

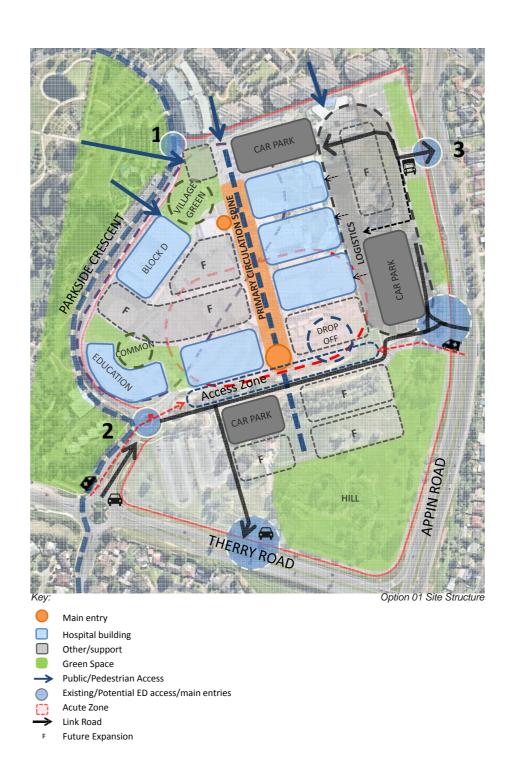
Masterplan

2.3 Site Structure

A Site Structure Plan was developed to provide master planning guidance for the on-going built form development of the Campbelltown Hospital site. It also investigated strategic staging opportunities for the project beyond the 2031/32 reporting period.

Key elements of the Site Structure Plan included:

- Establishment of north/south circulation spine 'Hospital Spine'
- Defined main front entry
- Outline of the sequential staging opportunities
- Defined clinical, access and logistic/BoH support zone (access zone)
- Identifies key entry points, both vehicular and pedestrian, including new connections
- Emergency department, including public and ambulance vehicle access
- Investigates multi-deck car parking locations
- Open space opportunities





Masterplan

2.4 Entries and Connections

The site access investigation determined that the most suitable 'access zone' for the hospital would be to the south of Building B and front the adjoining service road (as shown in the adjacent diagram). It is proposed that the service road be realigned and upgraded to provide suitable capacity and gradient to service the new Clinical Services building.

The master plan identified an opportunity to provide a north/south circulation spine or 'Hospital Spine' through the centre of the site. The 'Hospital Spine' has the flexibility to be multi-leveled and the ability to connect a majority of buildings and departments across the campus. Main entries would be provided at both the northern and southern ends. The southern entry provides the primary entry to the hospital and would incorporate public drop-off as well as public transport service connection

A segregated entry for the Emergency Department and ambulance access would be provided at a lower level. The northern entry will be secondary and provide access for ambulatory services. Current pedestrian circulation patterns indicate that the majority of movements into the site are from the north via Parkside Crescent. Campbelltown Private Hospital and mixed retail/office precinct is located within close proximity of the sites northern access point.

Pedestrian

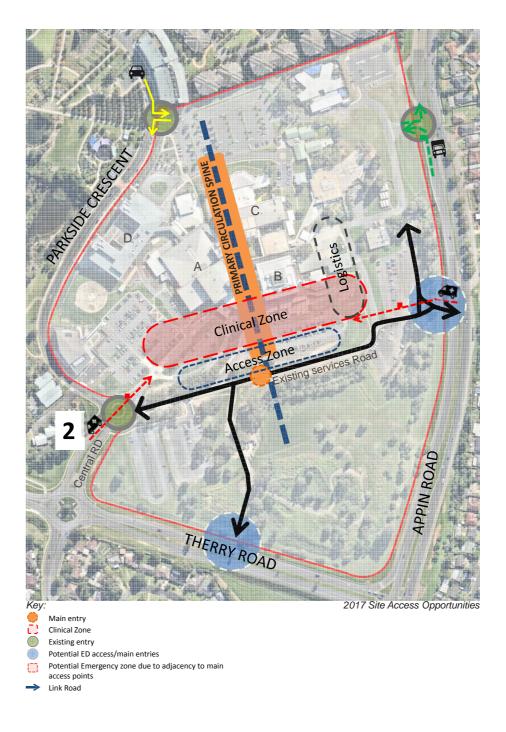
Pedestrian/ambulatory access will remain to the north as there are dedicated pedestrian networks within the adjacent parklands and off street pedestrian links to the two surrounding train stations and community shops/services to the north.

