NEPEAN HOSPITAL AND INTEGRATED AMBULATORY SERVICES REDEVELOPMENT STAGE 2

SSDA
(SSD-16928008)

ARCHITECTURAL DESIGN STATEMENT

DOCUMENT CONTROL

ISSUE	DATE	ISSUED BY	FOR
A	13.08.21	**AM**	**Information**
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C	12.11.21	**AM**	**FINAL SSDA ISSUE**

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1.00 EXECUTIVE SUMMARY AND RESPONSE TO SEAR'S REQUIREMENTS

SSD DA (SSD-16928008)

Health Infrastructure NSW (HI) is the applicant for the proposed Stage 2 Redevelopment of Nepean Hospital in Penrith Local Government Area (LGA).

The proposal is State Significant Development (SSD) for the purposes of the Environmental Planning and Assessment Act 1979 (EP&A Act) and clause 14(a) of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) as it involves development for the purposes of a hospital with a capital investment value in excess of $30 million.

The Stage 2 Redevelopment seeks to deliver significantly enhanced acute services, as well as a new campus main entry and drop-off area. It complements the recent Stage 1 Redevelopment (SSD 8766) approved in February 2019 and due for completion by early 2022.

The proposed Stage 2 Tower will be located west of, and connected to, the Stage 1 Tower. Portions of the North Block (north section) will be demolished with the remaining sections of the North Block (to the south of the Stage 2 Tower) to remain operational.

Departments to be provided in the Stage 2 Tower include:

- Front of House, including retail;
- Education and Training Centre;
- Transit Lounge;
- Medical Imaging;
- Interventional Radiology;
- Intensive Care Unit and Close Observation Unit;
- In-Centre Dialysis and Renal Inpatient Unit;
- Paediatric In-patient Unit;
- Plant areas;
- Clinical Support areas; and
- Kitchen.

The Stage 2 Redevelopment project scope includes:

- The Stage 2 Tower, being predominantly a 7-storey building, with roof plant;
- Demolition of parts of the existing North Block and other satellite buildings directly within the Stage 2 Tower footprint (excluding other buildings already approved under the Stage 1 SSD consent);
- Demolition of the Total Asset Management (TAM) facility;
- Reconfiguration of the loading dock area and back of house functions;
- Landscaping and other associated at-grade works within the Stage 2 Tower's immediate vicinity; and
- Barber Avenue upgrade and access road to the Stage 2 Tower's forecourt, port cochere, and front of house area.

The Stage 2 Redevelopment's SEARs was issued by the Department of Planning, Industry and Environment on 22 April 2021.

In preparing this report, the following SEARs General Requirements, Key Issues, and Agency's Advice letters have been addressed. The table below sets out the reference or location of these matters within this report.

SEARs Requirements	Response – Reference Section / Appendix
1. General Requirements • a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development. • plans, elevations and sections of the proposed development. • cladding, window and floor details, including external materials. • a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process). • plans and details of any advertising/business identification signs to be installed, including size, location and finishes.	Refer to the following: • Section 4 Built Form and Urban Design (inclusive) of this Architectural Statement. • For Stage 2 Tower, refer to Architectural Drawings Plans A0-200 series Elevations A0-300 series Sections A0-310 series Façade systems A0-320 series Shadow Diagrams A0-400 series Material Sample Board A0-450 series Photomontages A0-460 series • For the Refurbishment Works, refer to Architectural Drawings Plans A0-500 series Elevations A0-600 series Sections A0-610 series • Refer to Wayfinding Schematic Design Report by Urbanite
2. Built form and urban design **Address:** • the height, density, bulk and scale, setbacks and interface of the development in relation to the surrounding development, topography, streetscape and any public open spaces. • design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colour palette. • how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into development. • how good environmental amenity would be provided, including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility. • how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. **Provide:**	Refer to the following: • Section 4 Built Form and Urban Design • Section 5 Interface with the Public Domain • Section 7 Building Fabric Strategy • Section 8 Façade Types and Materiality • Section 9 Response to Better Placed • Section 10 – SDRP responses and the attached Government Architect NSW Presentations • Architectural Drawings A0-460 series Photomontages • Refer to Landscape Schematic Design Report by Arcadia

• a detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. • a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	
4. Environmental Amenity Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated. **Provide:** • shadow diagrams. • a view analysis, where relevant, of the site from key vantage points and streetscape locations and public domain including photomontages or perspectives showing the proposed and likely future development. • a view impact assessment that has been prepared in accordance with the established planning principles.	Refer to the following: • Section 4.10 Views and Visual Privacy • Section 4.11 Solar Access • Section 4.12 Wind • Section 7.0 Building Fabric Strategy • Architectural Drawings A0-400 series Shadow Diagrams A0-460 series Photomontages • Refer to Landscape Schematic Design Report by Arcadia
13. Staging Assess impacts of staging where it is proposed and detail how construction works, and operations would be managed to ensure public safety and amenity on and surrounding the site.	Refer to the following: • Architectural Drawings A0-900 series Staging Drawings
Plans and Documents: • Design report to demonstrate how design quality would be achieved in accordance with the above Key Issues including: • architectural design statement. • diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal. • detailed site and context analysis. • analysis of options considered to justify the proposed site planning and design approach. • summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice.	Refer to the following: • Section 2.0 Project Overview • Section 4.0 Built Form and Urban Design • Section 5.0 Interface with Public Domain • Section 6.0 Functional Relationships and Connections • Section 9 Response to Better Placed • Section 10 – SDRP responses and the attached Government Architect NSW Presentations • For Stage 2 Tower, refer to Architectural Drawings Plans A0-200 series Elevations A0-300 series Sections A0-310 series Façade systems A0-320 series Shadow Diagrams A0-400 series Material Sample Board A0-450 series Photomontages A0-460 series

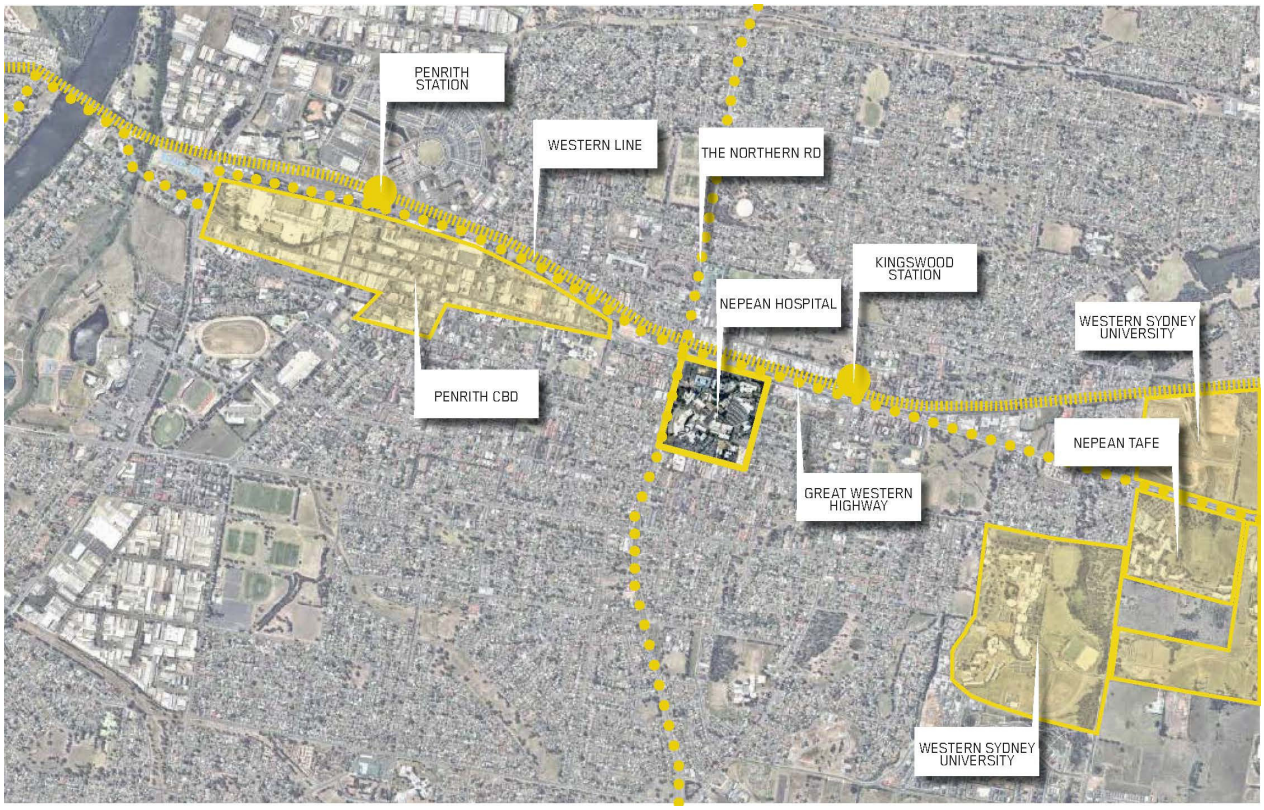
- For the Refurbishment Works, refer to Architectural Drawings
  Plans A0-500 series
  Elevations A0-600 series
  Sections A0-610 series
- Refer to Landscape Schematic Design Report by Arcadia

2.00 PROJECT OVERVIEW

Building on the Nepean Hospital Masterplan and with the completion of Tower 1, the new Tower 2 building and refurbishments that are part of the Stage 2 redevelopment present a great opportunity to improve and expand the clinical and non-clinical services on the Hospital Campus.

The Stage 2 development provides significant enhanced acute services, as well as a new Campus Main Entry and drop-off facilities in a total transformation of the current Nepean Hospital Campus .

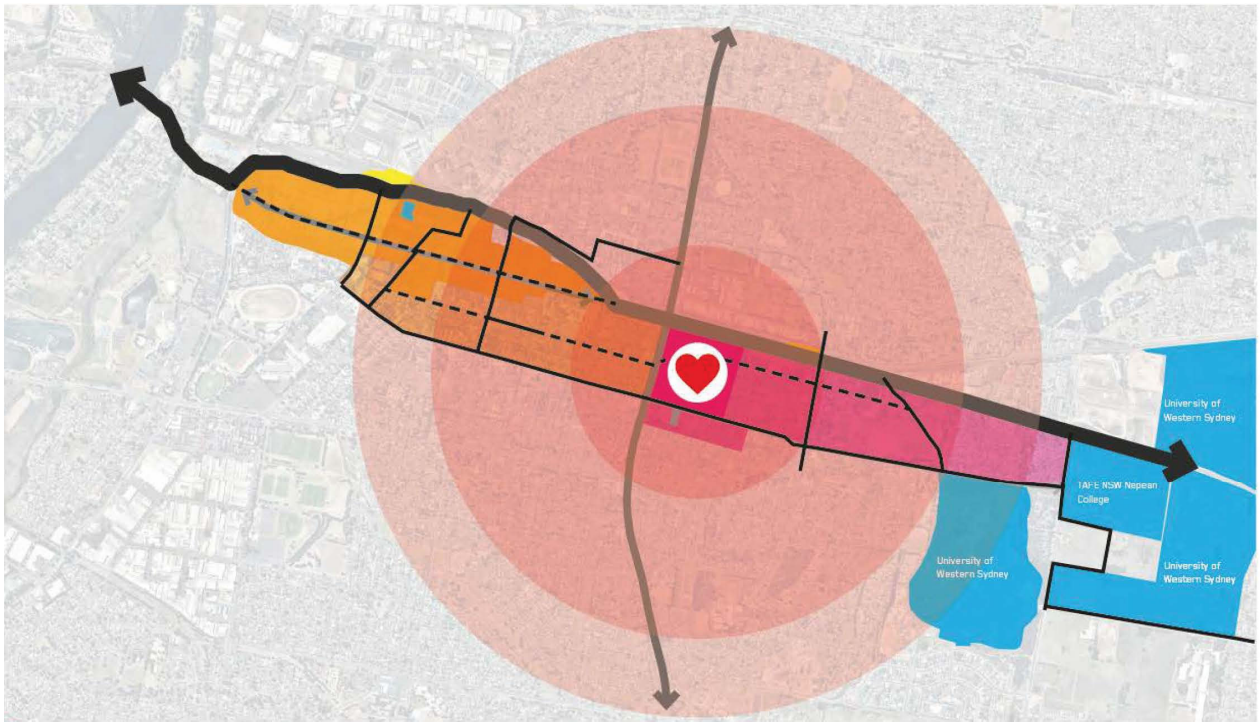
2.01 SITE CONTEXT



The Nepean Hospital Campus sits south/east of the Penrith Central Business District and north/west of an education precinct comprising of the University of Western Sydney and Nepean TAFE.

The extent of the campus is defined by the Great Western Highway and Barber Ave to the north, Somerset Street to the east, Derby Street to the south and the Northern Road to the west. Whist not located on the campus proper, the existing Nepean Private Hospital is located immediately north/west of the campus and is physically linked back to the Nepean Hospital via an overhead link bridge.

2.02 STRATEGIC CONNECTIONS



The Nepean Hospital Campus fulfils a central role within its immediate and wider context. The Penrith Health and Education Precinct also known as The Quarter, encompasses the campus and the Universities of Western Sydney and Sydney and TAFE and aspires to be a leading centre for health and education that *" will drive major jobs growth, economic prosperity, educational opportunities and improved health outcomes for a rapidly growing community*". Investment in the Nepean Hospital Campus is the catalyst for further public and private investment in health, education and research and realisation of the vision for The Quarter.

The proposed hospital deveopment is appropriately scaled to visually act as an entry signifier or gateway to The Quarter and to Penrith. Allied with the building design and site planning will seek to improve the connections between the campus and its surroundings.

2.03 MASTER PLAN CONTEXT

CONTEXT - LOCAL HEALTH DISTRICT

Nepean Blue Mountains Local Health District. (NBM LHD) is one of eighteen Local health Districts in NSW. It is responsible for providing primary, secondary and tertiary level health care for people living in the Blue Mountains, Hawkesbury, Lithgow and Penrith local government areas (LGA's) and tertiary care to residents of the Greater Western Region, covering almost 9,179 square kilometres.

