



**Planning &
Environment**

***STATE SIGNIFICANT DEVELOPMENT
ASSESSMENT REPORT:***

***North Shore Health Hub (previously known as St
Leonards Private Hospital)***

***Tower A (SSD 7543) and Tower B Concept Development
Application (SSD 8499)***



Environmental Assessment Report
Section 4.40 of the
Environmental Planning and Assessment Act 1979

June 2018

ABBREVIATIONS

Applicant	DEXUS Projects Pty Limited, or anyone else entitled to act on this consent
CIV	Capital Investment Value
Consent	Development Consent
Council	Willoughby City Council
CEMP	Construction Environmental Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CTMP	Construction Traffic Management Plan
CTPMP	Construction Traffic and Pedestrian Management Plan
CWMP	Construction Waste Management Plan
DA	Development Application
Department	Department of Planning and Environment
DP	Deposited Plan
DSI	Detailed Site Investigation
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FSR	Floor space ratio
GFA	Gross floor area
GSC	Greater Sydney Commission
GTP	Green Travel Plan
ICNP	Interim Construction Noise Policy
INP	Industrial Noise Policy
ICNG	Interim Construction Noise Guidelines
LGA	Local Government Area
LoS	Level of Service
Minister	Minister for Planning
NCC	National Construction Code
NIA	Noise Impact Assessment
NML	Noise Management Levels
NSPH	North Shore Private Hospital
OEH	Office of Environment and Heritage
RAP	Remediation Action Plan
Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
RMS	Roads and Maritime Services
RNSH	Royal North Shore Hospital
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SSD	State Significant Development
TfNSW	Transport for New South Wales
TIA	Traffic Impact Assessment
TTP	Temporary Transport Plan
UPSS	Underground Petrol Storage System
UST	Underground Storage Tank
WDCP	Willoughby Development Control Plan
WLEP	Willoughby Local Environmental Plan

Cover Photograph: Proposed view of Tower A from the south (Source: SSD 7543 RtS)

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EXECUTIVE SUMMARY

This report provides an assessment of two State significant development (SSD) applications for the project known as the North Shore Health Hub (SSD 7543 and SSD 8499). The site is located at 12 Frederick Street, St Leonards. The Applicant is DEXUS Projects Pty Ltd and the proposal is located within the Willoughby local government area.

Approval is sought for:

- the detailed design, construction and operation of 'Tower A' (SSD 7543), including site preparation works, a new seven-storey building, basement car parking, an elevated pedestrian connection to the adjacent North Shore Private Hospital and Royal North Shore Hospital multi-storey car park, and landscaping and public domain works
- a concept development application for the future development of 'Tower B' (SSD 8499), including future building footprint, envelope and height of the tower, indicative future uses and future car parking provision.

This report has been prepared to consider both SSD applications concurrently on the basis that: they were lodged by the same Applicant; are on the same parcel of land; and propose an interrelated and integrated built form and land use, effectively forming a 'health hub' on the subject site. The assessment of both applications in this report enables the key considerations to be undertaken concurrently by the Department of Planning and Environment (the Department).

Tower A has a Capital Investment Value (CIV) of \$75.6 million and would generate 166 operational jobs and 500 construction jobs. The concept development application for Tower B would facilitate development with a CIV of \$36.9 million and would generate the potential for 110 future operational jobs and 330 future construction jobs. The proposals are SSD under clause 14 of the *State and Environmental Planning Policy (State and Regional Development) 2011*, as it is development for the purposes of a health, medical or related research facility with a CIV of more than \$30 million. Therefore, the Minister for Planning is the consent authority in relation to both applications.

Tower A was publicly exhibited between 6 April 2017 and 22 May 2017. The Department received a total of five submissions from public authorities. An additional three submissions from public authorities were received in response to the Applicant's Tower A Response to Submissions (RtS).

