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## JUSTINIAN HOUSE REDEVELOPMENT ARCHITECTURAL DESIGN STATEMENT

October 2007

For  
ST VINCENTS AND MATER HEALTH SYDNEY



**DOCUMENT CONTROL**

Revision	Date	Authorised
A	11 October 2007	Alex Kibble
B	18 October 2007	Alex Kibble
C	19 October 2007	Alex Kibble
D	24 October 2007	Alex Kibble

## 1.0 Project Overview

The Sydney Melanoma Unit is a world leader in melanoma related research, education and treatment. It is affiliated with the University of Sydney, and has clinical links to The Mater Hospital and Royal Prince Alfred Hospital.

Core areas of research, all of which are oriented toward reducing the impact of melanoma on the community, include:

- clinical based research with a focus on the biology, pathology, immunology and genetics of melanoma;
- conduct of clinical trials in four key areas including surgical oncology, radiotherapy, immunotherapy and medical oncology;
- Sydney Melanoma Unit Database which holds comprehensive clinical and histopathological information on over 25,000 patients with melanoma.

This project undertakes to develop a new 'world class' clinical research facility for the Sydney Melanoma Unit (SMU) and will link with existing cancer treatment infrastructure at The Mater, creating a melanoma facility that provides coordinated clinical care, undertakes research and provides training for clinicians in translating oncology research into patient care.

The key components of the project include a series of interrelated service clusters that provide consultation, clinical treatment, administration and research office facilities for the SMU; an independent office suite for the Mercy Foundation and site landscaping

The project also includes the provision of carparking on the site to meet the projected needs of the new facility as a 'stand alone' entity. It is anticipated that the new development will not rely upon car parking elsewhere on the Mater Hospital Campus.

## 2.0 Site description

Bounded by Rocklands Road on the south, Sinclair Street to the east and Gillies Street to the west the site has an area of 3,541 m<sup>2</sup>. A newly created boundary that extends the southern boundary with 17 Gillies Street subdivides the former Justinian House site and now defines the northern boundary of the site. This new boundary severs the two cottages at 20 and 22 Sinclair Street from the original Justinian House site.

### *Levels*

The site generally has a 9.35m fall from the high point of RL 88.3 at the midpoint of the boundary on Sinclair Street to RL 78.95 on Gillies Street. The Rocklands Road boundary falls 7.7m from RL 86.92 (on the corner of Sinclair Street) to RL 79.20 on the corner of Gillies street.

### *Existing structures*

The site currently houses a group of buildings known as Justinian House, a former aged care facility, which comprised residential apartments, dining hall and recreation lounges and several internal courtyards, gardens and terraces. A separate Development Application (348/07) lodged with North Sydney Council for the demolition of the structure has now been approved.

An electrical sub station approximately 22m<sup>2</sup> in area and about 3.5m high is located on the Gillies Street frontage. This structure will not be demolished. On the north western corner there is an existing driveway crossing and delivery driveway along the northern boundary to the centre of the site and it is proposed to continue the use of this driveway crossing for deliveries to the new development.

Immediately north of the site are two former cottages that formed part of Justinian House group of buildings and have now been subdivided and no longer form part of the development site.

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### **3.0 Context and Constraints**

Surrounded primarily by residential buildings including single cottages and multi storey apartments the site is located in a Residential Zone C area. The most significant in scale (of the residential structures) is the old maternity hospital on the corner of Rocklands Rd and Sinclair Street, which is also a listed heritage item. A second listed heritage structure is located on the corner of Rocklands Road and Gillies Street. The houses directly adjacent to the site on the northern boundary are single storey cottages, with the Gillies Street houses being well elevated from the road and having stone retaining walls to the front gardens.

Located opposite the Justinian House site on Rocklands Road is the Mater Hospital, a large multi-story complex with an institutional scale. The building has no significant architectural character and has an extensive series of vehicle driveways, loading dock and waste management compounds at the street frontage on Rocklands Road. An existing bus shelter on Rocklands Rd outside Justinian House will remain in place position and is unaffected by the proposed development.

An existing view corridor along the northern boundary of the site from Sinclair Street looking down to Gillies provides distant views to the harbour and beyond. While not expansive, these views are pleasant and give a sense of connection to the harbour. It is intended to maintain this view corridor and remove the current aerial bridge that connects Justinian House to the neighbouring cottage to the north on Sinclair Street.