The Integrated Nepean Hospital Master Plan identifies 7 Key Strategic Directions developed in consultation with the stakeholders in exploration of strengths and weaknesses, and analysis of constraints and opportunities of the existing Hospital Campus.

These 7 key principles are:

1. Improving Population Health - Inequalities and Localities
2. Enhancing the patient experience - Clinical quality, Access and Safety
3. Living within our means - Service 7 Financial performance
4. Strengthening our Workforce - Culture & Organisational development
5. Enhancing our Services and Facilities
6. Developing and Strengthening research capacity
7. Establishing robust governance and local decision making.

The Zonal Masterplan responds to the need for a large increase in clinical services to the Nepean Hospital campus and encapsulates planning information received to date and the outcomes of workshops with client/stakeholders and the design team.

The zonal Masterplan identifies uses for the development zone including:

- Acute/IPUs/Clinical Support
- Ambulatory Care
- Commercial
- Education/Research/Administration
- Mental Health
- Private Hospital
- Car Parking
- Green Zones
- 24 Hour Zone

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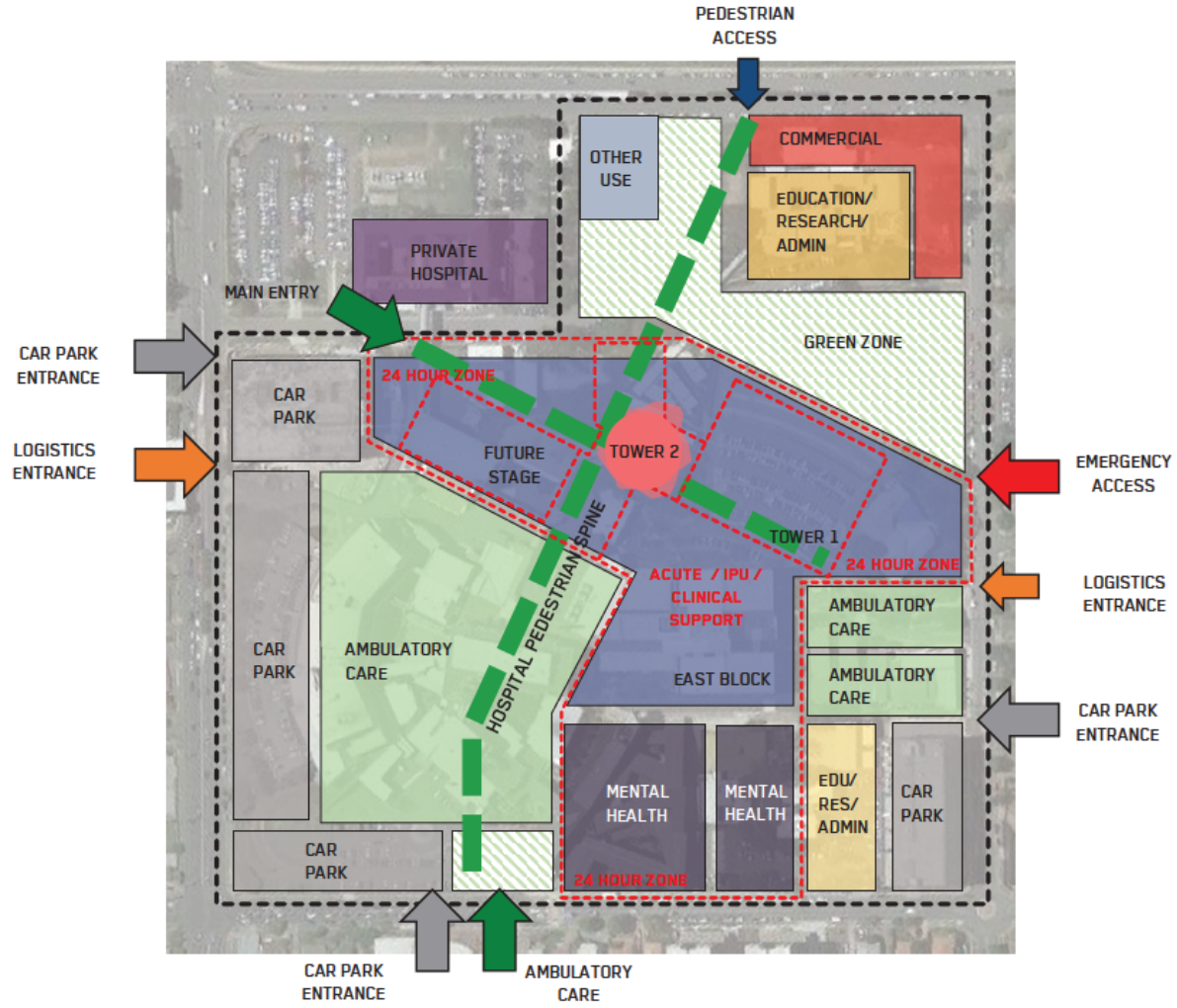
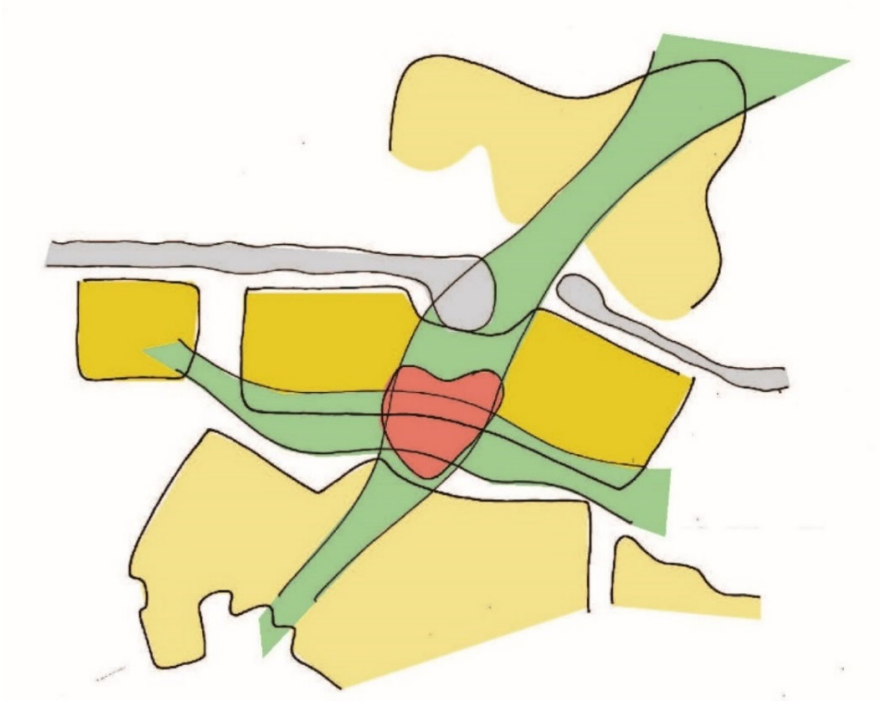


ZONAL NEPEAN HOSPITAL MASTERPLAN

The main entry point onto the campus and new hospital facilities will be from the west. Additional access points have been established off Parker Street, Somerset Street and Derby Street which will enable separate and independent access and improved circulation on site.

The completed Stage 1 Tower and the new Stage 2 Tower development collocates the majority of Acute Services, IPUs and Support functions within a centralised zone of the campus. This will enable efficient and discrete connections between all acute services contained within a 24 hour operational zone.
An expansion zone has been located to the west of the Stage 2 New Tower identifying a potential future Stage 3, which is compatible with the masterplan options explored to date.

Ambulatory Care zones are located on the western and eastern edges of the campus with direct access off Derby Street and Somerset Street respectively and adjacencies to Car Parking zones.



Uses such as Education/Research/Administration and Commercial which require community connection have been located adjacent to Somerset Street and Great Western Highway, providing potential street frontage and activation in line with Penrith City Council's Planning Controls.

The Mental Health facility remains in its current location with a dedicated future expansion zone to the east.

Non-clinical support functions are consolidated into zones with direct adjacency to the Acute Services/IPUs and Clinical Support Zone. To the South side of the new Car Park, a road has been established in order to provide a direct access for BOH service vehicles.

The Private hospital remains in its current location and is being expanded.

Car parking zones are predominately located along the East, South and West edges of the campus allowing easy and direct access off Somerset Street, Derby Street and Parker Street respectively. Car parking zones have been positioned to enable potential direct access routes to Ambulatory Care Zones and the Private Hospital. The consolidation of car parking around three main zones aligns to the strategic intent of the 2011 Masterplan.

2.04 FUTURE DEVELOPMENT

The position of the completed Stage 1 and proposed Stage 2 Building on campus allows the expansion of clinical and non-clinical services over a zone towards the north/west portion of the existing campus.

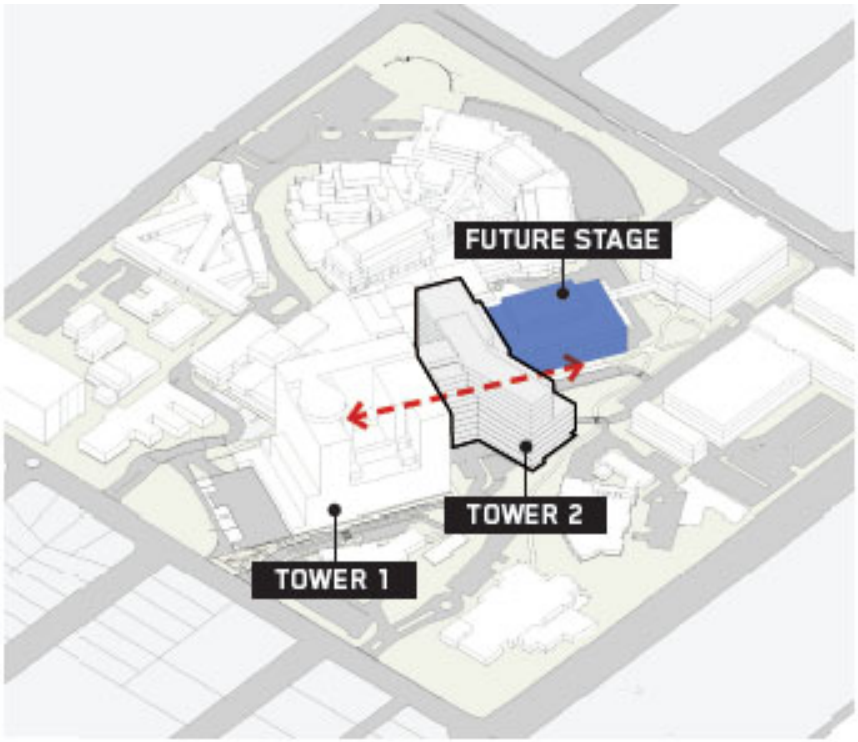
The massing of any future development will be influenced by the following:

- Service provision and functional programme which meets the NBMLHD CSP;
- Clinical adjacencies and connections; and
- Staging, links and circulation/flow strategies for staff, patient, services (BoH) and visitors.

The future Stage 3 development has the potential to complete the acute services zone of the Hospital Campus and will include the development of the surrounding ground works, incorporating landscaping, potential re-linking the Private Hospital and the multistorey carpark building, whilst improving BOH services facilities campus wide.

This building form and programme seeks to cohesively link Tower 1 & 2 and any future stages with the existing hospital estate.

INDICATIVE MASSING – VIEW LOOKING FROM NORTH/EAST



3.00 DESIGN PRINCIPLES

The Design Principles and Aspirations reflect the importance of the Stage 2 Building both within the Nepean Blue Mountains Health District and the Penrith Education and Health Precinct.

The Design Principles are derived from the aspirations set out in the Masterplan Report, and developed in response to the detailed site analysis contained within those reports and developed as part of the Concept and Scheme Design.

These key principles are:

- Improving Population Health - Inequalities and Localities
- Enhancing the patient experience - Clinical quality, Access and Safety
- Living within the Hospital's means - Financial performance
- Strengthening the Workforce - Culture & Organisational development
- Enhancing the Hospital's Services and Facilities
- Developing and Strengthening research capacities
- Establish robust governance and local decision making

The following universal Design Principles seeks to respond to the NBMLHD's Key Strategic Directions.

3.01 HUMAN CENTRED

The design aims to "provide and promote a healing, health promoting and ecologically sustainable environment."

The quality of the built environment is critical to realising this aspiration. The Stage 2 Building will seek to provide a harmonious, stress-free user experience, not only for patients, but for staff and visitors alike.

A high quality built environment that seeks to realise this aim should positively harness the impact of the following design considerations:

- Material selection and the importance of colour, texture and natural finishes;
- The pedestrian experience and how the provision of generous, legible circulation in combination with attractive public outdoor spaces can promote a walkable campus;
- Access to daylight for patients, staff and visitors;
- Access to green space (both new and existing), in the form of external landscaped spaces, or views to greenery.
- Acknowledging the human scale. This should drive decisions at all scales of the building design.

3.02 SUSTAINABLE

Sustainability must be a key driver for the Stage 2 Building. Facade elements such as shading, insulation, and material selection should be considered in the context of the overall energy performance of the building.

The Nepean Hospital Redevelopment project provides an exciting opportunity to embody the innovative spirit of the health and educational research centre by exploring the potential of renewable and recycled materials in a hospital building.

Grid layout, core design, services reticulation and floor to floor heights will all be designed for future flexibility, providing an element of resilience into the design and ensuring it remains relevant well into the future.

3.03 CONNECTED

The existing Hospital Campus is characterised by a number of internalised and not necessarily intuitive pedestrian connections.

The Stage 2 Building provides an opportunity to create a public entry/forecourt for the hospital. The integration of public space will establish a sense of entry and facilitate the development and appropriate identity for the hospital within the local community as it becomes a fundamental connector for pedestrians. The location of the public space has been strategically position to respond to the aspirational strategies of the campus Masterplan.

The Stage 2 Building will seek to respond to this aspiration by recognising pedestrian desire lines (existing and future) and ensuring the environment around the building provides a safe, sheltered and enjoyable experience for pedestrians. The building itself will be open and welcoming with the Front of House unambiguous.

