

CHRISTCHURCH HOSPITAL - ACUTE SERVICES BUILDING - DESIGNATION DETAIL

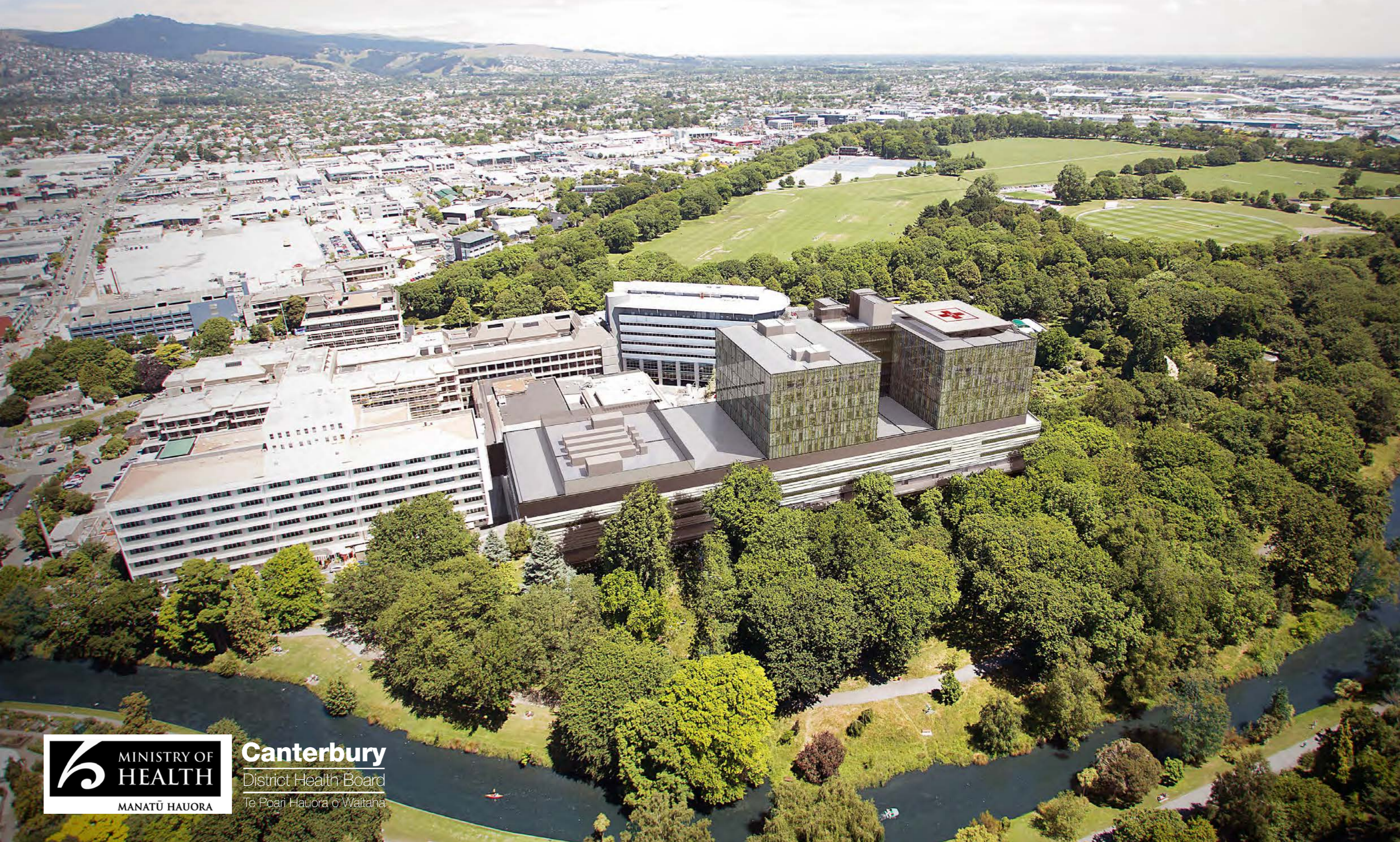


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Note: This document is incorporated into the designation and provides detailed information on the matters set out in section 176A(3) RMA. In accordance with s176A(2) RMA no outline plan is required to be submitted to the Council.

DESIGN

5.0 ARCHITECTURE

5.5 BUILDING DESIGN

5.5.1 MASSING AND FORM

The overall programme for the building has been layered into the sections according to function.

At the base, loading, storage and waste management functions are co-located with amenities spaces. This area has some risk of flooding on a relatively short return period. Consideration will be given to bunding of any critical plant spaces at this level.

The podium formed above the base isolation plane has two stories of non-ward acute functions in ED, Theatres, ICU and Radiology.

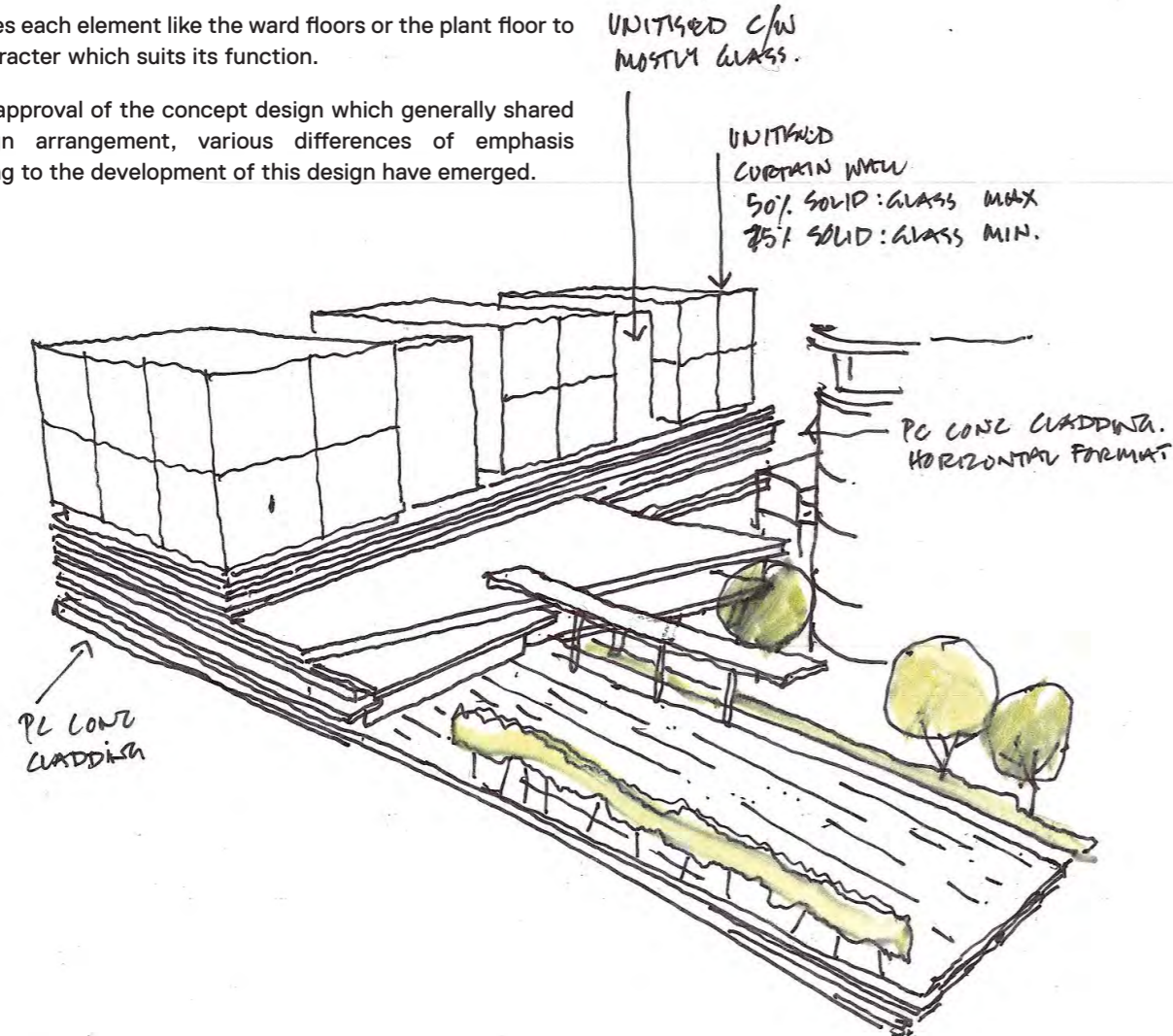
Over this layer serving both up and down is a full floor of mechanical and electrical plant.

Above this again are six floors of ward accommodation.

We have chosen, because of the various external skin requirements, to make these elements of the programme separate volumes or masses.

This enables each element like the ward floors or the plant floor to have a character which suits its function.

Since the approval of the concept design which generally shared this design arrangement, various differences of emphasis contributing to the development of this design have emerged.



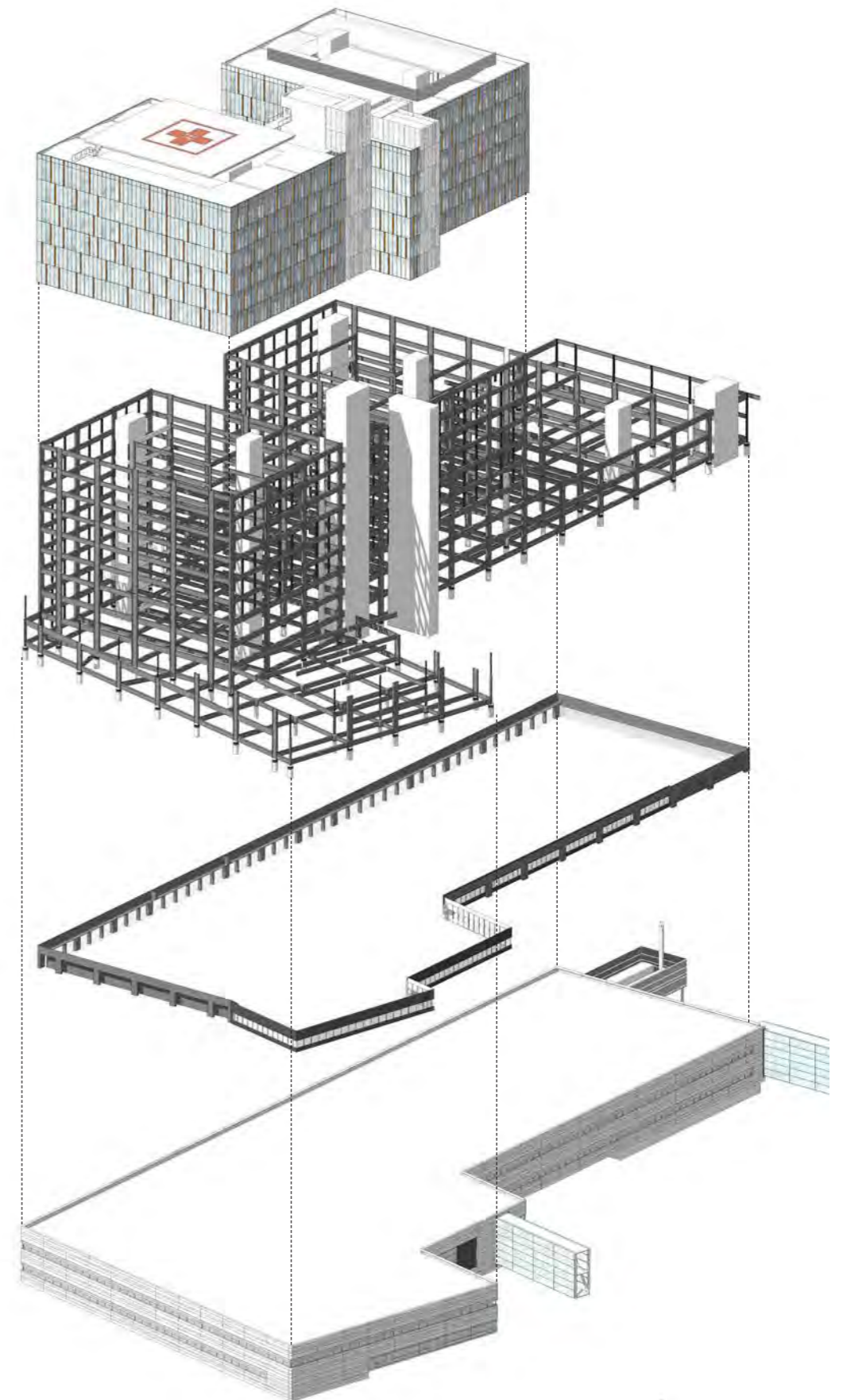
HELIPAD

WARDS

STRUCTURE

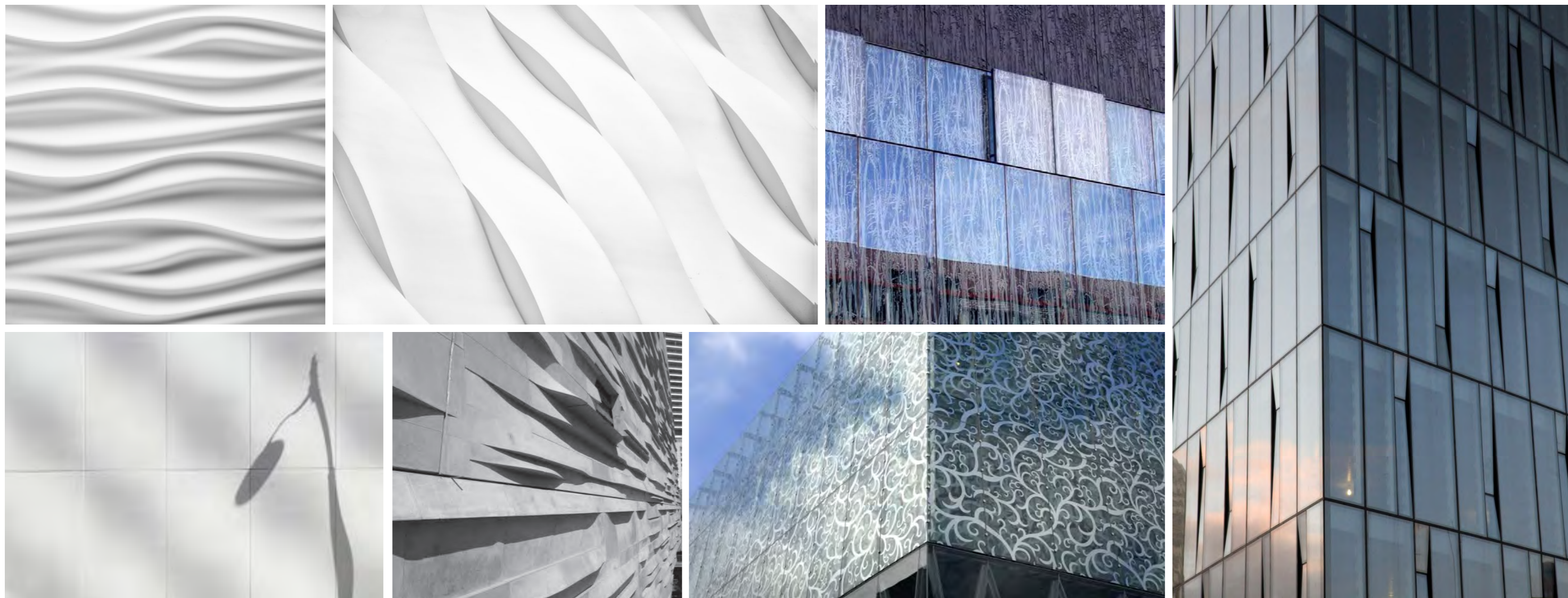
PLANT LEVEL

PODIUM



5.0 ARCHITECTURE

5.5.2 MATERIALITY, TEXTURE & PATTERN



The proposed Acute Services Building is one building within a campus of existing buildings of varying ages and architectural styles. The proposed materials and treatment need to consider the relationship with adjacent buildings and seek to create a degree of harmony and consistency while still allowing the Acute Services Building to be expressed as a new and contemporary facility.

The consideration of this context is overlaid with the initial architectural concept of emphasising the differing key functions of the building by utilising different materials and textures.

Associating the podium and the car park deck with existing solid elements of the site and the upper ward levels with the curtain walling provides a new variant to the theme existing on the site, with the heavy and earthbound elements low to the ground, and the lightweight, glossy elements at tree top level and above.

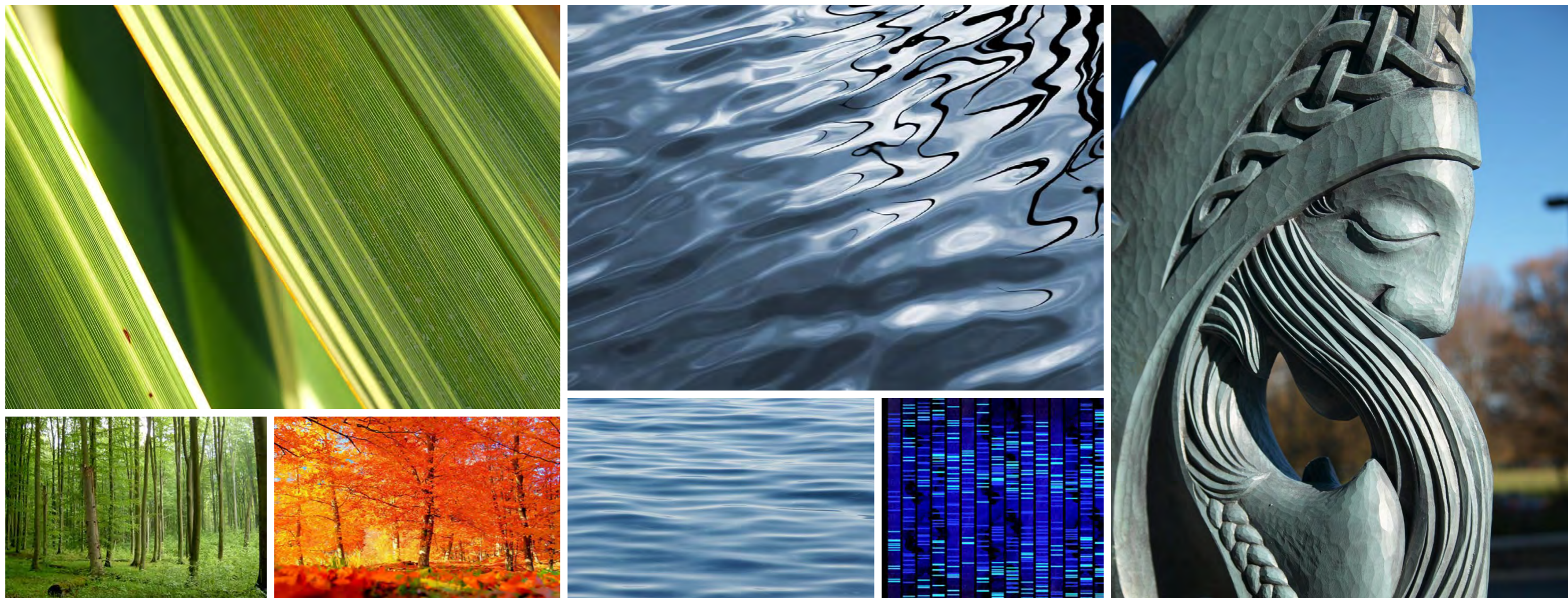
The selection of materials and façade systems is also influenced by the differing functional requirements of the key building elements. The selection of curtain glazing to the upper wards is driven by the higher ratio of glass and full height glazing to allow generous views from the ward spaces. The selection of concrete

to the podium element emphasizes solidity created by the lower ratio of glazing and window upstands required in the diagnostic and treatment facilities.