A key statutory constraint for the development is the North Sydney Council LEP height limit. For this site the height limit is 12m above the ground level. This is complemented by a 45 degree sloping plane starting at 3.5m above ground along the boundary. The critical controls inform the setbacks and overall height for the development. As a consequence of the height planes, a default setback is created around the perimeter of the site, encompassing existing planting and landscaped edges.

### **4.0 Development Opportunities**

#### **4.1 Corner Entry – Principal pedestrian entry**

A key opportunity for the development is to capitalize upon the key entry point to the site on the corner of Rocklands Road and Sinclair Street. With a prominent view from the upper end of Rocklands Road this corner provides an opportunity for a landscaped entry plaza, which is open and set back from the street and has a visual connection to the main entry of the Mater Hospital or the bus stop on Rocklands Road.

#### **4.2 Vehicle access**

The vehicle access to the car park has been located on Rocklands Rd and purposefully avoids providing entry from either Gillies or Sinclair Streets, which are quieter residential streets. It is positioned so that it is some distance away from the Mater loading dock and also a reasonable distance (up hill) east of the corner of Rocklands Rd and Gillies Street. The parking has been designed so that the entry and exit point is contained in the one location minimising the impact on the street edge

#### **4.3 Fall of the land**

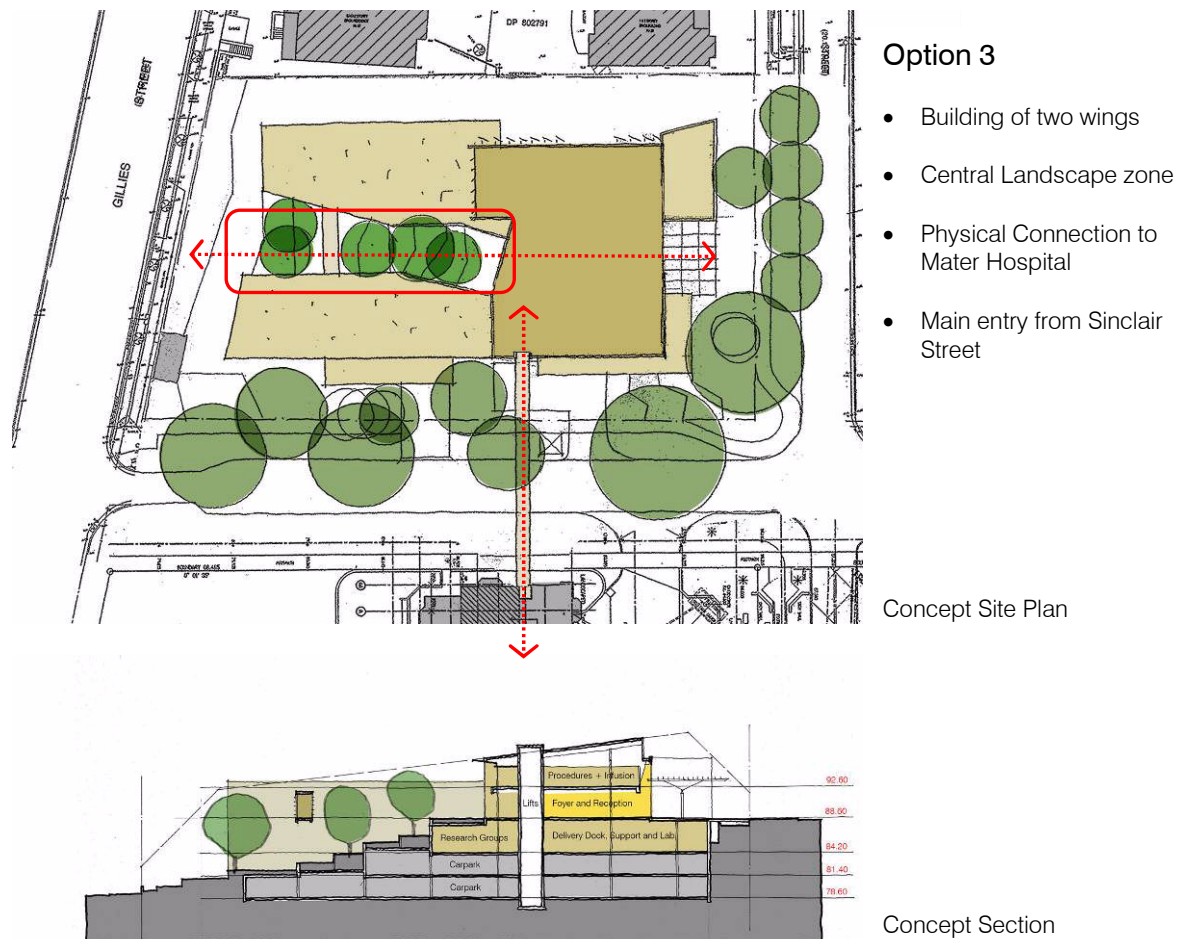
The 9m change in level along the length of the site provides design opportunities to partially obscure carparking in basement level carparks and to provide grade access at several levels of the building. As outlined earlier, the principal entry to the building is at the highest point of the land at the south east corner on Sinclair Street providing direct level access to the main floor at RL 87.7 housing the main reception counter and consultation suites.

