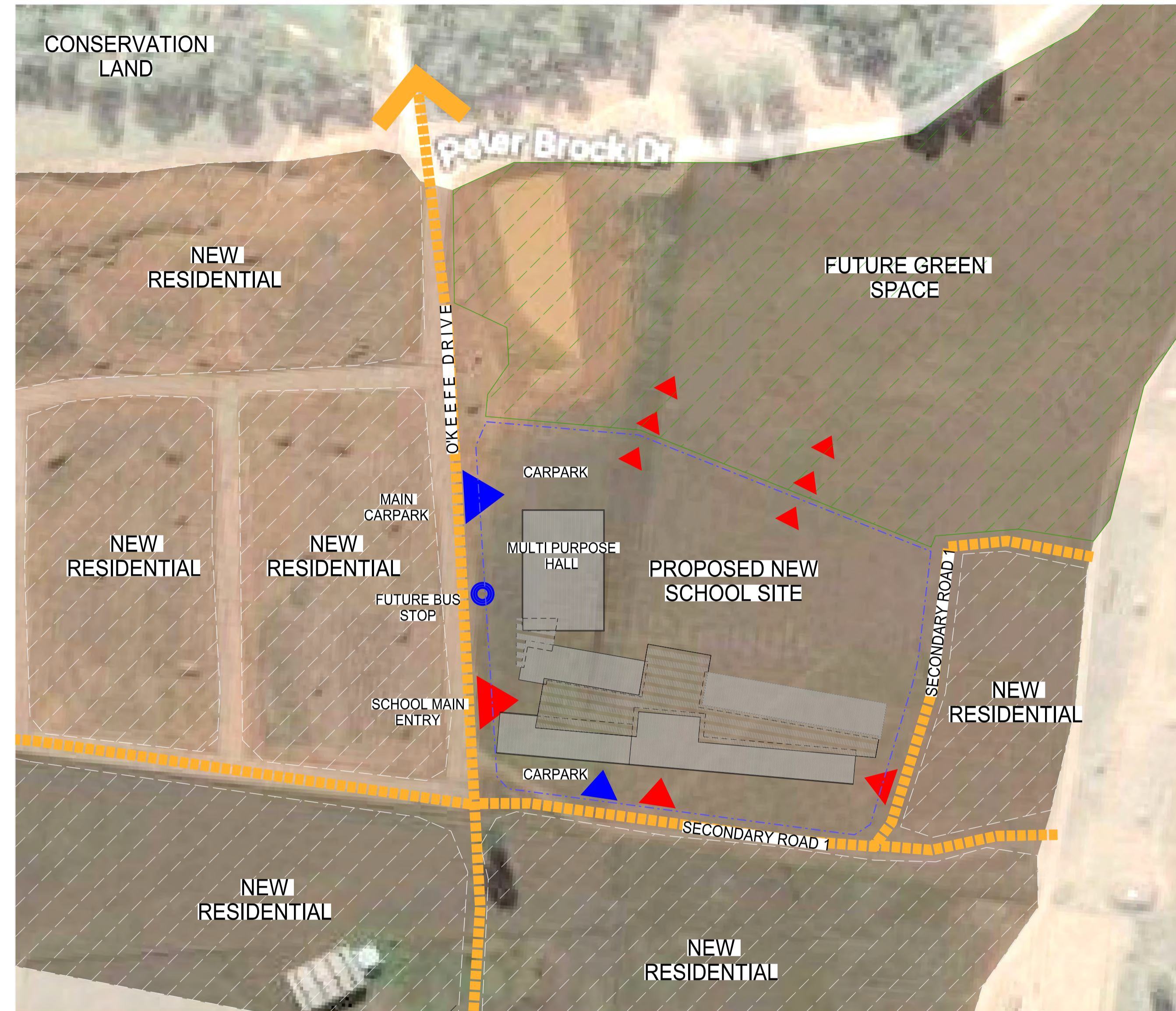
- Provide 44 new teaching spaces to accommodate 1040 students.
- Integrate the core facilities sized to service whole of school capacity.
- Manage site accessibility and circulation specific to the sites opportunities.33
- Provide onsite staff parking.
- Provide infrastructure services as required.

OPPORTUNITIES

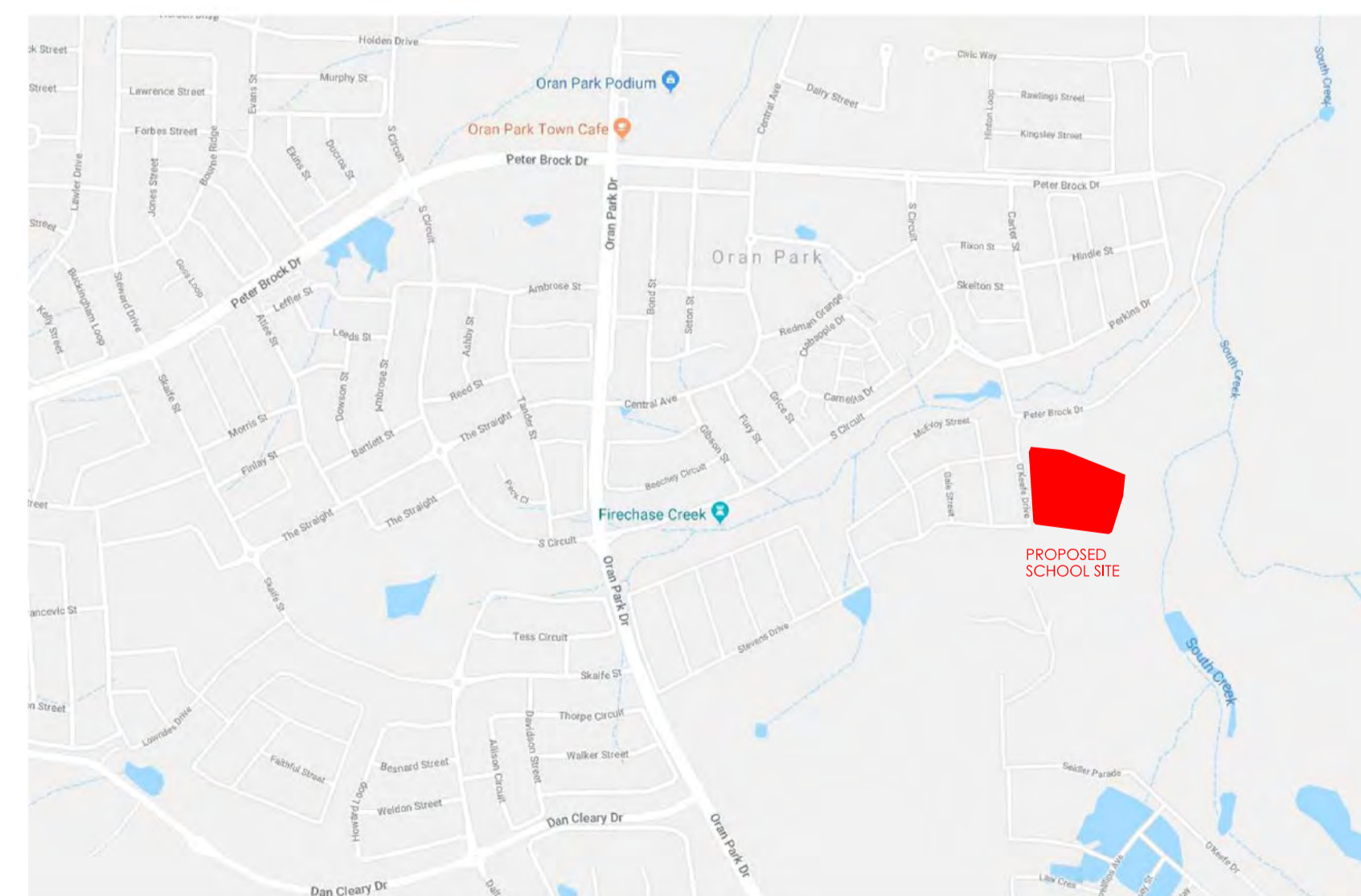
- Consideration to physical and visual connectivity to the open space to the north of the site.
- Ensure efficient site access and building connectivity.
- Define site entry in close proximity to the library and hall for potential out of hour use by the community.
- Utilize the sites natural ground gradient to assist in the approach to building scale and mass.
- Position the new buildings to take advantage of climatic conditions and orientation.
- Adopt a part 3 storey design approach to preserve and maximum open space amenity.
- Create a community use focus to the planning strategies.
- Provide environments that engage with the current and future learning strategies.
- Develop an assembly realm suitable for whole of school population integrated with modern free play landscaped areas.

DESIGN INTENT

- Design new facilities that offer transparent learning spaces and provide visual and physical connections between spaces, people and resources.
- Create connectivity with the learning spaces to the hall, library and outdoor gathering and play spaces.
- Develop a central realm to the sites building configuration and open space relationships.
- Express the physical presence of the school's arrival and entry.
- Establish various typographies to offer better activity choices.
- Improve and encourage community integration and inclusion within the site.
- Build aesthetically pleasing vernacular and modern architecture that responds meaningfully within the existing sites context, environment and climatic conditions.
- Provide large covered areas for learning and whole of school community gathering which can integrate with the hall facility.
- Rationalize site pedestrian access and on site vehicular accommodation.
- Include environmental sustainability measures into the design of the building fabric, its consumption of energy and its response to passive climatic control



2 PROPOSED SCHOOL SITE PLAN  
Scale 1:1000



1 SITE LOCATION PLAN  
NTS

SITE CONTEXT

The new primary school at Catherine Field will be located on a site within a Green-field Development that is expected to generate substantial population and school age population growth. The site allocated for the school is approximately 2.0 Ha and has a direct connection to a 5.0 Ha future Open Space to its Northern boundary, and full road access to the rest of the site's 3 boundaries

The main road address to the site is off Barry O'Keefe Drive which is to its western boundary. The southern and eastern boundaries are residential secondary access roads.

The site falls from west to east consistently 1 in every 35m resulting in 4m overall across the site. The site is void of any existing vegetation. There is a traffic roundabout on Barry O'Keefe Drive to the north-west corner of the site and the road is widened to its south to enable road side stopping. Future low residential housing development lots is to all across roads adjacent to the east, south and west.

