President Private Hospital Built Form and Urban Design Report

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00 DOCUMENT CONTROL

01	Draft Report	30/03/2020
02	Final Report	24/06/2020

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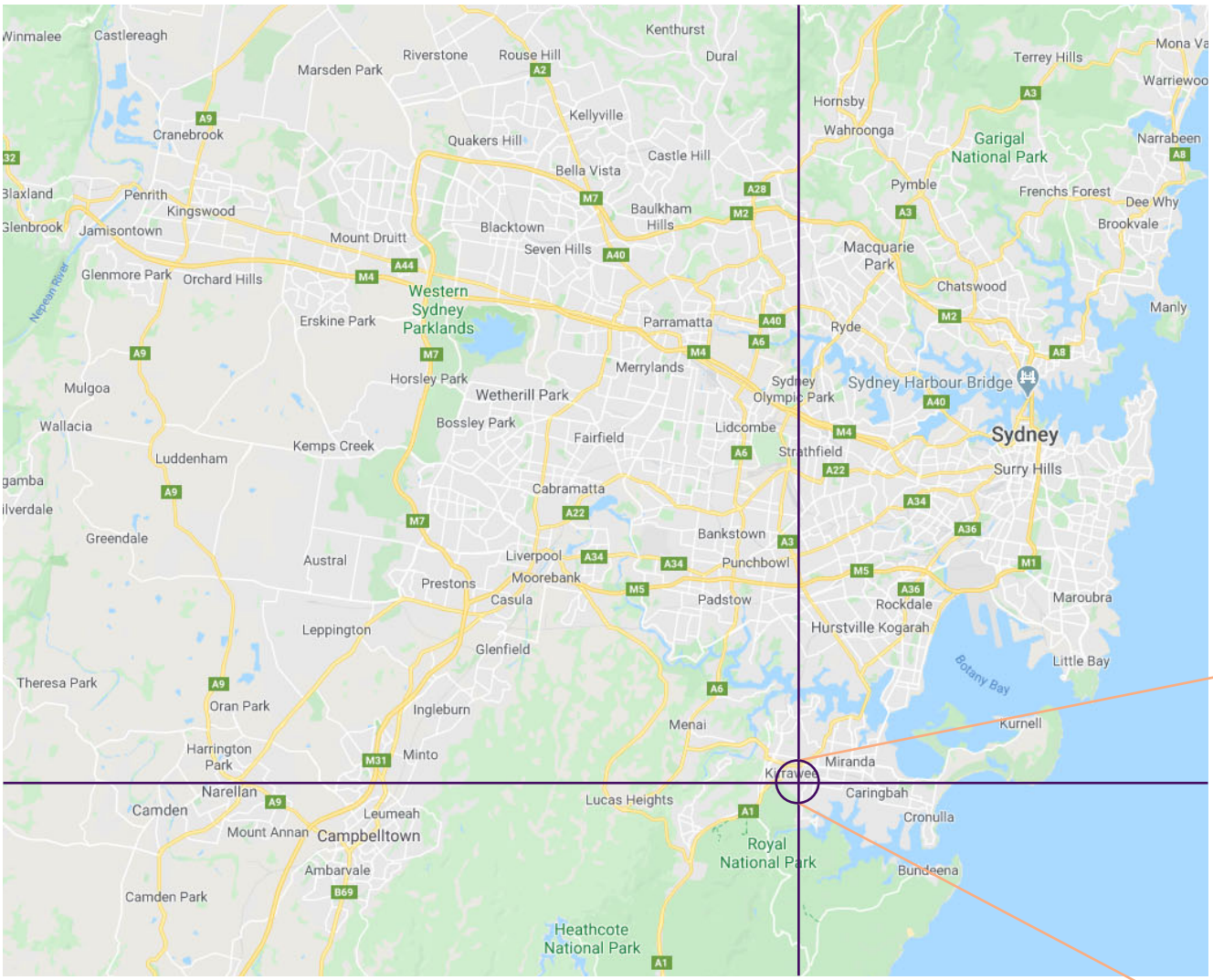
00 CONTENTS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Moorebank
Rockdale
Maroubra
Casula
Padstow
Leppington
Hurstville Kogarah
Glenfield
Little Bay
Botany Bay
Theresa Park
Oran Park
Ingleburn
Menai
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Caringbah
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Lucas Heights
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Cronulla
Mount Annan
Campbelltown
Royal
National Park
Ambarvale
Bundeena
Camden Park
Heathcote
National Park

01 LOCATION

President Private Hospital is located in the southern Sydney suburb of Kirrawee. Kirrawee is characterised by detached dwellings, medium density housing, light industry and warehousing.

The site is located at the junction of two main roads, President Avenue and Hotham Street. It is surrounded by low density housing and a small medical practice.

President Private Hospital is an existing rehabilitation hospital with inpatient care and outpatient therapy. The proposal addresses the current demands and future needs of the community by expanding the existing rehabilitation facilities and establishing a new mental health ward.

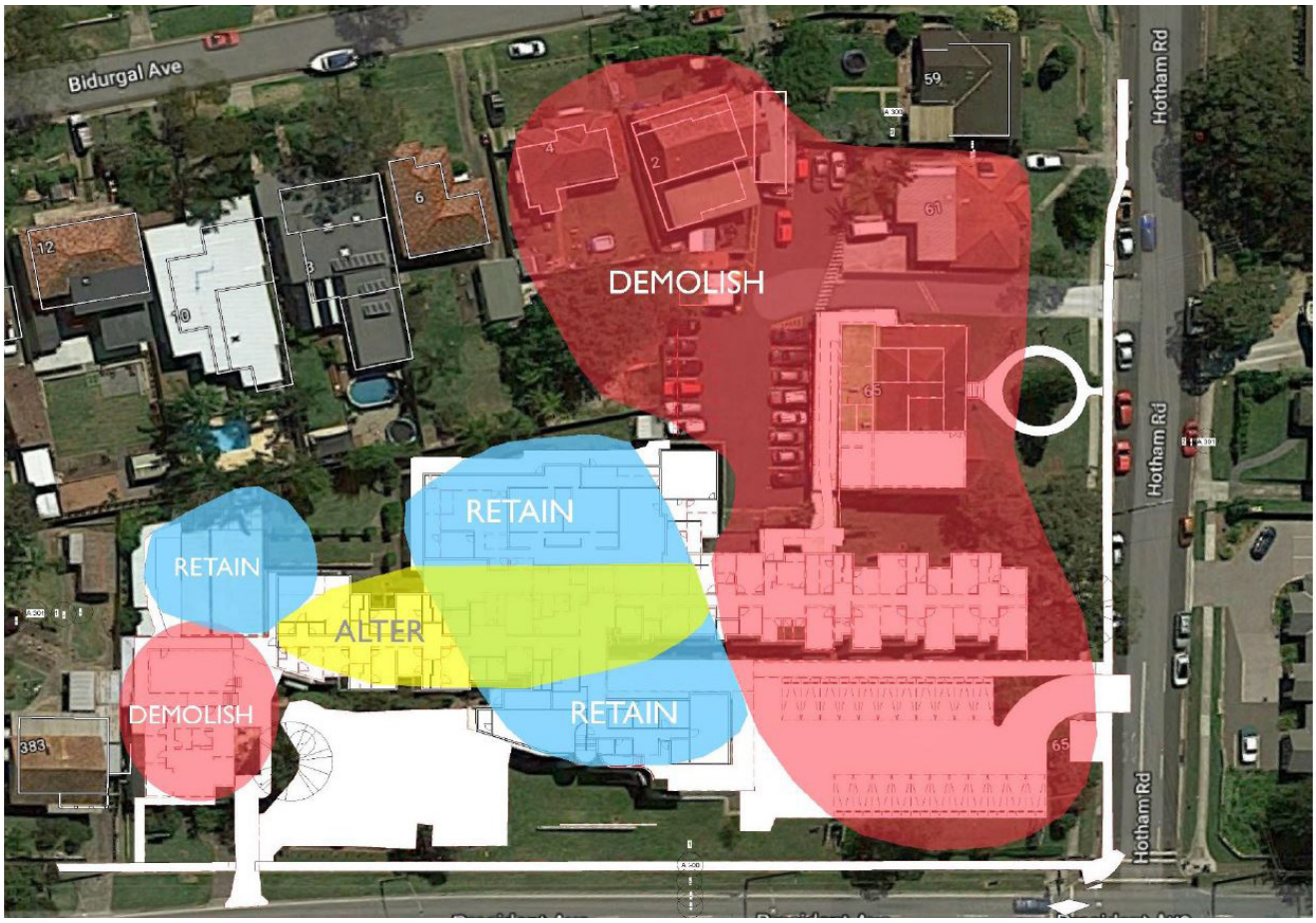


Figure 1.2 Demolish vs retain analysis

01 SITE STRATEGY

Review of the current buildings and uses provided hierarchy of retention

To retain:
High priority
- Operating theaters
- Recovery
- Hydrotherapy pool

Mid priority
- In-patient rooms
- Kitchen

Low priority
- Cottage used for administration
- Cottages providing patient therapy services
- Outbuildings
- Residential cottages

Based on the above assessment site retention is summarised in Figure 1.2.