Internal circulation is to be direct with legible pathways for visitors and clear way finding. The Stage 2 Building provides the opportunity to address the hospitals compromised patient, staff and public circulation flows by establishing a framework which de-conflicts patient, staff and public cross overs through the development of the following:

- Creating clear paths of travel both vertically and horizontally; and
- Separate and streamlined flows for patients, staff and public.

3.04 INTEGRATED

The completed Stage 1 and proposed new Stage 2 Buildings provide an integrated Acute Services Hub for the existing Nepean Hospital Campus, whilst remaining responsive and connected to other Campus services and functions.

The Design ensures the Hospital acute services remain fully operational during the construction period. Following completion of the new building, essential clinical relationships are maintained and are likely to include connections between the following departments:

- New ED Clinical Support on L00 of Tower 2, supporting ED in Tower 1
- New centrally located Kitchen on L00 in Tower 2 will support IPU's in both buildings
- New Medical Imaging & Nuclear Medicine on Level 2 of Tower 2 connecting into Tower 1
- New IR on Level 3 in Tower 2 connecting to Tower 1 IPU's and Operating Theaters on the same level
- New CCU, CCL, Echo (Tower 1)
- New ICU and CoU pods on Level 5 in Tower 2 connecting Level 5 CCU, CCL and Echo in Tower 1
- New Paeds IPU on Level 6 in Tower 2 connecting to Neonatal Services on the same level in Tower 1
- New Pathology department on L 1 in East Block with logistic llink connections to Tower 1 & 2 and North Block
- New BOH deliveries, Linen, Waste and Bulk Goods Storage areas on L1 North Block, connect South Block, North Block, East Block and Tower 1 & 2 through the new BOH logistic link
- New Pharmacy on L 2 North Block to connect to Tower 1 and Tower 2 through BOH logistic link

Level 2 of the existing Hospital, which provides the public link connection between the new multi-storey carpark and North Block is a critical datum for the New Stage 2 Building as a horizontal connection and wayfinding point.

The New Stage 2 Building will have minor impact on the remaining, existing Hospital fabric by incorporating and expanding on the the Stage 1 courtyard spaces interfacing with East and North Block.

3.05 CREATE IDENTITY

The existing Hospital Campus is an amalgamation of diverse buildings; which reflect a variety of different scales and ages. Multiple arrival points, spread across North, East, South and West Blocks, make it difficult to perceive the Hospital Campus as a unified 'whole', particularly for the first-time or infrequent visitor.

Combining a number of functions into a single Acute Services building, the Stage 1&2 Buildings will significantly alter the way people use and access the Hospital, and aims to become the first point of arrival for many visitors to the campus.

As such, it presents an exciting opportunity to create a unique, easily identifiable and memorable 'front door' - a landmark building, which becomes synonymous within the Nepean and Blue Mountains Health District.

Below outlines the conceptual framework of the Stage 2 Redevelopment project, having incorporated a series of key design principles, developed for this project:

1. Establish a sense of coherence

   Tower 2 will respond to it's context in terms of built form, fabric and articulation.

2. Promote a healing environment

   Stage 2 will enable access to **landscaped area**.

3. Allow for a health promoting hospital

   Tower 2 will provide access to **daylight and views** for patients, staff and visitors.

4. Establish a sense of identity

   Tower 2 will establish a **Main Entry** for the campus.

5. Promote a walkable campus

   Stage 2 will provide a safe, sheltered and **enjoyable experience for pedestrians**

6. Increase campus clinical efficiency

   Stage 2 will establish a clearly-defined and consolidated **24 hour zone**.

7. Enhance building adaptability

   Stage 2 will allow for **future expansion**.

8. Create a cohesive campus

   Stage 2 will carefully consider **level changes** between buildings and provide clear **way finding**.

9. Address sustainability issues

   Tower 2 will introduce a **facade treatment** that can improve overall energy performance of the building.

4.00 BUILT FORM AND URBAN DESIGN

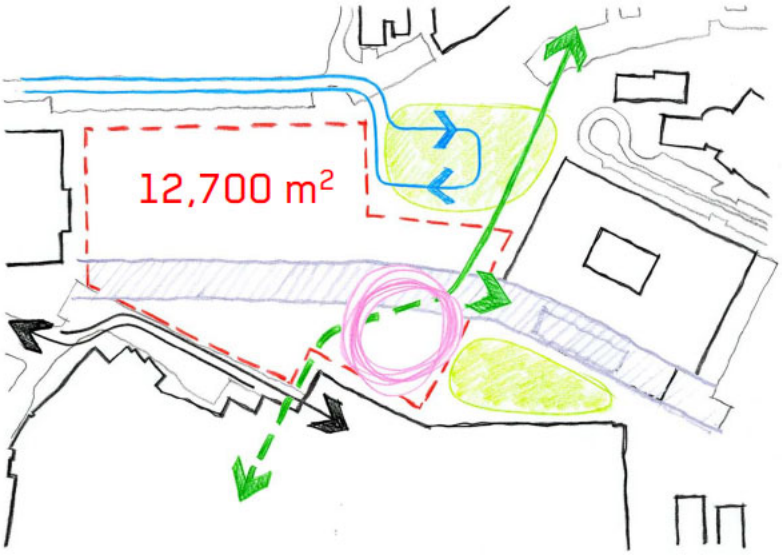
4.01 SITE LAYOUT, STREETSCAPE AND SETBACKS

The New Stage 2 Building embodies the critical clinical and urban design aspirations outlined in the Zonal Masterplan.

The building is positioned to become a key driver in the ongoing development of the Nepean Hospital Campus.

Summary of site constraints that informed the proposed building foot print are outlined below:

- Availability of an appropriately sized site/area on the existing campus free of core clinical and clinical support spaces and functions;
- Access to existing BOH facilities
- Setback to align with existing new multi-storey carpark
- Consider 6m building setbacks to existing buildings
- Stage 1 landscaped courtyard towards East Block
- Public vehicular drop off and entry
- Stage 2 landscape zone
- Stage 1 interface zone
- Enable logical future expansion
- Continue existing Hospital Street
- Campus Hub



- Refer to the Site Plan (Architectural Drawing A0-104 series) which describes location and setout of the proposed Nepean Hospital Tower 2 in relation to existing buildings.

4.02 MASSING AND STREETSCAPE

The Stage 1 & 2 Buildings have great potential to become a landmark structure, with a clear identity and strong visual presence on the existing campus.

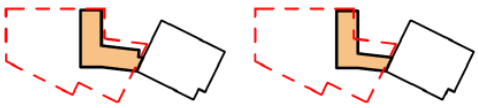
The new building site is in the north-west portion of the existing campus, opposite the Private Hospital with adjacencies to the new Multi-Storey carpark and the Stage 1 Tower.

The proposed siting and arrangement of the building mass seeks to:

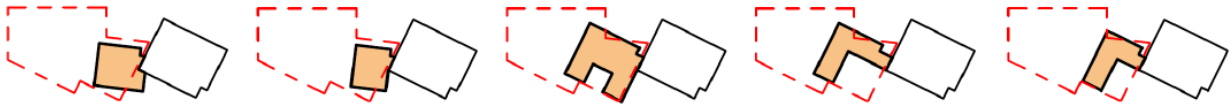
- Accommodate functional brief requirements:
- Minimise impact on existing clinical and non-clinical services maintaining the existing service provision to the community;
- Reinforce the public address and access and connection to the existing acute core of the campus;
- Allow for future growth expansion to the west to meet the needs of the CSP;
- Form and orientation responds to solar access, vista's and existing topography of the campus;
- Creation of significant accessible outdoor spaces.

Within the given site perimeters, various massing options were explored and their evolution is shown below.

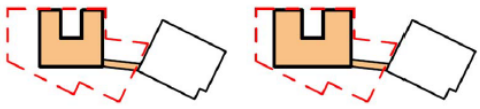
L-SHAPE FOOTPRINT



CENTRAL FOOTPRINT



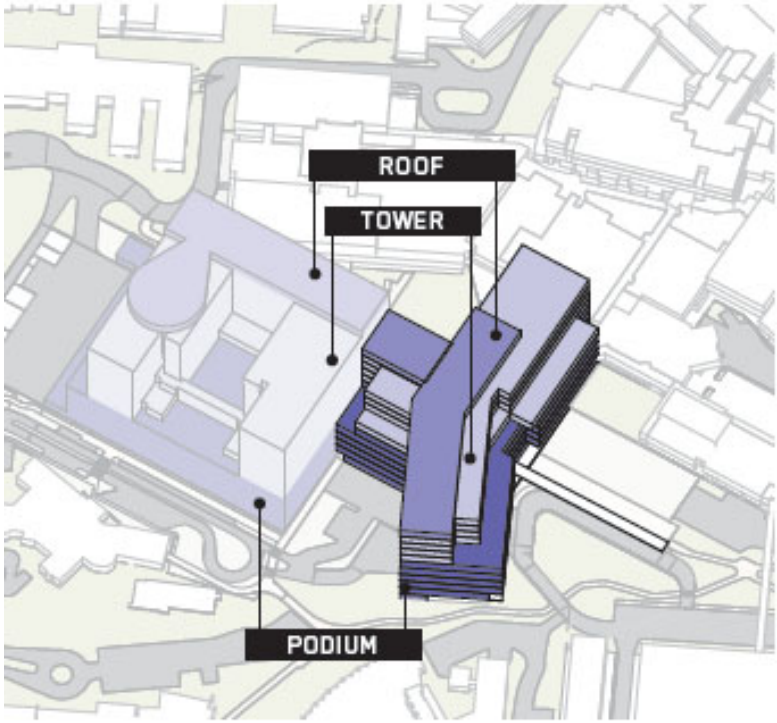
U-SHAPE FOOTPRINT



A number of more detailed constraints and opportunities further informed and determined the proposed siting and massing of the Stage 2 Building including:

- Building positioned around existing acute functions and buildings to allow continued operation and staging;
- Location does not pose any impact or compromise existing clinical or clinical support functions and services;
- Proximity and relationship to existing acute clinical services and clinical support in Tower 1 and North Block
- Alignment to HI's briefed requirements and the Projects cost parameters.

PROPOSED BUILDING MASSING TOWER 2



A massing strategy for the building has been developed to closely tie into the building form and mass of the Stage 1 tower, dividing the overall mass into a finer grain of interconnected vertical solids of an appropriate scale within the urban context. Changes in façade type correspond to the massing strategy as each solid is developed with a consistent façade system and materiality.

There is a general strategy to divide and breakdown long elevations and large masses with the use of deep recesses. These not only respond to opportunities for natural light for internal planning purposes but provide a reduction in scale, whilst the Tower 1 Northern link connection and the Tower 2 main entry Atrium façade are more fractured and striated.

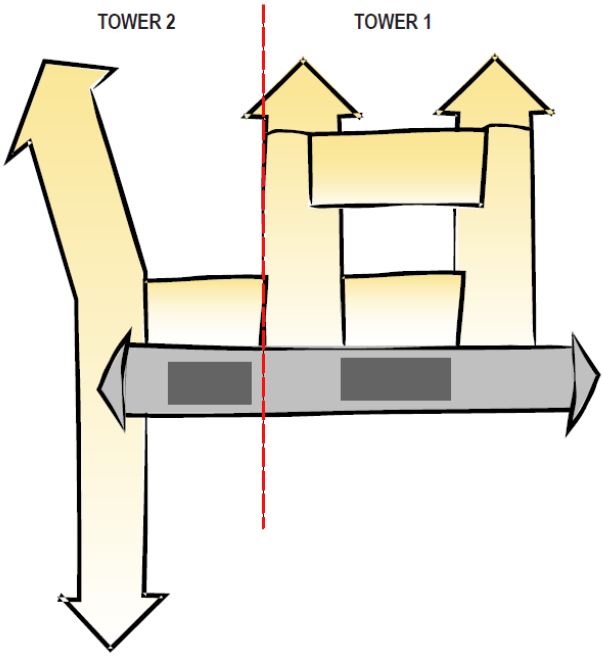
Being a building form of significant height, its locality within in the context of adjacent hospital buildings and surrounding neighbouring buildings is responsive to minimise adverse amenity and contrasting scales and appropriate to the current and future density of the urban context.

4.03 SERVICE AND FACILITY PLANNING CONTEXT - SPINE AND CLINICAL ZONE

Generally, the floors are separated into two distinct zones being the Clinical Zone and the Central Support Zone.

The zonal arrangement of the Stage 2 Building floors connects to the spine from Stage 1 Tower and provides a framework which:

- Establishes clear and separate zones between clinical and non-clinical support spaces
- Clearly segregates departmental areas from a central services area and public spaces
- Facilitates ready horizontal movement from Stage 2 Tower across to Stage 1 Tower.



CLINICAL ZONE

The clinical zone is separate from the central support area and generally accommodates patient care and treatment areas. The clinical zone is located North and South of the central support Area.

CENTRAL SUPPORT AND CORE ZONE

The central Support Zone area is a continuum from the Spine of Stage 1 Tower and generally accommodates circulation/flows and engineering including:

- Separate patient/staff and public circulation
- Main lift core, stairs, building services and risers
- Stores
- The Lift core is in a central position within the Support Zone spine and can be easily accessed from Tower 1 and Tower 2.

- This central core facilitates ready vertical movement from:
- Main entry and Front of House Functions to all Departments
- Patient Transport Services Drop off to Transit Lounge
- Between all clinical Departments and from all Clinical Departments to Future IPU's
- Kitchen to all Levels of the tower
- The spine in Tower 1 and core in Tower 2 is designed with separate lobbies and dual corridors to achieve separation of patient/staff and public flows as required.