ACCESS

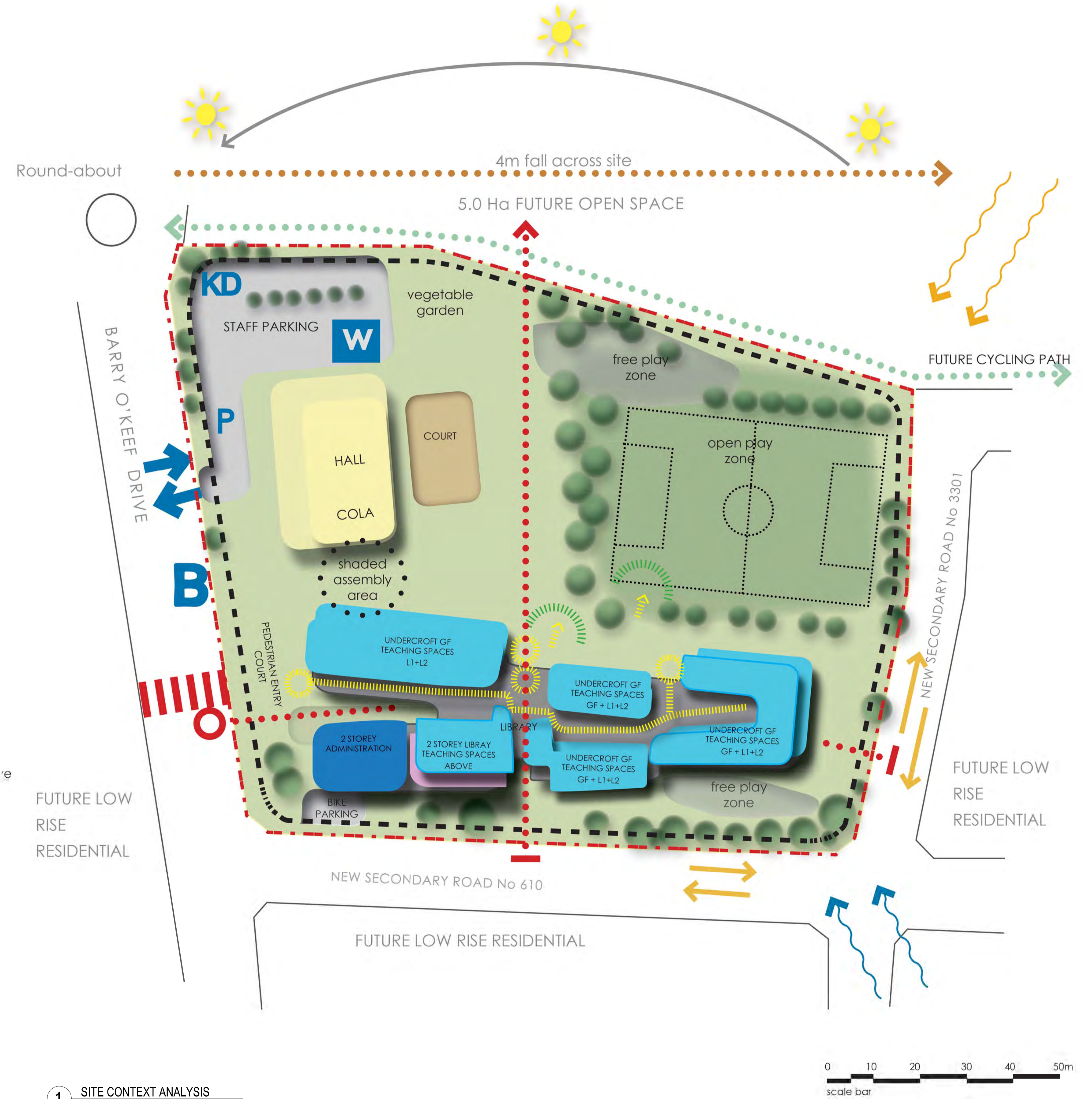
The sites primary access is from Barry O'Keefe Drive where there is a proposed kiss and drop zone, pedestrian crossing, public bus stops and pedestrian gated entry through to the administration building.

Onsite staff parking is to the north west of the site, behind the hall and accessed also from Barry O'Keefe Drive. A small visitors parking area is proposed from the secondary road adjoining Barry O'Keefe Drive.

The main address and pedestrian entry to the school is accessed from Barry O'Keefe Drive positioned at the high part of the site. Other access points are proposed from the secondary roads to provide additional pedestrian entry and exit options alleviating bell time congestion.

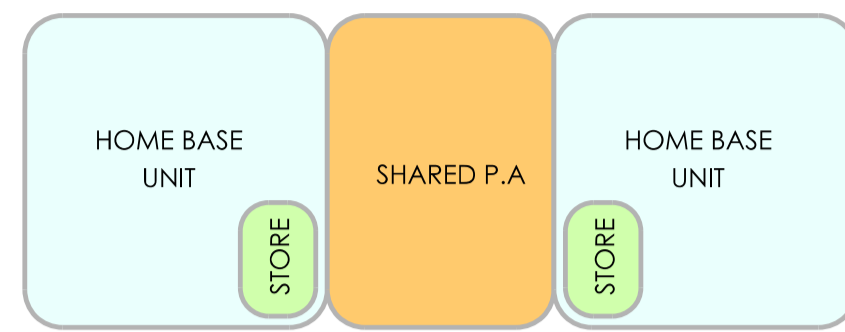
LEGEND

- |  |                               |  |                                   |
|--|-------------------------------|--|-----------------------------------|
|  | Subject Site Boundary         |  | Canteen                           |
|  | Site                          |  | Hall                              |
|  | Learning Street               |  | Single Storey Administrative Zone |
|  | Parking                       |  | 3 Storey Teaching Spaces HBU's    |
|  | Main Access                   |  | Practical Activities              |
|  | Secondary Access              |  | Shaded Assembly                   |
|  | Amenities                     |  | S/E Wind Harsh                    |
|  | 2 storey Library              |  | N/E Wind Favourable               |
|  | Waste Collection and disposal |  | Games Courts/Cola                 |
|  | Kiss and Drop                 |  |                                   |
|  | Pedestrian Crossing           |  |                                   |
|  | Fall across Site              |  |                                   |

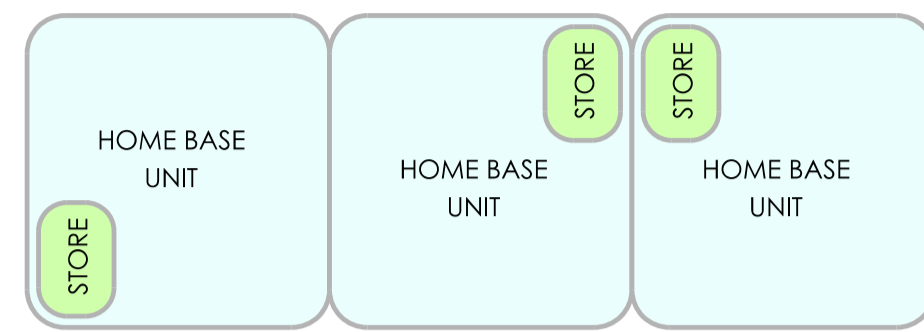


1 SITE CONTEXT ANALYSIS NTS

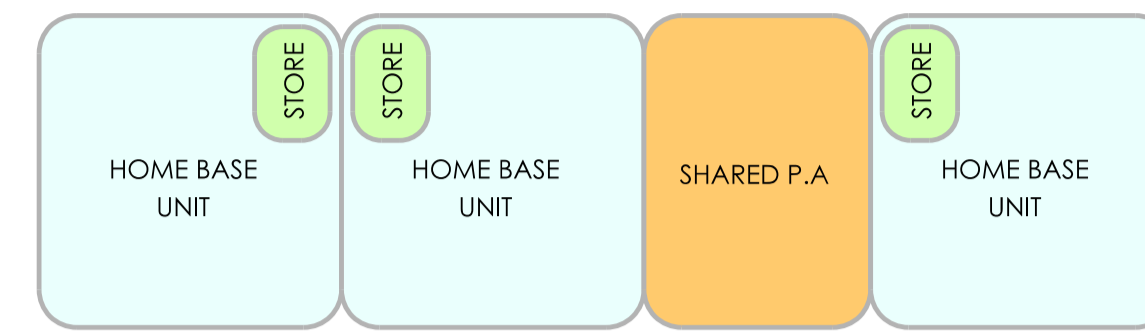
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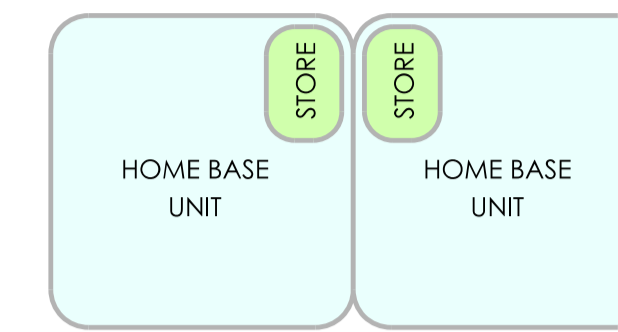
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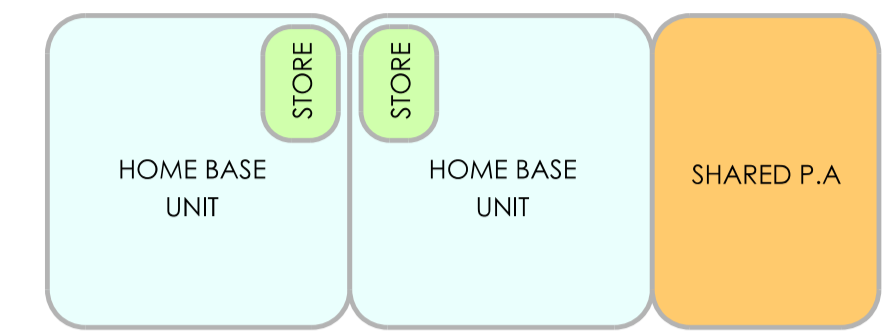
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MODULE TYPE d