Vehicular

Vehicular/Main entry would be maintained to the existing southern entry from Central Road with the main entry drop off located within the access zone. There is also future potential to create another site entry directly off Appin road to the east creating a primary traffic thoroughfare for vehicles and buses (subject to RMS consultation).

Logistics

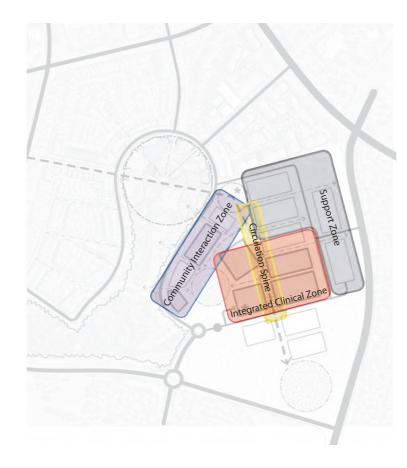
Logistics access zone would be located towards the eastern side and would utilise current back of house functions such as the loading dock, stores access, waste management and medical gas/oxygen tanks storage. Access to the logistics zone would be maintained via current use of the Appin Road connection located toward the north east of the site.

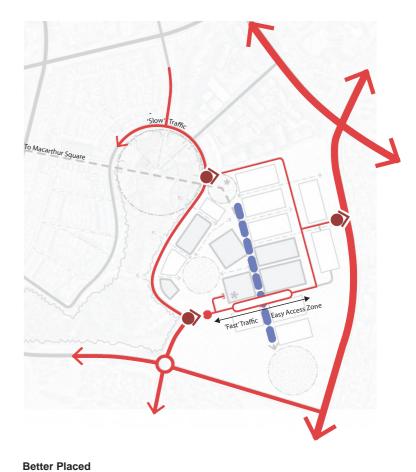




Masterplan Structure Plan and "Better Placed"







Overall Structural Plan



Future Development

Better Placed



- Developed Structure Plan
 Clear and Strong structure to frame uses over time
- Better fit with neighbourhood structure
- Contribution to quality of place
- Provisions of opportunities for campus partners

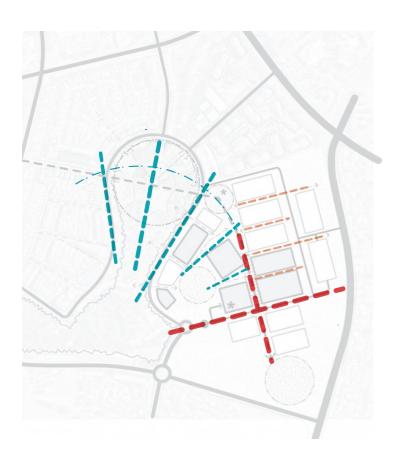


Connectivity

- Separating hospital 'fast' traffic from community 'slow' traffic
- Clear, legible entries. Easy access to the site
- Pedestrian access from Macarthur Square through Marsden Park to Hospital



Masterplan

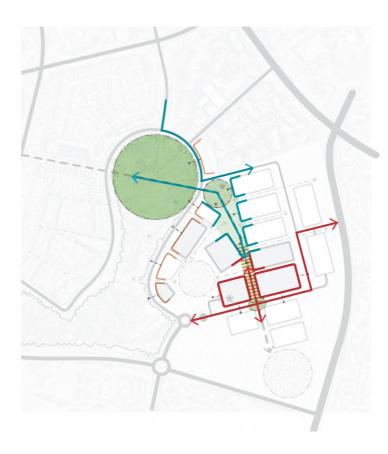






Structural Organisation

- Rigid and organised structure for efficiency at the 'fast' end
- Structure fanning out, opening up to the community
- Better fit with the neighbourhood structure, contributing to the quality of place



Better Placed



Extrovert and Introvert

- Extrovert public face
- Introverted welcoming interior
- Functional, fit for purpose environment