02 Document requirements

The following report examines the proposed development from an Urban Design perspective. At a minimum, the report considers the requirements set out by the Planning Secretary's Environmental Assessment and Section 4.12(8) of the Environmental Planning and Assessment Act 1979 and Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

The requirements relating to this Urban Design report are as follows;

A. Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.

B. Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, and colours.

C. Where relevant, provide details of any signage, including size, location and general finishes.

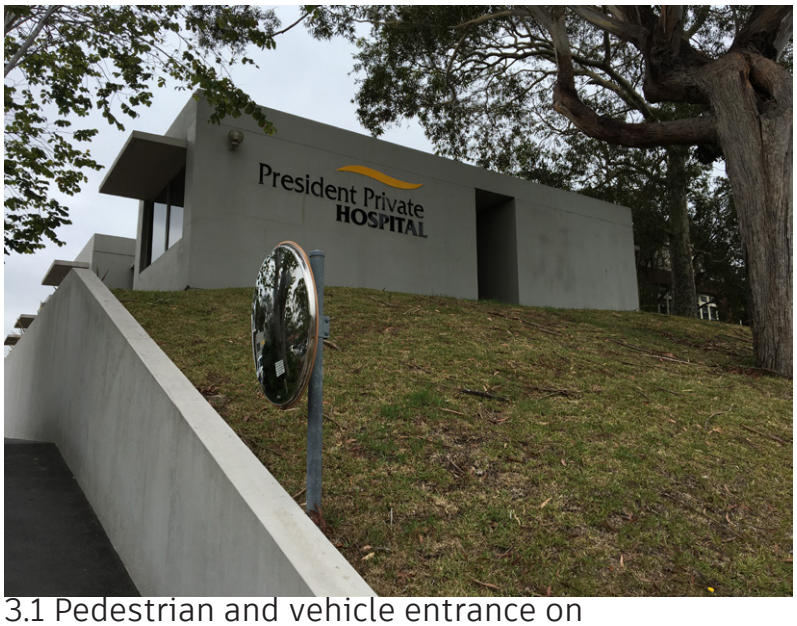
D. Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.

E. Outline the design strategy for providing internal amenity, including: access to natural daylight; opportunities for visual and physical access to outdoor landscape areas; and solar shading to manage glare and heat gain.

In addition the report analyses the current pedestrian access to and from main transport nodes and town centres. The report also investigates local bus routes to ensure equitable and easy access to and from the facility

This report is intended to be read in conjunction with the following reports;

- Waste management report
- Landscape Report
- Drainage and Water Quality Report
- Heritage Report
- Arborist Report
- Traffic management report



3.1 Pedestrian and vehicle entrance on Hotham Street


3.2 Car Park on President Avenue

3.3 Facade from President Avenue

3.A

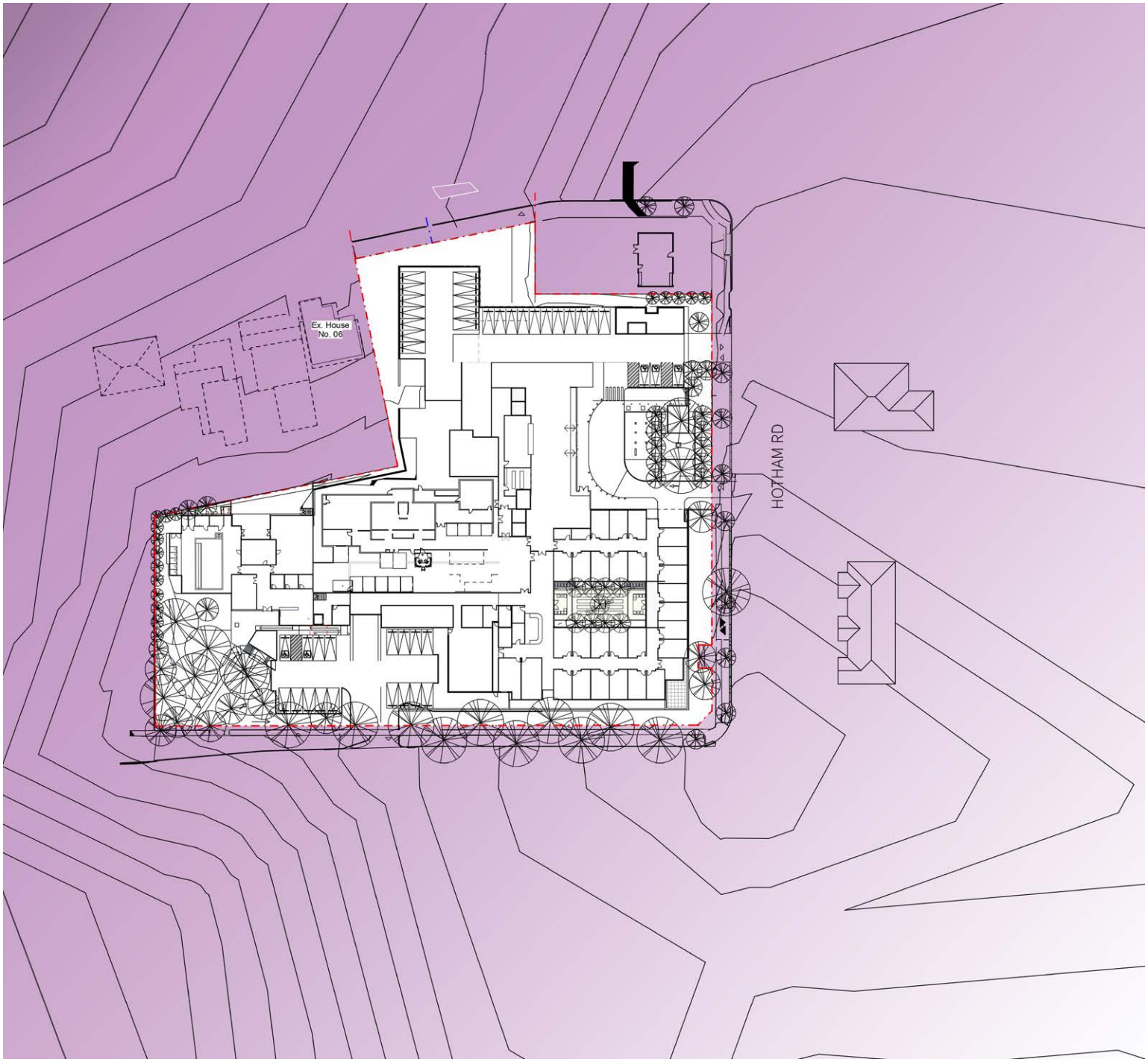
Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.

Current situation
The current built form is characterised by single storey buildings. There are a variety of additions, connections and renovations throughout the existing building which are of typical 1950's, 1970s and 1990s origin. It is obvious upon arrival to the site that these additions have been adhoc and on an as needed basis.

The building currently sits back from both President Avenue and Hotham Street. The building is generally single storey, low density. The assumption that because the building is low that it is unassuming and in keeping with its context is incorrect. Even though the building is generally single storey its bulk and austere appearance creates a more imposing mass and interrupts the continuity of the streetscape.