During the preliminary design phase, the stakeholders expressed a preference for smoother and 'more modern' expression for the podium cladding. Therefore, although concrete was the preferred material for the podium element, the end appearance of the concrete is seen as being smooth and white with references to the more recent adjacent Women's Hospital.

Overall the material palette is neutral in colour and in keeping with the surrounding buildings on the hospital site. The main material selections of white concrete and glass are in keeping with the hospital campus and the subtle texture and patterning of the concrete and glass give the building its uniqueness and identity.

MATERIALITY, TEXTURE & PATTERN



Sitting within Hagley Park on the banks of the Avon River the building will form the back-drop to one of the most iconic public parks in New Zealand. Therefore the quality and appearance of the external building envelope is of key importance.

The overall form of the new building is driven by healthcare planning requirements and the need to create suitably efficient and flexible interior spaces. Combined with the highly efficient earthquake resisting steel frame the end result, externally, are large and fairly simple geometries.

Applying a pattern or texture to facade treatments helps to create another layer of visual interest and identity that avoids creating large uniform surfaces. Applying a different texture and pattern to the podium and wards elements also helps reinforce the initial concept of creating two distinct but complimentary forms.

The selection of texture and patterning can be derived from a number of potential influences including the natural features of surrounding site, the city, and the local culture and history to give the new building a distinctiveness and sense of belonging.

Above are images that have been influential in development of the preliminary design illustrated to date.

Our initial response to pattern has a texture applied to the concrete of the podium that projects a curved wave-like shadow over the concrete surface. The shape and extent of the shadow shifts with the time of the day, sometimes being barely visible and flat in appearance and at other times casting a deeply curved shadow.

The glazed ward towers require fritting to assist with the solar performance of the facade. This fritting, although functional, creates the opportunity to introduce pattern to the wards glazing. Our initial response is a vertical banding that derives its curved lines from the native harakeke that grow along the river edge. The vertical pattern contrast and compliment the horizontal texture of the podium.

Although a texture and pattern have been allocated for the images in this report we see the final pattern being developed further in the next stage of the design process.

5.0 ARCHITECTURE

5.5.4 WARDS FENESTRATION

The building is arranged with its long north face to the Christchurch Botanical gardens, and its back to the south to Hagley Park, and the existing campus.

This enables a large surface area to be presented to the view into the gardens and Hagley park, which is ideal considering the need for outdoor view and external wall area in ward areas.

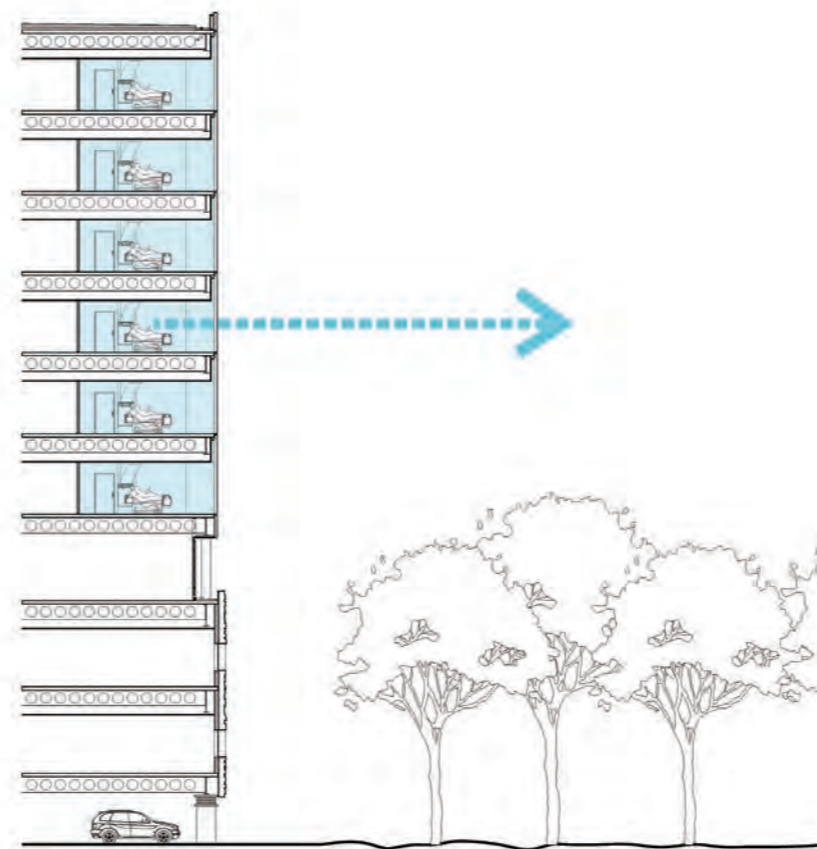
Both the ward floors and podium floors have a need for light and views, but keeping glare and solar gain to manageable levels requires limitation of window area to sensible proportions.

At a preliminary design level, the solar penetration of the external wall in both the ward floors and the podium has been limited to 50%, with a further reduction in the insulation through the combined use of glass selection, ceramic pattern on the glass and the use of blinds which will reduce energy use and increase comfort levels.

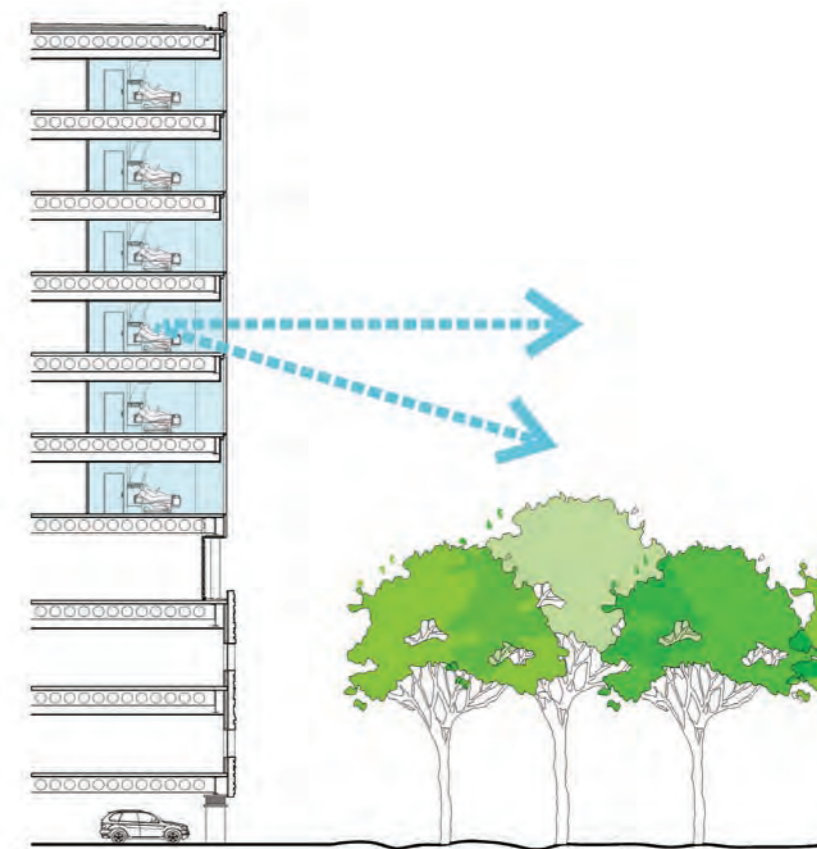
(It should be noted that in this building the floor to floor heights of 4.5m and 4.1m for podium and wards respectively mean that the 50% ratio mentioned above can result in a continuous strip 2.25 or 2.1 high, which is a large window opening)

The approach to window pattern on the facade has been influenced by this choice of penetration. For the ward blocks the vertical windows are full height in the room, but leave wall areas viewed from the bed unencumbered by clutter. The outlook provided maximises the view down to the treetops or lawn below, or up to the sky.

Various glazing configurations of 50% opening were explored for the wards blocks to development a window shape that created the most successful internal environment. A 1m full height glazing module became the preferred option and seemed to create the most successful interior space plus it allowed for a flexible 1m planning module - an important consideration for future changes to the internal planning layout.



THE LOCATION OF THE WARDS ON THE SITE OFFER GOOD DISTANT VIEWS.



FULL HEIGHT GLAZING ALLOWS DOWNWARD VIEWS TO THE PARK.



STUDY 01: 50% glazing with 800mm upstand. Having an upstand blocks views down to the park from the bed and lacks any unique character.



STUDY 02: 50% glazing with angled windows. Playful and irregular windows - counterproductive in creating a calming and pleasant space.



STUDY 03: 50% glazing with full height glazing on 500mm module. The narrow spacing feels constrained.



STUDY 04: 50% glazing with full height glazing on a 1m module. The views created by making the glazing full height feel generous and offer views down the park.

5.0 ARCHITECTURE

5.5.5 WARDS FACADE

A single skin unitised aluminium curtain wall system is shown enclosing the ward floors. The external face in this system is almost entirely glass. In the medium to long term glass is probably the most easily maintained of building materials, having a largely inert and cleanable surface. It is also relatively lightweight, a desirable characteristic for the cladding of this building from an engineering point of view.

A single skin curtain wall system most closely matched the aesthetic quality sought by the design while still aligning with the cost plan and performance requirements.

Shading provided by high-performance coatings or fritting on glass can provide good efficiency for the lowest additional cost in use and capital expenditure. The fritted white ceramic patterns indicated would be bonded to the inside of a double glazed unit so not subject to weather and wear.

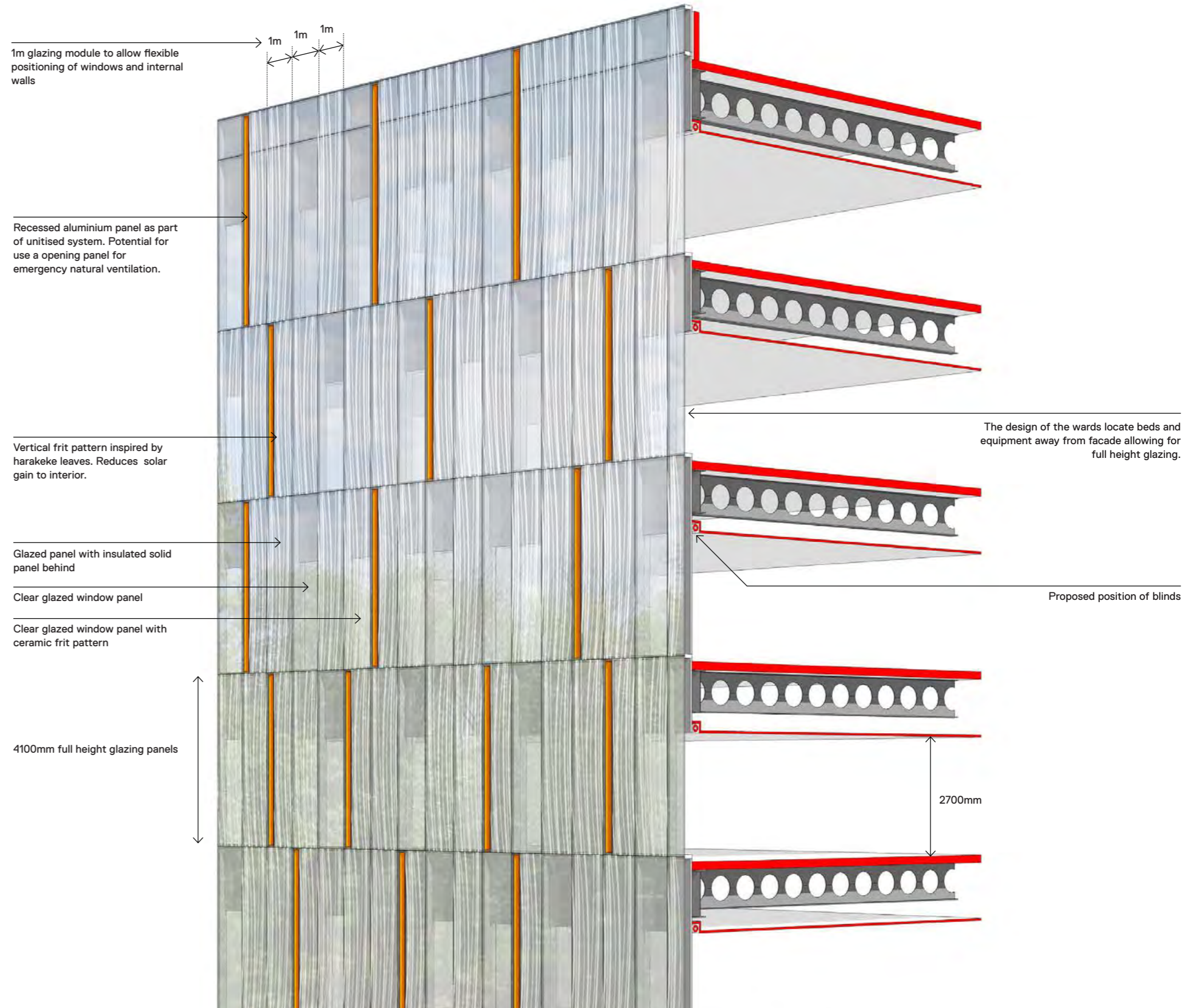
Reducing the glazing area by introducing additional solidity is an alternative that potentially reduces or obviates the need for external shading devices, without being detrimental to solar control performance. Introducing 50% solidity into the facade helps to create a balance between views out and reducing incoming solar gain and glare in summer and heat loss in winter. To retain a consistent glazed finish to the ward towers we have proposed glazed panels with insulated solid backing as part of unitised system.

The curtain wall system proposed has a high degree of standard modularisation and its level of repetition relates directly to the ward bed configuration. To avoid creating an overly repetitive and flat surface the facade design uses 3 simple devices:

1. Staggering the window openings and solid backed panels between floors helps to avoid vertical bands of solid and opening.
2. Not applying the ceramic frit pattern to all window openings creates 3 panels types - clear glazed, clear glazed with pattern, and glazed with pattern plus solid backing. This helps to break down the regular solid/opening rhythm.
3. Introducing coloured recessed slots randomly spread across facade gives a texture and grain to the surface. The visual impact of the recessed slots varies depending on the light condition and angle of view - giving the wards a level of animation not possible with purely flat facade.

These aspects have been discussed with local New Zealand suppliers who see no difficulty accommodating them within their standard glazing systems.

The ward levels are almost entirely covered by the unitised system, which is beneficial in terms of avoiding or reducing complex inter-trade responsibilities.



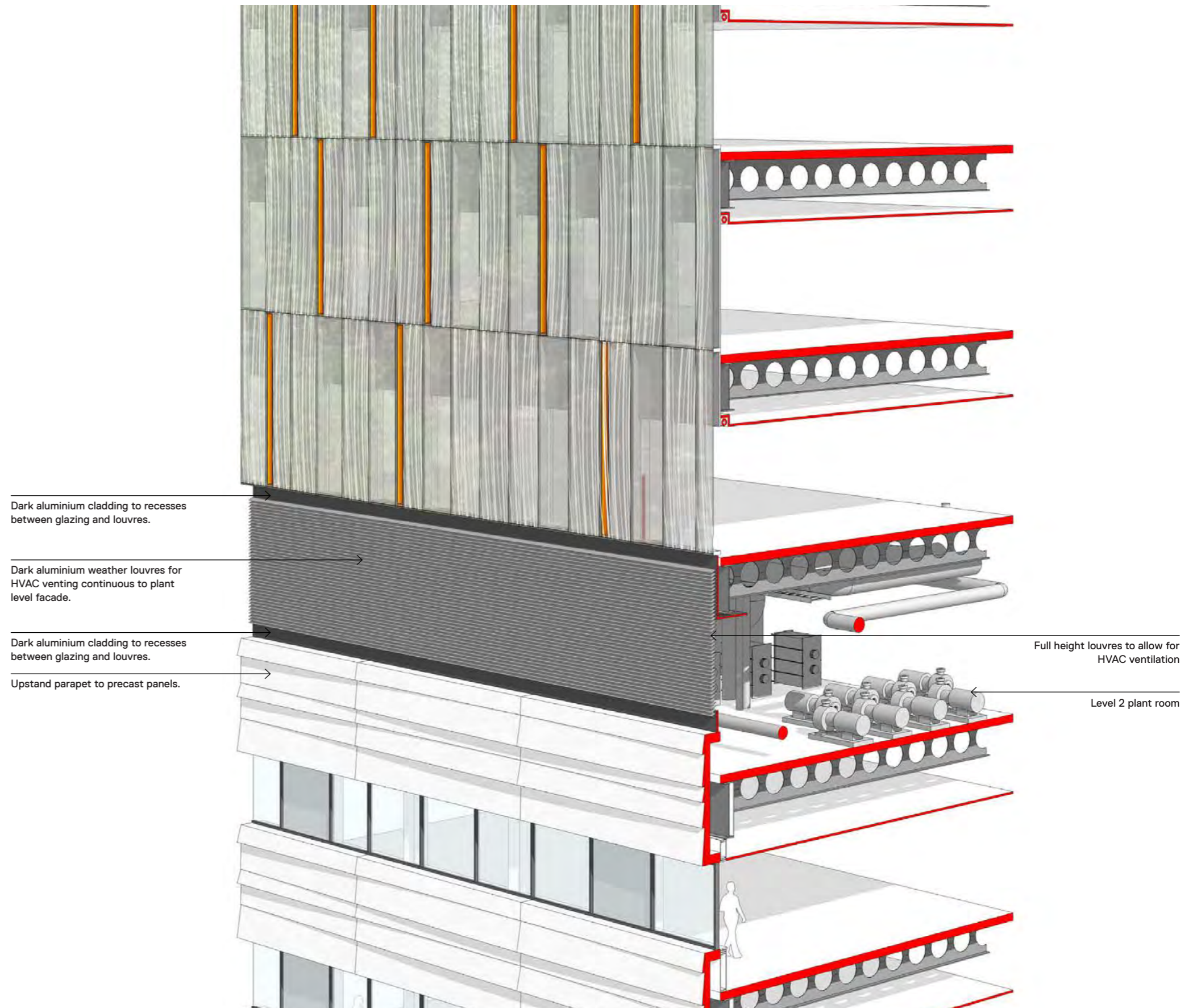
5.0 ARCHITECTURE

5.5.6 PLANT LEVEL FACADE

Level 2 of the building has been set aside for mechanical plant and back of house functions. Large areas of the facade are required for the ventilation and are louvred. Initially at concept stage the plant level facade was set back to reduce the visual impact of the plant facade to create a strong recessed break between the concrete podium and glazed ward towers. The development of the internal planning during the preliminary design phase meant that a recessed plant level facade would be difficult to incorporate. Instead the plant level is entirely clad in louvres set flush to the wards tower glazing. Recessed 'shadow gaps' separate the plant level facade from the wards and podium facade finishes and creates a distinct metallic band of louvres.

Moving the louvres to the outer face of the building masks the structure and simplifies the detailing and construction of the plant level facade. The continuous louvre treatment of plant level emphasises its simple geometry and creates another minimal and textured element in keeping with architectural language of the podium and wards.

Further development of the level 2 plant room facade will be undertaken in the next design stage.



