





ACKNOWLEGMENT OF COUNTRY

We acknowledge and pay our respects to the Traditional Custodians of the Country now known as Ryde: the Gai-mariagal, Guringai, Dharug, D'harawal and Eora peoples.

We look to pay respects to their Elders of the past, present and future and emerging, and to all Aboriginal and Torres Strait Islander peoples of these communities.

We hope to share our collective knowledge and learning and we recognise that Aboriginal and Torres Strait Islander knowledge and learning is over 60,000 years old and inextricably embedded in Country and the culture of all Australians.

The growing Indigenous voice in place-making is repositioning the built environment as a grounds to express and explore alternative worldviews, but also the progress of reconciliation. It is our responsibility to take action towards remembrance and embrace the social responsibilities, values and principles of the worlds oldest continuous culture so we can inform a responsible design and community outcome.

This is, was, and always will be, Aboriginal Land.



DOCUMENT CONTROL

DOCUMENT SSDA 1 DESIGN REPORT

PROJECT RYDE HOSPITAL REDEVELOPMENT

PROJECT NO. 10520

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1.0 EXECUTIVE SUMMARY

PROJECT DESCRIPTION

This report has been prepared for the redevelopment of Ryde Hospital by the project Consultant team, led by Silver Thomas Hanley Pty Ltd (Principal Consultant) and TSA Management (Project Manager).

In 2019 Government announced its intention to redevelop the Ryde Hospital with a project budget of \$479m. The Ryde Hospital is within the Northern Sydney Local Health District, (NSLHD).

This report has been complied with inputs from the wider design and client teams and is derived from workshops with but not limited too;

- External Reference Groups
- Project Working Groups
- Executive User Group
- GANSW

STH and the sub-consultant team have prepared documentation which addresses the current use and future development potential for Ryde Hospital.

Health Infrastructure (HI) NSW have commissioned Silver Thomas Hanley in early 2021 to undertake the master planning, feasibility and concept design study in order to determine framework of the design principles for the built form that will support the future efficient provision of services for the Ryde Hospital and Health Service.

BACKGROUND

The NSLHD has prepared a Clinical Services Plan, (CSP) for the redevelopment of the Ryde Hospital. The CSP is now awaiting endorsement with the Ministry for Health.

EXISTING HEALTH SERVICES

Ryde Hospital is a 194-bed district general hospital providing acute (130 beds) and sub-acute (64 beds) services. Specifically it incorporates:

Acute services, predominantly provided at role delineation level 3, include emergency medicine, general and sub-specialty medicine (including cardiology, respiratory medicine, endocrinology, gastroenterology, renal medicine, and neurology), and general and sub-specialty surgery (including orthopaedic surgery). Other acute services are provided on a consultative basis. An ambulatory midwifery group practice is provided with obstetric support from RNS Hospital.

Sub acute admitted rehabilitation (role delineation level 5) is provided in the purpose-built Graythwaite Rehabilitation Centre and aims to meet the general admitted medical rehabilitation as well as specialist burns rehabilitation as part of the supra-LHD Severe Burn Injury Service.

Non-admitted services include clinics for preadmission, orthopaedics, acute cardiology, respiratory medicine, endocrinology, ante- and post-natal care, pathology, imaging and clinical measurement, cardiac and respiratory rehabilitation, community aged care and rehabilitation, and allied health.

Community-based drug and alcohol and mental health services are provided from a stand-alone community health building and are managed by the Mental Health Drug and Alcohol Directorate.

CLINICAL SERVICE PLAN

NSLHD have undertaken extensive stakeholder consultation in the development of the draft Ryde Hospital and Health Services Clinical Services Plan (CSP) (version 4) which has been submitted to the Ministry of Health for endorsement.

The CSP identifies a future high level vision for the future of Ryde Hospital and Health Services, that includes:

- A comprehensive health care hub that meets most of the secondary health needs of the local population.
- A vibrant hospital and health service that has clear and specific roles within the network of NSLHD hospitals.
- A provider of effective treatment delivered with compassion by clinicians in partnership with patients and their carers, as well as with GPs and other primary care providers.
- A hospital of the future taking advantage of new models of care, new technologies and new approaches to sustainability.

 A focus for education, training and research in collaboration with education institutions to develop the current and future health workforce.

Without this project the ability of the NSLHD and Ryde Hospital to implement this vision would be severely constrained by poorly located, outdated and aging infrastructure coupled with the challenges of meeting the needs for a rapidly growing population.

The CSP proposes a number of services increasing in role delineation from level 3 to level 4

The CSP describes future health services that will be person focused, high quality, safe, affordable and sustainable, accessible and culturally appropriate. The need to be able to care for the most vulnerable including the elderly, the opportunities in non-admitted and virtual models of care, the value of research and the importance of information communication and technology (ICT) systems that enable clinical outcomes.



RYDE HOSPITAL REDEVELOPMENT | SSDA 1 DESIGN REPORT | AUGUST 2022

1.0 EXECUTIVE SUMMARY

CONCEPT DESIGN AND EARLY WORKS

This report also responds to the key architectural and urban design requirements of the SEAR's

Item 3 - Design Quality

- Demonstrate how the concept development will achieve:
 - Design excellence in accordance with any applicable EPI provisions.
 - Good design in accordance with the seven objectives for good design in Better Placed.
- Demonstrate that the development has been reviewed by the State Design Review Panel (SDRP). Recommendations are to be addressed prior to lodgement.

Item 4 - Built Form, Urban Design and Visual Impacts

- Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach.
- Demonstrate how the proposed concept built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, street-scape and existing and future character of the locality.
- Outline how the future building design will deliver a high-quality development, including consideration of façade design, articulation, roof design, materials, finishes, colours, any signage and integration of services.

- Outline how the future development will comply with the relevant accessibility requirements.
- Provide a visual analysis of the concept development envelopes from key viewpoints, including photo-montages or perspectives showing the proposed and likely future development.
- Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the concept development on the existing catchment.

Item 5 - Environmental Amenity

- Assess amenity impacts on the surrounding locality, including lighting impacts, solar access, visual privacy, visual amenity, view loss and view sharing, overshadowing and wind impacts (including the preparation of a wind assessment where the concept development has a height above four storeys). A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated.
- Provide a solar access analysis of the overshadowing impacts of the concept development within the site, on surrounding properties and public spaces (during summer and winter) at hourly intervals between 9am and 3pm, when compared to the existing situation and a compliant development (if relevant).

Item 6 - Public Space

 Demonstrate how the concept development maximises the amount, access to and quality of public spaces (including open space, public facilities and streets/plazas within and surrounding the site), reflecting relevant design guidelines and advice from the local council and the Department.

The above items will be expanded on within the following pages.



RYDE HOSPITAL REDEVELOPMENT | SSDA 1 DESIGN REPORT | AUGUST 2022

1.0 EXECUTIVE SUMMARY

SEARS RESPONSE MATRIX INDEX

	SEARS	REFERENCE		
3	Design Quality	NEI ENEMOL		
а	Demonstrate how the concept development will achieve Good design in accordance with the seven objectives for good design in Better Placed.	6.5 Better Placed		
b	Demonstrate that the development has been reviewed by the State Design Review Panel (SDRP). Recommendations are to be addressed prior to lodgement.	6.3 GANSW Consultation		
4	Built Form, Urban Design and Visual Impacts			
a	Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach	5.1 Architectural Desing Prinicples 6.1 Design Quality		
b	Demonstrate how the proposed concept built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality.	6.2 Connection to Country6.4 Healthy Urban Response & Public Spaces6.6 Built Form, Urban Design & Visual Impacts6.7 Façade Design		
С	Outline how the future building design will deliver a high-quality development, including consideration of façade design, articulation, roof design, materials, finishes, colours, any signage and integration of services.	6.8 Articulation		
d	Outline how the future development will comply with the relevant accessibility requirements.			
е	Provide a visual analysis of the concept development envelopes from key viewpoints, including photomontages or perspectives showing the proposed and likely future development.			
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6	Public Space			
а	Demonstrate how the concept development maximises the amount, access to and quality of public spaces (including open space, public facilities and streets/plazas within and surrounding the site), reflecting relevant design guidelines and advice from the local council and the Department.	6.4 Healthy Urban Response & Public Spaces		



2.0 TERMS OF REFERENCE

2.1 METHODOLOGY

The consultant team has worked with Health Infrastructure NSW to develop the existing Ryde Hospital site to become a contemporary hospital to meet the future needs of the local communities within the area.

The methodology process included, but not limited to the following key items;

- Embedding Connecting to Country methodological approaches to all phases.
- Review of the available documentation for the existing site.
- Site visits and consultation with the Hospital
- Assessment of the existing building fabrics and services.
- Site assessment of local environmental, physical and authority constraints and opportunities.
- Mapping of the existing clinical services functions, areas and locations within the existing buildings.
- Mapping of the surrounding health services within the immediate vicinity and local CBD
- Comparison between the existing clinical areas and the Australasian Health Facility Guidelines (AusHFG).
- Series of Project User Group (PUG) meetings to inform users of the planning process and listen to the users issues, concerns and ideas

- regarding any potential work to their current facility.
- Review of briefing information including the Clinical Services Plan to help inform the preliminary Schedule of Accommodation (SoA).
- Macro and Micro Urban context assessment
- Transport network and connectivity assessment.
- Site assessment & analysis environmental, physical and authority constraints and opportunities.
- Review of engineering and infrastructure requirements.
- Review of functional relationships & adjacencies, Blocking and stacking exercises to inform, listen, understand and respond to user feedback.
- Options development and analysis
- Considering various future proofing strategies for the various stages of development.
- Review of the Master plan documentation and strategy.
- Support by the design working group and endorsement by project governance.
- External reviews at State Government level such as the Government Architects New South Wales (GANSW).



3.1 LOCATION

LOCATION

The current Ryde Hospital is located on Denistone Road in Denistone (Sydney), NSW 2122.

Located approximately 7km north west of Ryde town centre, the hospital is bound on three sides by suburban streets. Access to the hospital occurs on all three streets with the main access for both pedestrian and traffic occurring on Denistone Road on the hospitals eastern side.

COUNCIL & NEIGHBOURHOOD

Ryde Hospital falls under the City of Ryde council area. Its location within the Denistone area is of suburban context made up of predominantly single and two storey homes.

A protected Blue Gum High Forest (BGHF) over steep terrain is located at the southern end of the campus.

TITLE

The Ryde Hospital site is made up of the following lots:

DP	Landowner
1183279	The State of NSW
1183279	HAC
323458	HAC
323458	HAC
	1183279 1183279 323458



Ryde Hospital Campus, Denistone, NSW

LEGEND

- 1 Private Medical Centre
- 2 Private Car Parking
- 3 Private Diagnostic Imaging
- 4 Private Medical Centre
- 5 Graythwaite Rehabilitation Centre
- 6 Emergency Department
- 7 Private Residences
- 8 Blue Gum High Forest (Private Residences)
- 9 NSW Ambulance
- 10 Blue Gum Hight Forest
- 11) Denistone Park
- (12) Valerie Park
- 13 Early Childcare Centre
- 14 Primary School
- (15) Commuter Car Park
- 16 Denistone Train Station







3.2 ZONING

ZONING

LEP 2014 SP2 Infrastructure Zone

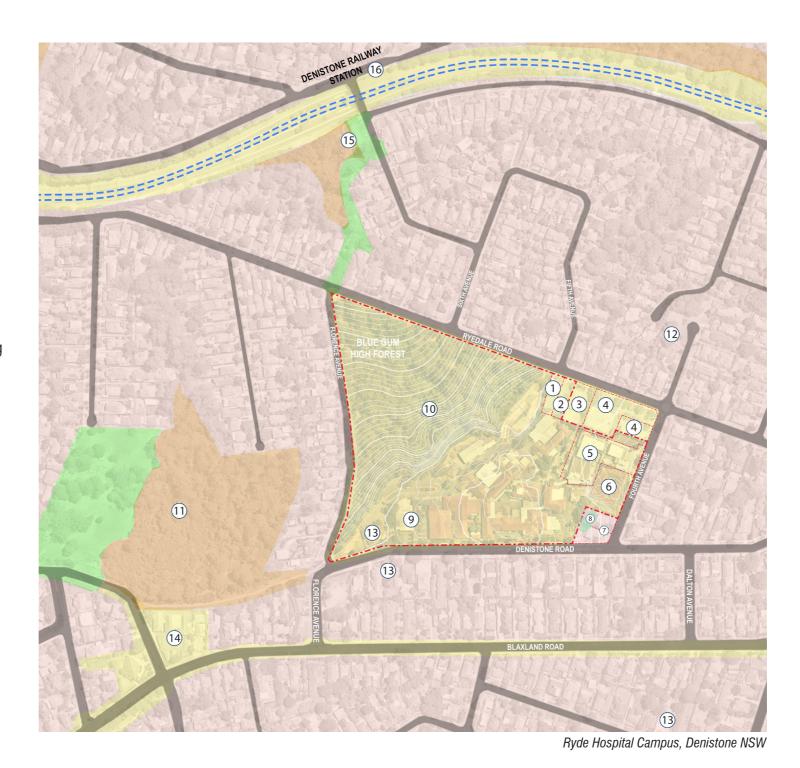
TOWN PLANNING PARAMETERS

The primary planning instruments that currently apply to the site and set out the relevant planning controls are:

- The Ryde Local Environmental Plan 2014 (RLFP)
- The Ryde Development Control Plan 2014 (RDCP).

Floorspace Ratio N/A.

Parking N/A.



LEGEND

- 1 Private Medical Centre
- 2 Private Car Parking
- 3 Private Diagnostic Imaging
- 4 Private Medical Centre
- 5 Graythwaite Rehabilitation Centre
- 6 Emergency Department
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- 9 NSW Ambulance
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- 12) Valerie Park
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- 14 Primary School
- 15 Commuter Car Park
- 16 Denistone Train Station

LEGEND

E2

Zoning Parameters

R1 General Residential

SP2 Infrastructure

RE1 Private Recreation

Environmental Conservation





3.3 EXISTING GREEN SPACES

The existing Ryde Hospital Campus is situated within the residential area of Denistone Road in Ryde.

The hospital is adjacent to a series of green spaces that allows access for the public. These parks are noted as;

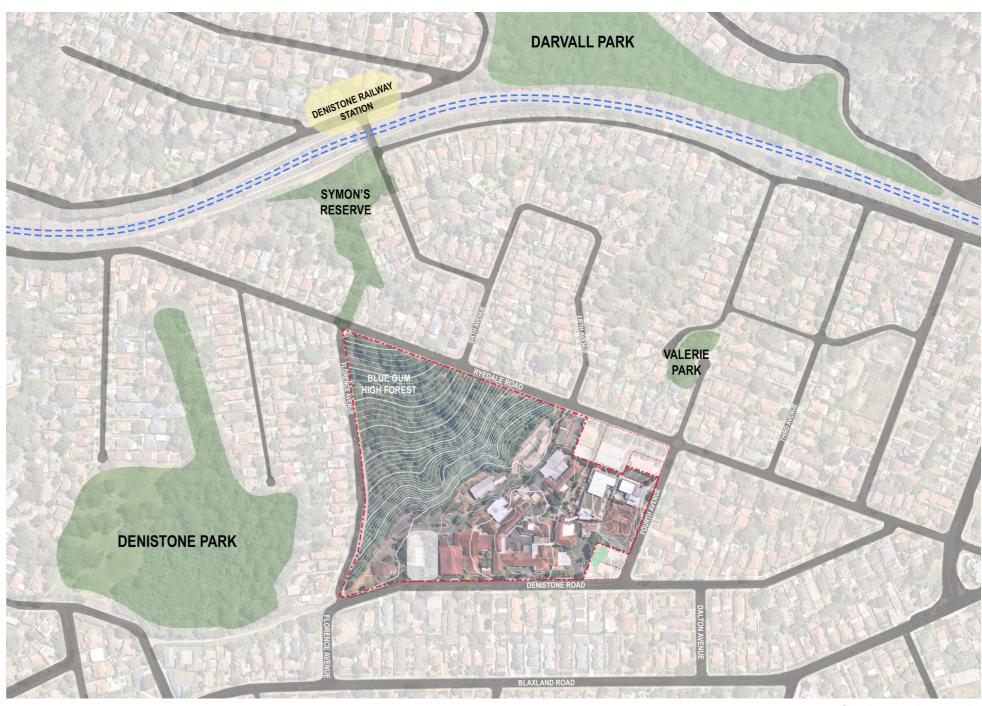
- Valerie Park
- Denistone Park
- Symon's Reserve.

Both Denistone Park and Symon's Reserve are characterised by dense Blue Gum High Forest, similar to the one within the hospital grounds.

The campus grounds has little existing public amenities which is characteristic of urban hospitals that have expanded of decades.

The site has a large protected Blue Gum High Forest that covers almost half the site to the southern end, and is spread over a steep terrain which is also covered in dense under storey growth.

The beauty of the tree canopy has been identified as a asset to the site and pivotal to the landscaping and place making design approach for the site.



