

# **ACKNOWLEDGEMENT OF COUNTRY** This document acknowledges that within the Cessnock City Council LGA boundaries are the Traditional Lands of the Wonnarua people. Australia is home to over 250 unique and culturally diverse Aboriginal and Torres Strait Islander language groups, defining Country. We recognise these as the oldest continuing cultures in the world and we pay our respects to elders past, present and emerging of the Wonnarua People. As an architecture studio practicing today in Australia, Fitzpatrick +Partners acknowledge that we are working on land that was not ceded and which always was and always will be, Aboriginal Land. At F+P we have always sought to place our work in its context and are continuing to evolve this strategy to a more holistic understanding of Place and Country. One that recognises the original custodians of the land and their place in this process. Image credit: Photo of Biame Cave taken during Walk on Country with permissions of Wonnarua Elders



## **DOCUMENT HISTORY & STATUS**

Version

Issue Date 20 NOVEMBER 2024

Reviewed by Myrto Kyardi

Approved by Rod Pindar

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# REPORT INFORMATION

## Architectural Design Report

Project Number 22212

Document Number CHR Architectural Design Report

Document Title Architectural Design Report

Client NSW Health Infrastructure

## **Author Details**

Organisation Name Fitzpatrick+Partners Pty Ltd

ABN 19 081 636 900

Address Level 6, 9 Castlereagh Street

Sydney NSW 2000

Contact Rod Pindar

+61 2 8274 8200

rodp@fitzpatrickpartners.com

Nominated Architects James Fitzpatrick 9303

Paul Reidy 11839

Rod Pindar 9019

## **PROJECT OVERVIEW**

Cessnock Hospital is a district level hospital within the Hunter New England Local Health District (HNELHD). It provides low acuity medical and sub-acute services to the local community and is networked with Maitland Hospital for higher acuity services, and John Hunter Hospital for Tertiarylevel services.

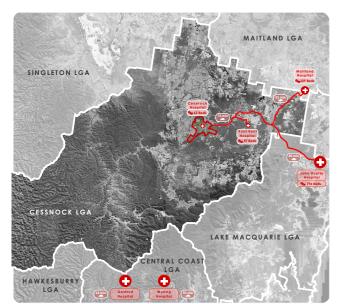
The clinical services provided by the project will be generally consistent with what is currently being provided at the Hospital, except changes in services where network efficiencies are identified.

The project scope includes the following clinical services:

- + Emergency Department (ED)
- Medical Imaging
- + Perioperative Suite
- + Sterilizing Services Unit (SSU)
- + 2 x 28 Bed Inpatient Units (IPUs)
- + Pharmacy
- + Mortuary
- + Front of House (FOH) services

The overall project scope also includes the following:

- + Demolition of select existing structures
- In-ground infrastructure and enabling works
- + A new acute services building containing the above clinical services
- A new primary vehicular and pedestrian entrance to the hospital campus from Jurd Street
- New vehicular drop-off
- + Refurbishment of the existing on-grade car park
- + A new connection between the new hospital building and the existing hospital buildings
- + Landscaping



Lower Hunter Sector within HNELHD

## **CESSNOCK REGION**

Cessnock is located approximately 2 hours north of Sydney and 50 minutes west of Newcastle and is the gateway town to tourism area of the Hunter Valley, NSW's largest and oldest wine region.

It is surrounded by the natural landscape of Mount View and Werakata National Park and enjoys two distinctive local characters; one that is influenced by the surrounding country and wine region and one that is the historic town centre with significant colonial history and heritage.

Cessnock Hospital provides services to Cessnock Local Government Area (LGA) a 2,000 square kilometre catchment, with a population of 61,256 (as of June 2020).

The region has a significant and growing indigenous population of 9%, higher than the state's average of 3.5%.

## **EXISTING CESSNOCK HOSPITAL**

Cessnock Hospital is a low acuity, Level 3 District Hospital containing 63 beds and providing services that include acute, subacute, emergency, ambulatory care and oral health.

The hospital is complemented by services provided at Kurri Kurri and Maitland Hospital, with higher acuity patients presenting at Maitland and John Hunter Hospitals.

The existing hospital site is approximately 41,000 square meters situated in a largely residential area, within 1.5km of the town centre and is bordered by a NSW Ambulance building and aged care home located to the north and positioned on top of a hill with views to Mount View.

The main hospital was built in 1914 with the majority of the buildings on site constructed by the 1960's. A Heritage Assessment undertaken by Umwelt identifies that due to significant renovations and extensions over time, many of the buildings built before the 1950's have a low-to-moderate level of significance.

The aging infrastructure has seen quotes of up to a million dollars in 2021 for ongoing maintenance. The decommissioned Drinkwater Building is at the end of its life and has been left abandoned and in disrepute.

The current infrastructure is not conducive to modern models of care with disconnected clinical functions, poorly accessible buildings and unclear wayfinding. As a result, staff safety, service and efficiency has been impacted and subsequently created issues with recruitment.



Cessnock TownCentre



 ${\it Archival photo of the original Cess nock Hospital}$ 

# **PROJECT DESCRIPTION**

Cessnock Hospital Redevelopment is an asset replacement project that will provide contemporary facilities and models of care in a safe and secure environment for the ongoing delivery of health care services on the Cessnock Hospital campus.



## **SERVICE STATEMENT**

Cessnock Hospital is a Level 3 District Hospital and forms part of the Hunter New England Local Health District (HNELHD).

It provides low acuity medical and sub-acute services primarily to the population residing in the Cessnock Local Government Area (LGA) and is networked with Maitland Hospital for higher acuity services, and John Hunter Hospital for tertiary level services.

Between 2021 and 2036, the LGA population is expected to increase by 20,000 people, reaching 82,800 people in 2036. This growth is forecast for all age groups, with the most significant growth forecast for the 70 years and over age group.

Compared to NSW, the LGA has a higher proportion of people aged 14 years and under and has a higher proportion of Aboriginal and/or TorresStrait Islander people.

In terms of socioeconomic status, the LGA is significantly more disadvantaged than the State, ranked within the bottom 10% of regions on the Index of Relative Socioeconomic Advantage and Disadvantage.

The Cessnock Hospital consists of multiple buildings that are poorly connected and not conducive to providing patient centred, integrated, contemporary models of care.

Buildings on the site are isolated, with very little wayfinding and no clear circulation through the campus and the functional relationships between key clinical services are not compatible with contemporary models of care and are less than optimal from a security, staffing and patient safety perspective.

