

Date: 12th August



10 MISSENDEN ROAD SYDNEY

DESIGN REPORT

Introduction

The development at 10 Missenden Road is positioned to become a transformative hub that bridges public and private healthcare services, enhances community health and wellbeing, and fosters economic growth. By addressing the future health demands of the precinct through thoughtful design and planning, this initiative aims to create a landmark that invites change and positively shifts public perception, ultimately benefiting the entire community.

This location is envisioned as a vibrant marker and landmark of a public corner, symbolising an invitation for change and a shift in public perception. Architectus has been engaged in collaboration with JPW to develop a comprehensive development envelope and reference design to meet the future health demands of the precinct.

As the population increases, the need for accessible healthcare services grows. This expansion will help ensure that the community has sufficient healthcare facilities to meet its needs. Increased capacity and quality of services contribute to improved health outcomes for the community, ensuring that residents receive timely and effective care.

Co-locating services enhances operational efficiency, reduces redundancy, and provides a seamless experience for patients navigating between public and private healthcare options.

By integrating educational and research facilities, the development will contribute to advancements in medical research and training for healthcare professionals, fostering a culture of innovation.



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1.

THE PRECINCT



The Evolving Precinct

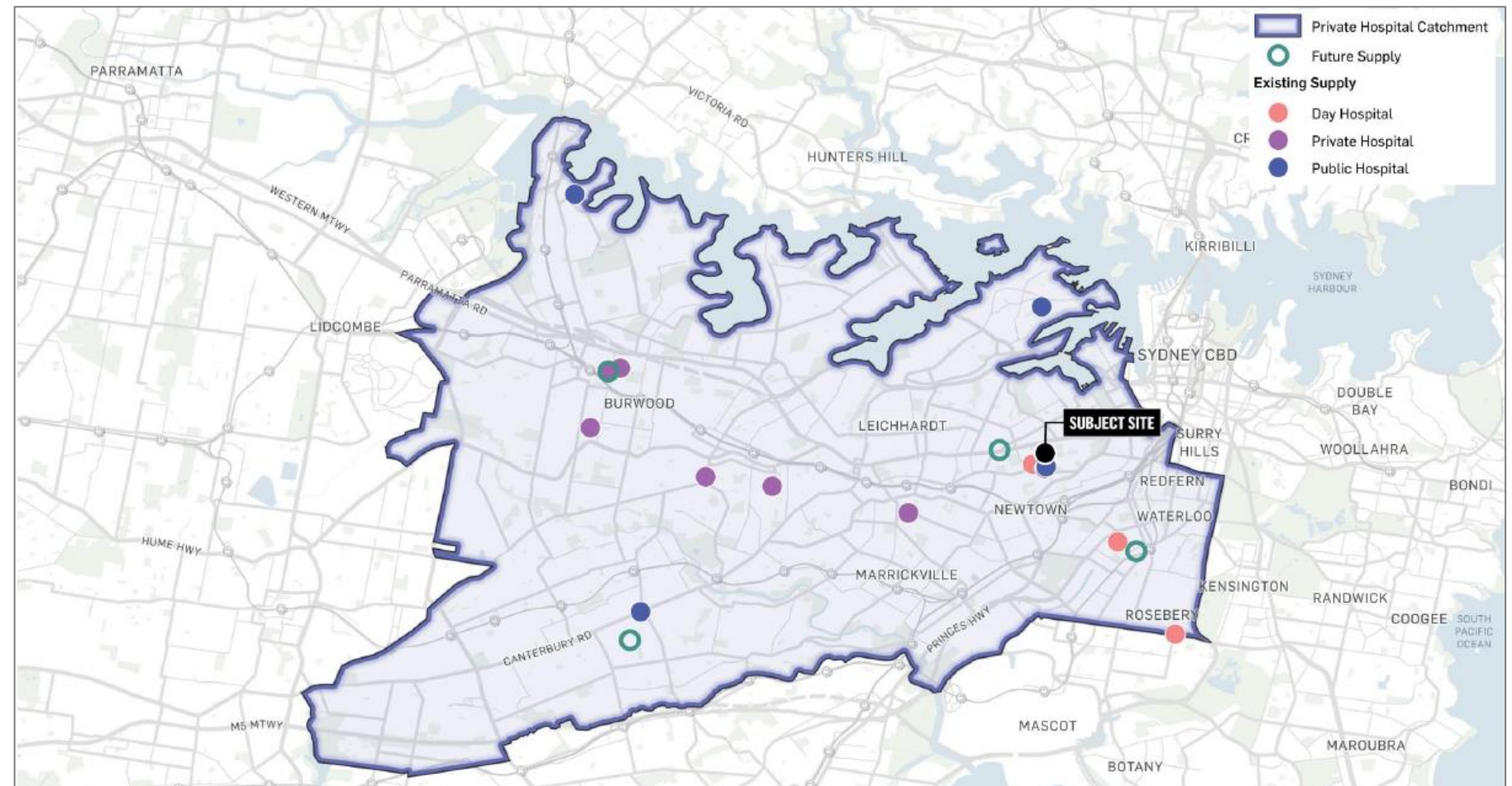
The Site and Catchment

The Precinct

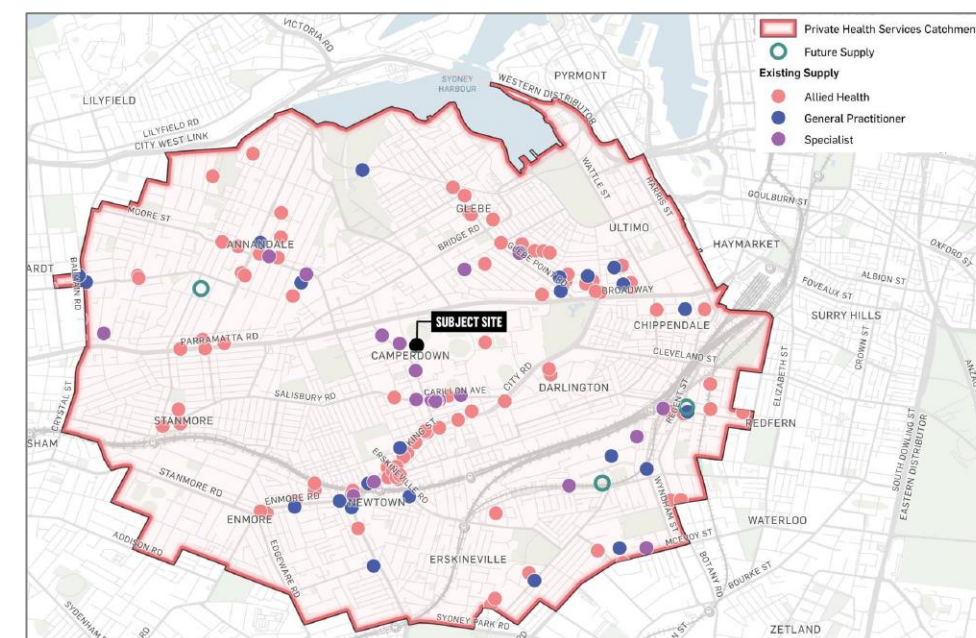
- **Location** – innovation district
- **Co-location & adjacency** – complements public hospital, research, education
- **Ecosystem** – collaboration and innovation across the healthcare, education, and medical research sectors
- **Efficiency** – patients, service providers, government, research

Strong Underlying Demand (2055)

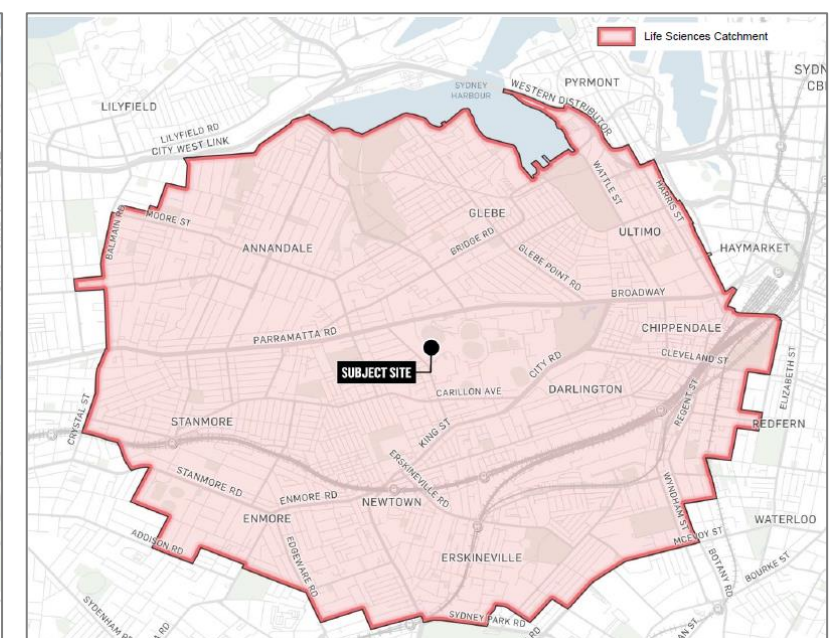
- 173 beds or 25,889m² of private hospital floor space (15% of catchment share)
- 40 consulting rooms/suites or 3,000m² of floor space (40% of catchment share)
- 29,422m² of life sciences floor space (25% of catchment share)
- Total of +58,000m² of floor space



Current Hospital Network in Study Area



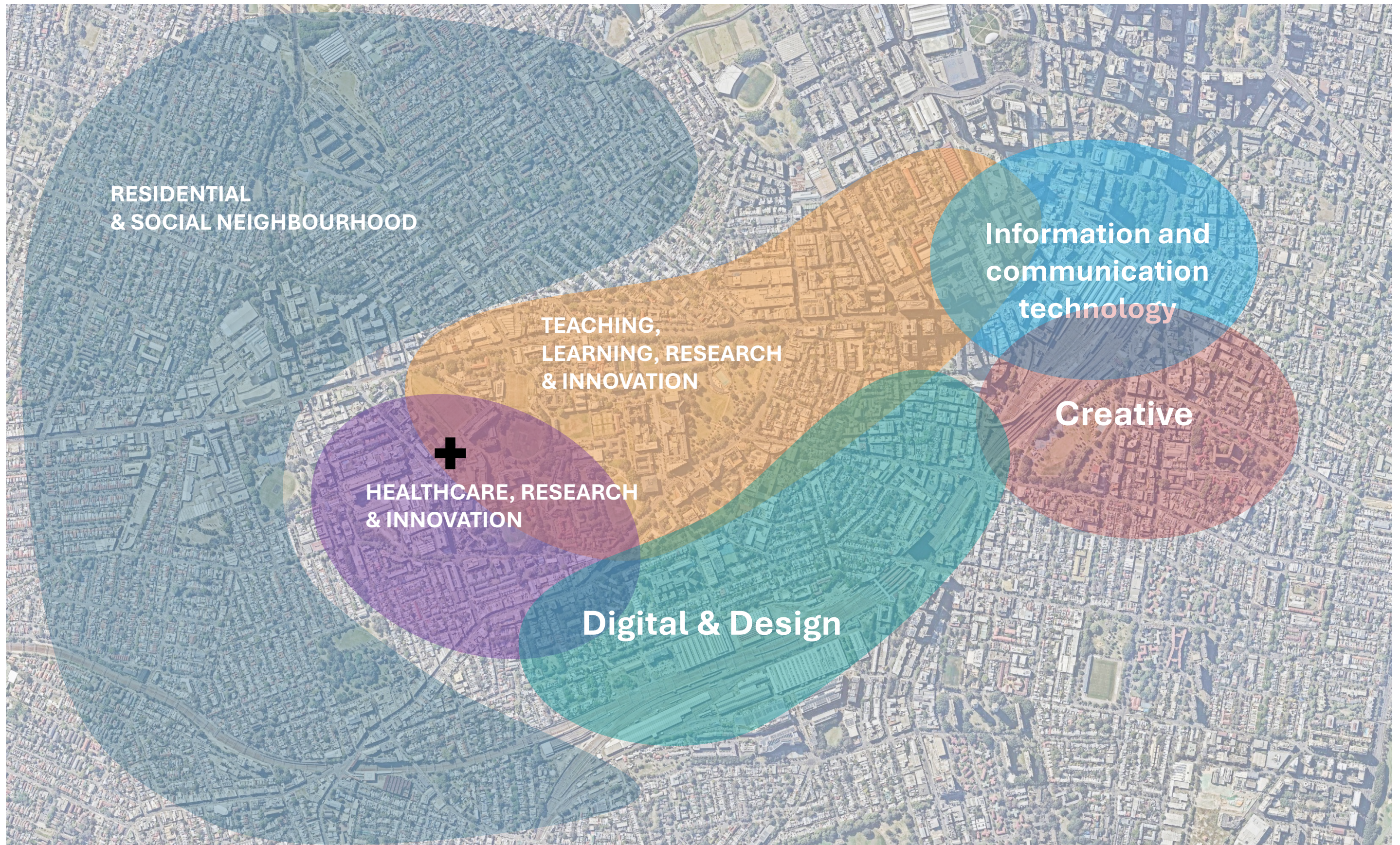
Supply of Allied Health Services



Life Sciences Study Area 2km radius

The Evolving Precinct

Allied Precincts



The Evolving Precinct

Current and Future Development

BIO-MEDICAL

1. Susan Wakil Health Building
2. Royal Prince Alfred Hospital
3. NHMRC Clinical Trials Centre
4. Charles Perkins Centre
5. Brain & Mind Centre
6. The Heart Research Institute
7. Sydney Neuroscience Hub
8. George Institute Global Health, Musculoskeletal Health
9. Chris O'Brien Lifehouse
10. Melanoma Institute Australia
11. Eveleigh Bio-Medical Building
12. Institute for Precision Medicine
13. RPA Surgical & Robotic Training, RPA Institute of Academic Surgery
14. George Institute for Global Health
15. NSW Statewide Biobank, ANSTO Research, Tissue Pathology, Prof. Marie Bashir Centre
16. Centenary Institute

FUTURE BIO-MEDICAL

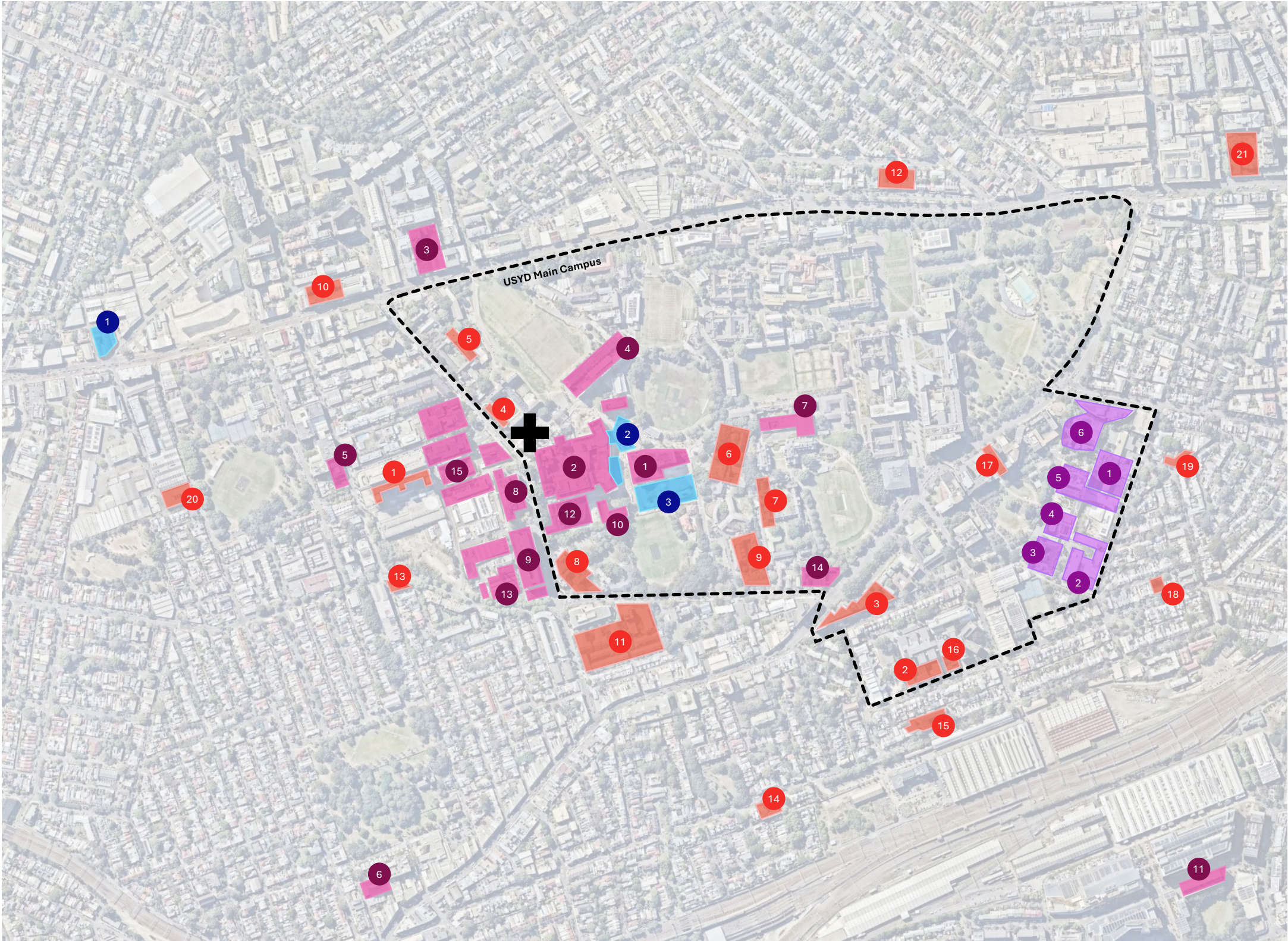
1. Camperdown Modern IM
2. RPA Re-Development
3. Bio-Medical Accelerator

ENGINEERING

1. Sydney Manufacturing Hub
2. School of Civil Engineering
3. Gordon Yu-Hoi Chiu Building
4. Immersive Learning Lab
5. Chemical & Biomolecular Engineering
6. Seymour Centre

STUDENT ACCOMMODATION

1. Queen Mary Building
2. Abercrombie
3. Regimark
4. St John's College
5. Sancta Sophia Graduate House
6. Wesley College
7. St. Paul's College
8. St. Andrew's College
9. Women's College
10. Castle Student Accommodation 2
11. Sydney University Village
12. Arundel House / Scape Glebe
13. Castle Student Accommodation
14. Stucco Housing Co-operative
15. Scape Darlington
16. Mandelbaum House
17. Scape USYD
18. Scape Abercrombie
19. Scape Boundary X
20. Miguel Cordero Residence
21. Scape Broadway