Site Plan, 1:5000 at A3





3.4 MACRO URBAN DESIGN ANALYSIS

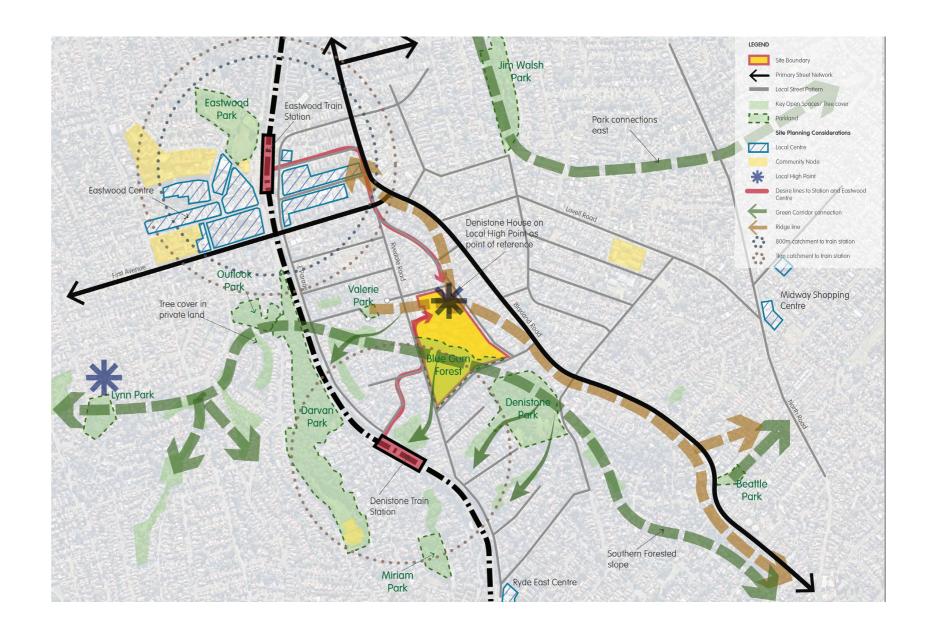
The Ryde Hospital occupies a prominent site on an east-west ridge line overlooking the Parramatta River. This site was developed as Denistone House, prior to becoming a hospital at the beginning of the 20th century. Over time, Denistone House has been obscured by later hospital buildings.

The hospital sits in a established residential neighbourhood which is predominately made up of low rise single family homes.

Three local shopping centres are within 1 to 2km from the hospital, beyond a convenient walkable distance suggesting the hospital site could offer its own amenities for visitors, staff, and patients.

The hospital is situated between to rail stations, Denistone Station which is less than 500m away and can be accessed via a walking track through the Blue Gum High Forest and Eastwood Station, just over 1km away.

The southern slopes of this ridge line contain a protected Blue Gum High Forest and further park areas are adjacent to the site that include Denistone Park and Symon's Reserve. This creates opportunities to enhance the current overgrown forest on the site and connect this to the adjacent parks as a community amenity.







3.5 MICRO URBAN DESIGN ANALYSIS

The ridge formation offers two potential desire lines through the site for surrounding residents:

Along the edge of the Blue Gum High Forest.

- Creating public walkway of path for interaction with the forest at the canopy level creating an amenity for visitors, patients and staff as well.
- Establishing other smaller open spaces along the walkway as a place of respite, connection to nature and opportunities for social connection.

Through the centre of the site and past Denistone House.

- Creating a community focused open space between Denistone Road and Denistone House and improve visibility and reinstate community connections to the house to create a natural focus point.
- Creating a more informed streetscape respectful of the local community it sits within.
- Creating amenities that can be used by the local community

Connection between these areas, the Blue Gum High Forest and a garden setting to Denistone Road will reinforce connectivity from outdoor to indoor and spaces inform the location of hospital lobbies and core.







Internal Site Desi re Lines
Site
Corner
y focussed
Ildings
J height on hill
of hospital and
y
ss St reet Edge

Distupted visual presence
Site and Crest in Road

Internal Site Desi re Lines
Internal Site Desi re Lines
Ikm walk and to Deniston
Pedestrian Desi relines
throughout Hospital
Views/Outlook into for rest
Street and original Hospital



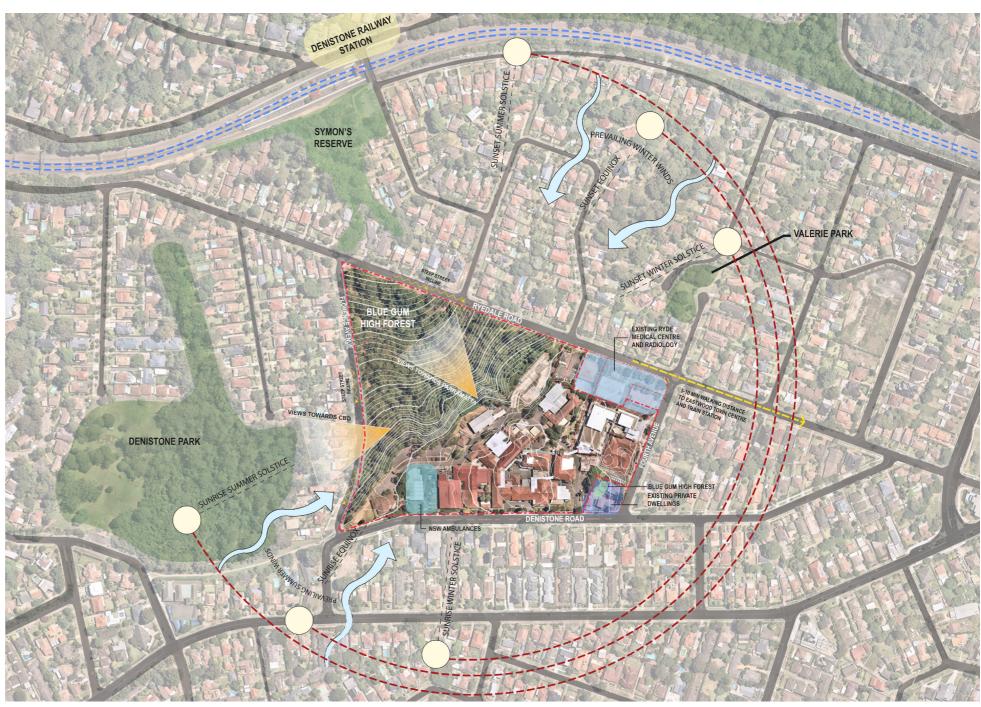




3.6 SITE ANALYSIS

The concept design has been developed with a number of existing site parameters taken into consideration:

- Topography of the site;Neighbouring adjacencies;Existing buildings identified to remain;
- Urban design response; Vehicle and pedestrian access;
- Solar access;
- Views;
- Site features;
- Staging of any development;
- Allowances for future expansion
- Connection to Country and its' Traditional Owners and Custodians



Site Analysis, 1:5000 at A3





3.7 TOPOGRAPHY

Situated on a prominent ridge overlooking the Parramatta River the site has two distinctive topography features.

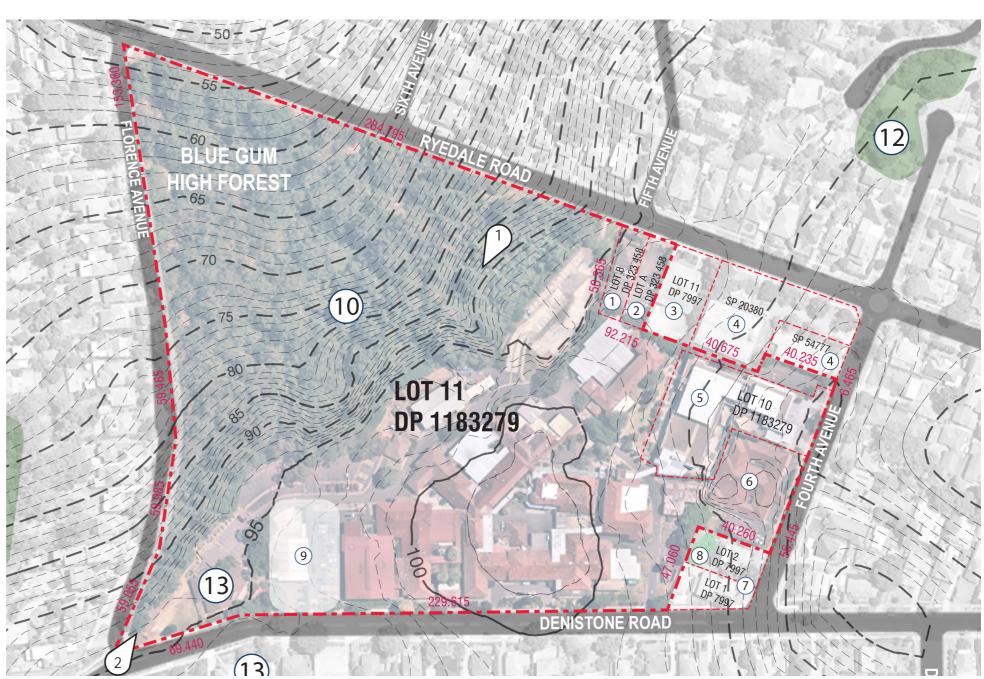
The main building sits at an approximate RL 100m RL to RL 95m.

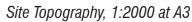
The area of the BGHF has very steep terrain in places and drops of 50m to the southern most corner of Florence Avenue and Ryedale Road.



(1









3.8 BUSHFIRE & APZ

The Blue Gum High Forest to the south of the proposed Ryde Hospital Redevelopment site is noted as PCT 1237 in both the BC act and EPBC act as remnant Blue Gum High Forest, and is protected.

Bushfire & Ecology Consultants Eco Logical undertook a review of the ecology and potential bushfire impacts to the site.

Refer to their reports:

- Ryde Hospital Redevelopment Biodiversity Development Assessment Report [V1] Dated: 8 April 2022
- Bushfire Protection Assessment Ryde Hospital Redevelopment Concept Plan [V1] Dated: 25 March 2022

The solutions considered three potential APZ footprints, including: a *Make Safe* Option to be applied to the Existing Hospital Buildings, an *Acceptable Solution Strategy* to the applied to proposed buildings, as well as an *Indicative Performance Solution* APZ.

The solution adopted by Eco Logical Australia works with a maximum foot print of the hospital that allows the greatest flexibility to developing the final design, while creating a APZ solution that will meet compliance without undue costs or building design responses to achieve this.

APZ performance solution being finalised with the RFS and ecology consultants



Bushfire Hazard Assessment Plan, EcoLocical Australia, [V1] March 2022





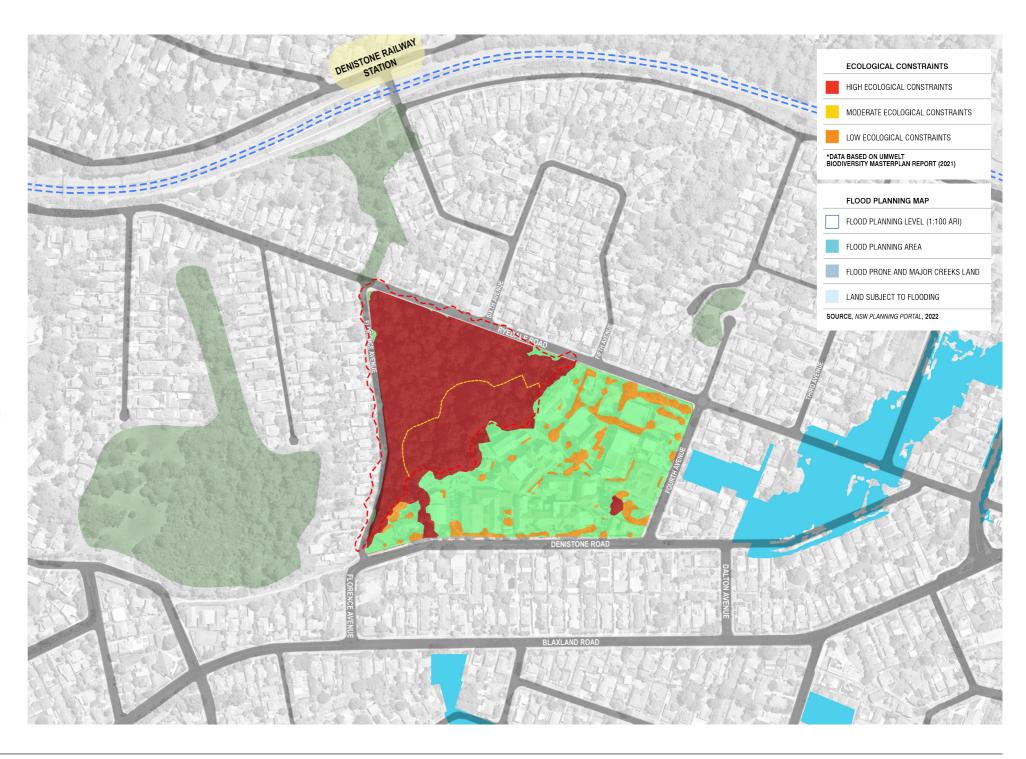
3.9 BIODIVERSITY, FLOOD, GROUNDWATER & MINE SUBSIDENCE

The site is subject to thirteen ecological constraints, concentrated in the Blue Gum High Forest (BGHF) to the south of the site.

The BGHF is listed under the BC Act and the EPBC Act. A smaller stand to the north of the site does not meet the criteria due to its limited extent and size.

No threatened fauna and flora species were identified, however it is noted that BGHF is typically a habitat to a number of fauna species.

Due to the biodiversity impacts associated with the development a EPBC referral has been prepared and lodged in conjunction with the BDAR to clearly detail the possible biodiversity impacts and avoidance and minimisation approaches that have informed the development to date.







3.10 SITE ACCESS

Denistone Road provides the majority of access to the site;

- Public Car parking
- Front of House Drop Off
- Emergency Department Drop Off
- Ambulance Access
- Logistics

Access to the Community Mental Health and Graythwaite buildings are from Fourth Avenue.

A secondary staff parking area is located to the west of the site accessed from Ryedale Road.

Campus roads service the on grade staff parking, the back of house areas such as the loading dock and engineering workshops and the ambulance drop off to the Emergency Department.

A small staff car park is also located to the west of the site with access from Ryedale Road.

The Graythwaite and Community Mental Health have vehicle access from Fourth Avenue,

Pedestrian access to the main hospital entry is off Denistone Road.



Note: Subject to Validation by Traffic Engineer



External Site Access and Circulation





3.11 BUILT FORM

ARCHITECTURAL ASSESSMENT

The site sits on a rise within the Denistone area of Ryde. Bound on four sides by suburban streets; Denistone Road to the east, Fourth Avenue to the north, Florence Avenue to the south and Ryedale Road to the west.

The campus is made up of a number of buildings over a 90 year period as well as two historically significant buildings that pre-date the hospital.

The majority of the hospital was built post world war two and has had a number of additions and alterations over its time.

Most buildings are predominately of one or two storey brick construction that reflect the suburban setting of the hospital.

This has led a complicated site layout with sub standard site wide way finding and little public amenity. A number of factors that need to be considered in the sites assessment:

- Much of the architectural integrity of the original buildings is lost;
- The age of each building and its current use, and its suitability for future clinical requirements.
- Significant BCA and DDA non compliance;
- Non compliance to current AusHFG;
- Haphazard additions resulting in poor intuitive way finding and clinical adjacencies
- The cost of rectification works to ensure compliance.

The following buildings have been identified to be retained on site due to either their comparative recent builds, location within the site, compliance with the BCA and AusHFG or heritage value;

- The Child Care facility (B1), retained on site due it's service offering and its disconnection from the rest of the site.
- Graythwaite Rehabilitation Building (B20), a recent new build of less than 10 years.
- Community Mental Health (B7), identified as having over 10 to 20 years more use.
- Ambulance NSW, recent new build.
- Denistone House, a heritage listed building identified for reuse in the redevelopment.
- The Stables, a heritage listed building that is not within the scope of the redevelopment.

The facilities within this unit would be integrated back into the wider outpatient departments and therefore has been identified for removal in the redevelopment.

The following buildings while identified as having a number of years left in their life cycle are to be removed as part of the redevelopment of the site;

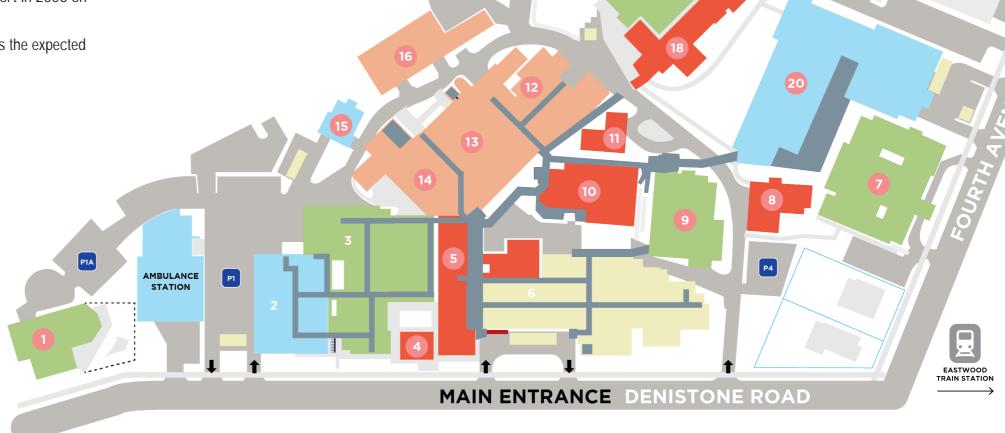
- Building 17, The CaRES Building is also identified as a recent addition to the campus.
 The building sits within the middle of the campus and has been identified as causing significant issues to the development of the site due to its location
- Building 3, Theatres, while a fairly new building, services within do not comply with current AusHFG planning requirements and also are located to the furthest eastern side of the development zone in the campus.
- Building 9, Trigg House has been assessed to be of little heritage significance and is considered to have been compromised by the extent of alterations and additions, such that the original form and facades are unlikely to be retrieved. The building is also unsympathetically located as it blocks views and connections between Denistone House (Building 10) and the Stables (Building 8) and compromises the original setting of the former Denistone Estate buildings.