5.0 ARCHITECTURE

5.5.7 PODIUM FACADE

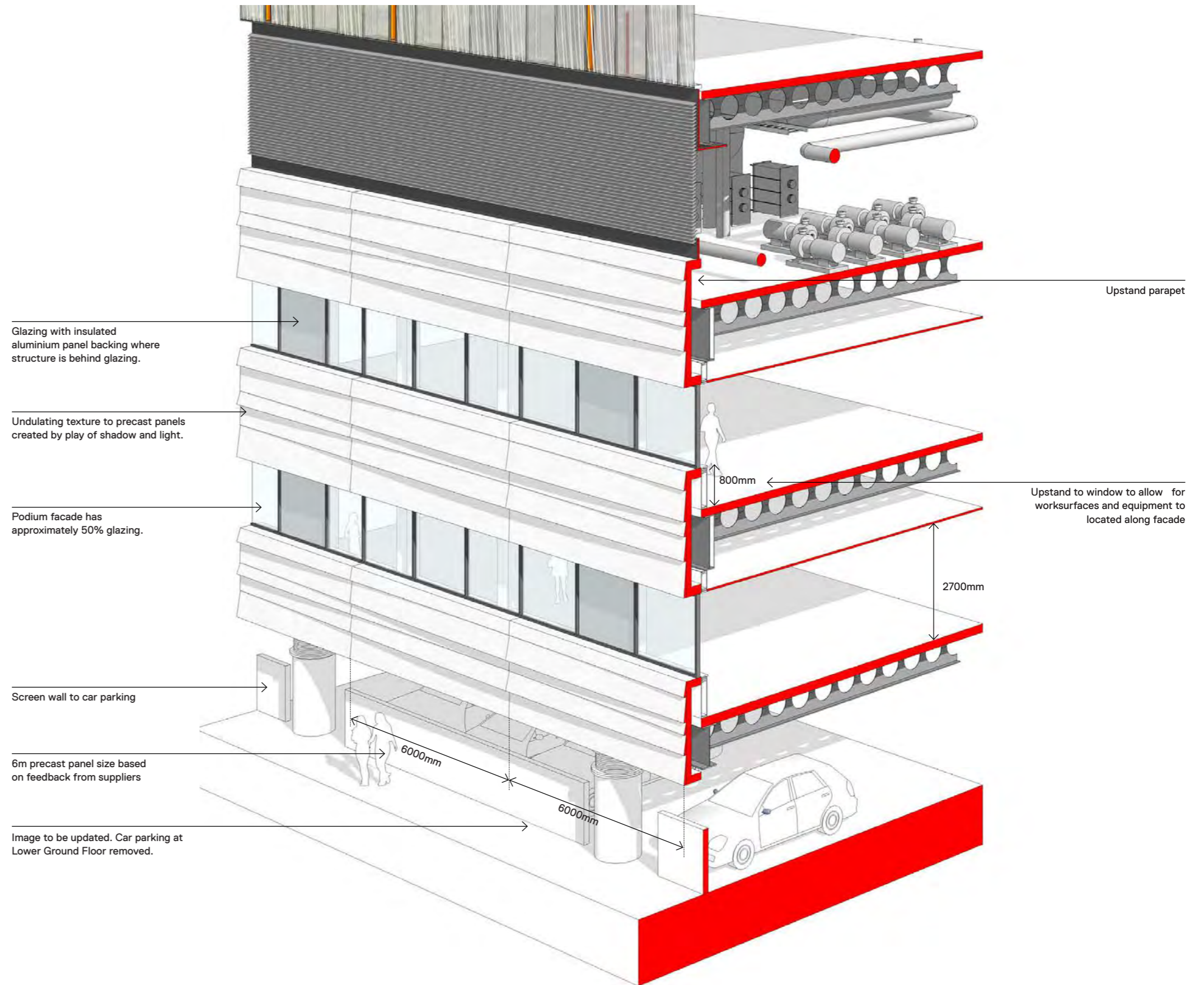
At the ground level the building will be an imposing presence in Hagley Park- these views are discussed in the urban design section. It is felt that a system with some texture, variety and depth will help to reduce the this feeling of massiveness. Precast concrete is suitable for this task as it is able to be moulded to produce textural and asymmetric effects relatively easily. It is also durable and requires little maintenance, depending on the design and surface finish intent. Initial design studies looked at a heavily textured finish in contrast to the glossy translucent curtain wall above. The current façade design has evolved to show the possibility of a visually textured but lighter concrete base that references the whiteness of the existing Women’s Hospital adjacent, and projects a clean, optimistic, modern building.

While the podium cladding seeks to avoid repetition, it consists of an almost continuous strip of glazing on both levels between 800mm above floor and the 2700 ceiling height. When taken into account the many small spaces which make up the podium as a functioning unit, the windows proposed will be generous in each room. The 800mm upstand along the podium façade gives the internal spaces a greater degree of flexibility as work surfaces and equipment can be placed against the facade. This flexibility is important as the podium houses a variety of diagnostic and treatment facilities with different layout requirements. As the design of the podium spaces develops the optimal upstand/sill height may alter. The glazing band is continuous along the podium façade allowing maximum flexibility for placement of rooms along the outer edge of the building, ensuring that all spaces on the perimeter have access to good views and daylight.

A result of the continuous strip of glazing is a strong horizontal banding of the podium façade. A subtle undulating texture on the precast concrete panels produces a liveliness through the play of shadow and light that emphasizes the horizontal banding in a manner that hints at natural phenomena such as metamorphic rock formations or flowing water. The podium forms a 160m long edge to Hagley Park and creating a surface that is attractive and interesting will help to minimize the visual impact the new building has on the park.

The precast panels sizes have been limited to 6m lengths on the advice of local suppliers. The pattern is repeated over 4 panels to limit the number for moulds required while creating a texture that is not overly repetitive.

Replacing the precast concrete panels with glass reinforced cement (GRC) panels was also explored in this stage. The potential benefits could include a lighter building and easier construction. The GRC panels would be a different module and the wall build up and detailing would need to be explored in more detail in the next stage to test if it is a viable replacement for the precast panels.



5.0 ARCHITECTURE

5.5.8 ENTRANCES

The position of the new Acute Services Building has been driven by the availability of free space and the need to connect the new facilities with the relevant functions in the existing buildings. The result is a building set back from the street edge and that is slightly disconnected from the activity of the street. This can be mitigated by a canopy and landscaping that reaches out to Riccarton Avenue and directs pedestrians to the new buildings. This connecting zone has been identified as key space in the landscape design (see zone B on plan below) and could feature signage, 'gateway' tree planting, and tree/canopy uplighting to give emphasis to the new building entrance.

A secondary drop-off entrance point is located on lower ground. This area is shared with the ambulance drop-off to the Women's hospital and the oncology building. This area has also been highlighted in the landscaping design a potential plaza area with a shared vehicle/pedestrian surface incorporating planting seating (see zone C on plan below).

We have suggested a common architectural language for the canopies and link bridges to reduce the number of competing visual elements and create a more unified overall building form. The current proposal indicates steel and glass canopies and links bridge with a matching metallic finish to the level 2 plant facade. The canopy and car parking design are currently only indicative and are dependent on procurement and scoping of the car park building.

5.5.9 FACADE MAINTENANCE

Initial consideration has been given to how the facade may be maintained. Two possible methods have been considered and will need to be explored further in the next stage. One option would be to have a cleaning scaffold that can move around the building on a roof mounted rail system to maintain the wards glazing. This option could be expensive and difficult to install where the roof structure is light weight.

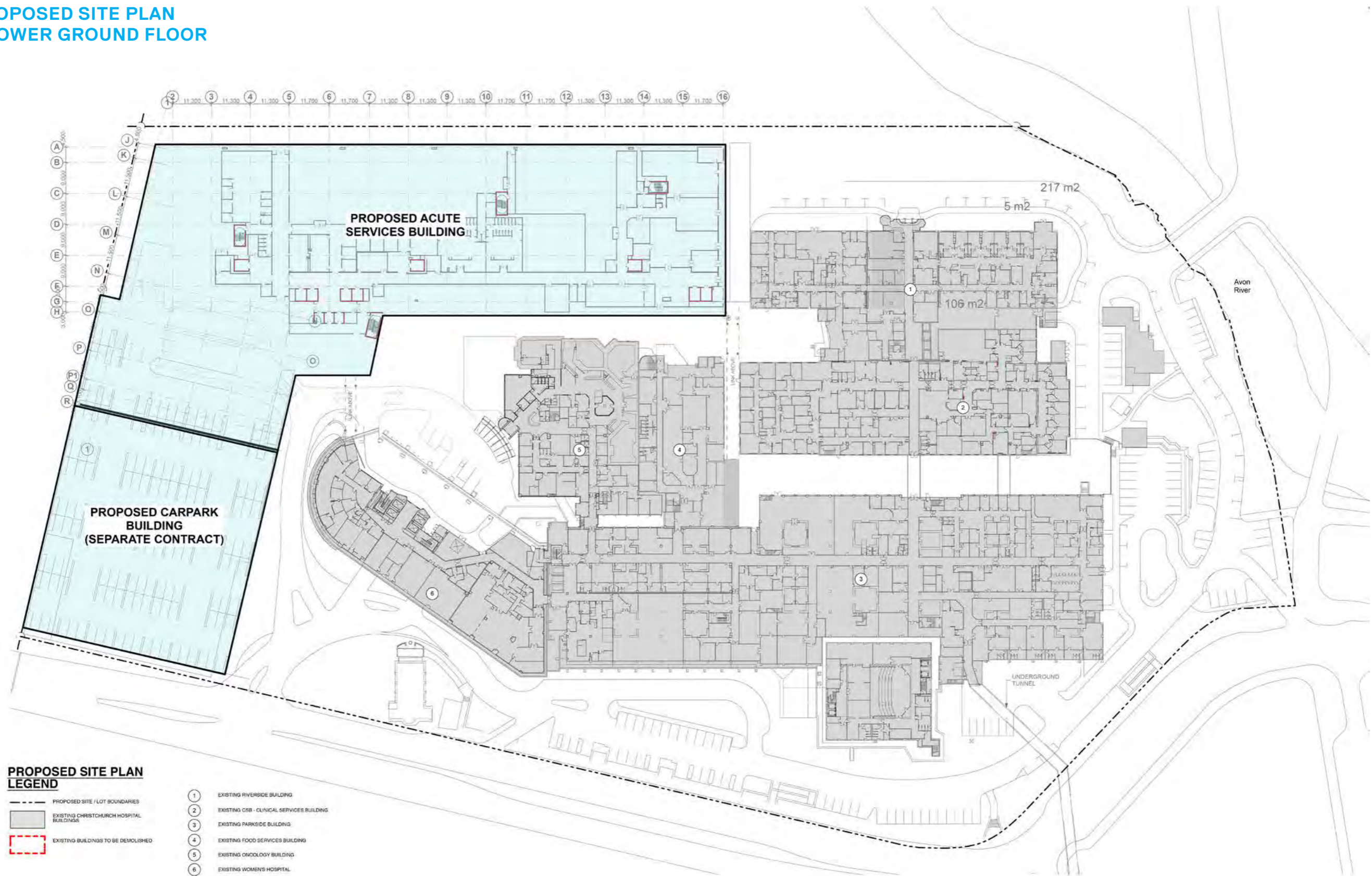
Another option would be to install steel posts at regular intervals on the roof and use removable gantry arms to support a cleaning scaffold that is moved around the building at ground level with the gantry arms being removed and repositioned as the scaffold moves around the building. This option requires a clear zone at ground to access the perimeter of the ward and could be difficult where the base of wards facade sits on top of the podium. This option will need be to developed further it the next stage.

The podium facade is only 3 stories in height and could be maintained at ground by a mobile cherry picker. This would require that a clear path around the perimeter of the building to allow for this option.



5.0 ARCHITECTURE

5.2.3 PROPOSED SITE PLAN - LOWER GROUND FLOOR

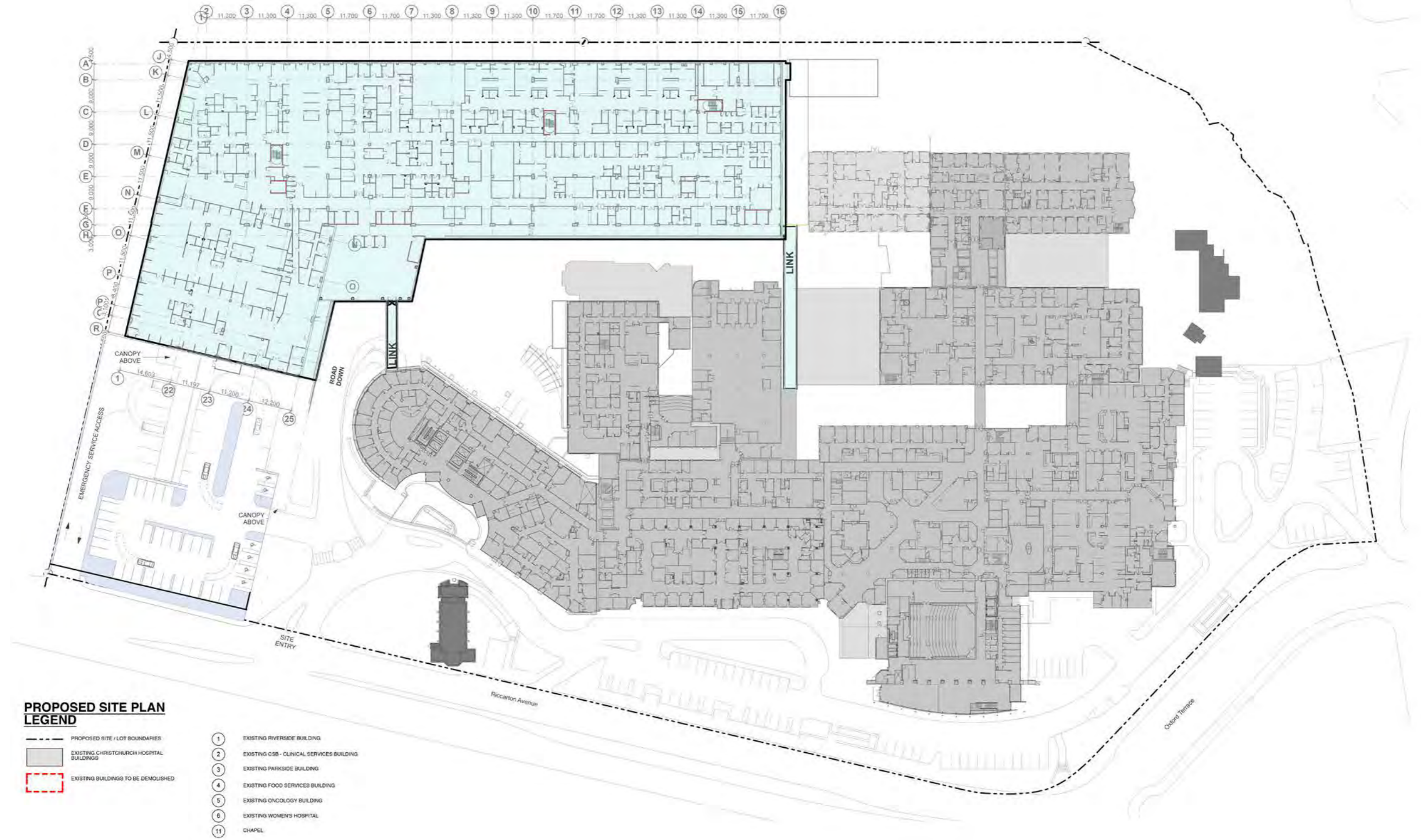


**PROPOSED SITE PLAN
LEGEND**

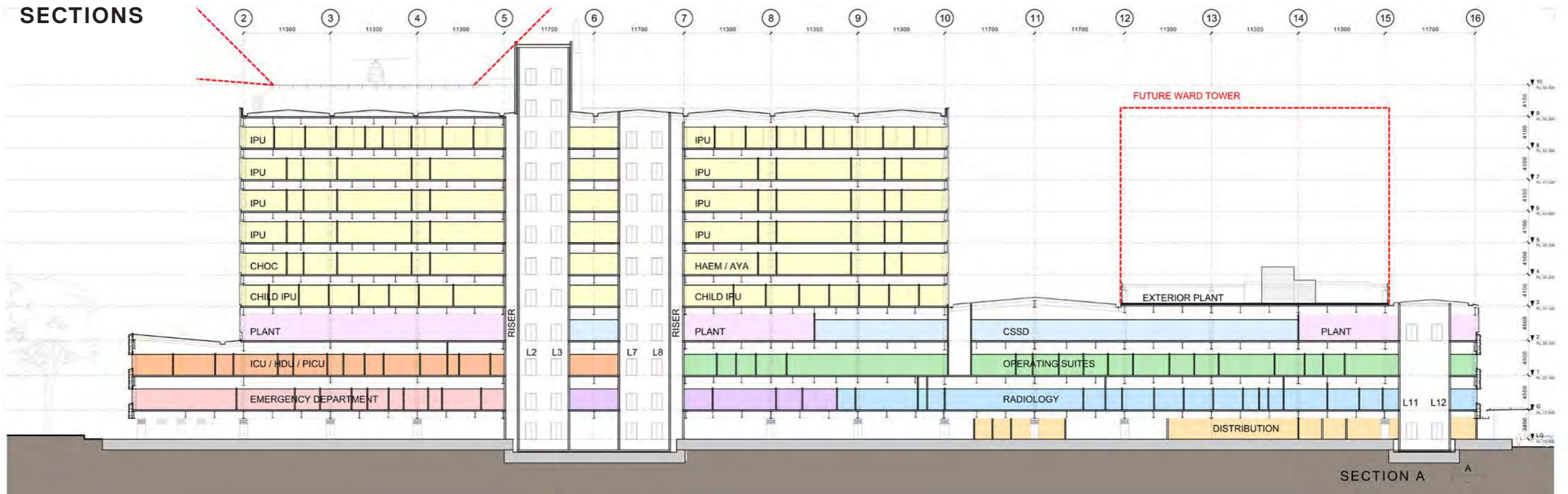
- PROPOSED SITE / LOT BOUNDARIES
- EXISTING CHRISTCHURCH HOSPITAL BUILDINGS
- EXISTING BUILDINGS TO BE DEMOLISHED
- ① EXISTING RIVERSIDE BUILDING
- ② EXISTING CSB - CLINICAL SERVICES BUILDING
- ③ EXISTING PARKSIDE BUILDING
- ④ EXISTING FOOD SERVICES BUILDING
- ⑤ EXISTING ONCOLOGY BUILDING
- ⑥ EXISTING WOMEN'S HOSPITAL