A secondary entrance is provided for the lower floor at RL 83.5. This is positioned midway along Rocklands Road and provides the potential for clear identity for secondary users of the building.

## 5.0 Brief and Concept Options

A Functional Brief for the project was initially prepared by Colleen Wilson Health Strategies Pty Ltd and was finalised in May 2007. This brief was adopted as the basis for the commencement of the concept design phase and defined the broad project scope. In parallel with the development of a concept design and site analysis, the functional brief was developed through user consultation. This resulted in a specific user brief and Schedule of Accommodation. These meetings occurred from June to August of 2007. The key outcome of the brief development phase was the requirement for a building with a usable floor area (UFA) in the order of 2,400m<sup>2</sup>.

Initially, three preliminary concept options and the detailed return brief were prepared for the consideration of the principal stakeholders from the Sydney Melanoma Unit (SMU) and St Vincent's and Mater Health Sydney (SVMHS). These options were presented on 22 June 2007 and proposed alternative arrangements for the key functional units articulated in the Functional Brief. These options established parameters for building entry, circulation and building massing. Of the three options presented, the preferred option proposed a building of three levels that was organised into two distinct 'wings' separated by an elongated central landscaped court. This option also established the key driver of a SMU clinical floor located on the mid level (level 2) with a street entry from Sinclair Street.

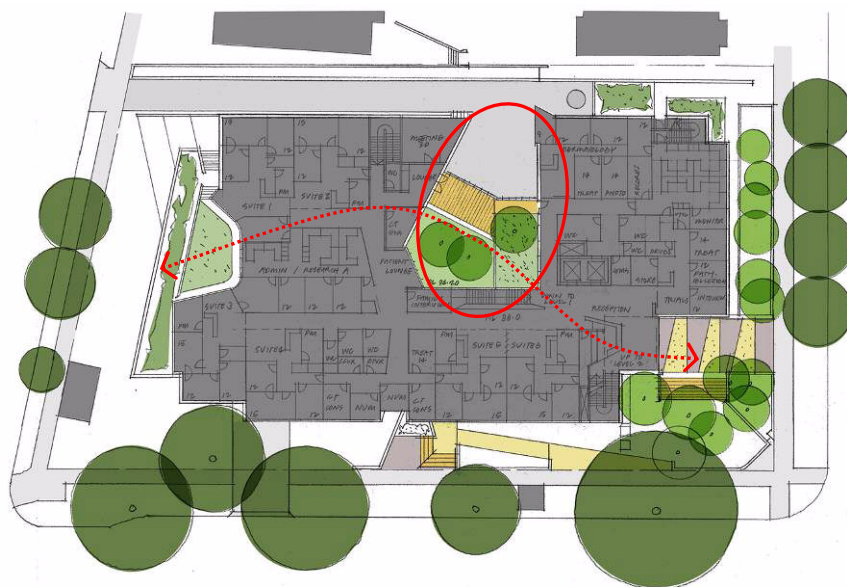


Preferred Option 3 was developed further through more detailed consultation with specific user representatives from the SMU and a matching schedule of accommodation was generated. However after further consideration of the project scope, budget and critical functional relationships by the client groups, substantial modifications were undertaken to respond to stakeholder critique. This involved a review of the general arrangement of the principal SMU clinical floor and the inclusion of certain high cost functional components of the brief.