3.11 BUILT FORM

AON Risk Solutions prepared a report in 2006 on the Ryde Hospital building stock.

The adjacent diagram demonstrates the expected building life cycles.



STEPS TO DENISTONE TRAIN STATION



No. DESCRIPTION				
1 APPLE COTTAGE CHILD CARE	5 RECEPTION (MAIN)	6 WARDSPERSONS	10 DIETETICS	13 PATIENT GYM
2 OPERATING SUITE	6 STERILISING	7 MENTAL HEALTH	10 INFORMATION TECHNOLOGY	14 CHAPEL
3 CARDIOLOGY UNIT	6 ELCA (EDUCATION, LIBRARY	8 ANTE NATAL CLINIC	10 J.M.O. TRAINING	14 VMO LOUNGE
3 CORONARY CARE UNIT (CCU)	& CONFERENCE AREA	8 STABLES BUILDING	10 OCCUPATIONAL THERAPY	15 MORTUARY
3 HIGH DEPENDENCY UNIT (HDU)	6 EMERGENCY DEPARTMENT	9 MATERNITY	10 PODIATRY	16 ENGINEERING
3 PERIOPERATIVE UNIT	6 NURSING ADMINISTRATION	9 PATIENT TRANSIT LOUNGE	10 SPEECH PATHOLOGY	17 AGED CARE + REHABILITATION
4 FRESH PLUS CAFÉ	6 OUTPATIENTS CLINIC	9 WARD 6	10 SOCIAL WORK	18 CHATTERY / STAFF DINING
5 ADMISSIONS	6 PATHOLOGY	9 WARD 7	11 CLEANERS	18 STAFF ACCOMMODATION
5 EXECUTIVE OFFICE	6 PHARMACY	9 WARD 8	12 FOOD SERVICES	19 CAMELIA COTTAGE - Family Care Centre
5 MEDICAL RECORDS (HIS)	6 RADIOLOGY	10 DENISTONE HOUSE	12 PHYSIOTHERAPY	20 GRAYTHWAITE REHAB CENTRE
5 WORKFORCE	6 SECURITY	10 DIABETES SERVICE	12 STORES	21 SERVICE YARD





RYEDALE ROAD

THE RYDE MEDICAL

CENTRE

MEDICAL

RADIOLOGY

3.12 HERITAGE

The Ryde Hospital site is heritage listed on Schedule 5 of the Ryde Local Environmental Plan (LEP) 2014, Item No. 47, "Denistone House" and "Trigg House" (Ryde Hospital)".

Denistone House and The Stables are also listed on the Department of Health Section 170 Heritage Register (Denistone House Heritage Item ID 3540681 and the Stables Heritage Item ID 3540682).

Foundation stones for the hospital were laid in 1933, and the hospital was opened in 1934 with 56 beds, comprising a casualty department, outpatients department, public, private and intermediate wards, accommodation, administration and an operating theatre.

The campus has had multiple further buildings added over the last 90 years, and a number of these building have had the architectural and heritage value diminshed, and in some cases totally lost with later additions and alterations, such as Trigg House.

Denistone House and The Stables are to be retained on site as part of the redevelopment. Denistone House is in a good condition, but has had a newer (circa 1970's) addition that has been proposed to be removed to reinstate the original architectural integrity.

Both Denistone House and the Stables will front onto a new public green space that will open onto Denistone Road, creating a new public amenity, as well as respecting these two heritage buildings within the redevelopment.

Denistone House will retain its use as a education and administration space while the Stables has no identified use in the redevelopment due to its restrictive original internal planning.

Trigg House although listed in the Ryde LEP as a heritage building has lost most of it's original Architectural merit with many additions overtime. Heritage consultants Urbis support it's removal as part of the redevelopment.

A conservation management plan will be prepared for the detailed SSD Application. A Heritage Impact Statement has been provided with this SSDA and will also be provided for the detailed SSDA.



Building 8. The Stables



Building 10. Denistone House





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4.1 SITE OPPORTUNITIES & CONSTRAINTS

The site presents a number of opportunities and constraints that have informed the Master Plan.

CONSTRAINTS

- The Ryde site is approximately 76,952m².
 However, a large proportion of the site is attributed to the protected Blue High Gum Forest, which covers the very steep terrain on the south of the site. Noting this, and along with the retention of the Graythwaite and Community Health buildings, the usable area for the site is reduced to approximately 39,819m².
- Heritage buildings identified as significant and to be retained on site located centrally to the proposed building area.
- Other buildings such as the Graythwaite and Community Health buildings to Florence Avenue being relative new and being retained in the redevelopment reducing site development options further.
- Neighbouring residential and medical centres occupying key corners.

OPPORTUNITIES

- BGHF creates great public amenity, enhances views and is key to the connection to country principles of the site.
- Prominent location on the ridge line allows for great views from the in patient units on the upper levels.
- Uninterrupted solar access to the site.





4.2 DEVELOPABLE AREA

DEVELOPMENT ZONE OBJECTIVES & OUTCOMES

- Dispose of aging assets that do not meet contemporary health facility requirements.
- Retain existing contemporary buildings identified as Graythwaite Building (B20), the Community Health building (B7), the Child Care building (B1) and the NSW ambulance station.
- Retain the heritage listed Denistone House and The Stables buildings (B10 and B8)
- Maximise development footprint
- Leverage frontage to Denistone Road, including creating new open public spaces to Denistone House.

The development zone has further constraints attached including;

- Staging of a development within a live environment.
- Bushfire setbacks.
- Creation of new public spaces.









4.3 ZONAL MASTER PLAN

The zonal diagram explored how the development zone would be developed. A number of key factors assisted in informing the diagram:

- Dispose of aging assets.
- Retain contemporary assets to Fourth Avenue.
- Retain the significant heritage buildings within the site.
- Enable the new development to respect the heritage buildings on the site.
- Maximise development site footprint.
- Create public amenities in the form of green open spaces to Denistone Road.
- Utilise the existing BGHF as an amenity for the hospital and wider community.
- Create distinct and separate vehicle access for public, staff, logistic and emergency service traffic.

The three stages of development zones critically allows for the hospital to be redeveloped while maintaining a live environment. Decanting as the buildings are demolished and allowing the new builds to be erected is key to this.







4.4 MASTER PLAN DEVELOPMENT

The initial site selection process considered Master Plan options against the following over-arching criteria including:

- Capacity to accommodate the clinical services needs, effective functionality, and future expansion
- Site accessibility, traffic engineering and access to public transport
- Identity, built form, environment, heritage and culture

Having identified the current Ryde Hospital site as the preferred development site, and following further analysis of the site constraints and opportunities the project expanded on these criteria to include site specific considerations and opportunities:

- Connection to the wider geography of the site including Sydney, Ryde and the local neighbourhood
- Connection to the natural and cultural history of the site
- Management of the Blue Gum High Forest, including the impact of the Environmentally Endangered Communities and the Asset Protection Zone
- Capacity of the scheme to be staged and implemented in a logical manner without impacting the continuous and safe delivery of clinical services.
- Achieving critical linkages with existing assets that are to be retained.

The design team explored six master plan options within the development zone which were presented and discussed with the Project Working Group (PWG).

The master planning stage had the following assumptions at the time that have been;

Retention of Trigg House, this building was later deemed to have lost most of its historical integrity and restrictive internal planning that did not meet requirements for a new clinical service building.

Retention of the existing peri-op and operating theatre buildings, adjacent to Denistone Road. Further reviews of the clinical services plan and value engineering exercises identified preference for a all new theatre suite within the proposed clinical service building.

OPTIONS 1 & 2

Option 1 and 2 explored similar principles in their master planning. Building massing and orientation within the site being the main difference. Key considerations for these options are;

- Optimisation of building foot print to maximise clinical adjacencies and functions.
- Maintain clinical connection to The Graythwaite Building on Fourth Avenue.
- Maintain clinical connection to the existing theatres near Denistone Road.
- Creation of public green space to Denistone Road
- Celebrating the heritage buildings by connecting them to the green space creating a public amenity beyond the green-space.
- Creation of separate dedicated entry points for public, staff, logistics and emergency services.
- Multi deck car park building located towards Ryedale Road.
- Staged building development to allow for live hospital environment to maintain services.
- Future development zone to the eastern side of the development area identified.



OPTION 1
PREFERRED/DEVELOP FURTHER



OPTION 2
PREFERRED/DEVELOP FURTHER





4.4 MASTER PLAN DEVELOPMENT

OPTION 3

Option 3 had the following principles that were also applied to the earlier options;

- Maintain clinical connection to The Graythwaite Building on Fourth Avenue.
- Maintain clinical connection to the existing theatres near Denistone Road.
- Creation of public green space to Denistone Road.
- Staged building development to allow for live hospital environment to maintain services.
- Celebrating the heritage buildings by connecting them to the green space creating a public amenity beyond the green space.
- Creation of separate dedicated entry points for public, staff, logistics and emergency services.
- Multi deck car park building located towards Ryedale Road.
- Future development zone to the eastern side of the development area identified.
- Staged building development to allow for live hospital environment to maintain services.

A number of undesirable factors were identified;

- The car parking solution was considered to be landlocked.
- Massing towards Ryedale Road and concerns with bulk and scale to Ryedale Road and the Graythwaite Building.

This option was discounted.



OPTION 3

OPTIONS 4 & 5

Two options explored retaining the CAReS building. Located in a central area within the development zone, it restricted the development location, massing and orientation of the new proposed clinical service building. (CSB).

The hospital identified to the project team that the services within the CAReS building were to be colocated in the new ambulatory services area of the CSB.

These options were also discounted.



OPTION 4



OPTION





4.4 MASTER PLAN DEVELOPMENT

OPTION 6

Option 6 explored a number of alternative ideas for the site.

Principles that were maintained for this option included:

- Creation of a public green space to Denistone Road.
- Multi deck car parking towards Ryedale Road.
- Retention of the CAReS building.
- Staged building development to allow for live hospital environment to maintain services.

The option posed a number negative affects on the site:

- · Clinical disconnect to the Graythwaite Building.
- Increased staff travel distances.
- Under utilisation of development area.
- Concerns on the adjacency to the Blue Gum High Forest to the eastern side of the site.
- Potential massing impact to Denistone Road.

This option was discounted.



OPTION 6

Following detailed assessment of the Options outlined above and having regard to the criteria outlined at the beginning of this section, it was determined that Option 2 provided the best opportunity in the first instance to achieve those criteria.

Subject to further analysis and design development in the Concept Design phase it was determined that Option 2:

- Responded best to the site parameters including, providing valuable opportunities for connection with the site context, both natural and cultural.
- Embedded a series of place making opportunities that were connected to the cultural history of the site.
- Was capable of delivering the accommodation scope proposed in the Clinical Services Plan.
- Achieved key asset linkages across the site.
- Proposed a strategy that limited motor vehicle access to the extremities of the site and supported the pedestrianisation of the central plateau on the site and its connection to the Blue Gum High Forest.

This outcome was endorsed by the LHD and through the various project governance committees.





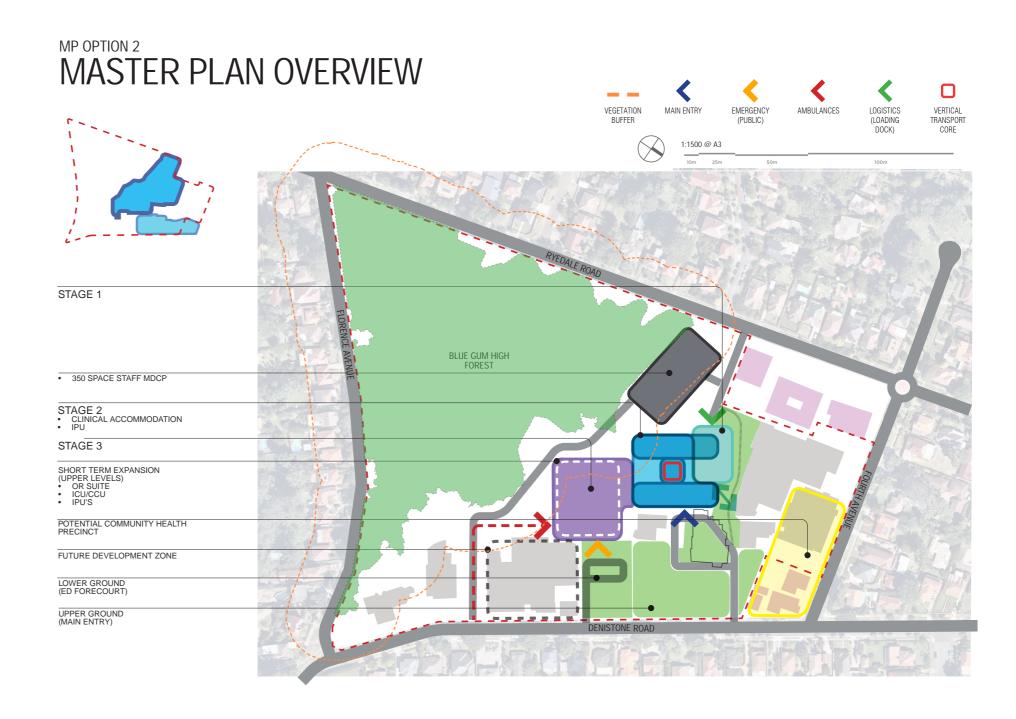
4.5 SITE MASTER PLAN

The Master Plan was developed from Option 2 of the earlier 6 studies.

The Master Plan developed the earlier principles to achieve the following;

- Buildings orientated within the centre of the site to reduce massing to Ryedale and Denistone Roads.
- Respectful consideration to heritage buildings with the new Clinical Service Building (CSB).
- The Multi Deck Car Park (MDCP) to the rear of the site with access from Ryedale Road.
- Staged building development to allow for live hospital environment to maintain services.
- Deliver 'building program' as outlined in the CSP.
- Maintain links to Graythwaite Building.
- Separate vehicle access to MDCP, Public drop off, Emergency Drop off, Ambulance and logistic traffic.
- Locating the CSB to maximise views towards Olympic Park and the BGHF.
- Create better public amenity use of the BGHF.
- Future expansion zone to the east of the proposed CSB.

The Master Plan was endorsed through governance. The Master Plan has formed the basis of the concept design development to which formed this SSD application.







5.0 DEVELOPMENT PROPOSAL

5.1 DESIGN PRINCIPLES

Four key design principles have been applied to the project as overarching outcomes that the design team are working towards;

DIGNITY

- Connection to community.
- Creating a public building and community amenity accessible for all

WELLNESS

- Utilisation of aspects and views within the building and grounds.
- Access to green spaces create high value public domain areas

LONGEVITY

- Future Proofing Provide efficient growth opportunities
- Sustainable adaptable and durable: buildings, spaces and systems

COUNTRY

- Connection to community Maintain identity of Ryde Hospital, Accessible hospital.
- Connection to Country Cultural, Environmental and Heritage
- Connections to access existing assets
- Place-making principles of its place, respecting unique qualities of each location, built form response to context



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5.0 DEVELOPMENT PROPOSAL

5.1 ARCHITECTURAL DESIGN PRINCIPLES

OVERALL DESIGN PRINCIPLES

- Meaningful resonate with local context and history of place through urban form making, architectural articulation, curation of interior settings and integration with local ecologies.
- Comprehensible create intuitive way finding cues through considered planning arrangements at campus, building and departmental scale supported by colour and material selections and articulation.
- Manageable allow for the personalisation of space to meet an individual's need to attenuate noise, control daylight penetration, adjust comfort levels and configure lay outs to meet specific cultural and privacy needs.
- Facilitate access to and through the campus
 Vehicle, pedestrian, and public transport to and through the site that provides clarity and integration for users
- Connection to community and site Maintain identity of Ryde Hospital and maintain or establish linkages between new assets and existing service.
- Operational continuity and expansion –
 Facilitate positive staging and decanting solutions along with growth opportunities for priority services areas.
- Connection to country Cultural, Environmental and Heritage.
- Optimise the re-use of existing assets that retain sufficient residual life cycle.

- Future Proofing Provide efficient growth opportunities for priority service areas
- Leverage Heritage assets to frame and create high value public domain areas.

URBAN DESIGN PRINCIPLES

- Civic Characteristics Creation of street quality and ambiance of public domain;
- Urban Response engender a civic quality commensurate with a urban setting with specific reference to the immediate context.
- Cognitive working on an emotional level as hospitals are places where the full range of human emotions can be observed and experienced, from hope to despair, from joy of a newborn to grief over loss of a loved one. The challenge is to provide a positive environment where all these emotions can be experienced without negatively impacting on the facility in general.

ARCHITECTURAL DESIGN PRINCIPLES

- Consider variety of built from and open space scales on site.
- Respond to new urban hierarchy.
- Respond to the scale, materiality and architectural vernacular of the precinct which is residential and domestic in nature.