Government Architect NSW



Open Spaces

- Embracing the natural green character of Campbelltown
- Landscape and built form are interlaced
- Connected to existing natural systems

3.0

Architectural Design

3.1 Key Concept Drivers

The Concept Drivers for the Campbelltown Hospital Redevelopment are to:

- Provide modern, contemporary hospital facilities with high quality care standards:
- Enhance and integrate Paediatric and Mental Health services;
- Facilitate the delivery of improved health, education, research and community facilities on site;
- Provide improved access to and between different health and community services on site:
- Provide flexible building design to allow for future modification and expansion to meet anticipated growth in demand for services and changes in clinical practice and models of care;
- Enable new ways of working by leveraging through technology and innovation;
- Ensure development provides harmony and balance with the surrounding areas:
- Provide a high quality urban environment through careful design of buildings, enhanced landscaping and a well-designed public domain;
- Improve and enhance the public domain, including a variety of public areas and pedestrian and vehicular connections through the site;
- · Record any significant heritage items that are required to be demolished;
- Encourage public transport use by enhancing access to walking, cycling and bus networks;
- · Provide adequate car parking on site;
- Provide improved access to the site and minimise or manage appropriately any adverse impacts on the surrounding main and local streets;
- Manage traffic though the site so that pedestrians can move freely and safely within an appropriate amenity;
- Adopt the principles of Environmentally Sustainable Design (ESD) in accordance with NSW Health and State Government policy.

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Key form and massing principles



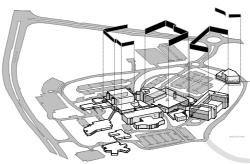












Building on the intent I Built Form and Setting

Inspiration for the original design came from the idea of a 'castle on the hill'. The 'Castle' is externally expressed with circular stair towers paired around central public and emergency entrances. The hospital rose above the greenfield hillside as a visually imposing representation of the new civic era of Campbelltown.

the 'castle on the hill' the 'town' on the hill

Remnant Cumberland Plains Woodland I Vertical Parti

Structure of the Woodland Three distinct layers The Canopy - Floating Boxes The Midstorey shrub layer - Plinth Ground Cover Layer - The Podium

local setting

Datums I Built Form Parti

The original buildings were designed with a strong division of the built form into two distinct vertical elements - a plinth (base/ rampart) with main entry points and a hovering built form above.

established site datums



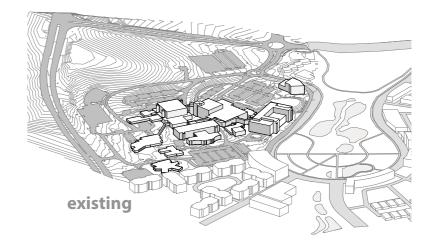
3.2 Urban Design

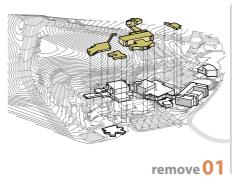
The existing Campbelltown Hospital campus is an agglomeration of buildings from different era's and styles all concentrated towards the centre of the site with a handful of at-grade parking areas dispersed on the perimeter. The existing buildings on site are staggered and terraced as a reaction to the slope of the topography creating references to a 'citadel' or town on the hillside. With the addition of multiple buildings over the years the campus has spread out. An intricate network of zigzagging circulation links to Building D has created a sense of disconnect across the site.

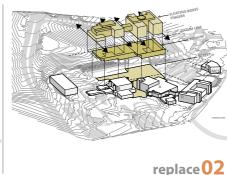
The proposed redevelopment brings an orderly structure to the site with the pedestrian spine 'Hospital Spine' redefining the campus planning and acting as the main public thoroughfare. The new Clinical Services Building (Building 01) will allow for the consolidation of buildings on site and provide a greater civic connection into the hospital and rationalise wayfinding of entry points into the hospital.

