

NORTH SHORE HEALTH HUB Architectural Design Statement

Tower B, St Leonards: Stage 2 Design and Construction

Medical Specialist Suites and Associated Allied Health Uses

12 Frederick Street, St Leonards, NSW



Issue: 04.05 .2018





Table of Contents

1.0	Introduction	01
2.0	Site Location and Description	02
2.01	Urban Context	03
2.02	Royal North Shore Hospital Precinct	04
2.03	Transport Context	05
2.04	Site Analysis	06
2.05	Topography and Streetscape	07
2.06	Indicative Uses	08
3.0	Design Principles	09
3.01	GFA	10
3.02	Building Height	11
3.03	Building Massing	12
3.04	Site Access, Landscaping and Tree Planting	13
3.05	Tower B	14
3.06	Indicative Facade Articulation and Materiality	15
3.07	Solar Access and Shadow Analysis	16
3.08	Visual Impact, Views and Privacy	18
3.09	Wind and Acoustic Impact	19
3.10	Car parking	20
3.11	Signage	21
4.0	Transport Context	22
5.0	Summary	23

1.0 Introduction

This architectural design statement relates to the Stage 2 development application (DA) for a new building known as 'Tower B' at 12 Frederick Street, St Leonards for doctor's suites and ancillary uses. This design statement addresses the Secretary's Environmental Assessment Requirements (Architectural) for concept proposal DA SSD 8499.

The concept proposal DA (SSD 8499) currently being assessed seeks approval for;

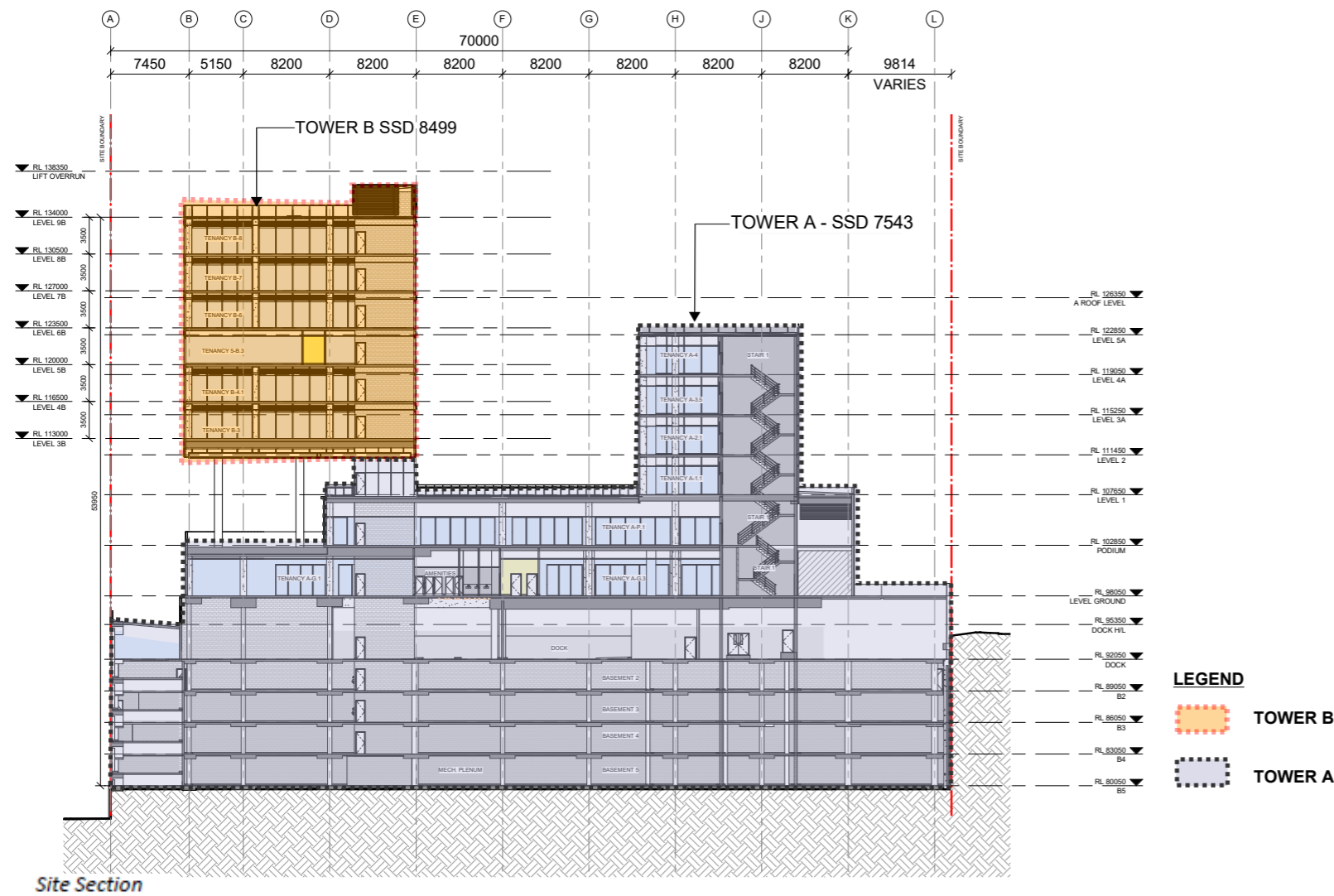
- A building envelope and indicative uses for Tower B that would be constructed on the podium of Tower A
- Indicative uses comprising medical consulting rooms, operating and procedure rooms, accommodation for healthcare workers, patients and visitors as well as ancillary uses such as conference rooms and gymnasium

The DA for Tower A and Podium (SSD 7543) is also currently under assessment. Together, Tower A, the Podium and Tower B comprise the proposed North Shore Health Hub providing a range of complimentary medical services associated with the existing St Leonards health precinct.

Tower B will be configured to;

- 6 Storey in height with maximum RL of 138.350
- GFA of 6864
- FSR 1.1:1
- Uses include but not limited to medical purposes associated with the proposed health hub and ancillary to the Royal North Shore Hospital and North Shore Private Hospital. Additionally specialist suites and associated allied health uses such as osteopathy, physiotherapy and speech pathology.

Tower B will compliment and extend the existing health precinct of the Royal North Shore Hospital.



Site Section

2.0 Site Location and Description

LEGEND


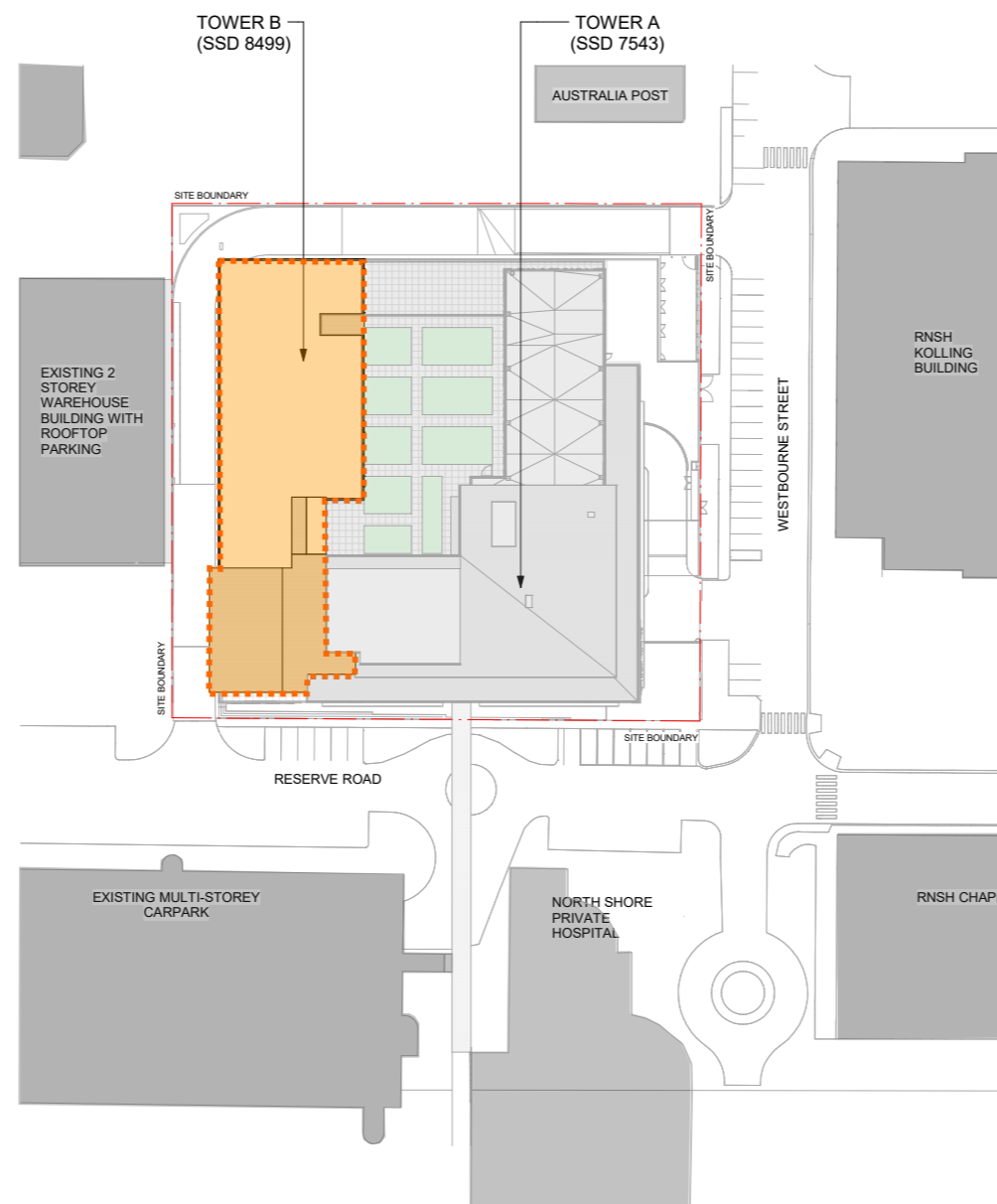
-  OVERALL SITE
-  PROPOSED SITE



Figure 1 - Locality Plan



The site is located on the corner of Reserve Road and Westbourne Street, St Leonards, in the Willoughby Local Government Area (LGA).

This proposed development site is part of a larger 2.6-hectare site, known as 12 Frederick Street, St Leonards. The site is described as Lot 1 in DP 591747 and is bounded by Frederick Street to the north, Reserve Road to the west, Westbourne Street to the south and mixed warehousing and related development to the east. The area of the subject site is of 6,194 m2.

The site is located opposite the existing North Shore Private Hospital to the west and the Kolling Institute Building to the south.

The site is a former brick quarry extending from Frederick Street to Westbourne Street and Reserve Road to Herbert Street is bisected by a quarry wall (16 meter level change) from southern corner to the northern corner.

The northern lowest corner of the site is occupied by a 2-storey warehouse building with rooftop parking, to be demolished (DA 2016/211). A former helipad is located on the southern highest corner (Westbourne Street and Reserve Road).

The vegetation on the site consists mainly of native regrowth and exotic species, with some areas of significant weed infestation and mature trees located along Westbourne Street frontage.



The Site

2.1 Urban Context

The site adjoins the northern edge of the Royal North Shore Hospital (RNSH) Precinct. This area is a mixture of old warehouse and low-rise commercial buildings juxtaposed against new mid-rise hospital, health services and research facility buildings. The context of the low industrial buildings to the north is likely to undergo uplift as a concentration of medical and associated services facilities are being encouraged to invest in the area.

As part of a masterplan redevelopment key sites within the RNSH precinct are also either under construction or at masterplan stages. These projects are likely to further expand and heighten key sites and the closest example is the Education and Learning Centre. The proposed NSW Health Office commercial tower is within the RNSH precinct.