 Consider whole-of-life principles for the material selection in following categories: Acquisition (including material availability and workforce skill level) Operating Maintenance

Disposal

CLINICAL EFFICIENCY, SAFETY AND DELIVERY OF IMPROVED HEALTH SERVICES

Establish clear functional and clinical flows for staff, patients and support services within the hospital. Support a patient focussed environment.

USE OF EVIDENCE BASED DESIGN (EBD) PRINCIPLES

Access to natural light and views, incorporation of natural elements (materials and artwork, internal courtyards) with familiar and easy to navigate spaces. All, these elements combine to support the environment of "wellness" for patients, and improving recovery times.

ENVIRONMENTALLY SUSTAINABLE DESIGN (ESD)

Use of materials and construction techniques that are low VOC, low energy (in production and recurrent cost) and recyclable.

Support the concept of ESD in the reuse of as

many of the existing facilities as possible. This supports the reduce, re-use, recycle concept. However, it must be assessed against the asset condition, clinical functionality, safety, standards (AS and BCA etc.) and guidelines (AusHFG).

Area specific detailing and materials selections, always keeping local skill levels (and material availability) in mind. Apply low maintenance principles in the selection of materials and in the detailing.

WORKFORCE

Understand that there is competition for the attraction and retention of staff. As a result the facility should be designed to provide the best possible workplace.

SECURITY IN DESIGN

With a limited staff available for surveillance – the facility must have the capacity to be physically secured in one or more sections with a focus on the separation on ambulant versus 24hr services.

Materials used should be robust enough to with stand some intentional damage and be easily replaceable by local trades.



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5.0 DEVELOPMENT PROPOSAL

5.1 ARCHITECTURAL DESIGN PRINCIPLES

STANDARDISATION AND FLEXIBILITY

Modularity in form and flexibility in planning. Standardisation provides a more efficient workplace, promotes patient safety, efficiencies in construction and cost. It allows flexibility and adaptability in the use of spaces supporting changing models of care over time. Co-location of services allow changing service demands to be managed within the overall infrastructure - improving efficiency.

AGED CARE DESIGN

Promote physical functionality and independence of individuals during hospital stays, provide a safe environment.

ABORIGINAL COMMUNITY

A place that is culturally respectful, supportive of access to the health system, is personal and generates a sense of familiarity comfort and cultural safety, human in scale and is family centred through: physical and visual connection to the landscape through light, views, provision of a variety of internal and external spaces including large indoor/ outdoor spaces to cater for extended family (and extended family visitation). Easy to navigate and understand via clear circulation paths and way finding clues.

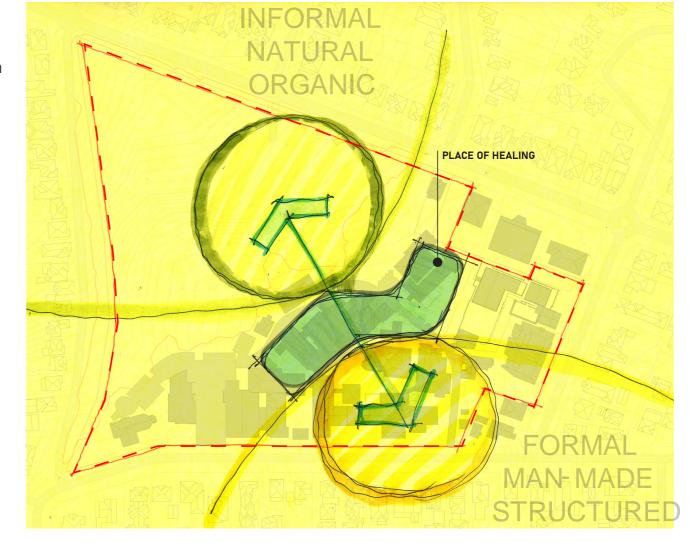
ACCESSIBILITY

For community across all capabilities – children to aged people and those that are less physically capable. Accessibility will be applied site wide including pathways and walks in accordance with the BCA and AS 1428.1

TECHNOLOGY

Define efficient and cost effective use of technology that supports innovative and a high-quality health service delivery.

Spaces to be flexible enough to cope with evolving medical equipment and IT systems.





6.1 DESIGN QUALITY

While this application and report is specific to early works and the building envelope of the proposed buildings, design quality is the core principle driving the design to date.

No EPI provisions apply to the Ryde Hospital site, however the design team is consulting with the Government Architect of New South Wales (GANSW) and have had three design panel review to date.

GANSW inputs along with our core design team partners, Hatch, Urban Planners and Cultural Consultants Bangawarra are informing how the redevelopment of the Ryde Hospital site will respond to it's urban context, it's role as a community amenity and its respect to the cultures that the community is made up of, both past and present.

Referencing the evolving design also to 'Better Placed' further strengthens how the design develops.

The design quality begins with it's early planning to inform the design that will evolve in the coming phases.



Design Principles

- O Community heart drop off and visual link to bush and Parramatta River
- Terraced Healing Gardens connecting to Blue Gum High Forest and Parramatta River
- Terraced Healing Gardens connecting to Blue Gum High Forest and Parramatta River
- Denistone Forest linking natural themes of Blue Gum High Forest to front of site
- 4 Denistone House gardens retaining and enhancing Colonial and Country themes
- Feature trees highlighting entry and exit points to site



6.2 CONNECTION TO COUNTRY

Cultural consultants Bangawarra were appointed to the design team to bring in their 'connecting to Country' experience to ensure the Ryde Hospital Redevelopment can maximise the potential outcomes that the site presents.

The site has important historical significance to the Indigenous communities of Sydney area. The site is on a prominent ridge that is an important cultural site with connections to what is now called Sydney Olympic Park, another site of cultural significance.

Bangawarra proposes six key principles in their Connection to Country strategy;

- Maximising views and connections to these important cultural sites.
- Understanding that Country is everywhere.
- To connect with Country.
- To utilise the healing qualities that Country has.
- The protection and creation of habitats.
- The utilisation of local art in the design response.

Bangawarra are currently undertaking the facilitation of community consultation to further inform the design team responses.



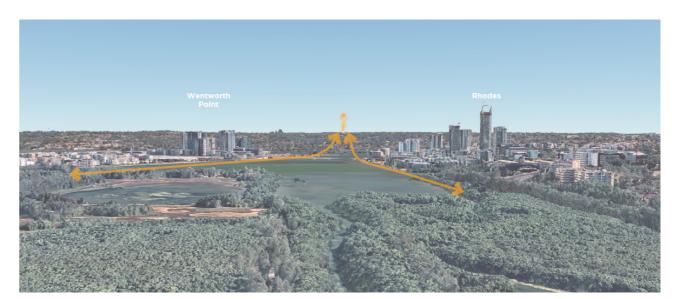


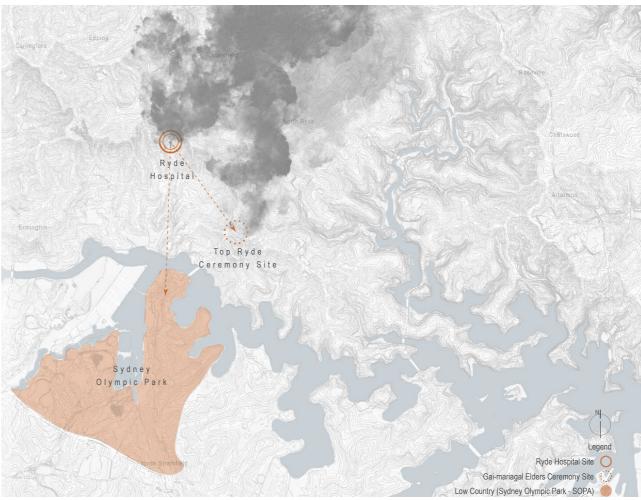












bangawarra



6.3 HEALTHY URBAN RESPONSE & PUBLIC SPACES

The following principles have been considered while developing the urban response and built form of the Ryde Hospital site to encourage and promote healthy communities:

PHYSICAL ACTIVITY

The proposed ridge-line Forest Path encourages physical activity – members of the public who may not enter a 'traditional' hospital campus are welcomed through the site to enjoy the natural environment of the Blue Gum High Forest.

The site is highly permeable, with the built form opening up to a series of open green spaces for staff, patients, and general public to utilize. The proposed terracing of the open spaces in particular creates a quality dynamic environment which invites physical activity and thoroughfare.

The site sits within a readily accessible urban zone, this encourages those who may be arriving by foot, bike, and public transport to continue to use these modes of transportation.

Footpaths within the new campus will be constructed to meet DDA standards, and as such promote physical activity.

TRANSPORT AND CONNECTIVITY

The site selection takes advantage of the existing public transport infrastructure. The existing hospital campus site is within walking distance to Denistone train station and there are bus stops directly outside the campus entry on Denistone Road.

Active transport will be encouraged by providing bicycle parking and end of trip facilities, as well as well designed, universally accessible pedestrian footpaths. Vehicular thoroughfare routes and car parking locations on campus are consolidated to encourage safe and inviting pedestrian and cyclist environments.

QUALITY EMPLOYMENT

The proposed facilities will be high quality and modern, with an array of specialized spatial typologies such as open green spaces, quiet spaces, and spaces for social interaction. As such this will provide a quality workplace with new and improved amenity for employees, as well as be an attractive location for prospective employment.

COMMUNITY SAFETY AND SECURITY
Development through Master Planning and
Feasibility phases has resulted in a built form that
is consolidated, rationalized and concise – this
reduces awkward way finding and blind corners,
and thus promotes community safety and security.

Open communal spaces to the east and west allow for improved visual connection going to and from the hospital campus, resulting in a 'many eyes' community security response.

OPEN SPACE AND NATURAL FEATURES
The open forecourt entry, with a focal point on
the existing historical Denistone House creates
a quality environment that promotes a sense of
cultural identity and place.

Open landscaped areas to east and west of the clinical services building create a sense of connectivity to the naturally occurring Blue Gum High Forest. Furthermore, the ridge-line walk and integration of the Blue Gum High Forest into the landscape design principles enhances the connection to the natural environment.

Open spaces will be designed in accordance with accessibility standards, and in conjunction with consultants to be attractive places of respite and activity, as well as easy to maintain.

SOCIAL INFRASTRUCTURE

Development of the Ryde Hospital Campus will not only refresh the existing infrastructure on site, but create a modern, state of the art facility that responds to the health needs of a diverse community, as outlined in the Ryde Hospital Clinical Services Plan.

Reuse of the existing site takes advantage of the connectivity and infrastructure that is already in place, and also provides an opportunity to create improved efficiencies in the delivery of the health service to the community

SOCIAL COHESION AND CONNECTIVITY
The proposed development will build on the site's
natural and cultural heritage thus promoting
a sense of community identity. These cultural
features will be readily accessible by the
community to encourage belonging and cohesion.

Whilst retaining heritage features such as Denistone House and the Blue Gum High Forest, creation of new built and landscaped elements which connect with the existing heritage elements in a sensitive manner, will add a new layer of social and cultural identity to the site.

ENVIRONMENT AND HEALTH

Retention of the Blue Gum High Forest, and the landscaping concept of drawing the tree canopy through to Denistone Rd entry aims to promote activated green spaces, healthy air quality and dust control.

Proximity to existing public transport hubs encourages use of public infrastructure facilities, and therefore reduces the need for car-based transport.



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6.3 HEALTHY URBAN RESPONSE & PUBLIC SPACES

A diverse arrangement of public green spaces surrounds the hospital

The internal and external public spaces aim to provide a series of calming and peaceful community spaces where individuals or groups can pause and be still, or meet and engage with one another and their surrounds.

The landscaped entry gardens provide a visual connection between the Hospital forecourt and the Blue Gum High Forest beyond. It softens and blurs the edges of the interface between the urban surrounds and the Hospital Entry.

The Healing Gardens beyond continue that connectivity and create a public link through the hospital entrance to the views of the Blue Gum High Forest. The Healing Gardens both express the six different seasons of Country and provide nodes to pause and reflect.

Design Principles

- Entry & drop off forecourt with breezeway and links to healing gardens
- Pealing Terraces expressing the six seasons of Country
- Tree top lookout providing views to significant natural elements and Parramatta River
- Upper garden terraces





Arrival Landscape

Design Principles

- 1 Feature marker tree
- Re-instate Heritage curtilage and ornamenta
- Multi- layered gardens with integrated yarning circle/s, interpretation and natural
- Open terraces to Stables building with seating and breakout spaces





Healing Gardens



6.4 BUILT FORM, URBAN DESIGN & VISUAL IMPACTS

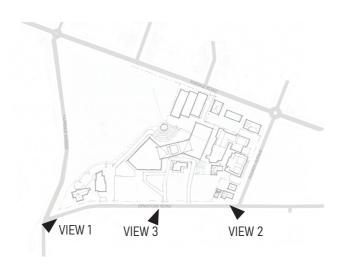
The design of the new hospital has many competing requirements such as those outlined in the GANSW presentation, Connection to Country inputs and also clinical planning that will deliver a hospital that gives the best health care to the local community in the most efficient way for staff to deliver their care. At this early stage, architectural consideration of how the building will ultimately come into reality is still at a high level concept level.

THE BUILT FORM

The master plan has demonstrated the building will be located behind the existing heritage buildings of Denistone House and The Stables. The buildings form will follow the existing ridge line allowing the hospital inpatient bedrooms to maximise the views towards Ryde, and importantly out over the Blue Gum High Forest towards Olympic Park. The building will respond to the ridge line and become a community focused amenity. Locating the building to the centre of the developable area of the site creates large open spaces to Denistone Road an also means the bulk of the hospital is also set back from Ryedale Road.

The height of building is over several floors and will be articulated into three masses, two IPU wings either side of a shared common link building. The link will house shared services between the IPU levels and will also allow for views from the Denistone House side of the site, through and out towards the Blue Gum High Forest to the south of the site.

With its generous set backs from the surrounding streets and working with the natural ridge line of the site that allows the building to have lower ground levels and therefore reducing the height of the building from Denistone Road and Fourth Avenue, preliminary massing studies and sketches indicate the building will become a community focal point, but does not overwhelm the neighbouring residential context.





VIEW 1: DENISTONE ROAD SOUTH



VIEW 2: DENISTONE ROAD NORTH



VIEW 3: DENISTONE ROAD TOWARDS MAIN ENTRY

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6.5 MULTI-DECK CAR PARK LOCATION OPTIONS

The construction of Multi-Deck Car Park (MDCP) is anticipated to be incorporated as part of the Main Works. The location of the proposed MDCP was tested across a number of locations on the site including:

OPTION 1

Adjacent the Ryedale Road frontage. In this location vehicular access would be from Ryedale Road, and would utilise the shared access to the facility Service Yard. Pedestrian access to the hospital would be directly into the Lower Ground Floor Level and adjacent to the main vertical transport cores. The following considerations supported the adoption of this option:

- The location has optimal proximity to the hospital, specifically the main vertical circulation core.
- ii. The site location is not suited to clinical development due to its disconnection from the internal circulation network of the main hospital; and the development constraints posed by the APZ.
- iii. Access off Ryedale Road provides creates a distinct and seperate logistics entry, away from the main entrance to the hospital.

Development would be feasible during the first phase of the campus re-development

OPTION 2

At the southern end of the site between the existing Ambulance station and the proposed hospital. Vehicular access would be from Denistone Road, while pedestrian access to the hospital entry would need to be around the facility foot-print to the East or to the West in order to access the Main Entry. The following considerations negated this option:

- i. This location precluded the future expansion strategy in a location that would be co-located with the proposed Emergency Department.
- ii. It presented potentially the longest travel distance back to the hospital Main Entry.
- iii. Development would not be feasible until the last phase of the campus re-development.

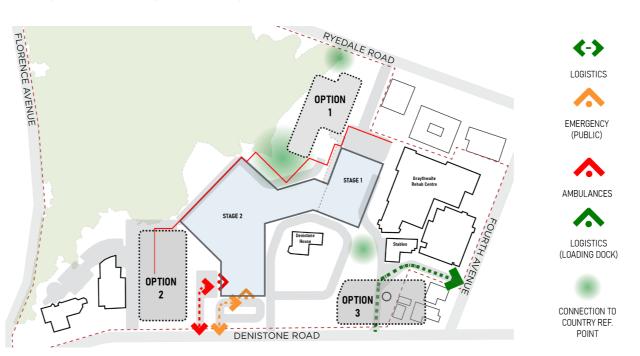
OPTION 3

In front of Denistone House. This option provided for vehicular access off Denistone Road and close pedestrian access to the proposed Main Entry. The following considerations negated this option:

- i. This location was not consistent with the project's Connection to Country strategy and the principle of re-presenting Denistone House to Denistone Road through the reintroduction of a landscaped forecourt.
- ii. Development would not be feasible until the last phase of the campus re-development, meaning that there would be additional car parking demand in the surrounding streets until the completion of the car park.

On balance, the project team determined that Option 1 represented the best outcome when considering all the competing factors. The refinement of the shape and footprint of the carpark at the location of Option 1 is being designed to provide the required on-site car parking and thereby reducing demand on the surrounding streets. The design of the car park will look to minimise its' ecological footprint and impact, as well as reduce view impacts for hospital users, local residents and the surrounding community alike. The location of the car park at Option 1 is considerate of the project's Connection to Country strategy and will not impede the re-presentation of Denistone House and landscaped entry forcourt. The location will also allow for a seperate and distinct logistics access, while not impeding possible future expansion of the hospital.