The key issues raised in the Tower A submissions include: site establishment; demolition; contamination; noise and vibration; radiation licencing; water; waste; construction and operational traffic, transport and parking impacts; proposed uses; economic and social impact assessment; built form and urban design; patient amenity; landscaping; loading arrangements; pedestrian and cycle access and provision; sustainable transport; lighting; fire services; signage; and development contributions.

Tower B was publicly exhibited between 20 July 2017 and 18 August 2017. The Department received a total of four submissions, including three from public authorities and one from the public. An additional three submissions from public authorities were received in response to the Applicant's Tower B RtS.

The key issues raised in the Tower B submissions include: noise and vibration; radiation licencing; construction and operational traffic, transport and parking impacts; proposed accommodation; water; gross floor area; built form and urban design; pedestrian and cycle access and provision; sustainable transport; lighting; fire services; signage; and development contributions.

The Department has considered the above issues in its assessment. The Department has considered the merits of the proposals in accordance with relevant matters under Section 4.15(1), the objects of the *Environmental Planning and Assessment Act 1979*, the principles of Ecologically Sustainable Development, and issues raised in all submissions, as well as the Applicant's response to these.

The Department has identified the following key issues for assessment: built form and public domain; traffic, transport and parking; noise and vibration; and contamination.

The Department's assessment concludes that the proposed built form and design of Tower A and the footprint, envelope and height of Tower B would be acceptable for the site. The Department has considered concerns raised in submissions and recommended a number of conditions of consent requiring further mitigation and management measures. In particular, a condition is recommended requiring the Applicant to complete prior to final occupation of Tower A (in consultation with and to the agreement of Council) necessary road upgrade works at the Herbert Street/Westbourne Street intersection. Subject to the recommended conditions, the Department is satisfied that potential traffic, transport, parking, noise, vibration and contamination impacts associated with Towers A and the future development of Tower B can be appropriately managed.

The site is capable of being remediated to ensure it can be made suitable for the proposed health related uses. In this respect, the Department is satisfied that the investigations undertaken by the Applicant satisfactorily demonstrate that the site can be made suitable for the proposal.

The Department considers that the proposal is consistent with the *Premiers Priorities* and *A Metropolis of Three Cities – The Greater Sydney Plan* and concludes that the proposal is in the public interest and recommends that the applications be approved subject to conditions.

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1. BACKGROUND

1.1 Introduction

This report provides an assessment of two related State significant development (SSD) applications for a new 'health hub' at St Leonards. The proposed development includes the detailed design, construction and operation of 'Tower A' (SSD 7543) and a concept development application for the future development of 'Tower B' (SSD 8499).

The Tower A application comprises: site preparation works; the design and construction of a new seven-storey building, with basement car parking; an elevated pedestrian bridge to the adjacent North Shore Private Hospital (NSPH); and landscaping and public domain works.

The Tower B application comprises a concept development application for the future development of a new health services building above part of the Tower A podium level, including: the future building footprint; building envelope; indicative future uses; and future car parking provision.

The applications have been lodged by DEXUS Projects Pty Ltd (the Applicant). The site is located within the Willoughby Local Government Area (LGA).

1.2 The site and surroundings

The site is located approximately six kilometres north of the Sydney central business district on the corner of Reserve Road and Westbourne Street, St Leonards. The site has an area of 6,194 sqm, which forms the southern portion of a larger 2.6 ha portion of land known as 12 Frederick Street and legally described as Lot 1 Deposited Plan (DP) 591747. A proposed elevated connection bridge between Tower A and the NSPH and Royal North Shore Hospital (RNSH) multi-storey carpark, spanning Reserve Road, would also affect a portion of Lot 210 DP 1172133 and Lot 2 DP 1158469.