The hospital master plan will also make provisions to significantly improve access to public transport with better connections across the campus and to St Leonards railway station.

The Ramsay's Northside Clinic mental health hospital is currently under construction on Frederick Street opposite a significant large format retail premises, both within the industrial zone.



LEGEND

-  12 FREDERICK ST SITE
-  SUBJECT SITE
-  HOSPITAL PRECINCT AND MEDICAL FACILITIES
-  IN1 + IN2 INDUSTRIAL ZONING
-  OPEN SPACE
-  EDUCATION
-  COMMERCIAL (* - DENOTES COMMERCIAL USE WITHIN HOSPITAL PRECINCT)
-  MIXED USE + HIGH DENSITY RESIDENTIAL
-  LARGE FORMAT RETAIL/HARDWARE

2.02 Royal North Shore Hospital Precinct

The site is located centrally within the RNSH Precinct, and provides opportunity to deliver a valuable service to the entire precinct in addition to servicing the demand within the site.



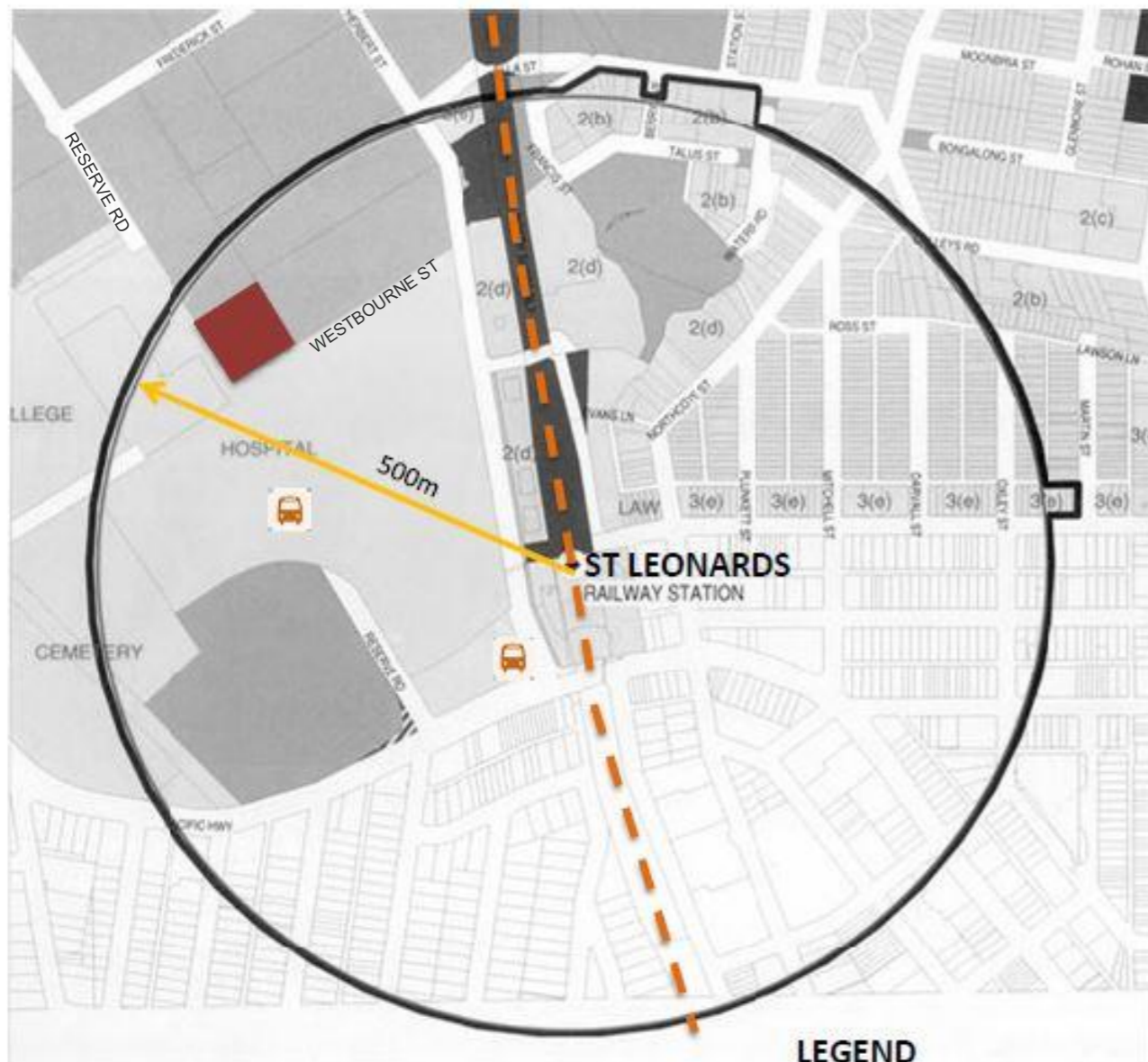
2.03 Transport Context

The site sits within the Willoughby DCP railway precinct area and is within 500m to St Leonards Railway Station.

Multiple Bus stops are also located within this radius providing high frequency services to Lane Cove, Chatswood, Macquarie Centre, North Sydney and the Sydney CBD.

In addition to on-site parking there is the hospital car parking station directly opposite.

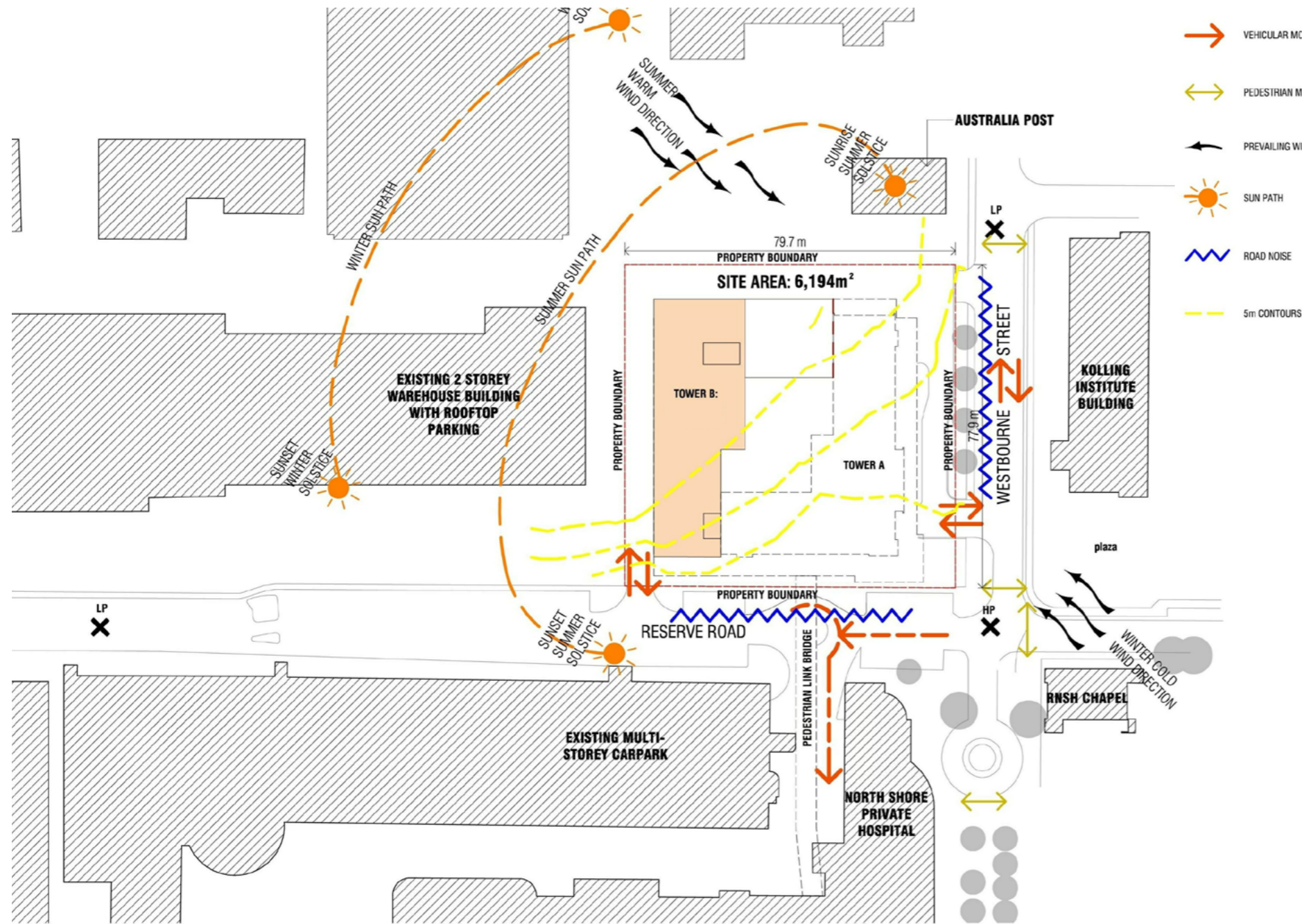
Overall, the site is well serviced by a variety of transport options.



Willoughby DCP Railway Precinct Plan St Leonards

- LEGEND**
- NORTH SHORE RAIL LINE
 - 500m RADIUS AROUND SITE
 - BUS STOP
 - SUBJECT SITE

2.04 Site Analysis



Proposed Lot 1 has a site area of 6,194m². It sits on a sloping site that falls away steeply from both Westbourne Street and Reserve Road.

Vehicular access points are from both streets, Westbourne Street being the primary public frontage and taking general traffic with Reserve Road providing service access.

Pedestrian pathways link the site and provide a clear line of sight to entry and drop off points.

The site has good solar access to the North and North West and has view opportunities in that same direction towards Chatswood CBD.

2.06

Indicative Uses

Uses associated with Tower B of the Health Hub and ancillary to the Royal North Shore Hospital will include medical specialist suites with associated allied health uses such as osteopath, physiotherapist and speech pathology. These uses are considered to be complimentary to the Royal North Shore Hospital and broader St Leonards health and education precinct.

3.0

Design Principles

Site Layout & Building Footprint

The site layout of the proposed envelope has been informed by the following key components:

1. Tower B Component

This element is the tallest of the two towers. Tower B is elevated over the podium level on 'pilotis' consisting of 6 levels. The tower complies with street and side boundary setbacks. Tower B is configured to accommodate doctor's suites and ancillary services. The scale of Tower B is smaller than Kolling Institute building and has been located in a zone that has the least impact to the operational areas of the hospital below.

The proposed Tower B location aligns with the indicative location shown on the original proposal (SSD 7543).