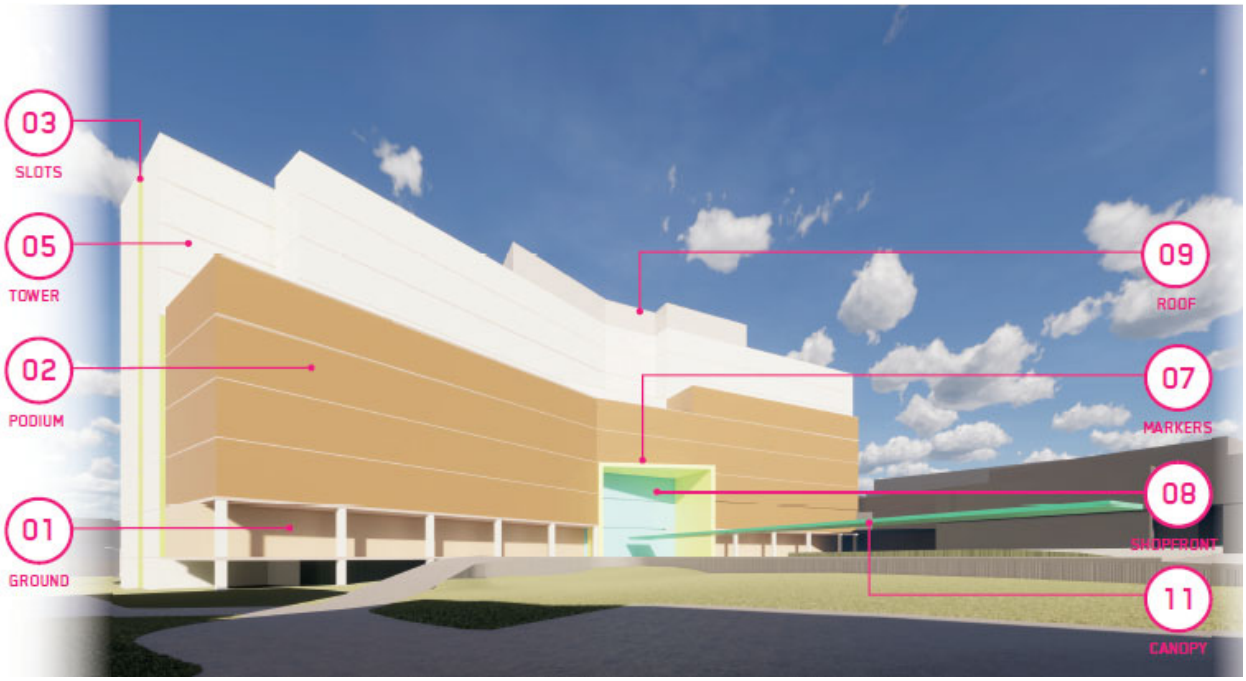
ATRIUM ZONE

At the Main entry point on Level 1 patients, visitors and staff arrive in a 3 storey Atrium that connects visually and physically including:

- Front of house and Education spaces across between Level 1 and 2
- The Medical Imaging Unit on Level 2

The Atrium also provides ample opportunities for break out spaces and retail with connections to the existing Hospital Street and Multi storey car park.

4.04 MASSING ELEMENTS – FRONT OF HOUSE, PODIUM, TOWER AND ROOF



FRONT OF HOUSE

The FoH delivered as part of the Stage 2 Tower seeks to provide identity and a main focal point for the Nepean Hospital Campus. It is envisaged that the FoH component is integrated into the Podium at Levels 1 and 2, collocated with the Education and Training Centre and the Transit Lounge. The intent of the FoH is to provide a framework for the development of linkages between the new Stage 1 Building, North Block, future development stages and the existing hospital estate, whist interfacing with existing and new pedestrian and vehicular traffic.

The services provided in the FOH include:

- Main Entry and Reception
- Switchboard
- Public Amenities; Cashier
- Volunteers Presence
- Aboriginal Hospital Liaison Officer and Aboriginal Health Space and Courtyard
- Admissions Presence and nursing Support Office
- Combined FOH Support and Retail

The services provided for Staff & Clinical Functions:

- Staff Canteen
- JMO lounge with outdoor terrace access
- Transit lounge with outdoor terrace access

From FOH, there will be direct access to car parking and drop-off zones with easy access to the entire campus and public transport. The 2 levels of FOH directly correspond with the 2 main levels of the existing campus. Level 1 is directly off the main drop-off and pick-up zone, Level 2 connects back to the Hospital Street and the Multi-Storey Carpark.

The FOH department is zoned into a number of functional groups including a Business Hours Zone and a 24 Hour Zone. The Business Hours Zone consists of the Aboriginal Courtyard, a Volunteers Space, public amenities, waiting areas, the Main Entry, Retail, Reception and Enquiries, Cashier and Admissions. The 24 Hour Zone consists of a Switchboard, Operations Centre, Nurse Support and Combined FOH support.

PODIUM & TOWER

The delineation between Podium and Tower in Stage 2 is not as clearly defined as it is in Stage 1 and becomes more of a hybrid model through expressed building massing and façade treatments.

The Podium of the Stage 1 Tower comprises of five levels and the Stage 2 Tower connects on all levels, expanding on the Stage 1 Podium spaces, whilst the Podium intent of the Stage 2 Tower extends to 7 levels, inclusive of Level 5 and portions of L6.

Level 00 Patient Transport drop off and staff access to the Tower 2 and ED is at street level on the north elevation and benched on the west (part) and south due to the natural site topography.

The remaining Tower Levels continue with a reduced mass to further ensure natural light and amenity to bedrooms to match the Stage 1 façade treatment and overall design intent.

Stage 2 Podium & Tower spaces are:

- L00 - BOH service facilities including Kitchen and Clinical Support
- L01 – FOH, staff facilities and Clinical Support, Education, Transit Lounge
- L02 – Medical Imaging and Nuclear Medicine, FOH, Education, Clinical Support
- L03 – Interventional Radiology, Clinical Support
- L04 - Associated plant and Clinical Support
- L05 – ICU – IPU floor
- L06 – Paediatrics – IPU floor and Renal Incentre Dialysis and IPU
- L07 – Future IPU floor

ROOF

Level 8 is dedicated to accommodating major engineering and plant spaces.

4.05 DENSITY (update table)

The following table outlines the existing Gross Floor Area (GFA)/Floor Space Ratio (FSR) of Nepean Hospital (entire campus) site, the proposed GFA of the Nepean Hospital Tower 2 and the total proposed GFA/FSR of Nepean Hospital.

Existing GFA Calculations	
Existing Site Area	139,200 m2
Existing Building Area (Nepean Hospital Campus August 2021)	244,000 m2

Proposed GFA Calculations	
Stage 2 Building GFA	33,650 m2
Existing Building Area (Nepean Hospital Campus August 2021)	277,650 m2

4.06 FLOOR TO FLOOR HEIGHTS

The highest level of the Stage 2 Building is the roof of lift shaft and plant room screen, set at the RL as nominated on the drawings.

Minimum floor to floor heights have been established to ensure future flexibility but to also tie into the Stage 1 building on all levels and into North Block on L01 and L02.

The following floor to floor heights are assumed as a minimum:

- L00/Stage 1 Podium (Kitchen, Loading dock and deliveries, Patient transport bays, Clinical Support ED) – 4.500 meters
- L01 Podium (Main Entry & FOH, Clinical Support, Transit Lounge, Education) – 4.600 meters
- L02 (NM & MI, FOH, Education, Clinical Support) – 4.500 meters
- L03 (IR, Clinical Support) – 4.500 meters
- L04 (Plant, ICU Clinical Support) – 4.800 meters
- L05 (ICU - IPU) – 4.500 meters
- L06 (Renal – IPU, Paeds - IPU) – 4.500 meters
- L07 (Interstitial floor – future IPU) – 4.500 meters
- Roof Level plant & Lift overrun – 4.200 meters

4.07 GRID & CORE

The Stage 2 Building footprint has maximum flexibility to suit the size and shape required by the clinical functions.

Based on the typical Hospital structural design, an 8.4 m standard structural grid has been adopted to maximise flexibility. Inpatient Units occupy a 3-grid footprint.

The core is positioned centrally between Stage 1 and Stage 2, creating a strong link connection between both buildings, whilst providgin optimal access to all floors across both buildings.

Close proximity to the existing central clinical & services hub in North Block and East Block and other Campus Services help minimise travel distances for visitors, patients, staff, and services.

4.08 INTERNAL CIRCULATION

The Stage 2 Building provides the opportunity to further address the Hospitals compromised patient, staff and public circulation flows by establishing a framework which de-conflicts cross overs and provides separate horizontal circulation from the departments between the new Stage 2, the completed Stage 1 and other Acute Services in the existing hospital estate.

The Internal circulation will offer more legible pathways for visitors with clear way finding between departments, building entries and car parking.

The design proposes the following in respect to circulation flows within the building fabric, mitigating potential cross overs between staff/BoH, public and patients:

- Level 00 and L01 primarily dedicated to staff and BoH flows linking into Stage 1 and North Block
- Level 01 and L02 primarily dedicated to public circulation linking into Stage 1 and North Block
- Level 03-07 limited to patient circulation linking into stage 1

4.09 CPTED PRINCIPLES

Crime Prevention Through Environmental Design (CPTED) has been considered and used throughout the planning and design of the Nepean Hospital Redevelopment of Stage 2.

CPTED uses design and space management principles in order to influence human behaviour and is a crime prevention strategy based on the proper planning, design and structures to create an effective use of the environment, which can lead to a reduction in the fear and incidence of crime, as well as an improvement in quality of life.

The design of a particular space has to ensure that the intended activity can function properly, as well as directly support the control of behaviour, in order to reduce the opportunity for crime.

CPTED comprises of four key principles and is further outlined under each principle below.

1. NATURAL SURVEILLANCE

The attractiveness of crime targets can be reduced by providing opportunities for effective electronic and natural surveillance. Good surveillance means that people can see what others are doing and is an effective deterrent to criminals from committing crimes in places that are well supervised.

Natural surveillance is a by-product of well-planned, well-designed, and well-used spaces. This is achieved when normal space users can see and be seen by others.

The Nepean Hospital Stage 2 design has implemented natural surveillance in a considered building layout and orientation, site location and amenities, landscaping and security lighting.

Electronic surveillance will be achieved through the use of Security Cameras, Video Recordings, and Intercoms. The strategic positioning of the security lighting and cameras is a major factor for deterring criminal behaviour and the prevention of anti-social behaviour.

2. ACCESS CONTROL

The Nepean Hospital Campus and the proposed new Stage 2 development have applied electronic access control measures that will restrict, channel, and encourage people into, out of and around facilities, combined with way-finding signage and formal/informal routes, that will reduce criminal activity.

Natural access control includes the tactical use of landforms, design measures including building configuration; formal and informal pathways, landscaping, fencing and gardens.

By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property.

Effective access control can be achieved by creating effective:

- landscapes and physical locations that channel and group people into supervised areas;
- restricted access to internal areas or high-risk areas;
- mechanical access control includes the deployment of security counter-measures.

3. TERRITORIAL REINFORCEMENT

The Nepean Hospital Campus and the proposed new Stage 2 development design has put a big focus on Community ownership of the public spaces to ensure they do provide positive signals, make people feel comfortable and are more likely to be visited as they feel owned and cared for.

Well frequented places also reduce opportunities for crime whilst increasing the level of risk to criminals. Community ownership also increases the likelihood that people who witness crime will respond by quickly reporting it or by attempting to prevent it.

Territorial reinforcement can be achieved through:

- designs that encourages people to gather in a public space and to feel some responsibility for its use and condition;
- design with clear transitions and boundaries between public and restricted spaces;
- clear design cues on who is to use a space and what it is to be used for.

4. SPACE MANAGEMENT

The Nepean Hospital proposed Stage 2 development design has taken into consideration and applied the need for Space management, which involves the formal supervision, control, and care of the development.

Popular public spaces are often attractive, well maintained and well used spaces and the proposed design wants to ensure that the space is appropriately utilised and will be well cared for.

Space management strategies applied to the proposed development and the Nepean Hospital Campus include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, replacement of faulty security lighting and the removal or refurbishment of decayed physical elements.

For the implementation of all of the above principles within the architecture and the interiors please refer to the Architectural drawing series A0-100, A0-200, A0-300, A0-310, A0-320 SERIES. Refer to Interior Schematic Design report in Appendix 2

For external CPTED consideration and implementation refer to the Nepean Hospital Stage 2 Landscape Report by Arcadia.

4.10 VISUAL IMPACT ASSESSMENT - VIEWS AND VISUAL PRIVACY

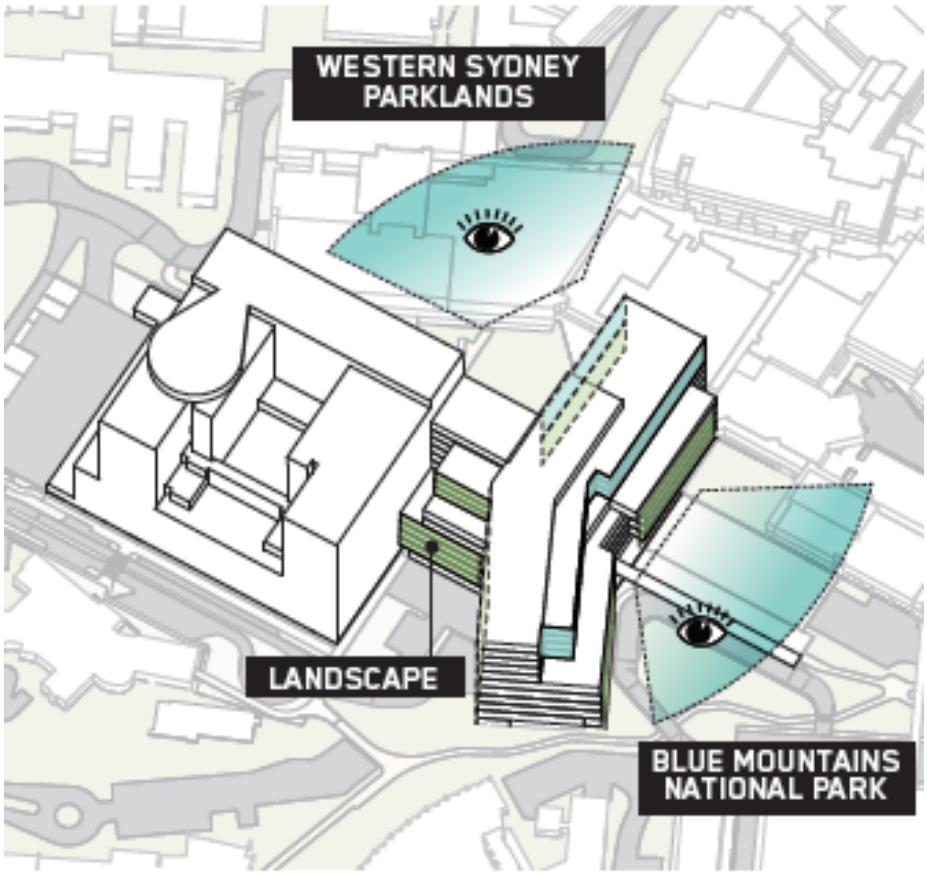
The location and the orientation of the Stage 2 building has limited impact on views and visual privacy from surrounding developments due to the reduced height, bulk, scale and location within the Nepean Hospital Campus.