A new or developed concept option was structured around a more centralised garden court that facilitated a consolidated floor plate for the SMU clinical operations. Critically, this development of the plan responded to issues of organisational communication and connectivity, eliminating the perception of isolated zones of the building. This scheme also deleted a Day Procedures Unit and the bridge connection to the Mater Hospital, although provision for future retrofitting of either item was to be considered. Stakeholder approval for this scheme was received on 11 September 2007.

This scheme formed the basis for this proposal and included the following key functional units:

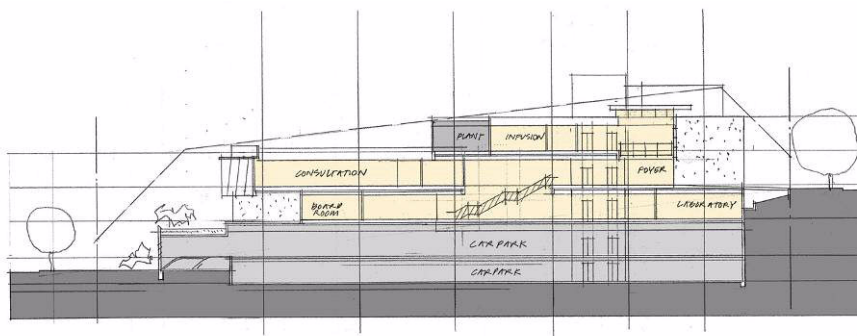
- Clinical Suites
- Clinical Trials Unit
- Academic Research Offices
- Administration Offices
- Laboratory space and Biospecimen Bank
- Education and Conference Facilities
- Carparking



### Final Preferred Option

- Central focal outdoor space
- Consolidated Clinical treatment floor
- No physical Connection to Mater Hospital
- Main entry from Sinclair Street

Concept Site Plan



Concept Section

## **6.0 Development Proposal**

The Development Proposal has been generated after extensive consultation with internal and external stakeholders, the local community and authorities. This proposal is the development of the initial concept options and embodies the optimal built resolution of the Functional Brief. This proposal also caters for growth in the activities of the SMU and anticipates the staffing needs through to 2014.

### **6.1 Overview**

The Proposal described in this section is result of careful study of the physical constraints of the site and the functional demands of the brief, coupled with the statutory requirements of the local and state planning controls.

Consisting of a 6 level building, including two basement levels for carparking, the proposal provides 3,533m<sup>2</sup> of Gross Floor Area (as defined by the NSCC LEP) and is substantially less than the 4,985m<sup>2</sup> of the existing development. The proposal envisages the following vertical arrangement of the building, with Level 4 being the topmost floor, Level 2 being the principal entry from Sinclair Street and Level 1 being the lowest habitable floor:

#### **Level 4**

Central Plant for exhaust, chillers and air handling plant  
Hydraulic Plant and boilers  
Emergency Generator

#### **Level 3**

SMU Administration unit  
NSW Melanoma Network Offices  
Specialist Dermatology Suite

#### **Level 2**

Main Reception  
6 Consultation suites  
Patient Lounge  
Executive Offices and clinician lounge  
Clinical Trials research offices and consultation suite

#### **Level 1**

Conference and Education Centre  
Academic Research Offices  
Database and server room  
Wet laboratories  
Mercy Foundation Offices  
Storage and Support spaces including delivery dock

#### **Level B1**

55 Carparking spaces  
6 Motor Bike spaces  
10 Bike storage spaces and change facilities  
Main Electrical Switch Board

#### **Level B2**

63 Carparking spaces  
6 Motor Bike spaces  
Rainwater Reuse Tank

### 6.3 Architectural Intent

Conceptually, this building is focused around a central outdoor landscaped court. While not large, this space becomes the central hub or *locus* for the building, bringing not only light into the centre of the building but a clear identity for the interior. It also seeks to link some of the external landscaped precincts of the development to interior spaces of the building.

The primary driver for the functional planning of the building is the need to provide a flexible floor plate for the SMU to undertake clinical activities and to do so in an inviting and stimulating environment. This is to ensure that patients are provided with a dignified and appealing environment and that talented research staff are attracted to and remain in the SMU.