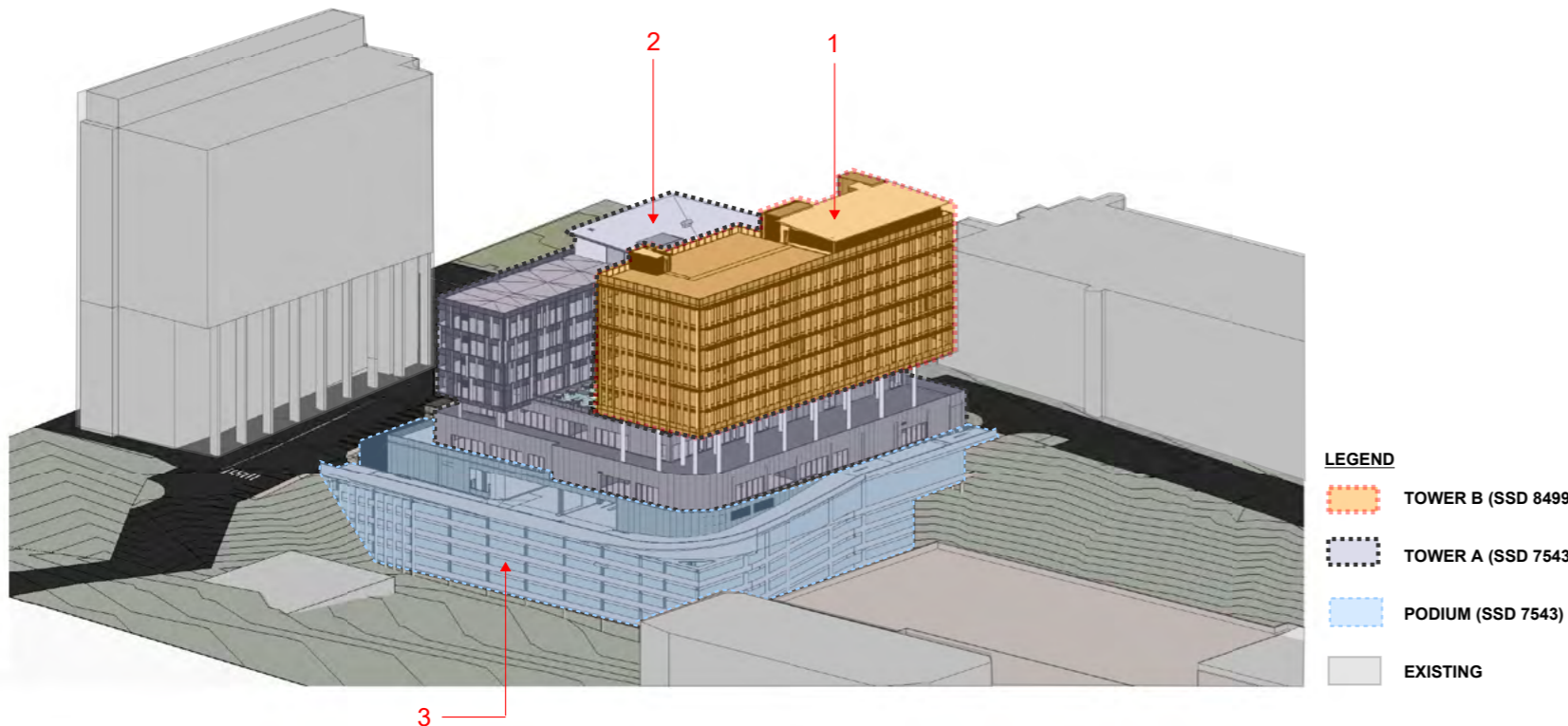
2. Podium + Tower A Component

The podium is generally a 2 level element that transitions height down to street level. Tower A is a 4 storey element (above podium) that contains the private hospital. This scale of tower A is in keeping with the relative height of the existing 5 storey North Shore Private Hospital and its adjacent public carpark building both of which are located opposite the site.

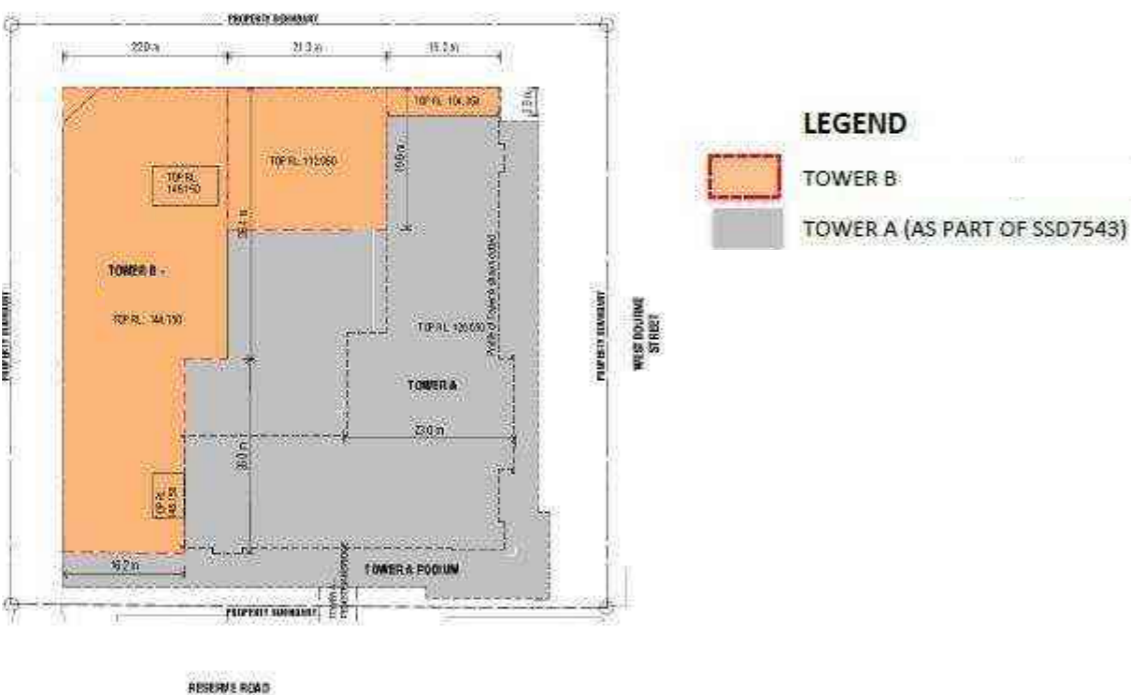
The Tower A Component steps back from the podium level to maximise the separation of mass away from Westbourne Street providing the street level with improved amenity in addition to enhanced relationship with the Kolling Institute Building.

3. Ground & Below Ground Component (Incorporated in Tower A SSD)

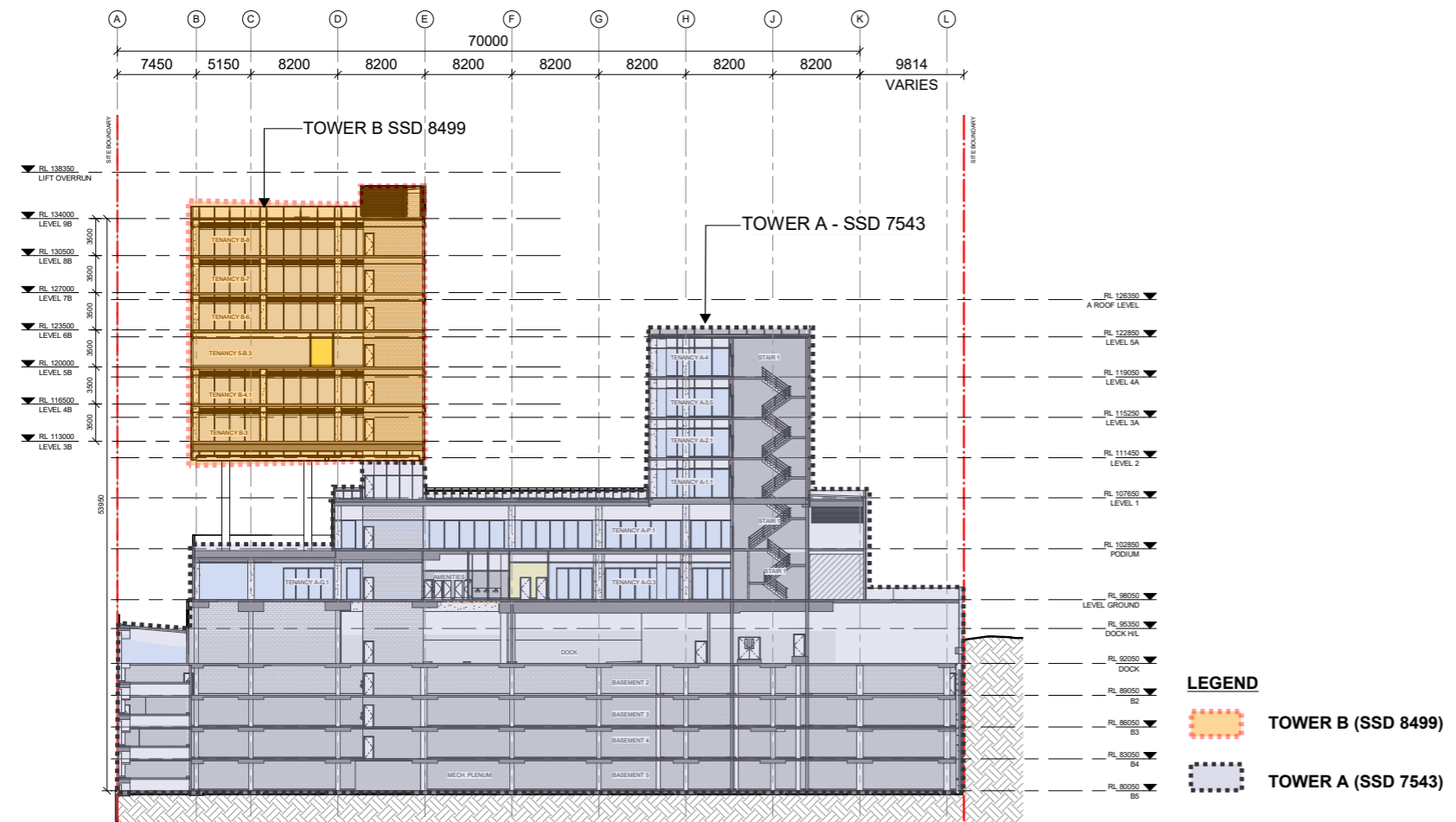
Ground level complies with required setbacks to the street and side boundaries. Main entry and retail spaces occupy this level. Access to the below ground parking basements is accessed by way of a two way ramp from ground level down to the lowest B5 parking level. The ramps and basements take advantage of the existing topography of the site mitigating any impact to street scape.



Site Layout and Building Footprint Diagram



3.01 GFA



The Tower B building envelope, as noted in the Tower A proposal, allows the additional GFA of the site to be completed to the Planning Proposal FSR (3:1).

The total GFA of Tower B is 6,864m²

AREA SCHEDULE		GFA
TOWER A		GFA
TOWER A + PODIUM (STAGE 2DA SCHEME)		11717
TOWER B		GFA
PODIUM	0	
LEVEL 3B	1,144.00	
LEVEL 4B	1,144.00	
LEVEL 5B	1,144.00	
LEVEL 6B	1,144.00	
LEVEL 7B	1,144.00	
LEVEL 8B	1,144.00	
TOWER B TOTAL		6,864.00
SITE AREA		6,194.00
TOWER A + TOWER B		18,581.00
PERMISSIBLE GFA (3:1)		18,582.00
FSR		1:1.1

3.02 Building Height

The Plaza to the Kolling Institute Building is seen as part of a nodal point within the RNSH Precinct defined at the junction of Westbourne St and Reserve Road. This nodal point is characterised by lower elements and open space surrounded by existing height.

Taller buildings are seen pin wheeling around this nodal point. The first building being the Kolling Institute, the second being the future Research and Education Centre Tower and Tower B being the third pillar. These towers are of relative scale and are consistent with the prevailing built form and character of the locality.



Building Height Diagram

HEIGHT LEGEND

- TOWER B - 6 LEVELS ABOVE PODIUM
- 8-11 LEVELS
- RESEARCH AND EDUCATION TOWER – APPROX 9 LEVELS
- 5 – 7 LEVELS
- 2 - 4 LEVELS
- 0-2 LEVELS
- TOWER B PODIUM LINK – 1 LEVEL

3.03

Building Massing



Tower B is articulated in depth and height to create clear forms that can be read from the street as identifiable program elements. The podium fronting Westbourne St has a recessed form at street level signifying entry points and front of house services.

Tower A is defined by a substantial setback from the podium perimeter. Tower B is defined through its separation and elevation onto 'Pilotis' over the podium. In addition Tower B is distinct in form and language to Tower A.

The architectural language is envisaged to complement the contemporary nature of the recently completed buildings within the precinct. Expression of environmental sustainability will be encouraged on the façade with elements such as sun shading devices and facade articulation.