Current Deficiencies
The initial review of the current hospital arrangement highlighted the following deficiencies to be addressed in the redevelopment:

- Setback of the building does not offer additional usable open space for the community
- Building appears bulky and heavy on site
- Height and scale do not appreciate the potential of creating a landmark on a buy intersection
- Setbacks, and bulk create a confusing wayfinding situation
- The interface with the street appears messy and unwelcoming
- No clear understanding sense of arrival
- No clear communal facilities (cafe) for visitors and local residents



3.4 Topography

3.A

Historically the development of hospitals has been haphazard and on an as needed basis. As a result, many hospitals have developed with a height, density and bulk unsatisfactory to the surrounding urban fabric. The proposal aims to manage height, scale and bulk to ensure that the development relates to its surrounding context.

To ensure the proposal relates to the site in which it sits, a number of objectives around height, density, bulk, scale and setbacks have been considered. In short,

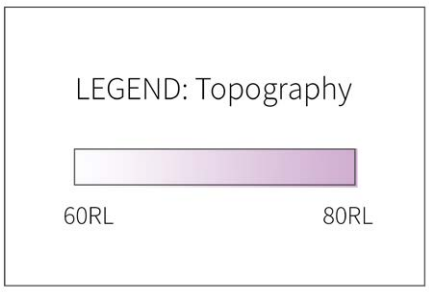
- The manipulation of the ground plane to achieve height when appropriate (ie. at the junction of 2 roads) and low scale when required (adjacent to residential building).

- The articulation of setbacks to provide usable public open space and spaces of respite for local residents, visitors and patients. Setbacks also manage privacy in spaces adjacent to residential blocks.

- The manipulation of bulk and scale to achieve subconscious readability of the development. By playing with bulk and scale, the visitor achieves a general understanding of where to go upon arrival at the site.

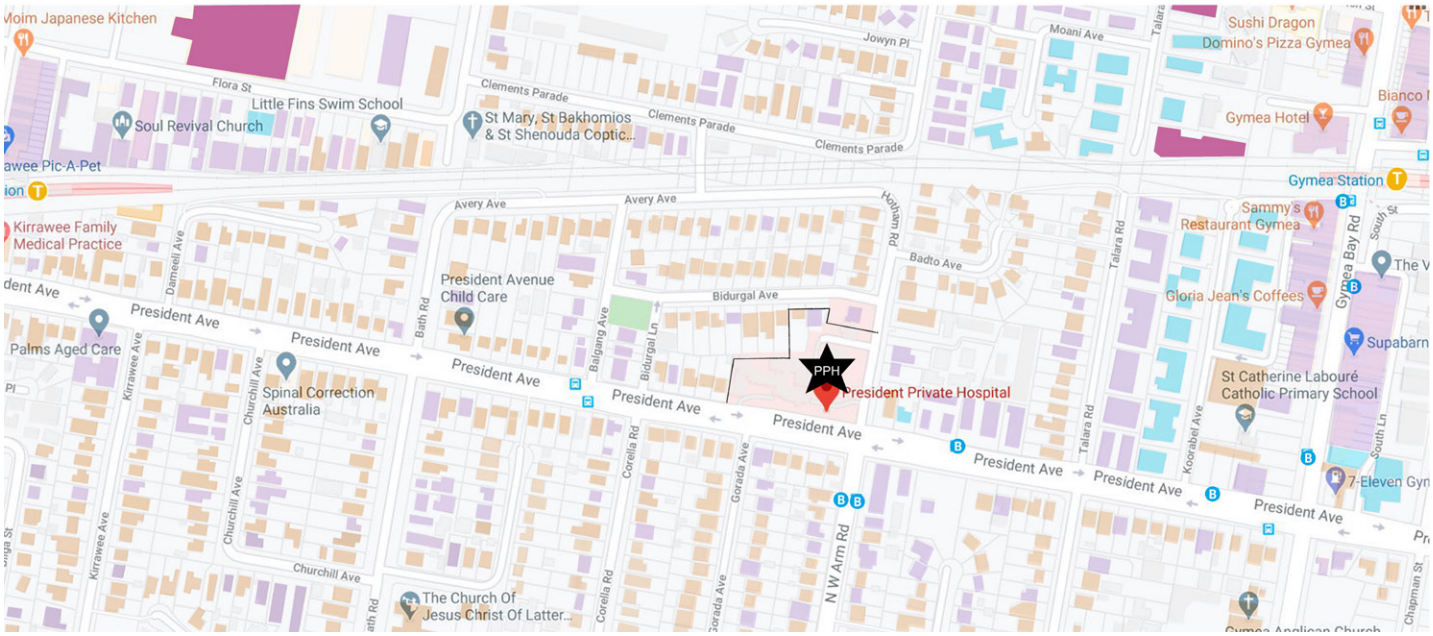
The manipulation of the ground plane to achieve height when appropriate (ie. at the junction of 2 roads) and low scale when required (adjacent to residential building).

The built form of the proposed works are sympathetic to the surrounding residential buildings, health facilities and main road location. The existing condition sees the low point of the site at the corner of Hotham Street and President Avenue. The proposal thus manages this existing topography to ensure that the visual bulk of the development is at the lowest part of the site, which is also the junction of two busy roads. The height rises to three storeys at this location (corner of Hotham Road and President Avenue), reinforcing the arrival at a road intersection and becoming a landmark along President Avenue.



The proposed design maximises the manipulation of contours on the site to ensure the proposed building is considerate of surrounding residences. As the proposed development moves towards residential properties, the building is cut into the site, giving the visual appearance of residential scale.

All these objectives provide a human scale experience and serve the variety of purposes required for the facility and as a facility in its larger context.



3.4 Height of Buildings

HEIGHT OF BUILDINGS

LEGEND

1 storey

2 storey

3 storey

Multi storey

3.A

The manipulation of the ground plane to achieve height when appropriate (ie. at the junction of 2 roads) and low scale when required (adjacent to residential building).

The streetscape of President Avenue and Hotham Street is characterised by a busy multi-lane road, single or double storey residential housing, sporadic vegetation, turf verge and concrete footpaths. There is very little public open space and what public space there is, is used as transitional, not a destination.

The site sits at a busy junction on President Avenue which is characterised by turf verges and concrete footpaths. The surrounding area is generally void of public open space or spaces of respite for pedestrians.

The articulation of setbacks to provide public open space and spaces of respite for local residents, visitors and patients. Setbacks also manage privacy in spaces adjacent to residential blocks.

The proposed development manages the setback and articulation of the building facade to provide moments of public open space and spaces for quiet respite. The intention is that these spaces will feel welcoming for patients and visitors to the facility, but will also provide open space and gathering opportunities for pedestrians and the local community.

Height of surrounding development
The allowable building height of surrounding residential blocks fronting Bidurgal Avenue and President Avenue is 8.5m. The allowable built form height for buildings opposite Hotham Road is 9m (J1). The maximum height of the proposed building is under 15m.

The current height of surrounding development is generally 1-2 storey low density residential. However, this is changing as more lots become medium density residential, especially around transport nodes. The building is sympathetic to its surrounds, with its highest point, at the junction of President Avenue and Hotham Street.

3.5 Open space at the rear of the building

3.6 Open space at the rear of the building

3.B Design quality and built form

Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, and colours.

Current situation:
The current design quality is not appropriate for its purpose as a health care facility. It does not function effectively, it is not efficient in its use of the site and it does not provide a welcoming and compliant facility for the community, staff, patients and visitors.

The existing development currently lacks usable public and private open space. The existing building is characterised by large turf set backs and on grade car parks. Thus, whilst there is ample open space, this space is no welcoming or usable. In addition, the use of multiple large on grade car parks create a disjointed arrival to site and an unappealing visual appearance from the street, surrounding residences and views from within the building. On grade car parks have the ability to dominate public space, whilst being a poor use of space in an ever densifying urban fabric.

Whilst the current building is only single or double storey, it appears harsh and imposing on the site. The large massing with minimal landscape treatments creates a draconian appearance.

The current development hosts 2 on grade car parks along President Avenue and steep and a poor functioning car park entry at Hotham Street. This ensures the building sits even further back from the street, whilst still not providing functional open space or opportunities for large scale landscape planting.