The site has a frontage of approximately 77.5 m to Westbourne Street and 80 m to Reserve Road. The site is accessible from Westbourne Street, Reserve Road and an internal access road running along the north-east boundary of Lot 1 DP 591747 accessed from Frederick Street. Reserve Road is a two-way road with an on-street restricted staff parking area between a roundabout located approximately 40 m to the north-west of Westbourne Street (adjacent the site) and a permanent southbound lane closure and north-bound boom gate located approximately 170 m to the north-west of Westbourne Street (to the north-west of the site). The existing southbound lane closure prevents south-bound through traffic from accessing the site via Reserve Road.

The site is situated in a light industrial precinct that is dominated by warehouse and retail uses. Uses include an Australia Post facility, which is located immediately to the north-east of the site, and Home HQ (mixed retail), which is located to the north-west of the site on the opposite side of Frederick Street. The existing North Shore Health Precinct is also situated adjacent to the site, including the RNSH, which is located to the south of the site on the opposite side of Westbourne Street, and the NSPH and a RNSH multi-storey carpark, which are located to the west of the site on the opposite side of Reserve Road. St Leonards railway station is located approximately 500 metres to the south-east.

Historically, the site comprised part of a former brick quarry. A steeply sloped quarry embankment running from east to west bisects the site, resulting in an approximate 16 m reduction in level from south to north across the site. The existing buildings on Lot 1 DP 591747 are mixed warehouse units owned by the Applicant, the most southerly of which are two-storey units with rooftop parking that extend into the lower northern portion of the site. A former helipad is located in a clearing in the higher southern portion of the site. The remainder of the site is vegetated, except for a small western portion of the embankment.

The site context and site location are shown in **Figures 1** and **2**. The existing site conditions are shown in **Figure 3** and views of the existing two-storey warehouse building and the former quarry embankment are shown in **Figures 4** and **5**. The site access from Frederick Street is shown in **Figures 3** and **6** and the southbound lane closure on Reserve Road is shown in **Figure 7**.