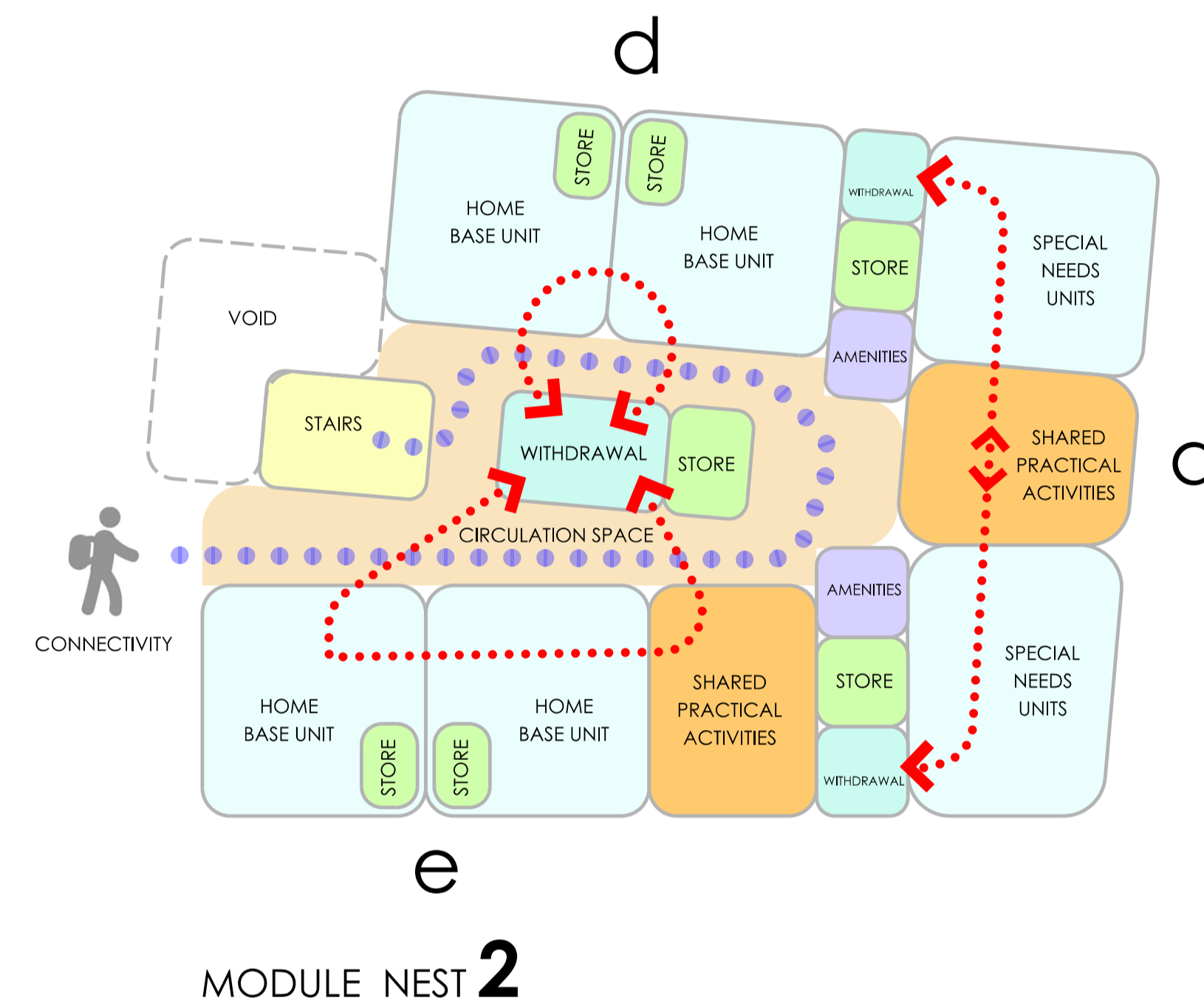
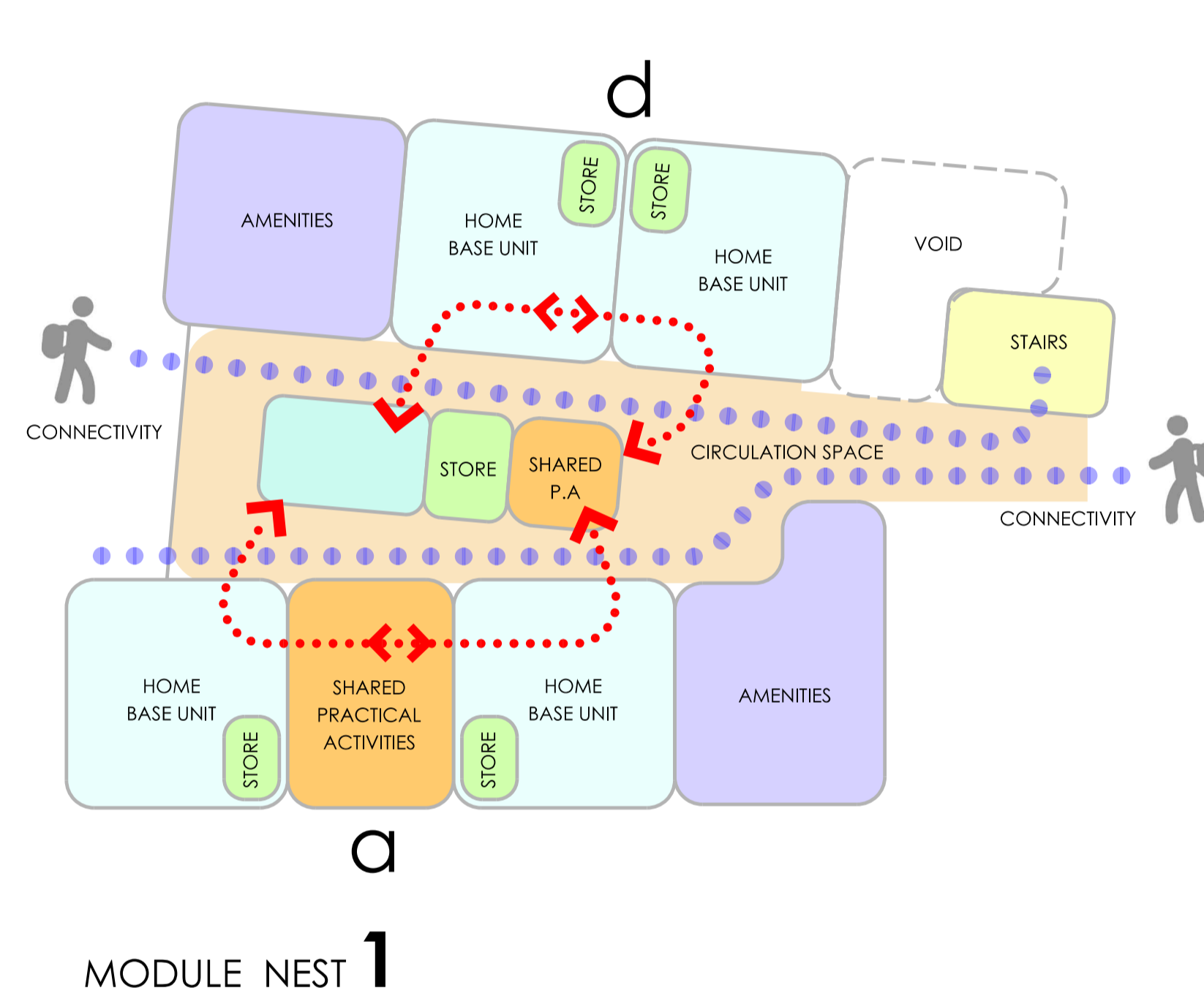