5.0 ARCHITECTURE

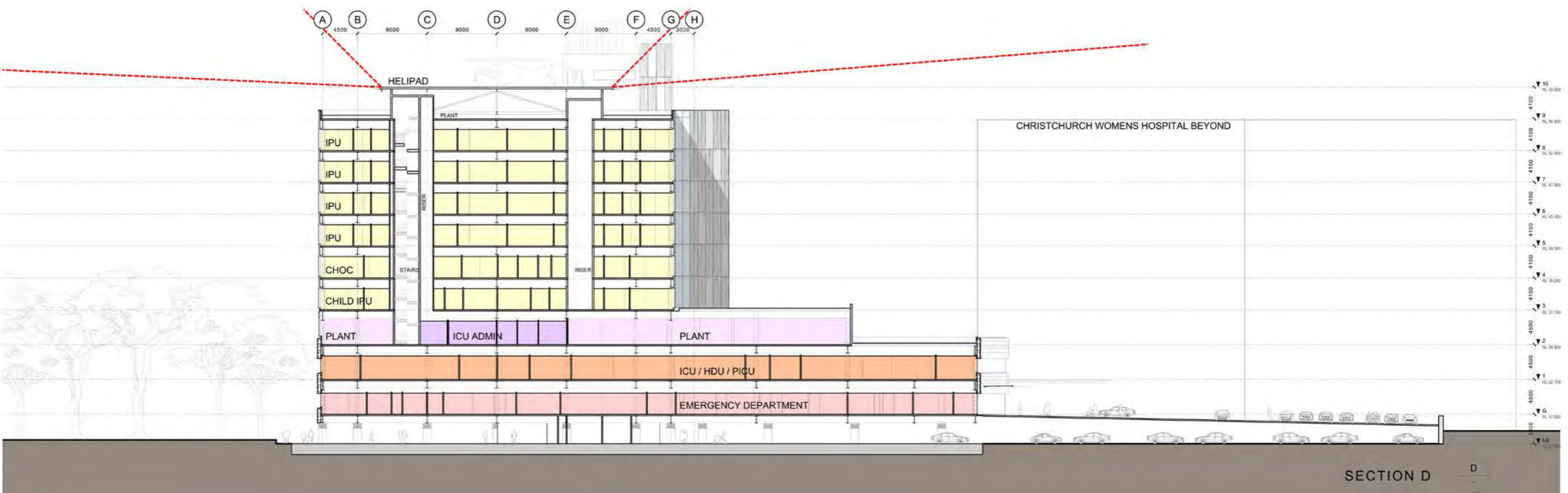
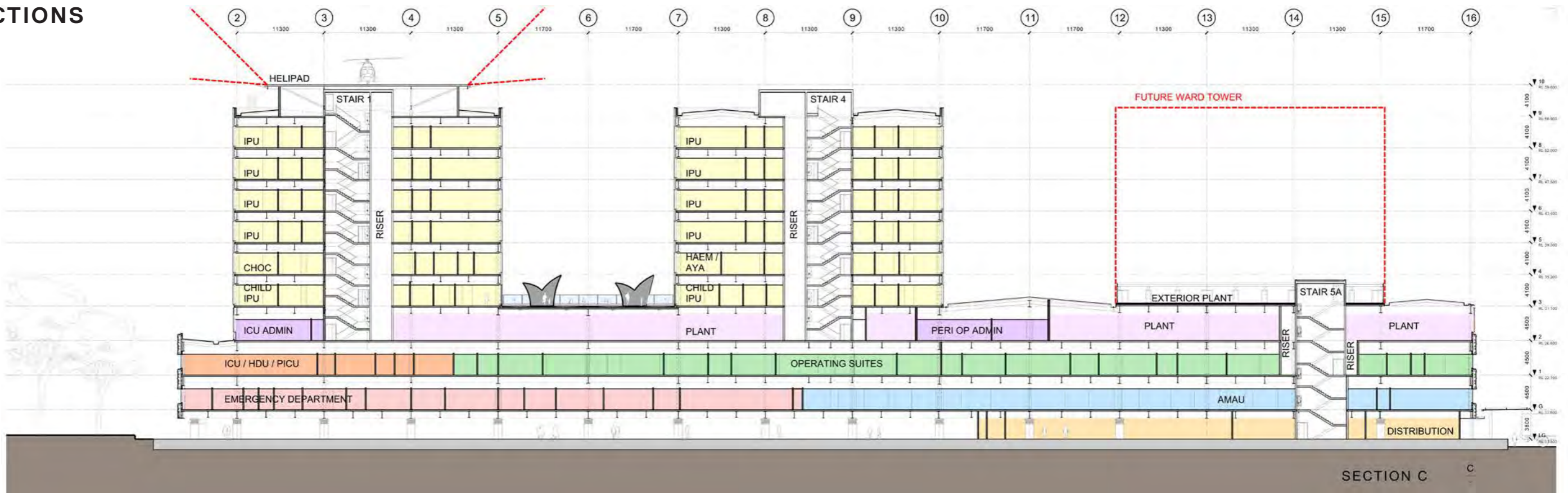
5.2.4 PROPOSED SITE PLAN - GROUND FLOOR



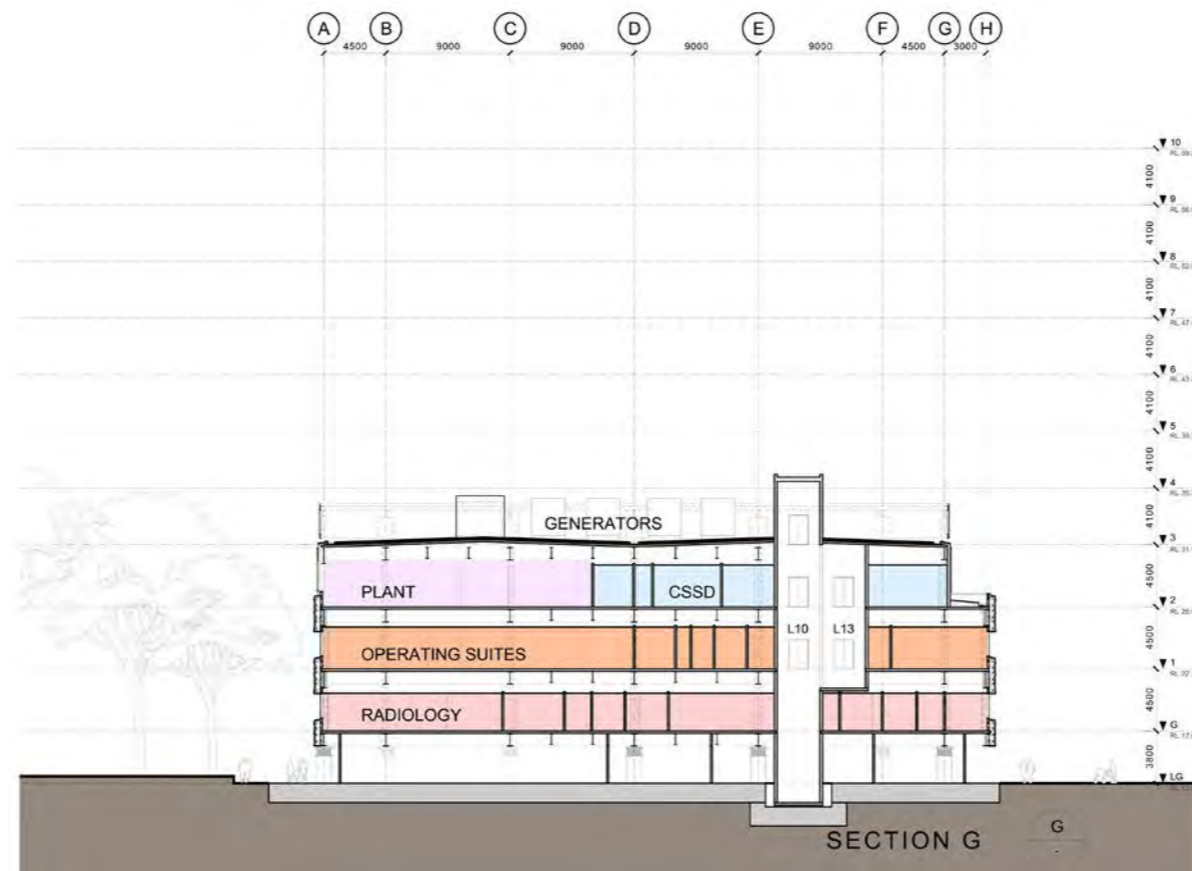
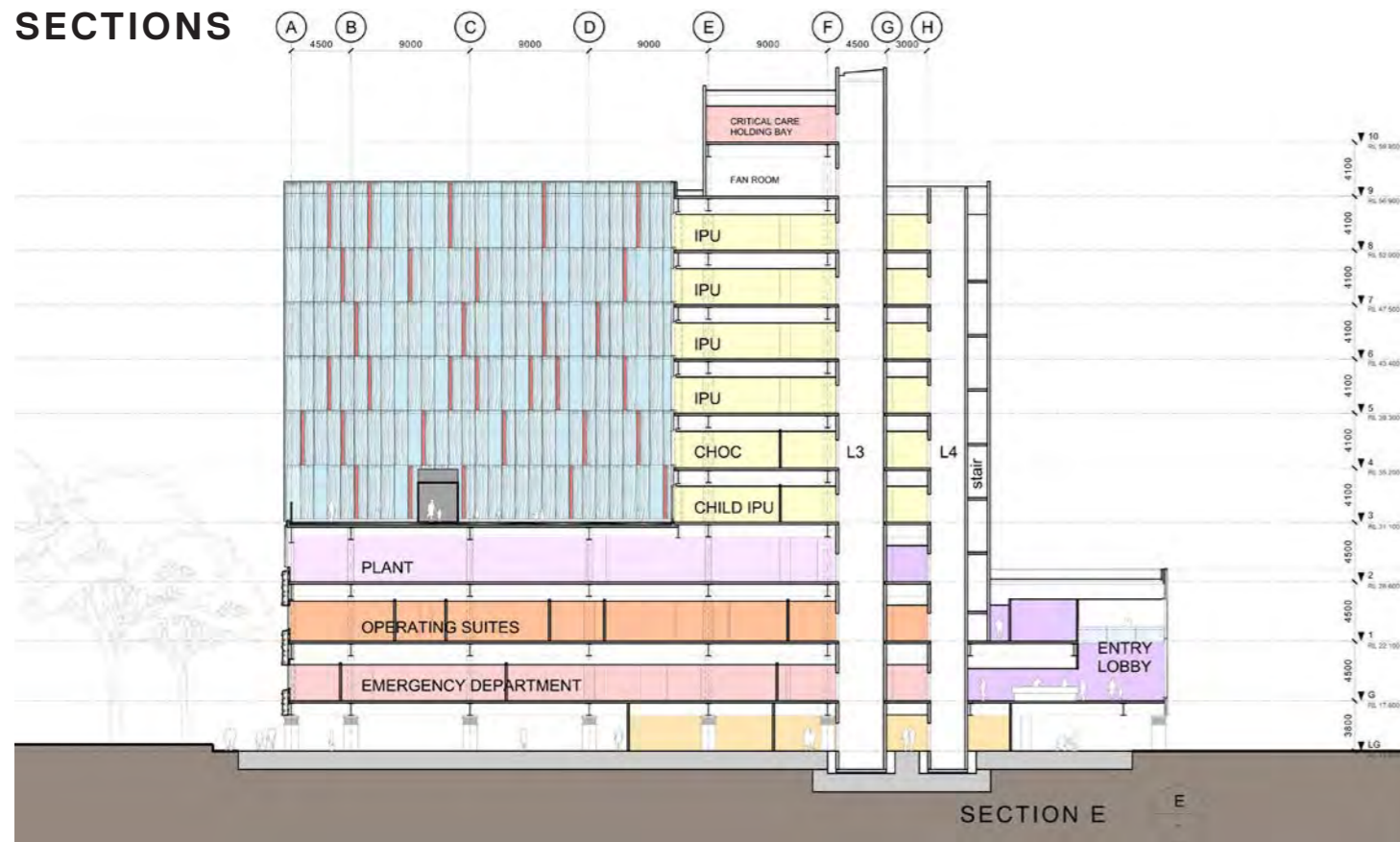
5.4 SECTIONS



SECTIONS

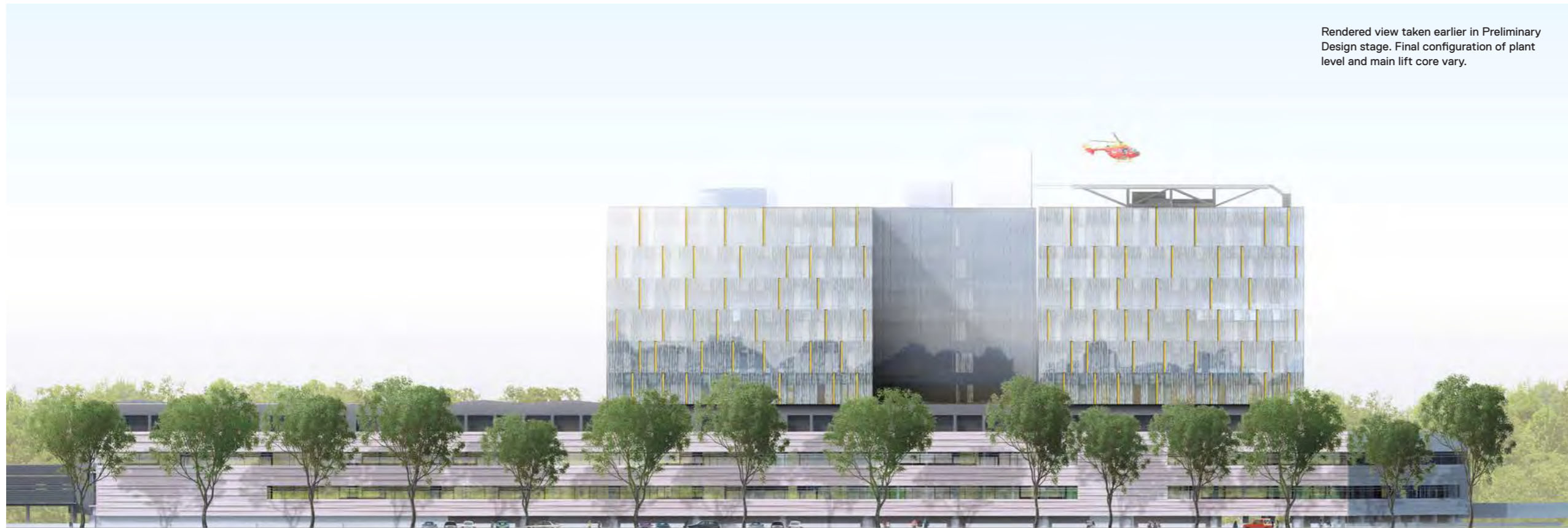


SECTIONS



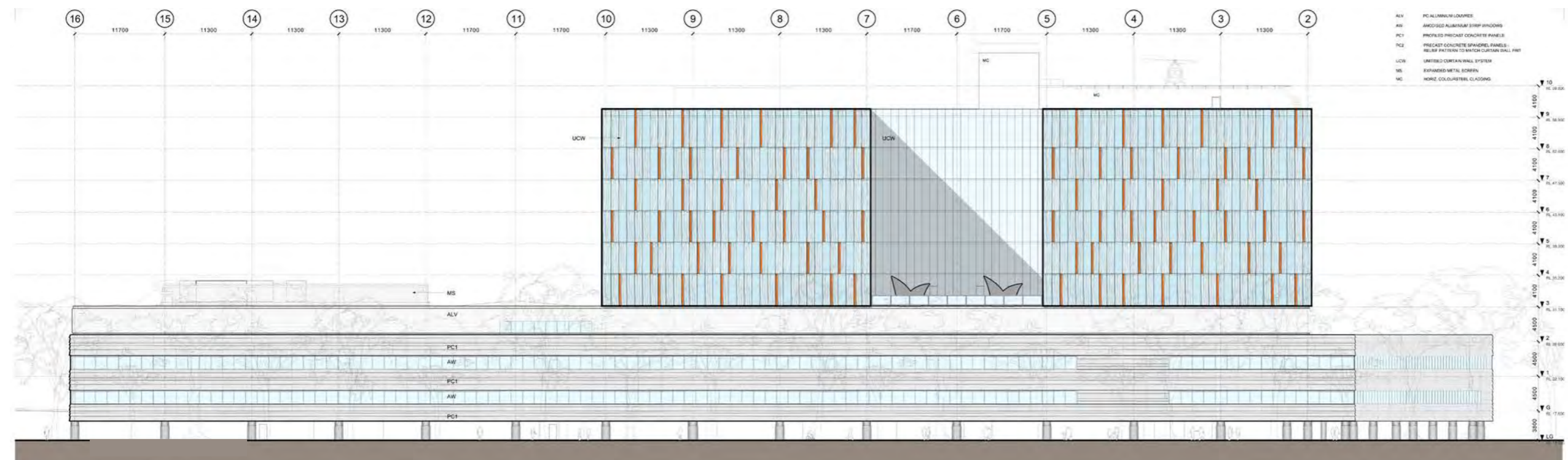
5.0 ARCHITECTURE

5.5.3 ELEVATIONS



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.

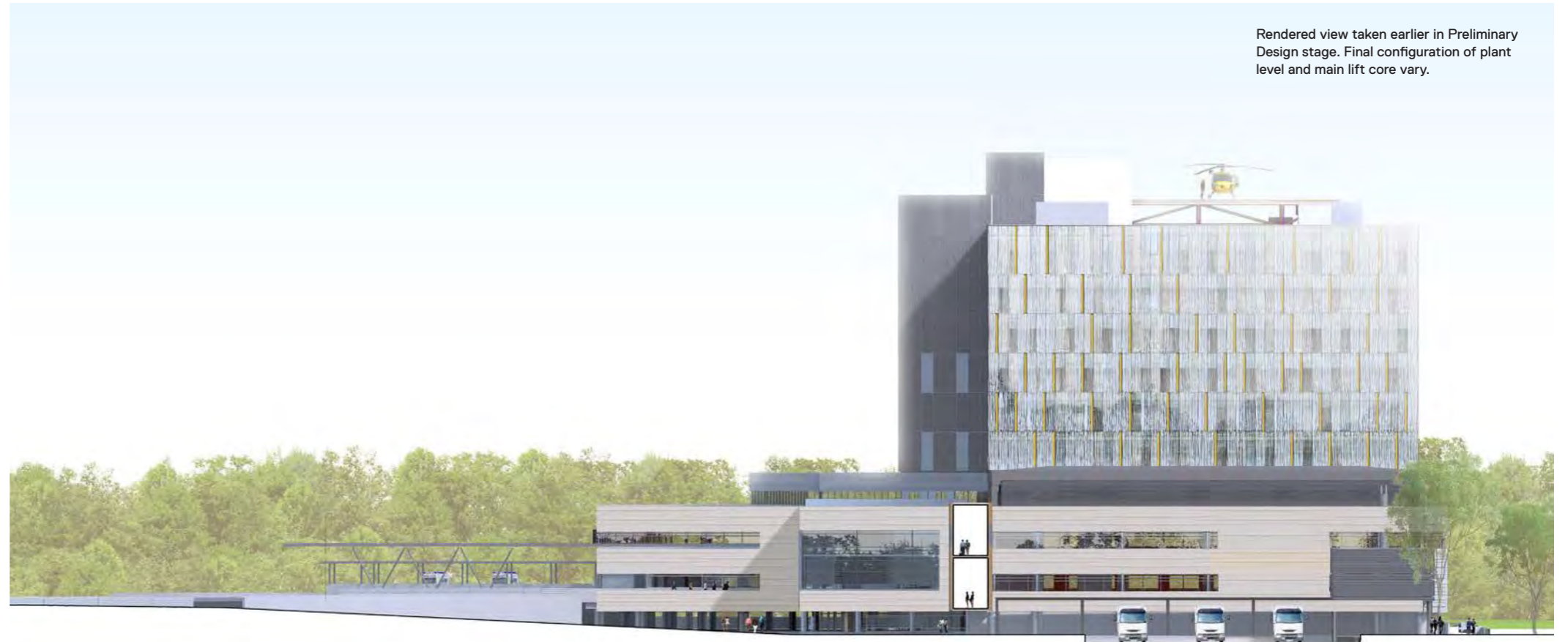
NORTH ELEVATION - RENDERED VIEW



NORTH ELEVATION

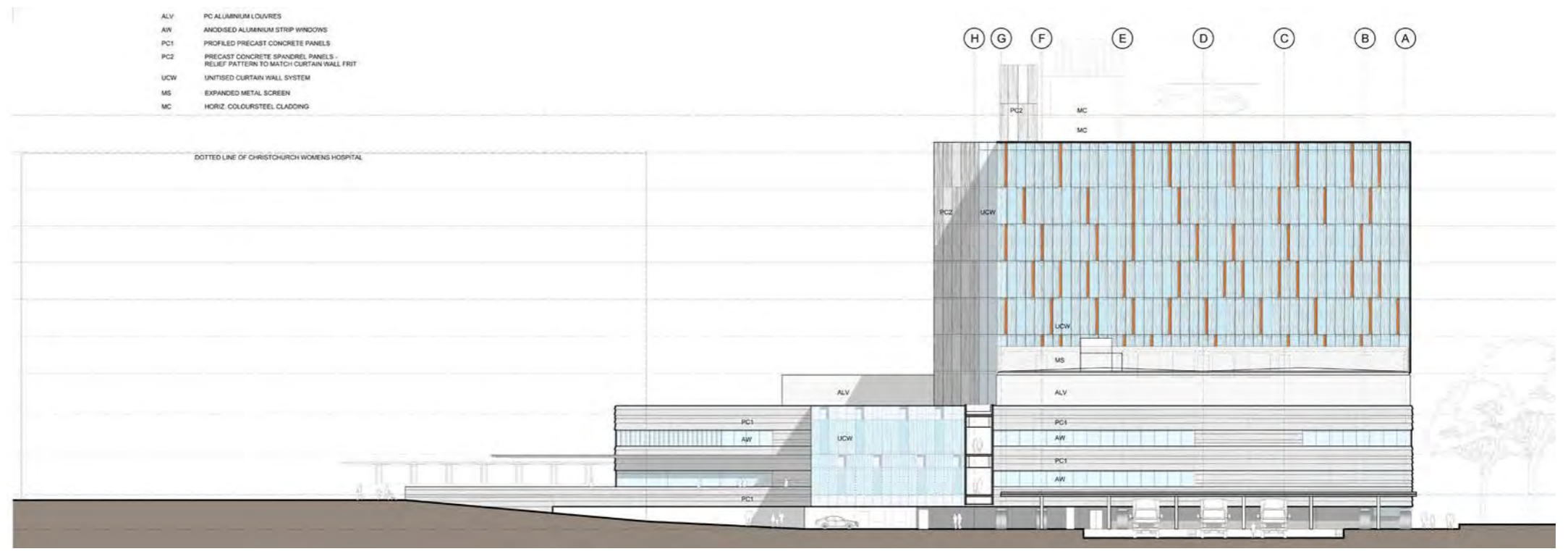
5.0 ARCHITECTURE

ELEVATIONS



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.