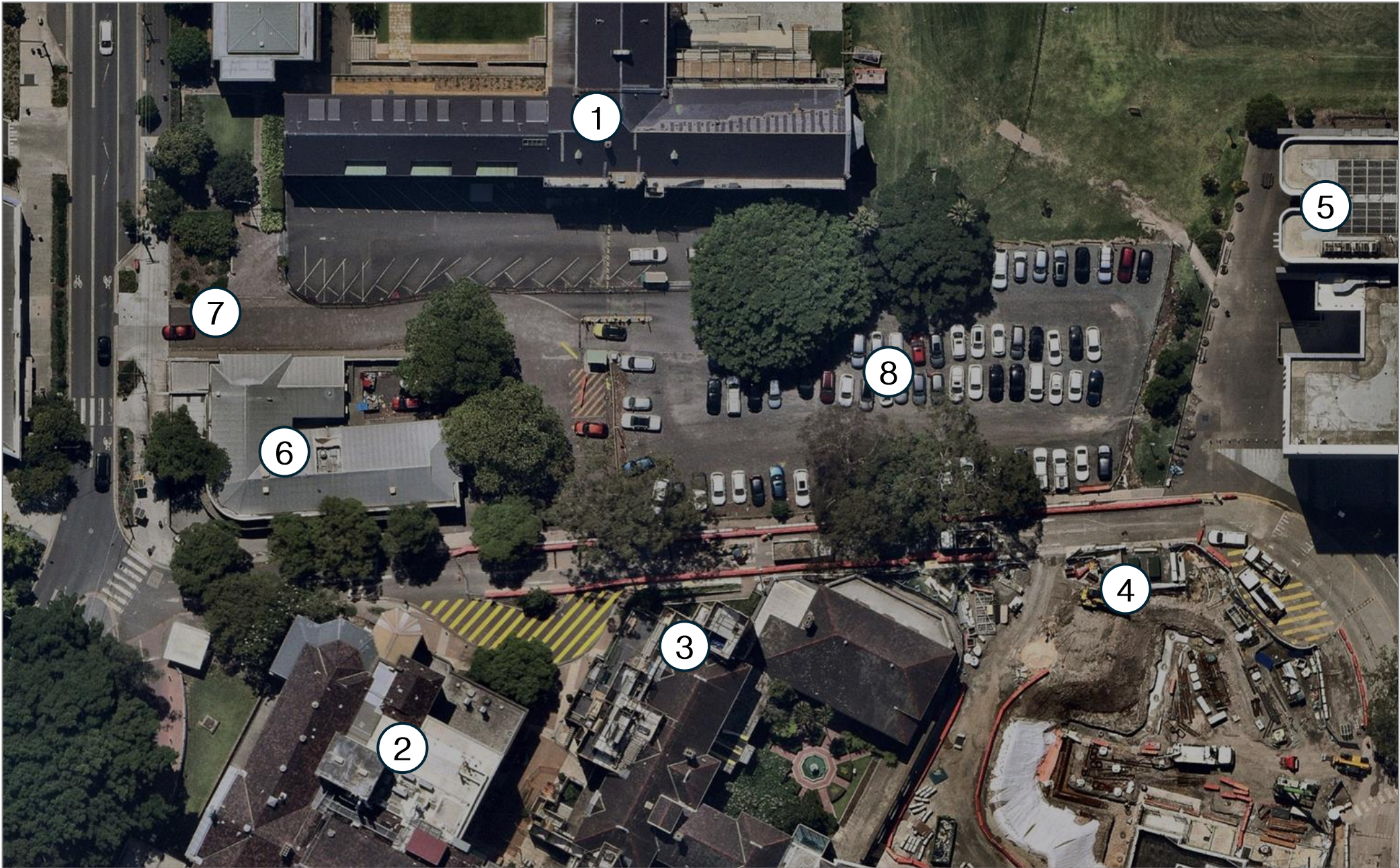
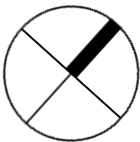
The Site

Existing Site

10 Missenden Road

10 Missenden Road is currently home to the St John's College Car Park and the Benning Building housing the 7-Eleven convenience store and Australia Post tenants

- ① St John's College
- ② Royal Prince Alfred Hospital Albert Pavillion
- ③ Royal Prince Alfred Hospital Royal Prince Alfred Hospital
- ④ Royal Prince Alfred Hospital Forecourt
- ⑤ Charles Perkins Centre
- ⑥ Benning Building
- ⑦ Carpark vehicular access off Missenden Road
- ⑧ On grade St John's College Car Park



The Site

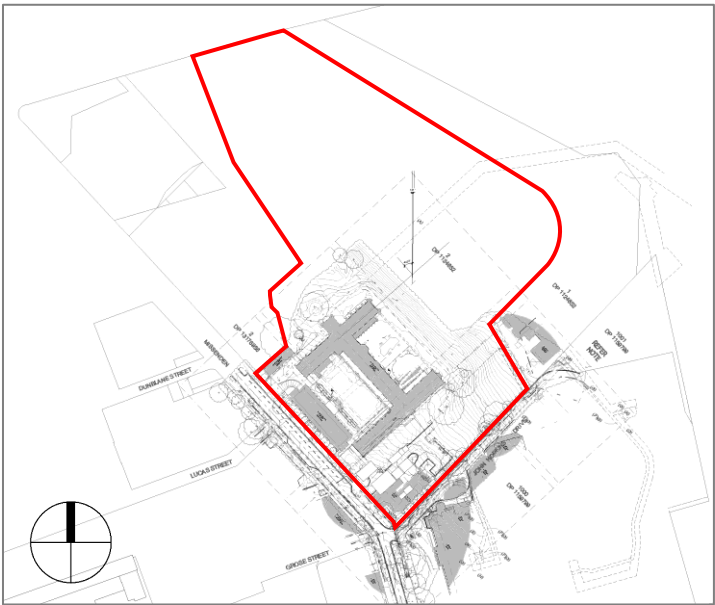
Site Survey

Existing Site

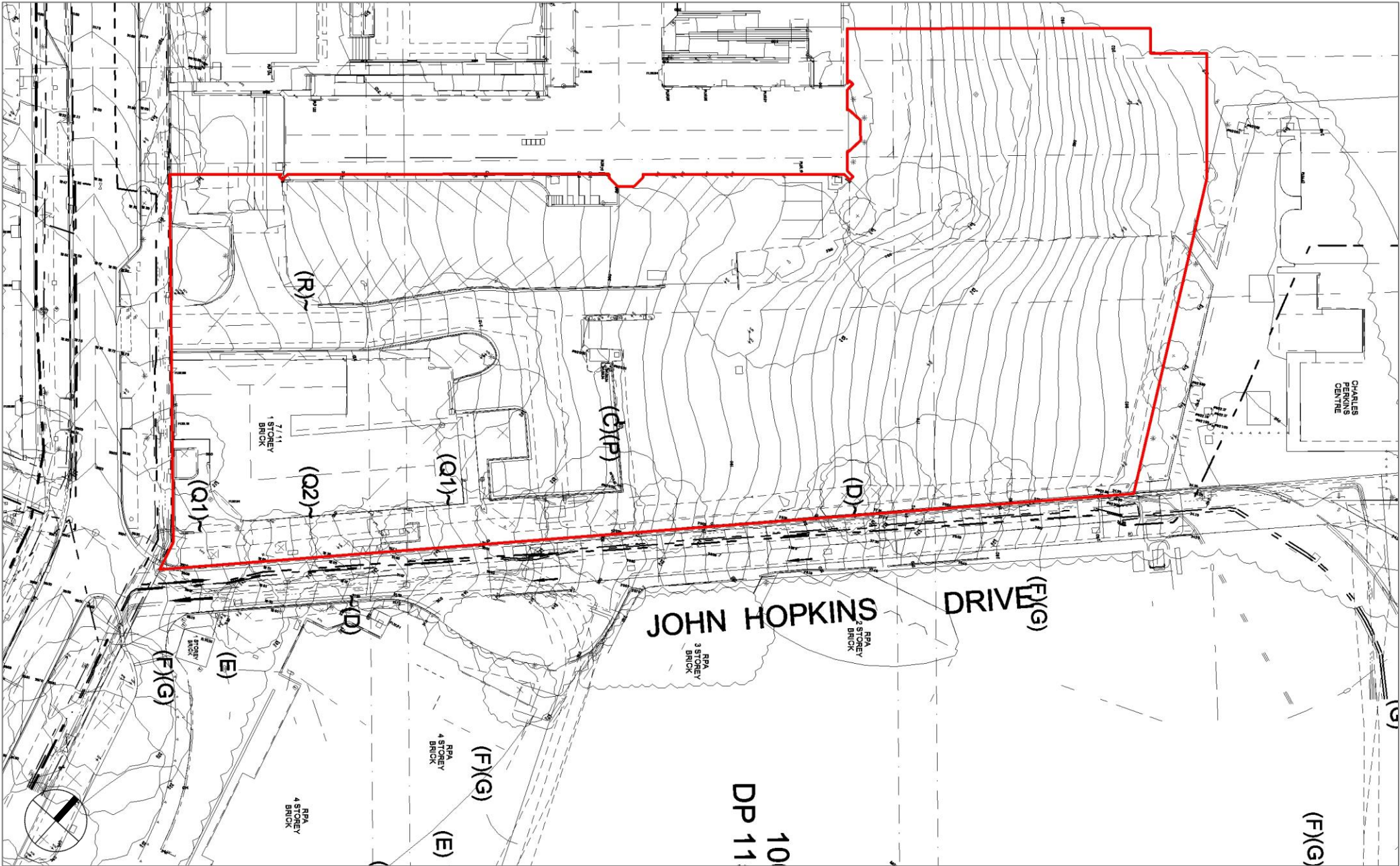
The site area includes all of 10 Missenden Road (which is approximately 4.79ha). The Concept Development Area, for which future building works are proposed, is 7,329m².

The existing site at 10 Missenden Road, while presenting some challenges due to its steep gradient, also offers opportunities for innovative design and development.

- The upper level at RL 33.0 (Relative Level 33.0)
- The lower level at RL 24.5 (Relative Level 24.5)



10 Missenden Road Site Area (approximately 4.79ha)



Concept Development Area (7,329m²)

2.

DESIGN PRINCIPLES



Design Principles Bangawarra

bangawarra

The Connecting with Country Vision

The proposed Connecting with Country concepts and principles for this 10 Missenden Road are iterative and recursive. The stories and themes identified at this stage of the project documentation are provided as a starting point to understand Country in cultural, social and spatial terms through the much overdue practice of Connecting with Country.

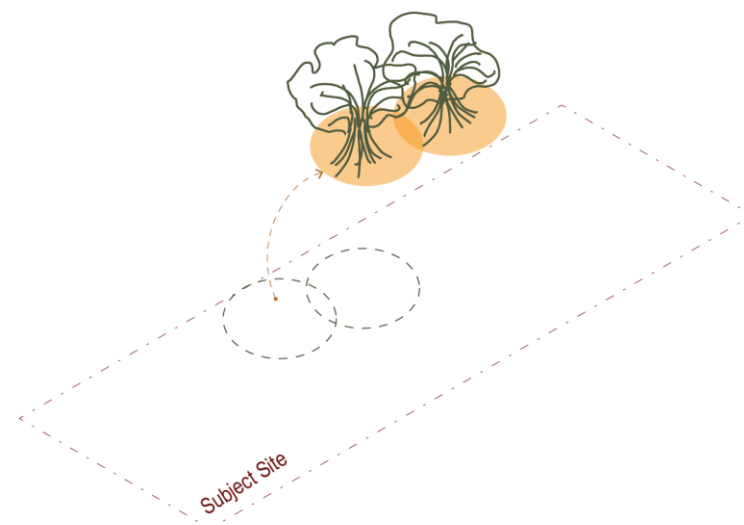
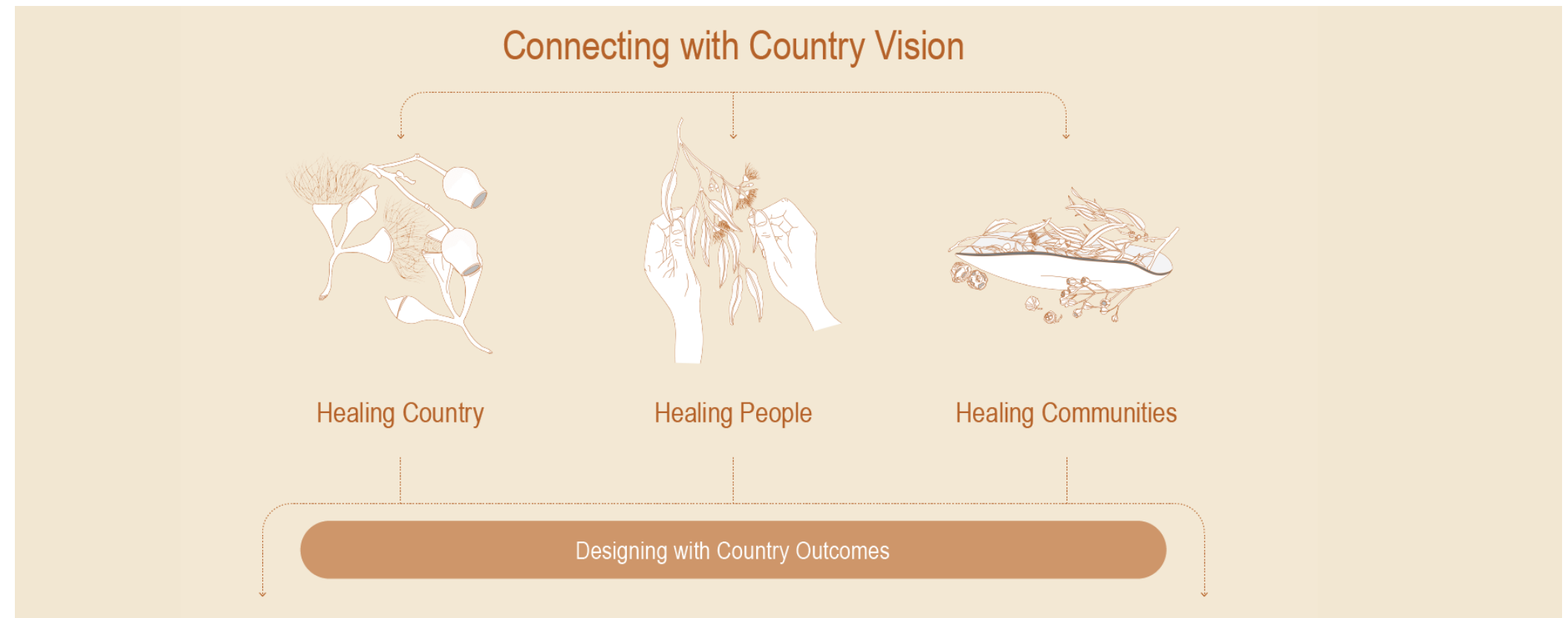
As each phase of the project progresses, the knowledges of Country will continue to evolve and will be embedded into the project with increasing specificity, architectonic relevance and spatial impact. They may also grow to incorporate other stories and knowledges as engagement with Indigenous communities and cultures continually broadens.

Bangawarra has crafted a vision guided by three fundamental principles aimed at fostering a harmonious relationship between the environment, individuals, and communities.

Healing Country: Emphasising the importance of maintaining balanced ecosystems that support diverse flora and fauna. Prioritising the preservation and transplantation of existing trees. Advocating for sustainable practices by recycling to remain on Country

Healing People: Creating connection between indoor and outdoor spaces to enhance well-being and promote a connection to nature. Designing inviting outdoor spaces where people can relax and connect while waiting, fostering a sense of community. Incorporating greenery that enhances visual appeal and provides natural shade, contributing to a calming atmosphere.

Healing Communities: Developing pathways and connections between different areas to encourage movement and interaction among community members. Using specific plants to signal environmental health and promote awareness of local ecology. Establishing pathways that support pollinators, enhancing biodiversity. Creating flexible spaces that cater to various community activities, encouraging social interaction and inclusivity. Integrating local materials like sandstone to reflect the region's identity and history, enhancing the sense of place.



Trees relocated on site close to original location.



Connecting with canopy ecologies through courtyards and voids.



Outdoor gathering spaces with textural designs in ground plane.

Design Principles

JPW Collaboration & Peer Review

JPW

Local Precinct Case Study

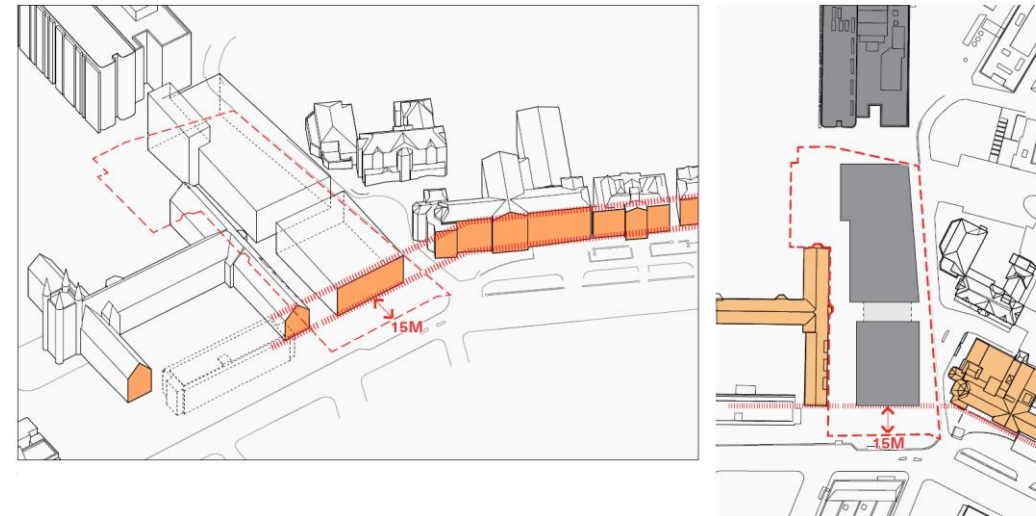
As part of the peer review conducted by JPW, an analysis of the surrounding contexts, specifically focusing on health and biomedical buildings, was undertaken. This analysis examined the bulk, scale, and overall height of the surrounding subject sites to inform the design of the proposed development.

Built Form

JPW's analysis of the bulk and scale of adjacent local precinct buildings is a critical component of informing key design principles of the development envelope. The built form footprint reflects a design strategy that prioritises consistency in scale with the RPAH East Wing and Block E, while also enhancing the overall environment through generous tower separations. This approach not only reduces overshadowing but also maximises sky views, contributing to a more inviting and functional space within the hospital precinct.

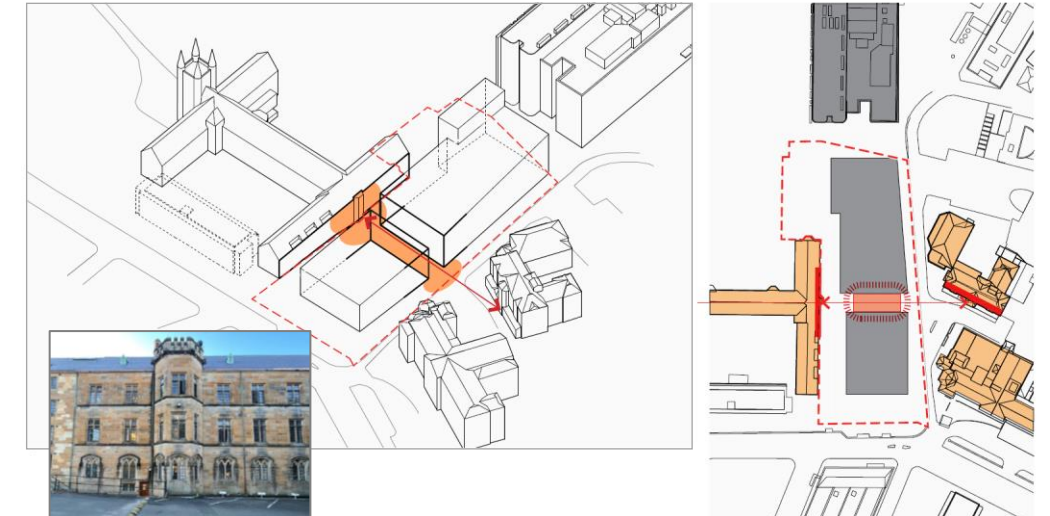
Envelope Development

The envelope development by JPW reflects a thoughtful approach to architectural design, focusing on key objectives that promote harmony with the surrounding context, enhance user experience, and respect the heritage significance of St John's College. By addressing these objectives, the design aims to create a functional and aesthetically pleasing building that contributes positively to the urban landscape and the broader community.