Option 1 will continue to be refined with stakeholder engagement, traffic demand data and sustainability strategies.





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6.6 SITE ACCESS STRATEGY

The site access strategy has been developed to follow modern clinical requirements for a hospital development. These require clear, defined, and separate entrances dependant on their functionality.

NSW Ambulance requires a dedicated access to the Emergency Department, which has been provided from Denistone Road.

The Emergency Department is further served by a separate public vehicle entrance from Denistone Road. Parking to this area is also considered.

The main public hospital access from Denistone Road will be designed to maximise view of Denistone House, The Stables and the new hospital entrance. A public car park is envisaged within the public realm.

Logistic vehicles entrance of Denistone Road will allow for service vehicles to access existing infrastructure on site. The main logistics entrance off Ryedale Road will be created. The main staff car park is also separately accessed from Ryedale Road.

Fire access and service vehicles can access the southern side of the building as required in a limited capacity.

Clear way finding allows for easy pedestrian access as well as the introduction of public walkways from Florence Avenue through to Ryedale Road,





6.7 FACADE DESIGN

Material choice and articulation is still in its preliminary stages of development. Conceptual ideas are being explored.



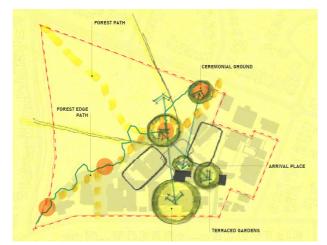
6.8 ARTICULATION

PERMEABILITY

A series of permeable sight lines from the visitor entrance adjacent to Denistone House draw the visitor though the site and connect the residential grid to flow through the main building to the healing gardens and views of the blue gum forest and towards the city.

A series of interconnected green spaces leading from Denistone Road to the facility, to Ryedale road where the community can interface with the facility and enliven the outdoor spaces.

A series of sky-walks and platforms allow for an ambling pedestrian walkway traversing the ridgeline and allow for open connectivity between Florence Avenue, the Car Park, and Ryedale Road.



LAYERING OF SPACES

The layering of spaces, both indoor and outdoor, assists in way finding and creates excitement and intrigue.

A sense of connectedness is achieved by ensuring alignment of key spaces, views through and continuity of materiality and landscaping.

FRAMING VIEWS

Views to the surrounding natural context over the BGHF and towards the city and Parramatta are accentuated by capturing and framing.

Sky-walks allow for an elemental connection to the views and the forest beyond.

Views to the sky are equally important in giving a sense of a openness and natural light.

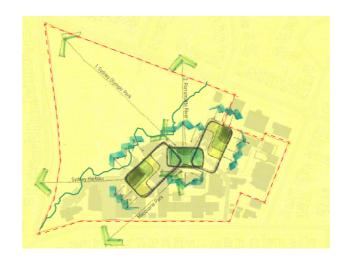
COURTYARDS

The courtyards are considered both volumes and nodes to connectivity in themselves.

The use of textured screening will differentiate the courtyards within the overall composition of the site

This screening creates privacy, and moments of intrigue and excitement.







6.9 ENVIRONMENTAL AMENITY

The fundamental site connection principles that include reference to the natural and cultural history of the site are intended to extend through to and inform the Environmental Amenity objectives and outcomes for the facility. These strategies will support both Biophilic and salutogenic outcomes that are intended to promote and maintain the physical and mental well-being of the facility users. The facility users include consumers of the clinical services, their family and friends, workforce and incidental users or those members of the community who are drawn to the site by virtue of amenity provisions such as walking trails that traverse the site and retail concessions.

VISUAL AMENITY

The existing topography of the site including a central plateau on what is a prominent ridge in the suburbs of northern Sydney affords long views to the city of Sydney, Olympic Park and the Parramatta River. Meanwhile district views are available to the surrounding residential neighbourhood, and immediate views over the Blue Gum High Forest.

The Concept Design will seek to leverage these views particularly to the overnight patient accommodation and workforce work-point and amenity areas.

At the ground plane the Concept Design will focus on creating a series of activated green amenity places that are both accessible from the facility and provide visual points of interest.



SOLAR ACCESS

The Concept Design proposes a facility form solution that straddles and is elongated along the site ridge line described earlier. Quite apart from the comfortable integration of the built form with the topography, this strategy means that the long axis of the facility including the Inpatient Units is predominantly North facing.

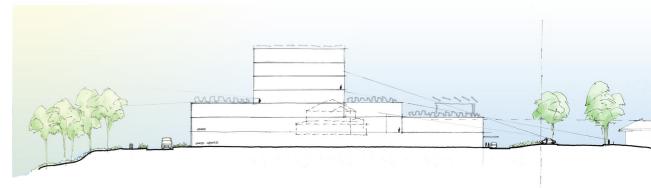
The facility orientation will be further refined through the design development process with a view to optimising:

- i) Solar access to all orientations
- Passive sustainability opportunities, while balancing access to views with:
 - a) Solar gain minimisation; and
 - b) Solar glare minimisation

NATURAL DAYLIGHT

The project's connection to country strategy includes a focus on the visual permeability of the envelope. Through the development of the Concept Design the project will explore opportunities to visually connect the formality of the Denistone House forecourt and gardens through the central amenity area with the Blue Gum High Forest.

A key objective of the project will be to provide access to natural daylight to all habitable spaces within the facility. All over-night accommodation will have access to daylight and to views as described previously. Similarly, early 'block and stack' concepts have given consideration to optimising floor-plates with a view to maximising access to natural daylight and reducing the reliance on artificial lighting.

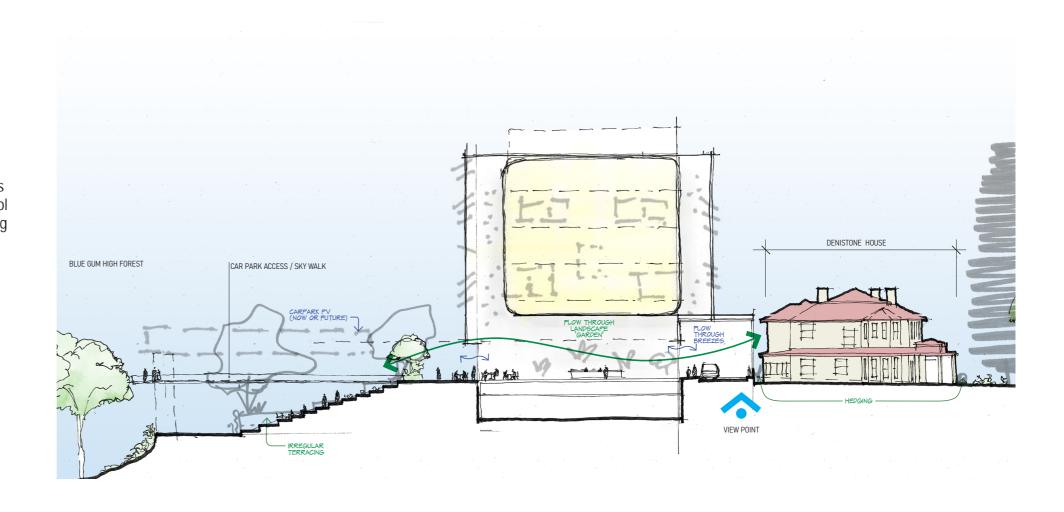




6.9 ENVIRONMENTAL AMENITY

VENTILATION

The nature of any clinical environment requires strict management of ventilation strategies in accordance with contemporary engineering guidelines. That said the trend that is to be embraced by the project will see a greater emphasis on the utilisation of increasingly more air-tight building envelopes supported by more frequent stale air expulsion and supply of fresh air; that is, a greater number of fresh air changes per hour. This strategy supports infection control management and improved well-being of building occupants.





6.9 ENVIRONMENTAL AMENITY

VISUAL LOSS & OVERSHADOWING

With the position of the building set well back from Denistone Road, Fourth Avenue and Ryedale Road, views from neighbouring properties will not significantly be affected by massing or views of the residential context of the area. The creation of new public spaces such as the area in front of Denistone House will enhance the local street scape.

Over shadowing occurs in limited areas and hours over the course of the year as demonstrated in the diagrams following.

Refer to Section 7 of this report for additional overshadowing drawings.



SHADOW DIAGRAM - 21 DECEMBER 3PM



SHADOW DIAGRAM - 21 JUNE 3PM



SHADOW DIAGRAM - 21 DECEMBER 12PM



SHADOW DIAGRAM - 21 JUNE 12PM



SHADOW DIAGRAM - 21 DECEMBER 9AM



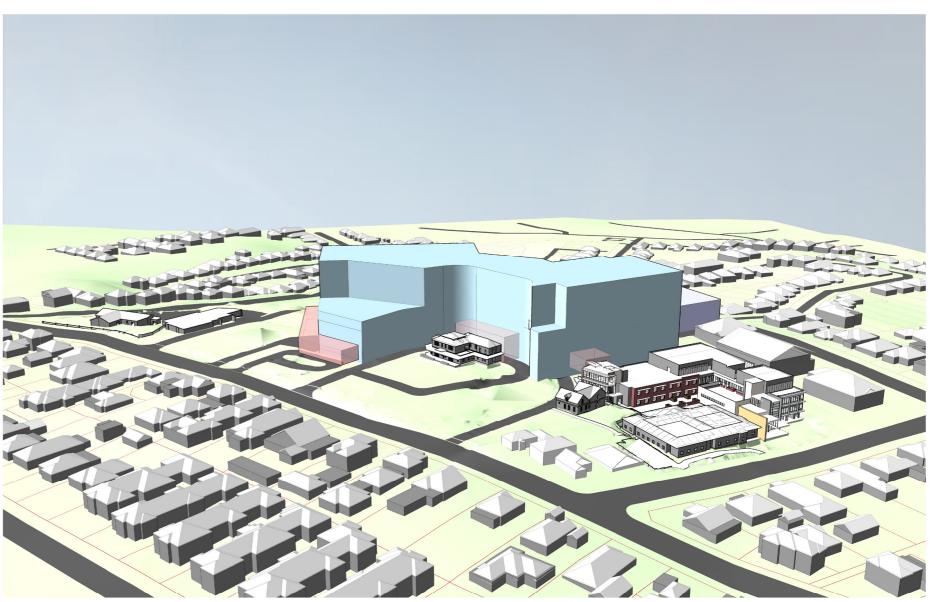
SHADOW DIAGRAM - 21 JUNE 9AM



RYDE HOSPITAL REDEVELOPMENT | SSDA 1 DESIGN REPORT | AUGUST 2022

7.0 SSDA DRAWING DOCUMENTATION

The current SSDA application proposes a maximum built form envelope that will accommodate the proposed redevelopment of the Ryde Hospital on the current hospital campus on Denistone Road, Denistone.



PROPOSED BUILDING ENVELOPE



7.1 SSDA DESIGN RATIONALE SUMMARY

The proposed maximum built form envelope is based on the evolving Concept Design for the Ryde Hospital redevelopment and has been developed having regard to:

- The Clinical Services Plan and the proposed accommodation scope arising therefrom.
- Adoption of human centred strategies including universal and safe access to support the creation of salutogenic spaces and places where the well-being of the facility occupants is brought into focus
- Development of a Connection to Country Strategy that informs a biophilic response
- Development of a series of project design response principles
- A detailed Site Assessment and Analysis process
- Technical and authority compliance criteria
- A development implementation strategy that supports operational continuity with minimal service disruption.

The proposed envelope described herein is NOT intended to represent the proposed building mass, nor the proposed built form, but rather should be considered as the output maximum built form envelope derived from the point in time evolution of the Concept Design. That is to say that the Concept Design is subject to further analysis and resolution which will output amongst other elements:

- The facility planning solution
- The built form
- Edge interfaces and connections to the site and surrounding neighbourhood
- The architectural design response
- Materiality

SITE ANALYSIS / OPPORTUNITIES AND CONSTRAINTS

A detailed site analysis process identified a number of influencing factors (opportunities and constrains) that played a fundamental role in placement, shaping and massing of the proposed development:

- Blue Gum High Forest occupies more than half of the hospital site and offers a great visual outlook. It occupies area of very steep terrain (site has a level different of over 50m from north to south). The challenges associated with the BGHF are:
 - Bushfire danger associated with the quantum of and density of the ForestBGHF is habitat for number of species of
 - flora and fauna, with great ecological value.
- Topography current hospital campus is located over the relatively flat plateau which is part of a continuous ridge, running east west across the precinct. BGHF line is very closely aligned with the ridge drop, probably associated with the challenges of developing over the steep terrain.
- Current Hospital campus is product of multiple development over the years, taking predominantly 1 to 2-level built form, and occupying almost all the available plateau.

Decanting and connectivity, while maintaining the operational facility has influenced location, staging and massing of the proposed envelope.

• State-significant Heritage buildings (Denistone House and The Stables) are part of the current campus and due to its colonial heritage are located on top of the hill/plateau as well as in the centre of the site, challenging the location of the new-build as well as its relationship to the heritage building in terms of bulk and scale.



RYDE HOSPITAL REDEVELOPMENT | SSDA 1 DESIGN REPORT | AUGUST 2022 41

7.1 SSDA DESIGN RATIONALE SUMMARY

IMPACTS AND SOLUTIONS FORM SITE ANALYSIS

Retention of habitat and reduction of bushfire threat to the Hospital campus, through close collaboration with the bushfire and ecological consultants, resulted in establishment of an Asset Protection Zone in which some of the undergrowth is to be removed, leaving the canopy trees in place. This reduction in the fire load while retaining the habitat for the various species, established a line of acceptable heat load for the building without onerous requirements for the building envelope.

Development Staging as well as locations of Heritage Buildings (Denistone House in particular) have driven the built form split into 2 clearly identifiable clinical program forms connected by a linking element.

STRATEGIES AND DESIGN PRINCIPLES

- Strategy to reduce the building footprint to enable increased public space.
- Creation of a network of public spaces that contribute back to the community
 - Campus as part of the precinct network (Green spaces and Pedestrian permeability)
 - Provision of accessible green/open spaces for all users of the hospital and members of the community
- Readdress Denistone House to the street / Establishment of Denistone Gardens.
- Restore, regenerate, and protect Blue Gum High

Forest

- Connection with Country principles:
 - Importance of the ridge fires as identification to meetings taken place translated into establishment of a "beacon" concept. Link part of the massing acting as a "meeting place" and continuing the stories and reinforcing the beacon.
 - Visual Connectivity from the building to the Country, establishing a vertical component to the "meeting place".
 - Visual connectivity between significant cultural sites and inclusion of a number of culturally significant locations on the site as part of network of public spaces and linked walking trails.

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7.1 SSDA DESIGN RATIONALE SUMMARY

GROSS FLOOR AREA

The building envelope has been developed to respond to the clinical areas that the proposed hospital will be required to deliver clinical services to the Ryde and greater community and taking into consideration the site restraints and opportunities, which include:

- The extent of the protected Blue Gum High Forest which may be developed into a better public amenity with access developed after the considered clearing of undergrowth.
- The steep topography to the southern portion of the site.
- The location of the two Heritage listed buildings central to the site; Denistone House and The Stables.
- The requirement to retain the contemporary clinical buildings on site including the Graythwaite, Community Mental Health and the NSW Ambulance Station.
- The requirement to stage the construction of the new hospital to allow for the decanting and continuation of clinical services within a live hospital environment.
- The desire to create better public amenity with the introduction of gardens and public spaces to better inform the building to its residential neighbourhood and the creation of a better streetscape.

HEIGHT

The aforementioned requirements of the building envelope has informed the building height as the restraints and opportunities of the site have led to a compact building area on what is a large site.

Clinical functionality and adjacencies have led to the conceptual planning that have responded to this. The building's location on the site responds to the topography and has allowed for the development of lower levels relative to the existing hospital.

STREETSCAPE AND SETBACK

Driving architectural design principles to be achieved is the creation of a modern community facility that responds to its neighbourhood.

While there are no prescribed setbacks, having significant setbacks for the clinical service building as driven by the restraints and opportunities earlier identified has allowed for the creation of green public spaces.

This allows for the height of the building not to impact as significantly onto its neighbours by height and bulk, reducing overlook and the creation of better privacy.

The multi-deck car park is setback from Ryedale Road and responds to the sloping topography of the site.