The overall scale and building massing is consistent with the character of the precinct with the blade tower configuration evident within the context.

SOUTH-WEST PERSPECTIVE
SCALE:

LEGEND

-  TOWER B
-  TOWER A + PODIUM (REFERENCING SSD 7543)

3.04

Site Access, Landscaping and Tree Planting

The Tower B building, as noted in the Tower A proposal, is an elevated tower that utilises the site access and landscaping nominated in the Tower A proposal. Street landscaping is as per SSD 7543 – Ground Floor Plan



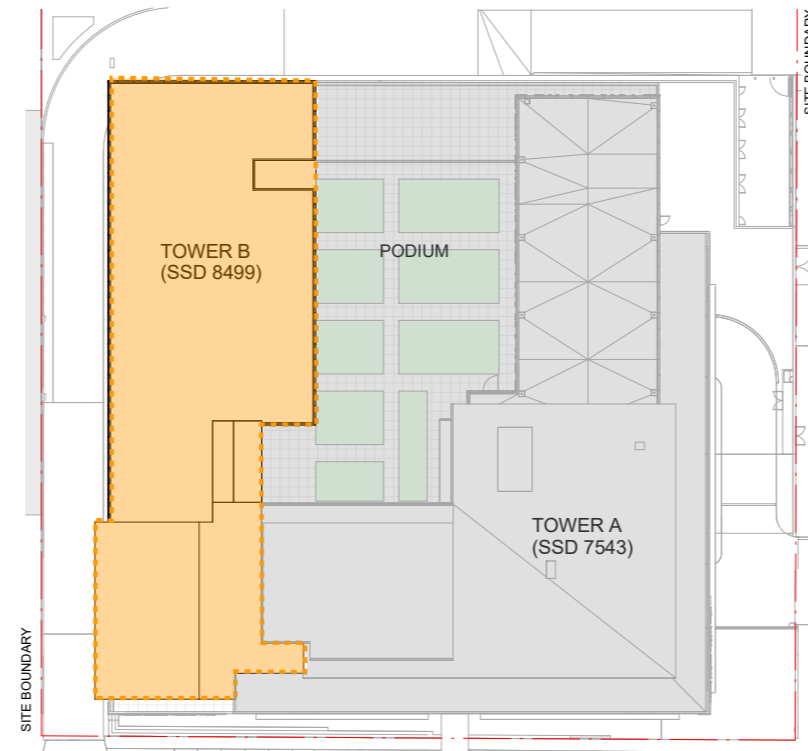
3.05 Tower B



South West Perspective



South East Perspective



LEGEND

- TOWER B
- TOWER A + PODIUM
(REFERENCING SSD 7543)

Tower B is physically integrated with Tower A by way of being located on the Podium of Tower A. A common lobby for both Towers is located on the ground floor facilitating transfer of patients between the towers. The pedestrian link bridge connects the podium level with the existing private hospital across Reserve Road making possible the transfer of patients between the Health Hub and the private hospital for treatment and aligning of hospital medical and surgical services.

Building B's configuration on the podium and in relation to building A has been articulated through variations in setback, building height as well as the use of 'pilotis' to raise the 6 levels of Tower B over the podium.



3.06

Indicative Facade Articulation and Materiality

The design of Tower B façade has been articulated with vertical sun shading control elements which relate visually and functionally to the Tower A façade. Materials and colours used in both towers are similar yet distinct in character to reflect the individual yet connected nature of the towers.

The façades are in keeping with the precinct in materiality and colour in addition to presenting as a prestigious and desired address within the Health Precinct of the RNSH.

Legend

- 1. Tower A and Podium subject of separate SSD 7543
- 2. Curtain Wall – IGU with but joints, glass high performance colour grey
- 3. Vertical Shading aluminium powder coat white
- 4. Spandrels high performance glass colour grey with shadow box
- 5. Aluminium profiled blades to ceiling, powder coat colour white
- 6. Concrete columns painted colour white
- 7. Colorbond® Roof sheets 'Surfmist'
- 8. Colorbond® facia and gutters colour 'Night Sky'
- 9. Plantroom louvres – Aluminium powder coat colour charcoal11 21

1. Vertical Shading aluminium powder coat white



2. Spandrels high performance glass colour grey with shadow box



3. Aluminium profiled blades to ceiling, powder coat colour white



4. Concrete columns painted colour white



5. Colorbond® Roof sheets 'Surfmist'



6. Colorbond® facia and gutters colour 'Night Sky'



3.07

Solar Access and Shadow Analysis

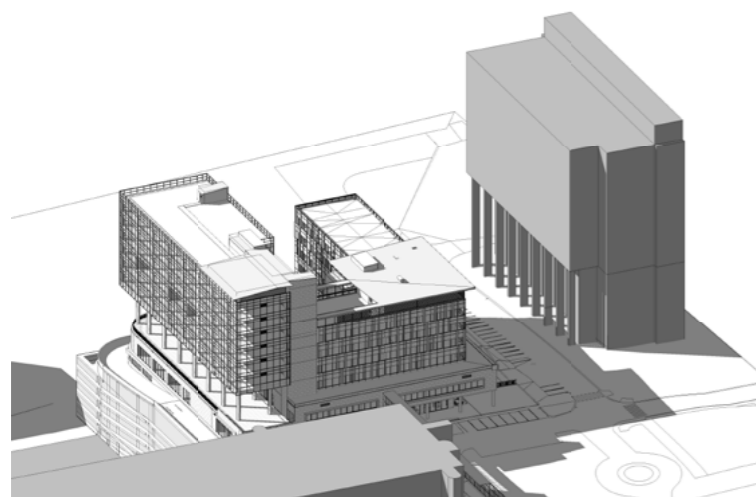
Solar analysis studies have been undertaken to assess the impact of the proposed envelope to the adjoining sites and within the site itself. The extent of overshadowing from the Tower B envelope is minimal, predominantly falling within the shadows cast by Tower A.

Shadow studies at Winter Solstice (June 21st) indicate that the morning shadows extend over the existing North Shore Hospital carpark and the eastern facade of the existing North Shore Private Hospital until approximately 12pm - then shadows approach the Kolling Institute Building façade. Given that the Kolling Institute Building is elevated above street level and has a recessed façade behind a 3 level colonnade to Westbourne St, the impact of shadow at these lower levels is progressive only from 1pm onwards. From 1pm to 3pm the Kolling Institute Building is affected by shadow from both Tower A and Tower B up to level 4.

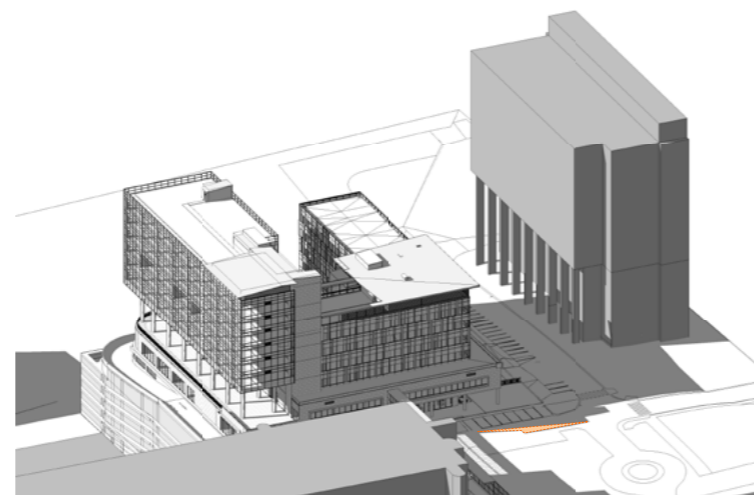
The shadows studies have been segmented into two components – Firstly that of Tower A and podium (Private Hospital scheme) and secondly that of Tower B (coloured). What this illustrates is the extent of impact of both Tower A & Tower B to the surrounding buildings as well as the specific extent of Tower B shadow (shown in orange) beyond that of Tower A.

Within the site shadow casting will be taken into consideration at the detailed design stage to explore ways of articulating the building form in such a way as to maximise solar access to podium level courtyards and to internal looking hospital wings of Tower A.

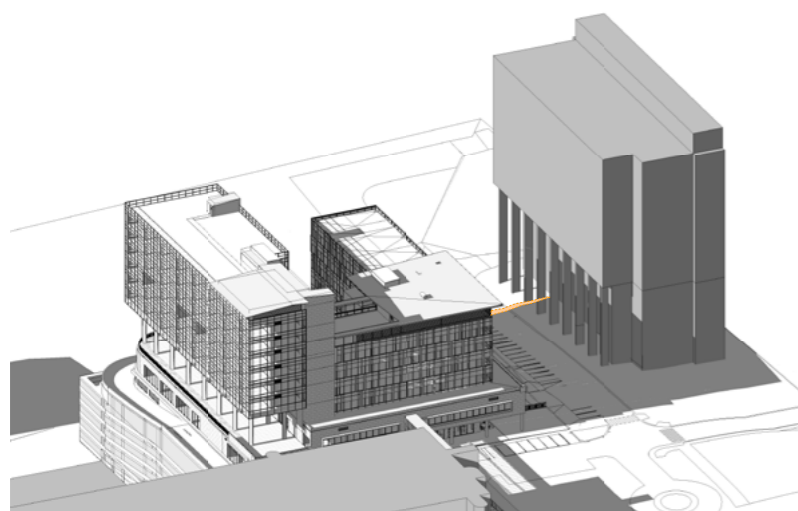
Given the site terrain, aspect and mass of Tower A & podium, these sun studies support the placement of mass within the proposed envelope such that the overshadowing effect to surrounding buildings is minimised, in particular the existing North Shore Private Hospital and the Kolling Institute Building.



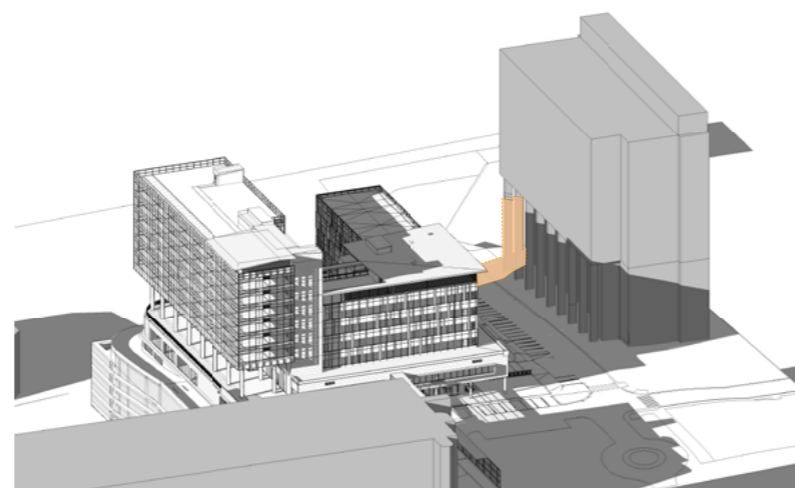
June 21 - 12pm



June 21 - 1pm



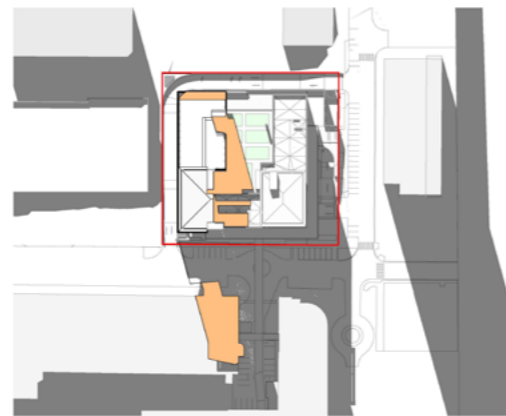
June 21 - 2pm



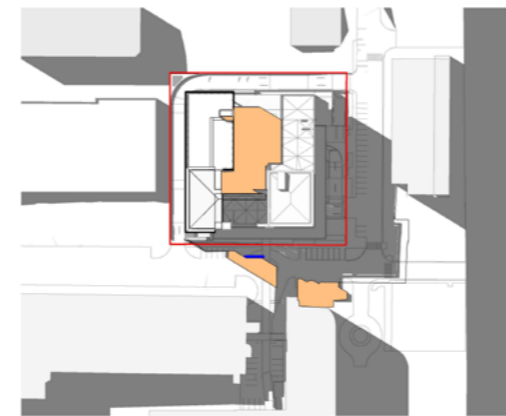
June 21 - 3pm

LEGEND

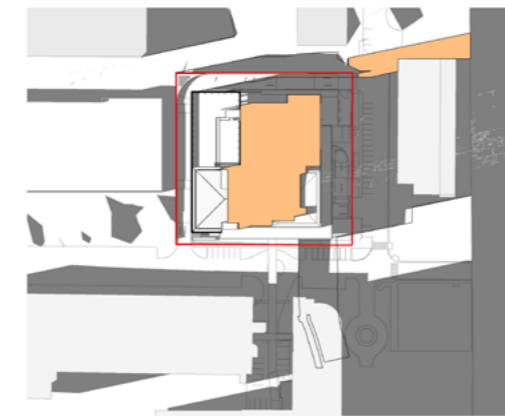
- SHADOW CAST BY TOWER A AND TOWER B (SSD 7543)
- ADDITIONAL SHADOW FROM PROPOSED TOWER B