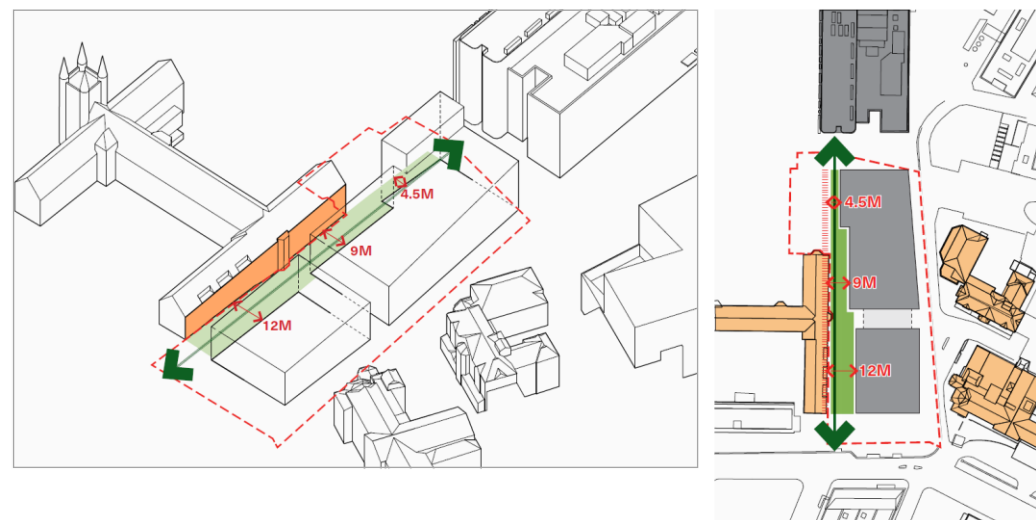
Provide a building frontage that is consistent in alignment and height with St. John's College and the RPAH Albert Wings.

A consistent streetwall will enhance the pedestrian experience and acknowledge the exceptional significance of St. John's College and the Albert Wing.



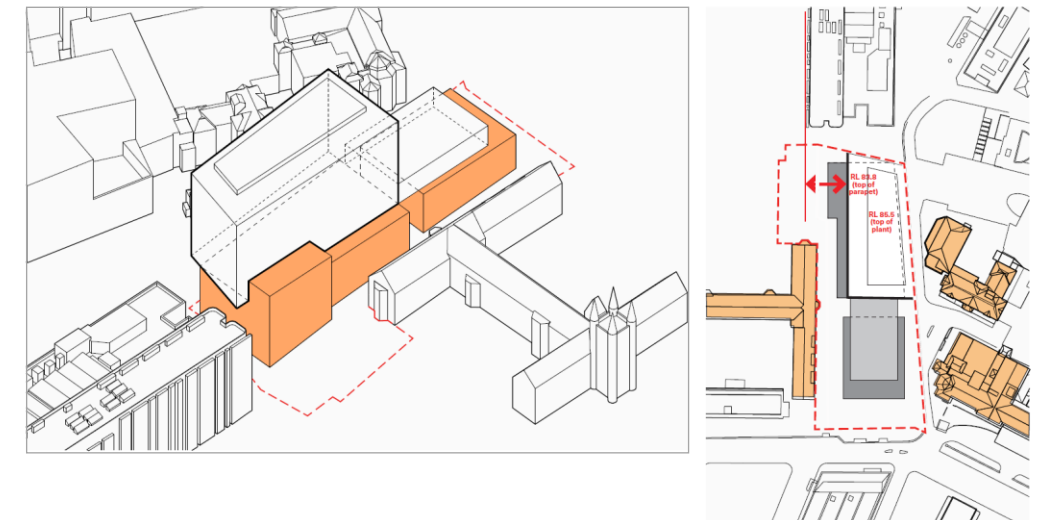
An atrium and entrance at the centre of the John Hopkins Drive elevation places appreciation, recognition and experience of the exceptionally significant adjacent heritage at the heart of the development.

The atrium supports the articulation of the development as two separate but linked buildings to reduce the developments apparent scale.



From the southern wall of the college, provide a 12m setback from the Polding wing, a 9 m setback at the Menzies Wing and a 4.5 m setback to the east beyond the Menzies Wing.

Appropriate separations between the college's south wing and the 10 Missenden Road development are necessary to mitigate amenity impacts to occupants of both buildings.



Provide upper floorplates located in the south east of the Concept Development Area.

A taller built form is to be concentrated in the south eastern site corner as far as possible from Missenden Road and the St. John's College and closer to the Charles Perkins Centre and the taller forms of the RPAH.

Design Principles

ASPECT Studios

Public Realm and Landscape Design Approach

Following on from the peer review conducted by JPW and a detailed analysis of the urban context, ASPECT Studios working with Bangawarra have developed a series of urban design priorities to shape the function of the surrounding public spaces.

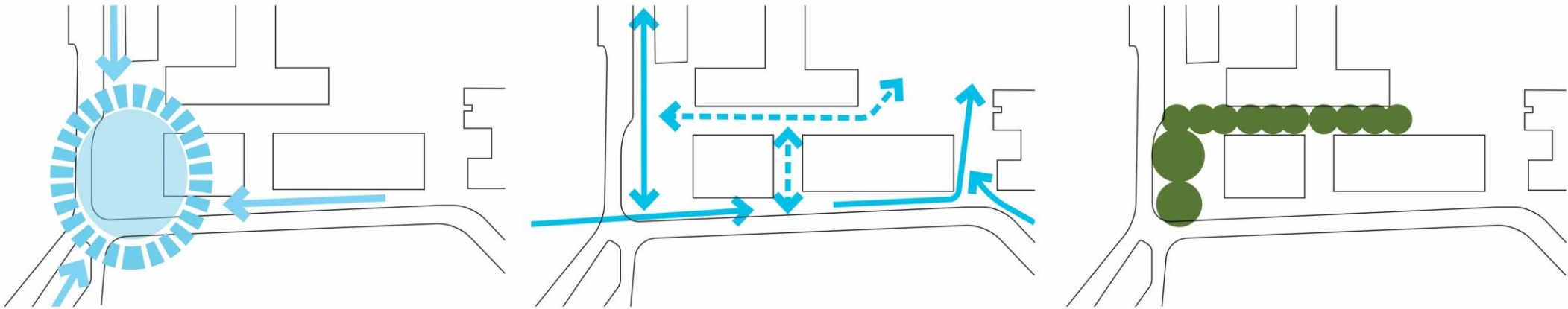
These moves respond directly to the site's complex setting, addressing key issues such as connectivity, accessibility, heritage integration and community amenity. The resulting design moves aim to create a cohesive and legible environment that supports a wide variety of users while reinforcing the civic role of the precinct.

A design approach with Country at its heart

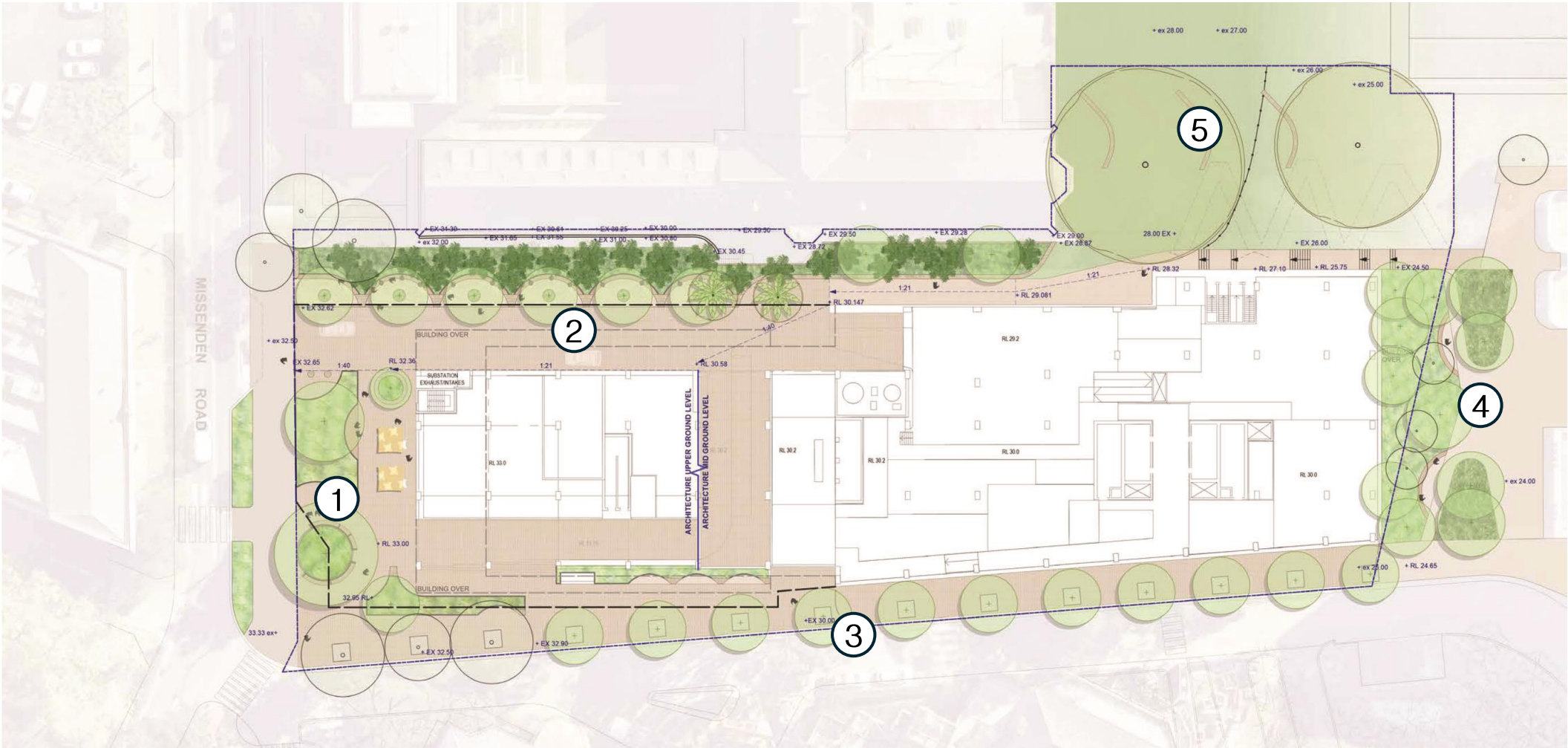
A Country-centred approach to shape all elements of the built form & landscape. The theme of 'Places of healing on Country' will permeate all layers of this architecture, landscape and interiors to ensure Country is at the heart of the design outcomes.

The design for the public realm and landscape creates a series of distinct spaces that are carefully responsive to their surrounding context, including scale, orientation and adjacency with a strong connection to the land. Each space is shaped not only by its physical setting but also by the anticipated patterns of use, ensuring it supports the needs and behaviours of its intended users.

- ① Missenden Plaza
- ② The North Court
- ③ John Hopkins Drive
- ④ Charles Perkins Interface
- ⑤ Potential future Amphitheatre



- 1. Provide a generous, pedestrian-priority plaza to Missenden Road which is supported by a public-focused, active building entry and facade treatment to the lower floors
- 2. Create an intuitive and permeable ground plane to John Hopkins Drive which allows for clear wayfinding and access to St John's Oval beyond
- 3. Provide opportunities for individuals to sit and connect with biophilia and nature through a Country-centred design approach



Reference Design Scheme

Design Challenges

Design Challenges

The development of the reference design by Architectus has encountered several significant challenges that require careful consideration and innovative solutions. The following outlines these key design challenges:

Land Locked Site: The Concept Development Area is land locked, meaning it is surrounded by other properties with limited access points. This can complicate construction logistics, site access, and the integration of the building into the surrounding urban fabric. Strategies have included creative planning for access routes, utilising existing pathways, and coordinating with adjacent property owners to facilitate movement.

Land Slope and Gradient: The Concept Development Area has varying slopes and gradients, which have impacted the design and accessibility. The design has accounted for these topographical features by incorporating terracing and architectural elements that adapt to the slope while ensuring safety and accessibility.

Existing Trees to be Relocated: The presence of existing large fig trees on the Concept Development Area poses a challenge for development, particularly if they are significant to the local ecosystem or landscape. Careful planning is required for the relocation of these trees, ensuring their survival and integration into the new landscape design. This involved working with arborists and landscape architects to create suitable conditions for their replanting.

Heritage Consideration to St John's College: The proximity to St John's College, a heritage site, necessitates careful consideration of the architectural style, scale, and materials used in the new development to ensure compatibility and respect for the historical context. Engaging heritage consultants and conducting thorough heritage impact assessments has guided the design process to ensure that the new building complements the college's character and significance.

Traffic Access Restrictions: Traffic access is restricted, with the primary vehicular approach via Missenden Road. Due to this limitation the design must incorporate efficient traffic management strategies, such as clear signage, designated drop-off zones, and potentially reconfiguring access points to optimise circulation and safety.

Hospital Functionality Planning: The design will accommodate the specific functionality and operational requirements of the private hospital, including patient flow, service access, and emergency response protocols. Engaging healthcare planners and stakeholders early in the design process will help to ensure that the layout effectively supports hospital operations while adhering to relevant regulations and standards.

Designing Functionality of Non-Hospital Tenancies: The inclusion of non-hospital commercial, research, and educational tenancies introduces additional complexity in the design, requiring consideration of varied space needs, access, and interactions with hospital functions. A flexible design approach that allows for adaptable spaces can accommodate the diverse needs of these tenancies. Collaborative planning with potential tenants can also inform the design to better align with their operational requirements.

Addressing these design challenges requires a multifaceted approach that combines creativity, technical expertise, and collaboration with various stakeholders. By carefully considering each challenge, the design team can develop solutions that enhance the functionality, sustainability, and integration of the new development within its context.



Reference Design Scheme

Design Excellence

Collaboration and Peer Review

The peer review process has ensured that the design aligns with best practices, addresses community needs, and respects the surrounding context. This collaborative approach allows for the integration of diverse perspectives and expertise, ultimately enhancing the quality of the final design.

The vision created by ASPECT Studios and Bangawarra has been incorporated into the developed reference design, ensuring that the public realm is not only functional but also inviting and accessible. This includes considerations for landscaping, pathways, seating areas, and other amenities that enhance the user experience.

The collaborative efforts between Architectus, JPW, and ASPECT Studios highlight the importance of teamwork in achieving a successful design outcome. By integrating diverse expertise and perspectives, the project is positioned to create a well-designed building envelope and a vibrant public domain that enhances the community and meets the needs of its users.

Additional consultants: Architectus has undertaken the development of a detailed and challenging reference design, which reflects a commitment to high-quality architecture and urban design. This process has involved extensive collaboration and consultation with a number of consultants to ensure a comprehensive and well-rounded approach.

- Urban planner Urbis
- Heritage consultant Urbis
- Landscape ASPECT Studios
- Indigenous consultant Bangawarra
- Traffic engineer JMT Consulting
- Civil engineer TTW
- Services Arup
- Structural engineer Northrop
- Gases consultant Arup
- VT Consultant NDY
- Level 3 engineer Arup
- Arborist Arborsaw
- BCA BM+G



3.

ENVELOPE CONTROL DRAWINGS



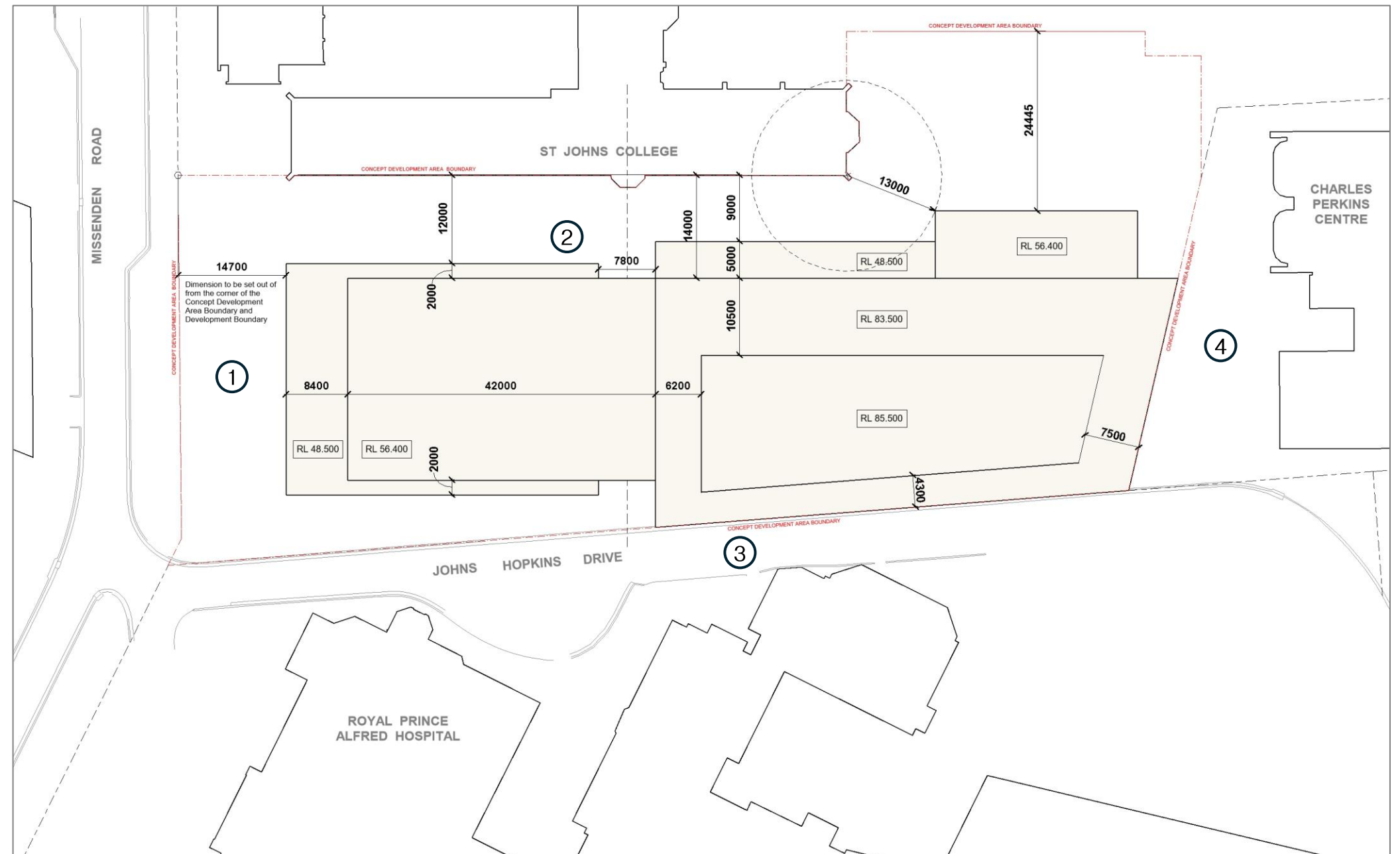
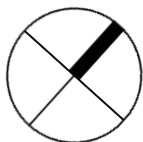
Envelope Control Drawings

Setout Plan

Setbacks

The peer review undertaken by JPW outlines the various setbacks associated with the development, focusing on their alignment and distances from key structures and streets.