## **DESCRIPTION OF SERVICE & SCOPE**

The redevelopment will address the capacity and functional deficiencies by providing contemporary inpatient units, emergency department and associated clinical and non-clinical support services in a secure and safe environment for both patients and staff

The design will be flexible to ensure that clinical spaces can be multipurpose where possible and remain future focused.

The CSP details Cessnock Hospital continuing as a Level 3 District Hospital providing low acuity medical and subacute services to the primary catchment of the population residing in the Cessnock LGA.

Cessnock LGA residents will continue to access higher acuity services within a network of hospitals at Maitland Hospital and John Hunter Hospital.

In addition, Cessnock Hospital will increasingly provide for the flow reversal of low acuity, high volume short stay adult surgical patients from Greater Newcastle and continue to support long-stay patients from Maitland Hospital and John Hunter Hospital.

In response to the CSP, the Project proposes a new build on the current Cessnock Hospital site.

# **PROJECT NEED**

Between 2021 and 2036, the LGA population is expected to increase by 20,000 people, reaching 82,800 people in 2036. This growth is forecast for all age groups, with the most significant growth forecast for the 70 years and over age group.



# **DESIGN PRINCIPLES**

The Project Teamin conjunction with HNELHD representatives have identified a series of Design Principles to guide the progression of the design in alignment with stakeholder aspirations and expectations.

These principles span six key catagories and have informed decison-making throughout the planning and design development phases of the project.

Other key project considerations in addition to these Design Principles, include:

- + Ensuring affordability and value
- + Consideration of the extent of new build versus refurbishment
- + Delivering the required scope and clinical services
- + Improving clarity of campus circulation, way-finding and entry points for patrons
- + Establishing campus zoning, future expansion opportunities and a cohesive overall layout for the site
- + Improving clinical relationships, efficiency and connectivity

The framework, outlined adjacent summarises the Project Vision and key Design Principles.

# **ESD FRAMEWORK**

This framework sets out the project teams initial thinking on approach to ESD.

This will need to be tested with HNELHD and the cost manager to set the priorities according with operational and budget requirements

# **SUSTAINABLE HEALTHCARE:** TOGETHER TOWARDS NET ZERO

## THE CARBON FOOTPRINT OF HEALTH

IT IS ESTIMATED AUSTRALIA'S HEALTH SYSTEM CONTRIBUTES 7% OF AUSTRALIA'S TOTAL CARBON FOOTPRINT.



HNELHD ARE TARGETING TO BE CARBON & WASTE NEUTRAL BY 2030. WE ARE SETTING OUR SIGHTS ON AN ENVIRONMENTALLY SUSTAINABLE FUTURE.

https://www.hnehealth.nsw.gov.au/ about-us/sustainable\_healthcare

# **ENVIRONMENTAL**

## **PERFORMANCE**

CURRENT NCC BUILDING CODES HI DESIGN GUIDANCE NOTE 058 HNELHD CARBON & WASTE NEUTRAL BY 2030

## ALL ELECTRIC

ZERO FOSSIL FUELS MAXIMISE SOLAR PV INCREASED EV CHARGING PROVISIONS

## LOW-EMBODIED CARBON

MINIMISE HIGH-EMBODIED CARBON MATERIALS RE-USE & RECYCLE MATERIALS WHERE POSSIBLE ADOPT LOCAL WORKFORCE, MATERIALS AND EXPERTISE

## INTEGRATED LANDSCAPING

HIGH QUALITY OUTDOOR LANDSCAPED AREAS NET POSITIVE IMPACT ON BIODIVERSITY MAXIMISE GREEN ROOF OPPORTUNITIES

## **RAIN WATER RE-USE**

ADOPT RAINWATER CAPTURE & REUSE INITIATIVES ADOPT PASSIVE IRRIGATION OF LANDSCAPED AREAS MINIMISE STORMWATER RUNOFF

## **SOCIAL**

## **DESIGNING WITH COUNTRY**

REGULAR CONSULTATION & ENGAGEMENT INTEGRATION OF CULTURALLY SENSITIVE DESIGN PROMOTE LOCAL HERITAGE & HISTORY

## NATURAL VENTILATION

ADOPT NATURAL VENTILATION WHERE POSSIBLE ALLOW USER / NURSE / ASSISTED CONTROL **ENHANCED OUTSIDE AIR RATES** 

## INNOVATION

INNOVATIVE MATERIALS TO BE CONSIDERED **ENCOURAGE EFFICIENCY THROUGH INNOVATION** ADOPT NATURAL VENTILATION WHERE POSSIBLE

## **ACCESS TO DAYLIGHT & VIEWS**

MAXIMISE DAYLIGHT COVERAGE MAXIMISE VIEWS (LOCAL & DISTANT) OPTIMISE SHADING AND SOLAR CONTROL

## MITIGATE URBAN HEAT ISLAND

MAXIMISE TREE CANOPY COVERAGE MINIMISE HARD, DARK, HEAT ABSORBING SURFACES MAXIMISE GREEN ROOF OPPORTUNITIES

# **ECONOMIC**

## REDUCE OPERATIONAL ENERGY

REDUCE OVERALL ENERGY CONSUMPTION REDUCE WASTE & CONSUMABLE CONSUMPTION IMPROVED RECYCLING & SORTING PROVISIONS

## **ADVOCACY**

PROMOTE A SUSTAINABLE AGENDA ENSURE ESD INITIATIVES ARE VISIBLE MONITOR ONGOING BUILDING PERFORMANCE

## STAFF ATTRACTION & RETENTION

**ACTIVE PROMOTION OF STAFF WELLNESS** IMPROVED STAFF AMENITY SUCH AS END-OF-TRIP QUALITY INTERNAL ENVIRONMENTS & LANDSCAPE

## SUSTAINABLE TRANSPORT

PROMOTE AN ACTIVE/GREEN TRAVEL PLAN INCLUDE PUBLIC AND STAFF BICYCLE PARKING PROVIDE END-OF-TRIP PROVISIONS FOR STAFF USE

## **RESILIENT TO CLIMATE CHANGE**

HEAT-SENSITIVE CARPARK DESIGN CLIMATE ALLOWANCES IN SERVICES DESIGN & SIZING PROVISION OF SPACES FOR NATURAL DISASTER RESPONSE

# **ESD FRAMEWORK**

The project is focused on achieving industry-leading sustainable design outcomes in accordance with HNELHD targets to be carbon and waste neutral by 2030.

As the project develops, particular consideration will be given to embodied carbon, ongoing operational energy and operational carbon of the redevelopment.