MODULE TYPE e



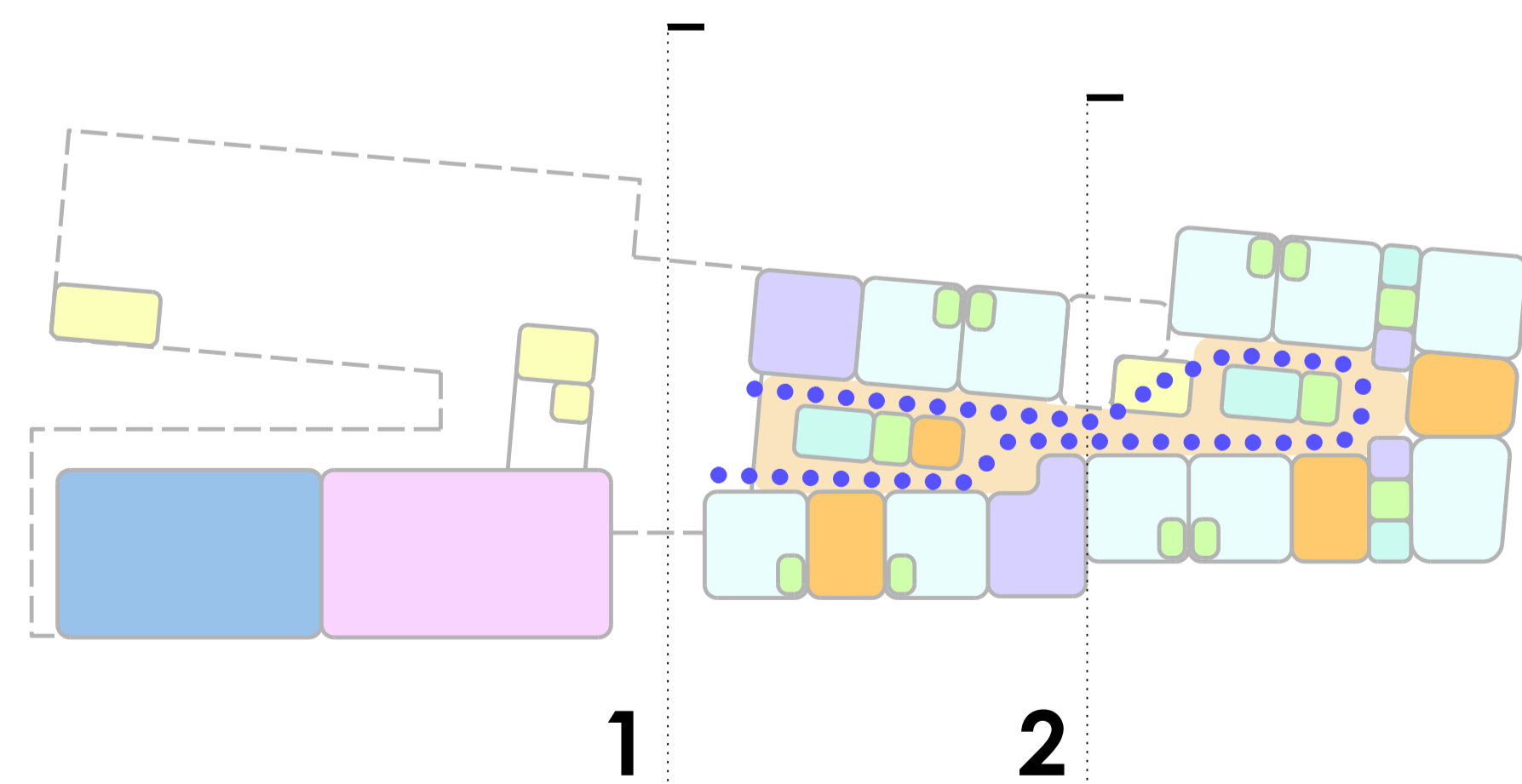
MODULE TYPES

Scale 1:200

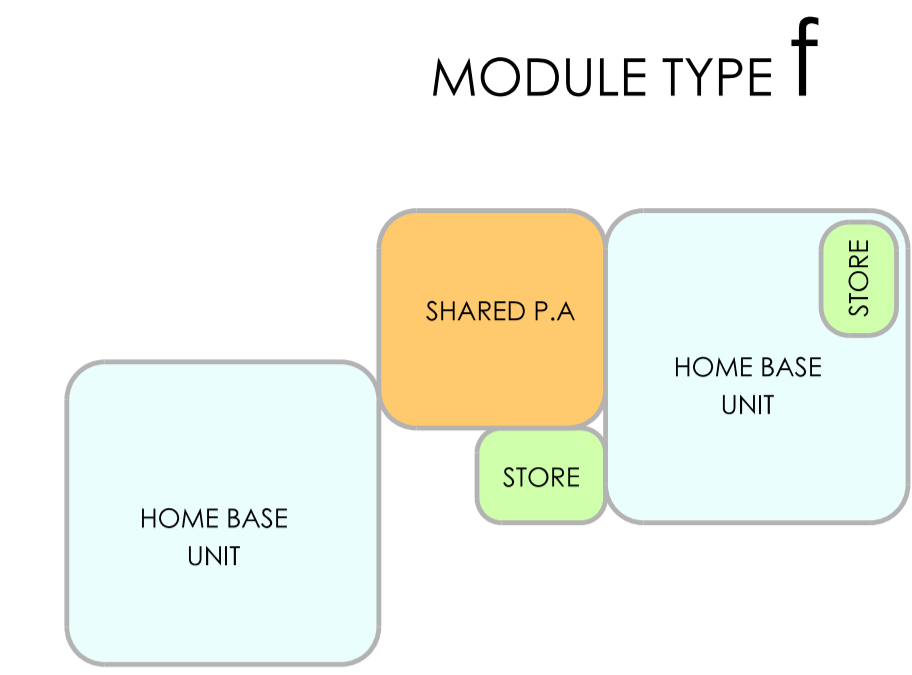
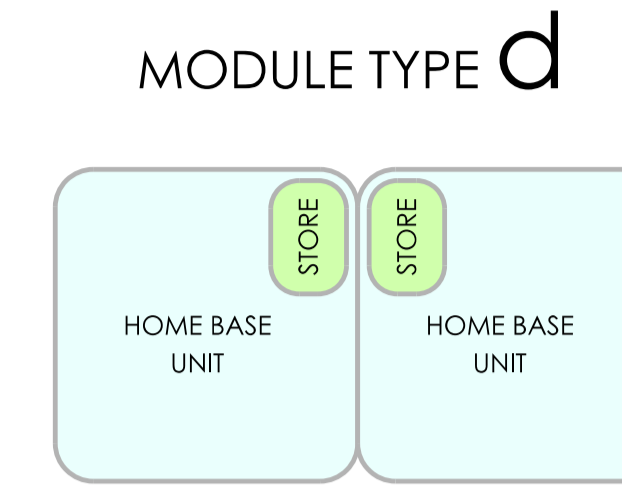
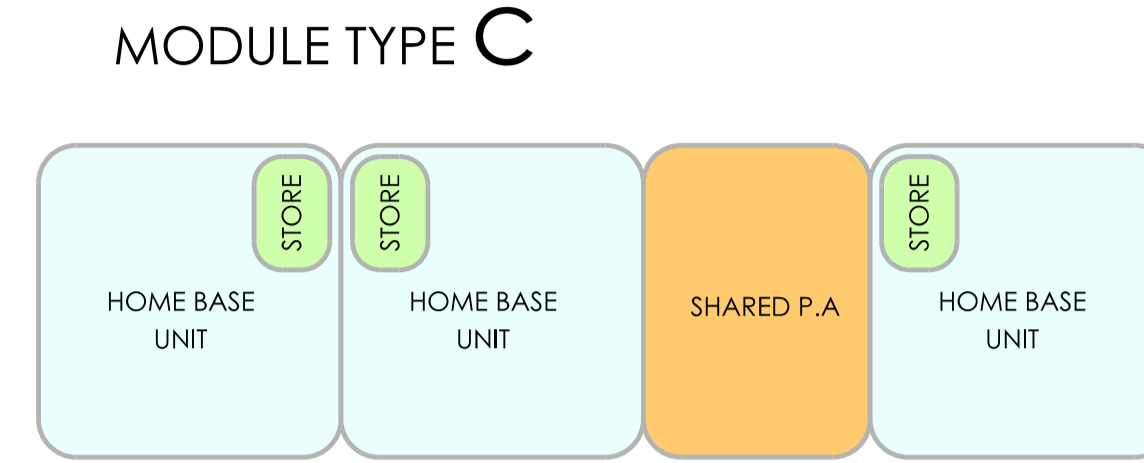
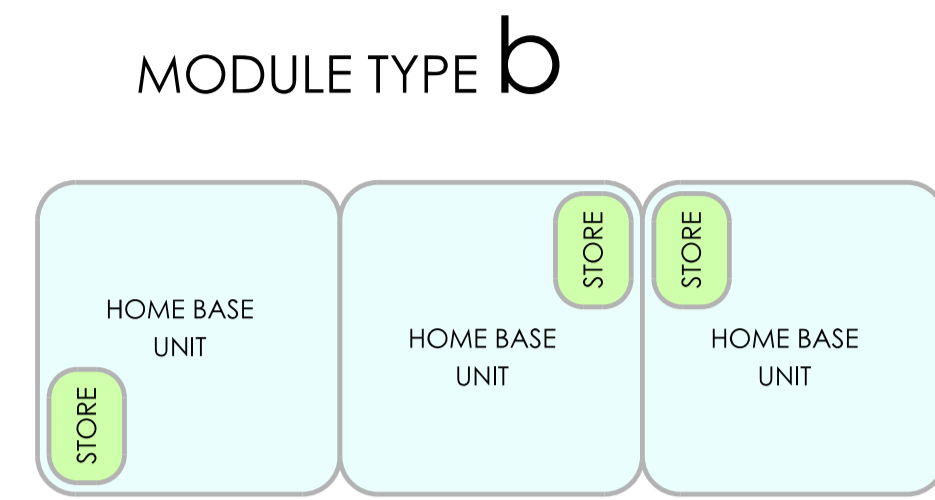
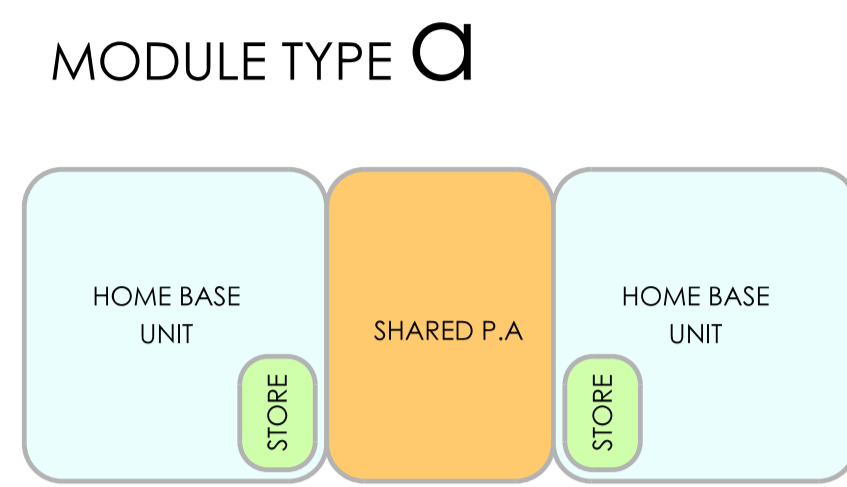


MODULE NESTS

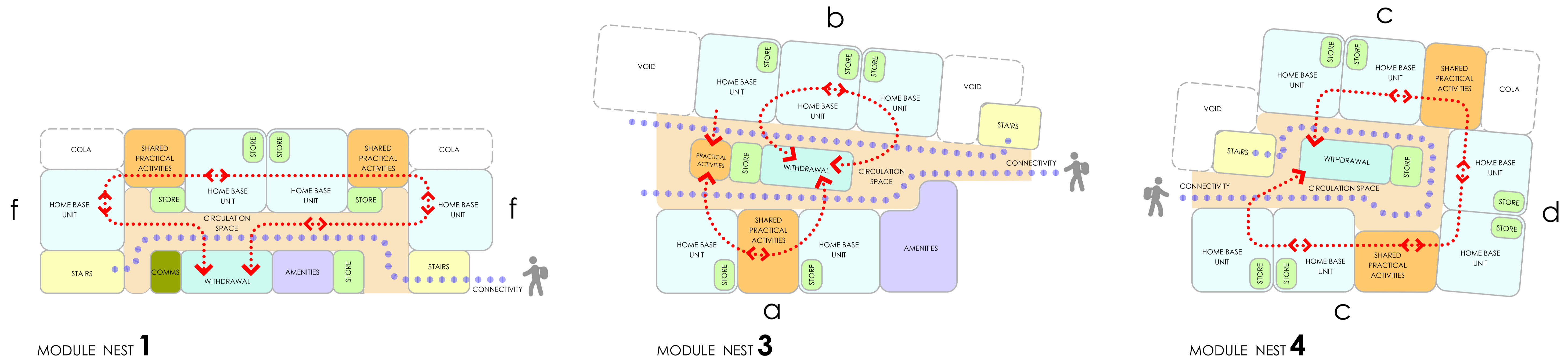
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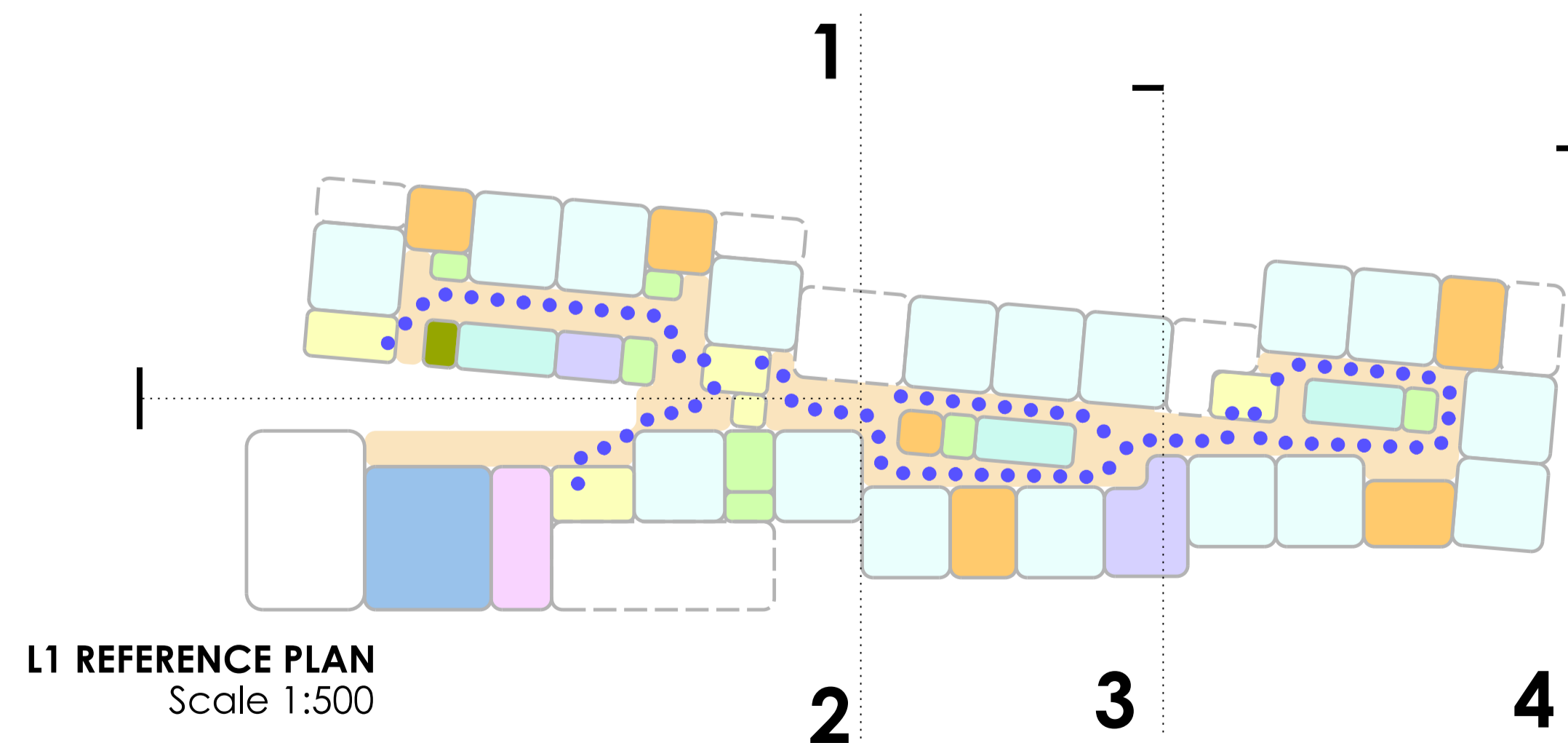
G REFERENCE PLAN  
Scale 1:500