- ① Missenden Road setback 14.7m
 - Alignment to St John's College
 - Alignment to the Albert Wing of The Royal Prince Alfred Hospital
- ② Setback to St John's College
 - Centred atrium alignment to the heritage fabric of St John's College
 - 12m podium setback to the west of the atrium
 - 9m podium setback to the east of the atrium
 - 14m to the taller bulk of the envelope to the east
- ③ Setbacks to Johns Hopkins Drive
 - 5m street setback along Johns Hopkins Drive with a cantilever to the higher levels to the east of the atrium
 - 16m setback from The Royal Prince Alfred Hospital to the podium levels to the west of the atrium
- ④ Charles Perkins Centre setbacks
 - 19m setback at ground level with a cantilever above RL 46.1



Envelope Control Drawings

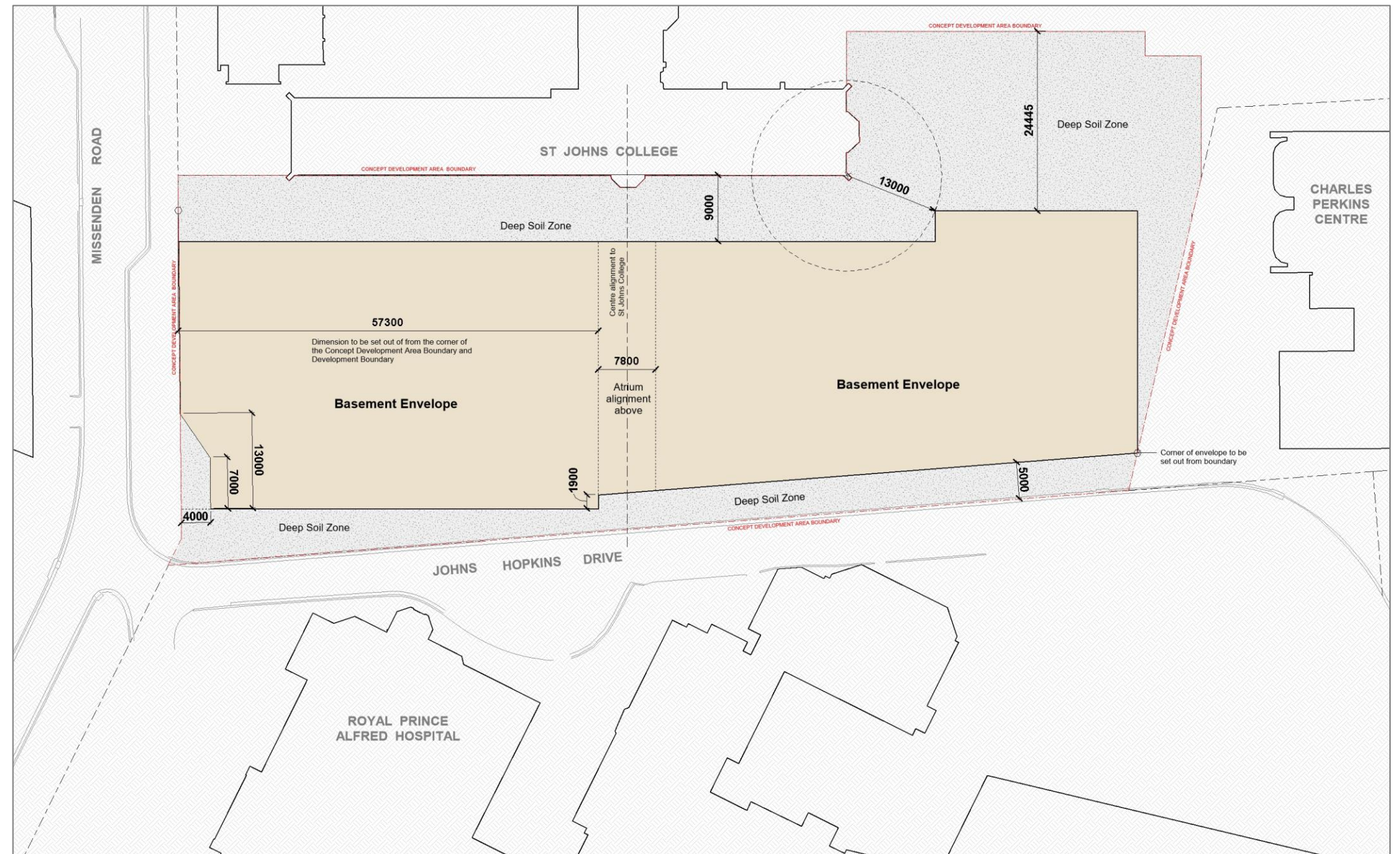
Basement Setout Plan

Basement Footprint

The allocation of a perimeter for deep soil planting within the basement footprint is a strategic decision aimed at fostering a healthier environment through the preservation and introduction of trees. This approach underscores a commitment to sustainability and ecological responsibility in urban development.

Preservation of Existing Trees: The perimeter of deep soil planting is specifically allocated to protect certain existing trees within the development boundary. By ensuring that these trees have adequate soil volume, their health and longevity can be maintained, contributing to the overall ecological balance of the area.

Planting of New Trees: In addition to preserving existing trees, the deep soil planting area provides an opportunity to introduce new trees into the landscape. This not only enhances the aesthetic appeal of the development but also contributes to biodiversity, improves air quality, and provides shade.



Envelope Control Drawings

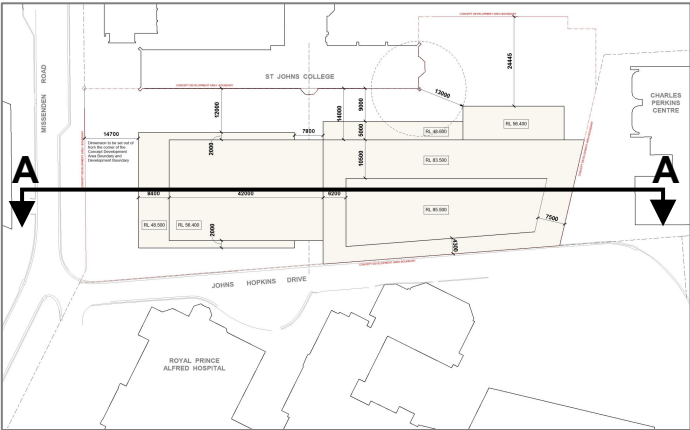
Section A – East West

Bulk and Form

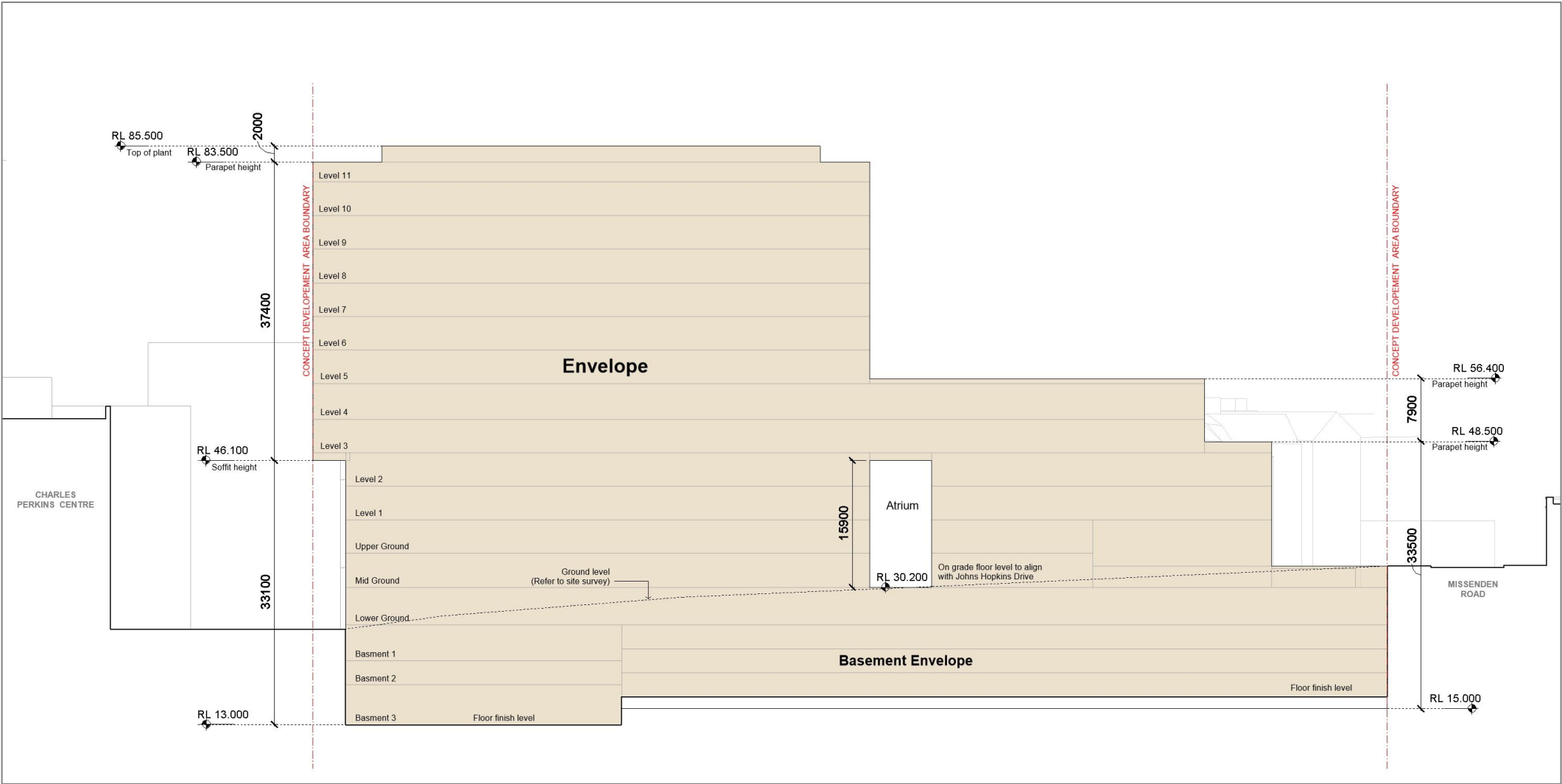
the strategic design of a lower form to the west and a higher envelope to the east reflects a thoughtful approach to bulk and form, ensuring that the building is both functional and responsive to its urban context

The decision to adopt a lower form on the western side, which faces Missenden Road, is influenced by contextual sensitivity and to reduce visual impact on the street, making the building more compatible with the existing urban fabric.

The taller envelope on the eastern side is designed to align with the heights of The Royal Prince Alfred Hospital. This aspect of the design serves several purposes:



Key Plan



Section A - East West

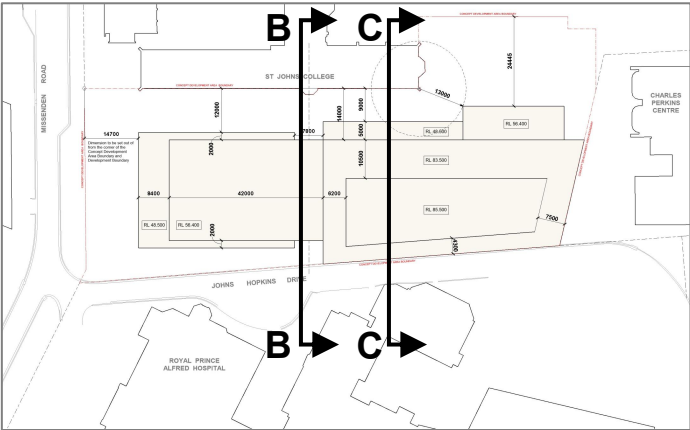
Envelope Control Drawings

Sections B, C

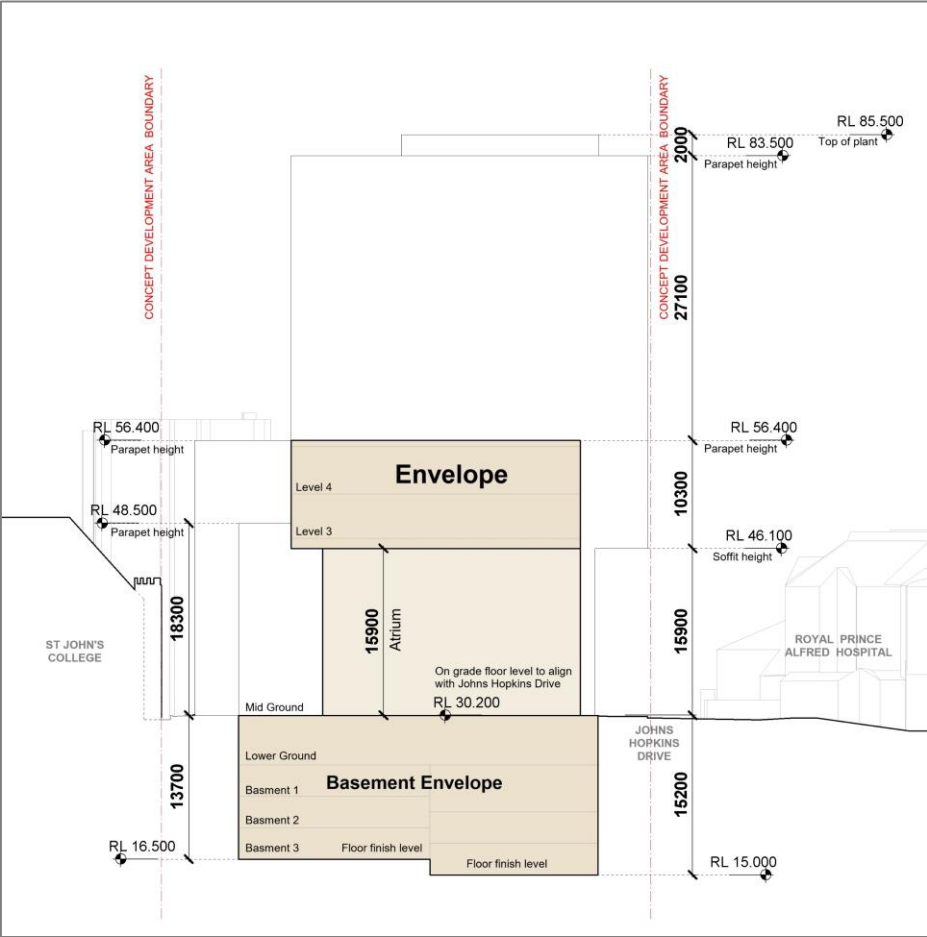
East and West Forms

the sections through the east and west forms illustrate a deliberate design strategy that balances height, scale, and engagement with the surrounding context, contributing to a cohesive and functional architectural outcome. These include:

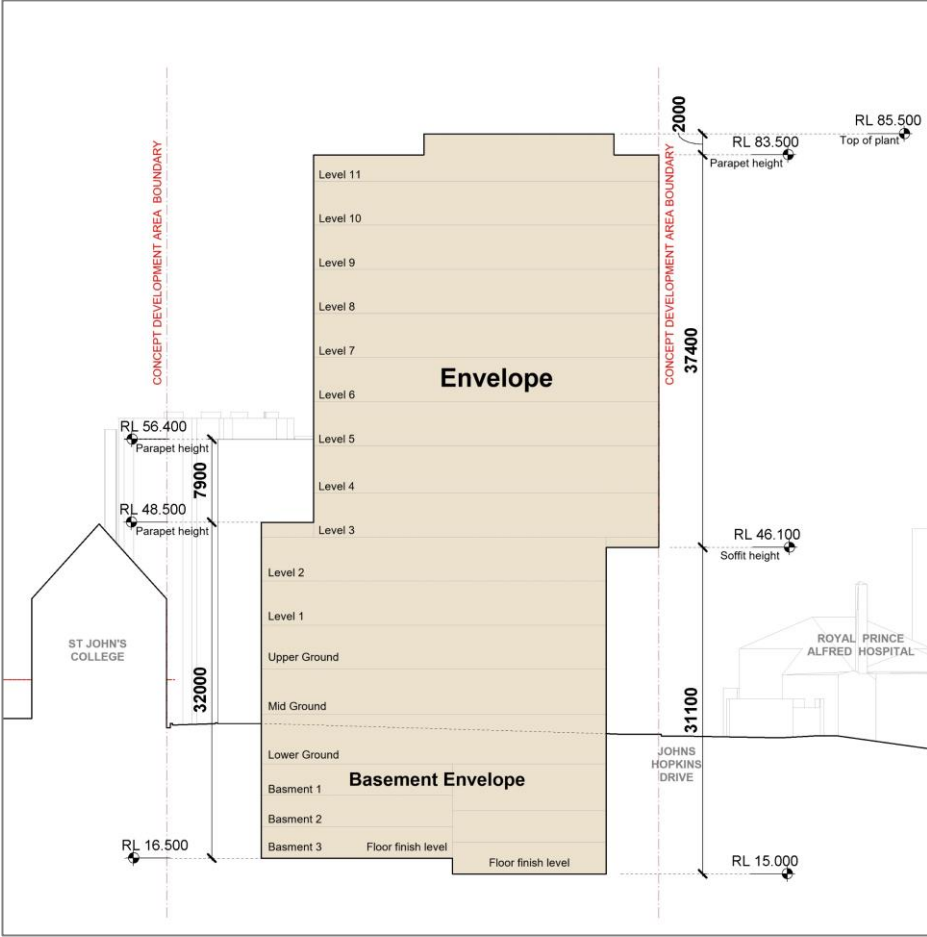
- Engagement with St John's College
- Site connection to Johns Hopkins Drive:
- 5m street level setback to Johns Hopkins Drive:
- The east form at RL 83.5 with the higher zone with provisions for higher plant equipment at RL 85.5 setback from the envelope edge



Key Plan



Section B - Atrium



Section C - Tower

Envelope Control Drawings

Envelope Mass

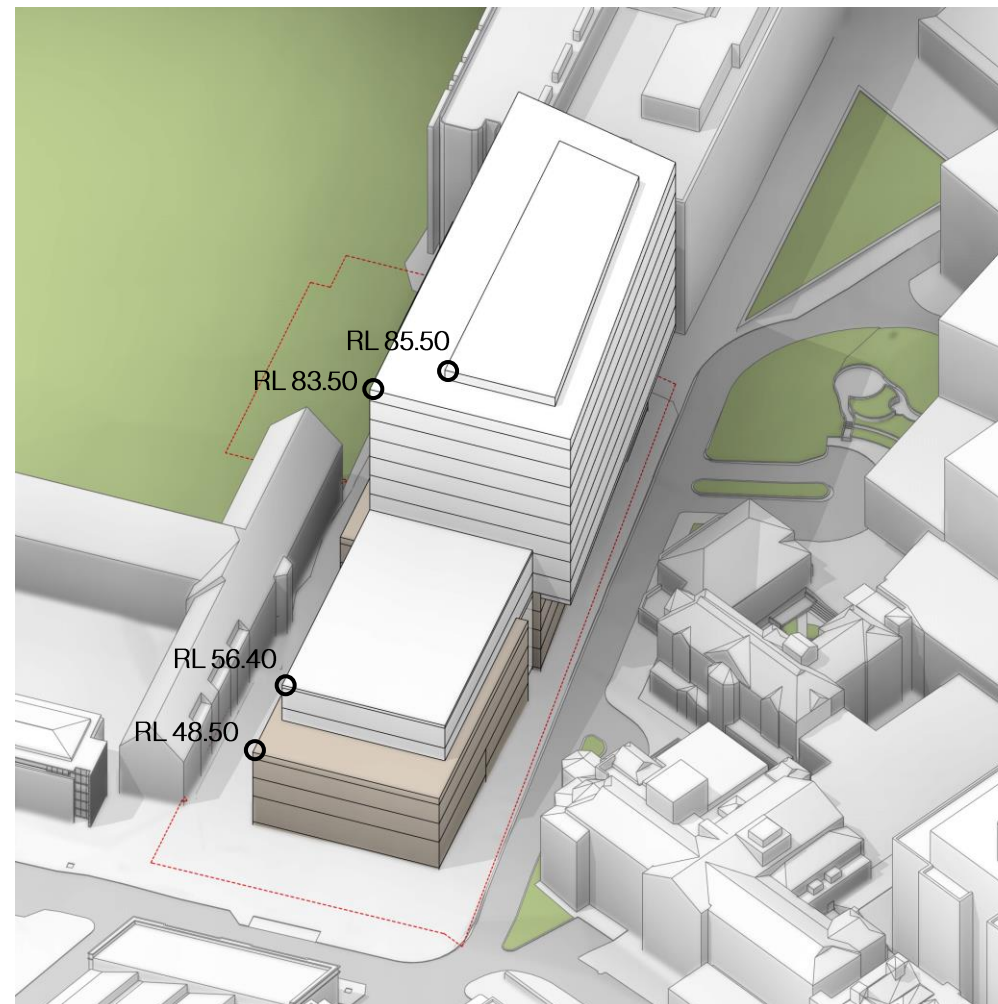
Key Envelope Objectives

The proposed envelope is guided by key objectives that focus on appropriate setbacks, basement footprint considerations, and the overall height and bulk of the structure. By addressing these objectives, the design aims to create a building that is not only functional and efficient but also respectful of its context and environment, enhancing the overall quality of the urban landscape.