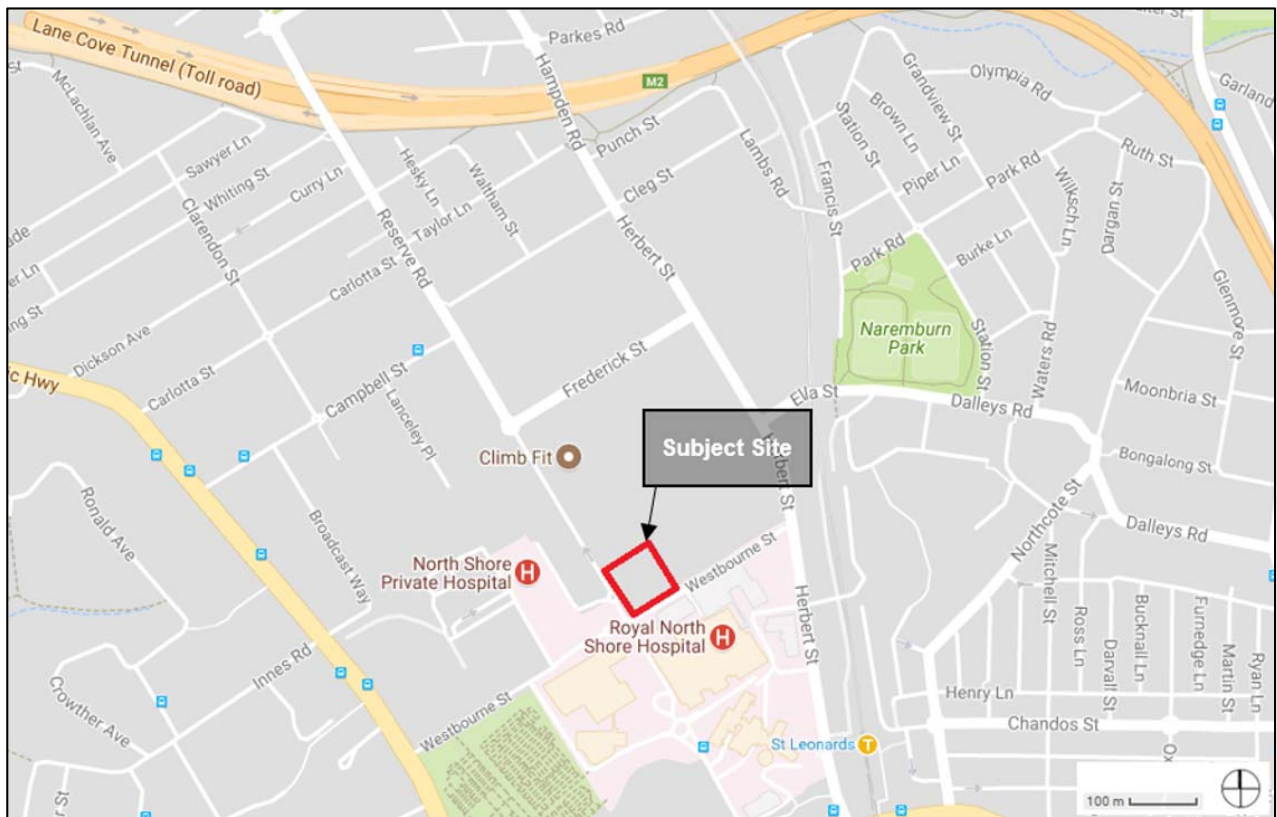


Figure 1: Site location (Base source: Google Maps)



Figure 2: Aerial view showing site location and surrounding development (Base source: Nearmap)

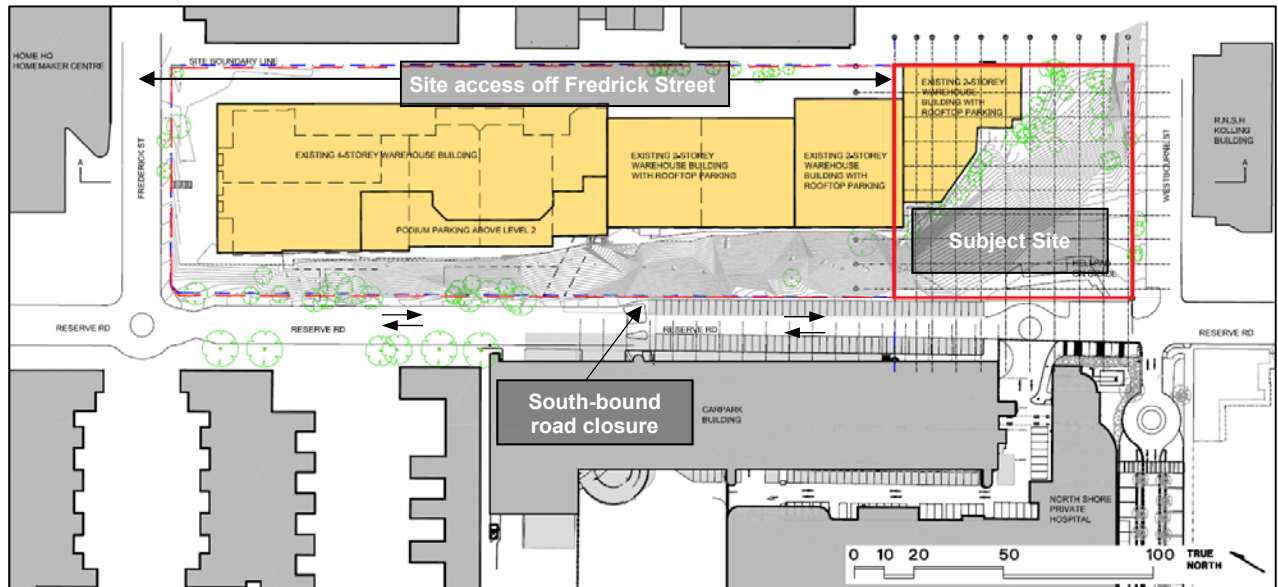


Figure 3: Existing site conditions (Base source: Tower A EIS)