Mutually reinforced sustainability between Environmental, Social, and Economic aspects will allow the project to achieve its sustainability vision.

The primary performance targets for the project include:

- + Compliance with HI DGN 058
- + Compliance with HNELHD Carbon & Waste 2030 Strategy
- + Compliance with current NCC Building Codes

The framework, outlined adjacent summarises the key ESD strategies being adopted by the project.



# **SITE ANALYSIS**

## Overview

The existing hospital site is approximately 41,000 square meters situated in a largely residential area, within 2km of the town centre. It is bordered by a recently built NSW Ambulance building and aged care home located to the north. It is positioned on top of a hill with views to Mount View.

The infrastructure of the hospital consists of a series of buildings largely positioned on the southern portion of the site ranging in age up to a hundred years old. The main hospital was built in 1914 but due to significant renovations and extensions over time, little heritage significance remains.

The majority of services are 40 years old and in frequently poor condition. Upgrading the existing buildings to address maintenance issues and meet current standards is considered to be cost-prohibitive.

## Context

Analysis of the local context identifies Cessnock as the gateway town to the Hunter Valley region with a character largely defined by its colonial history. There is significant opportunity for a more meaningful connection to Country and appreciation of the Wonnarua people, the traditional owners of the land.

## Existing Site

The existing hospital campus comprises a series of disconnected buildings that lack clear circulation and functional adjacencies. There is a large portion of open space which is largely lifeless and of little value to staff or patrons. At its steepest point the site has a 4m rise from Jurd Street to the centre of the site which affords the hospital a level of prominance over the residential surroundings.

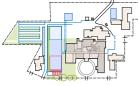
Refer to Appendix A of this report for detailed contextual and site analysis.

## LEGEND

--- Site boundary















## **ZONE 1**

## DRINKWATER

- IPU's stacked
- View St entry & access
- Retain on-grade CP
- BOH from Foster & Jurd

## PRO's

0

0

Connectivity Short term staging

BOH disruption

Services disruption

Retain Mortuary

CON's

Decant Demolition

Long term MP OT and CSSD

Bulk and scale Building levels

Access & drop-off

IPU outlook CwC opportunity

# **ZONE 2**

## **WEST END**

- + 2-storey build
- + IPU's co-located
- + View St entry & access
- + Retain on-grade CP
- + BOH from Foster & Jurd

# JURD

+ 2-storey build

**ZONE 3** 

- IPU's co-located
- Jurd St entry & access
- + Retain on-grade CP
- BOH from Foster

## **ZONE 4A**

## **GO WEST**

PRO's

- + 2-storey build
- IPU's co-located
- Jurd St entry & access

Connectivity

Demolition

OT & CSSD

Services disruption

- + New on-grade CP
- + BOH from Foster

# **ZONE 4B**

## WRAP

PRO's

0

0

- + 2-storey build
- + IPU's co-located
- + Jurd St entry & access
- + Retain on-grade CP
- + BOH from Foster & Jurd

Connectivity

OT & CSSD

Services disruption

CwC opportunity

# **ZONE 4C**

## **GO NORTH**

PRO's

- + 2-storey build
- + IPU's co-located
- + Jurd St entry & access
- + Retain on-grade CP
- + BOH from Foster

Connectivity

OT & CSSD

Demolition

Services disruption

ED Connectivity

CwC opportunity

# **ZONE 4D**

## COMPACT

- + 3-storey build
- + IPU's stacked
- + Jurd St entry & access
- + Retain on-grade CP
- + BOH from Foster & Jurd

## PRO's

Connectivity

CwC opportunity

OT & CSSD 0

Services disruption







Short term staging

# Long term MP Building levels

- + 3-storey build

# PRO's

Short term staging BOH disruption

0 Services disruption 0

Connectivity

Retain Mortuary CwC opportunity

# CON's

Decant

Demolition Long term MP

OT and CSSD Building levels

IPU outlook

PRO's

Decant Demolition Short term staging

Long term MP Access & drop-off

BOH disruption Services disruption

# CON's

0

•

OT and CSSD Jurd St upgrades

**ENDORSED OPTION** 

CwC opportunity

Legacy buildings

CON's

Decant

Short term staging Long term MP Ambulance flows Building levels

ED connectivity

CwC opportunity

# CON's

Long term MP Building levels

# CON's

Decant Demolition Short term staging

Short term staging Access & drop-off Building levels

# CON's



# **OPTIONS EXPLORED**

An extensive process of optioneering and analysis was undertaken during the initial planning phases to determine the optimal location and configuration for the new hospital building.

The primary consideration for the project in assessing each option was ensuring value for investment and realising the maximum clinical scope to ensure the project would adequately address the service needs outlined in the CSP.

Key to this was minimising expensive construction works and methodologies that contributed little to no benefit to the final outcome including:

- Demolition works
- Temporary staging or decanting works
- Refurbishment works to existing building stock
- Earth moving works

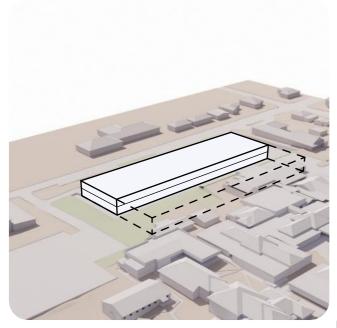
Following extensive review and consultation between the project team and HNELHD executives, Zone 3 was endorsed as the preferred Master Plan option and building location.



# **DESIGN OVERVIEW**

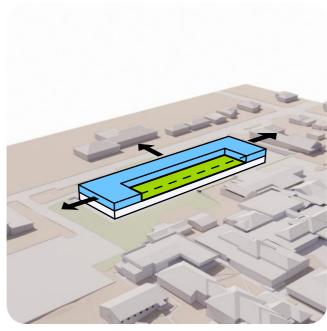
Key elements of the project include:
1 New 2-storey build (plus roof plant) in northern portion of the
2 IPU's aligned horizontally on a single level
3 New primary entry from Jurd Street
4 Priority car parking at main entrance
5 New bus stop
6 Vehicular entry / exit
7 On-grade car park to be retained, re-surfaced and improved
8 BOH access from Foster Street
New landscaping throughout