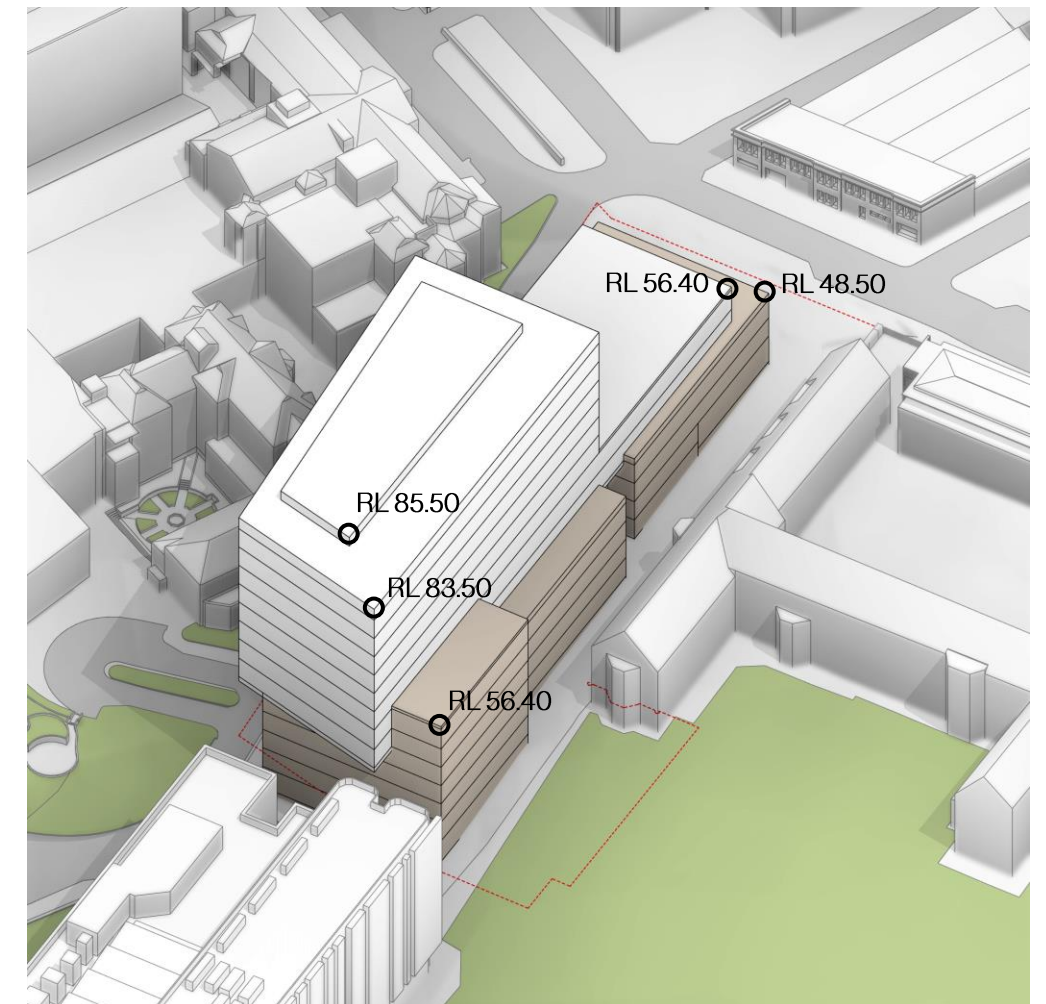
Appropriate Setbacks: Establishing adequate setbacks from Missenden Road, St John's College, Johns Hopkins Drive, and The Charles Perkins Centre aims to ensure visual harmony, enhance the pedestrian experience, and maximise access to light and air for both the new development and neighbouring structures.

Appropriate Basement Footprint: The design a basement footprint that allows for sufficient deep soil planting, facilitating the preservation of existing trees and the planting of new ones, thereby enhancing biodiversity and supporting sustainable landscaping practices.

Appropriate Height of the Envelope: The height of the building envelope to ensures that it is contextually appropriate, aligning with surrounding structures for visual cohesion, accommodating functional requirements for both hospital and non-hospital tenancies, and complying with local planning regulations.



Envelope Mass – South West



Envelope Mass – North East

4.

OVERSHADOWING ANALYSIS



Overshadowing to RPA

Key effected spaces

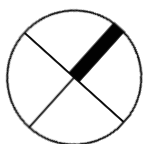
Key accessible spaces

1. RPA Northern Arrival
2. RPA Nurses Courtyard
3. RPA L4 Central Courtyard

Non accessible spaces

4. RPA Missenden Road Arrival
5. RPA Northern Terrace (Not accessible)

- A. Proposed Missenden Rd Plaza
B. Proposed St John's College North Court
C. Proposed Charles Perkins Centre Interface
D. Potential future Amphitheatre



Overshadowing to RPA

Northern arrival key accessible spaces

- 1. Gathering area
- 2A. West Seating areas
- 2B. East Seating areas
- 3. Indigenous Cultural Garden
- 4. Yarning Circle



Overshadowing to RPAH

Key effected spaces

21st June Winter Solstice

The eastern portion of the Royal Prince Alfred Hospital forecourt receives full solar access during the morning hours between 9am – 12pm. The design of the proposed envelope acknowledges the impact of overshadowing during the winter solstice, with careful consideration given to the 19m setback to the Charles Perkins Centre at the lower portion of the envelope to allow greater light to the Royal Prince Alfred Hospital forecourt.

The new areas of open space will receive solar access throughout various times of the day, resulting in a balanced outcome.

A. Missenden Rd Plaza: Receives good afternoon sunlight, enhancing its usability and appeal for social gatherings and activities later in the day.

B. Proposed St John's College North Court: Is positioned to receive good morning light, which is beneficial for creating a pleasant atmosphere for staff and visitors during the early hours.

C. Proposed Charles Perkins Centre Interface: The 19m separation has been established between the lower ground levels and the Charles Perkins Centre. This spacing ensures that the benefits from good afternoon light, enhancing the usability of the space.

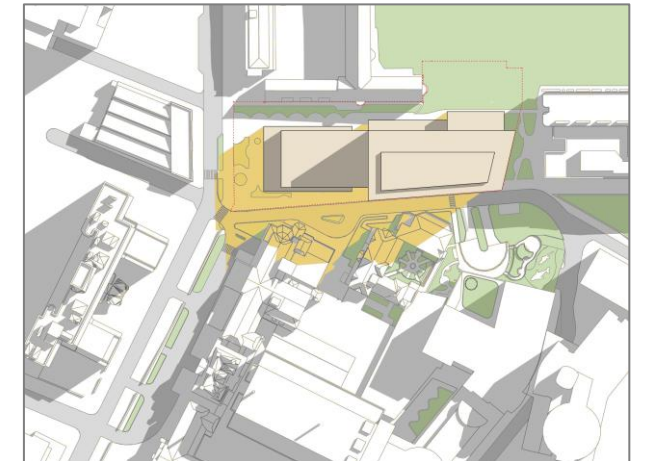
D. Potential future amphitheatre: The proposed future amphitheatre in the northern open space fronting St John's Oval will receive good sunlight throughout the entire day and holds significant potential for enriching the community's cultural landscape.



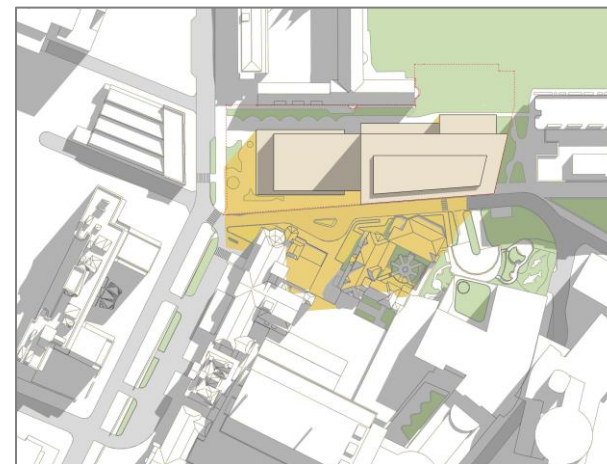
9:00AM 21st June



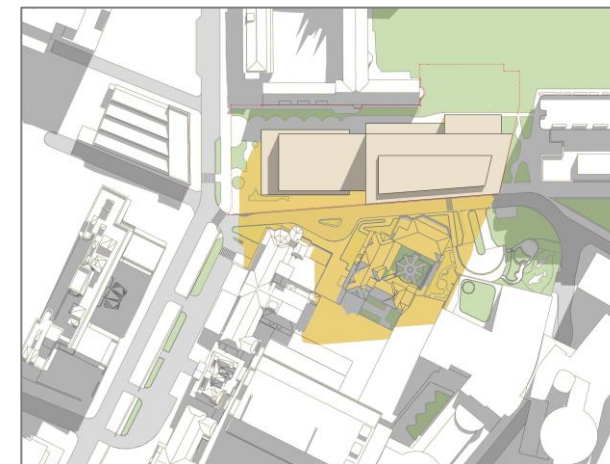
10:00AM 21st June



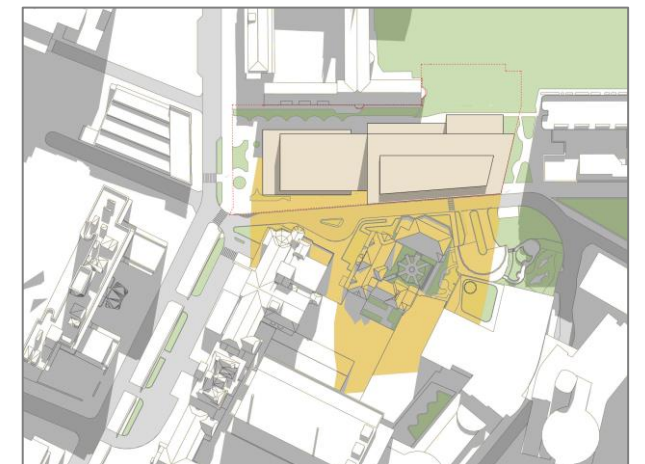
11:00AM 21st June



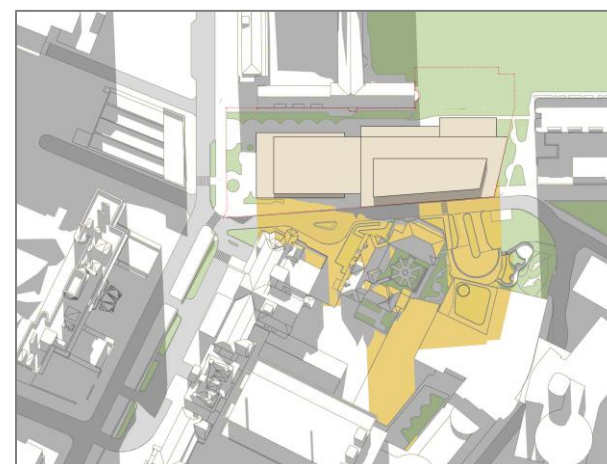
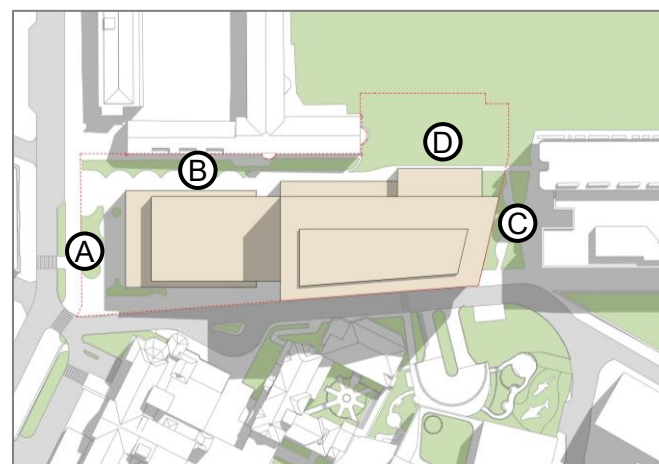
12:00PM 21st June



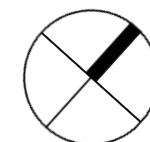
1:00PM 21st June



2:00PM 21st June



3:00PM 21st June



Additional Overshadowing

5.

REFERENCE DESIGN SCHEME



Reference Design Scheme

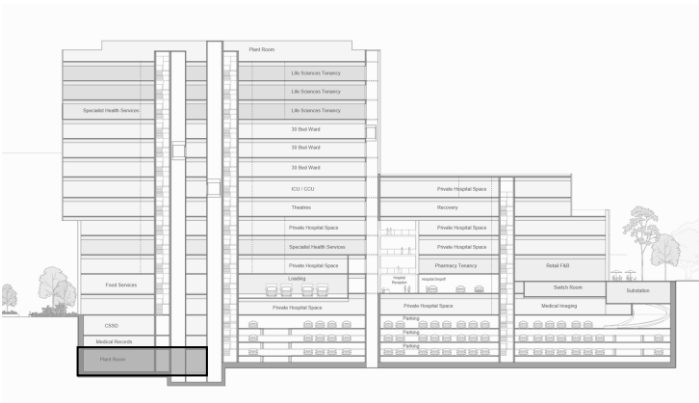
Basement 3

Basement 3 Plantroom

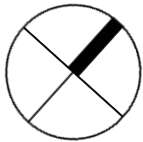
The tall 5m high chillers have been strategically positioned within the lowest basement area. This design choice serves to elevate the chillers, effectively reducing their visual bulk and scale as perceived from the roof level.

Key Considerations:

- **Space Utilisation:** By placing the chillers in the basement, the overall aesthetic of the building's upper levels is preserved.
- **Noise Reduction:** Locating the chillers underground can help mitigate noise pollution for the surrounding areas.
- **Accessibility:** Ensure that there is adequate access for maintenance and servicing of the chillers in the basement plantroom.



Key Section



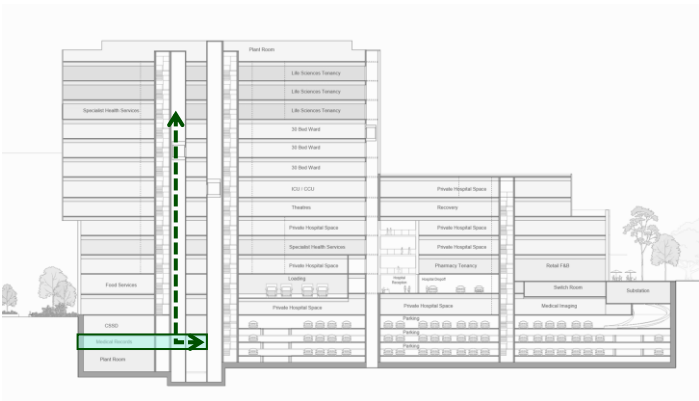
Basement 2 Level – BOH Support Spaces

Reference Design Scheme

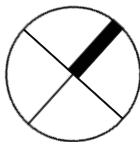
Basement 2

Back of House Support Spaces

The BOH support spaces located in Basement 2 are critical for the overall functionality of the hospital. Their strategic placement ensures that essential services are accessible while maintaining a clear separation from patient care areas. This design promotes operational efficiency, enhances the quality of care, and supports the hospital's commitment to providing safe and effective healthcare services.



Key Section



Basement 2 Level – BOH Support Spaces

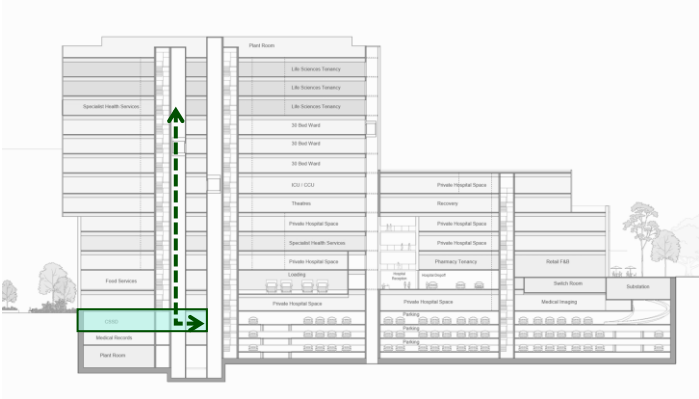
Reference Design Scheme

Basement 1

CSSD (Central Sterile Supply Department)

Located on Basement 1, and with high floor-to-floor levels the design of the CSSD is crucial for ensuring a smooth and efficient workflow for the sterilisation and distribution of medical instruments and supplies.

The circulation and flow within the CSSD, facilitated by the BOH service lift access, are designed to optimise operational efficiency and maintain high standards of sterility. By ensuring a logical and direct path for instruments from dirty to clean areas, the CSSD can effectively support the needs of the operating theatres, ICU, CCU, and inpatient units, ultimately contributing to improved patient care and safety.



Key Section



Basement 1 Level – CSSD (Central Sterile Supply Department)

Reference Design Scheme

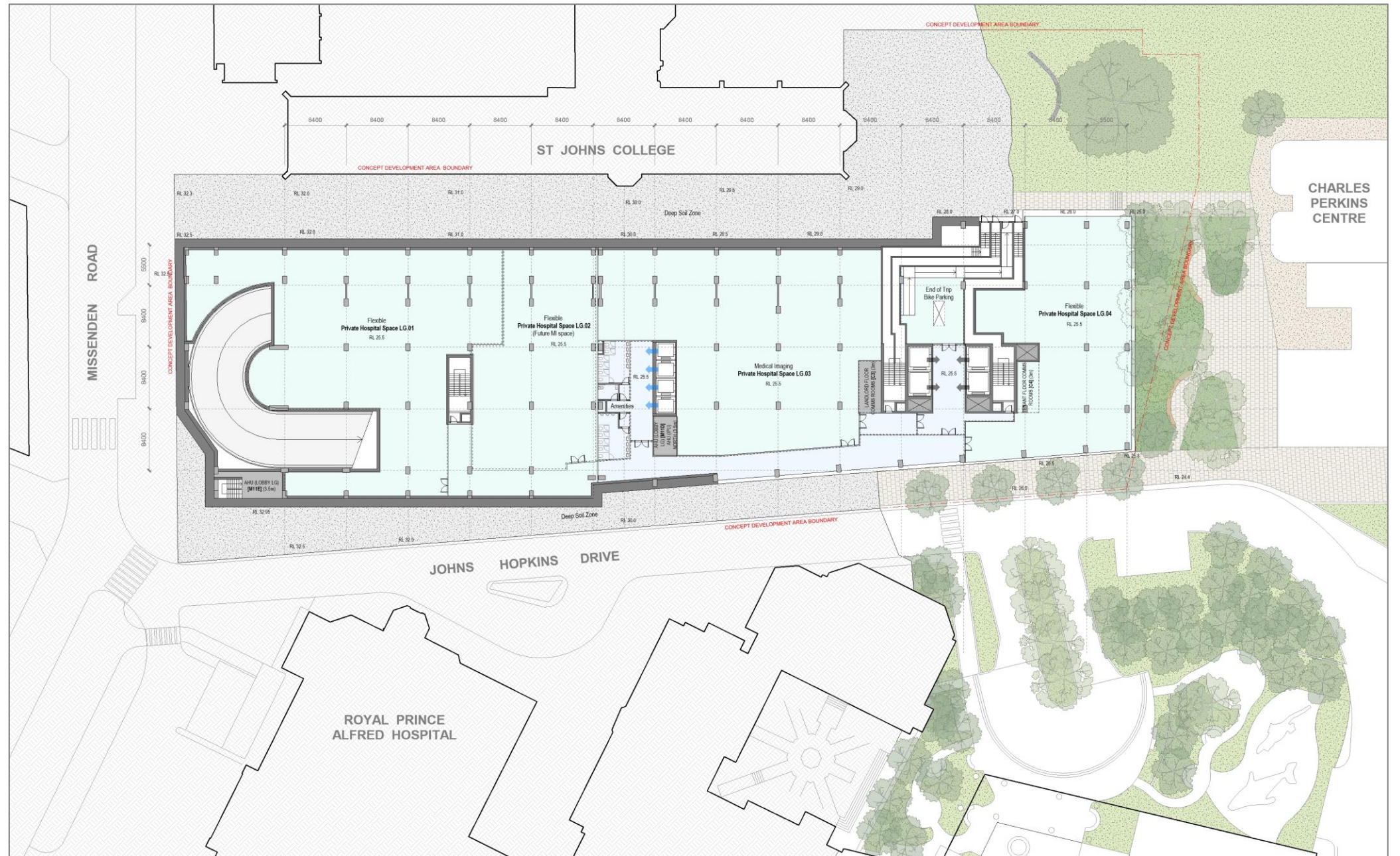
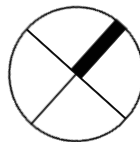
Lower Ground Level

Medical Imaging

The medical imaging tenancy located on the Lower Ground Level is a crucial component of the hospital's diagnostic capabilities. By ensuring efficient circulation, accessibility, and potential for future expansion, the design will support high-quality patient care and accommodate the evolving needs of the healthcare facility. This strategic planning will help the hospital maintain its commitment to providing comprehensive and accessible medical imaging services.