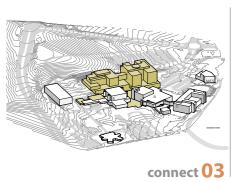
The new redevelopment and its built form aims to capture and strengthen the idea of a town on the hillside by embracing the existing disparate built elements and creating a higher level of cohesion on the site. The new built form is also a reaction to its surroundings as it will become a prominent beacon within the community. Working with the natural topography of the site is an opportunity to utilise this vantage point and elevate the hospitals local importance and civic presence in the local Campbelltown Community.

Key Design Principles

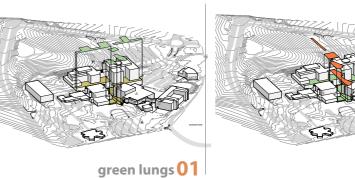


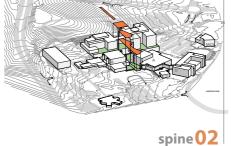


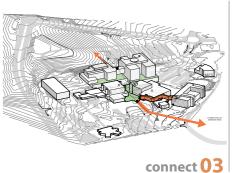




Composition Built Form







Composition Hospital Spine



3.Built Form

The masterplan provides a robust framework for the development of the site. The new clinical services building aligns with the masterplan framework and will concentrate the greatest site density centrally located on the campus. The existing medium height and low height buildings to the north will aid in stepping down the built form scale across the site. A landscaped edge is proposed for the eastern and southern boundaries of the site.

The built form for the new clinical services building is thirteen-storey in height with two additonal two levels of roof plant and helipad within this envelope. The tower split enables the necessary clinical separation of public (adult & paediatric), mental health and staff cohorts in the one building. The new building is linked to the existing hospital through a new hospital spine running north south along the centre of the site.

The built form can be distilled down into the following three design elements:

Plinth (Podium)

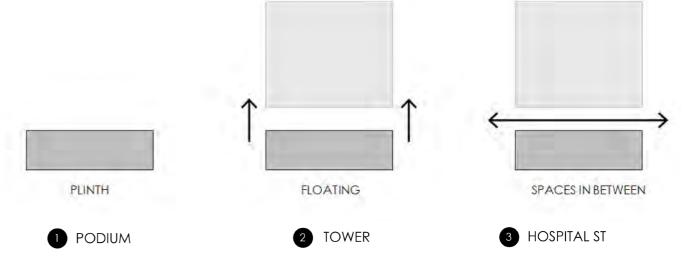
The lower levels of the redevelopment include the construction of a plinth for the proposed new clinical services building that maintain existing connecting elements across the site. These elements define the site location and structure of the new development and will result in the establishment of a continuous horizontal site datum across the entire site. The plinth acts as an anchoring point aiding the new clinical services building to comfortably sit in and amongst the landscape and seamlessly tie into the existing facades on the site. Deep reveals and punched openings into the plinth will indicate main entries and access points into the building.

Floating (Tower)

Floating above this plinth area are 'finger' towers centrally linked at each level. From a distance these 'light' fingers will appear to be floating above the plinth/podium.

Spaces in Between (Hospital Street/Open Spaces)

The main public pedestrian spine 'Hospital Spine' will act as the primary public space connector and pedestrian circulation network. It will connect the proposed development into all the existing buildings on site with pockets of green spaces, courtyards and terraces spilling off to its sides. These in between spaces are vital to the project and will act as the bonding agent which links the new with the old. These spaces will have an abundance of activity and natural vibrancy within them. The material elements associated with the space are likely to reflect this action and make playful references to subtle colours and textures that can be found in the natural environment.



Concept Diagram: 3 Key Ideas

3.0

Architectural Design

3.4 Site Access

Vehicular access will be provided/maintained via the existing roadway network that circumnavigates the hospital site. Main access will continue via use of Central Road which links south to Therry Road. An access point connects the site to Appin Road to the far north east of the site. This intersection is restricted to left in and left out access. It is envisaged that this intersection be decommissioned on completion of an alternative access located further south

The existing access road to the current public entry will be modified to provide public access to the new Emergency Department.

Ambulance Access

Ambulance access will utilise the existing and proposed internal roadway system. The new ambulance bay area will have a dedicated access road connection back to Central Road.

Vehicular Access

Most vehicular access points to existing car parking areas will be maintained with the new development. A new multi-deck car park is being delivered separately to this SSD.