10 Pedestrian connectivity to original hospital buildings



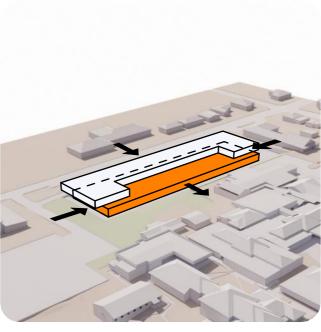
# STEP 1

- + Master Plan massing is the starting point
- Basic two-storey envelope



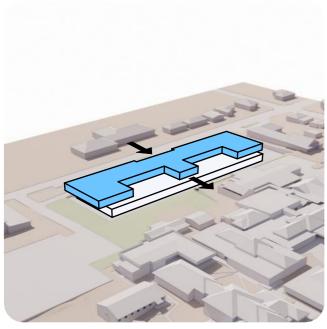
# STEP 2

- + Define In-Patient Unit arrangement on Level 1
- + Maximise views and outlook



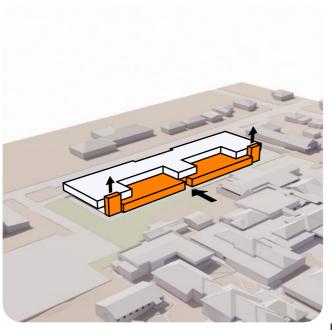
# STEP 3

- Contract Ground Level for overhang and shelter
- Expand Ground Level to the south for functional area



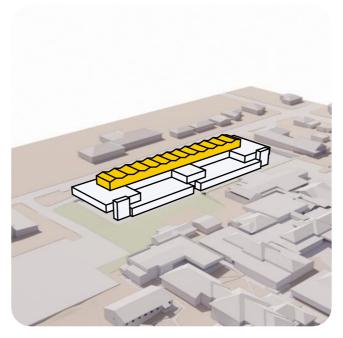
# STEP 4

- + Define Main Entry on north elevation
- + Expand Level 1 at the centre for vertical circulation (lifts)



# STEP 5

- + Define Rear Entry on southern elevation
- + Express vertical circulation (fire stairs)



# STEP 6

- Add building plant to roof
- + Articulate form in accordance with Facade Concept

# **DESIGN MOVES**

The building massing has been developed through a series of design moves to articulate the building function and use.

The diagrams adjacent explain the design rationale and considerations that have informed the final massing and built form.

# **MASSING & BUILTFORM**



View from Jurd Street looking south-west



View from over existing hospital looking north-east



# **FACADE CONCEPT**

"Cessnock is a natural amphitheatre surrounded by Yengo National Park. Embrace the magnificence".

Uncle Arthur - Wonnarua Elder

Cessnock Hospital is located on an elevated position (View Street) within the Cessnock basin, a low-lying plain bordered by Yengo National Park to the south and Barrington Tops National Park to the north.

The surrounding ranges create a natural amphitheatre from within which the hospital commands spectacular views from an elevated position in almost all directions.

The upper level of the new hospital building will sit amongst established native trees bordering the hospital campus, including Turpentine's and Queensland Brush Box's.

The metaphor of the hospital as a 'nest amongst the trees' has been adopted as inspiration for the facade expression.



Cessnock Terrain Map



## **THE TOP**

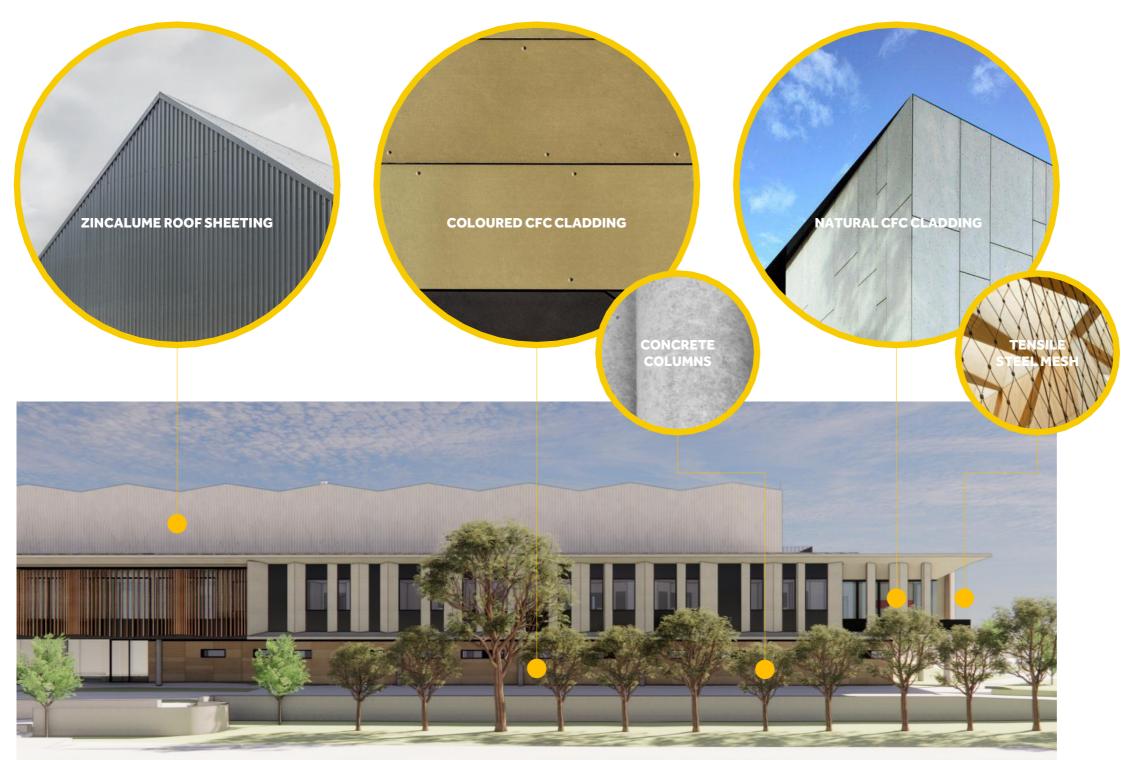
- Utility defined by function
- Form plays on the shapes of the Yengo Park ranges
- Singular monolithic form
- Simple and functional

## **THE BASE**

- Extruded from the earth
- Natural materials
- Durable + lasting
- Colours from nature

# THE LOOKOUT

- A nest among the trees
- Reflects the verticality of the trees
- Interplay of solid and sky
- A sense of movement



The Level 1 facade mimics the verticality and movement of the established trees along Jurd Street

# **MATERIALS & FINISHES**

The building materiality is designed to augment the massing & built form strategy as well as the Facade Concept described within this report.

The **BASE** of the building is typically recessive and sits under the overhang of Level 1 on three sides, surrounded by public domain and circulation paths. The base is clad in sand-stone coloured CFC panels with a natural patina across the surface. This materiality suggests the base of the building has been extruded from the earth, with the use of tactile, natural materials and colours inspired by Country.