Key Section



Lower Ground Level

Reference Design Scheme

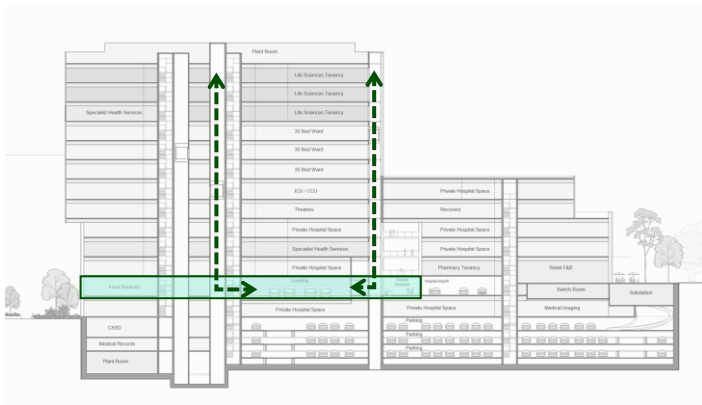
Mid Ground Level

Hospital Arrival

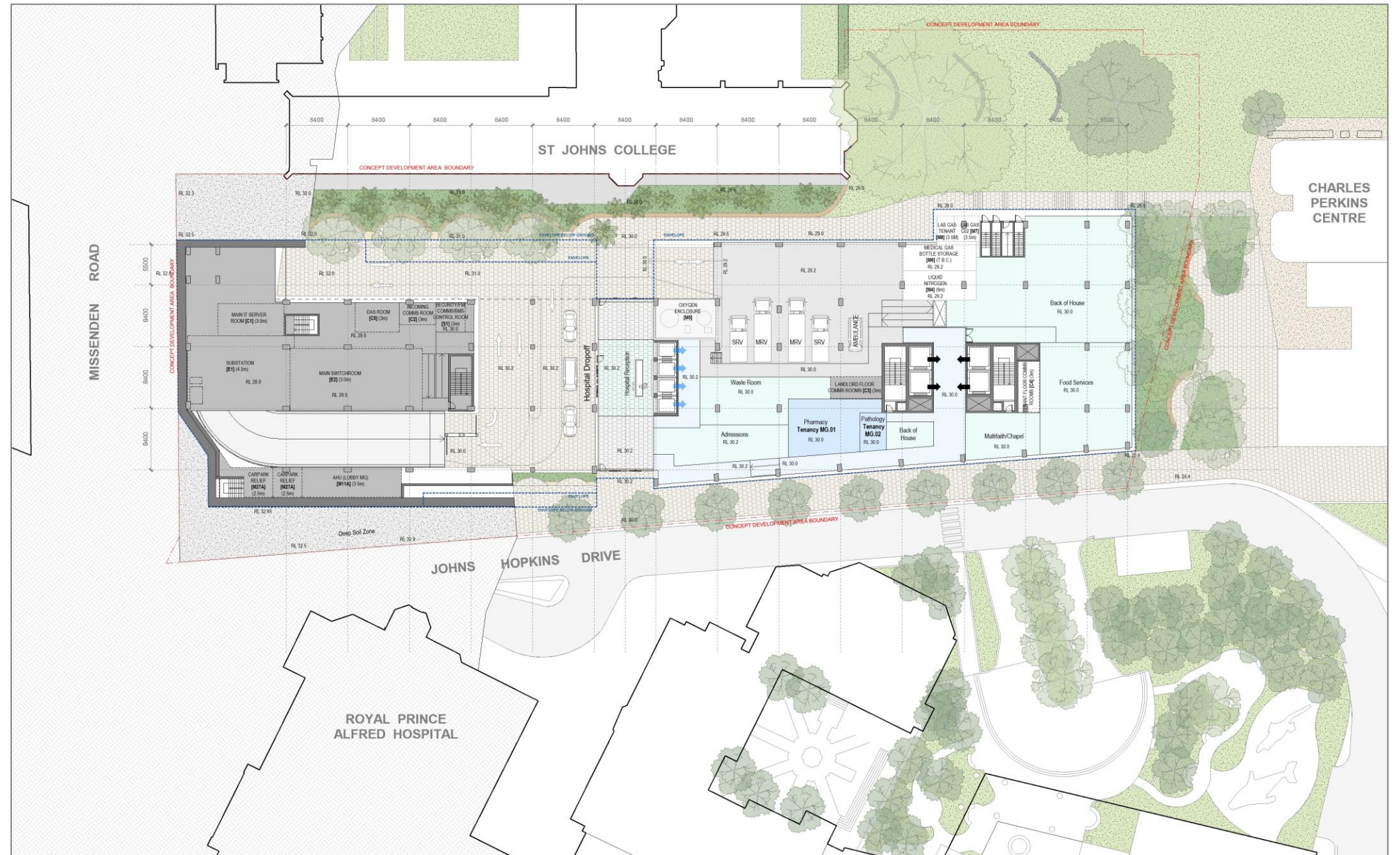
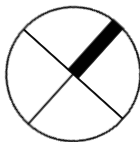
The design of the Arrival Atrium and surrounding areas prioritises easy navigation for both patients and visitors. The architectural qualities of the atrium space and entry experience maximises natural light, creating a grand and welcoming entry, and establishes a strong connection to the surrounding heritage. The volume of this space enhances the aesthetic appeal and contributes to a positive and engaging experience for all visitors. The clear layout reduces confusion and enhances the overall experience upon arrival. The inclusion of essential services like admissions and pathology in proximity to the reception area streamlines the patient journey, allowing for efficient processing and reducing wait times.

- Main Entry Reception:** Welcomes patients and visitors.
- Admissions:** Streamlined process for patient intake.
- Pathology:** Dedicated area for laboratory services.
- Multifaith Chapel:** Provides a quiet space for reflection and spiritual support.

The vehicular drop-off area is strategically positioned to facilitate quick and safe access for patients, particularly those with mobility challenges. The pedestrian entry via Johns Hopkins Drive ensures that foot traffic is well-managed and provides a direct route to the main entry reception, making it easier for visitors to find their way.



Key Section



Mid Ground Level

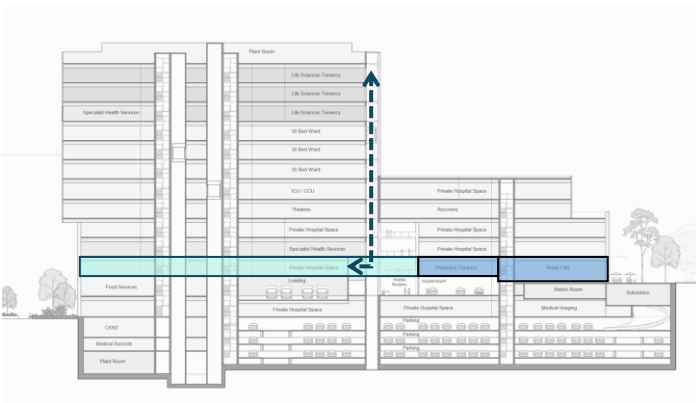
Reference Design Scheme

Upper Ground Level

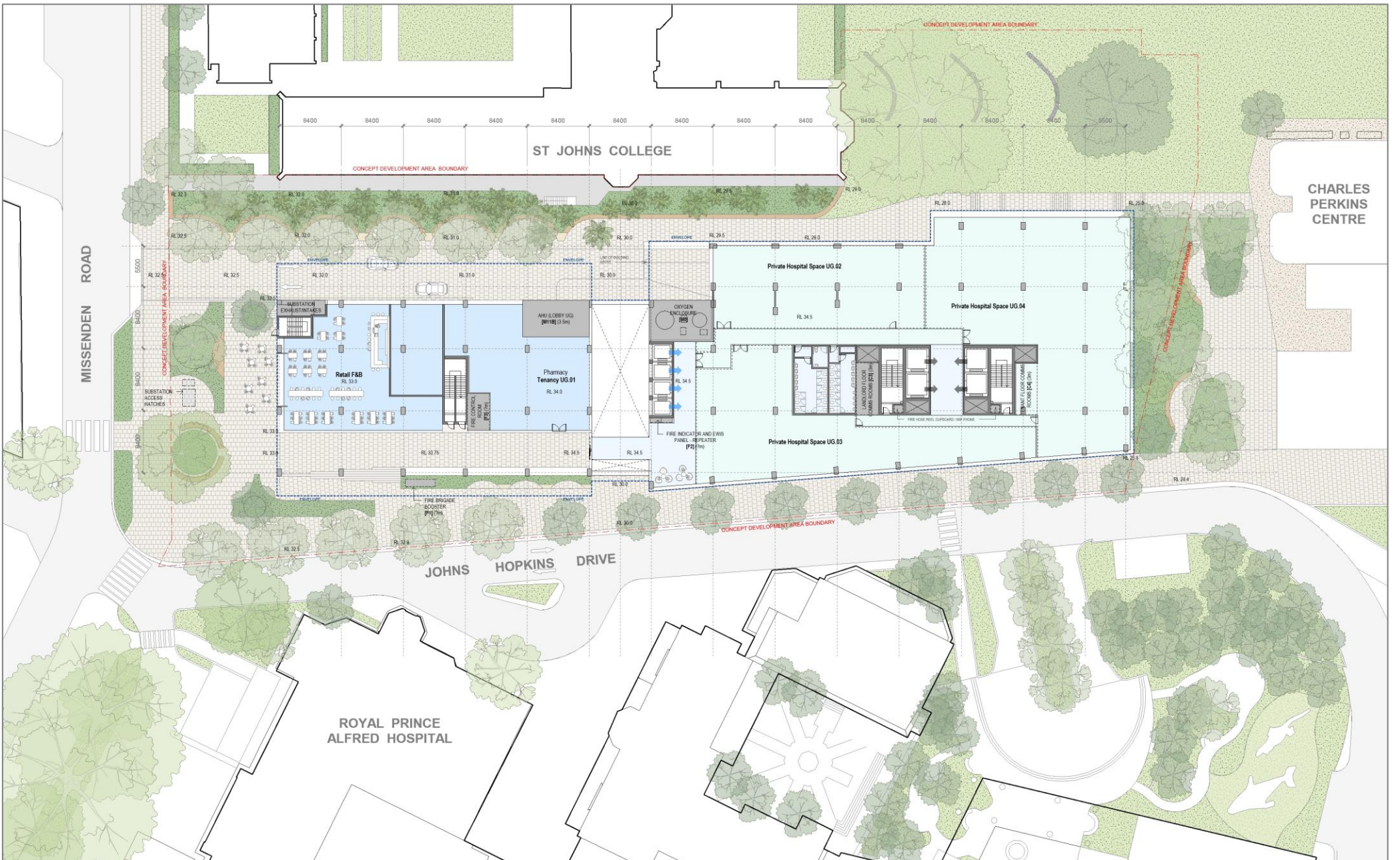
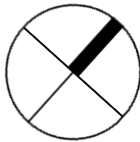
Upper Ground Arrival

The Upper Ground level is designed to function as the primary entry point for all non-hospital commercial, educational, and research tenancies. Access is provided via Missenden Road, positioned above the atrium void, ensuring visibility and ease of access for visitors and tenants.

A food and beverage (F & B) tenancy will play a crucial role in activating the proposed Missenden Road Plaza, creating a vibrant and engaging atmosphere for both users and passers-by.



Key Section



Upper Ground Level– Tenancy Levels

Reference Design Scheme

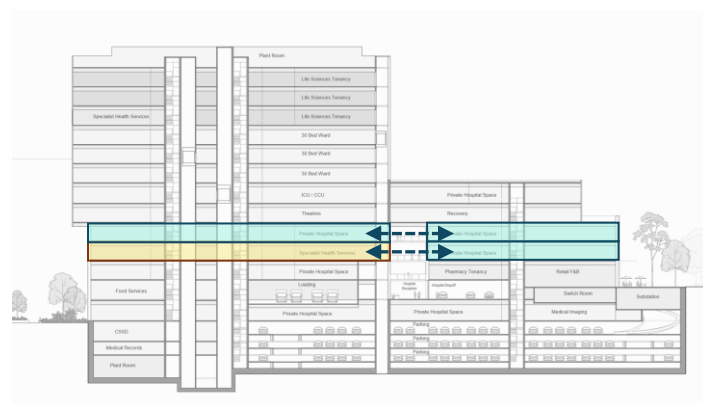
Level 1 - 2

Tenancy Levels 1-2

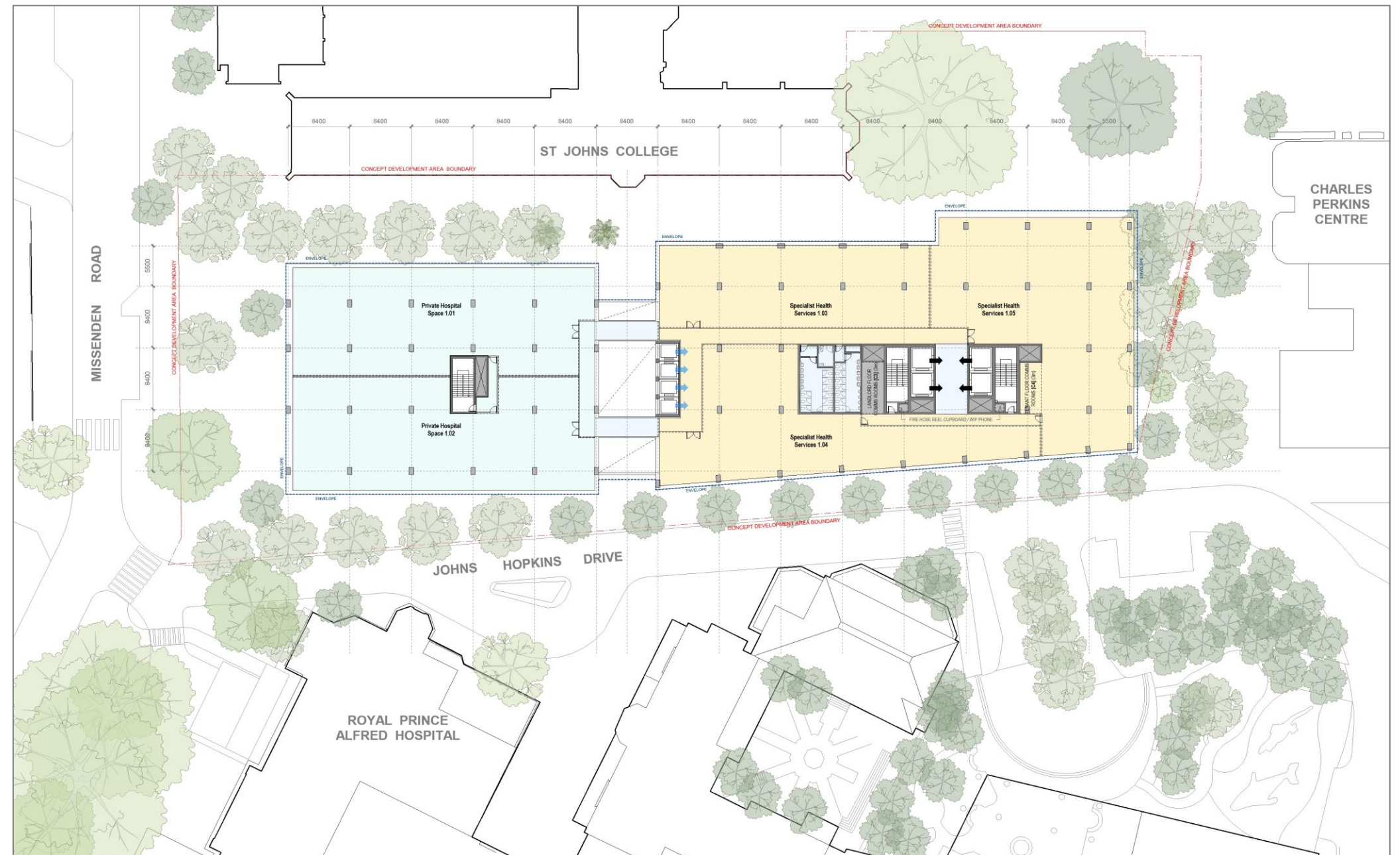
Spacious Design: The large floor plates offer ample space, accommodating a variety of hospital and ancillary tenancies. This design fosters flexibility in usage, allowing for diverse configurations and the ability to adapt to changing needs within the healthcare environment.

Bridge Connections: The bridge connections facilitate easy movement between the two levels, enhancing accessibility and promoting collaboration among tenants.

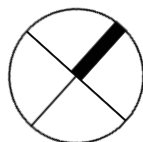
Glass Lifts: Positioned to face the atrium, the glass lifts not only provide functional vertical transport but also create a visually striking focal point, allowing users to enjoy views of the atrium as they move between levels.



Key Section



Level 1- 2 – Tenancy Levels



Reference Design Scheme Level 3

Operating Theatres & Recovery

Located on Level 3 the layout of eight operating theatres and recovery stage 1 and 2 patient discharge facilitates efficient patient flow and staff movement.