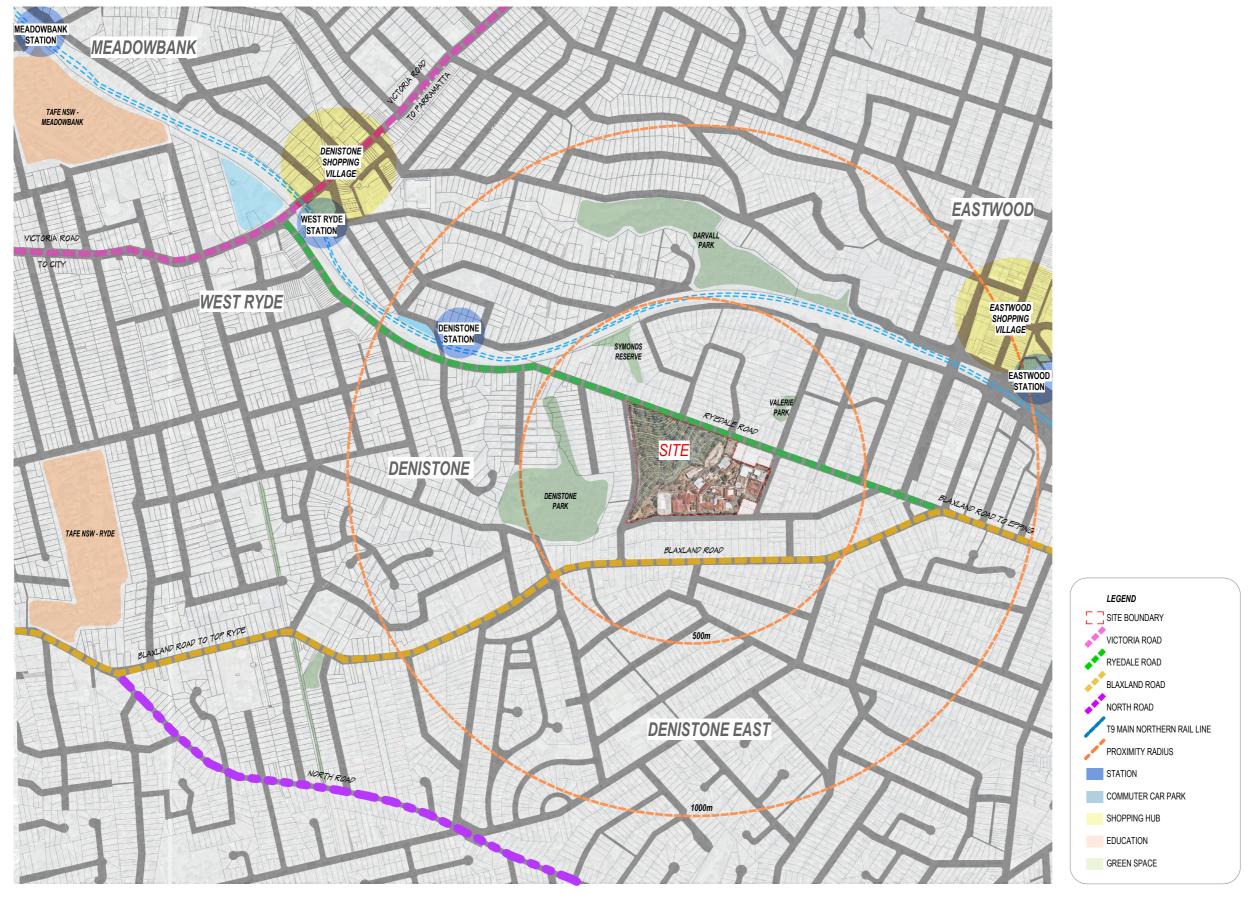
SUMMARY OF GROSS FLOOR AREA AND HEIGHT

The proposed building envelope has a maximum height of 39.5 meters, with a maximum RL of 136.50 and a minimum RL of 97.0 at lower ground.

The proposed envelope for the multi-deck car park has a maximum height of 24.9 meters, with a maximum RL of 116.2, and a minimum RL 91.3.

This approval is seeking approval for the following maximum Gross Floor Areas:
Acute Services Building: 40,000m²
Multi-Deck Car Park: 15,000m²







 RYDE HOSPITAL REDEVELOPMENT

 DATE: 1609/2022 5:38:01 PM

Project Number: 10520 Scale 1:5000 Date 1608/2022 Drawing Number: RHR-ARC-DR-SSD1_001 Rev: 6













- 1 PRIVATE MEDICAL CENTRE
- 2 PRIVATE CAR PARKING
- 3 PRIVATE DIAGNOSTIC IMAGING
- 4 PRIVATE MEDICAL CENTRE
- 5 GRAYTHWAITE REHABILITATION CENTRE
- 6 EMERGENCY DEPARTMENT
- 7 PRIVATE RESIDENCES
- 8 BLUE GUM HIGH FOREST (PRIVATE RESIDENCES)
- 9 NSW AMBULANCES
- 10 BLUE GUM HIGH FOREST
- 11 DENISTONE PARK
- 12 VALERIE PARK
- 13 EARLY CHILDHOOD CENTRE
- 14 PRIMARY SCHOOL
- 15 SYMOND'S RESERVE
- (16) DENISTONE STRAIN STATION





RYDE HOSPITAL REDEVELOPMENT
Project Number 10520 Scale 12000 Date 1608/2022 Drawing Number: RHRARC-DR-SSD1_002 Rev. 6

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CONCEPT PROPOSAL - SITE ANALYSIS PLAN

RYDE HOSPITAL REDEVELOPMENT

Date 1008/2014 12000 Date 1608/2022 Drawing Number: RHR-ARC-DR-SSD1_003 Rev: 6













LEGEND SITE BOUNDARY GREEN SPACE EPBC ACT - EEC ALIGNMENT AS CONFIRMED BY ECOLOGICAL AUSTRALIA EXTENT OF MANAGED APZ



RYDE HOSPITAL REDEVELOPMENT















SITE BOUNDARY

EPBC ACT - EEC ALIGNMENT AS CONFIRMED BY ECOLOGICAL AUSTRALIA

EXTENT OF MANAGED APZ

Description
APPLE COTTAGE CHILD CARE
OPERATING SUITE
CARDIOLOGY UNIT
CORONARY CARE UNIT (CCU)
HIGH DEPENDENCY UNIT (HDU)
PERIOPERATIVE UNIT
FRESH PLUS CAFÉ
ADMISSIONS
EXECUTIVE OFFICE
MEDICAL RECORDS (HIS)
WORKFORCE
RECEPTION (MAIN)
STERILISING
ELCA (EDUCATION, LIBRARY & CONFERENCE AREA
EMERGENCY DEPARTMENT
NURSING ADMINISTRATION
OUTPATIENTS CLINIC
PATHOLOGY
PHARMACY
RADIOLOGY
PHARMACY
RADIOLOGY
SECURITY
WARDSPERSONS
MENTAL HEALTH
ANTE NATAL CLINIC
STABLES BUILDING
MATERNITY
PATIENT TRANSIT LOUNGE
WARD 6
WARD 7 LEGEND PATIENT TRANSIT LOUNGE
WARD 6
WARD 7
WARD 8
DENISTONE HOUSE
DIABETES SERVICE
DIETETICS
INFORMATION TECHNOLOGY
JM.O. TRAINING
OCCUPATIONAL THERAPY
PODIATRY
SPEECH PATHOLOGY
SOCIAL WORK
CLEANERS
FOOD SERVICES
PHYSIOTHERAPY
STORES
PATIENT GYM
CHAPEL PATIENT CYM
CHAPEL
EMPLOYEE ASSISTANCE
VMO LOUNGE
MORTUARY
ENGINEERING
AGED CARE + REHABILITATION
CHATTERY / STAFF DINING
STAFF ACCOMMODATION
CAMELIA COTTAGE - Family Care Centre
GRAYTHWAITE REHAB CENTRE



RYDE HOSPITAL REDEVELOPMENT















SITE BOUNDARY

EPBC ACT - EEC ALIGNMENT AS CONFIRMED BY ECOLOGICAL AUSTRALIA

EXTENT OF MANAGED APZ

Concept Proposal - Stage 1 Construction

RYDE HOSPITAL REDEVELOPMENT





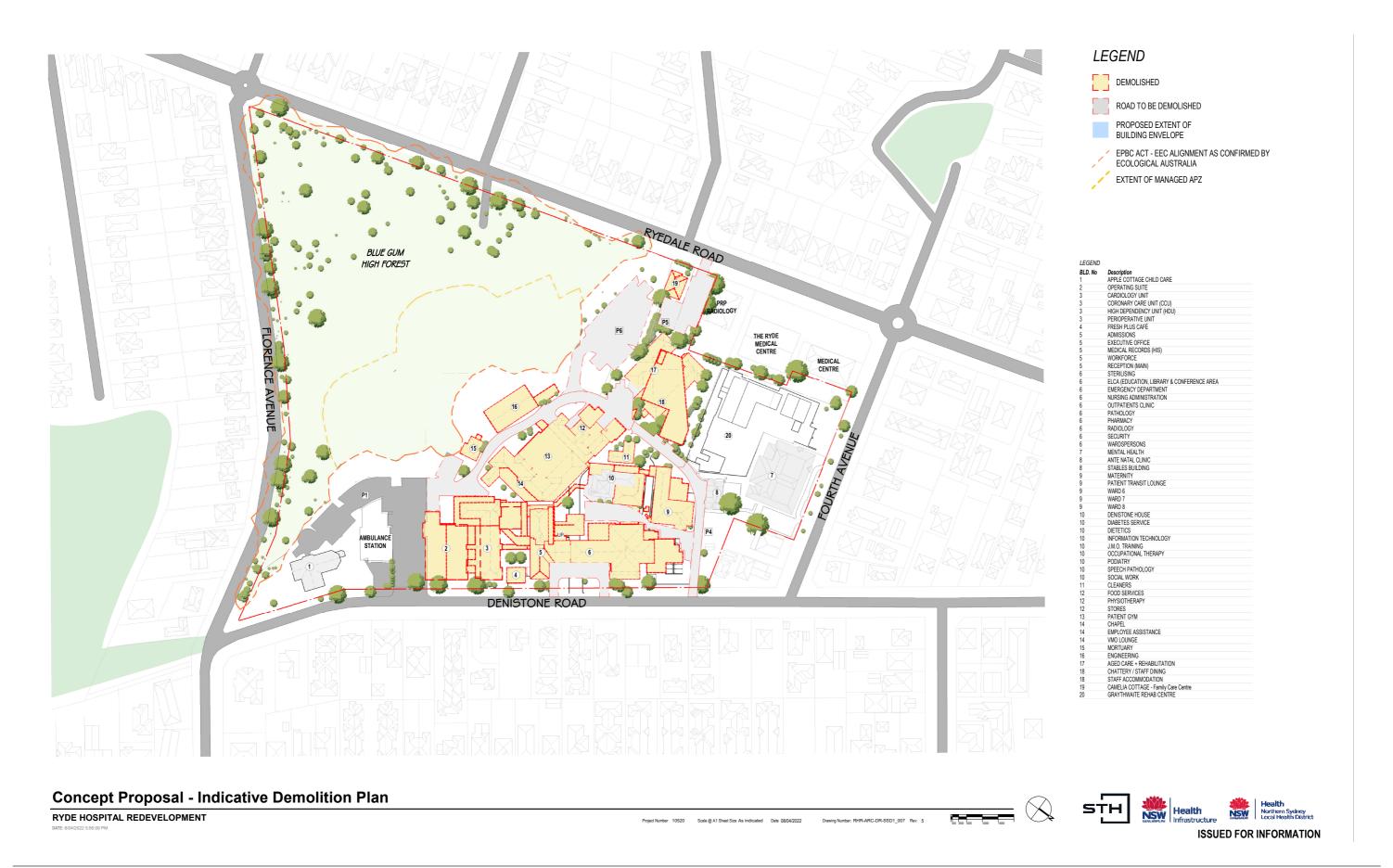


















ROAD

PROPOSED EXTENT OF BUILDING ENVELOPE

PROPOSED EXTENT ENVELOPE OF MDCP

PROPOSED EXTENT OF LINKWAYS TO EXISTING BUILDINGS

EPBC ACT - EEC ALIGNMENT AS CONFIRMED BY ECOLOGICAL AUSTRALIA

EXTENT OF MANAGED APZ

10KW APZ OFFSET

LEGEND

BLD. No
1 APPLE COTTAGE CHILD CARE
2 OPERATING SUITE
3 CARDIOLOGY UNIT
3 CORONARY CARE UNIT (COU)
4 HIGH DEPENDENCY UNIT (HDU)
5 PERIOPERATIVE UNIT
6 FRESH PLUS CAFE
ADMISSIONS
EXECUTIVE OFFICE
MEDICAL RECORDS (HIS)
WORKFORCE
RECEPTION (MAIN)
STERILISING
ELCA (EDUCATION, LIBRARY & CONFERENCE AREA
EMERCENCY DEPARTMENT
NURSING ADMINISTRATION
OUTPATIENTS OF NURS. EMERGENCY DEPARTMENT NURSING ADMINISTRATION OUTPATIENTS CLINIC PATHOLOGY OUIPAILENTS CLINIC
PATHOLOGY
PHARMACY
RADIOLOGY
SECURITY
WARDSPERSONS
MENTAL HEALTH
ANTE NATAL CLINIC
STABLES BUILDING
MATERNITY
PATIENT TRANSIT LOUNGE
WARD 6
WARD 6
WARD 7
WARD 8
DENISTONE HOUSE
DIABETES SERVICE
DIETETICS
INFORMATION TECHNOLOGY
J.M.O. TRAINING
OCCUPATIONAL HERAPY
PODUATRY
SPEECH PATHOLOGY
SOCIAL WORK
CLEANERS
FOOD SERVICES
PHYSIOTHERAPY
STORES
PATIENT GYM
CHAPPL
EMPLOYER ASSISTANCE PATIENT CYM
CHAPEL
EMPLOYEE ASSISTANCE
VIAL LOUNGE
WORTUARY
ENGINEERING
AGED CARE - REHABILITATION
CHATTERY / STAFF DINING
STAFF ACCOMMODATION
CAMELIA COTTAGE - Family Care Centre
GRAYTHWAITE REHAB CENTRE

Concept Proposal - Proposed Site Layout Plan

RYDE HOSPITAL REDEVELOPMENT

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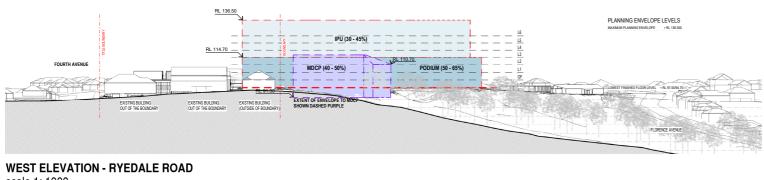


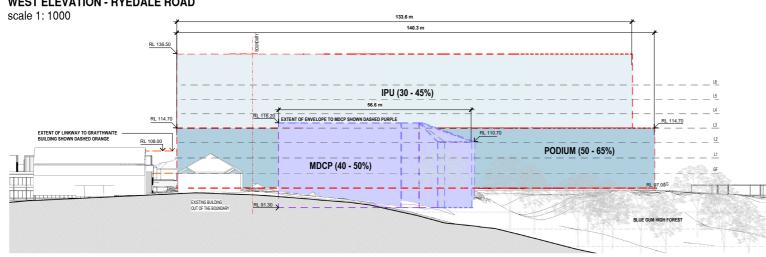




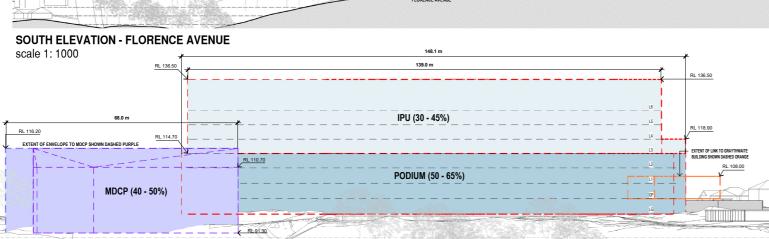








PLANNING ENVELOPE LEVELS RL 91.30



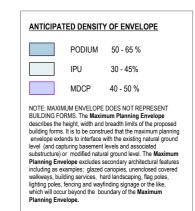
SOUTH ELEVATION - FLORENCE AVENUE _ CALLOUT

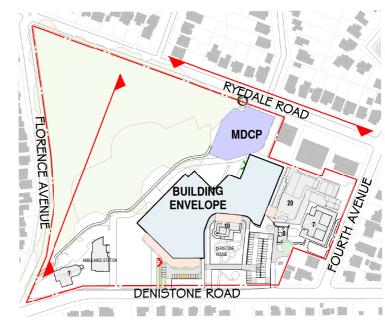
WEST ELEVATION - RYEDALE ROAD _ CALLOUT

scale 1:500

Concept Proposal - Proposed Envelope / Indicative Massing Elevations - sheet 1

RYDE HOSPITAL REDEVELOPMENT





KEYPLAN



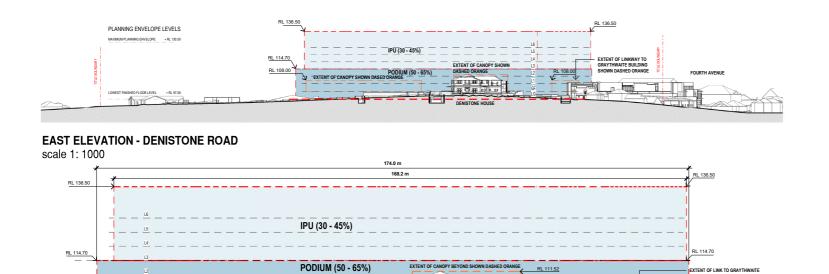






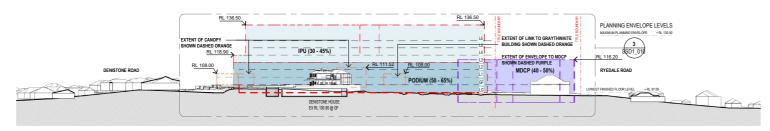






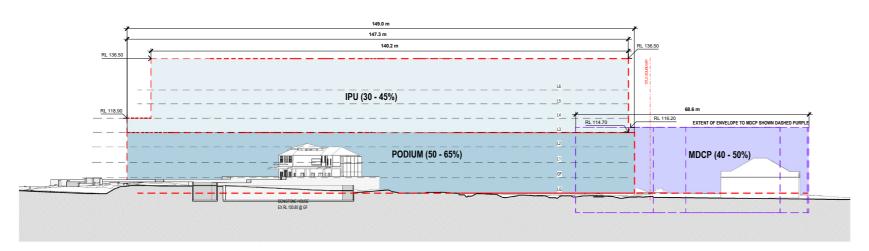
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EAST ELEVATION - DENISTONE ROAD _ CALLOUT scale 1:500



NORTH ELEVATION - FOURTH AVENUE

scale 1: 1000



NORTH ELEVATION - FOURTH AVENUE _ CALLOUT

Concept Proposal - Proposed Envelope / Indicative Massing Elevations - sheet 2

RYDE HOSPITAL REDEVELOPMENT

FLORENCE AVENUE

KEYPLAN

A STATE





ANTICIPATED DENSITY OF ENVELOPE PODIUM 50 - 65 %

MDCP

MDCP

BUILDING

ENVELOPE

DENISTONE ROAD

30 - 45%

40 - 50 %

NOTE: MAXIMUM ENVELOPE DOES NOT REPRESENT BUILDING FORMS. The Maximum Planning Envelope describes the height, width and breadth limits of the proposed building forms. It is to be construed that the maximum planning envelope extends to interface with the existing natural ground level (and capturing basement levels and associated the proposed of the

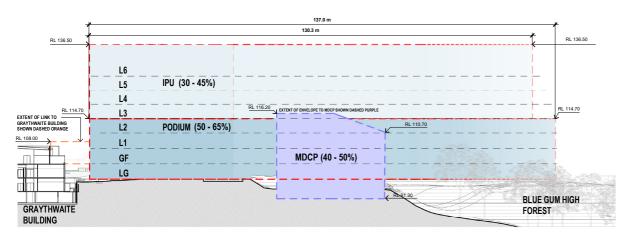
substructure) or mounter natural ground reven. The Maznica Planning Envelope excludes secondary architectural features including as examples; glazed canopies, unenclosed covered walkways, building services, hard landscaping, flag poles, lighting poles, fencing and wayfinding signage or the like, which will occur beyond the boundary of the Maximum Planning Exception.