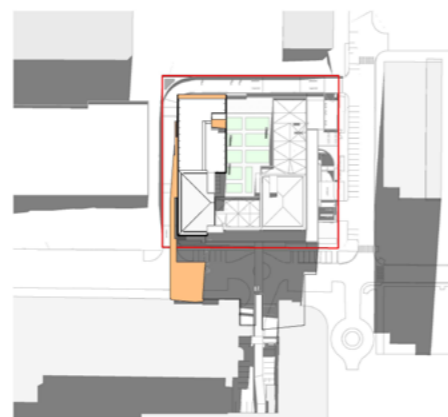
1 TOWER B - WINTER SOLSTICE - 9AM



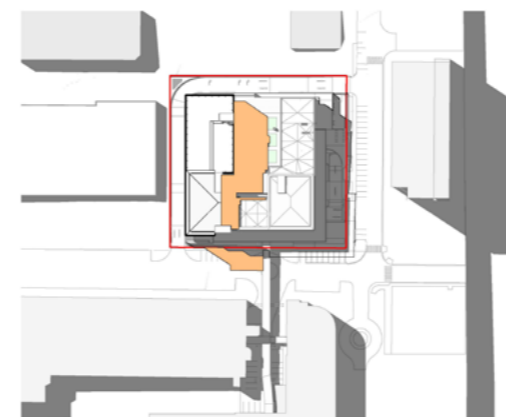
2 TOWER B - WINTER SOLSTICE - 12PM



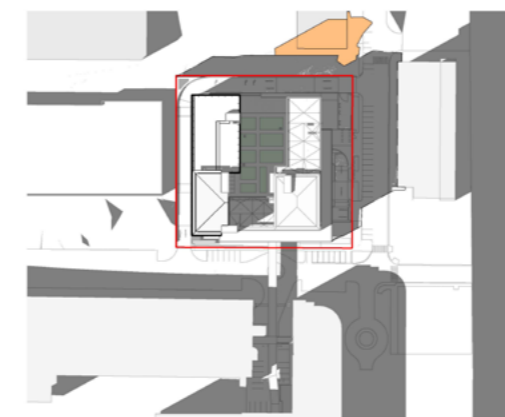
3 TOWER B - WINTER SOLSTICE - 3PM



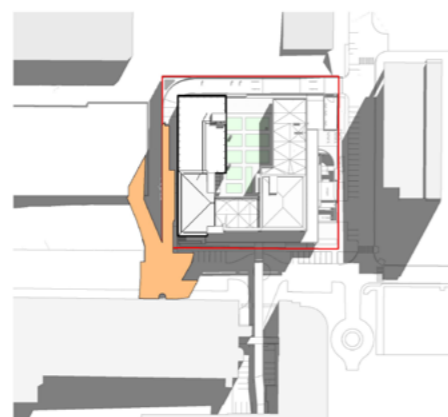
4 TOWER B - EQUINOX - 9AM



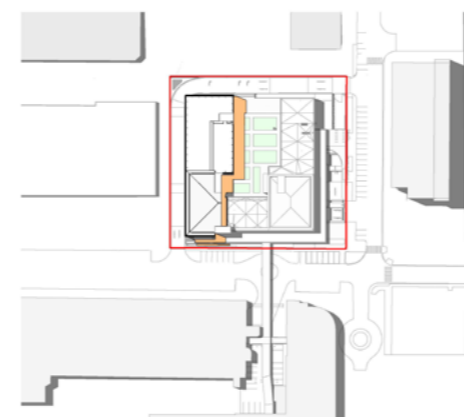
5 TOWER B - EQUINOX - 12PM



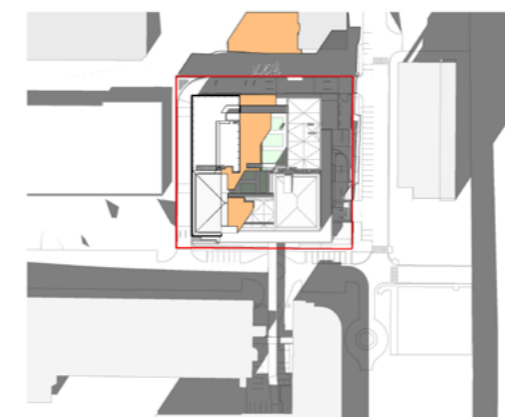
6 TOWER B - EQUINOX - 3PM



7 TOWER B - SUMMER SOLSTICE - 9AM



8 TOWER B - SUMMER SOLSTICE - 12PM



9 TOWER B - SUMMER SOLSTICE - 3PM

3.08

Visual Impact, Views and Privacy



View from Westbourne Street South East



View approaching site from Reserve Road heading South



View from Herbert Street Australia Post Driveway Entry

Visual Impact

The primary view is via the vehicular approach to the site, up Westbourne Street heading North West towards the Kolling Institute Building public plaza. The view is revealed progressing up the hill and is framed by the Acute Care and Kolling Institute Building on the left hand side. These building have established a high street wall given their scale and zero setback.

Given the proposed Tower A and podium are set back from the street the visual impacts are kept to a minimum. As seen in the indicative views from the street, the height of Tower B sits behind that of Tower A and is therefore less visually dominant.

The pedestrian approach to the site is via Reserve Road heading North. This interface has the context of the Public Plaza in the foreground and the proposed building framed by the Kolling Institute Tower on the right and the existing North Shore Private Hospital on the left. The setback of Tower A and podium softens the view as does the stepping back of the podium to Tower A, with Tower B being in the most part obscured behind.

Views

The site enjoys views in a North Westerly aspect back towards Chatswood CBD. Tower B has been placed along this boundary frontage to take advantage of this view.

Privacy

Privacy considerations have been assessed as primary views out from the Kolling Institute Building to Westbourne Street and from the partial north eastern end of the existing North Shore Private Hospital facing onto Reserve Road.

As Tower B is placed to the furthest distance away from Westbourne Street, potential privacy impacts to Kolling Institute Building have been minimised.

By the nature of the curved end form of the existing Royal North Shore Private Hospital, views from this portion of the building are directed away from the subject site and address more to the Chapel and Plaza on Westbourne Site. This façade also has heavily tinted windows and inbuilt blinds to further enhance privacy related issues towards this easterly direction.

3.09

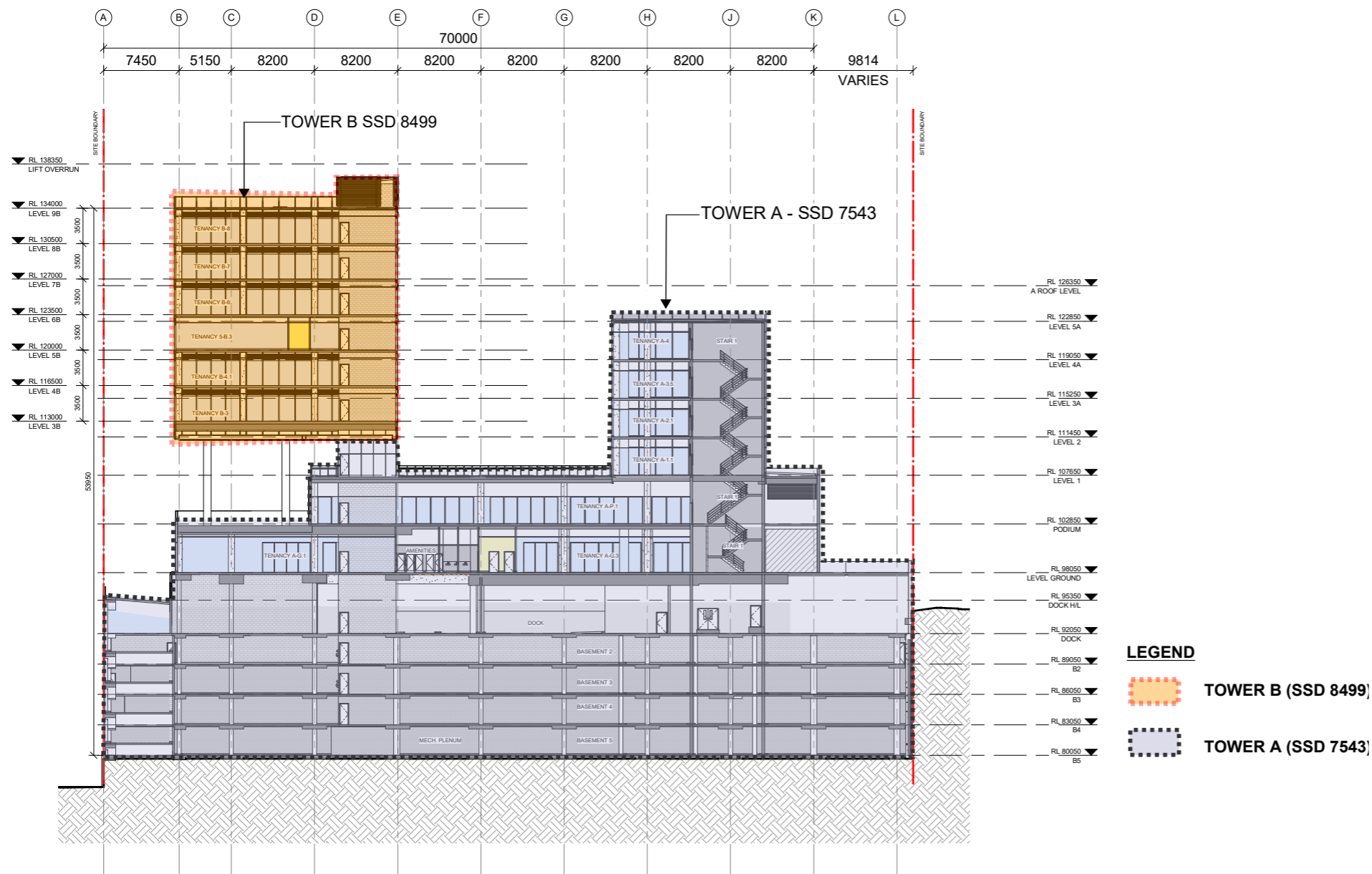
Wind and Acoustic Impact

Being located at the top of a hill the site currently experiences wind from the north east (summer) and the south west (winter). The proposed forms will provide a level of vertical wind shielding with the introduction of the podium and awnings. For a detailed analysis refer to the Wind Assessment Report. The podium level will be most impacted by wind however screens and planting will be installed to mitigate this impact.