In aiming to create a patient focused and stimulating work environment the building has explored several strategies in the architectural planning of the principal floors so that the physical environment matches the leading edge research undertaken by the research staff. Key strategies involve:

**Significant entry statement** – While many staff, patients and visitors will enter the building via the lifts from the carpark, a significant statement at the building's primary entrance is critical to identify and announce the work undertaken within the building. This has been done through use of high quality materials; an understanding of the landscape character of the site and a desire to create a spatial experience that marks the threshold of the entry.

**Clarity in building circulation** – In addition to the importance of building entry, the circulation patterns have been devised to minimise the use of extensive corridor systems and closed interiors. Through the inclusion of the central outdoor space a 'gallery' or open concourse has been used to link the 6 primary consultation suites, which themselves have been grouped in clusters creating a series of discrete and semi-private zones in which patients and staff undertake consultation and research.

**Connection and co-location** – The functional planning of the proposal, while responding to the numerical requirements of the brief, also explores ideas of locating office functions throughout the facility, where primary work activities occur. At the level of senior management, office space is located within the clinical suites, enabling the practicing directors to undertake management and administrative functions with ease. Similarly, the provision of specific facilities for Clinical Trials close to the general consultation areas will enable a holistic and patient focused approach to treatment and information gathering.

**Decentralised meeting facilities** – This requires a range of meeting rooms that are easily accessed, centrally located and provide a stimulating and responsive environment that facilitates interaction and discussion. In addition to the static 100 seat auditorium, a range of meeting rooms are provided on all levels. A particular and significant aspect of the SMU activities is a weekly multidisciplinary meeting of all research, clinical and nursing staff – bringing together the multiple strands of the SMU activities – and requiring a large 80m<sup>2</sup> room. Other spaces include a more informal senior clinician lounge for general interaction and discussion; smaller general seminar and meeting rooms associated with office functions.

**Outdoor space and breakout** – An important consideration has been the provision of protected outdoor space for patients, staff and visitors. In addition to the central space, which can be accessed on levels 1 and 2, a large landscaped terrace overlooking Gillies Street will provide a prospect beyond the tight focus of the interior, particularly for activities occurring within the conference and education facilities.

**Flexible work place** – In any facility that undertakes scientific and academic research, growth and change must be easily achieved. In this proposal, the building plans anticipate change in such a way that high cost and fixed items of infrastructure can be expanded easily. This becomes critical for components such as the laboratory and clinical components. The plan has been



structured so that expansion of these areas can occur through the reorganisation of office components

The proposal seeks to synthesise these planning drivers in the architectural expression of the building and to develop a responsive and stimulating facility

#### **6.4 Architectural Form**

The architectural form of the development proposal is a response to the statutory controls of the LEP, the character and topography of the local environment and demands of the functional brief.

Critical constraints influencing the form of the development include the 12m height limit for the zoning of this site; the associated setback planes and the need to achieve specific areas for landscaped areas; the 9m fall along the length of the site and the height and scale of adjacent properties.

At a conceptual level, the form of the building is broken down into smaller components to create a building with varied expression and heights. This proposal avoids the literal translation of the height plane into an extensive sloping form and seeks to present a small scale and diverse building form that is in character with the scale of the adjacent residential developments in the local area.

The development proposal articulates the various functional components and balances the horizontal stratification of the plan with a vertical expression of key areas – particularly at the building entry and along Gillies Street.

The building form is traditionally grounded and where the lowest level is raised above Gillies Street, landscaped terraces are provided to mask the exposed face of the basement carpark. This landscaped podium provides a composed base to the upper level of the building and creates a new landform for the site.

The roof top plant room is held within the height plane although there is limited projection from some mechanical exhaust ducts and cowls, particularly from the laboratory fume cupboard exhaust flues. The use of machine room-less lifts has resulted in no projections for the lift motor room beyond the roof top plant room.

The roof form of the building uses low pitched metal deck roofing where possible and concrete decks with parapets to minimize the vertical projection of the overall building form. Use of skylights and clerestory windows particularly over the consultation area will admit natural light into the centre of the plan and will provide a varied roof form.

#### **6.5 Exterior Expression and Materials**

The exterior expression of the building has been conceived to present a considered and composed design that responds to the surrounding environment both in material selection and composition. The design uses a palette of materials that responds to the overall formal approach and provides a distinctive and identifiable presence for the SMU. The material selection has taken a metaphor of 'imperfection' and 'variability' of surface to develop a building that is tactile and responsive to human scale. The building form and the constituent parts of the facades respond to human scale so that occupants, visitors and patients and the local community are able to connect with building. It is important that building is not perceived as a closed and disconnected commercial entity within the broader residential zone.