The in-patient units are spread across the Level 1 elevation and are referred to as the **LOOKOUT** capturing sunlight, outlook and magnificent views through the trees to the National Parks beyond. Exposed clear-finsihed CFC cladding has been selected for it's natural patina and durability, arranged in a vertical configuration with glazed windows and reflective aluminium cladding between to mirror the surrounding landscape and sky and give a sense of movement and lightness.

The **TOP** of the building consists of roof plant and equipment that is housed in a monolithic enclosure clad in Zincalume roof sheeting. The metallic sheen of this materiality will visually lighten the massing which is arranged in a simple hip-and-valley roof arrangement that mimics the ridge-lines of the surrounding topography.

The composition of Materials and Finishes is appropriate to the local context, inspired by the local natural environment and inclusive of feedback recieved through our indigenous engagement.



Natural earth ochre pigment provided through CwC engagement



## **DIGNITY**

"Dignity is about equity. Health facilities, precincts and places should welcome people of all ages, abilities, backgrounds, cultures and socioeconomic groups".

Key moves in response to designing for dignity include:

- + Built-form, massing and facade expression that responds to the local context and sits comfortably in the streetscape.
- + Clear and intuitive way-finding for both vehicular and pedestrian movements.
- Hultiple building entry points that are prominent, safe and have ease of access.
- Inclusion of places of respite throughout the landscape and public domain as well as internally within the building in public areas.
- + Public spaces have been designed to be culturally sensitive, approachable and welcoming.
- + Inclusion of an outdoor waiting area adjacent to Emergency to better cater to a diversity of users
- + Inclusion of two family rooms on Level 1 with openable doors, balconies and desireable outlook.
- + Separation of staff and public circulation throughout
- Inclusion of a cultural Gathering Space on Level 1 with openable doors, balcony and northern aspect and outlook.

## **WELLBEING**

"Well-designed health facilities and places contribute to the wellbeing of patients, visitors and staff. Connections to the natural environment are particularly important".

Key moves in response to designing for wellbeing include:

- + New soft landscaping surrounding the new hospital building including places for respite, relaxation and exercise.
- + Southern landscaped courtyard is sheltered from public roads ensuring privacy and shelter from acoustic noise.
- + Increase in tree canopy cover providing shade to outdoor areas and a green outlook for hospital patrons and staff.
- Views and outlook have been maximised to all areas of the hospital with floor-to-ceiling glazing to the most public areas including entrances, waiting areas, gathering space, family rooms and meeting rooms.
- Inclusion of balconies to a number of spaces on Level 1 including family rooms, gathering space, meeting rooms and allied health spaces.
- + Inclusion of a generous, public stair connecting Ground and Level 1 encouraging physical movement around the facility and between floors.
- + Generous waiting areas with quality custom joinery and finishes.
- Consideration of the patient experience with facade articulation designed around maximising patient views and outlook.
- + Appropriate shading and glare protection to windows.

## **EFFICIENT & FLEXIBLE DELIVERY OF CARE**

"Efficient planning of spaces and effective relationships between different areas and functions is fundamental to the delivery of healthcare".

Key moves in response to designing for the efficient and flexible delivery of care include:

- The new hospital design supports the delivery of the Clinical Services Plan with consideration of current Australasian Health Facility Guidelines and emerging models of care.
- The project considers the long term future of the campus with Master Planning for future development, clinical expansion, circulation and access.
- Consolidation of clinical services into a single hospital building with close connectivity between departments to reduce travel distances for staff and patients.
- Clear and intuitive circulation with separation of staff and public travel paths where possible and minimisation of travel distances throughout.
- Multiple building entry points that are prominent, safe and have ease of access.
- + Consideation of BOH and logistics movements across the campus including an enclosed pedestrian walkway connecting the new and old hospital buildings.

# **DESIGN OUTCOMES**

The new hospital design supports the delivery of the Clinical Services Plan with consideration of current Australasian Health Facility Guidelines and emerging models of care.



## **NEIGHBOURHOOD & ENVIRONMENT**

"Well-designed and carefully considered public spaces can strengthen the community and contribute to the quality of the wider built and natural environments".

Key moves in response to designing for the neighbourhood and surrounding environment include:

- + Community consultation undertaken during the planning and design phases included HNELHD and Cessnock Hospital staff, indigenous representatives through our Connecting with Country Working Groups, Consumer Groups, Cessnock City Council and feedback from the general public through information and open days.
- + Design, form and facade expression that is appropriate to the local context, streetscape and the civic role of the hospital as well as being worthy of the project investment.
- Inclusion of a comprehensive landscape design and public domain strategy that presents the facility as a valuable, civic place that is inviting, well-connected and integrated with the surrounding context.
- Consideration of the heritage and history of Cessnock Town
   Centre as well the indigenous history of the Wonnarua people
   in developing the design for the building facade, overall
   expression and interior spaces.
- + Encouragement of pedestrian activity across the campus with new landscaping, accessible pathways, way-finding and connections between buildings.
- + Inclusion of easily accessible bike storage for staff and the general public.
- + Consideration of scale and massing to contribute to the user experience as well as the character of the facility and its relationship to the local context.
- + Consideration of the ground plane including new landscaping and public domain works throughout, shelter along primary vehicular drop-off zones and clear way-finding and accessibility.

## CONNECTION

"Health facilities are important nodes within urban, transport, community and health networks that should enhance connection and catalyse the development of these networks".

Key moves in designing for connection include:

- Understanding of the primary mode of transport in the region (car) and consideration of vehicular circulation, access and infrastructure to support this including refurbishment of the existing on-grade car park.
- Relocation of the public bus route and bus stop to the front of the new hospital building on Jurd Street to allow way-finding and ease of access directly to the new Main Entry and Emergency department.
- + Inclusion of new pedestrian footpath infrastructure along Jurd Street that can be expanded in future by Council to improve pedestrian connectivity and amenity.
- + Inclusion of easily accessible bike storage for staff and the general public to encourage sustainable, healthy and affordable modes of travel.

+ Dedicated staff parking areas with appropriate lighting to

enhance safety at night.

## **SUSTAINABILITY**

"Sustainable design contributes to tackling global climate challenges and supports the health and wellbeing of present and future communities and natural systems, including habitat for biodiversity".

The project is focused on achieving industry-leading sustainable design outcomes in accordance with HNELHD targets to be carbon and waste neutral by 2030.