EAST ELEVATION - RENDERED VIEW



EAST ELEVATION

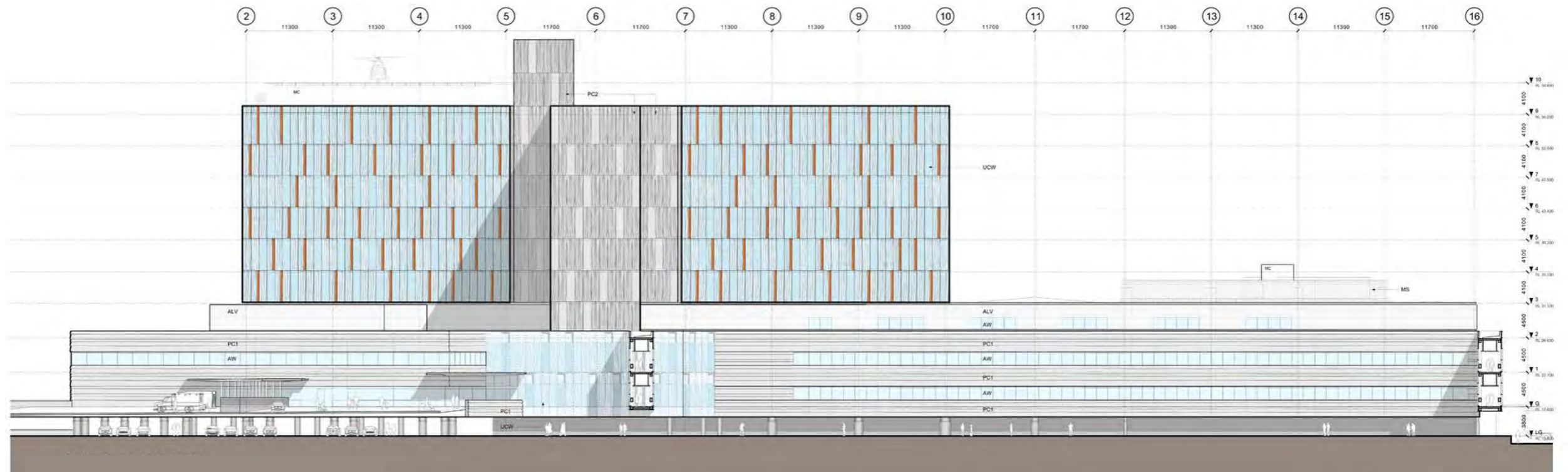
5.0 ARCHITECTURE

ELEVATIONS



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.

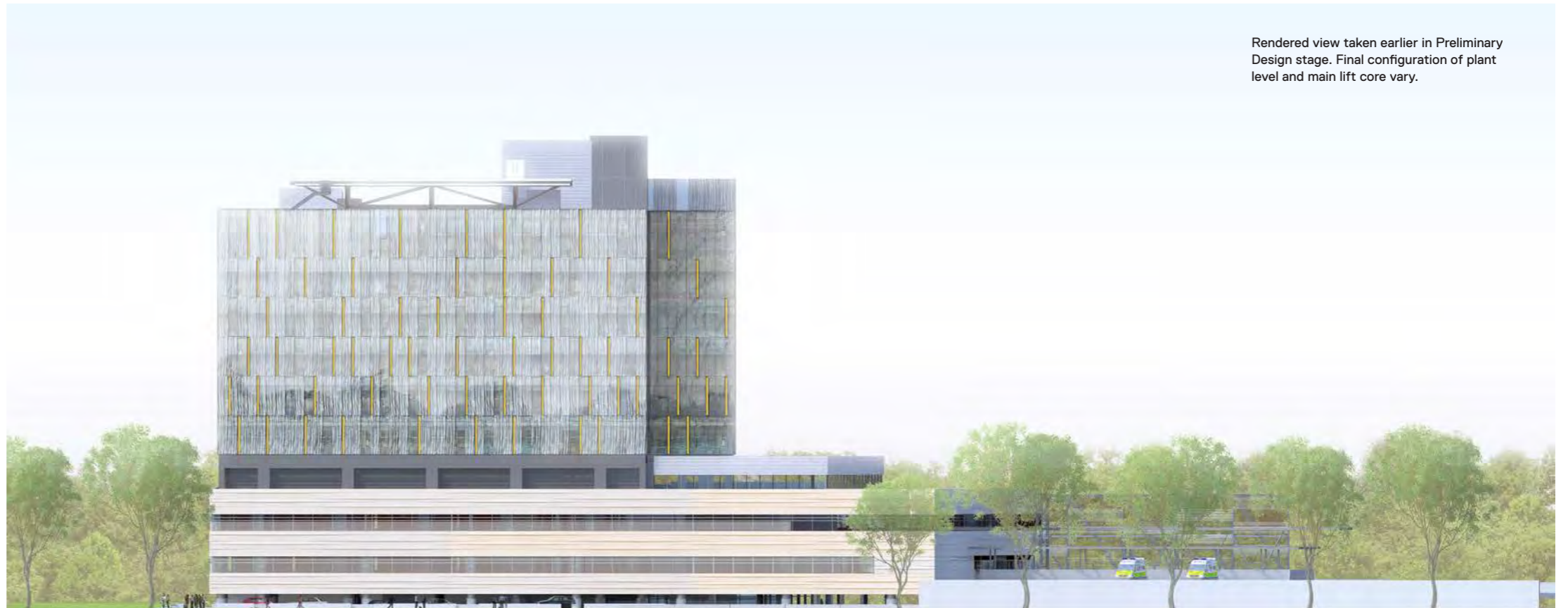
SOUTH ELEVATION - RENDERED VIEW



SOUTH ELEVATION

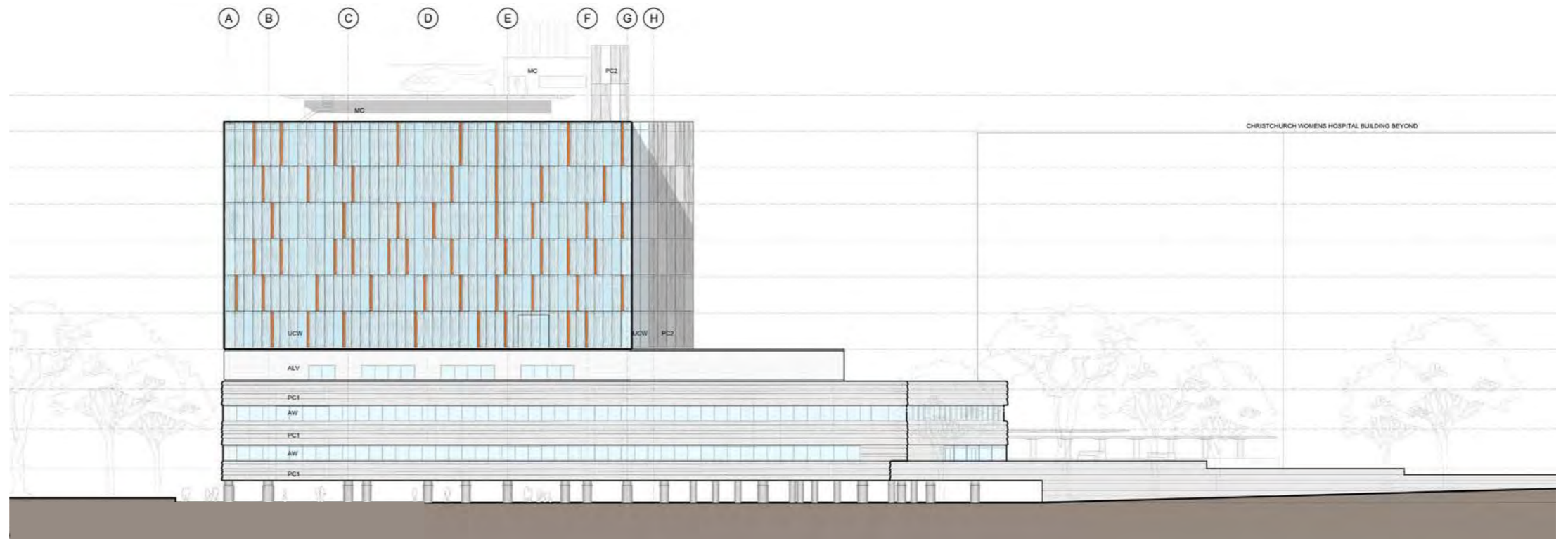
5.0 ARCHITECTURE

ELEVATIONS



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.

WEST ELEVATION - RENDERED VIEW



WEST ELEVATION



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.



Rendered view taken earlier in Preliminary Design stage. Final configuration of plant level and main lift core vary.







LANDSCAPING

5.0 ARCHITECTURE

5.7 LANDSCAPE ARCHITECTURE

Landscape design has been specifically prepared for key zones around the ASB Building.

5.7.1 ZONE 1 - RICCARTON AVENUE & ACUTE SERVICES ENTRANCE

- Consider extension of mature tree character of Riccarton Avenue along with visibility of the Emergency Department (ED). Incorporate low shrub planting from the face of the building to the public footpath. (Ensure ventilation to carpark is not compromised.)
- Potential to combine balustrade and screening to the southern (and south east corner) facade of the car park building as one continuous element i.e. vertical modular panels with perforations, varying transparencies, variety of lengths, act as balustrade and extend down the face of the building – part of the car park design-build project.
- Discuss with Council the potential to upgrade the public footpath to tie in with ASB entrance path.
- Development of this zone will be influenced by the development of the ED pick up – drop off zone. There is potential to reinforce the ED entrance thru canopy structures and lighting. May consider vertical elements to extend through ED canopy as potential way finding markers which could be lit at night, refer to Architects.
- Develop hierarchy/differentiate between ED canopy, ambulance canopy and Acute Services entrance canopy, refer to Architects.
- May require drainage, refer to Civil Engineers.
- Approx. 4.8m wide direct pedestrian connection from Riccarton Avenue to the ASB entry lobby. Proposed concrete path with ramps (minimal and/or accessible gradients) where required to accommodate level changes, lightly exposed and acid etched. Vehicular grade crossing where this path crosses the entrance onto the car park podium. Ramps may require a low (400-450mm) retaining wall. A balustrade will be required for a significant portion of this 4.8m path, approx. 50%. Balustrade to be vertical modular panels with perforations, varying transparencies, variety of lengths, act as balustrade and extend down the face of the building. Bottom of extended balustrade to be cut to a curve, reinforcing concept of ‘continuous flow’.
- Wide pedestrian connection to the ASB entry doubles as car park spill out arrival space with informal seating elements. Flush transition for accessible car parks.
- Removal of existing water feature, removal of portion of stone retaining and re-configuration to bicycle park area of Christchurch Women’s Hospital to incorporate a 2m wide footpath adjacent to Christchurch Women’s Hospital and connection across to ASB entrance path. The

proposed new Christchurch Women’s Hospital path extends the connection along the front of the existing hospital buildings, parallel to Riccarton Avenue. May require adjustment to some existing services, requires further investigation. All works to avoid Christchurch Women’s Hospital’s seismic joint. Existing pavement treatments to be considered and integrated with new pedestrian routes.

- Additional path and road crossing, vehicular grade construction linking the ASB entry path with Christchurch Women’s. Assumes potential grading to road to start north of the proposed crossing.
- All proposed paths to have specified aggregate mix and coloured oxide lightly exposed and/or acid etched finish with decorative saw cuts.
- Proposed low to medium shrub planting to provide separation between vehicles and pedestrians.
- Potential for avenue of specimen trees aligned with 4.8m ASB entry path and canopy. Trees proposed to directional vertical element to the ASB entry canopy and to add amenity to the proposed car park podium. The trees also provide shade and amenity to seating areas along the path. Trees to be up-lit for night time way finding. Sightlines to be taken into consideration. Further investigate required re. extent of car parking below. Tree species to link with adjacent mature trees in Hagley Park.
- Canopy to direct visitors to the Acute Services Entrance and provide additional cover to ED pick up – drop off area.
- Signage, refer to Way Finding Strategy.
- May require drainage, refer to Civil Engineers.

ZONE 2 - PICK UP-DROP OFF AT LOWER GROUND FLOOR

- This area’s primary function is vehicular movement, pick up and drop off for Acute Services, Oncology and Women’s.
- Final levels and drainage to be developed. It is understood that diesel tanks and waste water tanks in this area will be able to be driven over and access manholes/covers will be flush with ground level. Vent pipes will run underground to a building (perhaps Oncology) and up the face of the building.
- Design to be simple with robust materials built to withstand large vehicle turning movements.
- Some low shrub planting and decorative concrete pavement to be incorporated in the immediate vicinity of the lower ground floor access/lift area.
- Design to allow for future extensions to Oncology.
- Allow for extension to existing Oncology canopy (with lighting) and incorporation of seating.
- Allow to modify existing 90 degree parking area

immediately adjacent to Christchurch Women’s Hospital, removal of car parks, removal of VIE tank and development of a ‘green island’ with low to medium shrubs and specimen trees.

- Drainage, refer to Civil Engineers.

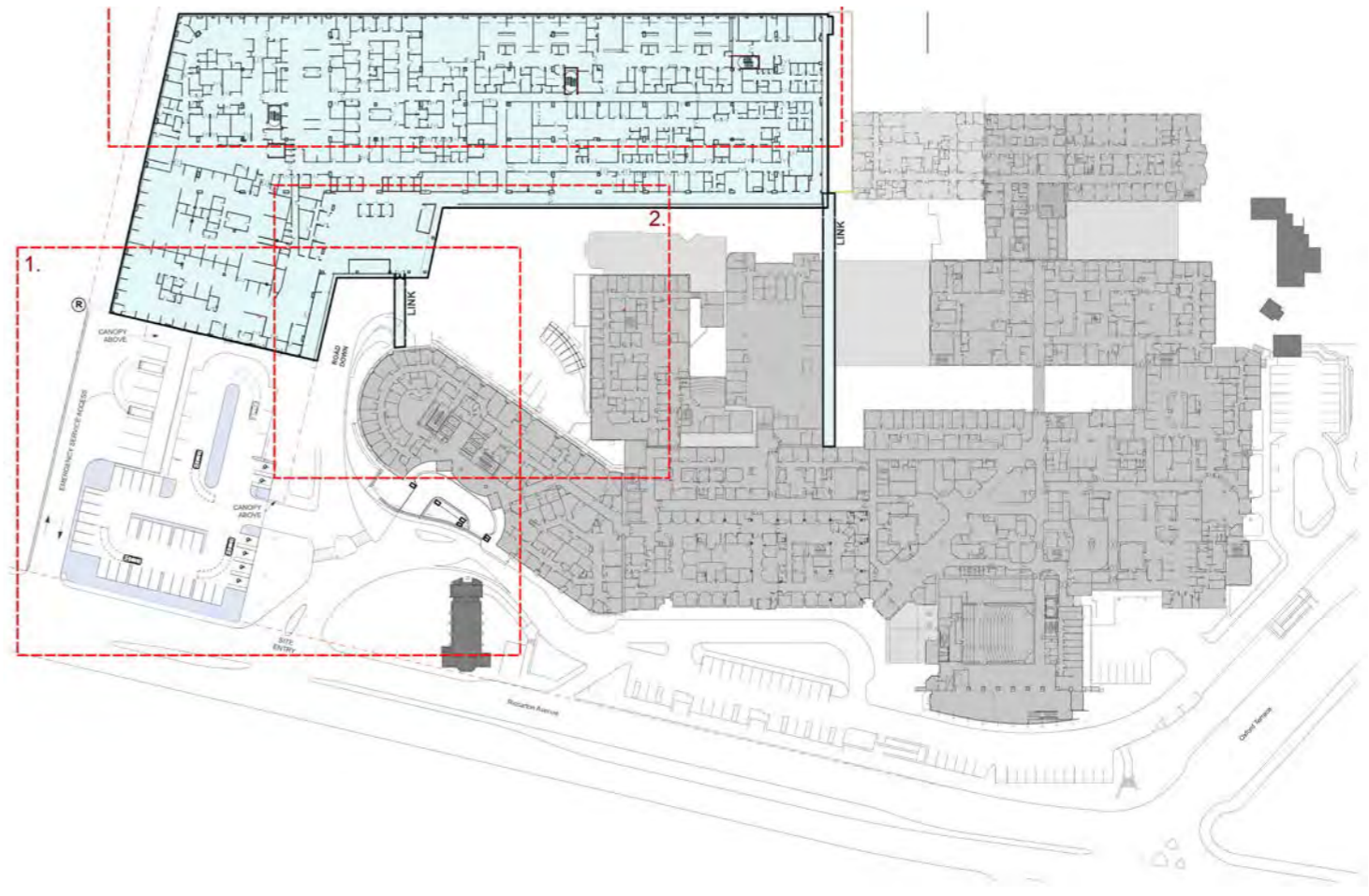
ZONE 3 - HAGLEY PARK SIDE (NORTH & WEST SIDE)

- Develop the concept of a ‘Verandah’ – terrace to the Park.
- Develop transition spaces between seating/contemplation spaces and consider access points into the Park.
- Retain along boundary to delineate between the public Park and the Hospital property while extending width of level access/space. Consider incorporation of lighting within the retaining wall.
- Ensure level paved area for patient access (beds and wheelchairs) and some level access into the Park.
- Pavement treatment to be lightly exposed, sand blasted and/or acid etched finish with decorative saw cuts and/or areas of Ballatini-strada (Resin Surfaces Ltd) or similar product. Exact treatment/finish of pavement to be

determined in liaison with the Structural Engineer, as it forms the foundation ‘raft’ of the building. (extends approx. 4 metres from the edge of the building.

- Incorporate areas of low to medium shrub planting.
- Consider edge treatment to car parking without compromising car park ventilation, possible incorporation of screening element behind seating areas.
- Consider incorporation of vertical pergola elements at access points in the Park.
- Drainage, refer to Civil Engineers.