The composition of the facades has been generated using a scale that is responsive to the adjacent residential development. Thus the dominant window type is small to medium openings

in walls, with limited use of large window and curtain walling. The building does not present as a commercial development, rather a more traditional building that may be found in a multi-unit residential zone.

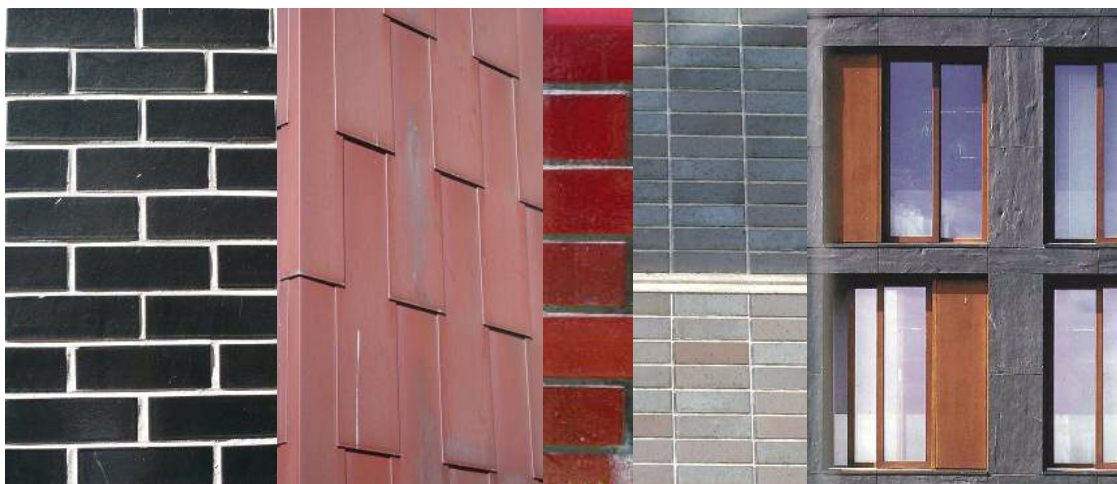
The principal materials proposed for this development include a range of masonry brickwork types, limited use of stone and copper cladding at the building entry; and both frameless and aluminium framed glazing.

Underpinning the overall approach to the exterior façade treatment is a system of brick snap tiles embedded on a precast concrete panel. This system allows a purposeful connection to the face brickwork found on many adjacent building, but in a contemporary manner. It is envisaged that a range of bonding patterns will be used that depart from traditional stretcher bond load bearing brickwork. Use of stack bonding and staggered bonds will bring a new visual expression to the brick facades, while retaining a physical connection to this key material. Colours will include dark manganese and deep reds, that relate to the context of the adjacent federation era houses.

In addition to the face brickwork of the brick snaps, it is proposed use a limited amount of coloured glazed brickwork, bringing a new texture and visual expression to a masonry building. Used primarily on the special facades or at key entry points coloured brickwork will create a distinctive presence that identifies the SMU building as a unique and identifiable component of the local environment. Colours will be complementary to general brickwork, and will include, oranges, ochre and deep red. A limited amount of black brickwork may be used in some areas.

The design uses a limited amount of special materials including copper and stone cladding at the principal building entry at Sinclair Street. These materials have a long lasting presence and will alter and change during their lifespan. These present a special and very tactile approach to building surface at the key building entry point and mark the entrance and public face to the SMU with a high quality architectural approach.

There will be some areas of glazed walling, particularly in office areas, at the main foyer and around the central landscaped court and will offer a controlled contrast to the wider solidity of the protecting masonry shell. The foyer glazing will use a system of structural steel sub frames and frameless connectors to develop a very refined and precise contrast to the tactile materiality of the adjacent stone and copper.