The primary performance targets for the project include:

- + Compliance with HI DGN 058
- + Compliance with HNELHD Carbon & Waste 2030 Strategy
- + Compliance with current NCC Building Codes

Refer Section 1-05 of this Design Report for futher details of our ESD Framework and initiatives.

# **DESIGN OUTCOMES**

The building design, form and facade expression is appropriate to the local context, streetscape and the civic role of the hospital as well as being worthy of the project investment.



## **DESIGN REVIEW & ASSURANCE**

The project has been reviewed throughout the planning and design phases by the NSW Health Infrastructure (HI) Design Advisors and External Design Experts in accordance with the HI Design Assurance process.

Outcomes and recommendations have been addressed as summarised adjacent.

## HI Design Assurance Group

The following reviews were held with the NSW HI Design Assurance review group as follows:

Master Plan January 2024
Concept Design May 2024
Schematic Design September 2024

## State Design Review Panel (SDRP)

The following reviews were held with the Government Architect's SDRP as follows:

Concept Design (original) June 2023

Master Plan February 2024

## **RECOMMENDATIONS**

## Master Planning

- + Zone 3 is clearly the preferred option.
- + Start site investigations and due diligence early.
- + Consider levels to minimise import or export of cut and fill.
- + Consider a wholistic long term vision.
- Consider services infrastructure and align this to the future.
- + Open space is a high priority for CwC, staff and patrons.
- + Consider elevated (roof garden) areas.
- + ESD Electrification is a high priority to adopt.
- + ESD Maximise roof space for solar PV opportunity.
- + ESD Consider rain harvesting for irrigation and re-use.
- + ESD Consider waste management and sorting.

## Concept Design

- Review build-up of northern facade to ensure functionality.
- + Develop a comprehensive landscape plan.
- + Continue further translation of CwC initiatives.
- + Review future fit-out of undercroft areas.
- + Review circulation and access to secondary entrance.

## Schematic Design

- + Design Assurance Review held September 2024
- + No major issues noted, Schematic Design generally supported
- + Final report and recommendations currently pending

## **OUTCOMES**

## Master Planning

- Zone 3 adopted as preferred Master Plan option.
- → Early investigations undertaken and informed design.
- Building raised to minimise material export.
- → Long term campus Master Plan developed.
- Services infrastructure considers long term Master Plan.
- → Landscape design strategy adopted.
- Considered but excluded due to affordability.
- Adopted (no fossil fuels for day-to-day operation).
- Adopted.
- → Adopted.
- Adopted (work ongoing with HNELHD).

## Concept Design

- Northern facade design developed to ensure performance.
- Landscape design developed and adopted.
- CwC engagement and incorporation of concepts ongoing.
- Additional project funding has eliminated undercroft areas.
- Access and circulation resolved through landscape design.

## Schematic Design

N/A

N/A

N/A

# **DESIGN ASSURANCE**

The project has been reviewed throughout the planning and design phases by the NSW Health Infrastructure (HI) Design Advisors and External Design Experts in accordance with the HI Design Assurance process.





# **VISUAL IMPACT ASSESSMENT**

The majority of the new hospital building sits opposite a vacant reserve and the Mountain View Lodge Hostel (aged care facility). An established line of trees along Jurd Street are to be retained which will visually screen the western portion of the building.

Five single-storey residential dwellings to the eastern end of Jurd Street have south-facing windows from the front of their properties with outlook across to a portion of the existing hospital site. The new hospital building will be visible from these properties as illustrated in the views

The visual impact on these residences will be minimal considering:

- + the majority of the new hospital building is not directly opposite
- + there is considerable new landscaping and public domain improvements proposed
- + the modest building height proposed (two-storey plus roof plant)
- + the poor condition of the existing hospital (ie, the current outlook)

There is no overshadowing impact on neighbouring properties from the proposed new hospital building (refer Shadow Diagrams included in the Architectural drawing package).

There are no valuable or iconic view corridors that exist around the site and hence no obstruction of key views will occur.

With consideration of the points noted above, it is determined that the proposed new hospital building is appropriate to the local context and does not substantially impact the neighbouring residences.

# VIEW 02 - Proposed Jurd Street View looking East



# **VISUAL IMPACT ASSESSMENT**

Refer description in Section 1-16 of this Design Report.



## **NSW GOVERNMENT FRAMEWORK**

The NSW Government Connecting with Country Frameworkis a guide for good practice in developing connections and understanding of Country that can inform the planning, design, and delivery of built environment projects in NSW.

The objective of Connecting with Country (CwC) is that everyone who is involved in delivering government projects will adopt the commitment that;

"All NSW built environment projects will be developed with a Countrycentred approach guided by Aboriginal people, who know that if we care for Country, Country will care for us".

The framework is informed by, and supports, a wider range of policies and objectives as show in the image below taken from the NSW Government Connecting with Country Frameworkguide:

	Sustainable De	velopment Goals ghts of Indigeno	s and Declaration	
lational				
Uluru Statement from the Heart	Closing the		tional Standard of etency for Architects	Native Title Act 1993
tate				
NSW State Design Review Panel	Ochre Plan	EP&A Act	Better Placed	ALR Act

Connecting with Country



Walk on Country - Visit to Baiame Cave with Wonnarua Flders

## **ENGAGEMENT APPROACH**

The project has embraced CwC engagement throughout the planning and design phases to incorporate an understanding of Country into the project. The objectives of our CwC engagement

- + Deliver on our commitment to Connect with Country.
- Engage meaningfully with local elders and Aboriginal representatives and community leaders.
- Gain a deeper understanding of local Wonnarua history, culture, stories and items of significance.
- Develop a Connecting with Country Framework to inform the design and planning of the new hopital building.
- Allow the inclusion of culturally safe and inclusive design features and environments.
- Contribute to the process of healing through a commitment to reconciliation.

Key stakeholders involved in our CwC engagement included:

Uncle Richard Edwards Local Elder Uncle Arthur Fletcher Local Elder Local Elder Aunty Cynthia Morris Aunty Tracey Skene Local Elder Kiray Putjung Aboriginal Corporation Chair Mindaribba LALC CEO Tara Dever Susan Mulyk HNELHD Aboriginal Health Unit Kaiya Mundine HNELHD Aboriginal Health Unit Cherie-Lee Whalen HNELHD Aboriginal Health Unit HNELHD Staff Member, CDH Rebecca Cook HNELHD Staff Member, CDH Teigan Bayrami Lucy Reed HNELHD Aboriginal Health Pract. & Kiray Putjung Aboriginal Corp. Jennifer Whiting HNELHD Site Nurse Manager, CDH Sheryn Barrack HNELHD Aboriginal Engagement, Infrastructure, Planning and

The method of engagement involved:

An **Initial meeting** to facilitate introductions, describe the project and process, agree on the approach to engagement and how future engagement will occur.