Figure 4: View of the site from the north
(Base source: Tower A EIS)



Figure 5: View of the site from west
(Base Source: Tower A EIS)



Figure 6: Site access from Frederick Avenue
(Base source: Tower A EIS)



Figure 7: Reserve Road parking area and southbound lane closure (Base source: Tower A EIS)

1.3 Other relevant applications

On 29 June 2017, Willoughby City Council (Council) granted consent to development application (DA) 2016/211 for the demolition of existing buildings on the site and the subdivision of Lot 1 DP 591747 to create a separate lot for the subject proposal (as shown in **Figure 8**). No vegetation removal is proposed as part of this application. At the time this assessment report was finalised, the approved lot has not been registered with Land and Property Information.

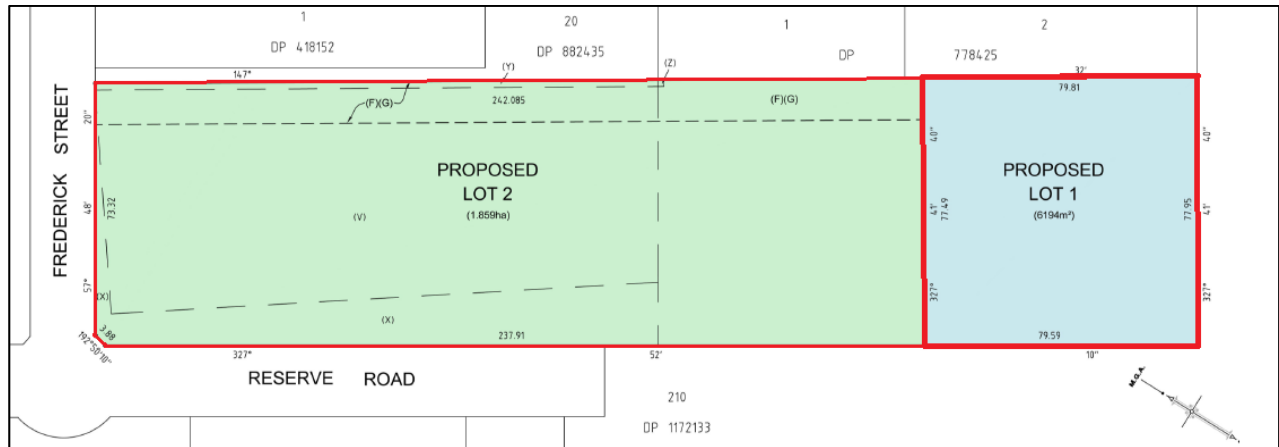


Figure 8: Proposed lots (Base source: DA 2016/211)

On 21 February 2018 the Applicant lodged an SSD application for the detailed design and construction of the Tower B (SSD 8894), which was on public exhibition until 3 April 2018. The proposal has been designed to be consistent in scale and function with the Tower B concept development application (the subject of this report). Tower B is also dependent on Tower A, which effectively forms the Tower B podium and the basement carpark for both components.

2. DESCRIPTION OF PROPOSALS

2.1 Description of proposals

The key components and features of the proposals, as described in the Response to Submissions (RtS), are provided in **Tables 1** and **2** and the proposed site layout is shown in **Figure 9**. In relation to Tower A, the range of uses was adapted and increased in the proposal as presented in the RtS, with levels 1 to 4 now additional health care related services rather than bed wards. This is discussed further in **Section 4.2** of this report.