Patient Transport

Patient transport services will be located in Building D. The existing drop-off and pick up area located to the north/east side of this building will be utilised for this service.

Loading Dock

The current loading dock is located directly east of Building B with an undercover connection back to the hospital at Level 1. The current facility will be maintained in this location for the foreseeable future. Delivery access will be maintained using the current, albeit partially reconfigured internal road network.

Helipad

The helipad facility is currently located in the south/western quadrant and will be decommissioned on completion of the stage 2 redevelopment project. The new helipad will be located on the roof of the proposed clinical services building. The facility will have direct connection to the theatre and emergency department floors located below.

24 Hour Access

24 Hour access will be maintained on site and the emergency department will be accessed separately to the main hospital entry though its own dedicated public drop off zone and public entry. The remainder of the hospital can be accessed via the Southern main entry though a dedicated 24 hour access zone, the main security department will also be located within this zone.

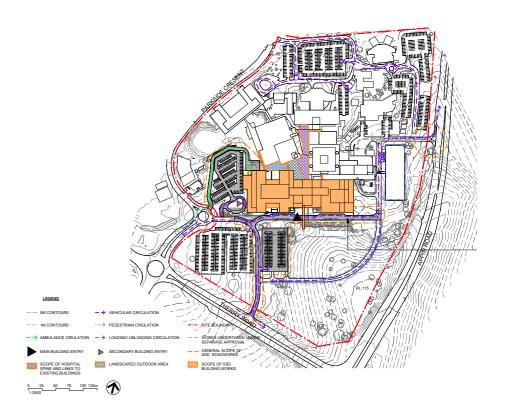
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3.5 Building Access

The proposed Stage 2 redevelopment will incorporate a new main public entry to be located toward the south of the site and will have direct on-grade access to a new vehicular drop off, including bus stop. The entry will be situated at the current Level 1 and will connect directly to a 'Hospital Spine'.

A new Emergency Department (ED) will be located at the lower level of the proposed CSB. This facility will be situated adjacent to the existing imaging department. ED public access will be situated on the western side of the new CSB podium block. Ambulance access will be situated adjacent toward the south/western corner and will form part of the 24 hour zone.

The existing goods and services loading dock, located toward the eastern side of the site, will be maintained, including access and circulation path connections back to Building B.





3.6 Building Fabric

The form hierarchy builds on the inherent site characteristics. The site's horizontal datums allow for the overall form to be broken down into three distinct striations- the podium, an intermediary zone and the towers. The ordering device of a street, allows for movement through the site and to connect across differing datums. The spaces between buildings, 'the negative spaces,' are conceived as green spaces of respite. These green spaces occur across various datums and up through the towers to allow for access to green throughout.

Materiality

The three distinct striations of the overall form have differing material treatments:

The Podium (The Plinth)

Levels 1 and below forms part of the 'podium'. This is conceived as a 'solid element' that carves, folds and merges with its surrounding landscape.

To create this sense of solidity the material palette may incorporate precast concrete elements or prefinished compressed fibre cement sheeting fixed to a sub framing system.

Openings within the facade are conceived as an abstracted pattern of punched rear glazed units. Canopies would be folded, angular elements of the same material.

The Podium: Intermediary Zone

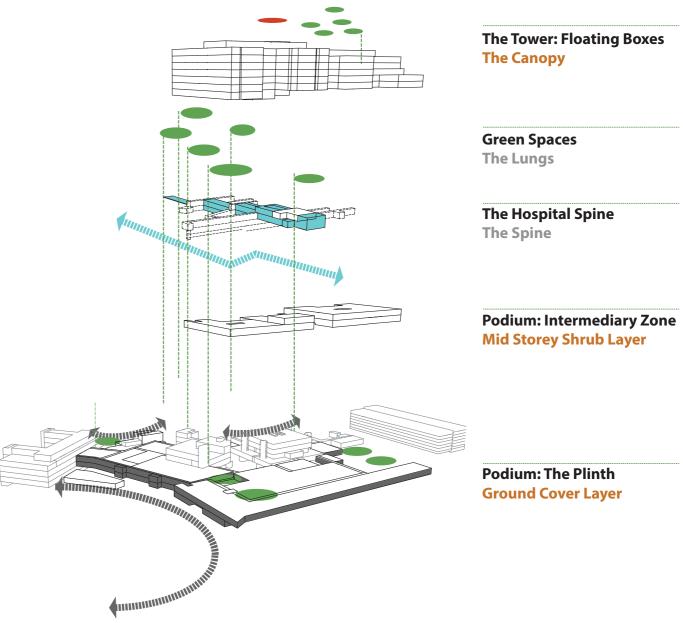
The 'Intermediary zone' Levels 2 and 3 forms parts of the podium but is setback in parts. This zone articulates a separation of the 'solid' podium levels and the lighter 'floating' glass boxes above.