Sustainability Manager

- Walk on Country hosted by the Local Elders to allow the Project Teamto gain an understanding of local Wonnarua Country including a visit to Baiame Cave.
- Connecting with Country Working Group Workshops to allow the workshopping of ideas, themes and stories and to facilitate discussion and feedback on the project development. A total of six CwC workshops were held during the planning and design phases of the project.
- Shared development of a Connecting with Country **Framework** to inform the design and planning of the new hopital building.

## **CwC PROJECT FRAMEWORK**

A key outcome from the CwC Working Group engagement has been the establishment of a Connecting with Country Framework that summarises the key feedback, themes and concepts that have been integrated into the planning and design of the new hospital building.

This framework has been developed in collaboration between the Project Teamand the CwC Working Group with shared input and endorsement of outcomes from local Wonnarua representatives.

Outcomes have been arranged into six catagories:

- More smiles
- A place for the local community
- Wonarua culture
- Give back to Mother Earth
- All the little things
- Importance of the journey

These themes have been integrated into the following aspects of the project:

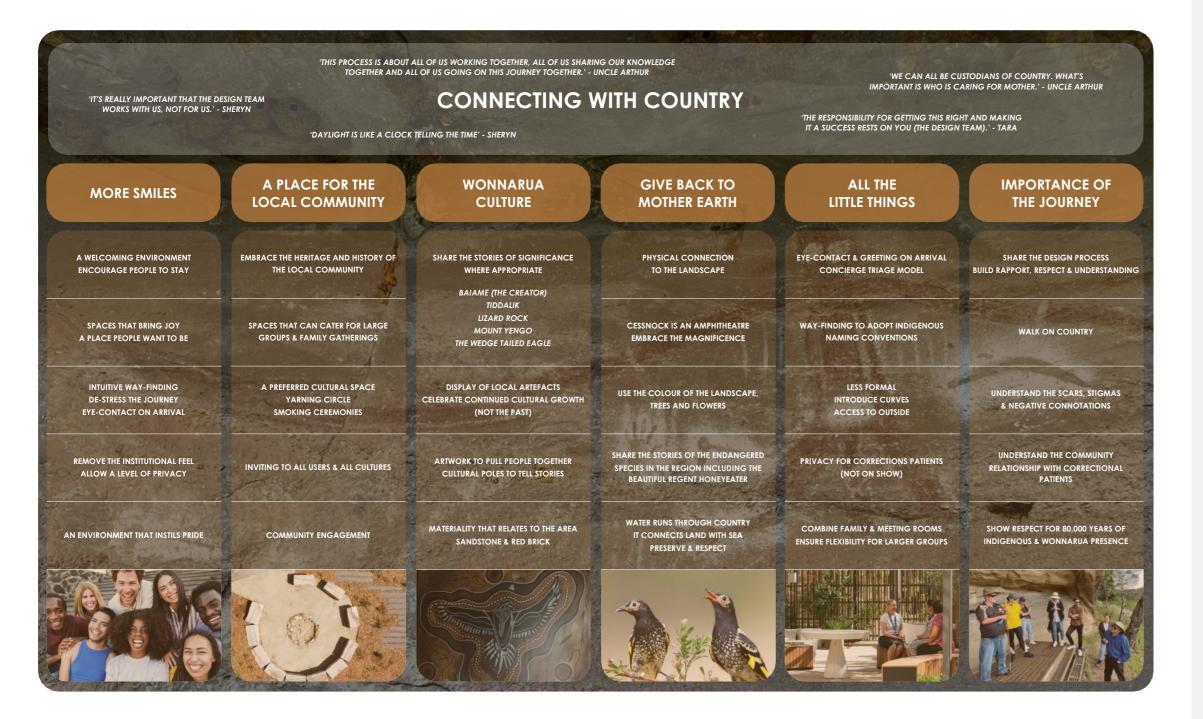
- + Miximising views and outlook to the surrounding landscape and district views including Yengo National Park and Mount View.
- Adopting a motif inspired by the ridge-lines of Yengo National Park throughout all aspects of the design including the landscape and interior design, the facade composition and ioinery design.
- Adopting colours for the interior design and facade that are inspired by the local natural environment and natural earth ochre pigment provided by the CwC Working Group.
- Incorporation of a cultural Gathering Room with balcony and primary northern views out to Yengo National Park.
- Incorporation of gathering spaces within the landscape that allow for large family groups, yarning and smoking ceremonies.
- Display spaces throughout for indigenous artefacts, artwork and storytelling.
- Public spaces and joinery with design elements inspired by nature including organic forms and natural materials.
- Celebration of water harvesting and management throughout the landscape with wicking beds, absorption trenches, passive irrigation and dry river paths.
- Privacy of flows and circulation for corrections patients.
- Story-telling of endangered native species throughout the interior design including the beautiful and rare Regent Honey-
- A high-quality architectural design and health-care facility that will instill pride in the local indigenous community.

The full CwC Framework is included in Section 1-19 of this Design Report.

# **CONNECTING WITH COUNTRY**

Designing with Country includes connecting with the natural environment and considering people, animals, resources and plants equally. This approach aligns with the biophilic design principles that are already a crucial part of the design of health facilities, and with sustainable design practices.

Designing with Country brings these together with Indigenous cultural knowledge of identity and place. This is fundamental to creating places that are culturally safe for Aboriginal people.