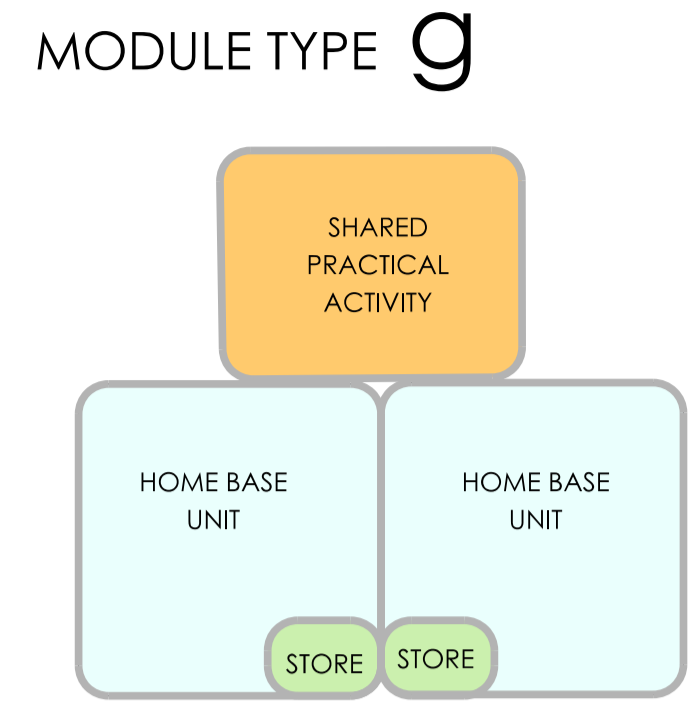
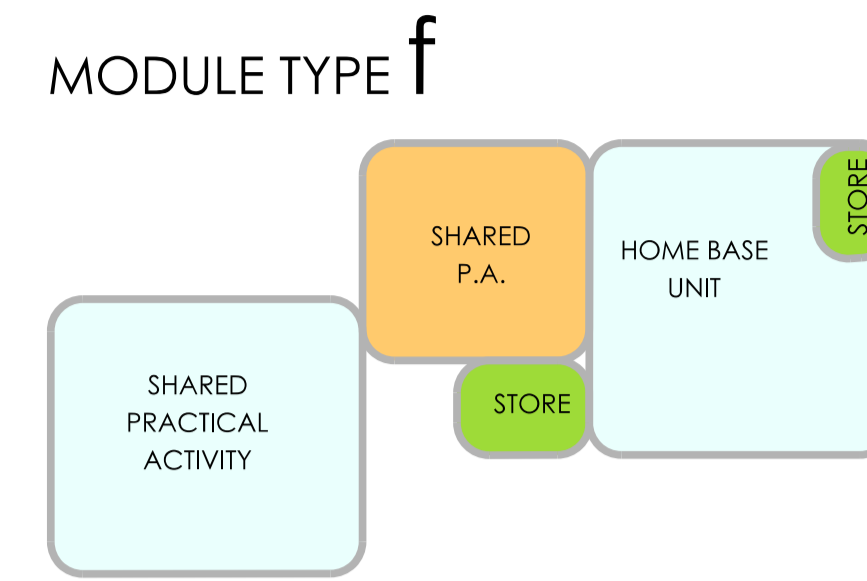
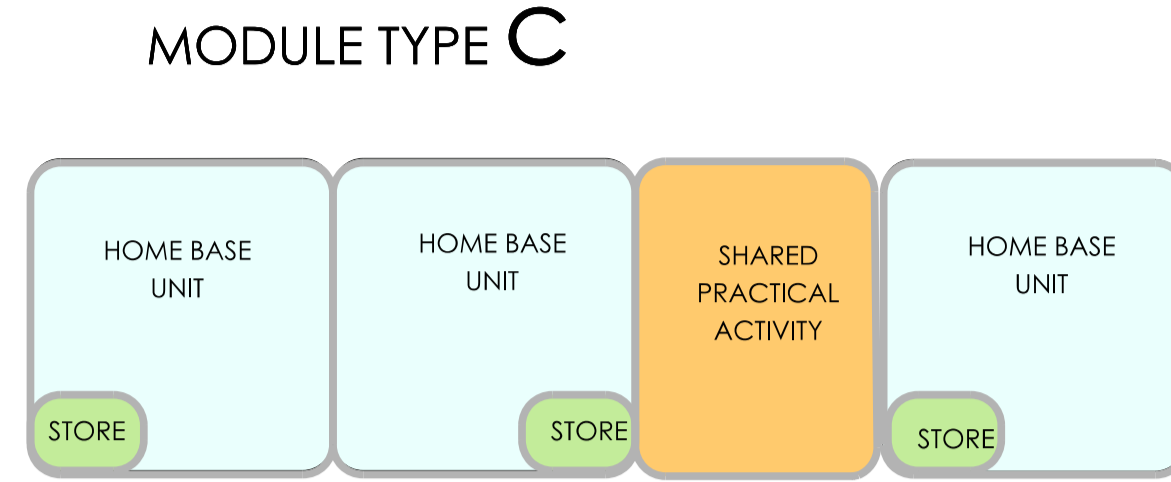
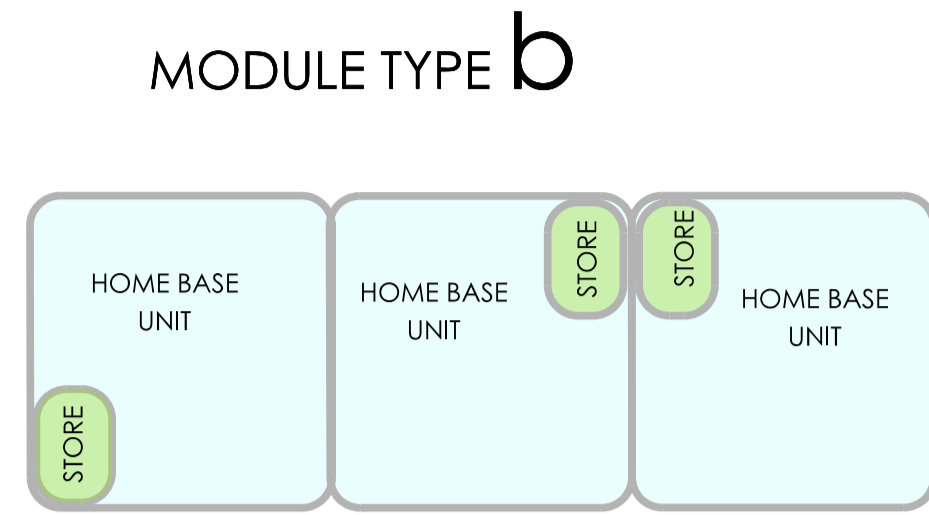
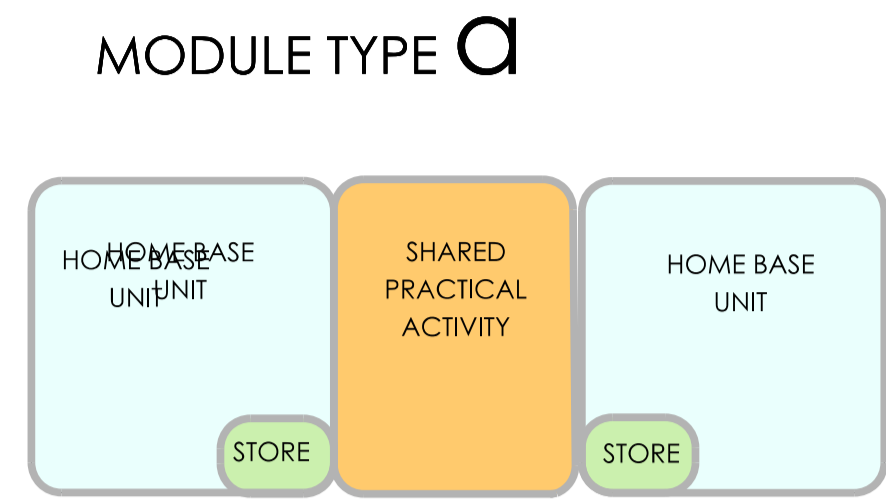