A shop front system is proposed, with a combination of glazed and aluminium, banded horizontal louvred elements (to plant areas). This would be designed to differ (eg in colour, frit, proportion) and be recessive to the tower element. The colour palette would be darker in contrast to the lighter floating towers and the hospital street.

The Hospital Spine

The Spine (which partially forms part of this SSD) weaves itself across several levels and varies in height along its length. This space is predominantly defined by the buildings that feed in and off it.

Two key elements will be used to define this space, expressed structural columns and the roof/ceiling. The walls are envisaged to be secondary, simple glazing elements, that maximise light and connection to the adjacent green spaces. These elements will extend as an external canopy to the north.



Heirachy of Forms



The Tower (Floating Boxes)

Levels 4 and above form the 'Tower', envisaged as a series of articulated linear fingers. These 'floating boxes' hover above the podium and merge with the sky.

The vertical and horizontal breakdown of the facades have been designed to cater for varied internal functional possibilities.

The facades have been manipulated to create distinct, varied and dynamic expressions within simple rectilinear forms.

The Tower Form

The treatments of the overall tower form includes:

Expressed Fingers

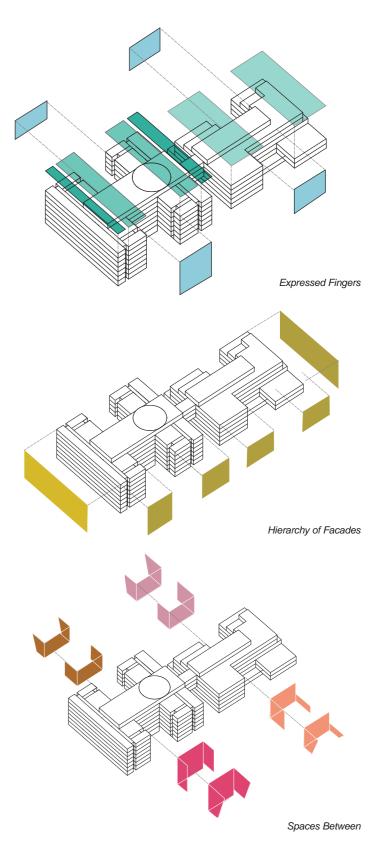
The Tower is broken down into simple rectilinear fingers, running south west. The differing orientations, aspect and functional requirements allow the scale of these fingers to be further broken down, as the planning develops.

Hierarchy of Facades

Differing orientations, aspect and address allow for the creation of a hierarchy of facade treatments. For instance, the key facades are treated differently are, those that are south facing and form the main public address; the south western finger and facades which are the main visible faces on approach to the hospital.

Spaces Between

The spaces between the fingers are treated differently, with varying coloured patterning in contrast to a simpler external shell. This aids in articulating the forms, wayfinding and speak to the green spaces that they bound. It also allows occupants with these aspects, to have outlook onto more expressive facades.





The Tower Colour and Texture

The use of colour has been explored employing a palette based on dye sampling of native tree barks and leaves not to dissimilar in species found in the remnant local Cumberland Plains Woodlands. It is envisaged that a local plant species colour palette be developed further along the design process. For instance, each 'finger' could have its own subtle variant colour palette to create its own identity and to enhance wayfinding.

As part of the facade treatment it is intended that the colour is applied in the spandrel zones. The intent is that the vision panels with the coloured spandrels would form a uniformed, continuous facade appearance as opposed to punched openings in a facade.