Refer to drawings, appended to their report for detailed landscape plans.



NOTES

GENERAL

All proposed levels have been calculated using minimum grades and threshold requirements to Acute Services Building. All future car park levels to respect current proposal.

All final roading layouts and radii to be refined by Traffic Engineer.

For all drainage information refer to Civil Engineers Documentation. All existing and proposed services to be integrated and co-ordinated moving forward.

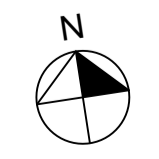
Signage type, number, location to be discussed in liaison with Traffic Engineer and Way Finding specialist.

KEY

1. Acute Services Entrance Axis
Approx. 4.8m wide direct pedestrian connection to Riccarton Ave. Ensures key sightlines are maintained to all entrance ways. Avenue of specimen trees visually strengthen / frame / clearly define ASB entry. Tree species potentially selected from those identified in the Hagley Park Management Plan 2007 - Area F Hagley/Riccarton Aves e.g. Golden Ash. Potential up-lighting for night time way finding. Specimens give a visually appealing outlook from within CWH and ensure character integration with adjacent mature trees at Hagley Park. Entrance path doubles as car park spill out / arrival space. Potential loss of one or two lower level parking spaces where the ASB path connects to the public footpath.
2. New blade Signage to be positioned on chapel grounds, refer to Way Finding Strategy Guidelines Issue K 1403.2014.
3. Riccarton Ave Interface
Continuation of specimen tree avenue along Riccarton Ave. Tree species potentially selected from those identified in the CHCH Botanic Gardens Management Plan 2007 – Harman’s Grove e.g. Quercus robur. (Robur is latin for hardwood, oak or oakwood, signifying strength and dependability). Low under planting to maintain ventilation into sub terrain (lower ground floor) car park. Opportunity to treat car park (S and S.E corner) façade as part of the landscape i.e. Vertical modular panels with perforations / varying transparencies to hint at a sense of arrival through narrative detailing. Potential for lower edge to further reinforce concept of continuous flow. Discuss with Council possibility to continue pavement treatments on public footpath to integrate with ASB entry path.
4. Car Park Threshold
Informal seating elements to complement car park spill out / arrival space.
5. Carriageway Crossings (2)
Continuation of pavement treatment with flush transition to pedestrian routes. Closely arranged decorative saw cuts to delineate pedestrian crossings.
6. Pedestrian Node
Direct connection across to existing CWH Entrance. Ensures continuous flow of pedestrian movement between buildings. Main circulation routes are defined through pavement treatments and surface finishes to ensure user hierarchy is clear. Green spaces provide separation to vehicular routes for pedestrian safety.
7. ASB Entrance Transition
Minimum grade ramp (1:100) transition to ASB Entry. Low retaining structure to adjoining car park space provides informal seating opportunities and potential for lighting to assist with night time way finding. Design remains flexible in terms of required accessible grades to entrance lobby. Balustrade along eastern edge provides opportunity to capture interesting detailing and minimise the vertical extent of car park structure from lower ground level. Potential for lower edge of balustrade to curve further reinforcing concept of continuous flow.
8. CWH Pedestrian Node
Existing courtyard space to be re-configured to allow for better pedestrian connections and natural / continuous flow patterns along the façade of CWH and across to ASB entrance axis. Existing stonewall to be partially re-configured to allow for new pedestrian and ramped accessible routes. Low solid retaining wall to flank ramp with balustrade detail to extend down face. Bicycle parks to be consolidated / re-configured. Existing pavement treatments to be considered and integrated with new pedestrian routes.
9. Feature Path to Lower Ground Floor
Pedestrian link to replace existing water feature. Design lines reflect ‘curved’ natural / patterning with potential for local narrative to be incorporated through detailing. Curved alignment complements facade of CWH and maintains current separation to the building seismic joint. Alignment of path maintains separation to vehicular space with 1m min. planted strip. Pedestrian connection to Lower Ground Floor to be positioned under proposed overpass, refer to Pick Up – Drop Off at Lower Ground Floor Plan.
10. Historic Milestone
Existing historic milestone to be protected and retained in current location, Riccarton Ave boundary.



Revision	Notes
A	15.05.2013 PRELIMINARY DESIGN

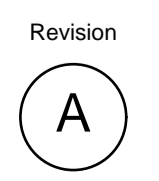


Project Title	Christchurch Hospital Acute Services Building
Site No.	01
Building No.	32

Sheet Title	Riccarton Ave & Acute Services Entrance / Arrival Landscape Plan
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Drawn:	KATOA
Checked:	KATOA
Original Scale:	1 : 200
@A1	
Printed:	15/05/14
Job No.:	13301

Drawing Number	KAT-DSK-0132-AR-251
Drawing Status	SKETCH ISSUE
Copyright:	KATOA ©



NOTES

GENERAL

All proposed levels have been calculated using minimum grades and threshold requirements to Acute Services Building.

All final roading layout and radii to be refined by Traffic Engineer.

Final size and location of pillars to pedestrian over bridge to be refined by Structural Engineer.

For all drainage information refer to Civil Engineers Documentation. All existing and proposed services and final levels to be integrated and co-ordinated moving forward.

Signage type, number, location to be discussed in liaison with Traffic Engineer and Way Finding specialist.

KEY

1. Green Island
Low amenity planting and specimen trees to provide visual relief. Low planting to continue to allow light through into Christchurch Women's lower ground floor entry. Specimen trees to be same species as those proposed for Acute Services Entrance Axis, potentially Golden Ash. Associated pedestrian pavement, treatment to match that proposed for Riccarton Ave - Acute Services Entrance pavement, to provide informal access to Christchurch Women's Hospital across to Oncology.
2. Carriageway Crossing and Lower Ground Floor Entry
Associated pavement treatment to Lower Ground Floor entry to match Riccarton Ave - Acute Services Entrance pavement. Closely arranged decorative saw cuts to delineate pedestrian crossing. Green spaces provide separation to vehicular routes for pedestrian safety and amenity.
3. Oncology Canopy
Potential extension to Oncology canopy with associated seating. Seating elements to be the same as those designed for the Riccarton Ave and Acute Services Entrance. Suggest lighting incorporated into the canopy.
4. Vehicular Turning Space / Service Area
Asphaltic surface with associated 100mm raised kerbed edge beam. Service vehicle / truck access only. Raised traffic tables connect pedestrian pavements and provide required ponding area for diesel containment. Traffic tables to continue surface finish of adjoining entrance paths.
5. Bicycle Parks
Additional bicycle parking to be located within this area.
6. Removable Bollards
Possible removable bollards to service access way.



Revision	Notes
A	15.05.2013 PRELIMINARY DESIGN



Project Title
**Christchurch Hospital
Acute Services Building**

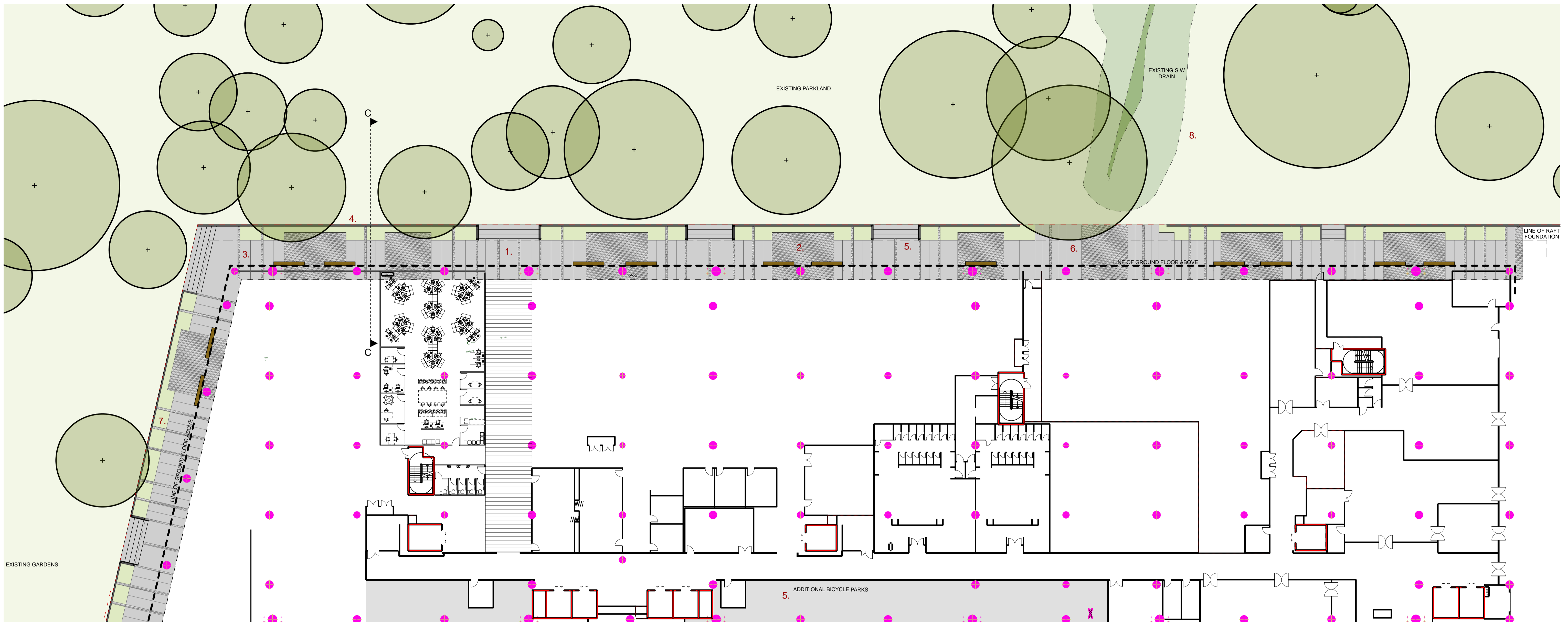
Site No.
01
Building No.
32

Sheet Title
**Pick up - Drop off at Lower
Ground Floor Landscape Plan**

Drawn: KATOA
Checked: KATOA
Original Scale: 1 : 200
@A1
Printed: 15/05/14
Job No.: 13301

Drawing Number
KAT-DSK-0132-AR-252
Drawing Status
SKETCH ISSUE
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Revision
A



NOTES

GENERAL

Relocate all existing Daffodils bulbs during construction and retain for future remedial works to Parkland edge in association with new works.

For all drainage information refer to Civil Engineers Documentation. All existing and proposed services to be integrated and co-ordinated moving forward.

KEY

1. Terrace / Verandah Intent

Develop a high degree of amenity to the Acute Service Building façade and strong connections to existing open parkland for all users.

2. Seating / Contemplation Spaces

Seats are positioned to give a variety of spatial experiences. Timber finish with detailing to remain simple yet complementing overall concept. Pavement treatment to proposed foundation raft and areas of extended pavement to be acid etched / sand blasted with decorative saw cuts (To be agreed with structural engineer) and/or areas of Ballatini-Strada (Resin Surfaces Ltd) or similar product. Surrounding garden spaces are kept minimum width to hint at a sense of openness. Suggest screening elements to open under croft spaces directly behind seating areas, further investigation needed.

3. Transitional Spaces

Primary function is for pedestrian movement between seating / contemplation spaces. Pavement treatments encourage continuous flow through these spaces via closer decorative saw cuts and pavement bands. Pavement bands continue pavement treatment of contemplation spaces at stepped intervals. Some bands extend into garden areas. Light exposed surface finish will achieve slip resistance requirement.

4. Low Retaining Treatment

Low retaining (0.8m – 0.6m - 0.4m) at boundary clearly defines public park / hospital terrace interface. Potential for solid wall construction to complement the materiality of the building façade. Low to medium planting in front of wall will soften its visual extent. Potential to light faces of wall to improve safety and way finding functions at night.

5. Steps / Access Points to Parkland

Positioning / alignment creates direct connections to the adjacent corridors and/or relates to the gaps between the existing trees to create an open connection to the parkland. Width of steps vary depending on their pedestrian volume / hierarchy. Poured in-situ construction to complement terrace finishes. Steel vertical pergola/structure to frame each parkland access point (steps). Possibly tie handrail of steps into pergola structure. In liaison with Council there is the potential for access points to connect with future Park pathways.

6. Accessible Access to Parkland

At grade access provides the option for an accessible route to parkland for all users/patients. A 4m wide path respects moveability requirement of beds / wheelchairs. This area could potentially require some minor re-contouring towards the upper slopes of the stormwater channel.

7. All garden spaces are at lower ground floor / pavement level to give a strong degree of amenity to the terrace and outlook from Acute Services Building. Planting will be used to create visual interest and fragrance that links to the contemplation spaces. Garden spaces extend to edge of raft foundation at transition spaces (approx. 1.5m wide).

8. Works at Existing Stormwater Channel

Assumption that existing stormwater chamber is to be relocated given the top of chamber level is currently 14.64. Minor re-contouring of existing stormwater channel is possible as a result of this.

Assumption:

Possible future staff amenity access points will respect current layout in terms outside connections if any at all.

Revision	Notes
A	15.05.2013 PRELIMINARY DESIGN



Project Title
Christchurch Hospital
Acute Services Building

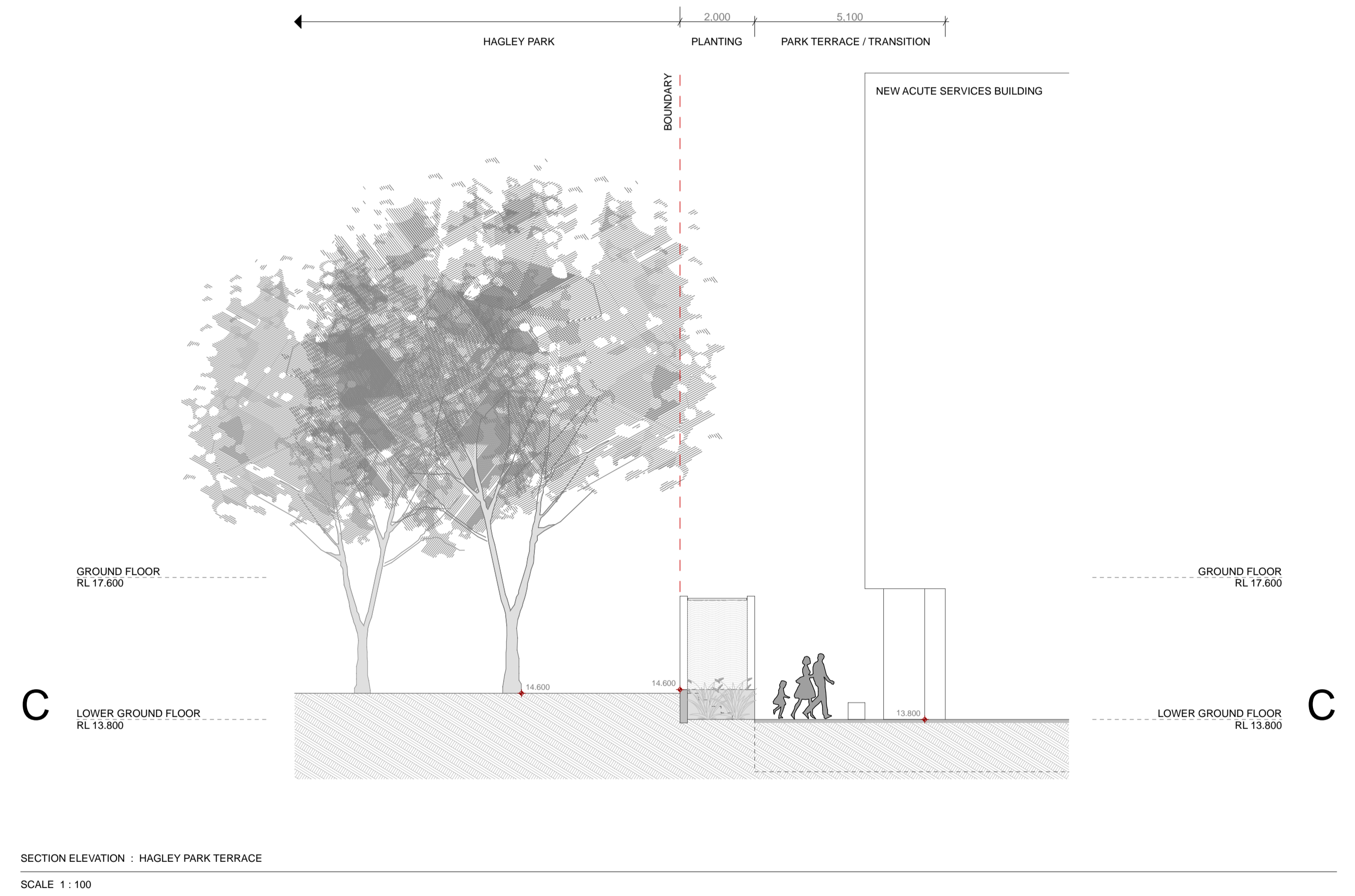
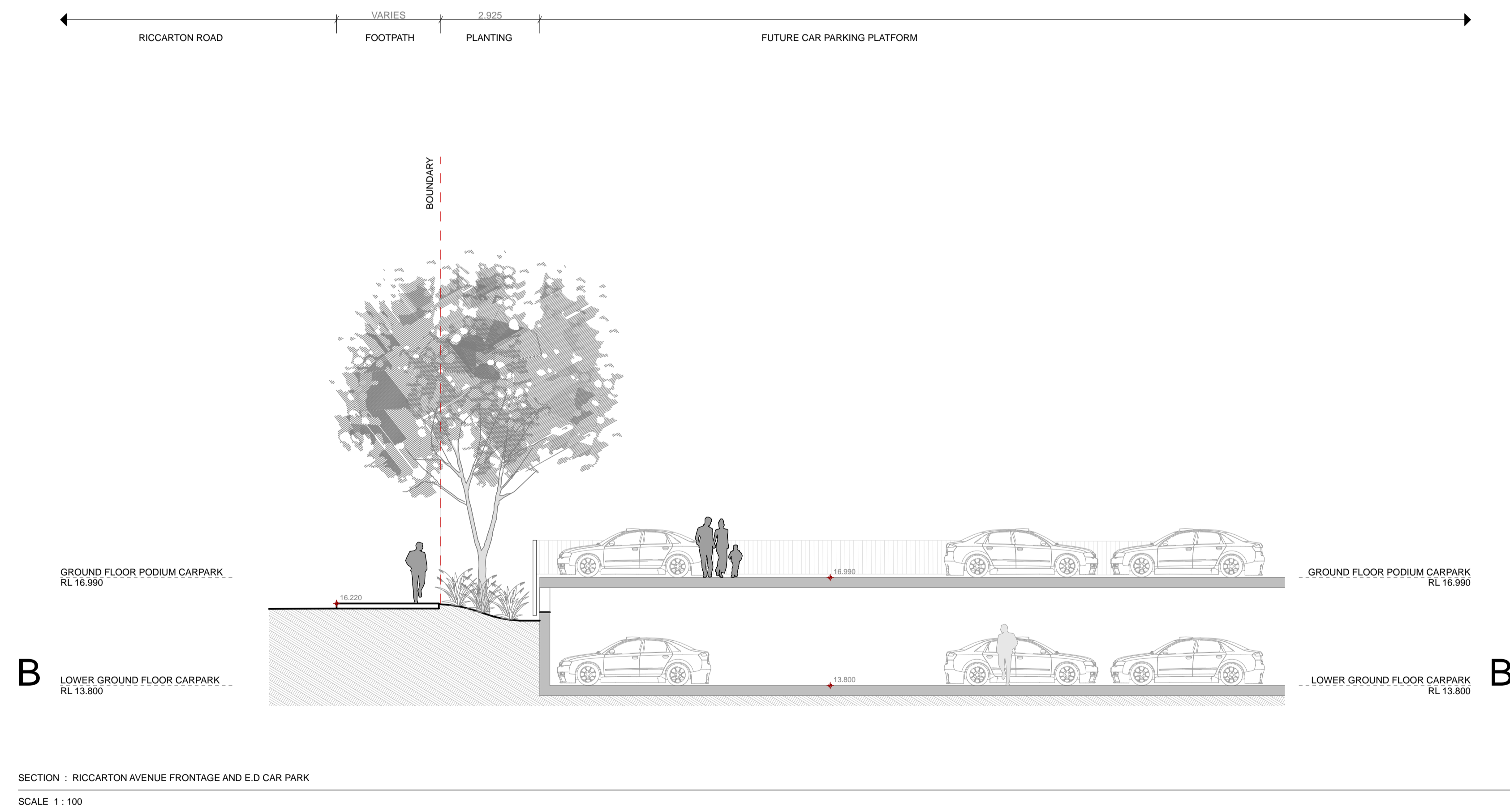
Site No.
01
Building No.
32

Sheet Title
Hagley Park Side (North & West) Landscape Plan

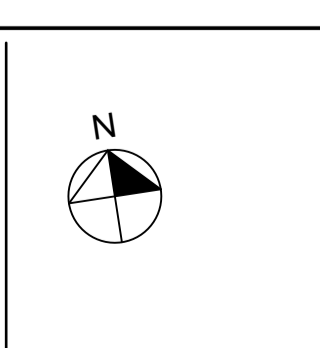
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Job No.: 13301

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Drawing Status
SKETCH ISSUE
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Revision
A



Revision	Notes
A	15.05.2013 PRELIMINARY DESIGN



Project Title
**Christchurch Hospital
Acute Services Building**

Site No.
01

Building No.
32

Do not scale from drawings.
All data to be verified on site prior to commencement of work.