**Material Palette** – Glazed Brick, Copper, Brick 'snaps' on precast concrete panels

## 7.0 Impacts

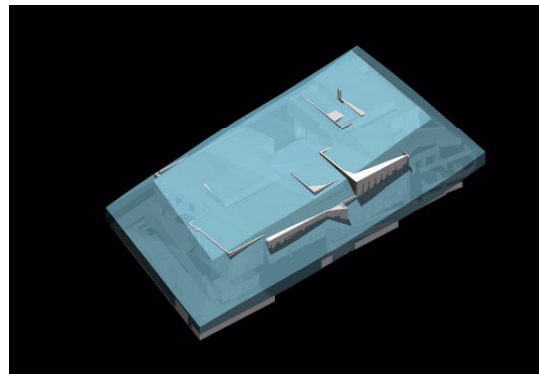
Through a positive response to the key controls of the LEP, the development proposal has minimized the impact on the surrounding environment. This section will detail some of the key impacts of the development and compare the definition of site coverage and floorspace for the existing and proposed developments.

**7.1 Height** – The height of the new proposal is generally in accordance with the 12m height limit of the LEP, however there are instances along the Rocklands Road frontage where the upper parapets of them building projects beyond the 45 degree height plane. This departure from the LEP controls has been considered within the context of the overall impact of the development and should be seen in the context of the existing buildings.

The existing Justinian House buildings project beyond the 45 degree height plane on all sides of the site and while not extensive, the projections do when taken together indicate a larger and more bulky building. This proposal has limited the projections to the Rocklands road frontage where the impact is lessened due to the scale of the mature Camphor Laurel trees. There is a very minor projection on the corner of the site adjacent 17 Gillies Street, however this is less than the current projection.



Envelope Controls – Existing Development



Envelope Controls – proposed Development

**7.2 Shadows** – Through careful consideration of the LEP height limit, bulk and form of the new building has been kept to a similar scale as the existing Justinian House buildings. While there are some additional shadows created by the new proposal, with the worst case being at 9am on 22 June along Gillies Street, the new proposal does reduce shadowing at other times elsewhere.

The project site being north facing generally overshadowing at midday on 22 June only affects Rocklands Road, which is largely overshadowed by the existing trees. Other shadowing impacts are limited to the forecourt and loading dock apron of the Mater Hospital.



Existing Shadows – 22 June 9am



Proposed Shadows – 22 June 9am

**7.3 Views** - The proposed development does not materially affect the views from adjacent properties, as the extent of the new development is no higher than the existing development it replaces. In some instances the views are marginally improved – particularly along the view corridor to the north of the site.

The new development does not overlooking adjacent developments in any greater manner than the existing development and in many cases the number of windows facing adjacent properties has been reduced – particularly along the northern boundary.

**7.4 Wind** - The proposed development will have negligible impact on the surroundings and is unlikely to cause additional wind tunnel effects. The form of the building being generally stepped and highly modeled will mitigate against westerly winds funneling down the view corridor along the northern boundary. This corridor is to be heavily planted long the boundary and will help reduce any wind affect to the adjacent residential properties.

There are limited expanses of façade that are greater than 2 storeys and where the building is at its maximum height over the delivery dock, podium planting, canopies and stepped terraces will all help to reduce down draft along the northern boundary. Along Rocklands Road, the façade is generally protected by the mature street trees, which will reduce any funneling between the Mater and the new development.

**7.5 Street Trees** – The impact of the proposed development on the street trees will be covered in more detail in the Arborist's report, however the proposed development has minimised any affect on the existing street trees through setbacks that respond to root zones and canopy spread. The proposed development also retains a significant Camphor Laurel within the site that contributes to the overall perception of the Rocklands Road canopy. Street trees on Gillies and Sinclair Street are unaffected by the proposed development