Table 1: Key components of the SSD 7543 'Tower A' application

Aspect	Description
Summary	Construction and operation of a new seven storey building, known as Tower A. Consent is sought for: - site preparation works, including tree removal, remediation, and bulk excavation - health care uses, including: pharmacy; medical imaging; pathology; medical centre; private health surgery; cancer care facility; specialist medical suites; operating suites; and convenience retail - vehicular, pedestrian and cycle access - pedestrian footbridge to the NSPH and RNSH multi-storey carpark - a five-level basement, including car and bicycle parking and loading facilities - landscaping and public domain works.
Maximum Building Height	RL 126.35 (seven storeys) excluding basement
Gross floor area (GFA)	11,031 sqm
Floor Space Ration (FSR)	1.8:1
Car parking	340 basement parking spaces (205 allocated to Tower A)

Aspect	Description
Bicycle parking	32 parking spaces (21 spaces for staff and 11 spaces for visitors)
Jobs	500 construction and 166 operational
CIV	\$75.6 million

Table 2: Key components of the SSD 8499 'Tower B' concept development application

Aspect	Description
Summary	A concept development application for a building, known as Tower B, to be used for health and medical purposes associated with the proposed Tower A and the existing NSPH. Consent is sought for: - future building footprint, envelope and height - indicative uses, including: medical specialist suites and associated allied health services - basement carparking allocation.
Maximum Building Envelope Height	RL 138.35 (9 storeys above the north portion of the Tower A podium, excluding plant and lift core)
GFA	7,000 sqm
FSR	1.1:1 (Tower A and Tower B combined = 2.9:1)
Car parking	135 basement parking spaces allocated to Tower B
Jobs	330 future construction and 110 future operational
CIV	\$36.9 million