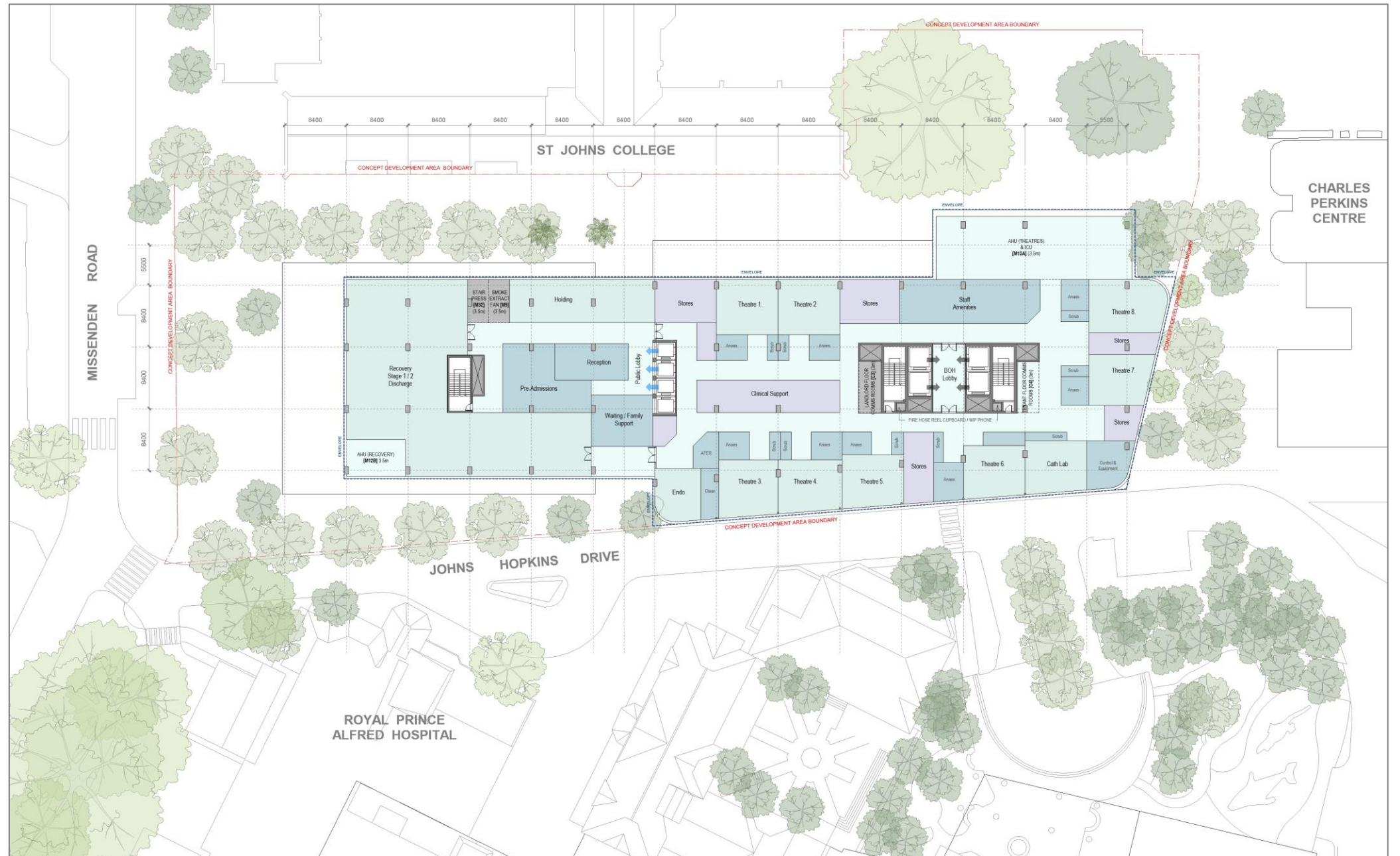
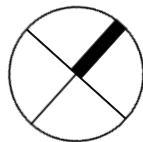
- Operating Theatres x8 set on an 8.4m grid
- High 4.5m from floor-to-floor height

Split Lift Core Access: Allows for segregation between public and clinical traffic, enhancing patient privacy and operational efficiency.

- **Public Lifts:** Provide access to reception, waiting areas and pre-admissions
- **Back of House (BOH) Service Lifts:** Designed to support the operating theatres and associated clinical support spaces. The BOH service lifts are crucial for transporting sterile instruments and supplies from the Central Sterile Supply Department (CSSD) located in Basement 1. This ensures that the operating theatres are well-stocked without disrupting the flow of patients and visitors. Effective circulation paths and lift access will minimise delays in surgical procedures and support quick recovery and discharge processes.



Key Section



Level 3 - Operating Theatres & Recovery

Reference Design Scheme

Level 4

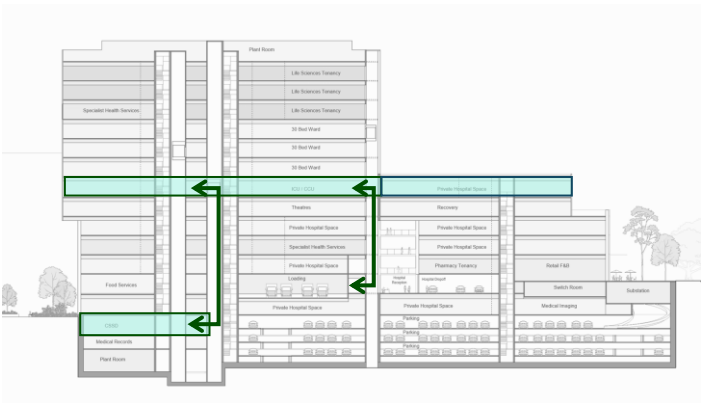
Intensive Care Unit (ICU) / Coronary Care Unit CCU

Located on Level 4 the design of the ICU and CCU areas prioritises patient safety and staff efficiency, ensuring that critical care can be delivered effectively.

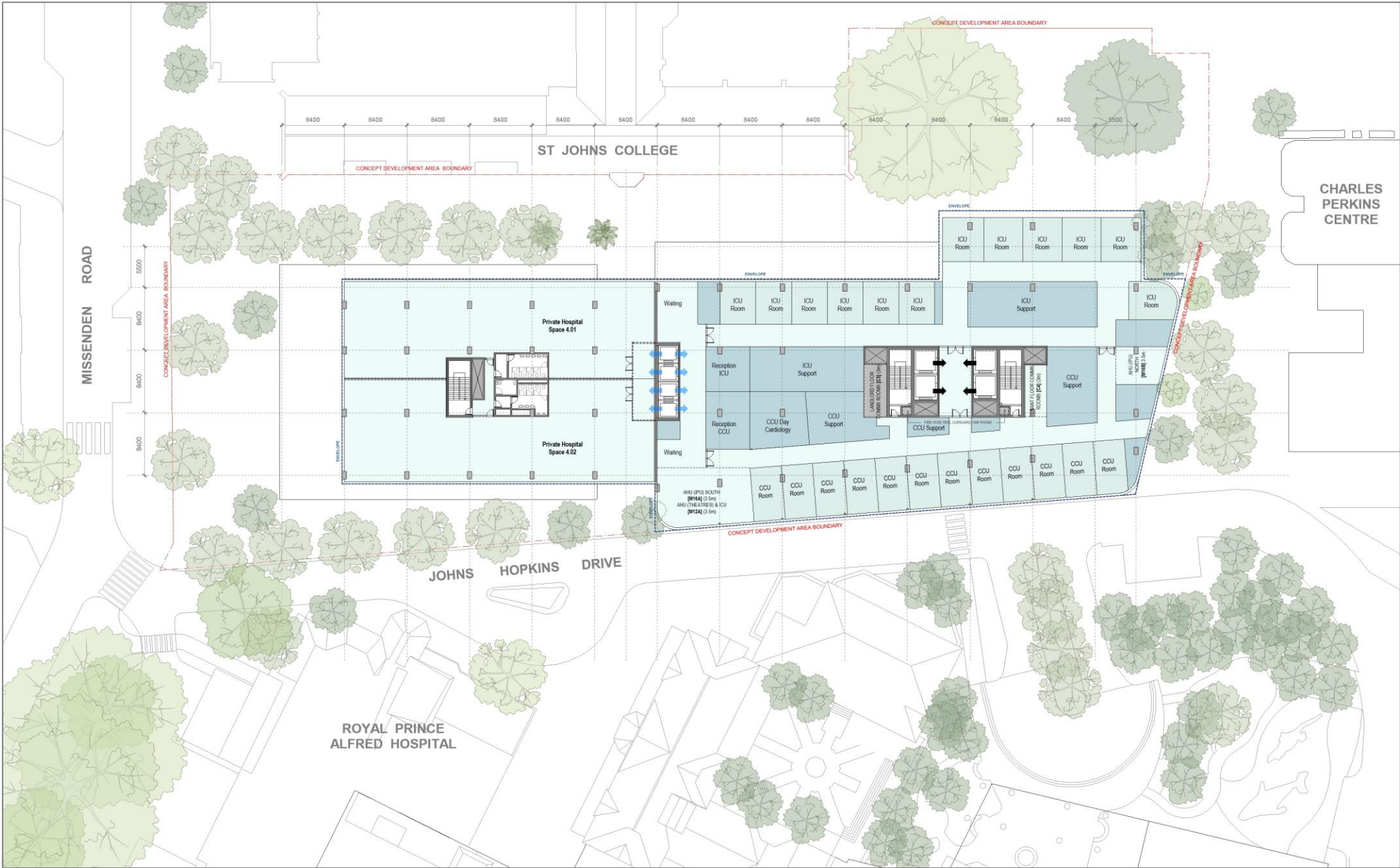
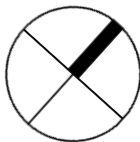
- ICU Rooms x12
- CCU Rooms x12
- 4.2m from floor-to-floor height

Efficient circulation routes for staff and emergency access are crucial in these units, ensuring that healthcare professionals can respond rapidly to patient needs.

The split lift core is essential for maintaining a clear distinction between public access and clinical operations, which is particularly important in high-stress environments like ICUs and CCUs. The BOH service lifts are vital for transporting necessary medical supplies, equipment, and sterile instruments from the Central Sterile Supply Department (CSSD) located in Basement 1. This access helps maintain the sterile environment required for critical care without disrupting patient flow or staff operations.



Key Section



Level 4 – ICU and CCU

Reference Design Scheme

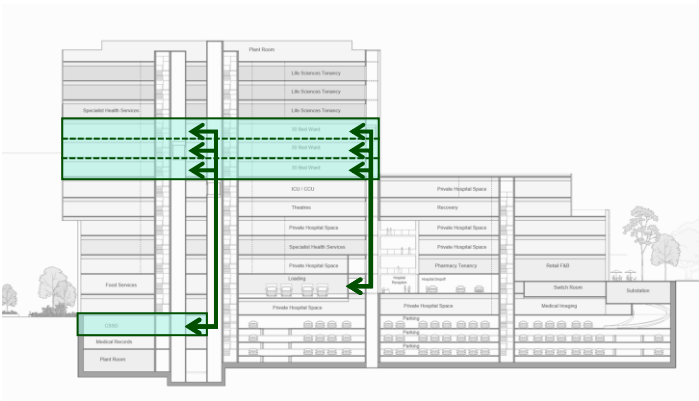
Level 5 - 7

Inpatient Unit Levels

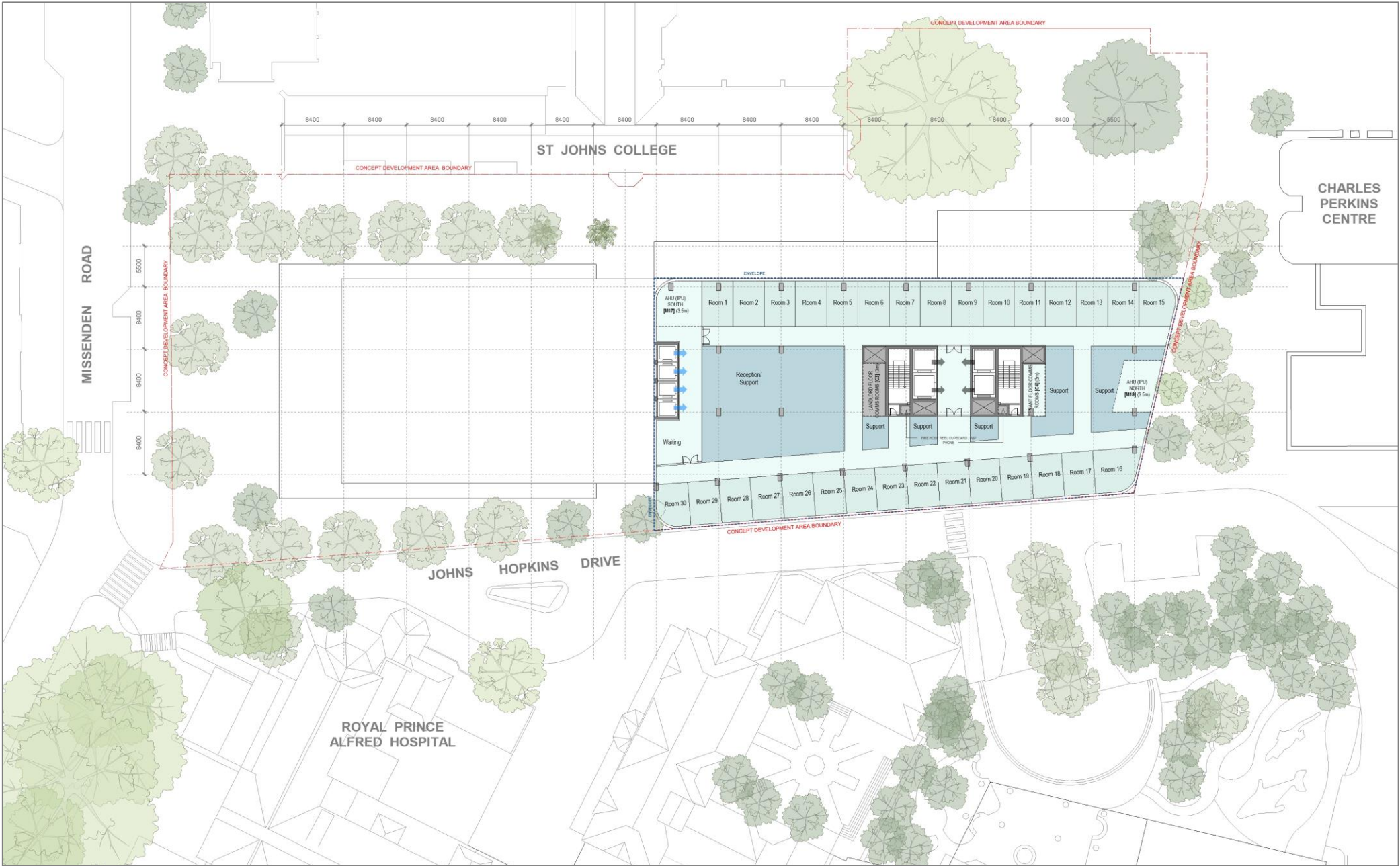
Located on Levels 5 – 7, the design of the inpatient unit promotes a comfortable and efficient environment for both patients and healthcare staff. Efficient circulation routes are vital in the inpatient unit to allow staff to move quickly between rooms, respond to patient needs, and maintain a high standard of care.

- Inpatient Unit Rooms x30 per level total x90 Rooms
- 4.2m from floor-to-floor height

The split lift core effectively separates public traffic from clinical operations, which is essential for maintaining patient privacy and a calm atmosphere in the inpatient unit. The BOH service lifts are critical for facilitating the transport of medical supplies, equipment, and sterile instruments from the Central Sterile Supply Department (CSSD) located in Basement 1. This access ensures that the inpatient units are well-equipped without interrupting the flow of patients and visitors.



Key Section



Levels 5 - 7 – Inpatient Unit Levels

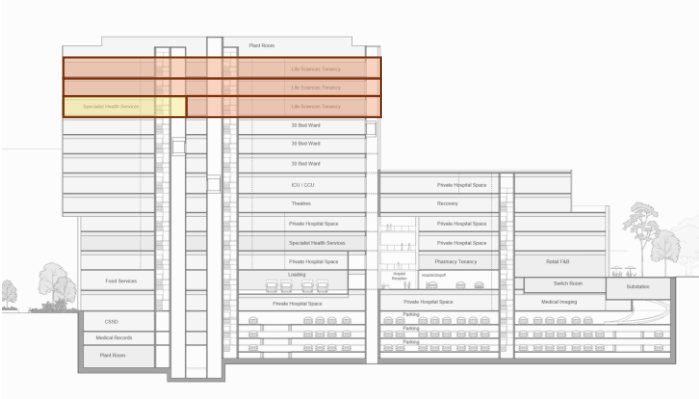
Reference Design Scheme

Level 8 - 10

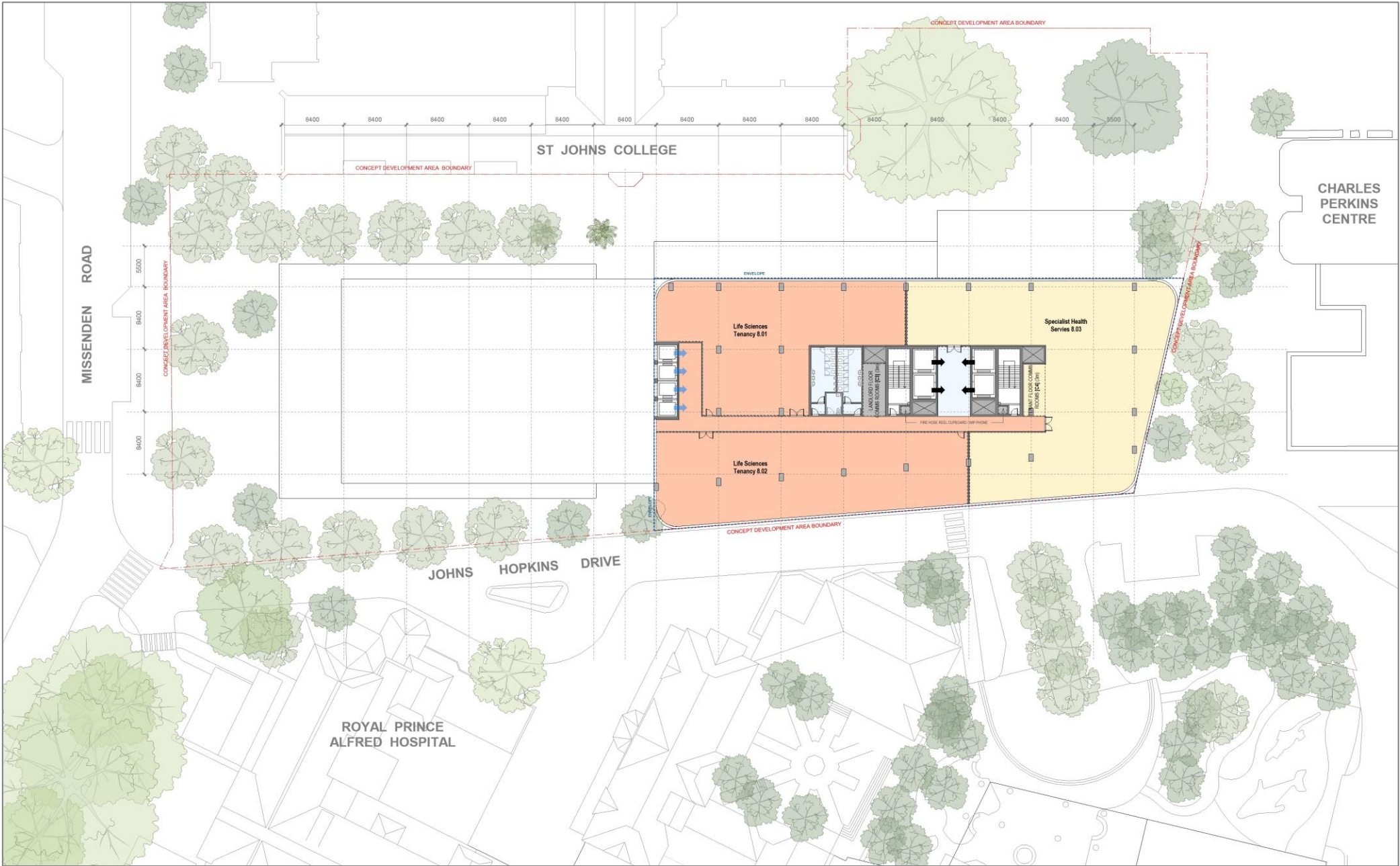
Levels 8 - 10

Prime Location: These ancillary tenancies are positioned at the top of the building, providing occupants with great vistas of the surrounding area.

Natural Light: The elevated position allows for ample natural light, enhancing the overall ambience and creating a pleasant working environment.