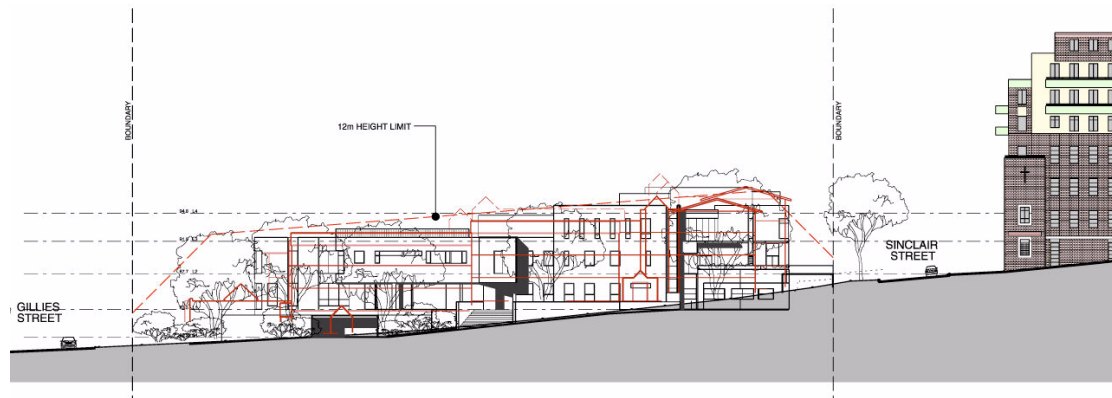
**7.6 Heritage** – The proposed development is located in close proximity to two listed heritage items. These items, the former Mater Maternity Hospital on the corner of Rocklands Road and Sinclair Street and a large house on the corner of Rocklands Road and Gillies Street are not affected in any substantial way by the proposed development.

Through the use of complementary materials in the form of a range of face brickwork and other masonry units; through the considered approach to fenestration and with a relatively low scale overall, the proposed building is not conceived as a high contrast development.

In addition to the design of the building form and selection of materials, the development is shielded from view along Rocklands Road by a row of Camphor laurel trees that will obscure the new development from the adjacent heritage items. These Camphor Laurels themselves also have a significance that the project recognizes. Setbacks and construction technique has taken into account the need to protect these trees.

**7.7 Comparison with Existing Development** – The proposed development has taken into account the key controls of the LEP that relate to height, bulk, setbacks, site coverage and carparking and responded with a sensitive approach. While this proposal does not strictly comply with the numerical controls that relate to height, site coverage, there is a substantial improvement than the current development.

While *Gross Floor Area* is not a control of the LEP, it does however inform the general bulk and scale of a development when considered in the context of the height limit. In comparing figures for the existing and proposed development it can be seen that there is a reduction in floor space of 1,452 m2 and consequent reduction in overall bulk. The proposed development is no higher than the existing development and has matched the overall scale of the existing Justinian House buildings.



Overlay of existing building and new proposal

The greatest departure from the LEP controls lies in the site coverage and resultant landscaped area of the site this is chiefly the result of providing a large extent of basement carparking. The proposed development has a landscaped area of 1,616m<sup>2</sup> or 46% of the site area. Of this 896m<sup>2</sup> or 75% of the planted area is deep soil planting. The existing landscaped area for Justinian House is 961m<sup>2</sup> or 27% of the site. Of that area only 784m<sup>2</sup> is deep soil planting.

The following schedule compares the key statistics for the proposed development against the same figures for the existing Justinian House buildings:

Item	Existing Development m <sup>2</sup>	Proposed Development m <sup>2</sup>	Difference m <sup>2</sup>	% Change
Site Area	3,541	3,541	0	0
Built Area	2,319	1,616*	(-703 m <sup>2</sup> )	30% decrease
Driveways	261	308	47 m <sup>2</sup>	18% increase
Landscaped Area	961 (27%)	1,617 (46%)	656 m <sup>2</sup>	68% increase
Planted Areas	784 (22%)	1,198 (33%)	414 m <sup>2</sup>	52% increase
Deep Soil Planting	784	896	112m <sup>2</sup>	14% increase

\* This represents the typical above ground perception of the building and excludes areas of landscaped podium over basement carparking.

## 8.0 Conclusion

This development has been designed after careful consideration of the statutory planning controls and the impact on the surrounding environment. It responds to the physical environment and addresses the functional and cultural demands of the Sydney Melanoma Unit.

The project announces the importance of the work undertaken by the SMU with a building that is responsive to urban surroundings and the landscape setting. It uses the underlying character of the surroundings to develop and create a sympathetic architectural language and uses traditional materials in new ways that links to the past and transform the local environment. The development opens up elements of the site so that the local community can appreciate and enjoy the gardens and connect with the work of the SMU.

The development proposal makes a positive contribution to the local area and replaces a mediocre institutional building with a new facility that uses unique forms and materials to create a sensitive approach for a significant world-class cancer research facility. Through the use of high quality materials that will endure, it is a building that will make a lasting contribution to the urban character of the surroundings and to the broader community through the work of the Sydney Melanoma Unit.