The current building facade is articulated repeatedly along the length of the building. Whilst this created interest in the facade, the repeated nature of the articulation makes it appear disjointed and dated.

The materiality and colour is characterised by grey concrete render and dark tint windows. It is unwelcoming and not appropriate for a health facility.

The current facade of the building is overwhelmed by a high concrete wall aiming to conceal the loading zone and waste management of the building. Towards the intersection of Hotham Street and President Avenue the facade is articulated with repeating facade setbacks, grey rendered material and repeating window proportions. At other locations on site, the built form is characterised by haphazard additions, extensions and connections to the original buildings.

3.7 Unused open space

3.8 Vehicle access from Hotham Street

3.B Design quality and built form

Current Deficiencies

The initial review of the current hospital arrangement highlighted the following deficiencies to be addressed in the redevelopment:

- Not clear what the purpose of the facility is when driving past the site
- Ineffective use of the site
- No clear entrances and exits
- Poor spaces for outdoor therapy and rehabilitation
- Disjointed landscape treatments and lack of usable open space
- Imposing mass on the landscape
- No utilisation of existing building setbacks
- No clear open space for visitors, staff and patients
- No space for respite for pedestrians
- Imposing facade and massing even though the building is set low
- Materials and colours of the building are draconian
- On grade car parking overwhelms site visually
- On grade parking not an effective use of space
- Pedestrian entrances unclear and
- Lack of public open space and accessible entrances
- Lack of places of respite for staff, patients and visitors
- Lack of cohesive landscape treatments throughout the site
- Lack of cohesive materiality throughout the site
- Unwelcoming arrival to site
- Poor wayfinding to and throughout the facility
- Heavy massing of the building even though it is a low building
- Unwelcoming and dated materiality used on the building facade (grey concrete render and dark tinted windows)
- Treatment of loading zone not appropriate
- Impact on the natural drainage of the site (overland flow)
- Poor tree management - trees not in mulch or located in asphalt without appropriate porous paving
- Sightline and safety issues throughout the site (CPTED)
- Age of building a variety of poorly planned additional has made effective maintenance of the building impossible.
- Poor readability of the site - confusing entrances and exists
- Non compliant pathways and movement through site

3.8 Existing and proposed open space

3.B Streetscape and Open Space

Proposed situation
The proposed development manages the competing interests of hospital built form, car parking, public open space and hospital facility management (loading docks, waste management etc).

As is evident in Figure 3.8, the proposed development offers similar volume of open space. However how this space is configured and used is managed in a thoughtful and appropriate way.

The proposal aims to maximise soft landscaping, open space for visitors/ patients and open space for the public. The open space provided achieves a number of functions including;

1. Spaces for public gathering (cafe)

- This space offers public open space and food and beverage facilities for staff, visitors, patients and community. Users have the option of sitting inside the hospital, outside in a formal cafe setting or within a pocket park setting. This space is characterised by the existing pine tree which commands the centre of the space. The open space provides a variety of seating which is designed to allow for quiet solo contemplation or gathering spaces for community and families/friends.

2. Open spaces for patients

- This space is designated specifically for the enjoyment of patients. With its northerly aspect, the courtyard will provide a light, comfortable space for patients, their carers and visitors. This space is designed specifically for the needs of patients managing mental health issues. There is strong evidence suggesting the importance of therapeutic gardens and the positive impact outdoor spaces have on recovery from physical and mental illnesses.

3. Gathering spaces for patients

- Views and access to appealing outdoor spaces is essential in providing improved patient care. No only does access and views to the outside improve the time taken for healing, it also significantly reduces the patients need for pain medication and reduces post surgical complications. Thus providing appropriate accessible (visual and physical) outdoor spaces is essential for the successful development of a health facility.

3.9 Proposed open space on Hotham Street perspective

3.10 Proposed open space on President Avenue perspective

3.B Streetscape and Open Space

4. Spaces to move through

- A visit to hospitals is often a major stressor for patients and their families. It is well know that stress has a negative impact on health and healing. By providing appealing and thoughtful spaces for visitors and patients to move through on their way to the facility, the proposed development intends to have a positive impact on all health outcomes. Thus the few minutes it may take to move through the proposed open spaces provided within the development intends to improve the larger health outcomes.

5. Spaces to view from above

- Many studies show that just three to five minutes spent looking at views dominated by trees, flowers or water can begin to reduce anger, anxiety and pain and to induce relaxation. This physically improves blood pressure, muscle tension, heart and brain electrical activity. It has also been shown that just a photo or painting of the natural environment can improve health outcomes. The design of public open space and the manipulation of views is paramount to the success of this project. The design decisions surrounding providing open space have been considered in conjunction with the design of the building. It is evident from the design that the proposed development seeks to be at the forefront of providing good quality open space within our health facilities.

6. Open space at therapy

- The project recognises the benefits on open space for both physical and mental therapy and healing. The proposed development centres around 4 main outdoor therapeutic spaces
- Main courtyard - this space will feature a market garden to expand on current in-patient and out-patient wellness programs. The space intends to encourage people to explore or develop confidence in gardening. Gardening has well know physical and mental benefits. This program intends to positively impact the confidence and wellbeing of those involved.
- Open space to the front of the wellness centre - this space was specifically designed to not only provide an entrance to the facility but provide physiotherapy for patients. The space is designed with a variety of surfaces and includes transition spaces including ramps and stairs.
- Deck behind the wellness centre - this space is an intimate gathering space for outpatients continuing their rehabilitation. For many, their weekly trip to therapy is their only social outing. A space to gather and connect in nature is essential in providing a holistic approach to patients health.
- The patient courtyard (mental health ward) - this space provides much needed respite for patients in the mental health ward. It is well known that being outdoors has significant positive impacts on mental health including reductions in stress and anxiety and elevated mood.

3.11 Hotham Street Entrance

3.12 Hotham Street Entrance

3.13 President Ave facade

3.14 President Ave car park

3.B Massing and set backs

Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, and colours.

Proposed development

The design of built form in relation to the massing of built elements is essential to create a readable and distinct building. Not only does the mass of the building have the potential to add drama to the streetscape, it also has the potential to create landmarks along the street and contribute to the readability and wayfinding approach to the site and surrounding streetscape. By playing with mass the development aims to be considerate of its residential setting whilst contributing a landmark to its wider context. It achieves this using the following tools;

- The massing of the building is dependent on the surrounding development. Where the building sits adjacent to low density residential blocks, the height of the building is generally single or double storey and/or set back from the boundary line. This is in keeping with the residential fabric of surrounding streets and maintains a sense of privacy and familiarity for the community

- As the building extends towards the intersection of Hotham Street and President Avenue, the built form reaches a maximum of 15m. By allowing for additional built form mass at this location, the proposed development becomes a landmark for President Avenue.

- The development plays with the setback of the facade to manage the mass of the built form. By stepping back the facade at particular locations the visual mass of the built form is reduced. Thus, even though the building might still be 3 storeys in height, from the perspective of a pedestrian, the form of the building feels smaller, less heavy and more ‘human scale’.

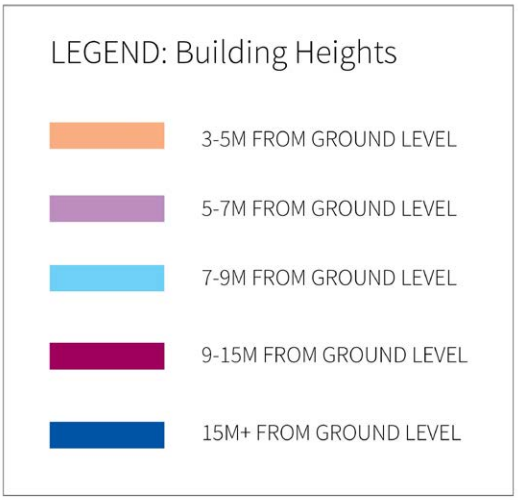
- Managing setbacks in the built form also provides a variety of landscape solutions on the site. No longer does the site only provide on grade car parking, but it offers solutions for human use. It provides landscape

3.15 Building heights

3.B Massing and set backs

thoroughfares characterised by large existing trees and new appropriate planting. It also provides spaces for rest and gathering, centred around the existing Pine on Hotham Street. Further still setbacks near residential boundaries have given opportunity for additional tree planting and open space for patients. This has a number of positive impacts including;

a. Contributes to improving the urban tree canopy
b. Manages permeable surfaces
c. Contributes positively to the urban heat island affect,
d. It creates positive views for the improved health outcomes of patients
e. Manages the privacy of surrounding residents.