(referring to Photomontages in Appendix 2)

Potential existing vista's available to the development site include:

- Western Sydney Parklands to the south/east; and
- Nepean River and the Blue Mountains National Park towards the north, west and the south.

The location and the orientation of the Stage 2 building provides the opportunity to create outlook and views for staff, patients and visitors accommodated in the new Stage 2 Building.

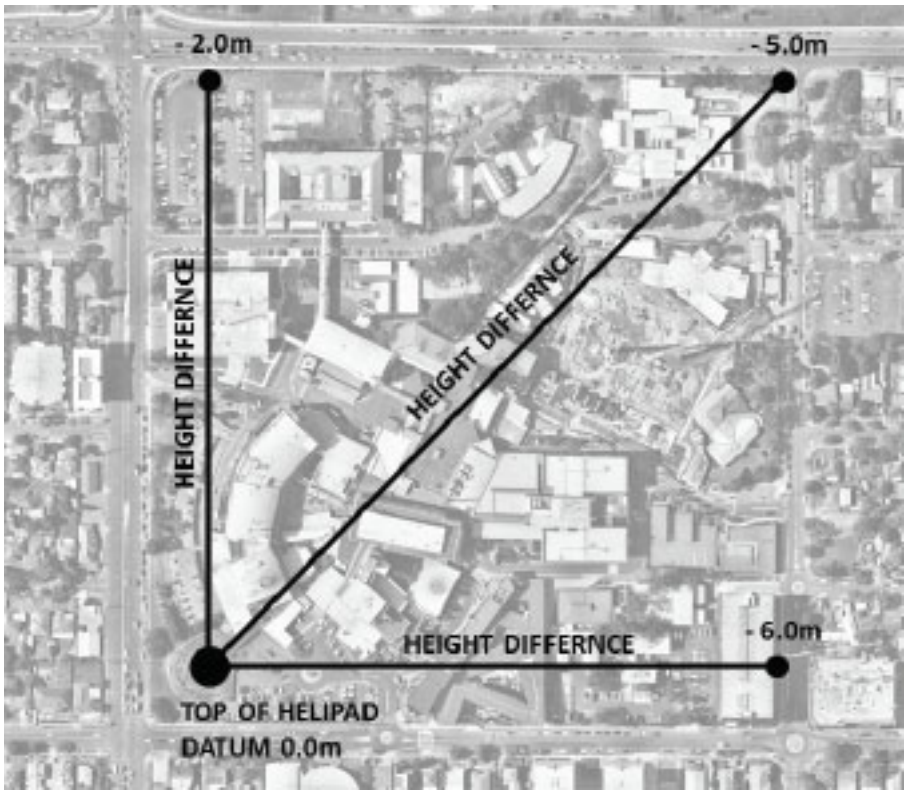


Views from the existing North Block ICU and IPU's in East Block (Level 3) will be impacted by the new development. However, this is proposed to be mitigated by the development of a green space courtyard contained within the space established by the new building footprint. This new contained courtyard seeks to provide an enhanced level of visual amenity and privacy for patients accommodated along the northern façade of East Block. Visual access to existing vistas IPU's in the West and South Blocks are predominately maintained due to the relative location of the Stage 1 Building and the Stage 2 Building.

The height of the building mass is visibly reduced from existing street frontages due to the following factors:

- Topography and fall of the site from south to north
- The building is (relatively) centrally located in the heart of the campus and setback from existing street frontages and surrounding buildings.
- The significantly reduced building height adjacent to the Stage 1 Tower provides a level of visual privacy to the surrounding streetscape and developments.

Further to this, privacy blinds will be considered in bedroom windows and Clinical Support areas.



4.11 SOLAR ACCESS

The site for Tower 2 is oriented east/west, the northern half of the tower will have full access to northern sun and light, while natural daylight of the southern half will mainly come from the west.

Due to the site's location and the proposed building height of the new tower, the low level afternoon sun at the winter solstice will cast shadows onto the existing campus.

Refer to the Shadow Diagrams (Architectural Drawings A0-400 series) for extent of solar access and overshadowing.

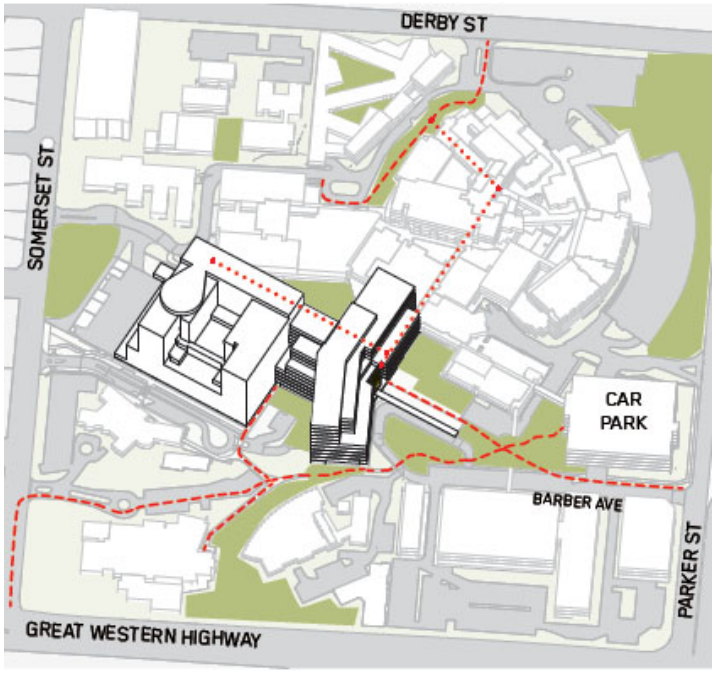
4.12 WIND

The proposed new Stage 2 entry canopy and airlock will provide protection from harsh winter winds as they predominately occur from the north/west and the west particularly in the morning, whilst the new building orientation will provide full protection to southerly winter storms.

Cooling summer breezes come from the south in the morning and north east in the afternoon and will be captured by the internal courtyard space and the northern terrace.

5.00 INTERFACE WITH THE PUBLIC DOMAIN

The Zonal Master Plan framework provides an opportunity to create a public entry/forecourt for the Hospital. The integration of public space will establish a sense of entry and facilitate the development and appropriate identity for the hospital within the local community.



The location of the Stage 2 Building's public space has been strategically positioned to respond to the aspirational strategies of the masterplan integrating the following aspects.

5.01 PUBLIC DOMAIN ESTABLISHMENT & ACCESS TO SITE

In order to establish a **sense of identity**, Tower 2 will introduce a new Main Entry for the campus.

The drop-off zone is one of the most prominent public areas on campus and a critical Main Entry component, both for its location and its functionality. Therefore, careful thoughts have been given to utilise this zone for campus identity establishment. Along with activating the drop-off zone, the aim is to establish a sense of identity along the journey approaching the Main Entry

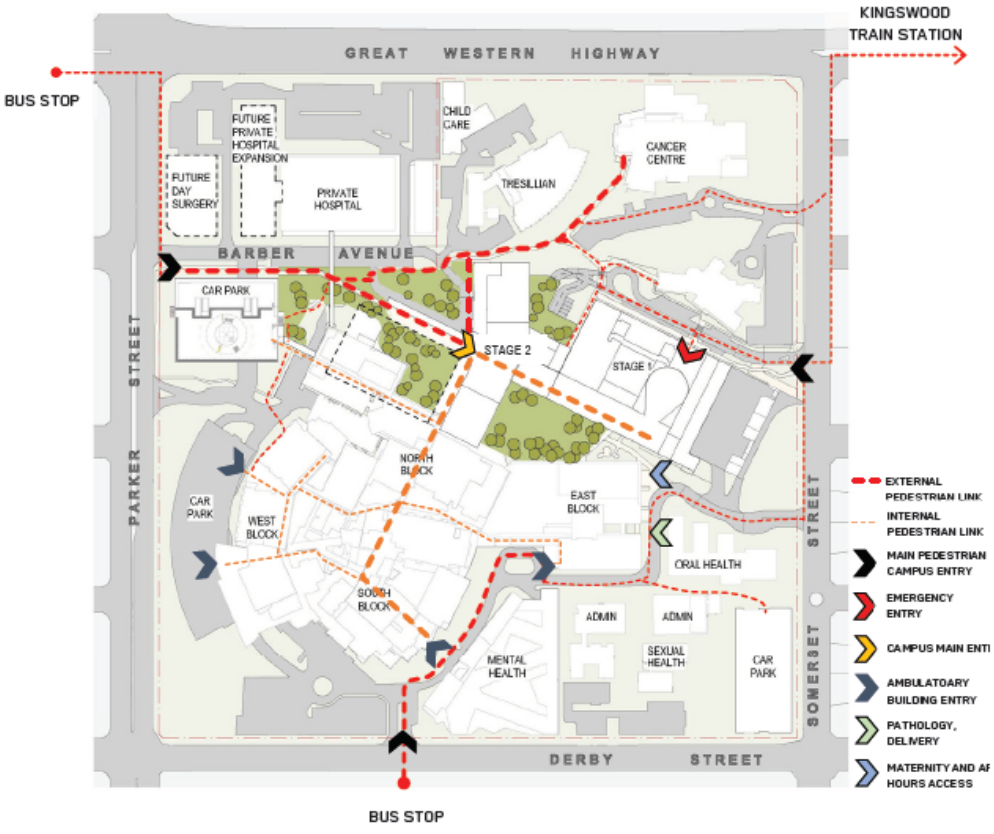
The design seeks to promote separate and easily identifiable on-grade entries for:

1. Members of the public arriving to the proposed new Main Entry on L01 through the drop off zone or by foot
2. Members of the public arriving at the Barber Avenue Multi-Storey carpark and enter through the link connection into North Block on L02
3. Patient transport services arriving through Somerset Street on L00
4. Members of the public arriving through the existing Hospital Street in North-Block / South-Block / East-Block and West-Block

5.02 PEDESTRIAN ACCESS

Main public transportation around the site includes bus stops on Great Western Highway and Derby St, as well as Kingswood Train Station, from which people can access the site through 4 main entry points as illustrated in the diagram below.

An internal pedestrian network will connect public members to all building entries. Through each entry an internal public link will lead people to different buildings throughout the campus. In response to the Zonal Masterplan, a strong pedestrian spine has been recognised and emphasized both internally and externally. The zone in front of the Main Entry has also been identified as a prominent public domain.

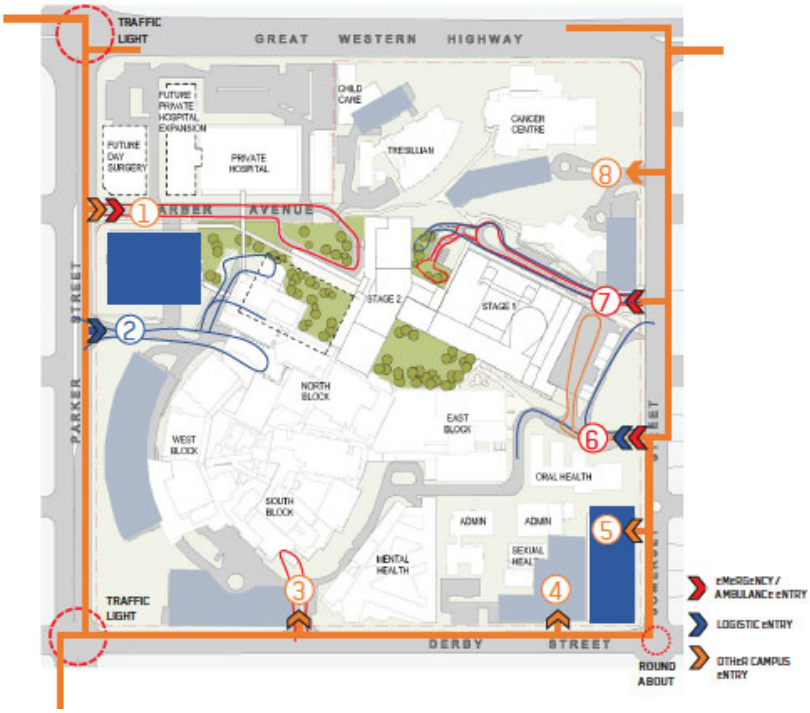


These pedestrian entries and potential bicycle pathways include:

1. Visitors arriving from Kingswood Train Station accessing the site from the north/east corner via the Great Western Highway and Somerset Street and entering the Nepean Hospital Tower FoH in Tower 2.
2. Visitors arriving from existing Bus Stops located on Great Western Highway and accessing the site from Barber Ave and entering the Stage 2 main entry
3. Visitors arriving from the existing Bus Stop and accessing the campus from Derby Street and entering the hospital from the existing South Block entry point at Level 2 (the former main entry); and
4. Visitors arriving east from medical mixed-use zones along Somerset and Derby Streets.

5.03 VEHICLE AND PUBLIC ACCESS TO NEW BUILDING

There are vehicle entries on 3 sides of the campus with the exception of Great Western Highway as illustrated in the diagram below.



Access Point 1 leads to the campus Main Entry once Tower 2 has been constructed. It is also one of the access points to the Multi-storey car park on Barber Avenue, Private Hospital, Tresillian and Child Care.

Access Point 2 serves as the current main logistic access point, and will continue playing a significant role for BOH services. From this entry point, vehicles can access the Main Loading Dock, Waste Collection Area and Mortuary Dock. Access to the Main Multi-Storey Car Park is also possible.

Access point 3 is the current Campus Main Entry. It also serves as current ED drop-off until Stage 1 is complete. As campus redevelopment progresses, the significance of this entry point will decrease and be used as an ambulant entry.