Also building on the idea of 'flights of colour', that occurs in a bushland setting by the sudden and fleeting burst of native flora and fauna, it is intended that this is translated within incidental and unexpected spaces (eg soffits, spaces between buildings) to engage the senses as one moves through the built forms.

The use of textural patterning and materials have been employed to all the play of light across the facade.

The use of patterning deriving from the cross sectional studies of local tree species adding a finer grained textural element. This will be applied as frit to glass, to the facades that have the most predominant vantage. The development of a hospital specific 'patterning' will also be employed throughout the hospital as one of several wayfinding elements.

Solid sections of facades will employ profiled ceramic tiles. The profiling aims to allow the play of light along the facades surfaces (particularly south orientated facades). A warm colour palette of varying textures and gloss levels will accentuate this play.

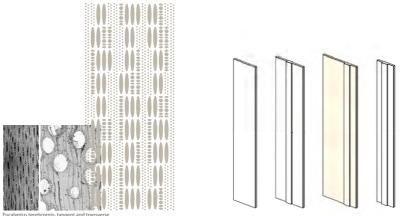
Eucalyptus dye database

Artist Sally Blake's work in conjunction with the Australian National Botanical Garden



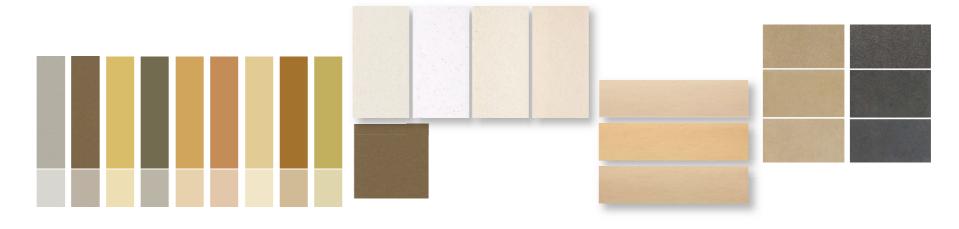


Floating Boxes The Canopy I Cumberland Plains Woodlands Tree Canopy



Floating Boxes The Canopy I Cumberland Plains Woodlands Tree Canopy Cross Sections

Floating Boxes The Canopy I Verticality (tree trunks) and the Play of Light (the bark)





3.7 Rooftop Design and Services Strategy

Rooftop Design

The upper most roofs will be flat slabs with ballast. These roof levels will partially accommodate plant and an upper helipad level (on the western tower building) with direct trauma lift access to the ED. Scattered throughout the lower levels are a series of rooftop terraces, that serve as outdoor active and respite areas to clinical spaces as required. Planting to these terraces will be contained and occur above slab level.

Plant Strategy

The main central plant is located on level 3 (including mechanical, electrical, hydraulic, fire and the main electrical generator). Additionally, spaces to accommodate air handling units are distributed across floors moving up the building to reduce runs and increase efficiencies. These are generally located along the building perimeters (to allow air intake and exhaust) and will form part of the façade expression.

Plant located on the roof includes the remainder of the chillers, storage tanks and additional air handling units. These will be enclosed by a unified louvred screen.



3.8 CPTED

The safety and security of staff, patients and visitors is of the highest priority in a hospital setting. Effective planning and design is required to minimise and, where possible, eliminate foreseeable risks associated with the facility design to staff and others.

A fundamental strategy in the planning and design of safe and secure environments is the adoption of CPTED principles (Crime Prevention Through Environmental Design). The public, 24/7, nature of hospitals allows for natural passive surveillance of spaces, as well as, secure spaces due to the nature of access control and separation of flows (staff, patient, visitors).