3.16 President Ave facade

3.17 Rear of building

3.16 President Ave facade

3.17 Building massing

3.B Facade, articulation and materials

Proposed development
The mass of the proposed building has been broken down into 3 main elements.
1. President Avenue - outpatient facility
2. Hotham Avenue - inpatient facility and main entrance
3. Residential block - wards

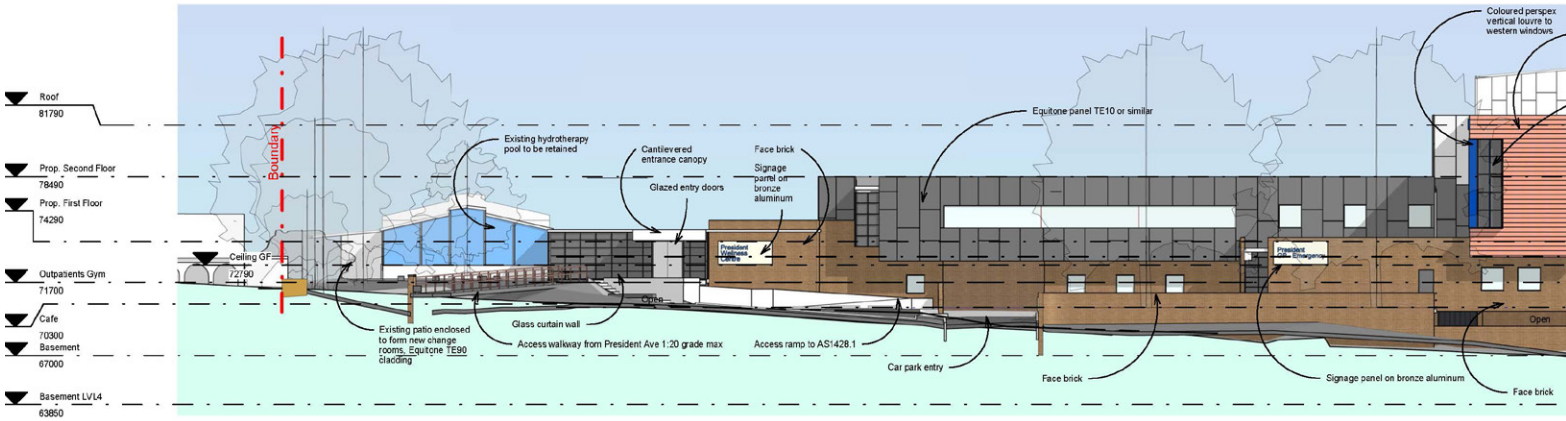
These masses are split usual visual tools including the stepping back of the building facade and glass Windows.

President Avenue - outpatient facility
The facade of this mass is managed by maintaining a large set back from President avenue.

Hotham Avenue - inpatient facility and main entrance
The facade is articulated using 3 main visual cues. Building height, materiality and facade articulation.

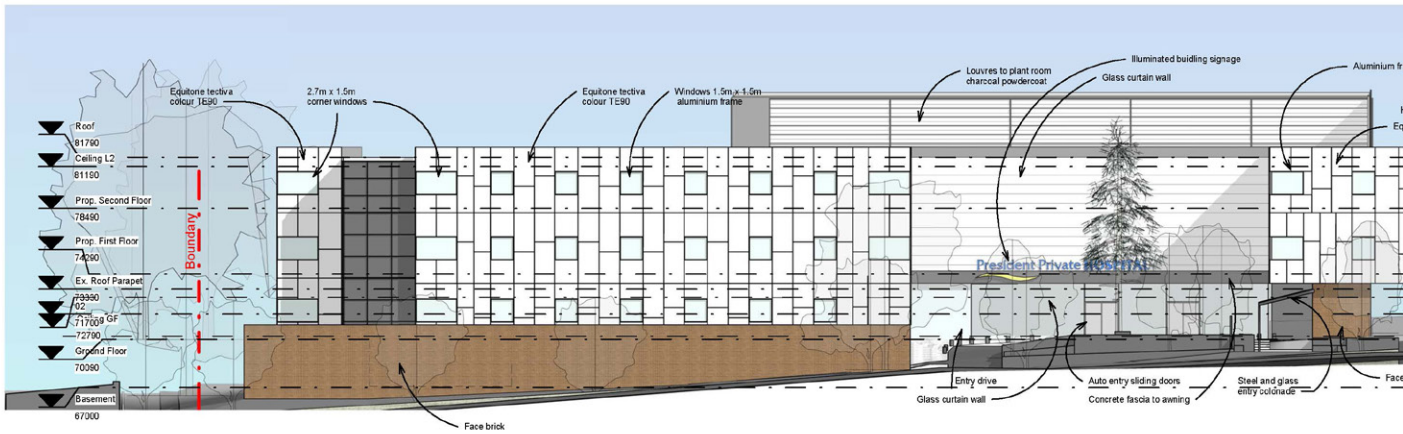
For this section of the building mass, the height of the building increases. This is to create a node at the intersection of two major roads. The building becomes a landmark for those driving past, but also a wayfinding tool for those arriving at the facility. The materiality of the building plays with the residential feel of brick, and the clean lines of FC and bronze panels. Finally, the facade articulation through the stepping back at locations where internal corridors end at glass panels creates interest and break ups the building mass.

Residential block - wards
At this location the facade appears to be more residential in materiality, height and built form mass. The building reaches a maximum of 2 storeys from ground level and windows proportions and facade treatments (brick) are kept to a residential standard.



1 A 300 SOUTH Elevation - President Ave

1 : 200



2 A 300 EAST Elevation - Hotham Rd

1 : 200

FACE BRICK

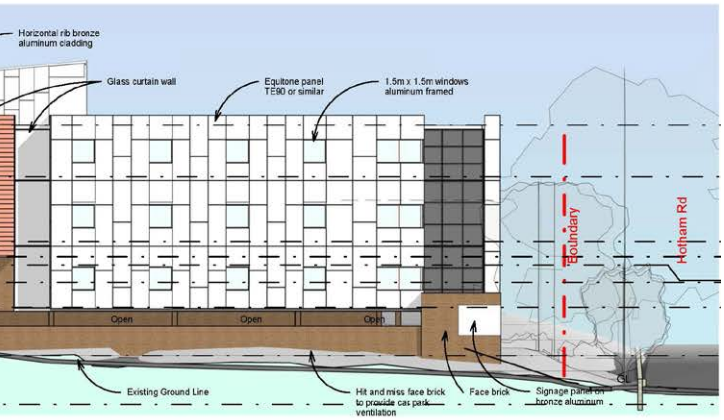
EQUITONE TE90 FACADE PANEL

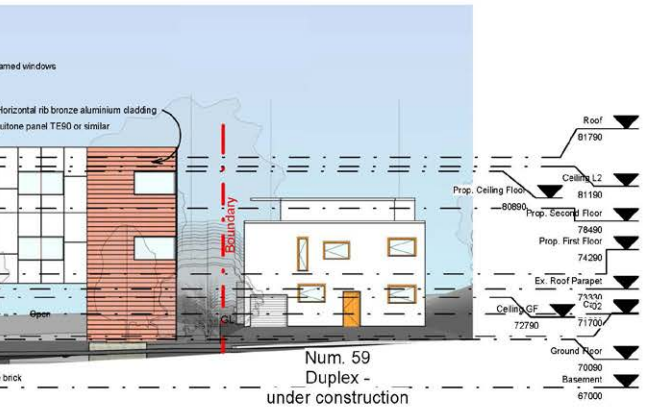
HORIZONTAL ZINC PANEL

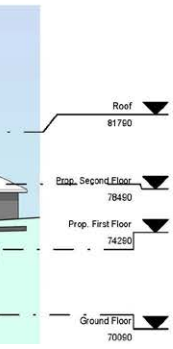
EQUITONE TE10 FACADE PANEL

3.18 Proposed built form materials

3.B Materials







Proposed development
The design proposes 5 main facade materials;