For acoustic analysis and resolutions, please refer to the Acoustic Report for a detailed examination of additional noise sources due to the proposed Medical Specialist Suites, accommodation and ancillary services, as well as the background noise, and how any noise sources will affect surrounding properties.



3.10 Car parking



The current Hospital proposal Tower A (SSD 7543) incorporates parking within the 5 basement parking levels and within the loading dock level. Parking for Tower B (SSD 8499) is provided within the Tower A basement parking levels. Given the slope of the site, there is sufficient volumetric capacity below the Hospital parking levels to accommodate the range of additional parking spaces projected. Due to the extreme topography of the site the basement car parking is open on two sides however appropriate screening has been designed to mitigate the visual impact of the basement structure.

Further to the onsite parking provisions, the surrounding area is well serviced by on-street car parking and the multi-storey car park opposite the site.

Crime Prevention Through Environmental Design

CPTED strategies have been considered during the conceptualisation of the building form and massing as far as possible. Additional strategies including measures such as (but not limited to): lighting control, surveillance opportunities and strategies, access and visualisations have been incorporated.

3.11

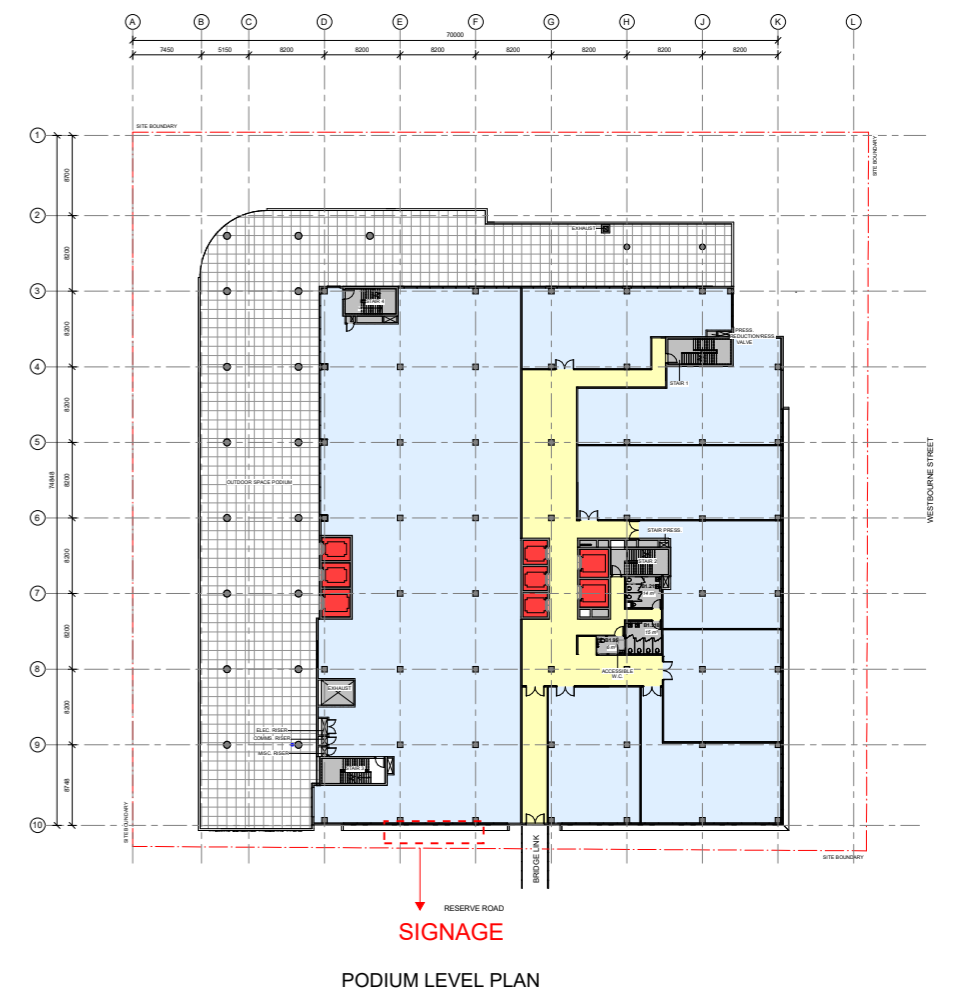
Signage



The design has identified signage zones located on the façade of the Towers A and B. Refer to the adjacent elevations and detail call outs.

The signage will be designed in accordance with required guidelines and standards during the detail design phase with all required approvals being obtained prior to installation.

Materials, colours, size, orientation and light quality will all be some of the considerations addressed at the detailed design phase.



PODIUM LEVEL PLAN

4.0

Transport Context

The site is located within the Willoughby Development Control Plan railway precinct and is within 500m of St Leonards Railway Station. Multiple Bus stops are also located within this radius providing high frequency services to Lane Cove, Chatswood, Macquarie Centre, North Sydney and the Sydney CBD.

In addition to on-site parking, bicycle park with end of trip facilities are provided in the basement (Refer Tower A SSD) there is the hospital car parking station directly opposite. Overall, the site is well serviced by a variety of transport options.

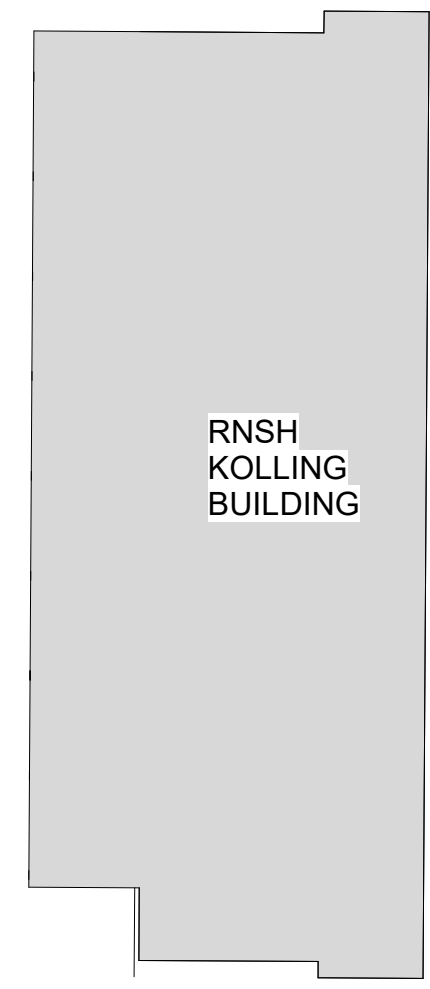
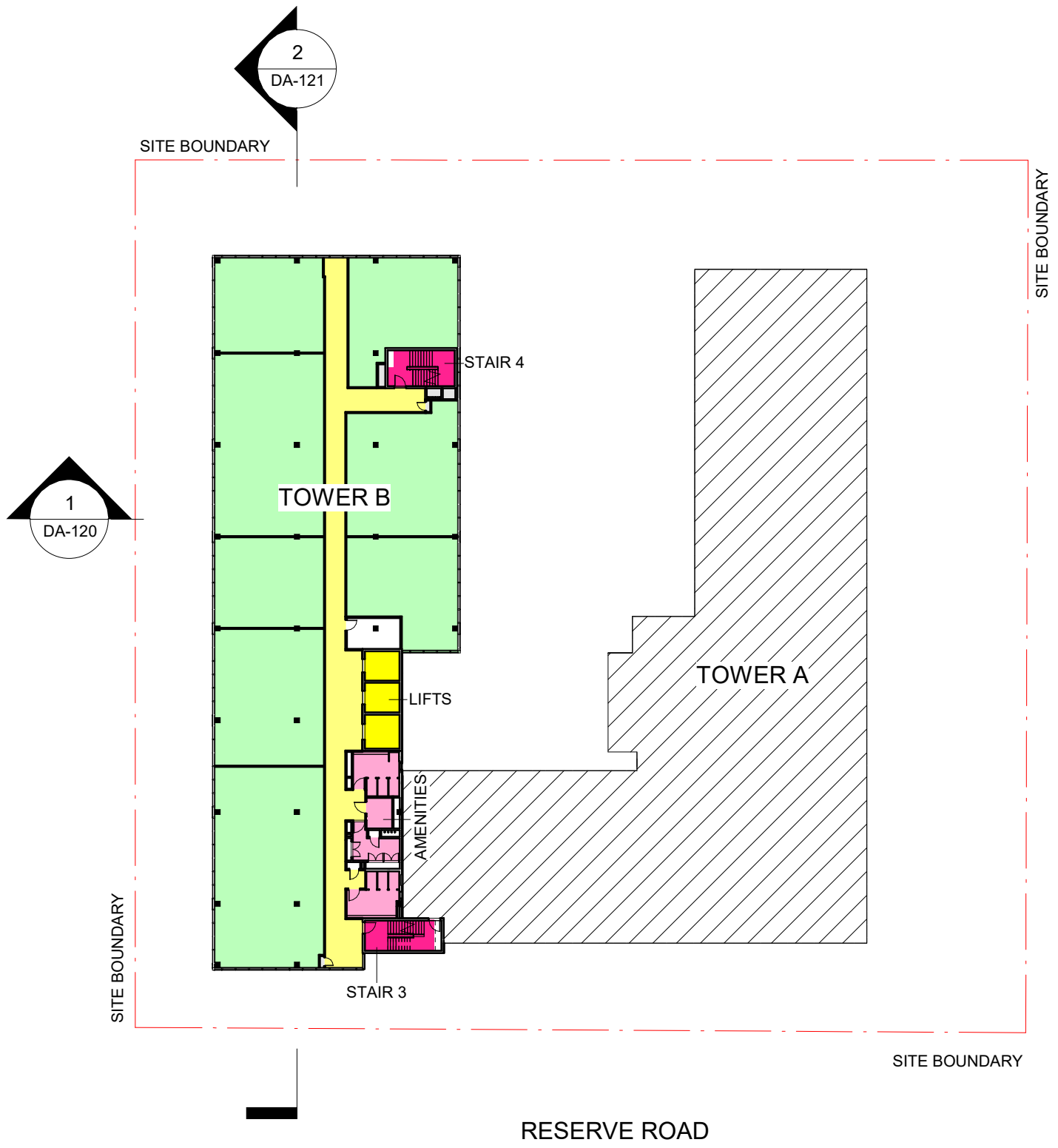
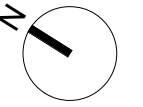
5.0

Summary

The key objective of the proposal is to seek approval for Stage 2 Development that will allow the development of integrated health related accommodation, services and clinical facilities within the Royal North Shore Hospital Precinct and maximise the range and breadth of services available to the local community.

This proposal has undertaken site analysis and detailed studies to test and illustrate the extent of impact to adjoining sites and within the site itself. The conclusion is that due consideration has been given to these issues and that the proposed envelope has been shaped accordingly. The segmented nature of the envelope will allow a variety articulation and architectural expression that will allow a considered and contemporary building to be crafted.

Accordingly, the Minister's favourable consideration of this concept proposal and building envelope is sought.