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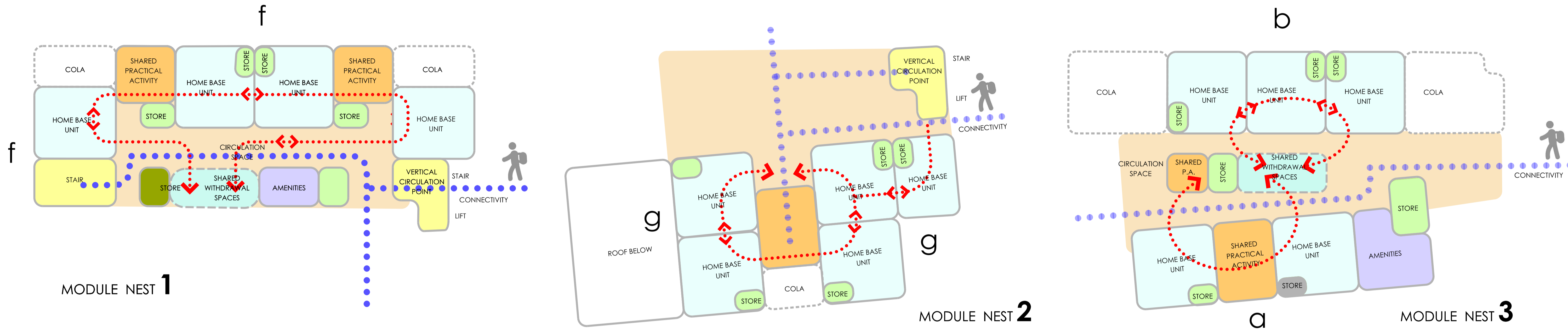


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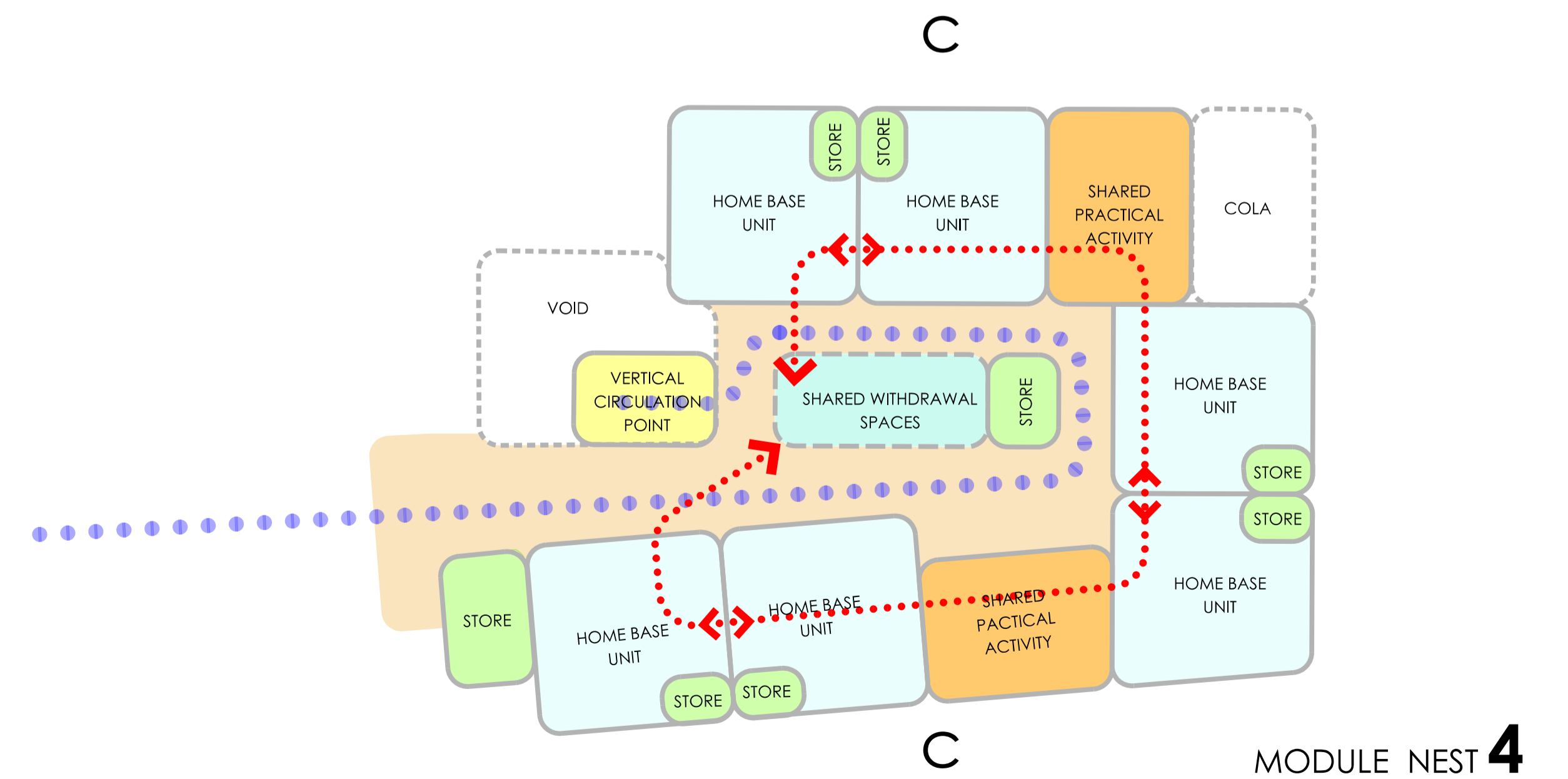
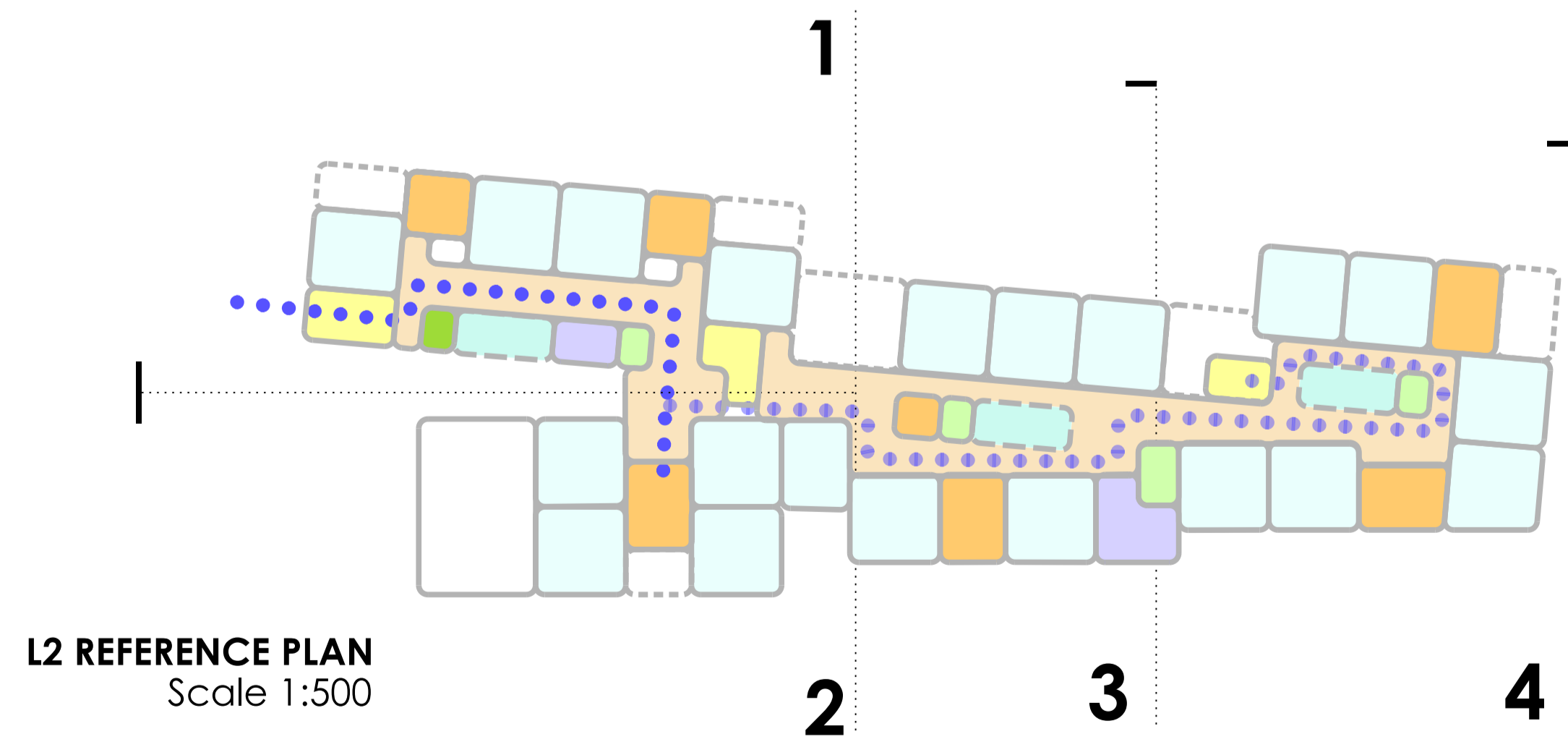




**MODULE TYPES**  
Scale 1:200



**MODULE NESTS**  
Scale 1:200



**BUILT FORM**

The site has no existing buildings. The proposed built form is a mixture of building mass consistent with single storey, two storey and three stories. The varied building mass will accommodate the stories in keeping with the sites gradient.

The proposed new built forms will incorporate modern materials and finishes, and reflect a vernacular architecture of contemporary learning facilities. A mixed palette of durable light weight prefinished cladding materials, glazing and a varied play of skillion roofs is adopted to integrate and emulate the residential character of the neighbouring built environment and its context.

**SUSTAINABILITY**

Passive climatic control measures are intrinsic to the design approach. Siting and orientation of the new buildings will afford good solar amenity from the north and capture prevailing breezes to provide crossflow ventilation.

Proposed large building openings will offer flexibility to enclose and open up the learning and working environments to encourage active control of the climatic opportunities.

Extensive undercroft areas are designed to provide shaded areas that are adjacent to internal building voids allowing for air movement to draw throughout the internal spaces. The pergola style translucent roof at high level will amplify natural light filtration from above and throughout the middle of the buildings.

In accordance with the EFSG requirements, building fabric insulation, shaded glazing, solar panel energy, grey water capture and reuse, recycled locally sourced materials and finishes, BMS including energy efficient lighting will all form elements of the development to ensure a high quality of environment sustainable outcomes.

**PUBLIC REALM**

The school community realm is central to the development. The undercroft, site tearing and assembly area aim to provide a congregation space that physically and visually connects with the site access points, learning areas, administration, covered outdoor learning areas, open play areas and the hall.

The canteen area and its position is designed as the hub of this space to encourage user interaction, creating a common ground to the school site which is adjacent to the front entry area.

It is visualised that this area will provide a 'heart' to the site and its facilities where the school community at large will gather, play and socialise.