Access point 4 leads to staff parking

Access point 5 leads to the second multi-storey car park on site

Access point 6 leads to the ambulance bay which is located directly off Tower 1. It also receives Bulk Gas and Cylinder Gas Supply. It also leads to maternity drop-off, pathology delivery and waste collection.

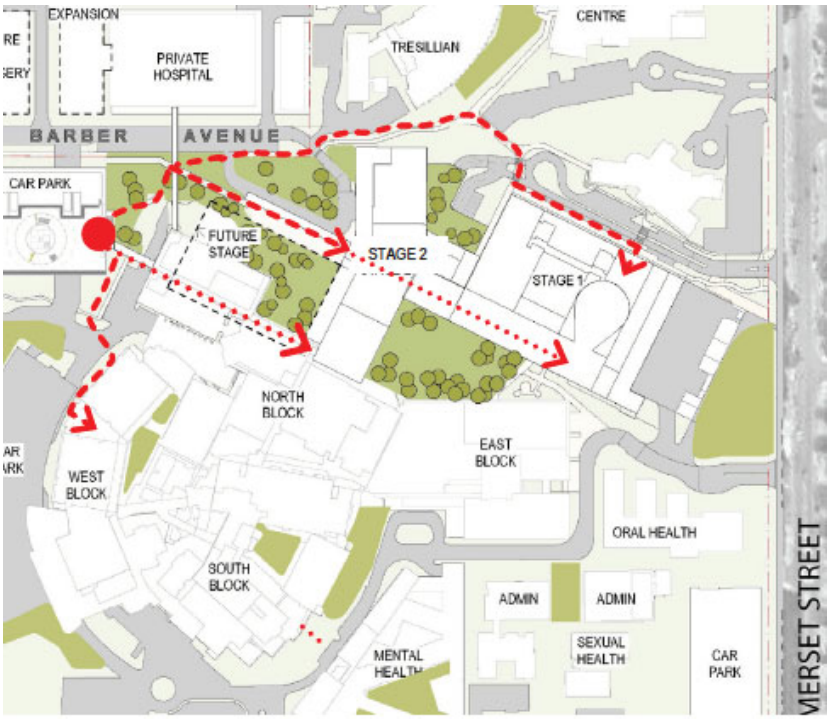
Access point 7 leads to ED drop-off zone in front of Tower 1. It also leads to patient transfer zone and kitchen dock in Tower 2.

Access point 8 leads to the Cancer Centre and on grade car parks.

5.04 PUBLIC CARPARK CONNECTION TO THE CAMPUS

There are 3 main ways for people to get from the Barber Avenue Multistorey Car Park to the rest of the campus.

- From the northern side on Level 01, people can walk east towards the Tower 2 Main Entry and the Tower 1 Emergency Department Entry.
- From the Level 2 link bridge, people can walk internally towards the southern end of Tower 2, then walk north towards the Tower 2 Main Entry, or south towards the existing Campus Hospital Street.
- From the southern side on Level 1, people can walk further south towards West Block department entries.



5.05 BUILDING ACCESS – MAIN ENTRY ESTABLISHMENT

Tower 2 will introduce a new Main Entry for the campus. The journey to the building is an important part of giving the space character and identity.

The Main Entry is identified by the drop-off zone for patients or visitors with the Front of House departments providing a clear 'front door' to the campus. In this FOH zone, the public would be guided to their destination departments.

There are 3 ways for the public to access the Main Entry"

- The East-west direction, and moves along the drop-off zone and perpendicular to the FOH at Level 1.
- Level 2 is a pedestrian link from the Barber Avenue Multi-Storey Car Park.
- Level 2, is a continuation of the current Hospital Street.

Departments along the west edge of the building will comprise of the retail components in Front of House, Education, Staff Admin and Social Zones. The design provides the opportunity for retail to further engage the inside with the outside, with retail seating to spill out into the generous colonnade and landscape zones.

This design approach will not only activate the entire building frontage, but also bring a sense of nature to the inside of the building, reinforcing the identity of a campus Main Entry both internally and externally. The entry pedestrian walkway to the building is located with great proximity to the main drop-off zone within a landscaped area.

This area provides great opportunities to introduce outdoor seating which can serve as the backdrop of a variety of outdoor activities, a good starting point of creating not only a sense of identity, but also a sense of community.

From this significant node point, pedestrians are provided with safe, sheltered and enjoyable experience. This will establish an identity of pedestrian friendly and walkable campus.

6.00 FUNCTIONAL RELATIONSHIPS & CONNECTIONS

6.01 CLINICAL BLOCK AND STACK

The clinical block and stack of the new Stage 2 Tower is driven by the following principles:

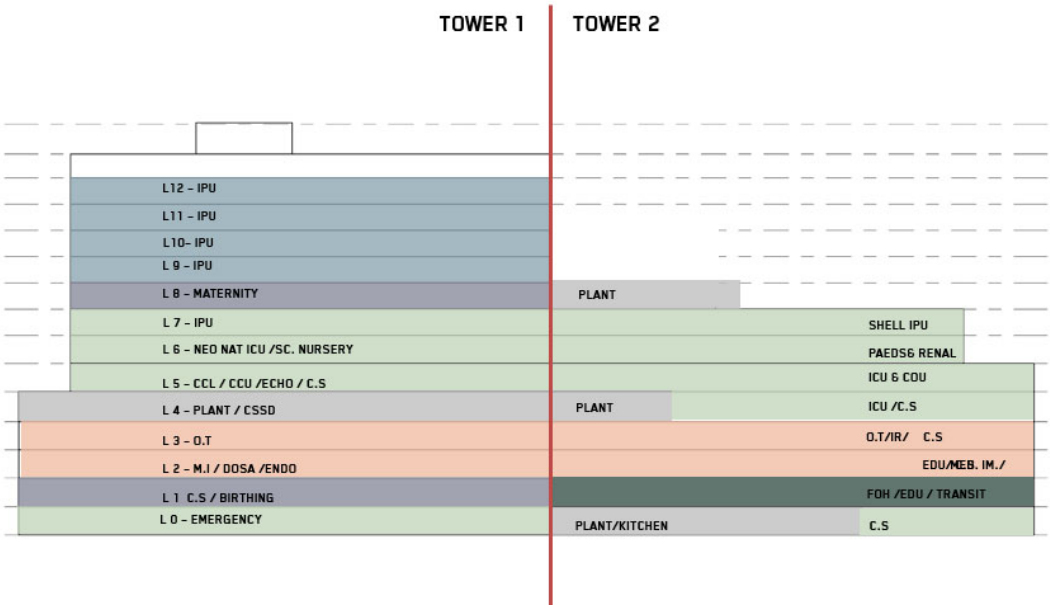
- Clinical connections to Tower 1
- On-grade access from Barber Avenue to the new Front of House and Transit lounge located at Level 01
- On-grade access to the Patient Transport Services parking and Kitchen and associated Kitchen loading dock area from Somerset Street on L00
- Connection to the Pharmacy in North block via the Link on L02
- Connection to the Barber Avenue Multi Storey Car park via the Public Link on Level 02
- Connection to the North Block BOH waste, linen and bulk goods storage areas including loading docks and deliveries

The blocking and stacking of the proposed new Stage 2 Building is outlined below:

Level 07	Shell space for Future Inpatient Unit
Level 06	Renal Inpatient Unit & In-Centre Haemodialysis Unit and Paediatric Inpatient Unit and Clinical Support
Level 05	Intensive Care Unit and Close Observation Unit
Level 04	Plant, ICU support areas and Clinical Support
Level 03	Interventional Radiology, Shell space for Future Operating Theatres and Clinical Support
Level 02	Front of House, Education and Training Centre, Medical Imaging and Nuclear Medicine and Clinical Support
Level 01	Front of House, Education and Training Centre, Transit Lounge and Clinical Support
Level 00	Kitchen, End of Trip Facility and Plant

6.02 CLINICAL AND NON-CLINICAL CONNECTIONS

The design supports the relocation of key functional areas that have critical relationships to existing departments which are remaining in their existing locations. The Stage 2 Building provides the following clinical and clinical support connections for key departments.



L00 TOWER 2 – CONNECTION TO TOWER 1

- Connection to the existing emergency service located at the base of the new Stage 1 Building at Level 00.
- Access to other acute facilities contained within the Stage 1 Building and the new Helipad Landing Site by way of direct vertical lift access.
- The Patient Drop off Service and the Food Services Delivery have access via the extended Tower 1 access road.
- A waste collection access (TUG parking) is provided to collect waste from Tower 2 and Food Services.
- The Food services delivery dock connecting to the future Kitchen.
- There is an entry from street level for staff to access the combined End of Trip Facility.
- There is a direct internal connection from the ED department in Tower 1 to the clinical Support for ED.

L01 TOWER 2 – CONNECTION TO TOWER 1 AND EAST & NORTH BLOCK THROUGH LOGISTIC LINK

- Connection from Barber Avenue the new Hospital Drop Off leads to the Main Entry to the Stage 1 & 2 Tower
- Connection to FOH functions including retail

- The Transit Lounge has a strong connection to the Main Entry, the Patient Transport Services Drop off on Level 1 via the lifts and to Tower 1 and Tower 2 via lifts.
- The Pathology Department on Level 1 East Block will have a direct connection to Tower 1/2 via a link and to the Loading and Waste area via a logistic link.
- The new Back of House Area with Linen Services, Bulk Store, Loading Dock and Waste Area has a logistic connection to the existing buildings on the campus, Tower 1 and Tower 2.
- The intention is that the Logistic Link is separated from public and patient flows.

L02 TOWER 2 – CONNECTION TO TOWER 1, EXISTING HOSPITAL STREET, MULTI-STOREY CARPARK AND EAST & NORTH BLOCK THROUGH THE LOGISTIC LINKS

- Connection to retail spaces through the Main Entry and via the central atrium and access stairs
- Connection to Tower 1 departments via the main circulation spine and the existing Hospital via Hospital Street.
- Connection to the Barber Avenue Multi-storey Carpark via the North Block public bridge link.
- Connection to and from the existing hospital via Hospital Street.
- Connection to Nuclear Medicine & Medical Imaging in Tower 1

L03 TOWER 2 – CONNECTION TO TOWER 1 AND EAST & NORTH BLOCK THROUGH THE BRIDGE LINK

- Connection to the Interventional Radiology Department located in Tower 2 is accessible from the Tower 1 lift via the main circulation spine. Ambulant and Inpatient entries to the department are separated.
- The Future Operating Theatres will have a direct connection to Tower 1 via a dedicated sterile corridor.
- The Southern Part of Tower 2 on Level 3 accommodates a large area for Clinical Support Space, which is accessible via lifts from Towers 1 and 2 and has a visual connection to the Atrium space.

L04 TOWER 2 – CONNECTION TO TOWER 1

- Connection and access to all on floor plant areas in Tower 1 and Tower 2
- Connection to Tower 1 departments via the main circulation spine.
- Access and interfloor connection to the ICU Clinical Support spaces located on this floor.

L05 TOWER 2 – CONNECTION TO TOWER 1

- The new ICU department will have direct access to Tower 1 departments via the main circulation spine.
- Access and interfloor connection to the ICU Clinical Support spaces located on the floor below.

L06 TOWER 2 – CONNECTION TO TOWER 1

- The new Paediatrics and Renal departments will have direct access to Tower 1 departments via the main circulation spine.

L07 TOWER 2 – CONNECTION TO TOWER 1

- The future Inpatient Unit – IPU will have direct access to Tower 1 departments via the main circulation spine.

6.03 SERVICES AND LOADING ACCESS

The Stage 2 Building provides the opportunity to separate the majority of BoH and staff horizontal circulation on Level 01 and L02 of the existing Hospital and Tower 2.

The Nepean Hospital Tower design provides a connection and functional link to the existing pharmacy, linen and waste loading facilities on Level 1 North Block and the kitchen facilities located on Level 2 South Block. These functional links are achieved via a new corridor which interfaces with the existing main inter-departmental corridors on Level 01. This new corridor seeks to link existing Stage 1 Tower, South, West and East Block lift cores to the new Stage 2 Building.

As part of the Stage 2 Development significant upgrades are proposed for the current support facilities, to ensure better hospital distribution connections between buildings and departments, to guarantee continuity of services. The work proposed includes major upgrades to the below services:

- BOH loading dock area to increase capacity to become the new centrally located Campus Logistics Hub
- BOH linen services to increase capacity to service the existing Stage 1 and the proposed Stage 2 departments including all existing Campus facilities
- BOH bulk goods storage area to increase capacity
- BOH waste area to increase capacity to better service the entire campus

Existing circulation routes from the dock, waste and linen area to the West Block lift cores are maintained, whilst overall connectivity will be improved.

6.04 END OF TRIP FACIITIES

Provision for the End of Trip Facilities (EoTF) are to be consistent with the Green Travel Plan. The End of Trip Facility has been located on L00 in Tower 2 to provide female and male change rooms inclusive of bike storage facilities. The space will service Tower 1 and Tower 2, whilst also providing access for staff working within the Campus.

Bicycle parking facilities for the public will be provided adjacent to the main Building Entry to Tower 2.

6.05 PLANT STRATEGY

The majority of the podium levels (Levels 00 up to Level 04) are served primarily by the Level 04 interstitial plant floor. This centralised plant space is supported by smaller components located on Level 00.

The tower floors are served by on-floor mechanical plant systems in order to minimise the size and distribution of risers and to easily accommodate future re-planning and expansion within the new Stage 2 Building component.

Additional mechanical plant and the Cooling Towers are located on the roof, along with hydraulic and electrical services.

6.06 STAGING STRATEGY

Refer Architectural Staging Drawings (A0-900 series) outlining the proposed staging strategy for the Stage 2 development.

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Below MASTER PLAN STAGING STRATEGY provides a simpliefied overview of the stages.