Key Section



Levels 8 - 10 – Tenancy Levels

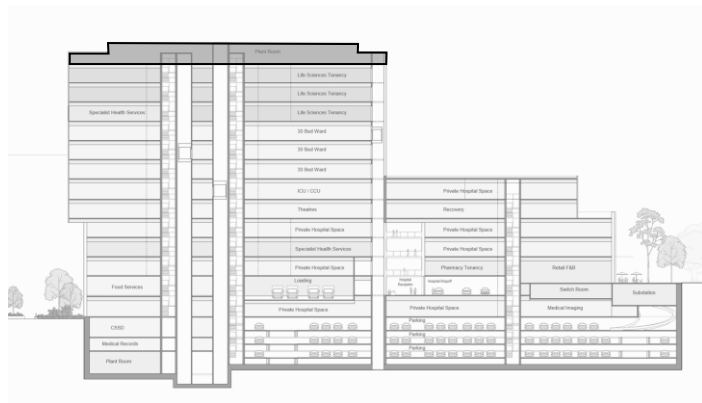
Reference Design Scheme

Level 11

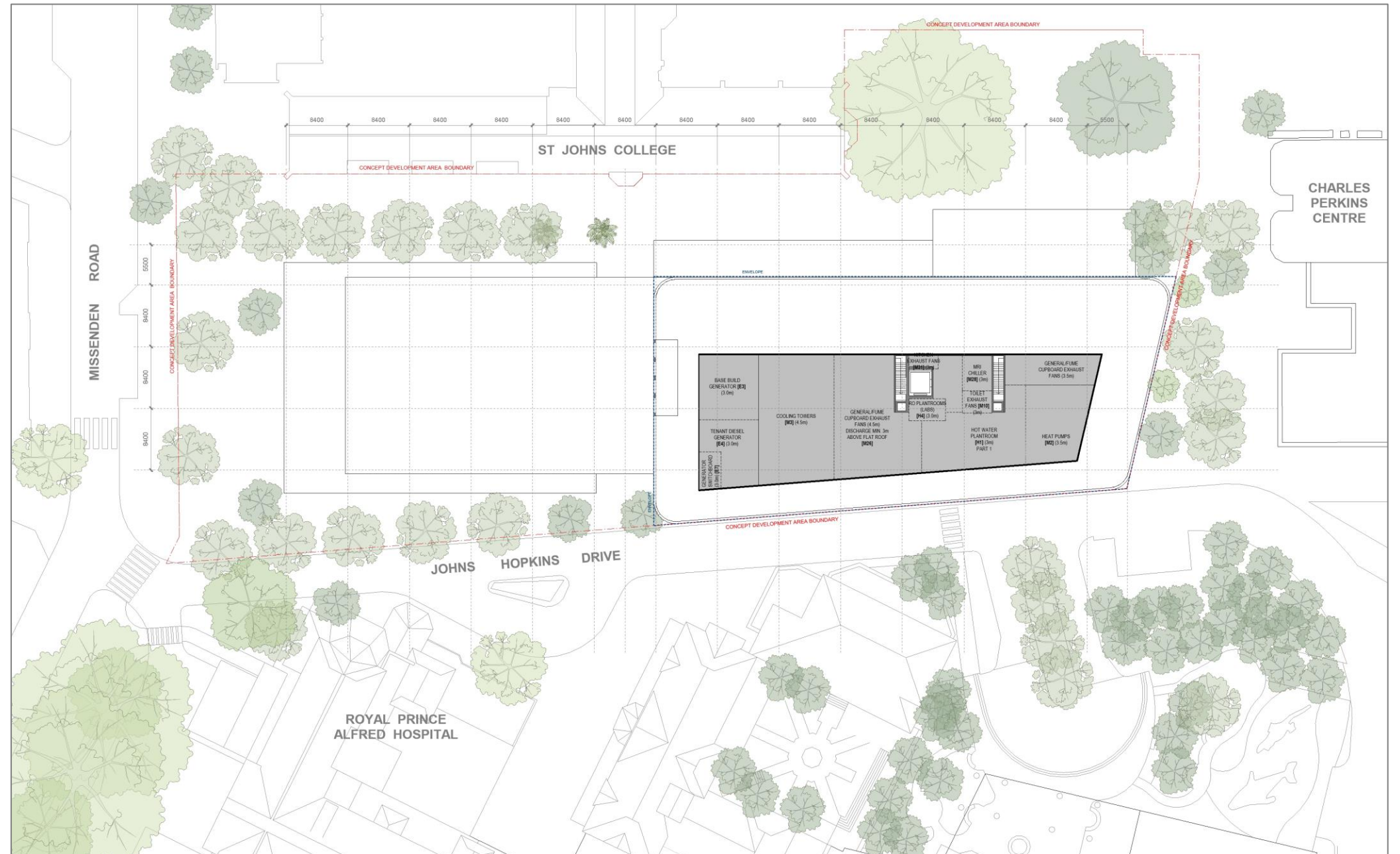
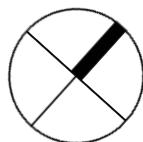
Level 11 Plantroom

This design aims to balance functional requirements with aesthetic considerations, ensuring that the plantroom operates effectively while contributing positively to the building's overall visual appeal.

Centralised Mechanical Equipment: Taller mechanical equipment is positioned at the centre of the floor plate. This design choice minimises the visual impact of the equipment when viewed from street level, helping to maintain the aesthetic integrity of the building.



Key Section



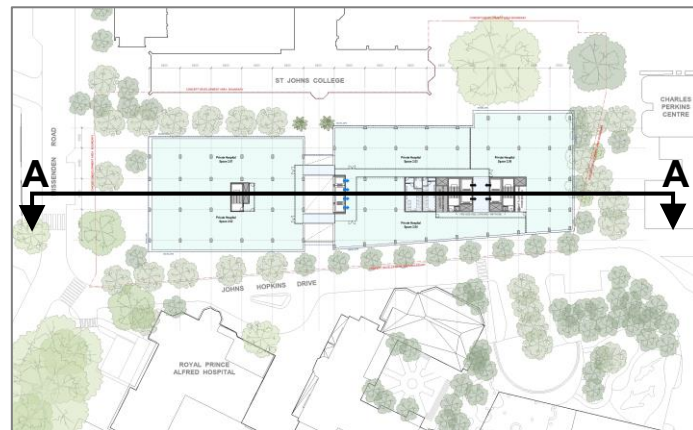
Levels 11 – Plantroom

Reference Design Scheme

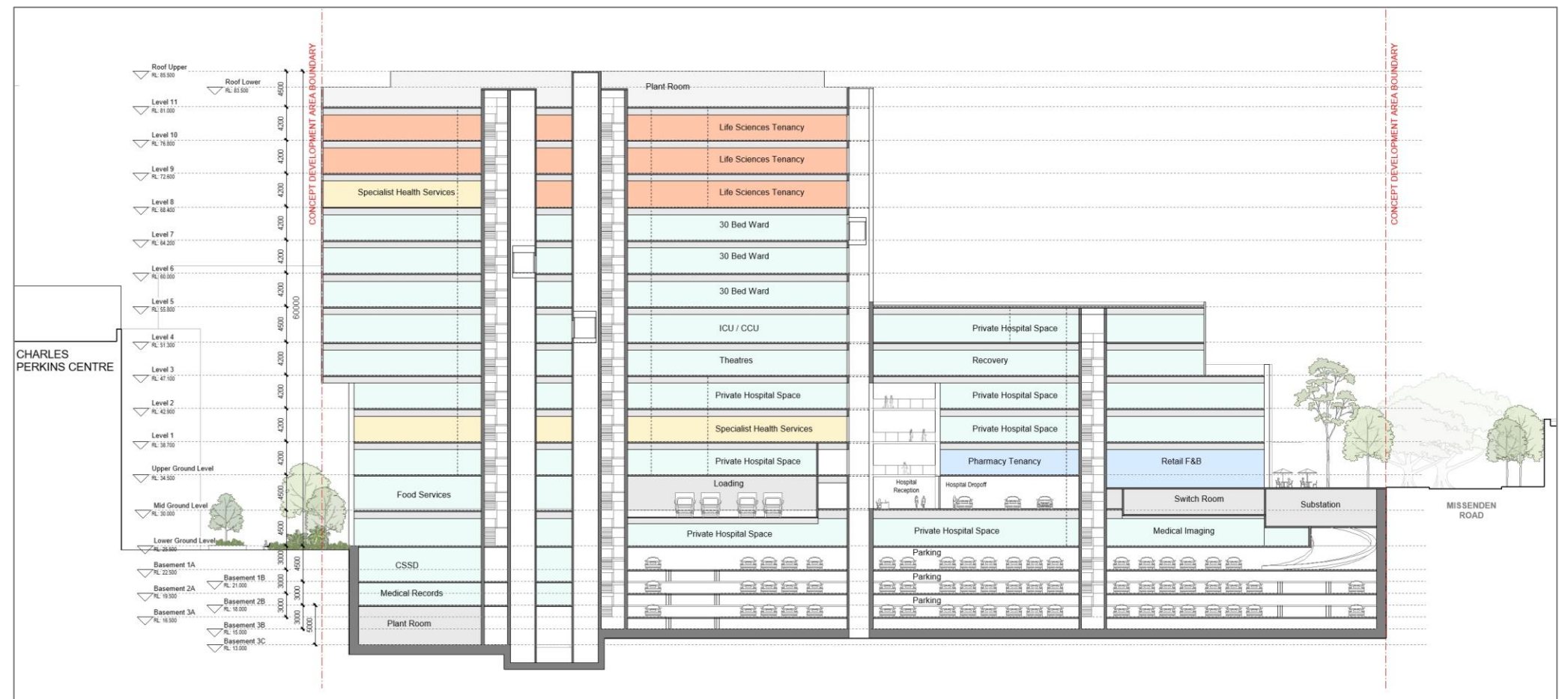
Section A East West

Section A East West

The section shows the strategic arrangement of hospital levels within the mid levels of the building, combined with the allocation of the topmost levels for commercial and research tenancies, creates a multifunctional space that maximises efficiency and fosters innovation. This layout not only enhances operational effectiveness but also supports the broader goals of collaboration and advancement in the healthcare sector.



Key Plan



Section A - East West

Reference Design Scheme

Section B, C North South

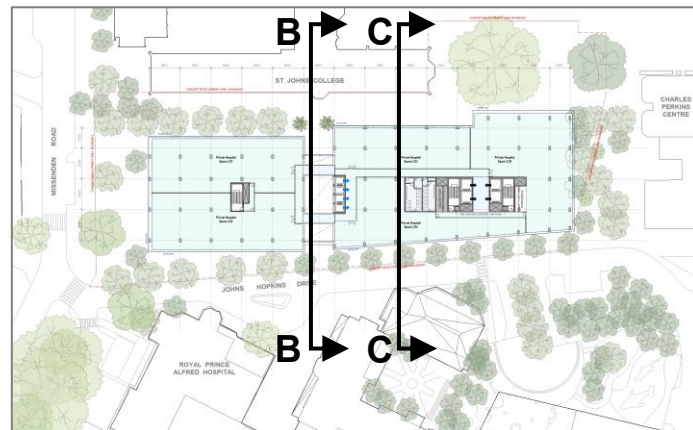
Section B - Atrium

Engagement with St John's College: The lower form is designed to engage with St John's College. This engagement is essential for maintaining the historical context and ensuring that the new development complements the college's architectural style and significance.

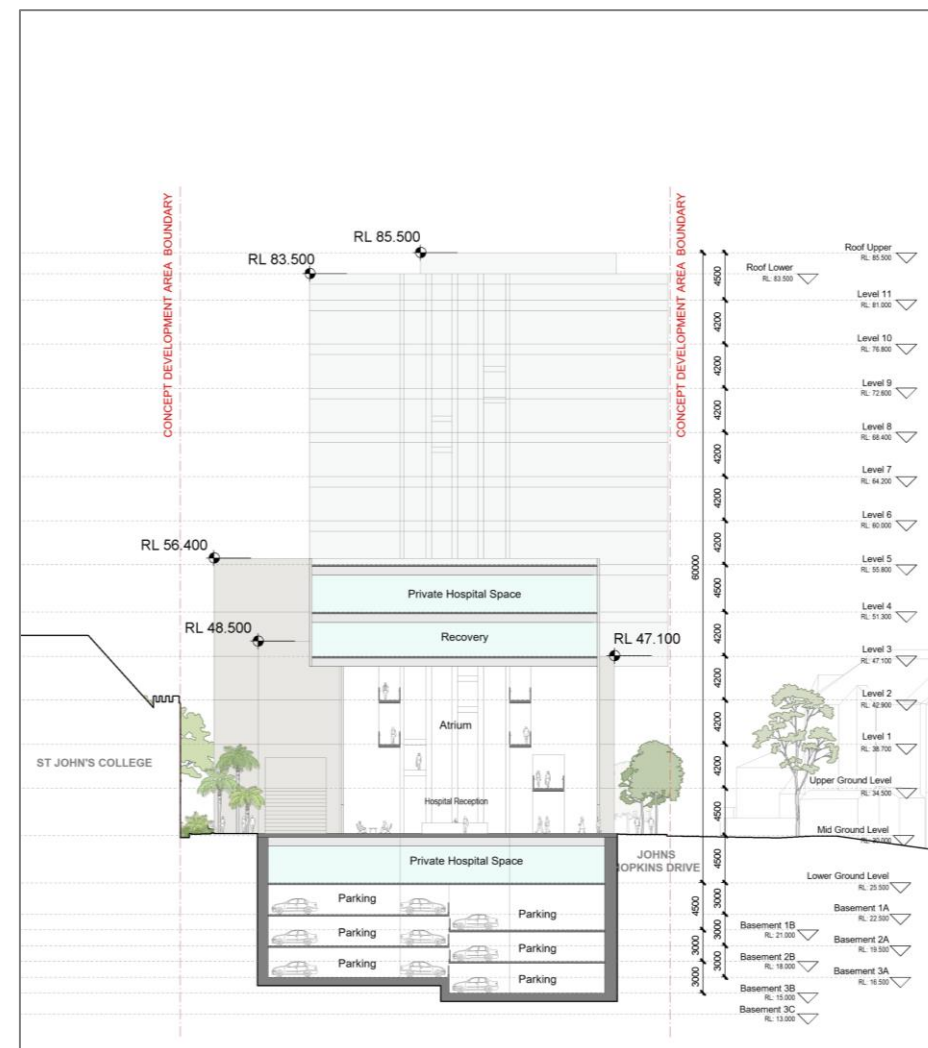
Visual Connection to Johns Hopkins Drive: The design incorporates a connection to Johns Hopkins Drive, facilitating access and movement between the building and the surrounding area. This connection enhances the overall functionality of the site and encourages interaction between the building and the public realm.

Section C – Tower

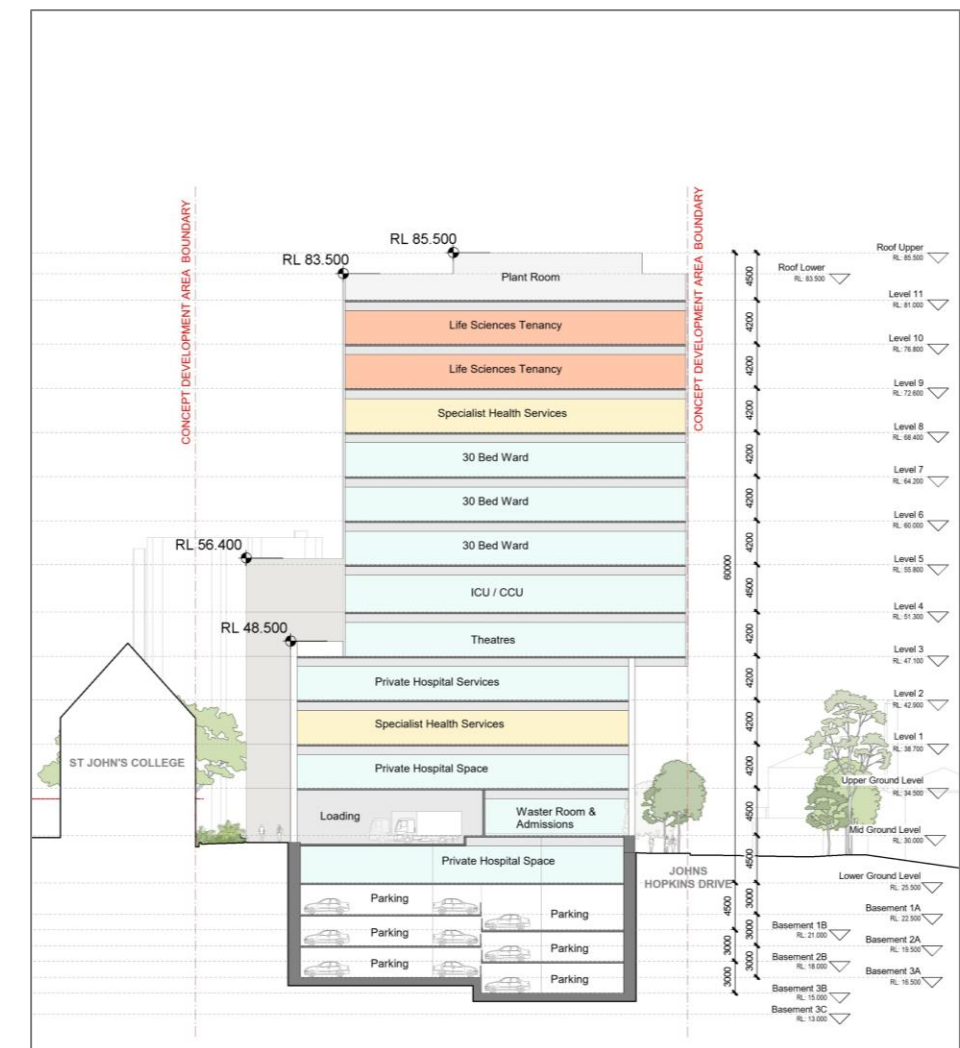
The design includes provisions for higher plant equipment setback at RL 85.5, located at the centre of the roof. By placing mechanical equipment centrally and at a higher elevation, it minimises visual disruption from the street-level view.



Key Plan



Section B - Atrium



Section C - Tower

Reference Design Scheme

Area and Hospital Schedule

Concept Development Area 7,329 m²

Total GFA	33,253 m ²
Total Parking	267

Level	RL	FF Height	Total GFA (m ²)	Use	Hospital GFA (m ²)	Ancillary GFA (m ²)	Parking No.
Roof	85.5						
Level 11	81	4.5		Plant			
Level 10	76.8	4.2	1902	Ancillary Uses		1902	
Level 9	72.6	4.2	1902	Ancillary Uses		1902	
Level 8	68.4	4.2	1902	Ancillary Uses		1902	
Level 7	64.2	4.2	1902	30 Bed Ward	1902		
Level 6	60	4.2	1902	30 Bed Ward	1902		
Level 5	55.8	4.2	1902	30 Bed Ward	1902		
Level 4	51.3	4.5	3196	ICU / CCU Rooms / Private Hospital Space	3196		
Level 3	47.1	4.2	3234	Theatre / Recovery	3234		
Level 2	42.9	4.2	3281	Private Hospital Space	3281		
Level 1	38.7	4.2	3281	Private Hospital Space / Ancillary Uses	1353	1927	
Upper Ground	34.5	4.2	2547	Retail / Foyer / Private Hospital Space	1001	1546	
Mid Ground	30	4.5	1399	Admissions + BOH / Pathology / Pharmacy / Lobby / Loading	1300	99	3 drop-off
Lower Ground	25.5	4.5	3352	Medical Imaging / Flexible Private Hospital Space	3352		
Basement 1	22.5	3	767	BOH / Parking	767		78
Basement 2	19.5	3	786	BOH / Parking	786		92
Basement 3	15	4.5		Parking /Plant			94
Total			33253		23975	9277	267

Hospital Department Schedule

Department	GFA (m ²)	Level
Administraion	443	Basement 2, Level 5, Level 6
Admissions	128	Mid Ground, Level 6
Back of House	1645	Basement 2, Lower / Mid / Upper Ground
Cardiac Care Unit	1083	Level 4
CSSD	767	Basement 1
Inpatient Unit 1 - Medical (30beds)	1702	Level 5
Inpatient Unit 2 - Surgical (30beds)	1661	Level 6
Inpatient Unit 3 - Surgical (30beds)	1902	Level 7
Intensive Care Unit	993	Level 4
Main Entry	375	Mid Ground
Medical Imaging	857	Lower Ground
Operating Unit - Stage 1	3234	Level 3
Private Hospital Space	9186	Lower / Upper Ground, Level 1, Level 2, Level 4
Total	23975	

6.

DESIGN CONCEPT KEY VIEWS



Design Concept Missenden Road Plaza

JPW



Design Concept
Missenden Road

JPW



Design Concept St John's College Court

JPW



Design Concept Johns Hopkins Drive Arrival Atrium

JPW



Design Concept
St John's Oval

JPW





JPW

architectus™

ASPECT Studios

bangawarra