The design addresses the four CPTED Principles as follows:

Guidlines	Design Solutions
Natural Surveillance	Facilitate observation of as many spaces as possible
Facilitate natural surveillance, line of site, open spaces overseeing by staff going about their normal business. Pathways, car parks in full view of staff, passers by, wards, offices etc	Provide line of sight wherever possible
	Avoid alcoves and recesses in building façade that could facilitate concealment
	Focuses on the placement of physical features, activities, and people to maximize visibility. This includes the lighting of public spaces and walkways at night.
Access Control	Segregation of public and clinical circulation
Approach to site – Vehicle,	At-grade entries provided
Pedestrian, Public transportSite circulation	Well defined circulation paths both internally and externally, that are open and well lit.
Access to building	No through access of Paediatrics ward
Signposting	Secure separated access and entry points (eg Mental Health)
Physical and symbolic barriers for movement control of pedestrian and vehicle	Clear well defined entries to site and to buildings. Minimising the number of entry points
	Signposting used to define staff only areas.
	Provide barriers either physical or symbolic.
 Territorial Reinforcement Site delineation and access locations Functional/transitional spaces, separation of functions 	Clear delineation between Hospital Campus and boundary and surrounding area/suburb.
	All entry areas are situated in locations that have maximum observation.
Space definitions/borders, ownership	Security area located within close proximity of the ED public waiting area
	Clear delineation of internal and external spaces, including usage separation of functions and transitional spaces for moving from public to semi-public/private to private.
	Use of physical attributes that express ownership, such as fences, pavement treatment, art, signage, and landscaping.
Space Management	Maintain spaces
Well cared for spaces and buildings - maintenance	Maintain the landscape and outdoor spaces to prevent any reduction of visibility from landscape overgrowth
	Maintain landscape to reduce obstruction of lighting
	Maintaining external lighting to ensure that all times it is operative.



3.9 Landscape and Open Space Design

Master Plan

The landscape proposition for the Campbelltown Hospital Master Plan, seeks to unify the site and compliment the structure of the architectural approach to achieve a legible, comfortable and accessible place for patients, visitors, staff and the community. The landscape will also tie into the existing connection between Marsden Park to the North-Western corner of the site.

Core to the organisation of the master plan is the establishment of the Hospital Spine running north south through the precinct. The street is both an indoor and outdoor space and blurs the line between landscape and architecture. It connects a number of larger landscape spaces and buildings allowing people to experience different areas with each visit.

The landscape approach considers the site at a macro level, from the functional requirements of a health based campus and the user experience of individual landscape spaces. Each layer and consideration will be interrelated and principles addressed at all scales.

Scope of Works SSD

The landscape approach considers the built form at a macro and micro level, from the functional requirements of a health based campus and the user experience of individual landscape spaces. Each layer and consideration will be interrelated and principles addressed at all scales.

These broad level considerations relate to movement, water, vegetation and land form. Holistically they will form the landscape system of the new building and wider hospital campus.

As a key driver for the project, the landscape draws heavily on principles of restoration and environment - in relation to its potential for providing respite and healing for the users of the site and also the remediation of the hospital land itself.

To reinforce the restorative approach the following principles have been identified:

- Promote Healing and Restoration through biophilic design
- Provide a varied landscape experience from all areas of the hospital
- Use natural materials sandstone, rusted steel, gravels etc. to reinforce the landscape narrative
- · Create an address that is identifiable
- Treat storm water
- Promote healthy living and a healthy campus
- · Encourage comfort and social cohesion
- · Improve and enhance the existing ecological quality of the site

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The user experience is fundamental to the design of the landscape. The experience has been considered as a person moving through the space as well as spaces viewed upon from surrounding hospital rooms. Where possible, views lines are terminated by landscape elements. Landscape features (paving, planting) are continued into internal spaces and internal spaces push into landscape to blur the line between built and natural.

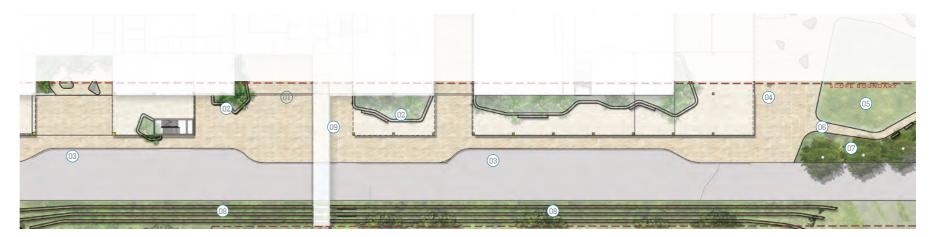
It is envisaged that landscape will be visible from all locations on the site and that the user should feel close to nature.







Landscape Section - Main Entry



SSD Scope of Works