Sheet Title
Landscape Cross Sections

Drawn: KATOA
Checked: KATOA
Original Scale: 1 : 200
@A1
Printed: 15/05/14
Job No.: 13301

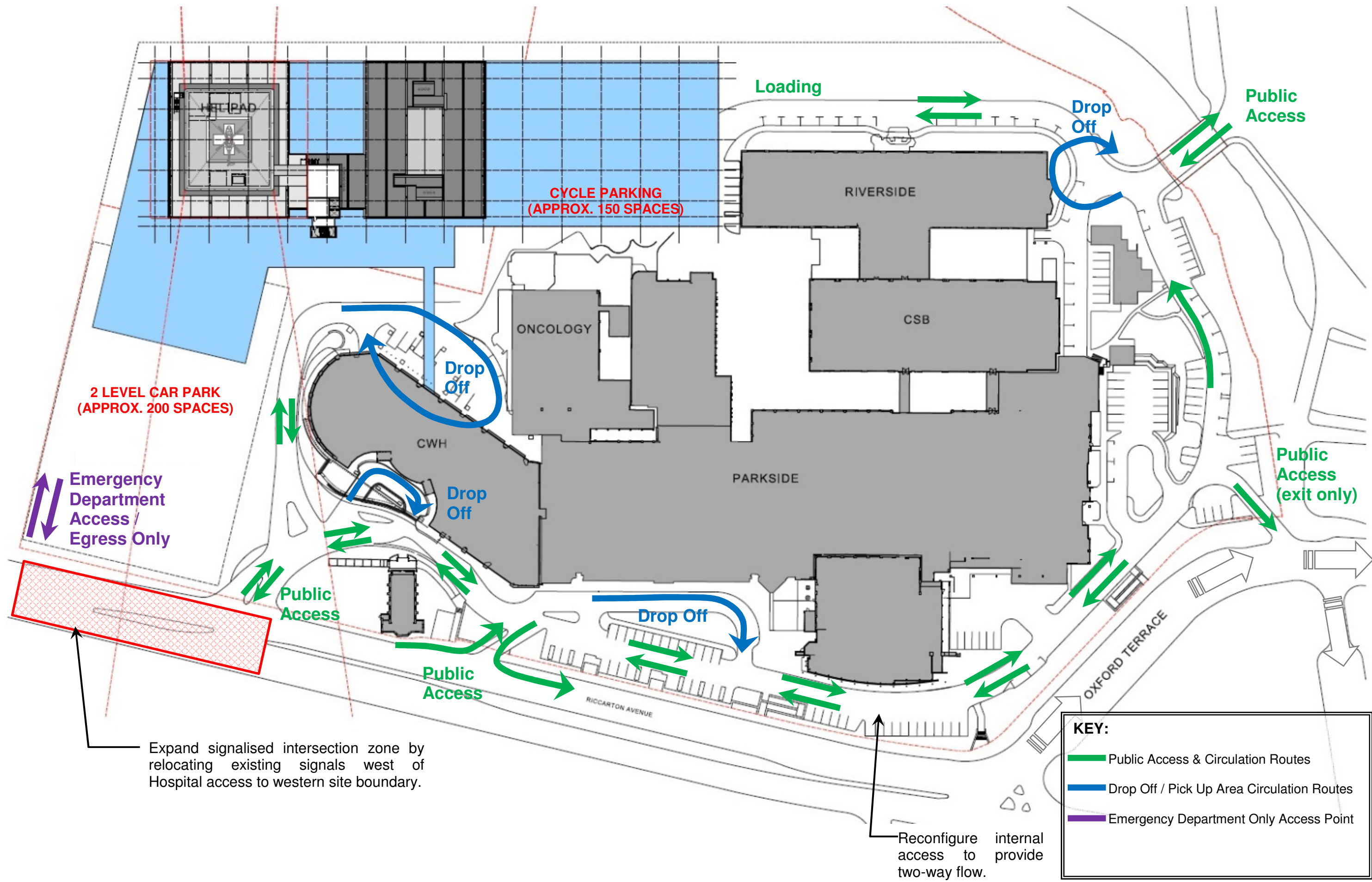
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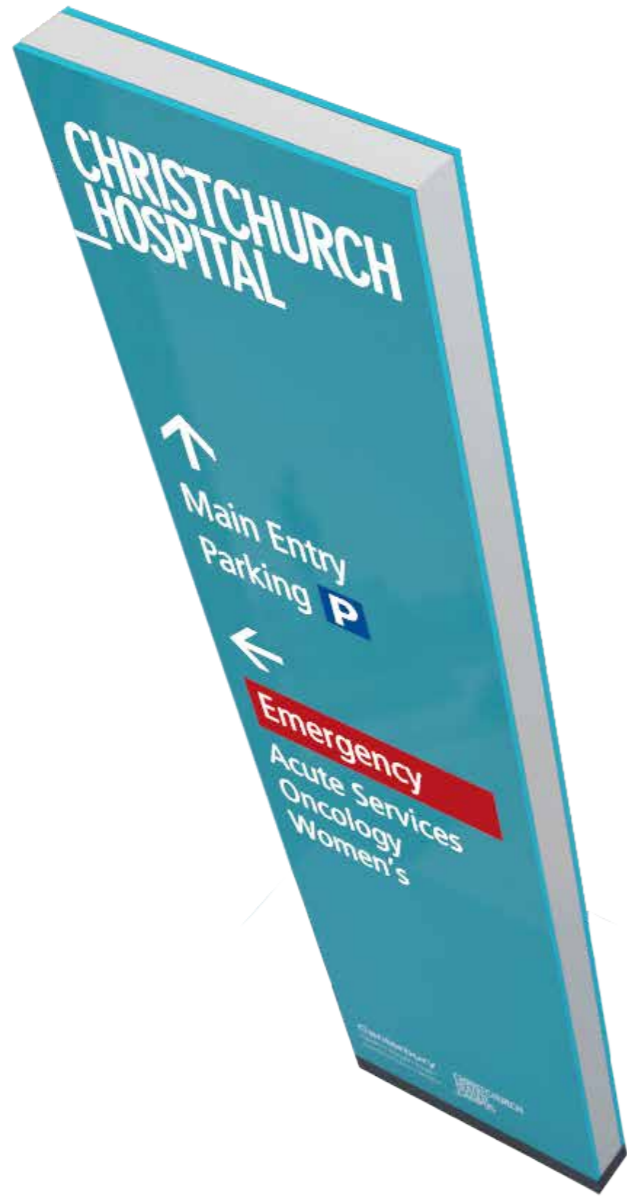
Drawing Status
SKETCH ISSUE

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Revision
A

TRANSPORTATION





New Zealand Ministry of Health
Canterbury District Health Board

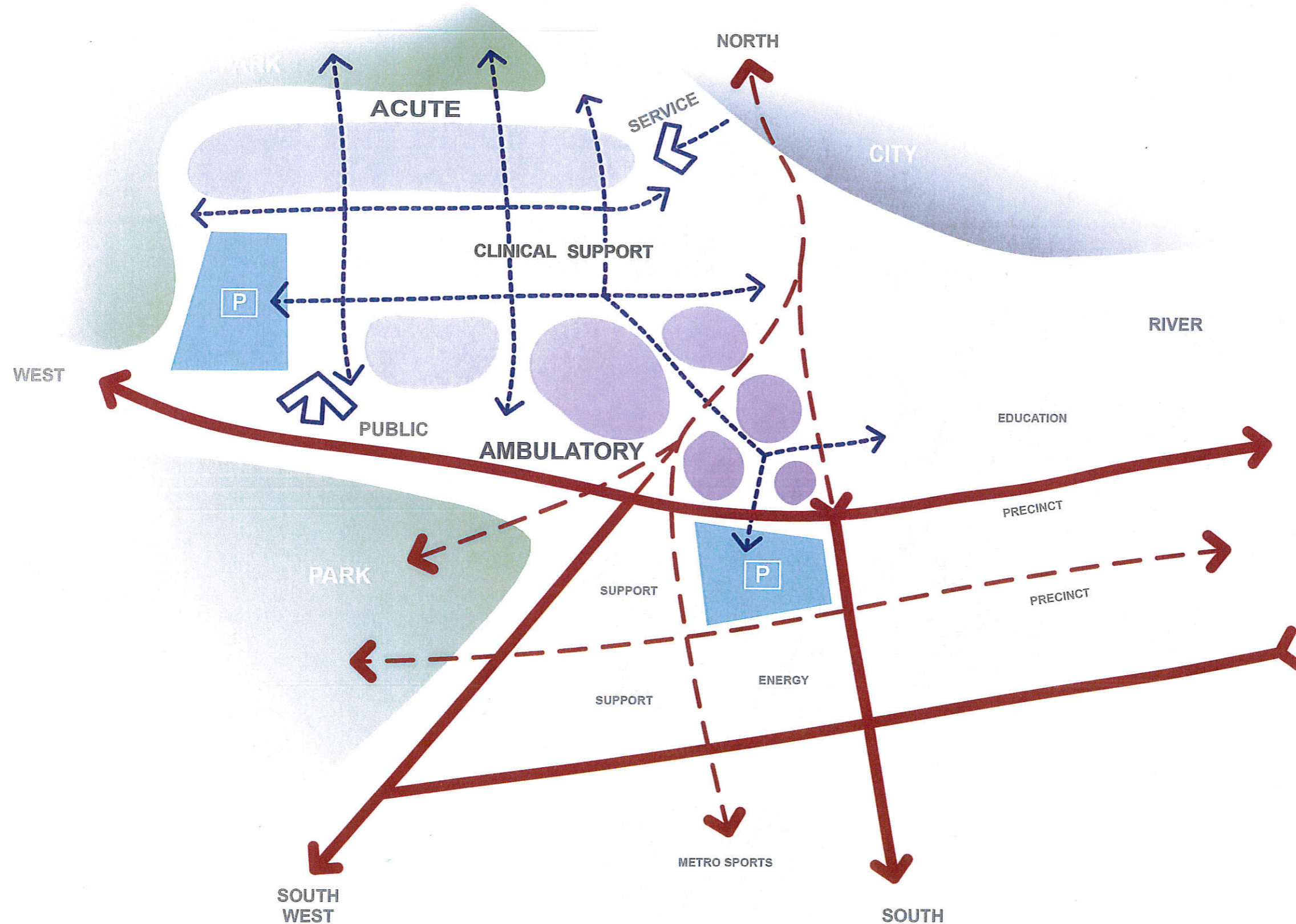
Christchurch & Burwood
Hospital Redevelopments

WAYFINDING STRATEGY GUIDELINES

Extract Only

Issue K
13.04.2014

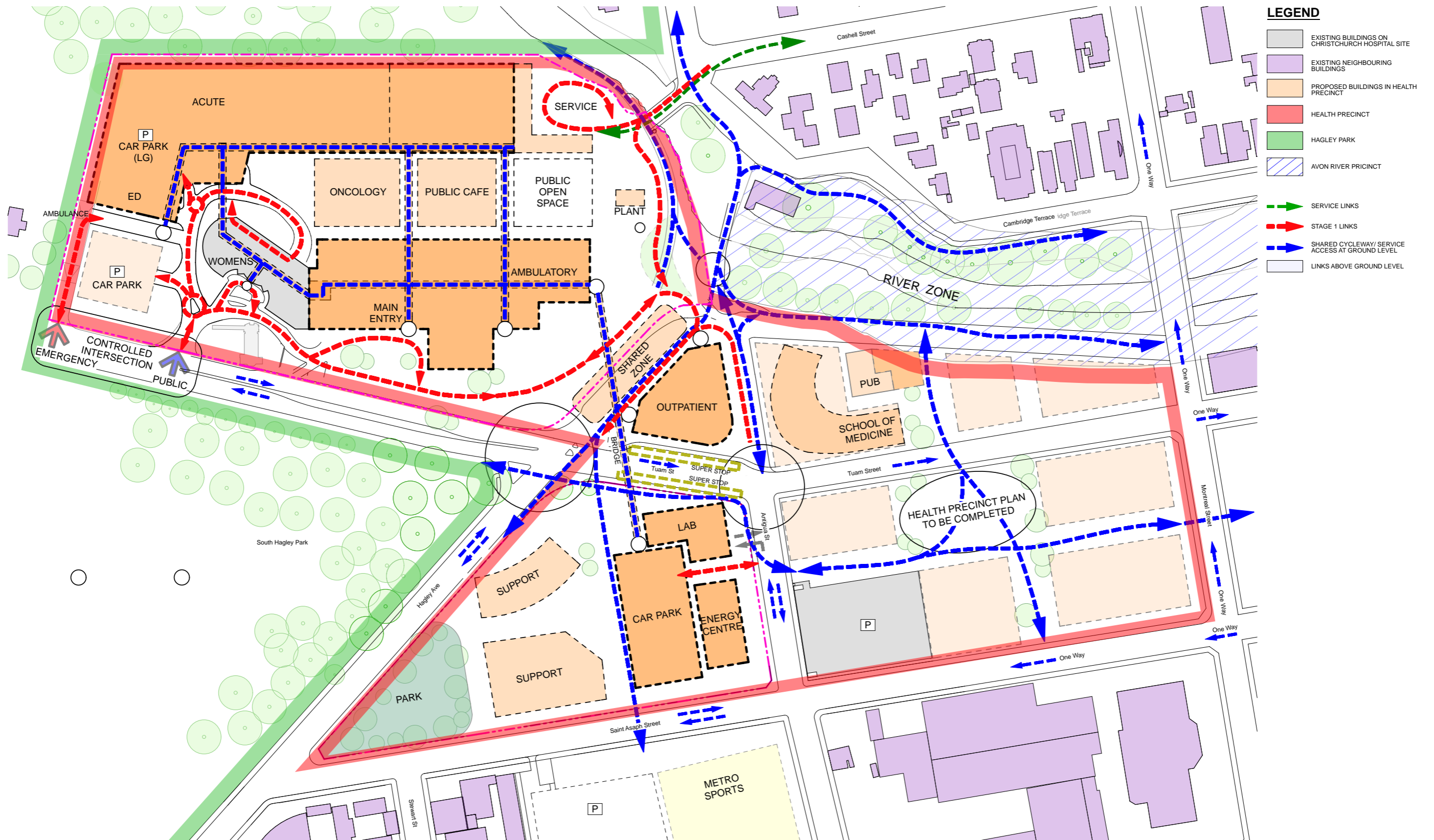
PROPOSED CHRISTCHURCH HEALTH CAMPUS CIRCULATION



FINDINGS

PROPOSED CHRISTCHURCH HEALTH CAMPUS APPROACH & CAMPUS ENTRIES

1



LEGEND

- EXISTING BUILDINGS ON CHRISTCHURCH HOSPITAL SITE
- EXISTING NEIGHBOURING BUILDINGS
- PROPOSED BUILDINGS IN HEALTH PRECINCT
- HEALTH PRECINCT
- HAGLEY PARK
- AVON RIVER PRICINCT
- SERVICE LINKS
- STAGE 1 LINKS
- SHARED CYCLEWAY/ SERVICE ACCESS AT GROUND LEVEL
- LINKS ABOVE GROUND LEVEL