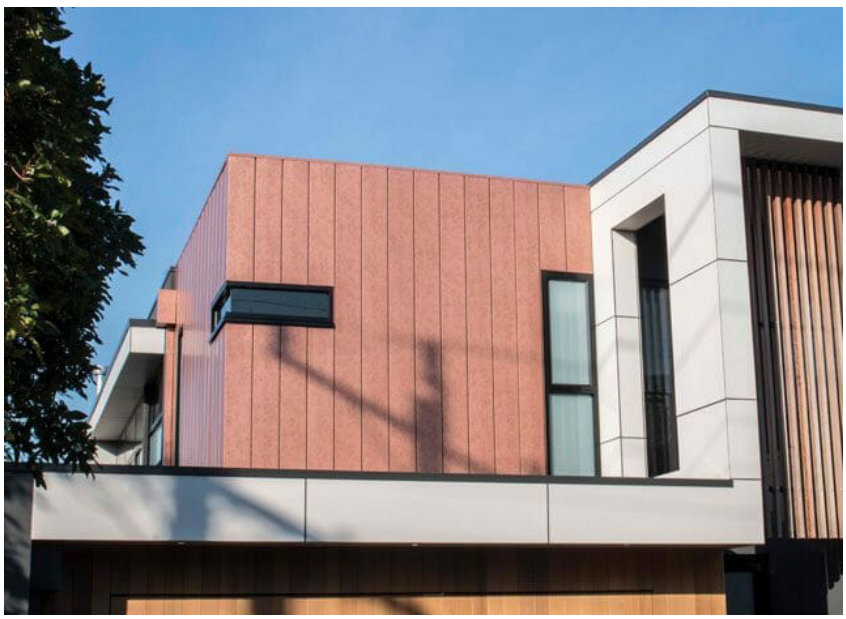
1. Face Brick
2. Equitone TE90 panels
3. Horizontal bronze panels
4. Equitone TE10 panels
5. Glass

The chosen materials provide elements of clean lines and modern hospital design along with materials more traditionally associated with residential buildings. The intention is to ensure the building presents itself to the street as a health care facility whilst considering its wider context.

The Equitone panels in two colours provide a hard wearing, maintainable and safe facade system. The panels are characterised by a sanded surface and naturally occurring hues within the material which will add interest and a changing appearance in the building over the day and seasons.

The face brick is synonymous with residential architecture. By including this material within the palette the building complements the surrounding built form. Brick also brings a solidity to the building providing a plinth for the additional built form.

3.19 Equitone TE90 and TE10 panels



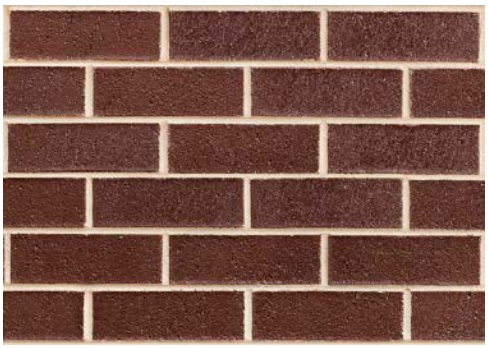
3.20 AMA Vestis Copper Panels

3.B Materials

The use of glass as a built form material is not only a practical material for the manipulation and provision of views and light, it also impacts the way the built form is perceived. The use of glass curtain walls provide the potential for interesting reflections of the sky and existing Pine tree. This softens the facade to ensure the mass of the built form remains at a human scale.

Finally the Bronze Panels provide drama, colour and depth to the facade. The bronze is used sparingly to highlight and define articulations in the built form. It gives the building a presence on the site without looking heavy.

The bronze panels have the ability to reflect light and will change in depth and colour throughout the day and over seasons. It becomes a building that sits quietly confident on its site, understanding its place in the wider context.



Face Brick PGH Bricks and Pavers - Altitude Everest

AMA Vestis Copper Panels

3.21 Rehabilitation facility signage

3.22 Hotham Street arrival signage


3.23 Outpatient facility signage

3.24 Carpark arrival signage

3.C Signage

Where relevant, provide details of any signage, including size, location and general finishes.

Current situation
The current signage situation is haphazard and informal. There is currently no signage strategy on site and thus wayfinding to and throughout the site is confusing. The current signage fronting President Avenue is placed so that you only see it after driving past the car park entrance. Visitors are unaware that there is a secondary car park entrance on Hotham Street and this is not signposted anywhere on site. Once the visitor or patient arrived in a car park, there is no obvious signage indicating the entrance to the hospital or the outpatient facilities.

Current deficiencies
The initial review of the current hospital arrangement highlighted the following deficiencies to be addressed in the redevelopment:

- No consistent signage
- No wayfinding strategy
- No directional signage when arriving to the site on foot or by car

Proposed development
The main sign is proposed to be located on the roof parapet of the top floor addressing vehicular approach to the corner of Hotham Road and President Avenue. This sign does not impede on the streetscape or landscaping.

The main entry to the hospital addresses Hotham Road and is set well back from the front boundary. There is a sign located on the awning of the entry. As the sign is located above pedestrian level it does not impede on access, or the impact on the surrounding landscape design.

The final sign is located on President Ave providing information on the location of the outpatient gym. This is the only freestanding sign on the site, it will stand approx. 3m in height and is located within the boundary line of the property. This signage type is essential for effortless wayfinding throughout the site.

The majority of signage is designed as part of the building rather than free standing. It is located above pedestrian eye level to allow recognition from a distance rather than close proximity. This compliments the ideals of the surrounding landscaping and public spaces.


President Private
HOSPITAL

3.D Services

Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.

Current situation
The current building services are located on the President Avenue street frontage. Some attempt at reducing the visual clutter that comes with loading zones and waste management is delivered through a high solid concrete wall. However this just further brings attention to these services.

The location of the loading zone along the main facade of the building is highly inappropriate for a hospital setting. Furthermore the narrow access to and from the service area for trucks and vehicles is hard to use and dangerous.

Current deficiencies
The initial review of the current hospital arrangement highlighted the following deficiencies to be addressed in the redevelopment:

- Location of services on main street frontage is not appropriate
- Movement to and from loading zone problematic and unsafe
- Visual clutter of bin storage ugly

PRESIDENT AVE

LEGEND: Ground Floor Services

- ADMINISTRATION
- SERVICES
- THERAPY
- INPATIENT
- TREATMENT

LEGEND: Building Services

- MECHANICAL PLANT
- LOADING DOCK
- WASTE MANAGEMENT ROOM

PRESIDENT AVE

LEGEND: First Floor Services

- RECREATION
- SERVICES
- THERAPY
- WARD AREA

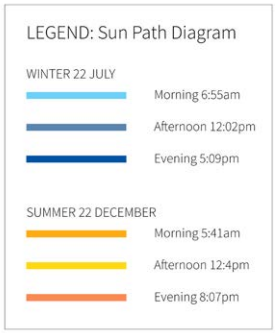
3.D Services

Proposed development
Servicing functions are concentrated in the initial stage being the north wing to allow continued operation of the hospital as the redevelopment progresses.

Truck access is provided directly from Hotham Rd. Loading and service vehicles are accommodated below grade, made possible by the slope of the site upward to the north. A separate contained area at the main hospital floor level is thus provided for delivery trucks, service vehicles, garbage collection, medical deliveries and short term staff parking. The area is not visible from surrounding properties. Visual and noise impacts to surrounding properties and public open space are minimised.
Ambulance access is from the main Hotham Rd driveway to the ramp direct to the basement car park. The ambulance bay provides direct transfer of patients to the lifts and thence in-patient unit.

Mechanical plant is primarily located at roof level above the main hospital entry between north and east wings of the hospital. The plant room is integrated into the building form and uses finishes consistent with the main facades. The external perimeter is set back from the building facades to reduce the scale and bulk. The plant room is orientated away from adjacent residences on Bidurgal Ave reducing noise and vibration impacts. Some minor secondary mechanical plant will be located on the open roof deck. This will be low level and not visible from surrounding public spaces.
Lift overruns are housed within the roof top plant room as a consistent building form.
An array of photo voltaic panels to generate electricity for the hospital are located at roof level. These are located away from the building facades and at low level. They are not visible from public spaces.