**SITE LEGEND:**

- KISS AND DROP
- WASTE COLLECTION, DISPOSAL AND DELIVERY
- VEHICULAR ACCESS
- PEDESTRIAN ACCESS/ CONNECTIVITY
- SITE BOUNDARY
- FENCE
- SUGGESTED CROSSING
- SCHOOL COMMUNITY REALM
- PHYSICAL & PHYSICAL CONNECTIONS
- BUILDING HEIGHTS
- SOLAR AMENITY
- VOID ALLOWING AIR MOVEMENT
- CROSS SITE VENTILATION



1 SITE PLAN  
Scale 1:500



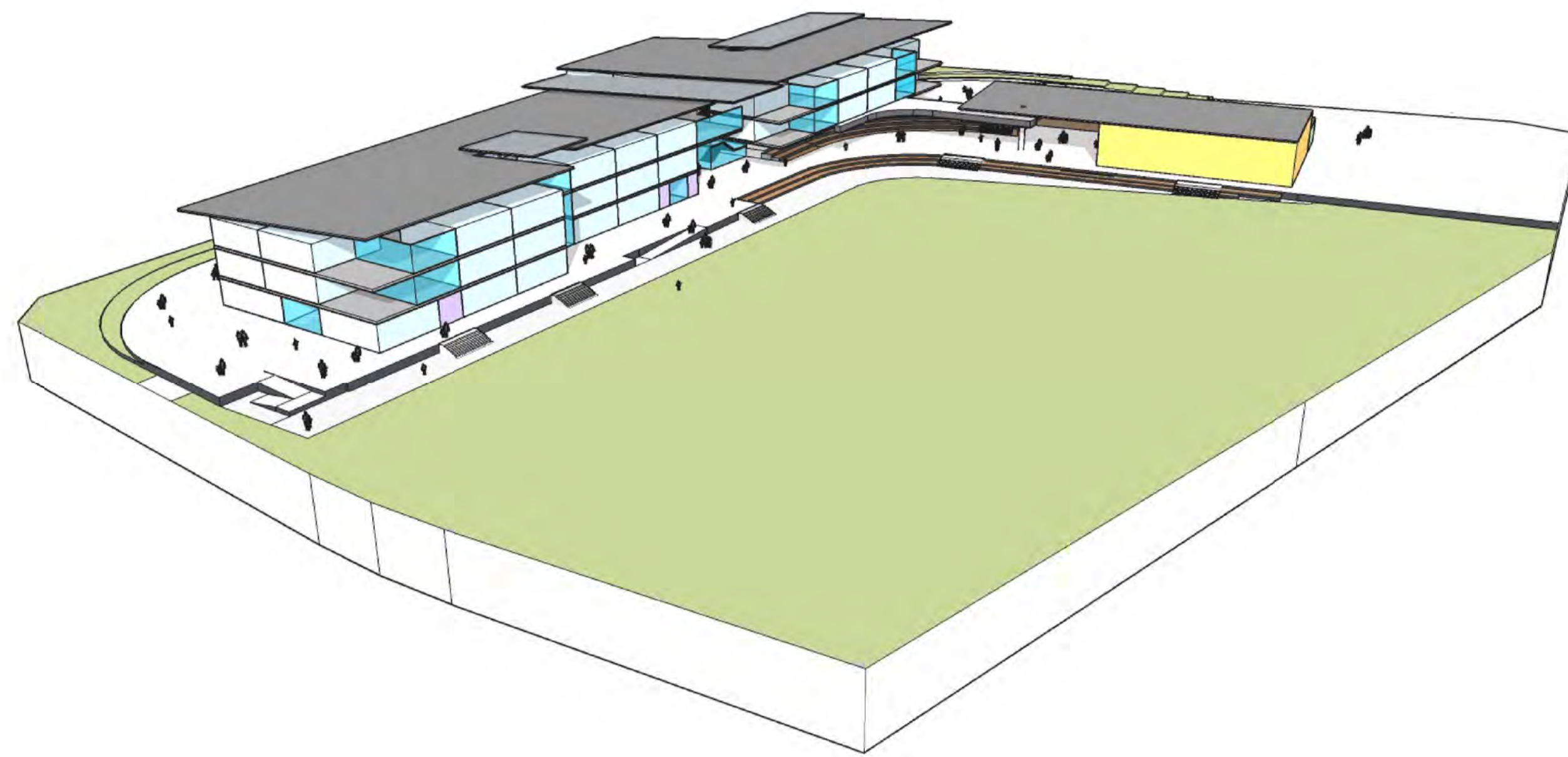


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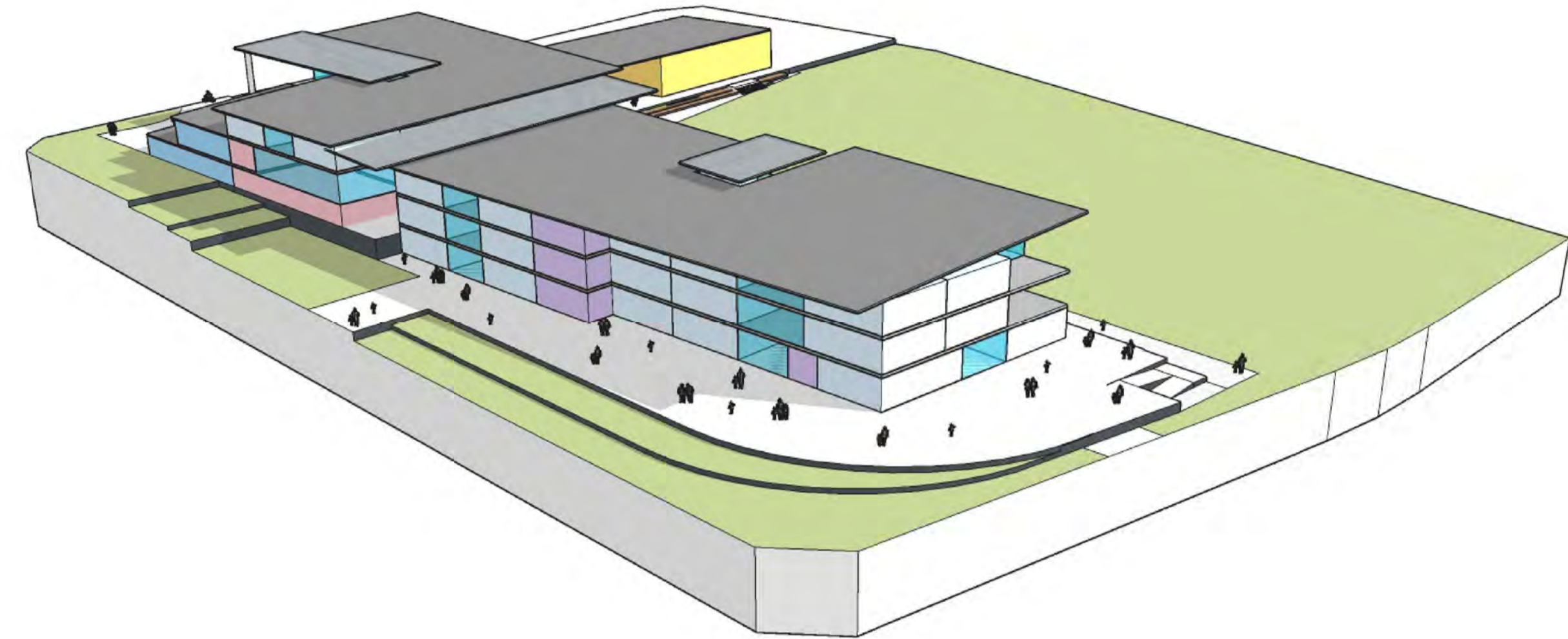
- HALL
- COLA
- CANTEEN
- STORE
- CLEANERS ROOM
- COMMS ROOM
- ADMINISTRATION
- TEACHING SPACES
- LIBRARY
- AMENITIES
- STAIRS
- OSHC
- CIRCULATION
- BUILDING OVER
- OPEN PLAY/LANDSCAPING
- WITHDRAWAL
- PRACTICAL ACTIVITIES
- FENCE
- SITE BOUNDARY



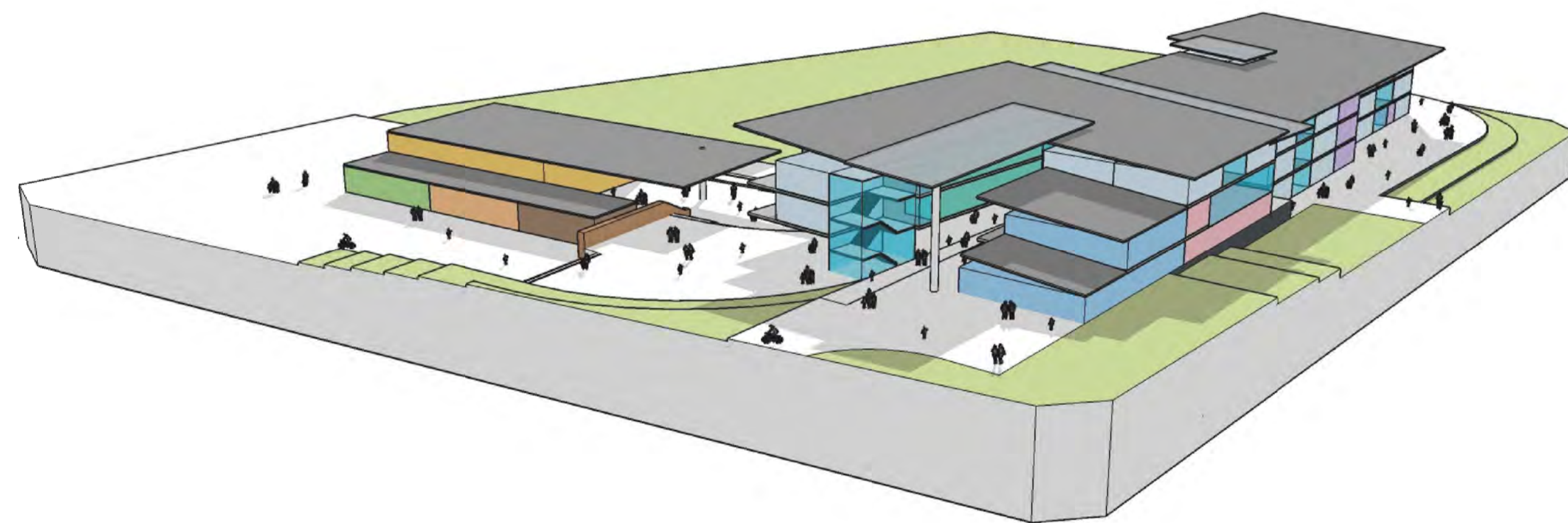
1 FLOOR PLAN - SECOND FLOOR  
Scale 1:200