POLICIES & PRINCIPLES

DESIGN PRINCIPLES FOR MAIN MARKERS

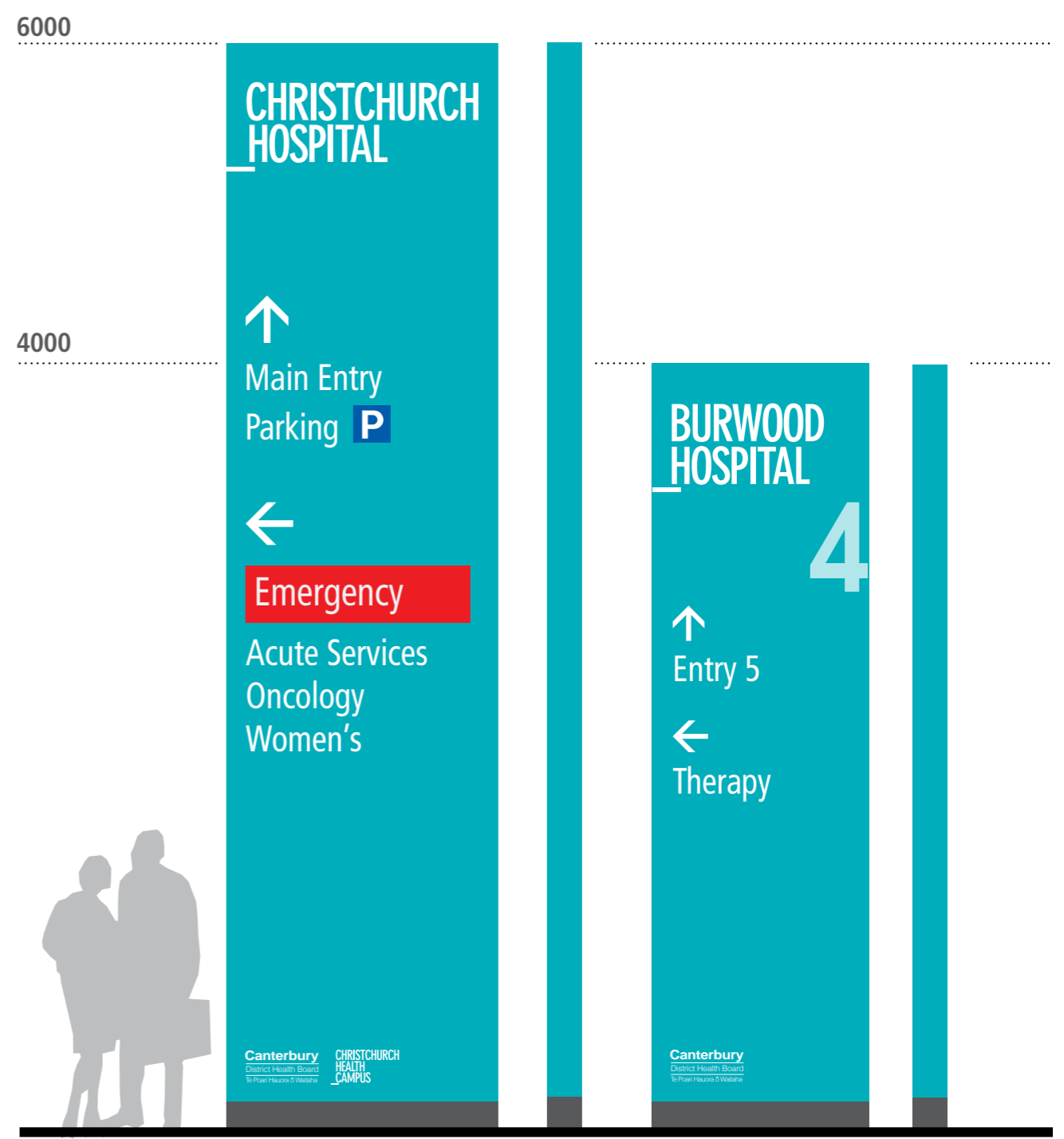
2



Existing Marker



Existing Marker



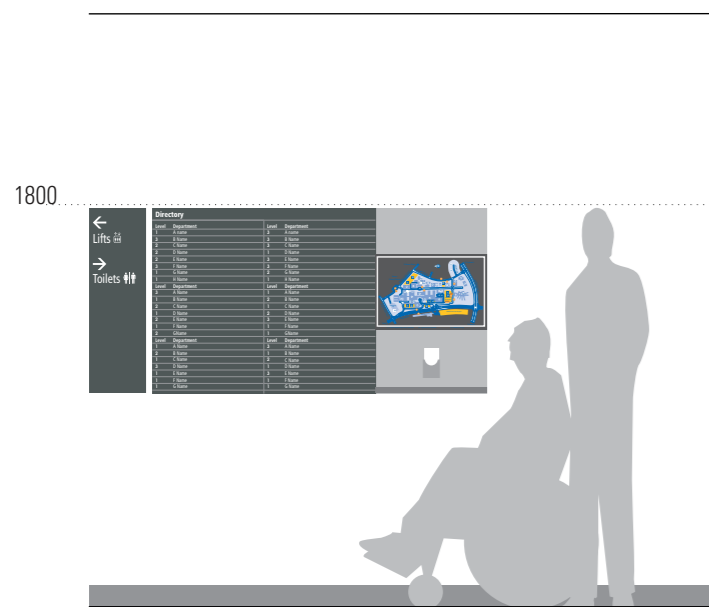
6000 x 1500
 Cap Height: 160mm
 Existing Cap Height: 112 & 80mm

4000 x 1200
 Cap Height: 160mm
 Existing Cap Height: 105, 70 & 45mm

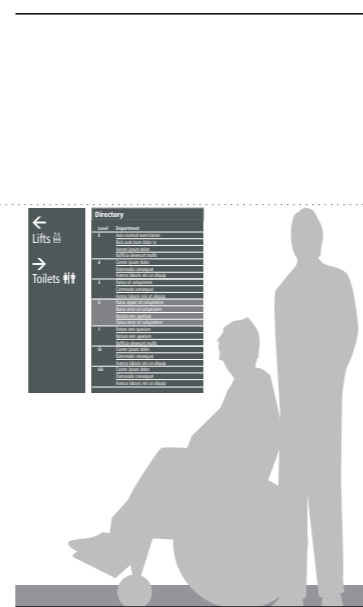
PLANNING PRINCIPLES

TYPICAL INTERNAL WAYFINDING SIGNS — LOBBY TO DESTINATION

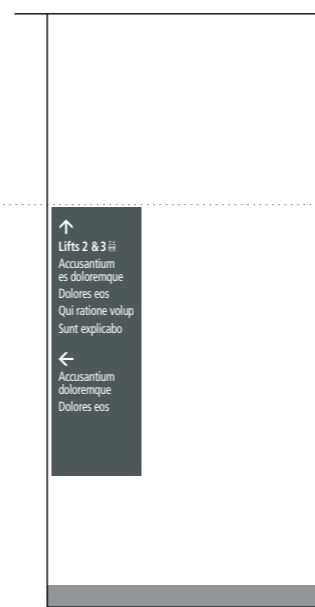
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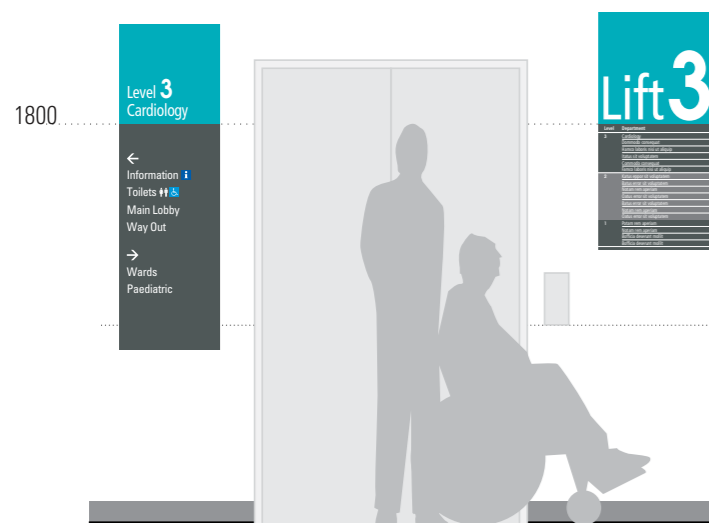
Primary Directory, Directional & Map



Typical Directory & Directional



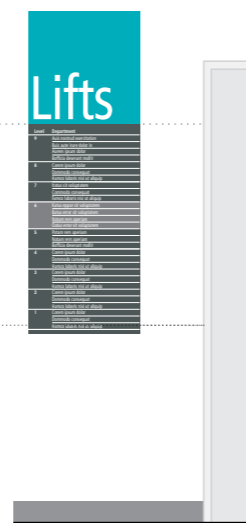
Typical Directional



Level Directional



Typical Lift Directory with code



Large Lift Directory



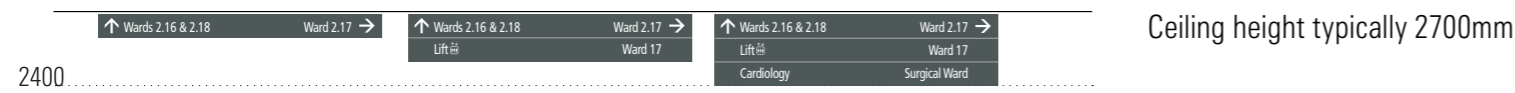
Typical Lift Directory



Staff Lift Directory

PLANNING PRINCIPLES

TYPICAL INTERNAL WAYFINDING SIGNS — LOBBY TO DESTINATION



Typical Ceiling Mounted Directionals



Typical Reception Identification

Typical Reception Identification

Typical Staff Station Identification

CHRISTCHURCH HOSPITAL EXTERNAL IDENTIFICATION & DIRECTIONS SIGNTYPES **4**

6000



SIGNTYPES 4

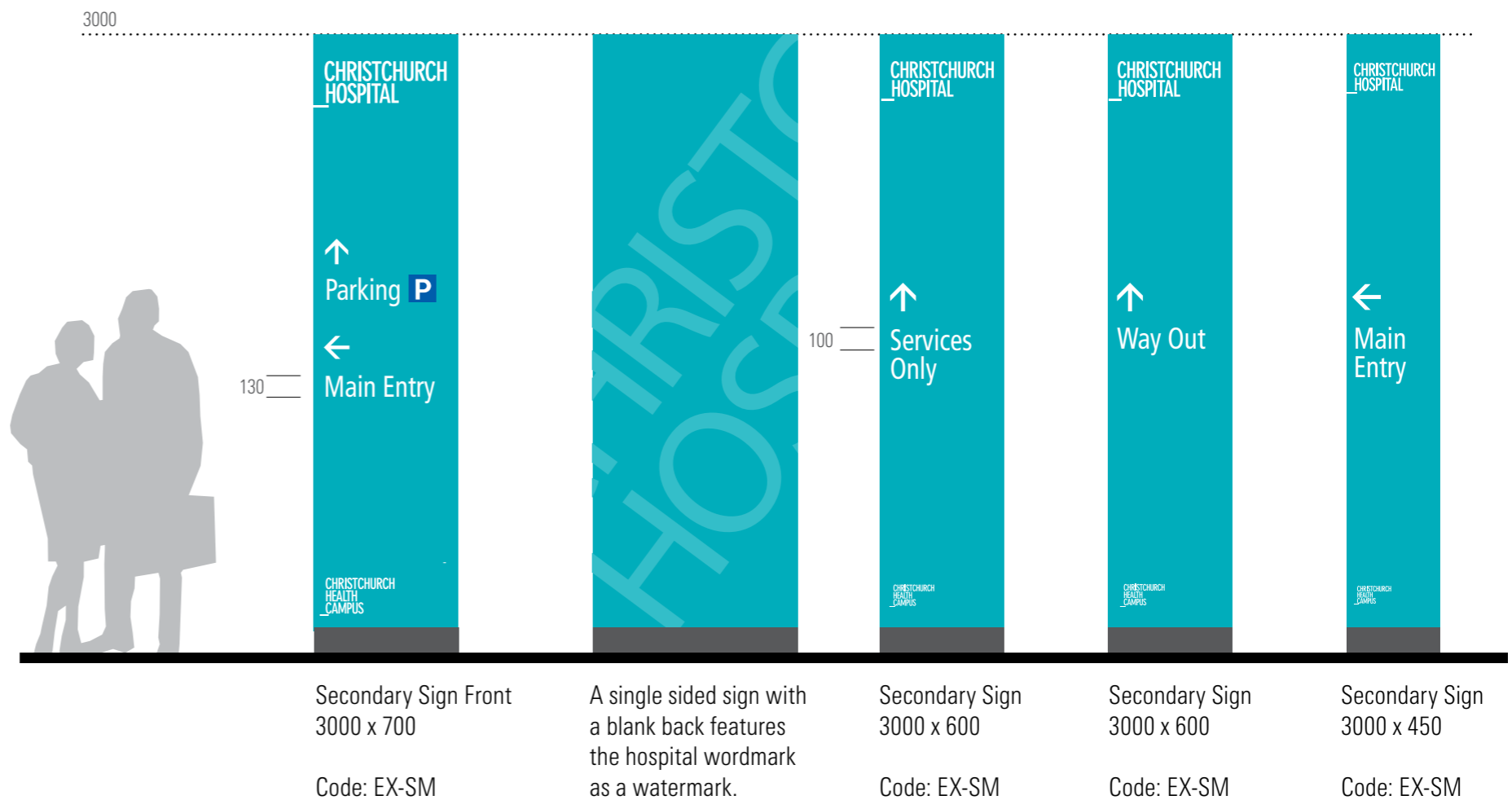
CHRISTCHURCH HOSPITAL EXTERNAL IDENTIFICATION & DIRECTIONS



Main Entry at Riccarton Avenue



At intersection Oxford Terrace and Antigua Street. Service Entry.



SIGNTYPES 4

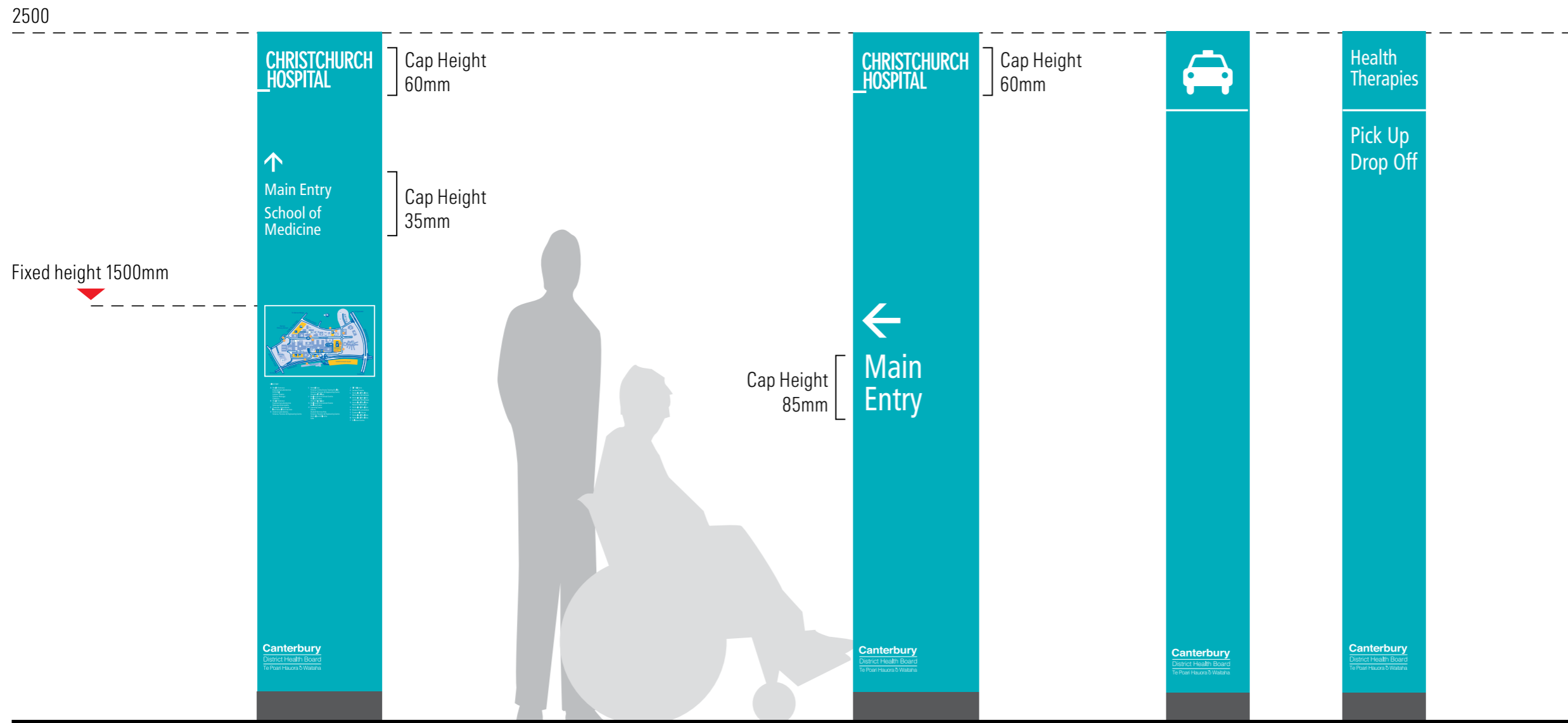
CHRISTCHURCH HOSPITAL EXTERNAL CARPARK IDENTIFICATION



Car Park Building Identification - Perpendicular to traffic & building facade
 900x4000 nominated subject to architecture
 Code EX-CBI

SIGNTYPES 4

EXTERNAL PEDESTRIAN WAYFINDING



Secondary Pedestrian Directional
450 x 2500
Typical Cap Height = 35mm
Code: EX-SPD

Secondary Pedestrian Directional
450 x 2500
Cap Height = 85mm
Code: EX-SPD

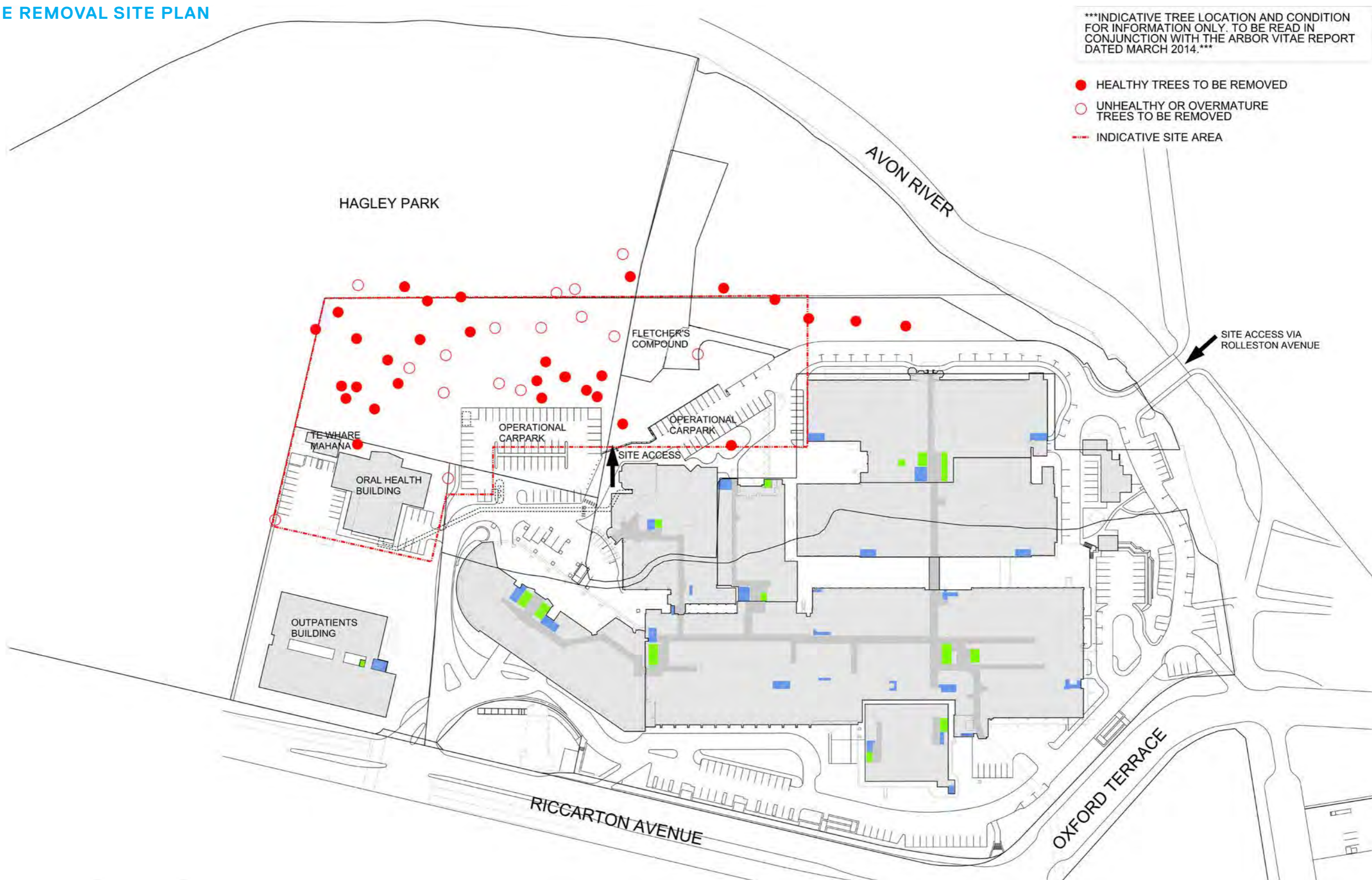
Taxi Marker
300 x 2500
Code: EX-TM

Destination Identification
300 x 2500
Code: EX-DI

TREES

5.0 ARCHITECTURE

TREE REMOVAL SITE PLAN



INDICATIVE TREE LOCATION AND CONDITION FOR INFORMATION ONLY. TO BE READ IN CONJUNCTION WITH THE ARBOR VITAE REPORT DATED MARCH 2014.

- HEALTHY TREES TO BE REMOVED
- UNHEALTHY OR OVERMATURE TREES TO BE REMOVED
- - - INDICATIVE SITE AREA