ISSUED FOR INFORMATION

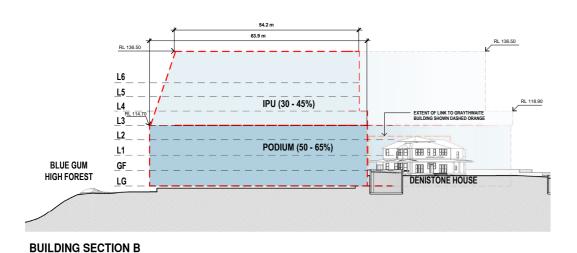


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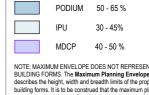
BUILDING SECTION A

scale 1: 250



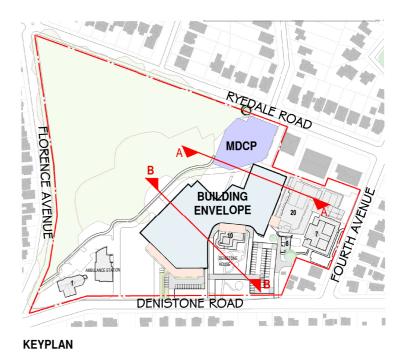
Concept Proposal - Proposed Envelope / Indicative Massing Sections

RYDE HOSPITAL REDEVELOPMENT
DATE: 8/04/2022 5:58:50 PM



ANTICIPATED DENSITY OF ENVELOPE

NOTE: MAXIMUM ENVELOPE DOES NOT REPRESENT BUILDING FORMS. The Maximum Planning Envelope describes the height, width and breadth limits of the proposed building forms. It is to be construed that the maximum planning envelope extends to interface with the existing natural ground level (and capturing basement levels and associated substructure) or modified natural ground level. The Maximum Planning Envelope excludes secondary architectural features including as examples: glazed canopies, unendosed covered walkways, building services, hard landscaping, flag poles, lighting poles, fencing and wayfinding signage or the like, which will occur beyond the boundary of the Maximum Planning Envelope.



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Concept Proposal - Shadow Diagrams - December

RYDE HOSPITAL REDEVELOPMENT

Project Number 10520 Scale @ A1 Sheet Size 1 : 2500 Date 08/04/2022 Drawing Number: RHR-ARC-DR-SSD1_012 Rev: 6



















7 Shadow Diagram_21 June 3pm SCALE: 1: 2500









Concept Proposal - Shadow Diagrams - June

RYDE HOSPITAL REDEVELOPMENT









7.2 EARLY WORKS DRAWINGS

The proposed Early Works have been identified to enable the site to be prepared for the first stage of the new build. These works will be located to the western side of the site, behind the Building (B20)

The Early Works have several parts to it.

- 1. Decant existing services located in the CAReS Building (B17), The Chattery (B18), and The Cleaner's Building (B11) into other buildings within the campus or into temporary accommodation such as port-a-cabins.
- 2. Site establishment including access from Ryedale Road.
- 3. The demolition of the CAReS (B17), The Chattery (B18) and the Cleaner's Building (B11).
- 4. Clearing of the site.
- 5. In-ground services relocated or terminated.
- 6. Initial bulk excavations for the future stage one build of the new hospital.

The Early Works allows for the first part of the staged redevelopment of the site while limiting disruption of clinical services within the live hospital redevelopment.

This first early works body of works allows for a staged development of the site by creating a 'empty chair' within the site. The main works will require two main building stages with the first occurring in this 'empty chair'. Once this first stage of the building is completed, decanting of services from the remaining buildings commence, locating them in stage one of the building.

This then allows demolition and site clearance of a number of buildings with the exception of the theatres, emergency department and medical imaging which will remain in operation until the second stage of the building is completed.

Once all services are located within the new clinical services building, final demolition and site landscaping will be completed.



S S **BLUE GUM HIGH FOREST** LOT 11 NEWENT PROPERTY E-134 M

LEGEND

BUILDINGS TO BE DEMOLISHED

STAGE 1 WORKS EXTENTS

NEW WORKS - ROAD

INDICATIVE STAGE 1 HOARDING LINE

SITE BOUNDARY

ROAD TO BE DEMOLISHED

EXISTING BUILDINGS

***** EXISTING ELECTRICAL SERVICES AS PER ELEC. ENG.'S DRAWINGS

EXISTING STORMWATER SERVICES AS PER HYD ENG.'S DRAWINGS

EXISTING STORMWATER SERVICES TO BE DEMOLISHED AS PER CIVIL FING 'S DRAWINGS

TEMPORARY SHORING WALL AS PER CIVIL ENG.'S DRAWINGS

EXTENT OF EARTHWORKS AS PER CIVIL ENG.'S DRAWINGS

EXTENT OF SEDIMENT FENCE AS PER CIVIL ENG.'S DRAWINGS

EXTENT OF SEDIMENT BASIN AS PER CIVIL ENG.'S DRAWINGS

STORMWATER OVERLAND FLOW AS PER CIVIL ENG.'S DRAWINGS

EPBC ACT - EEC ALIGNMENT AS CONFIRMED BY ECOLOGICAL AUSTRALIA

EXTENT OF MANAGED APZ

PUBLIC EMERGENCY

MAIN ENTRY

AMBULANCE

LOGISTICS

LEGEND			
BLD. No	Description		
1	APPLE COTTAGE CHILD CARE	9	WARD 6
2	OPERATING SUITE	9	WARD 7
3	CARDIOLOGY UNIT	9	WARD 8
3	CORONARY CARE UNIT (CCU)	10	DENISTONE HOUSE
3	HIGH DEPENDENCY UNIT (HDU)	10	DIABETES SERVICE
3	PERIOPERATIVE UNIT	10	DIETETICS
4	FRESH PLUS CAFÉ	10	INFORMATION TECHNOLOGY
5	ADMISSIONS	10	J.M.O. TRAINING
5	EXECUTIVE OFFICE	10	OCCUPATIONAL THERAPY
5	MEDICAL RECORDS (HIS)	10	PODIATRY
5	WORKFORCE	10	SPEECH PATHOLOGY
5	RECEPTION (MAIN)	10	SOCIAL WORK
6	STERILISING	11	CLEANERS
6	EDUCATION	12	FOOD SERVICES
6	EMERGENCY DEPARTMENT	12	PHYSIOTHERAPY
6	NURSING ADMINISTRATION	12	STORES
6	OUTPATIENTS CLINIC	13	PATIENT GYM
6	PATHOLOGY	14	CHAPEL
6	PHARMACY	14	EMPLOYEE ASSISTANCE
6	RADIOLOGY	14	VMO LOUNGE
6	SECURITY	15	MORTUARY
6	WARDSPERSONS	16	ENGINEERING
7	MENTAL HEALTH	17	AGED CARE + REHABILITATION
8	ANTE NATAL CLINIC	18	CHATTERY / STAFF DINING
8	STABLES BUILDING	18	STAFF ACCOMMODATION
9	MATERNITY	19	CAMELIA COTTAGE - Family Care Centre
9	PATIENT TRANSIT LOUNGE	20	GRAYTHWAITE REHAB CENTRE

 ${}^*\text{Note:}$ Termination of inground building services and augmentation of utilities as required