A	ISSUE FOR DA	18/04/18
	REV	



Billard Leece Partnership Pty Ltd
Architects & Urban Planners
Studio 201, 50 Holt Street
Surry Hills 2010
NSW Australia
T +61 2 8096 4066

E info@blp.com.au
www.blp.com.au

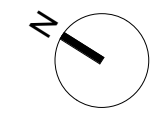
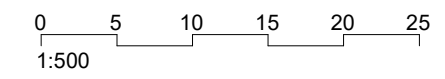
CLIENT
DEXUS PROPERTY GROUP

PROJECT
NORTH SHORE HEALTH HUB

DESCRIPTION
LEVEL 6B

Project No 17005

Scale 1 : 500@A3	Date 17/04/2018
Drawn By SD	Checked By AD
Drawing No DA-103C	Revision A



A	ISSUE FOR DA	18/04/18
	REV	

blp
 Billard Leece Partnership Pty Ltd
 Architects & Urban Planners
 Studio 201, 50 Holt Street
 Surry Hills 2010
 NSW Australia
 T +61 2 8096 4066

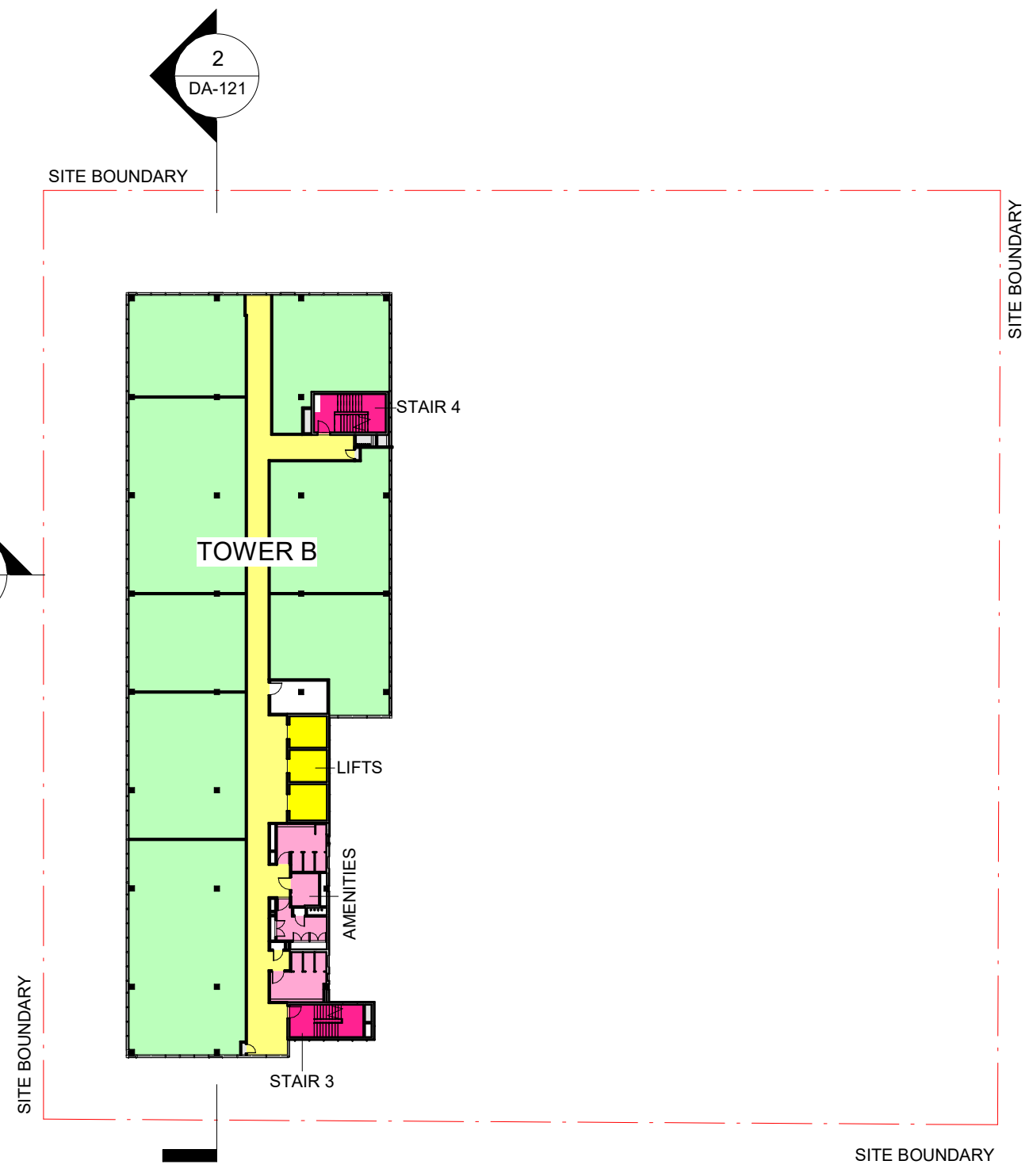
E info@blp.com.au
 www.blp.com.au

CLIENT
DEXUS PROPERTY GROUP

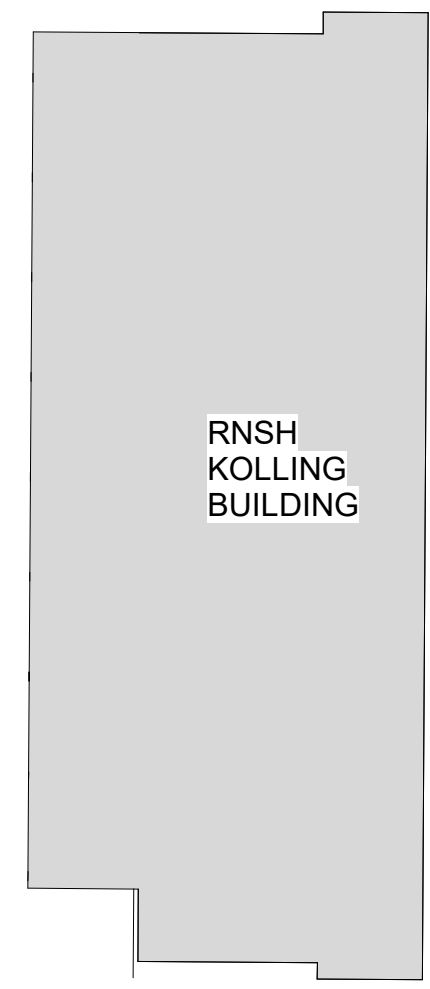
PROJECT
NORTH SHORE HEALTH HUB

DESCRIPTION LEVEL 8B	
Project No	17005
Scale 1 : 500@A3	Date 17/04/2018
Drawn By SD	Checked By AD
Drawing No DA-103E	Revision A

4/20/2018 12:36:19 PM



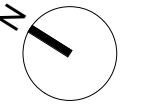
WESTBOURNE STREET



RNSH
KOLLING
BUILDING

RESERVE ROAD

0 5 10 15 20 25
1:500



D	ISSUE FOR DA	18/04/18
C	ISSUE FOR DA	22/12/17
B	ISSUE FOR DA	19/12/17
A	PRELIMINARY	24/11/17
REV		



Billard Leece Partnership Pty Ltd
Architects & Urban Planners
Studio 201, 50 Holt Street
Surry Hills 2010
NSW Australia
T +61 2 8096 4066

E info@blp.com.au
www.blp.com.au

CLIENT
DEXUS PROPERTY GROUP

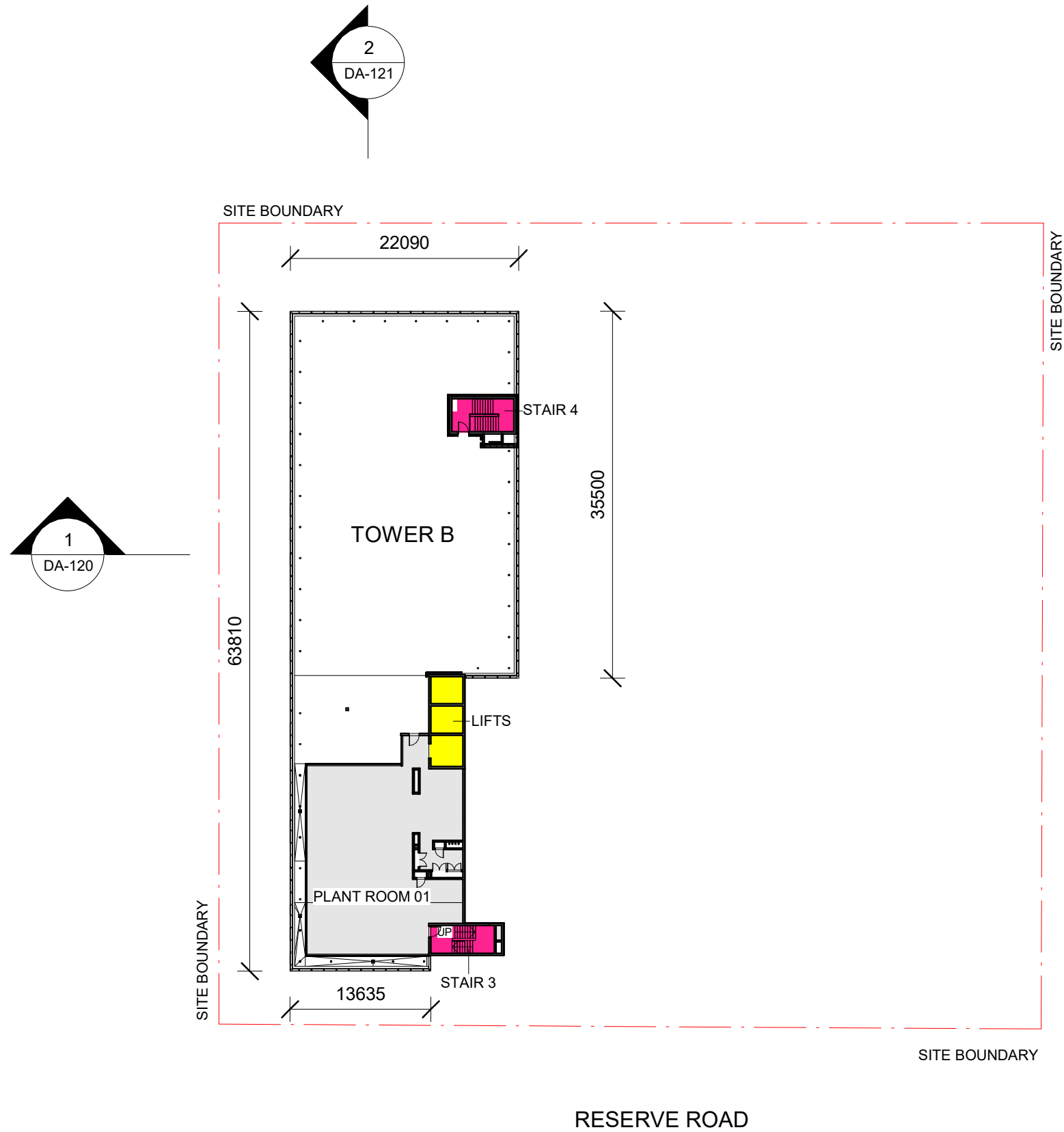
PROJECT
NORTH SHORE HEALTH HUB

DESCRIPTION
LEVEL 9 PLAN

Project No 17005

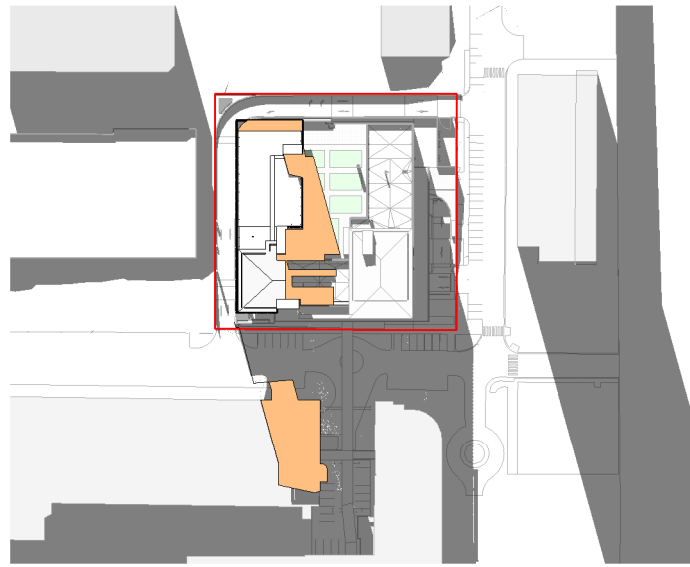
Scale 1 : 500@A3	Date 17/04/2018
Drawn By SD	Checked By AM
Drawing No DA-105	Revision D