Service connections, MSR and metering are located off the main Hotham Rd driveway and integrated into the main building. The backup generator will be located within the basement level below the main access ramp.



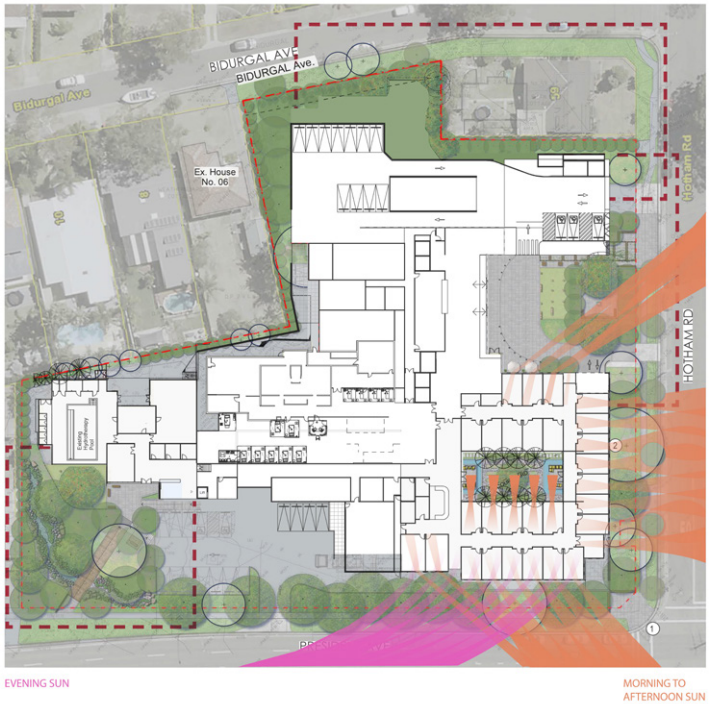


Figure 3.28 Access to natural daylight diagram Ground Floor

Access to natural daylight diagram 1st Floor

3.E Solar shading

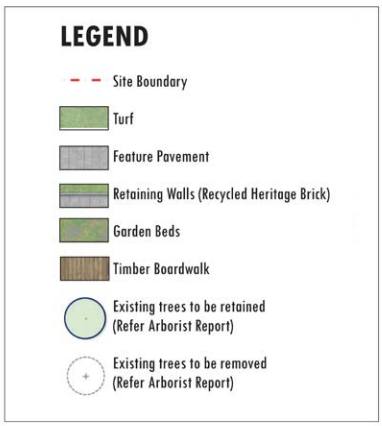
Outline the design strategy for providing internal amenity, including: access to natural daylight; opportunities for visual and physical access to outdoor landscape areas; and solar shading to manage glare and heat gain.

The current situation
The current building does not provide internal amenity including access to natural light or access to usable outdoor spaces. It does provide window shades to manage glare and heat gain along the facade of President Avenue, however these are poorly considered as the aspect of the building is South. North facing windows are currently characterised by old large windows which are no longer fit for purpose. In some locations the windows are tinted with a mission brown tint, however the internal amenity this provides is poor.

Current deficiencies
- Ineffective use of window shades
- Outdated glass/window technology
- No utilisation of vegetation and trees to manage solar shading, glare and heat gain.
- No access to usable outdoor space
- Poor visual access to outdoor landscaped areas
- Poor natural light to south facing rooms

Proposed works
The proposed upgrade works maximise solar access by the majority of windows facing north, whilst minimising windows and open space to the west. This provides the most comfortable outcome for patients, whilst managing artificial heating and cooling systems.

LEVEL 1 NATURAL LIGHT DIAGRAM
SUMMER



By providing landscape solutions including new shade trees along the southern boundary of the property, views over the major road of President Avenue are improved. Along with improved views, ambient noise from traffic is decreased and the building as buffered from strong cold southerly winds. This not only improves the internal amenity, but the ability to manage passive heating and cooling.

In additional, by providing additional trees along the western boundary, rooms facing west are protected from the hot afternoon sun, along with providing privacy and reducing light spill for the neighbouring property.