TOWER 1 COMPLETION

SITE WIDE WORKS & DECANTING

STAGE 2 TOWER

Below detailed STAGING METHODOLOGY outlines the scope of work to be completed in each PHASE:

SITE STAGING - SITE WORKS PRIOR TO STAGE 2

- Stage 1 Tower completed
- Existing departments relocated to Tower 1 or other available areas on/off Campus

PHASE 1

- Demolish satellite buildings and portion of North Block – make good North Block building interface with new façade
- Demolish Pathology building after decanting into East Block

PHASE 2a

- Construction of loading dock (north section) incl. new truck bays, waste area and associated rooms and hard stand areas
- To note: southern loading dock area remains operational

PHASE 2b

- Construction of loading dock (south section) inc. new truck bays, canopy, bulk storage, clean & dirty linen, hard stand areas
- BOH corridor upgrade works
- Commissioning

PHASE 3

- Establishment of site and site compound
- Installation of retention wall system
- Bulk excavation works
- Sub-structure piling

PHASE 4

- Construct new Clinical Services Building / Tower 2
- Commissioning

PHASE 5a

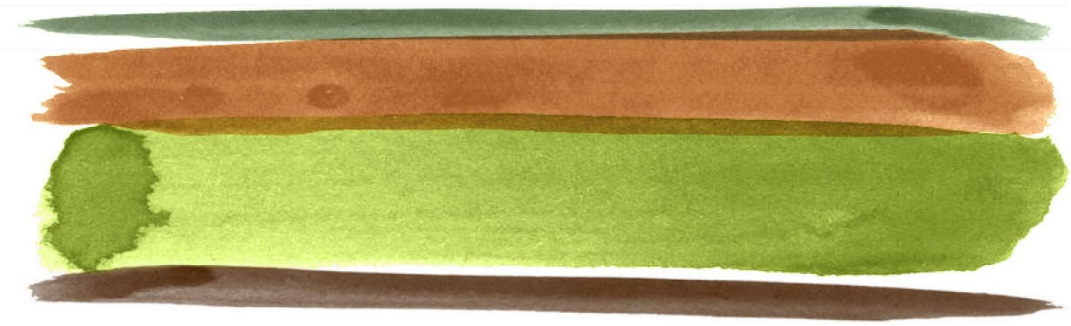
- Construct new internal Road Infrastructure / Civil Works
- Demolish temporary link between North Block and Stage 1 – make good façade and internal works

PHASE 5b

- Remaining external works including hard and soft landscaping and other completion works
- External Wayfinding completion
- External Lighting and Security completion
- Completion of project

7.00 BUILDING FABRIC STRATEGY

The following principles have been developed in response to the framework set out in the Zonal Masterplan and the Stage 1 & 2 Tower. These aspirations have strongly influenced the design of the facade and the materials selected.



the BLUE MOUNTAINS

'a collection of unique & beautiful landscape *strata*'

CONTEXTUAL APPROPRIATENESS

The New Stage 2 Building will be a significant new feature on the Nepean Hospital Campus. Material selections reflect the building's prominent location and important civic role. The facade design and selected material(s) respond to (but not necessarily replicate) adjacent built form, and in particular significant heritage context.

The design embodies Nepean as a place - empathetic to its surroundings, materials and forms and draws on the influences and strata from the Nepean River and Blue Mountains.

The Design proposes a facade that is restrained, calm, and rhythmical, and suggests the use of quality natural materials, such as terracotta and bricks.

SUPPORT URBAN DESIGN ASPIRATIONS

Façades at the entry level (or levels) should provide visibility into the building and permit ease of access. Façades bounding pedestrian routes and public spaces should provide an active and engaging edge. Operable façades have been considered where permitted by internal function.

A transparent and permeable facade supports the philosophical aspiration to create an allied health and science centre and encourage a blurring of boundaries between the various institutions.

Architectural features such as colonnades, double or triple height spaces, canopies, and cantilevers have been used to signify entries, provide gathering spaces, and to delineate covered pedestrian paths.

Due to its central location in the campus, the Stage 2 building will represent the new entry of Nepean Hospital. While the building's west facade is important in the urban context with the new entry to the Front of House, at higher levels all four elevations will have significant presence and will be highly visible to the wider precinct.

HUMAN-CENTRED

The facade represents a key opportunity in the creation of a building which actively promotes health and wellness. The State Design Review Panel suggests a palette of tones that is 'soft, warm, and aesthetically soothing'. Natural materials, textured elements, and planting have been incorporated to create a facade that is warm, inviting and harmonious.

The facade must operate at both the macro- and micro-scale: whilst it addresses the surrounding urban context, materials and openings respond to the human body to create a building that is welcoming and responsive.

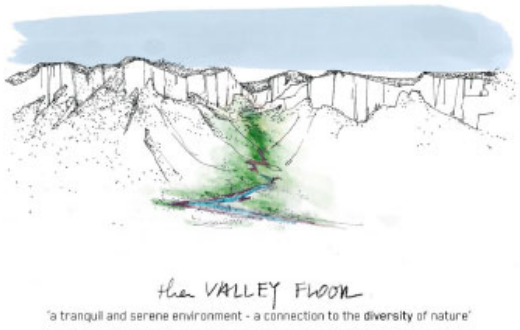
SUSTAINABILITY

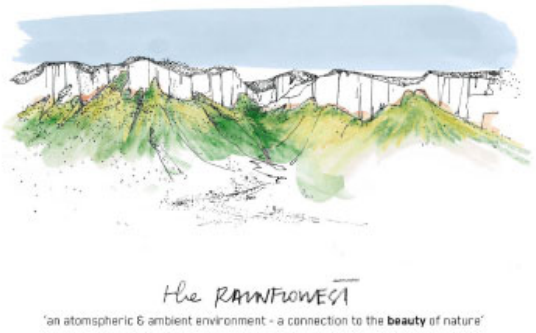
Material selection has considered embodied energy and the use of recycled materials. The harmful content of materials (such as volatile organic compounds) has been minimised.

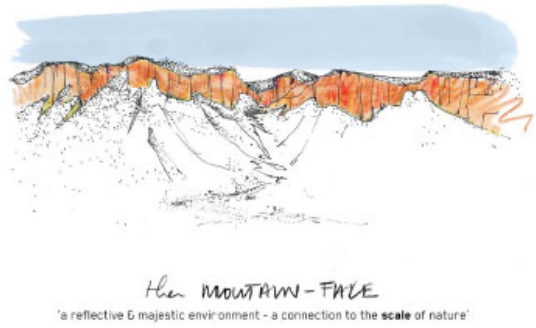
Orientation, shading and insulative properties have been considered to minimise potential energy consumption, whilst maximising natural light and views to the outside. Natural ventilation will be implemented in the main atrium space and public and staff zones through a mixed mode mechanical system.

FUNCTIONALITY

Materials must be robust with a long lifespan and the facade design has considered access for maintenance and cleaning methods.







8.00 FAÇADE TYPES AND MATERIALTY

The overall number of façade types is minimised for clarity and construction efficiencies and to tie into the façade language of the Stage 1 Tower. Key façade types retain flexibility within the system to further articulate facades and adjust for internal planning changes.

8.01 TOWER FAÇADE TYPE

Essentially a rainscreen façade, the building's primary façades type has been developed to suit the modulation of the clinical planning. Preferred systems utilise floor-to-floor components that divide the façade vertically.

This tower façade is made up of windows and metal panel and seeks to provide textural variance using a mixture of profiled/ribbed metal cladding such as Longline in combination with a smooth flat panel. To provide depth and visual relief, the façade system is further articulated with the use of recessed "urban markers" which respond to the internal planning. Windows and cladding panels are based on 1200mm wide modules, that can be accommodated within the building's 8.4m grid. Sill levels are set typically 200mm above floor levels and ceilings 2700mm above floor level. Full height vision glazing spans 2500mm between these levels with an insulated infill cladding panel above to visually extend the 'glazing zone' to the full height of the floor.

Reflectivity is minimised by the use of matt-finish materials and limited areas of glazing. The building is substantially set back from Parker Street to the west and the Great Western Highway to the north, further reducing any potential impacts from glare

8.02 PODIUM FAÇADE TYPE

Within the podium façade system, the location of glazed and solid elements is varied from floor to floor to help avoid an 'institutional' appearance. Vision glazing percentage varies around each façade depending on the internal planning. Glazing areas have been minimised and matched to the internal clinical requirements.

The intent is to utilise a large format prefinished tile cladding system (terracotta/natural) as cladding material. This product has a natural tonal variation, which will offset the 'flat' elevations resulting from the general building massing and to complement the aesthetics of Tower 1.

The podium facade is primarily facing West. Sunshade terracotta louvres will be used to break up the "mass" of the podium façade as well as to help identify the main hospital entry. This integrated louvre system will help reduce potential glare inside the Front of House Atrium space, whilst vertical sunshade louvres are proposed on the West facade to reduce heating and colling requirements.

Windows and cladding panels are based on 1200mm wide modules that can be accommodated within the building's 8.4m grid. It is proposed that this facade will also be constructed with a varying reveal depth to provide further articulation and visual interest and relief.

8.03 GROUND PLANE FAÇADE TYPE

The ground plane facade bounds the pedestrian routes and addresses key outdoor public spaces. A shop front glazing system is proposed along the colonnades at the entry level. The façade at the ground level seeks to be as transparent as possible, providing visibility into the building and permit ease of access.

A transparent and permeable facade will support the philosophical aspiration to create an allied health and science centre and encourage a blurring of boundaries between the various institutions. Operable facade sections will be considered where permitted by internal function to create an interaction with the landscape elements and outdoor furniture, creating an active and engaging building edge.

The canopy elements will be used to help signify wayfinding and entries, provide gathering spaces, and to delineate the covered pedestrian path to the FOH entry point.

Refer to Architectural Elevations (A0-300 series) and the Material Sample Board (A0-450 series) for the extent and scope of façade types and details of materials, finishes and colours respectively.

8.04 PLANT ROOM FACADES

Plant room louvres are generally integrated into the tower and podium façade systems (where required) working to the 1200mm module setout. This will provide a consistent reading of the facades where large louvre areas are required for plant rooms on Levels 4 and the roof.

The intention is to utilise a full height weatherproof louvre system. Where visibility into plant rooms may be an issue, such as cooling tower enclosures, louvres may be inverted to ensure sightlines are blocked.

8.05 FACADES TO KEY INTERNAL CORRIDORS

The division of the massing solids corresponds to key circulation corridors developed in the internal planning. Full height glazing panels setback from the main façade line preserves views at the end of corridors facilitating intuitive way-finding and a connection to the outside.

8.06 FACADE ACCESS

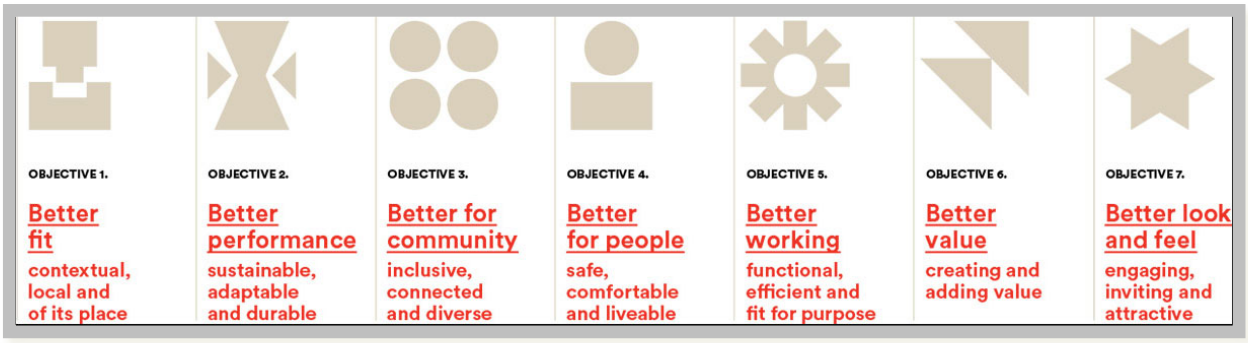
The intent is that all major roof levels are protected by parapets and provide safe access to facades for cleaning and replacement either by abseiling from davit arms or from building maintenance units. Horizontal ledges on facades are minimised to facilitate this access. A fit for purpose façade access system is to be further developed with the Design Team in the subsequent design stage.

9.00 RESPONSE TO BETTER PLACED

The design for the Nepean Hospital Redevelopment will be governed by, and in consideration of, fostering the long-term, co-ordinated decision making in rethinking complex systems and processes from wider, future urban strategies through to everyday hospital operational requirements consistent with the policies outlined in the Better Placed document prepared by the Government Architect of NSW.

In its development of design strategies, the Nepean Hospital redevelopment has identified, engaged and consulted in the objectives of a number of industry, professional and government agencies as well as local community stakeholders to provide a proposal that responds to and embodies a healthy, responsive, integrated, equitable and resilient design solution.

The 7 BETTER PLACED Objectives have been outlined in our response below:



BETTER FIT

The Nepean Hospital Campus fulfils a central role within its immediate and wider context. The Penrith Health and Education Precinct also known as The Quarter, encompasses the Nepean Health Care and the Universities of Western Sydney and Sydney and TAFE and aspires to be a leading centre for health and education that " will drive major jobs growth, economic prosperity, educational opportunities and improved health outcomes for a rapidly growing community".

The new Stage 2 Building location and the associated public space has been strategically positioned to respond to Penrith City Council's control plan and the desire to establish and develop direct pedestrian links to Kingswood Station and to consider future medical mix use development along Somerset Sreet and Derby Street.

The location of the new Stage 2 Building has been developed to identify and support the growth of the campus over its life time and to meet the aspirations of the NBMLHD with a focus on improving services across acute health care, ambulatory health care, research and education, mental health and community care services to 2032.

The design of the Stage 2 Building embodies Nepean as a place, empathetic to its surroundings, materials and form. The building mass and façade strategy seek to ground the new building in its context, recognising and responding to the surrounding campus building heights and an inferred campus datum line.

BETTER PERFORMANCE

Longevity, functionality and robustness underpin the new Stage 2 Building design with the provision of the following:

- Selected façade materials/systems and interior finishes are resilient and low maintenance;
- The new building promotes social sustainability on the Hospital Campus by providing public and green spaces for patients, staff and visitors;
- Grid layout, core design, services reticulation and floor to floor heights will allbe designed for future flexibility, providing an element of resilience into the design and ensuring it remains relevant well into the future - future proofingthe building for changing clinical uses; and
- The new Stage 2 Building is seeking to achieve a 5 Green Star equivalency rating.