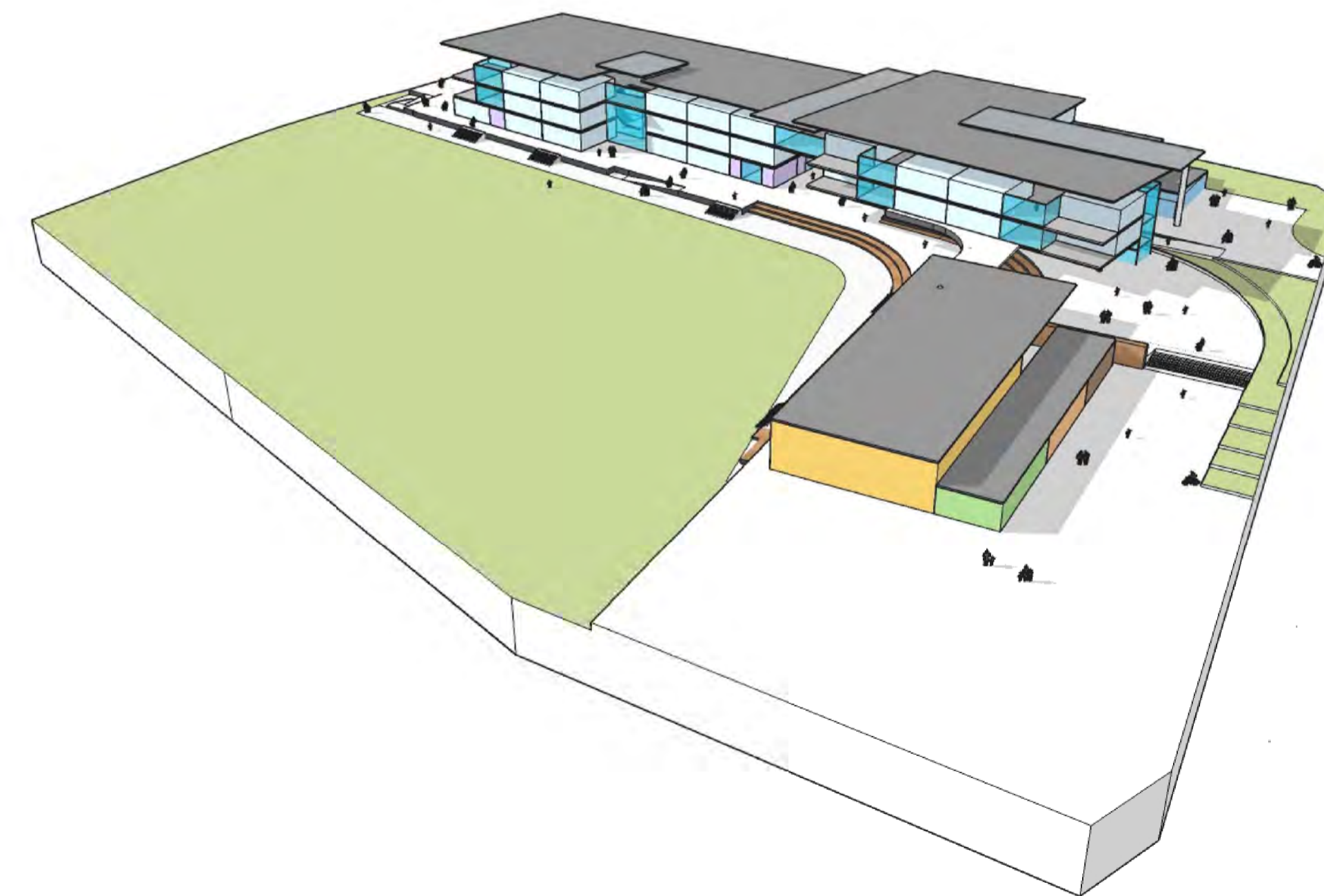
1 NORTHEAST VIEW  
3D SITE MASSING



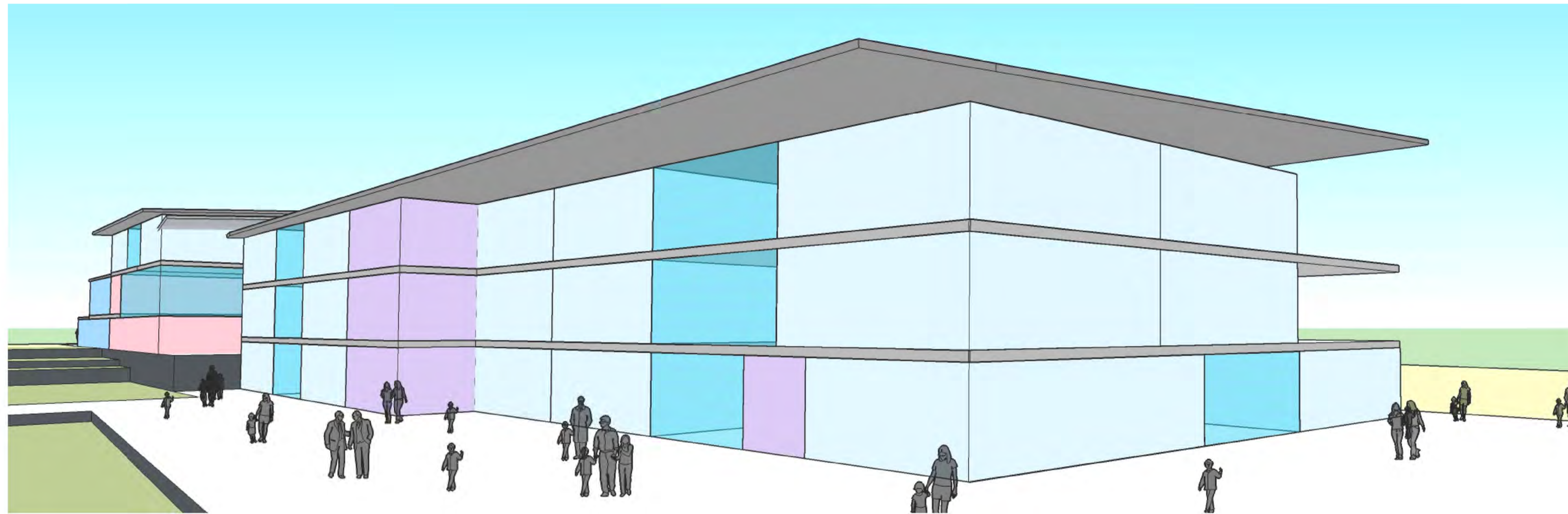
2 SOUTHEAST VIEW  
3D SITE MASSING



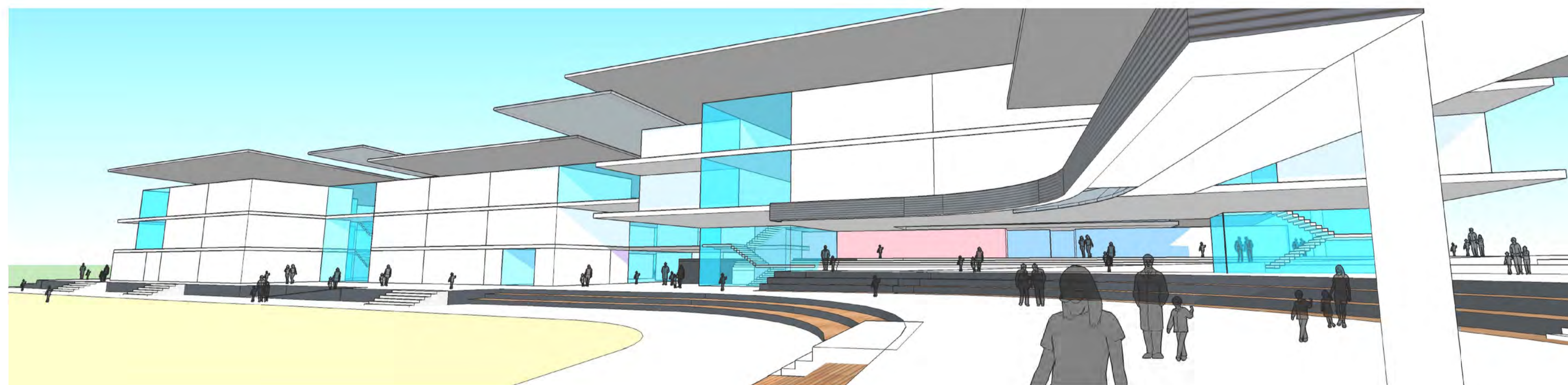
3 SOUTHWEST VIEW  
3D SITE MASSING



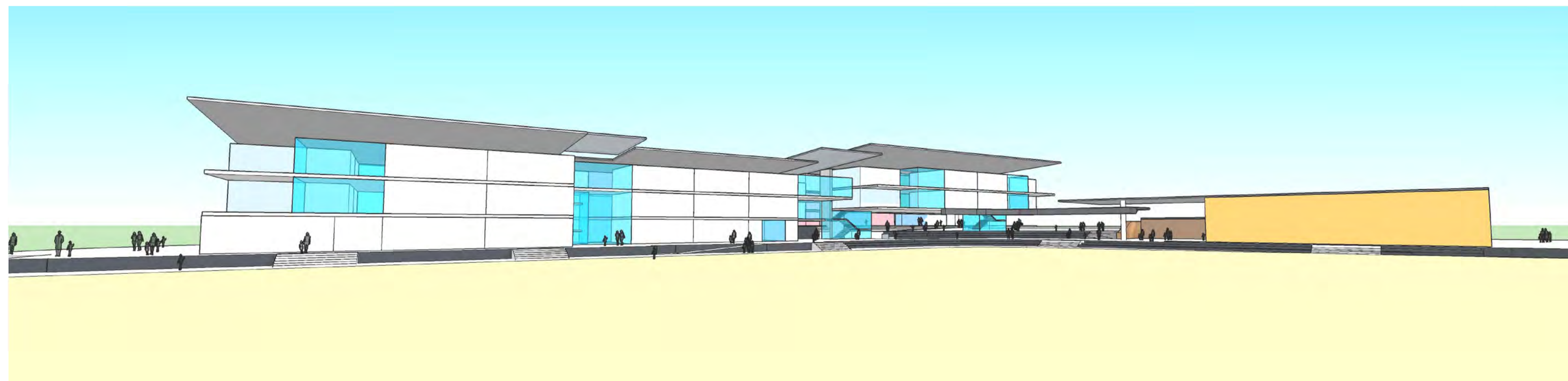
4 NORTHWEST VIEW  
3D SITE MASSING



1 TEACHING SPACES AND SECONDARY ENTRY FROM ROAD 2  
VIEW 1



2 OVERALL VIEW OF SCHOOL & LIBRARY FROM COLA  
VIEW 2



3 OVERALL VIEW OF SCHOOL, COLA & HALL FROM PLAYING FIELDS  
VIEW 3