Drawing Number: RHR-ARC-DR-SSDA S1 001 Rev: 7



Health Infrastructure



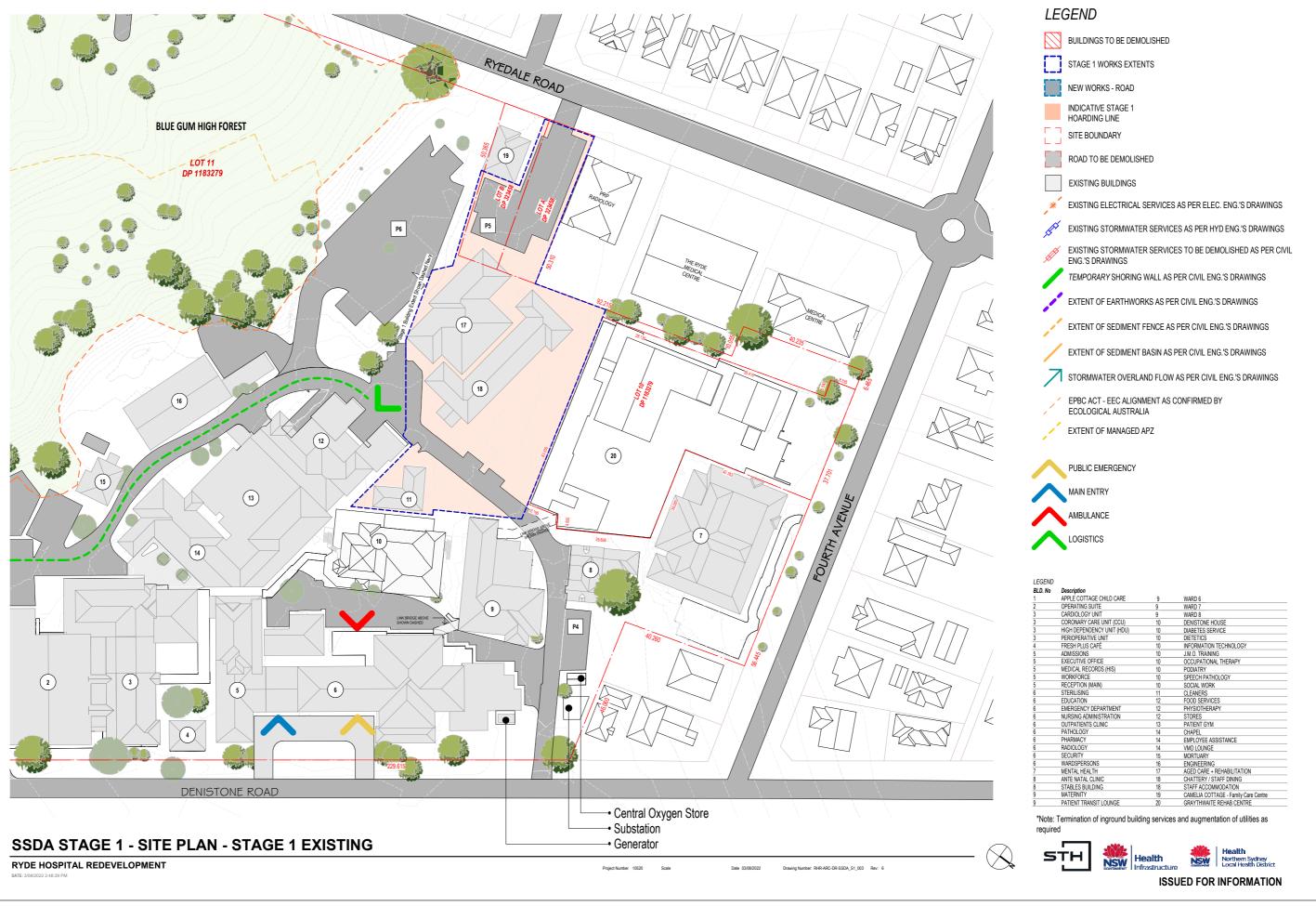
ISSUED FOR INFORMATION



SSDA STAGE 1 - PROPOSED SITE PLAN

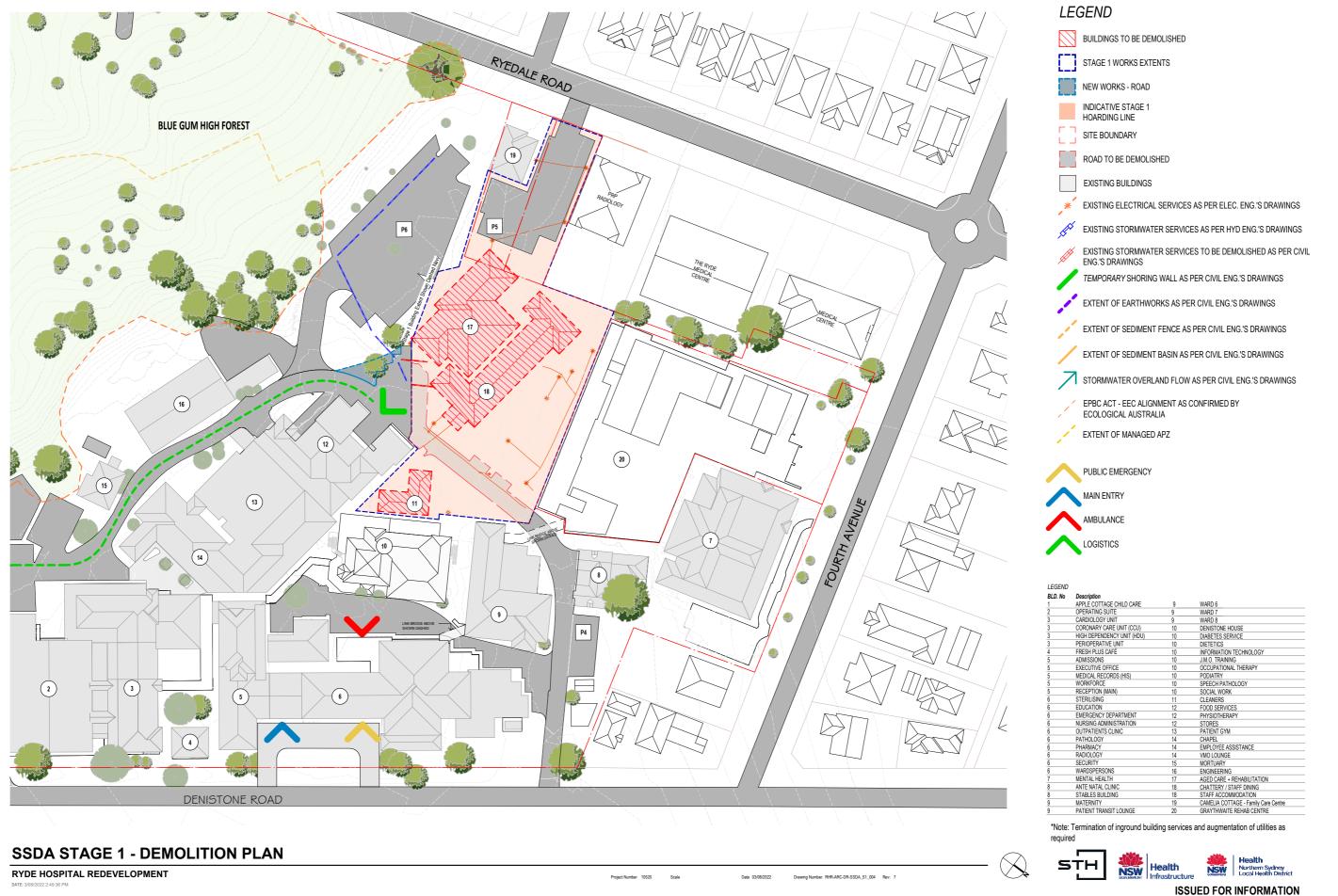
RYDE HOSPITAL REDEVELOPMENT







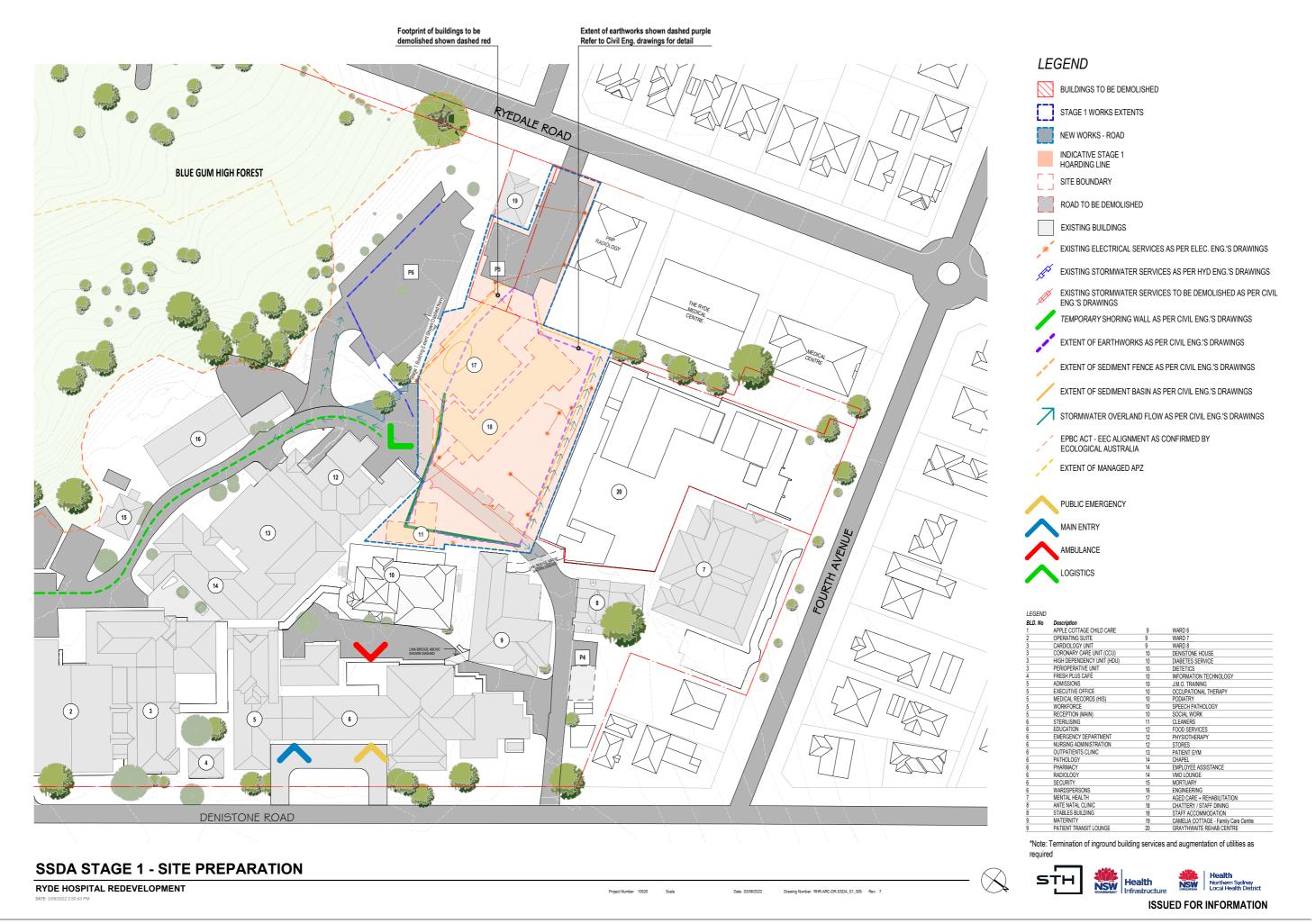






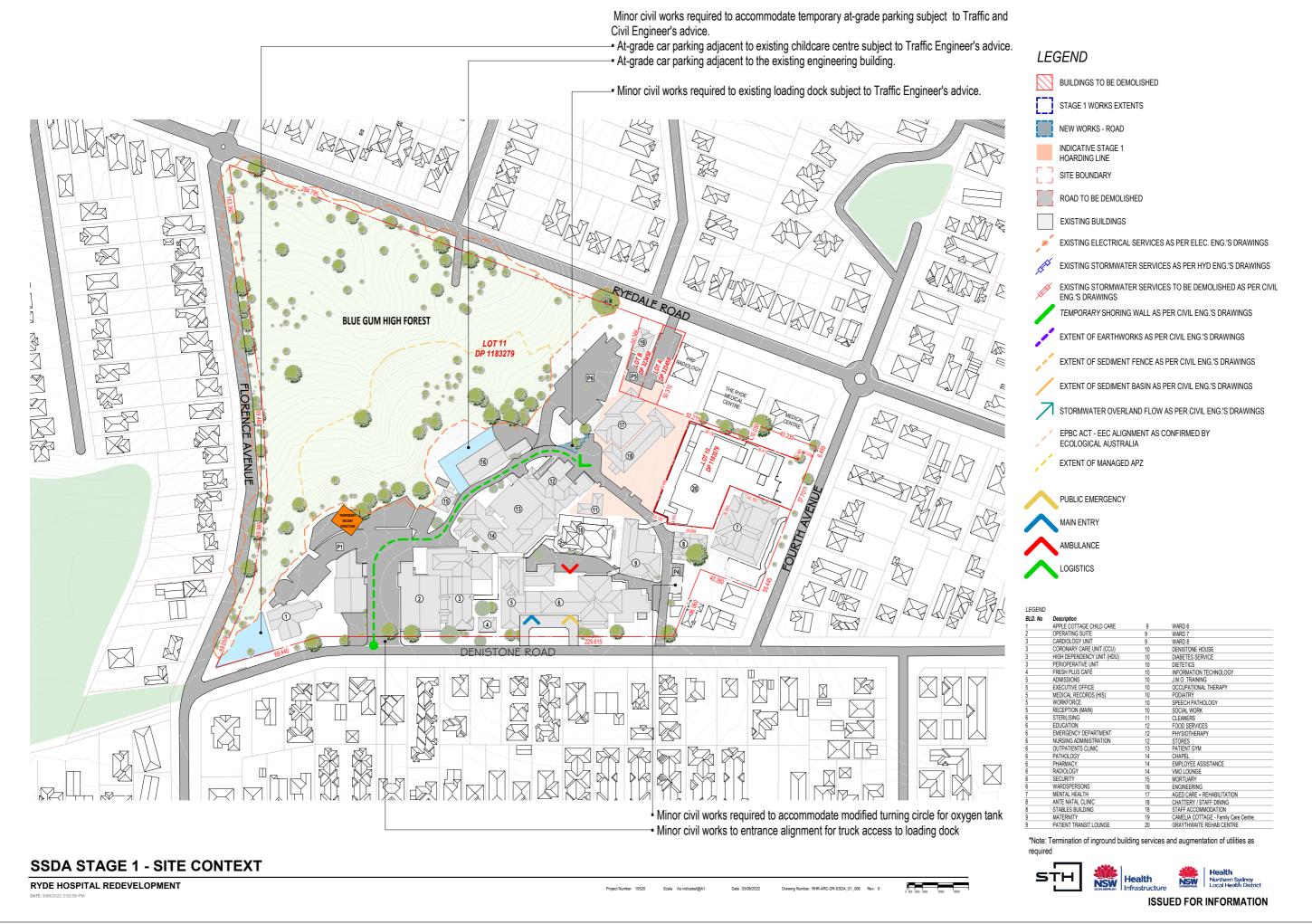
















8.0 GANSW CONSULTATION

8.1 GANSW CONSULTATION

The project was present to the GANSW Review Panel on the following occasions:

First Review, 30 June 2021, wherein the project team presented the site assessment findings that were to be used to inform the selection of a preferred development site. The sites presented included:

- The current hospital site located in Denistone Road Ryde.
- The site on the corner of Herring Road and Talavera Road, Macquarie Park on the Macquarie University campus.

In their written response dated 8 July 2021 the GANSW Review Panel identified the following matters as core to arriving at a preferred site:

- Development of a Connection with Country Strategy
- b) Further Master planning analysis

Notwithstanding, the Review Panel provided a view in their written recommendation that on the basis of the material presented, the Ryde site had '....significantly more potential to realise a hospital that is integrated with landscape, provides successful health and well-being outcomes and benefits to the community in a rich and meaningful campus.'

Project response: Having undertaken further analysis as recommended by the GANSW panel, the findings of the project team let to a recommendation to re-develop the existing hospital site in Denistone Road Ryde.

Second Review, 3 November 2021 wherein the project team provided a focussed analysis of the Ryde Hospital site constraints and opportunities, noting that it had been identified as the preferred development site, including:

- An outline of the proposed design principles and the Connection to Country analysis that informed those strategies
- A more detailed site analysis outlining the site constrains and opportunities; and
- The proposed Design Strategies

In their written response dated 11 November 2021 the GANSW Review Panel supported further development of the following strategies:

- a) 'The early engagement and meaningful approach to Connecting with Country'
- b) Efforts to protect and integrate the Blue Gum High Forest into the development concept
- c) 'Readdressing the heritage listed Denistone House to Denistone Road
- The strategy to concentrate the facility foot-print and provide increased public open space
- e) The investigation and consideration of a wide range of site considerations

Project Response: These matters are core to the evolving design and continue to inform the development of the Concept Design

Third Review, 9 March 2022 wherein the project team provided an update on the evolution of the Concept Design; including the following principles and strategies:

- The site Master Plan, and the strategies for connecting the site with the local context and community, place making, the pedestrian circulation strategy, vehicle access strategy, and design strategies for major design performance criteria such as staging, future expansion, APZ, the fire trail requirement and the heritage assets.
- The biophilic strategy that proposes to protect the Blue Gum High Forest and integrate it into a comprehensive landscape response that connects community and clinical program to the land and country on which the hospital is located.
- The clinical program and the evolving 'block and stack'.
- The planning envelope expressed as a volume only, noting that the Concept Design was continuing to evolve in response to all the criteria and design principles previously outlined, and that the volume presented was solely for the purposes of informing an initial assessment of the proposed development
- Sustainability principles.

In their written response dated 23 March 2022 the GANSW Review Panel noted support for the principles outlined above. The Review Panel sought further resolution in future interactions with the design team on the following matters:

- a) The site strategy
- b) Embedding of the foundational concepts and principles in the Concept Design
- c) Further articulation of how the planning envelope addresses the urban design principles outlined by the design team for the project
- d) The integration of program and landscape
- e) The opportunity for the project to serve as a prototype for how the development can integrate Connection to Country and landscape strategies
- f) Access and circulation
- g) Mitigation of the impacts of the multideck car-park and at-grade parking on the site and landscape.

Project response: The Concept Design continues to evolve in response to the project design principles shared and developed in consultation with the GANSW Design Review Panel. It is the expectation of the project design team that through an iterative design process, further refinement of the design will continue to occur including more nuanced design responses to the matters raised described above.



9.0 BETTER PLACED

9.1 BETTER PLACED

The Concept Design is being developed with regard to the 7 objectives outlined in the GANSW Better Placed policy document for integrated design outcomes in the built environment. Whilst the Concept Design for the Ryde Hospital is continuing to evolved, the project response to those objectives as outlined:

BETTER FIT

The Concept Design for the Ryde Hospital is informed first and foremost by the natural and cultural heritage of the site, including its place in the history of:

- The geographical character of the site and flora and fauna that it accommodates.
 Specifically, the Blue Gum High Forest extant on the southern embankment of the site is a key feature of the site with its own microclimate that accommodates a variety of native flora and fauna.
- First nation peoples who saw the site as a place of great reverence. Traditionally communities would gather at key times of the year to hunt and feast in the current Olympic Park area on the banks of the Parramatta River. During these periods the elders would meet on the ridge which traverses the current site, where they lit fires to indicate their presence to their broader community encamped on the banks of the river below.

- Colonial occupation including development of Denistone House and its stables built on the plateau of the ridge that is a prominent feature of the site to take advantage of the distant views particularly those back to Sydney and the Parramatta River.
- Conversion of Denistone House into a convalescent hospital for returning World War I servicemen in the 1920's and ultimately redevelopment into the current hospital.
- The residential scale development of the immediate neighbourhood and the development of Sydney over the past 100 years.

In response the current Concept Design has developed the notion of a 'beacon' on the hill to identify the hospital location within the landscape and to act as a community and workforce amenity space that links the clinical accommodation wings. The 'beacon' will also act as a repository for the collective histories represented by the site expressed as art and landscaping.

BETTER PERFORMANCE

The project is located on site of the existing Hospital, with the well-established public transport infrastructure. One of the major objectives in The Concept Design was minimizing vehicle penetration into the site, focusing on pedestrian movement, and accommodating a range of s throughout the campus.

Minimising the space dedicated to vehicle movement and prioritising vertical development, allowed generosity of public space and a "reveal" of long-hidden cultural assets (Denistone House and Stables). Resulting open space is dedicated to usable green infrastructure, including canopy trees and green landscaped areas.

As majority of clinical spaces require a certain standard of air filtration and purification, Concept Design concentrates on the opportunities within "meeting zone"/'beacon" and starts to explore access to fresh air and semi-enclosed conditions to the main atrium.

Built areas within the atrium are oriented to maximise natural light penetration through the building to the southern side, creating a unique space on the south of the building with direct light and views to the south.

Proposed structural grid and floor to floor dimension are at the foundation of future proofing and ability to change, allowing a variety of clinical services to be accommodated or expanded within the building.

Sustainable water management is reflected in rainwater collection and use of bio-swales for surface water filtration.



9.0 BETTER PLACED

9.1 BETTER PLACED

BETTER FOR COMMUNITY

Through generosity of proposed open spaces, Design offers full visibility to public entry locations and clarity of way finding.

The Design emphasises community integration by creating a range of open spaces of various types, sizes, and configuration:

Community Trail that runs on the edge of Blue Gum High Forrest not only connects 2 streets and allows pedestrian permeability through the campus, but also serves as a link to the wider network of green open spaces in the precinct (connecting Denistone and Darvall Parks)

Denistone Gardens, created as a forecourt to Denistone House, offer green open space to the community, linking with the surrounds and encouraging exploration in a safe environment. Denistone Gardens serve as a natural extension of Blue Gum High Forest to Denistone Road, with the proposed Built form integrated into the landscape, rather than separating 2 sides of the campus.

Responding to the needs of this high Country a protected and safe space for healing ceremony is created along Ryedale Road. Importantly this is the only space where people can stand with their feet on the land while visually, spiritually, and culturally connecting with the significant area of low Country now known as Sydney Olympic Park.

BFTTFR FOR PFOPI F

One of the underpinning principles of the Concept Design is Design for Humans. Review of User experience was fundamental in the design process.

Typical of building placement of the era, Denistone House is sited on top of the hill. The Concept Design uses existing terrain to place the new building with minimum excavation, matching the ground level of Denistone House. This results in natural terracing on both north and south sides of the new built. Created slopes are carefully considered with the principles of equitable access and pause points to create a richly layered open space, natural terracing providing seating opportunities in a "theatre of life".

Established ground level open spaces support a spectrum of uses from active (walking and playing) to passive and social (sitting). Through the design process those spaces will be further developed in materiality, furniture provision and other details.

Ground plane user experience also includes main entry sequence. Envisaged as a semi-open and naturally ventilated space, maximising visual and physical permeability of the building horizontally and as a central atrium providing clarity of vertical circulation. Visual connectivity to outside acting as orientation marker, supporting more natural and intuitive way finding.

The Concept Design also concentrates on the user experience within the building.

Person centred with a focus on safety and comfort



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9.0 BETTER PLACED

9.1 BETTER PLACED

BETTER WORKING

Provision of functional and efficient building is vital to efficiency of Hospital operation:

- Reduction of travel distances,
- Compact floor plates
- Centralised vertical circulation
- Functional adjacencies Are all aspects of practical and purposeful building.

Plant strategies were developed to minimise reticulation runs and riser locations, resulting in optimising of usable areas.

Adopted Structural grid allows for maximum flexibility and efficiency

Floor plates are shaped by balance of area requirements and optimised Daylight access through the building perimeter.

Support spaces are centrally shared in the atrium built-form, allowing variety of spaces to be accommodated (enclosed or open) with outlook and access to daylight.

BETTER VALUE

Underpinning Principle of "Design for Humans" outlined above generates value for the hospital and the community, promoting:

- Community offering
 – variety of open space and access through the site, making the campus part of precinct network.
- Health and well being rather than illness through open spaces, walking trails, access to green outlook and daylight.
- "Attract and retain staff" Efficient and functional layouts complemented by provision of variety of dedicated staff and education areas with access to outlook and daylight.

BETTER LOOK AND FEEL

Concept Design places the new built form behind Denistone House, creating a welcoming and embracing gesture to the open space of Denistone Gardens.

The new built form is concentrated towards the centre of the site providing generous setbacks to the perimeter as well as stepping down towards Denistone Road. Proposed massing sits well within the surrounding built from and streetscape, without dominating or negative impacts on any of the amenities.

Proposed built form clearly articulates two more clinically-oriented programs, connected by the main atrium – resulting in breakup of the building mass and providing further opportunities in architectural expression between elements of the program.

The atrium and spaces within it are considered to be opportunities for integration of public art – visualisation of beacon, echoing the continuation of "meeting place" as part of Country.

Integrated landscape solutions are interconnected and provide variety of experiences, outlooks, shelter options.