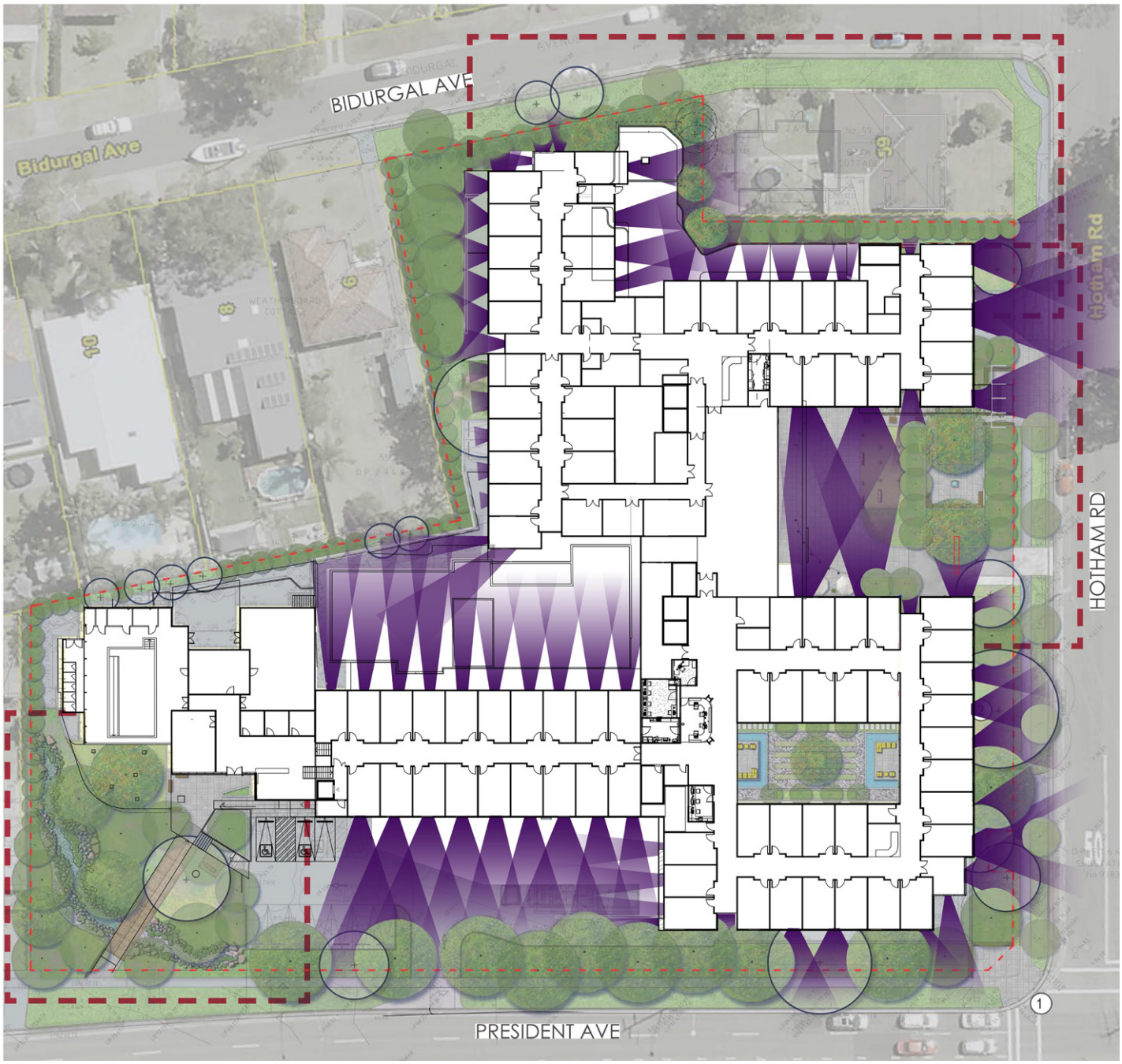


Figure 3.29 Views and light spill to neighbouring properties diagram

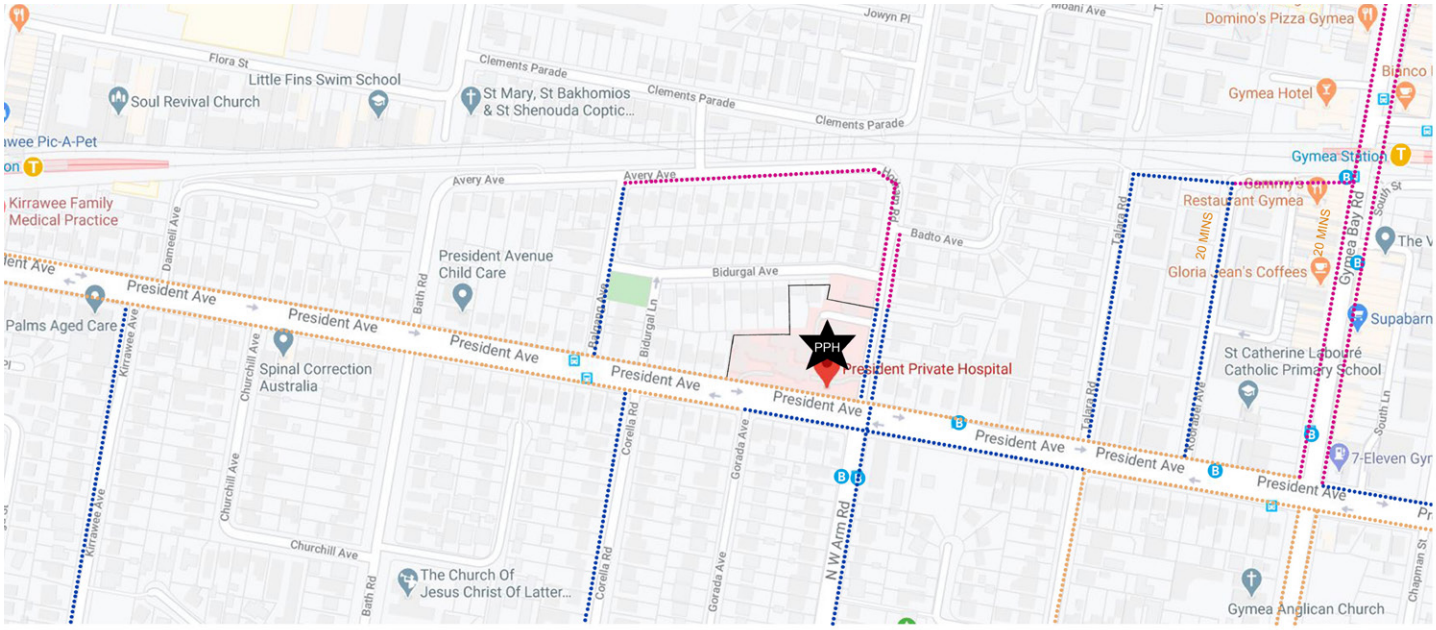
3.E Views

The proposed design not only manages design to ensure visual and acoustic privacy, it also manages design to ensure the best health outcomes for patients. It does this by ensuring visual connection to the outside world whilst ensuring the privacy and managing light spill for surrounding residential blocks.

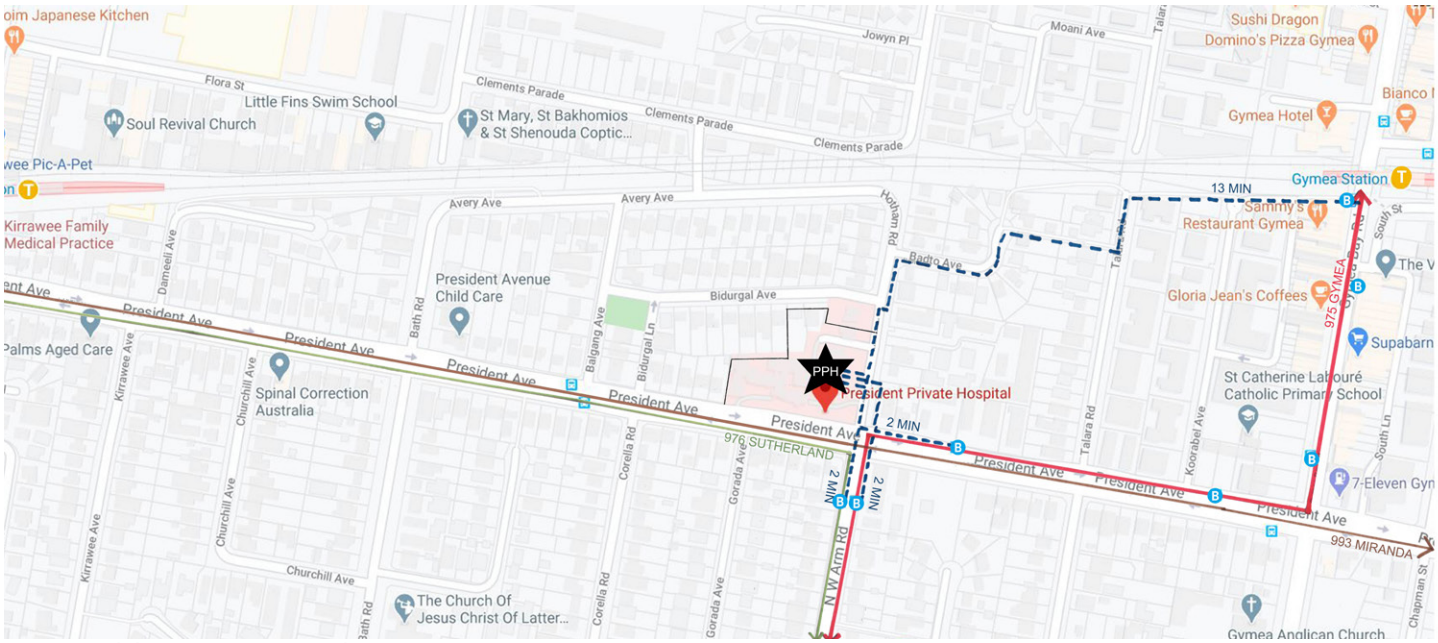
Research has shown the improved healing times, reduction of complications and reduced pain medication when views to green space occur. The proposed design acknowledges this research to ensure the best health outcomes for patients.

The manipulation of views to ensure patients enjoy a view of a tree or a prospecting view when concerns for privacy are not apparent.

As seen in the diagram, views out are consistently towards Hotham Street and President Avenue whilst shortened views obscured by vegetation are towards the residential blocks.



4.01 Concrete footpath diagram

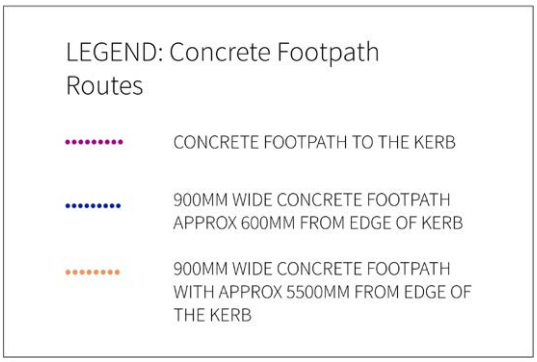


4.02 Public Transport diagram

03 Access

Creating accessible healthcare facilities is essential. Not only does access through the facility need to be considered, but access to and from the facility needs to be analyised. Often visitors and patients may not be in a position of taking a private vehicle to the facility. Public transport and good quality pedestrian access is paramount in ensuring equitable access.

The proposed development is in the fortunate position of being located close to existing transport and town centre nodes. Both Gymea and Kirrawee train stations are a 10-15min walk from the facility. The facility is also close in proximity to the town centres of Kirrawee and Gymea ensuring connectedness to the wider context.



Pedestrian access
The site is pedestrian friendly and well connected to both Gymea and Kirrawee train stations with well maintained concrete footpaths. The site is a 550m walk to Gymea station.

Public Transport
The site is well connected by bus routes to Miranda, Gymea and Sutherland.