Facade elements such as shading, insulation, and material selection will be considered in the context of the overall energy performance of the building.

The integration of the central atrium on Level 01 of the Stage 2 Building provides a new main entry and public space with visual connectivity and access to natural daylight and ventilation to Front of House areas.

The landscaped terrace on L01 provides amenity for staff and a dedicated indigenous outdoor garden space, whilst the Southern courtyard will accommodate public art and a variety of landscape solutions to be used by vistiors, patients and staff to provide respite to the internal hospital environment.

BETTER FOR COMMUNITY

Combining many functions into a single building, the new Stage 2 Building will significantly alter the way people use the hospital, and aims to become the first point of arrival for many visitors to the campus. As such, it presents an exciting opportunity to create a unique, easily identifiable and memorable 'front door' -a landmark building which becomes synonymous within the Nepean and Blue Mountains health district.

The new Stage 2 Building provides an opportunity to create a public entry/forecourt for the hospital. The integration of public space will establish a sense of entry and facilitate the development and appropriate identity for the hospital within the local community as it becomes a fundamental connector for pedestrians upon arrival.

The New Stage 2 Building will seek to respond to this aspiration by recognising pedestrian desire lines (existing and future) and ensuring the environment around the building provides a safe, sheltered and enjoyable experience for pedestrians.

Wayfinding principles incorporated in the design enables the ease of identification of major destinations by providing clear navigational choices through the creation of structured paths within the campus.

BETTER FOR PEOPLE

The new Stage 2 Building has been designed with people's experience and safety at its core by providing the following:

- Integration of new public and green spaces enhancing the pedestrian experience, health and well-being;
- Material selection and the importance of colour, texture and natural finishes consistent with the local environment and elements;
- Legible entries ensure a clear and intuitive way finding experience;
- Access to daylight for patients, staff and visitors

- Public corridors terminating in glazing ensure visitors remain oriented and connected to the outside at all times;
- Views to the outdoors or to the shared central atrium ensure people retain a sense of being part of the whole even as they move through the building;
- Integration of Arts and Cultural strategies within the Hospital's public spaces;and
- Application of the principles outlined in the Crime Prevention Through Environmental Design summaries provided as part of this report and as outlined in the Landscape Report by Arcadia

The new stage 2 building aims to "promote a healing, health promoting and ecologically sustainable environment." By providing a harmonious, stress-free user experience for patients, staff and visitors that harnesses the impact of the above design considerations.

BETTER WORKING

Extensive user consultation to develop models of care which underpin the department plans and inform the design has been undertaken to create a building which will be functional, efficient and fit for purpose.

Construction of a standardised 8.4m grid ensures maximum flexibility for a variety of health-related uses long into the future.

The design supports the relocation of key functional areas that have critical relationships to existing departments which are remaining in their existing locations. The Stage 2 Building provides a framework that addresses the Hospital's compromised patient, staff and public circulation flows by establishing a framework which de-conflicts cross overs and provides separate horizontal and vertical circulation for each of the constituent groups.

Positioning of the Stage 2 tower also enhances the access to and from the Nepean Hospital campus in relation to existing public transport infrastructure and car parking facilities within the site as noted in this report.

BETTER VALUE

Replacing aging existing facilities with a modern, future-proofed building that promotes precinct-wide integration will provide ongoing value for the immediate and wider community long into the future.

Being a public hospital, the new stage 2 building proposal has been conceived and designed with a primary emphasis on whole of life costs and patient centric amenities such as green public spaces and courtyards to improve health and well-being of patients and staff.

BETTER LOOK AND FEEL

The Stage 2 Building will be a significant new feature on the Nepean Hospital Campus. Material selections are to reflect the building's prominent location and important civic role.

The new Stage 2 Building seeks to provide an engaging, tactile and memorable experience through the provision of the following elements:

- A generously scaled shared central atrium and entry zone;
- Extensive use of textural materials throughout the new public spaces;
- Consistency of wayfinding, look and feel across the campus and on floors to ensure continuity for visitors; and
- Integration of Arts and Cultural strategies with wayfinding and interior concepts.

10.00. RESPONSE TO GANSW COMMENTS

The following table provides references to specific sections contained within this Architectural Statement which addresses observations made by the GANSW in SDRP 1 & 2.

GANSW SDRP 01 Comment	Response – Reference Section / Appendix
Concept Masterplan The panel noted a continuous pedestrian experience from north to south must be reinforced by the design of each building. Sectional views are required to accompany the masterplan to explain level changes along the spine and around each building.	• Refer to SDRP presentation 02 – Architectural Drawings – Plans, Sections, Elevations, 3D views
Landscape & External Circulation The panel noted that it's crucial to provide significant and appropriately located areas of deep soil and substantial canopy planting early in the design process. The intention of the pedestrian spine, while clear in masterplan, is ambiguous in detail. A clear movement framework for the site supported by ground treatments, planting and intuitive wayfinding strategies is essential to clarify the pedestrian experience. The landscape character also offers opportunities to explore a cultural continuum from Aboriginal habitation to present day uses; this exploration has the potential to provide a unifying element across the masterplan.	• Refer to SDRP presentation 02 – Landscape Diagrams and Drawings – Plans, Sections and Planting Palette by Arcadia Refer to Interpretive Opportunities as part of the overall landscape design by Arcadia Refer to Interpretive Opportunities as part of Wayfinding and Signage by Urbanite Refer to Interpretive Opportunities as part of the Arts Strategy by Creative Road
Architecture To understand the scale and mass of the 3 proposed stages, all should be shown in future presentations in plan, section and 3D. The desired ground plane pedestrian experience, a clear and logical journey across the campus, should also be present in the upper levels of the building, with light, views and access to outdoors a key priority.	• Refer to SDRP presentation 02 – Architectural Drawings – Plans, Sections, Elevations, 3D views and Site Diagrams
Sustainability Opportunities for renewable energy, water and waste recycling, WSUD measures and passive building performance must all be explored as a minimum. Extensive use of accessible green roofs, sunlight penetration to deep floor plates, natural ventilation, cross ventilation for thermal comfort and the treatment of façade openings for high, year-round thermal performance should be a part of design development. A sustainability strategy, which addresses the above and any other ESD outcomes that are proposed to be achieved, should be presented at the next SDRP.	• Refer to SDRP presentation 02 – ESD Strategy Targets and project overview by LCI
Aboriginal Culture & Heritage and Art Strategy The Panel requests further information on the whole-of-project approach to Aboriginal Culture and Heritage, especially important given the area's demographics and diversity. Evidence is also required to understand how	• Refer to SDRP presentation 02 Refer to Interpretive Opportunities as part of the overall landscape design by Arcadia Refer to Interpretive Opportunities as part of Wayfinding and Signage by Urbanite

Aboriginal culture and heritage is informing the design of the hospital and buildings. An art strategy should be developed in conjunction with the landscape and architecture proposal and be presented in the future SDRP.	Refer to Interpretive Opportunities as part of the Arts Strategy by Creative Road

GANSW SDRP 02 Comment	Response – Reference Section / Appendix
Landscape & Masterplan Walkable links between these outdoor landscaped spaces and through the Stage 2 building are required to fully realise the benefits the landscape adjacencies have to offer. The North/South green spine is currently interrupted by the Stage 2 building. A more generous, wider landscaped zone outside the Stage 2 arrival lobby (to the west) is recommended to ensure a continuous walkable external path and stronger landscape connections from north to south. Transparency and permeability through the building from west to east connecting the proposed Hospital Pedestrian Spine to the interior and beyond to the eastern terraces and courtyard must be explored.	• The landscape connection strategy and principles will be further presented in the updated Landscape Design SDRP presentation 03 by Arcadia • Refer to Landscape Schematic Design Report by Arcadia
Architecture & Public Domain The panel noted, the ambition expressed for Stage 2 to unify the campus and become the logical center and orienting hub of the site is dependent on the following: • Provision of a meaningful space at the junction of the covered west/east walkway and the Stage 2 building edge • The ability of the North/South spine to act as a primary way finding element, with adjacent landscape spaces and built form integrated into the spine and engaging with it through edge conditions that allow permeability and operability. Stage 2 is a critical connector for the site alongside which the spine passes. Spaces within and around Stage 2 must emphasise this role as connector and junction • The ground floor plane requires more areas of unprogrammed open space, particularly around the building edges, to give the lobby/reception a natural sense of arrival and connect it to nearby courtyards and exterior amenity. Currently the ground plane is tight with retail and service areas dominating the perimeter and is lacking in space for loose occupation, amenity and landscape connection. Thelobby should spatially relate to the North/South spine. Elevations and sections indicating the relationship of the proposed Stage 2 building to the existing Stage 1, the raised landscape areas and the proposed	• Refer to SDRP presentation 03 – Architectural drawings – Elevations, 3D external & Internal views & Interior Design intent Refer to A0-320 series for Façade Systems & A0-450 series for Material Sample Board, for A0-300 series Elevations and A0-460 series for Photomontages Refer to expanded ESD measures and principles by LCI

streetscape are required to explain the proposal more fully. Material selection, façade articulation and ESD measures should be expanded on at the next SDRP. Where possible, the internal spaces should capitalise on the aspects and views from the upper levels of the building. Extended corridors, waiting areas and lift lobbies should have access to natural light, sky and green views wherever possible. The extent of internal green spaces must be presented in detail at the next SDRP addressing how their benefits can be maximized through design. ESD principles must be a priority for all hospitals and, in particular, this naturally rich site, with opportunities for balconies with high amenity, access to natural breeze and light where possible – a comprehensive active and passive approach to ESD should form part of the next SDRP presentation.	
Carpark & Transport A further developed transport strategy for the campus, evolving alongside the masterplan and proposed Stage 2 building should be included in the next SDRP presentation. This should address proposed traffic movement (vehicles and bicycles), parking, pedestrian circulation from cars to destinations within the campus, and how public transport opportunities may be further strengthened in the development of the site. A reduction of the extent of the 'horseshoe' road adjacent to the lobby to strengthen the North/South green corridor should be presented at the next SDRP.	• Refer to SDRP presentation 03 – Transport Connections by PTC Refer to Landscape SDRP presentation by Arcadia

GANSW SDRP 03 Comment	Response – Reference Section / Appendix
Landscape & Masterplan Further attention is required to the landscape areas that are directly accessed/adjacent to the built form of Stage 2 including courtyards, terraces and entry zones. Further comments below. • Review the extent and width of pathways to allow for clear wayfinding across while ensuring amenity and respite spaces are integrated. • Ensure the ratio of porous to hard new paving is logical and appliedthroughout the project scope with due consideration to WSUD principles.Revisit the design principles for WSUD presented in SDRP 2 and use these to ensure a healthy year-round landscape. The variation of plantingin distinct pockets as a response to WSUD principles will also assist as a wayfinding element within the site.	• Refer to updated Landscape Schematic Design Report by Arcadia • Design will be further developed in the Design Development Phase to implement relevant comments made by the SDRP

• Ensure appropriate planting for the Nepean climate is specified throughout the project: for the Drop Off and Main Entry zone, the heightand year-round condition of planting should be a priority. • Provide evidence through sections and details that the Northern Courtyard/ Indigenous Courtyard will have adequate deep soil plantingand garden beds to support medium to dense planting. Consultation with the local Aboriginal Community should continue to ensure the bestpossible amenity outcomes are achieved for this courtyard, tailored to Community requirements and desired usage. • Select plant species that assist, respond to and promote favourable micro-climates in the different courtyard conditions. Attention to the amenity, scale of planting and uses for the Southern Courtyard should be developed for EIS submission - consider indigenous Blue Mountainsspecies that tolerate shady cool winter and sunny warm summer variations. • While visual amenity is positive, explore active uses for the upper level landscaped areas such as the Level 6 Terrace. Provide amenity and planting that provides shelter where appropriate during the different seasons. • Where possible, provide green roof areas to the Stage 2 development. This large expanse of roof will be visible from the Stage 1 development.	
Architecture & Public Domain • Increase the visual presence and identity of the entry canopy/structure at the Drop off and Entry zone. An enhanced civic presence to the main entry will support the aim of the masterplan to make Stage 2 the logical front door and center of the campus. • Continue to develop the materiality and architectural language of the facades through detail design, with attention to scale and junction details. The mass of the built form will be greatly enhanced with well considered detailing. • Deliver a detailed wayfinding strategy which includes its extent, ease of use and campus wide implementation.	• Design will be further developed in the Design Development Phase to implement relevant comments made by the SDRP • Refer to Architectural drawings – Elevations, 3D external & Internal views & Interior Design intent • Refer to A0-320 series for Façade Systems & A0-450 series for Material Sample Board, for A0-300 series Elevations and A0-460 series for Photomontages • Refer to expanded ESD measures and principles by LCI • Refer to Campus wide Wayfinding Strategy established by Urbanite with the LHD

- Ensure a clear and protected path of travel is provided between theexisting carpark and the main entry of Stage 2. Provide inclement weather protection and rest areas for the length of the journey.
- Where possible, continue the landscape themes of the areas directly adjacent to ground level activations into the entry lobby, the cafe, and other gathering spaces. On the upper levels ensure views are framed with sill heights that allow outlooks to users both seated and standing.

11.00 APPENDIX 1

11.01 SDRP 1 - GOVERNMENT ARCHITECT NSW PRESENTATION (August 2020)

11.02 SDRP 2 - GOVERNMENT ARCHITECT NSW PRESENTATION (April 2021)

11.03 SDRP 3 - GOVERNMENT ARCHITECT NSW PRESENTATION (September 2021)

12.00 APPENDIX 2

12.01 SSDA SUPPLEMENTARY

- Architectural Drawings for Tower 2 – A0-100 series, A0-200 series, A0-300 and 310 series for site plan, floor plans, elevations and sections
- Architectural Drawings for Refurbishment Works – A0-500 series for floor plans, elevations and sections
- Tower 2 Façade Schematic Design Concept and Details refer to architectural drawings A0-320 series for Façade Systems and A0-450 series for Material Sample Board
- Tower 2 Photomontages refer to architectural drawings A0-460 series
- Shadow Diagrams refer to architectura drawings A0-400 series
- Architectural Drawings - Staging Drawings A0-900 series
- Interior Schematic Design Report