# **CwC FRAMEWORK**

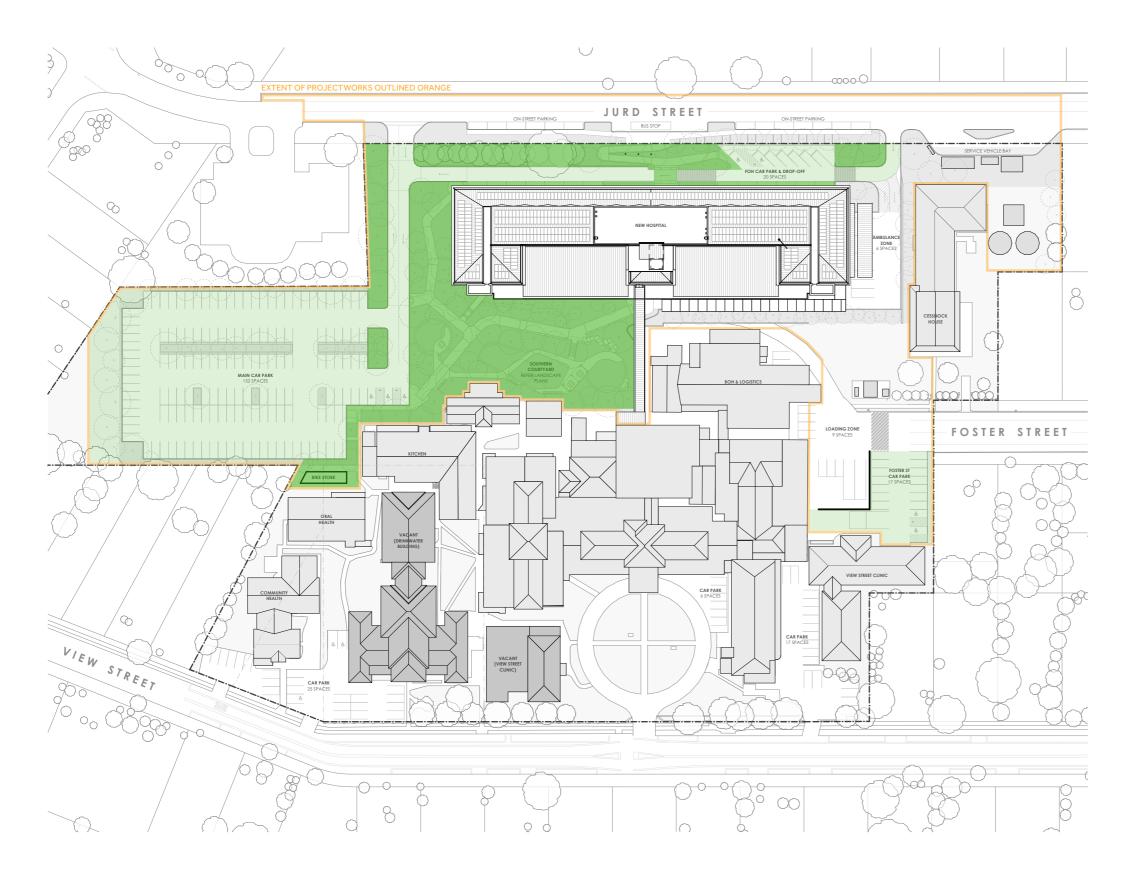
The project team is cognisant of the growing indigenous population in the area and recognise the importance of ensuring authentic indigenous representation in the design process.

A Connecting with Country Working Group has been established with regular consultation workshops being held throughout the planning and design phases of the project.

The CwC Working Group includes local elders, indigenous representatives from HNELHD and members from the Local Aboriginal Land Council.

The framework, outlined adjacent summarises the key themes, ideas and outcomes from the CwC Working Group.





# **PUBLIC SPACES**

The existing site is generally open and allows the public to traverse throughout with minimal security or designation of FOH and BOH spaces.

The new works will significantly improve the designation of public, staff and BOH areas with greater clarity and screening. The quality of landscaped open space will be greatly improved with new public domain along Jurd Street, a significant increase in tree canopy cover and a new landscaped courtyard to the south of the new hospital building.

Public spaces throughout the site are shown on the plan attached:



Public areas - Vehicular access and parking



Public areas - Landscaped open space

## **OVERVIEW**

The Crime Prevention through Environmental Design (CPTED) guidelines under Section 79C of the EP&A Act 1979 are based on key principles for designing buildings and places that are safe, secure and deter criminal behaviour. These key principles include:

- Surveillance
- Access Control
- Territorial Reinforcement
- Place Management & Maintenance
- Vulnerability

The project has adopted the principles of CPTED in developing the design to establish a safe and secure environment for staff, patients, contractors and visitor.

# **SURVEILLANCE**

Passive surveillance has been encouraged through the incorporation of design features that maximise visibility of people using a public space. This includes:

- + Facilitation and promotion of passive surveillance into public spaces from new buildings.
- Providing unrestricted sight lines and avoiding blind spots.
- Providing lighting to ensure safe use and effective surveillance of the space after hours.
- Connecting spaces to promote pedestrian movement.

## **ACCESS CONTROL**

Access Control delineates spaces open to the public or where these spaces are restricted. The design incorporates natural barriers such as roadways and landscaping, electronic and physical barriers through the use of the following:

- Securing public entrances after hours.
- + Providing a 24-hour security station that can respond to other parts of the hospital during occasions of duress.
- Provision of CCTV monitoring linked back to security station.
- Providing electronic access points of entry and intercoms.
- Providing access control to clinical departments after hours as well as engineering services areas and other sensitive areas of

## **VULNERABILITY**

minimal maintenance.

The aspect of how vulnerable a person feels in a space will impact on the use of that space limiting its activation and attracting undesirable activity. This has been addressed through:

**PLACE MANAGEMENT & MAINTENANCE** 

Maintenance is a reinforcement of ownership of property where as

decline in space management and maintenance signifies reduced

jurisdiction by the owners of the space and therefore less control in

External spaces designed with robust finishes requiring

Restricting access to sensitive areas such as goods lifts.

Fall protection from heights to include significantly increased

Ensuring clear observation lines to open areas that would be of

relation to access. This has been addressed through:

balustrade heights and or fully enclosing mesh.

high risk to the public, such as loading docks.

- Effective lighting of spaces both natural and artificial.
- Provision of clear exit (escape) pathways allowing users of a space the option of more than one route out of the area.
- Avoiding blind spots in spaces and ensuring that distance visibility is available to all users of the space.

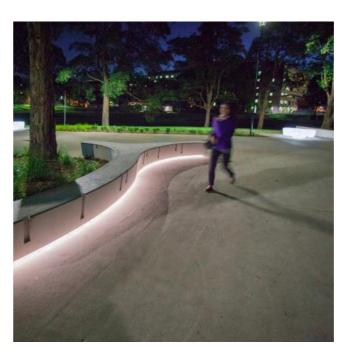
## TERRITORIAL REINFORCEMENT

Territoriality provides social regulation through definition of space. This has been addressed through:

- + Clearly defining spaces into public and back-of-house through physical barriers or appropriate directional means.
- Not mixing public, patient and back-of-house activity in the same spaces where possible.
- Clearly identifying control points to clinical areas.
- Ensuring that circulation patterns are unambiguous.
- + Reinforcing public areas by introducing amenities or other elements of activation attracting desired users of the space.







# **CPTED**