4/20/2018 12:36:25 PM

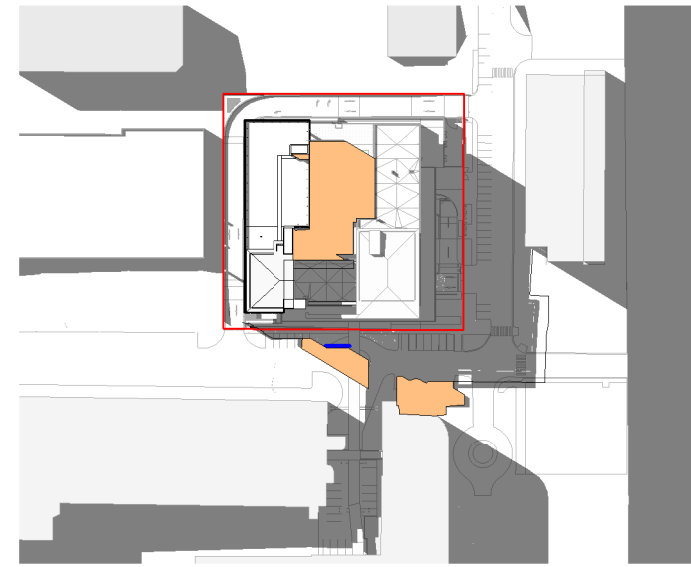


WESTBOURNE STREET

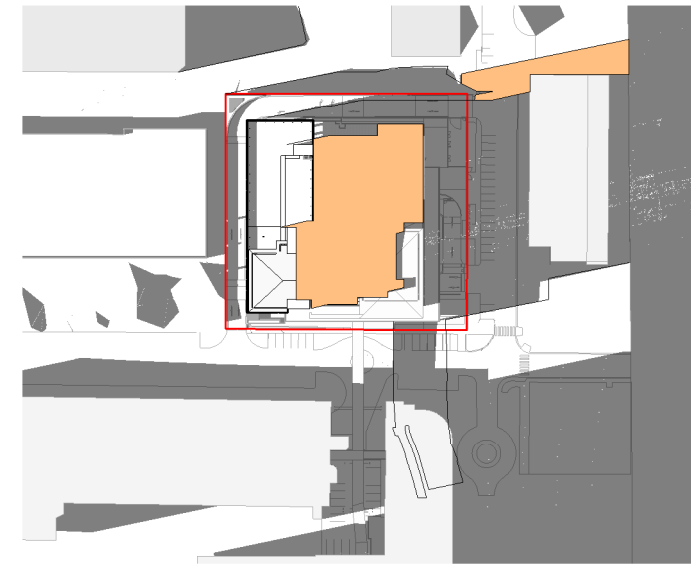




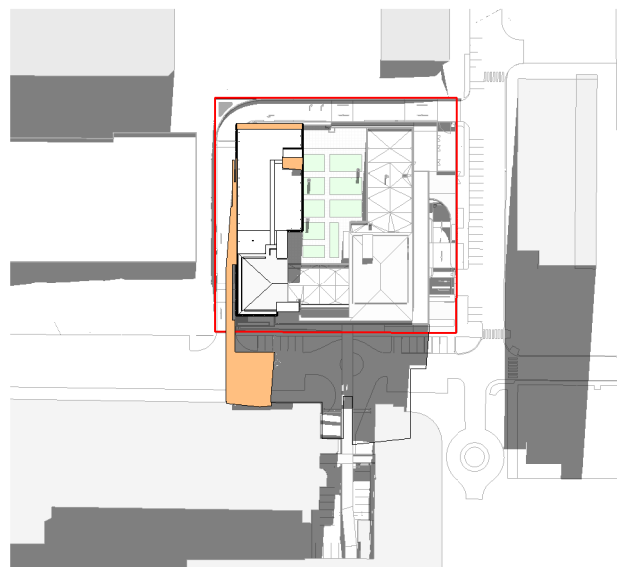
1 TOWER B - WINTER SOLSTICE - 9AM



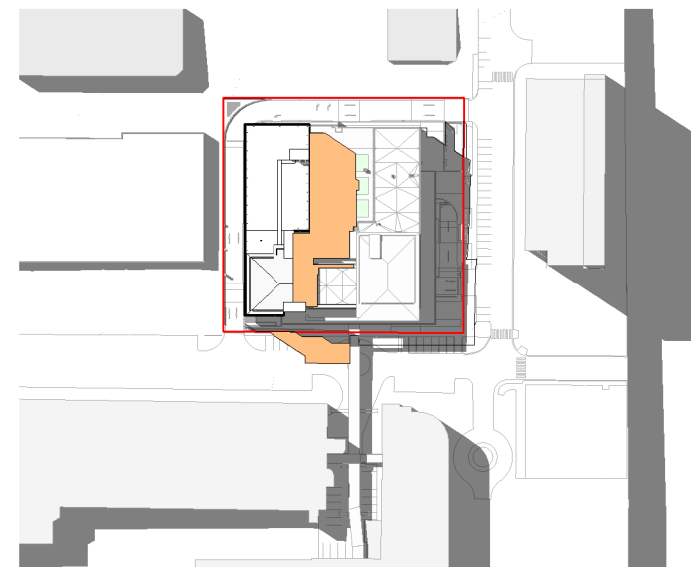
2 TOWER B - WINTER SOLSTICE - 12PM



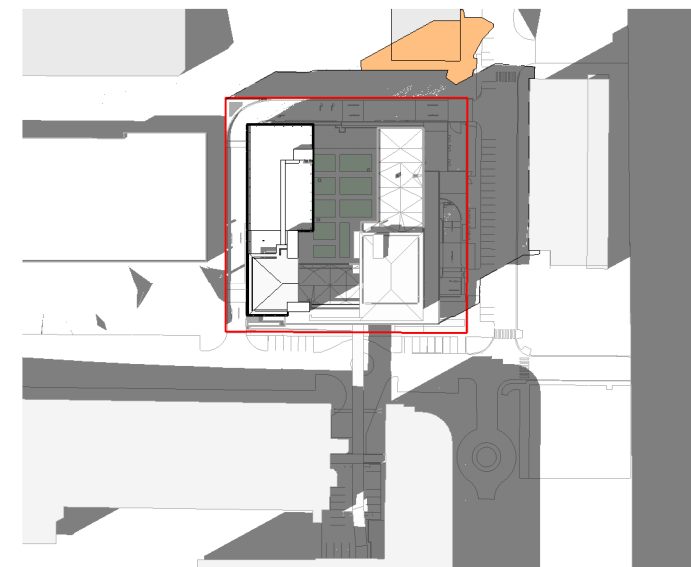
3 TOWER B - WINTER SOLSTICE - 3PM



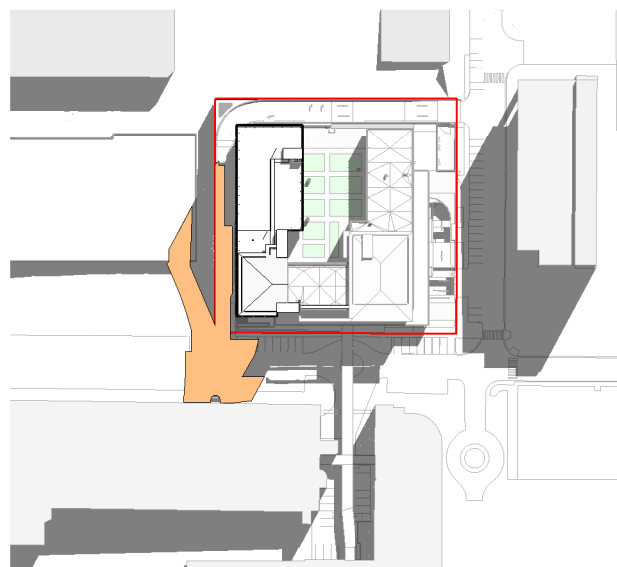
4 TOWER B - EQUINOX - 9AM



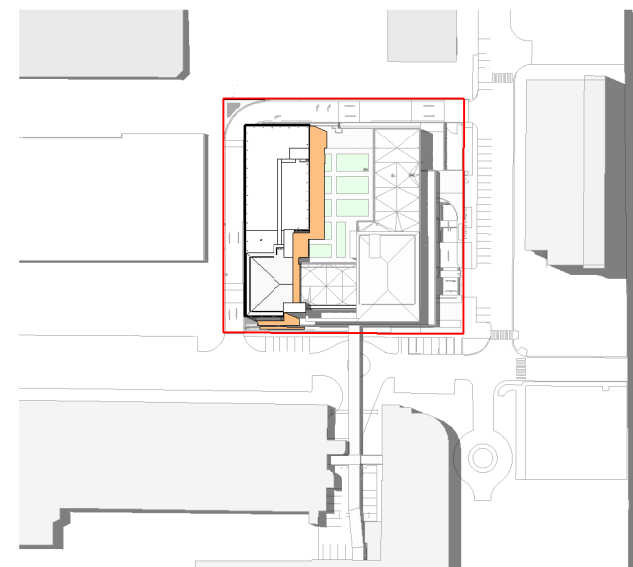
5 TOWER B - EQUINOX - 12PM



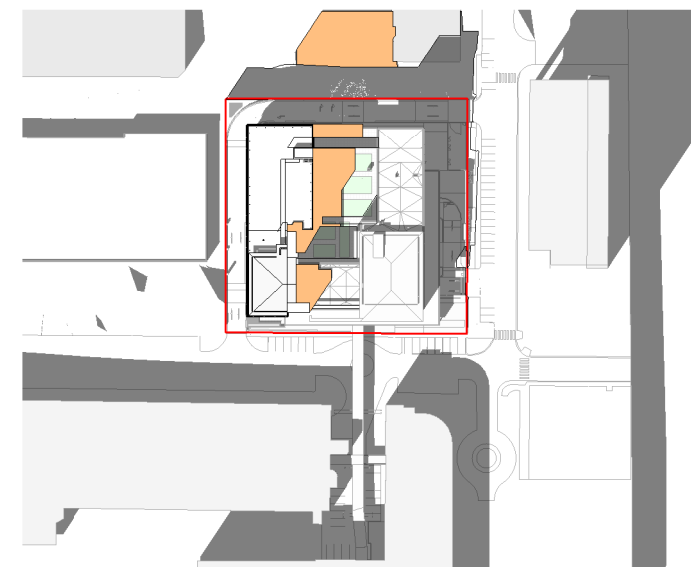
6 TOWER B - EQUINOX - 3PM



7 TOWER B - SUMMER SOLSTICE - 9AM

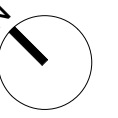


8 TOWER B - SUMMER SOLSTICE - 12PM



9 TOWER B - SUMMER SOLSTICE - 3PM

0 25000 50000 75000 100000 125000
1:2500



LEGEND
 TOWER 'B' SHADOW

D	ISSUE FOR DA	18/04/18
C	ISSUE FOR DA	22/12/17
B	ISSUE FOR DA	19/12/17
A	PRELIMINARY	24/11/17
REV		



Billard Leece Partnership Pty Ltd
 Architects & Urban Planners
 Studio 201, 50 Holt Street
 Surry Hills 2010
 NSW Australia
 T +61 2 8096 4066

E info@blp.com.au
 www.blp.com.au

CLIENT
DEXUS PROPERTY GROUP

PROJECT
NORTH SHORE HEALTH HUB

DESCRIPTION
 SHADOW DIAGRAMS

Project No 17005

Scale 1 : 2500@A3 Date 17/04/2018

Drawn By SD Checked By AM

Drawing No DA-125 Revision D