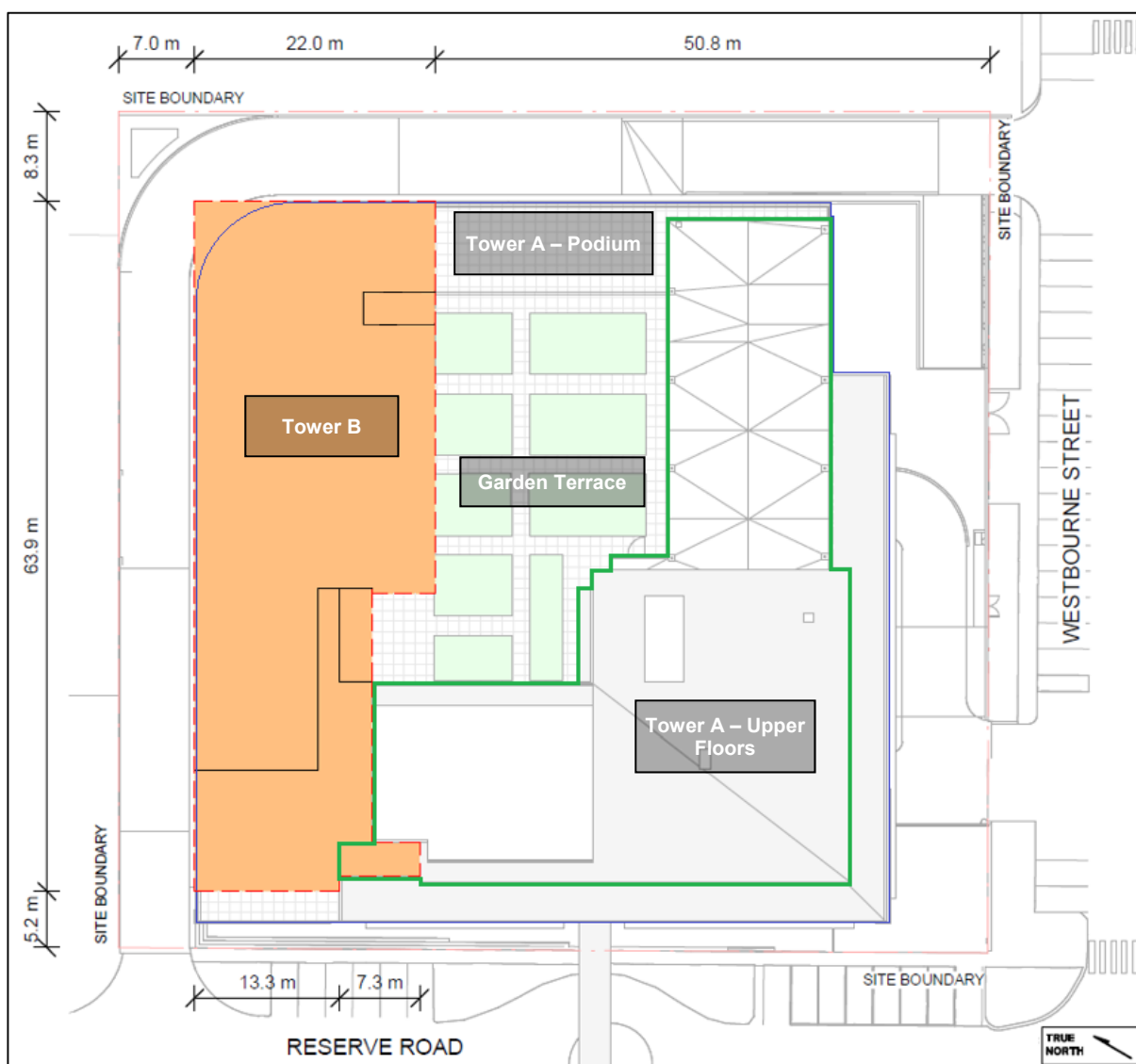


Figure 9: Proposed site layout (Base source: Tower B RtS)

Tower A will be constructed as a class 9a building, for hospital use, under the Building Code of Australia. This building classification is required as the space will be a licenced surgical facility (via NSW Health) and patients will receive general anaesthetic during their admission. Furthermore, the Applicant has detailed that an essential element of the proposed development is its connection with NSPH by an enclosed bridge over Reserve Road. Patients will be transferred between the new facility and the existing NSPH via the bridge, for diagnostic services or further treatment as required. The new facility will include additional operating theatres, patient beds, and recovery bays which comprise an expansion of existing facilities in the NSPH.

In addition to the above, the proposal also includes the following medical services:

- diagnostic and radiology services, being an expansion of services currently provided in NSPH to increase the capacity to provide imaging services for both patients of NSPH and others using these services from external referral
- comprehensive cancer care facility, requiring spaces in both the basement to provide radiation oncology services and a level of Tower A for medical oncology services
- specialist medical practices in both Towers A and B, including accommodation for practitioners who presently provide their services at either RNSH or NSPH.

Built Form and Urban Design

Tower A

The key features proposed for each floor of Tower A are summarised in **Table 3**.

Table 3: Features of floors of 'Tower A'

Floors		Description
Basement	Lower Ground Levels 5 to 1	• 340 basement parking spaces (205 allocated to Tower A) • cold shell space (Lower Ground Level 2) for potential future uses including cancer care facility use • amenities • storage rooms • plant rooms
Podium Floors	Ground Level	• main entrance • lobby • retail spaces and cold shell spaces for potential future uses including pharmacy, medical imaging, pathology, medical centre and convenience retail uses • amenities • plant rooms
	Level 1	• cold shell spaces for potential future uses including private health surgery facility and specialist suite uses • pedestrian bridge over Reserve Road linking to the existing NSPH and NSPH multi-story carpark • amenities • plant rooms
Upper Floors	Levels 2 to 5	• cold shell spaces for potential future uses including cancer care facility, specialist operating room and medical suite use • outdoor terrace (Level 2) • amenities • plant rooms
	Level 6	• plant rooms

The footprint of Tower A's basement (Lower Ground Levels 5 to 1) and podium floors (Ground Level

to Level 1) would comprise most of the site. The L-shaped footprint of the upper floors of the building (Levels 2 to 6) would be located above the south-east and south-west extents of the podium floors and would partially enclose an outdoor terrace on the Level 1 rooftop, as shown in **Figure 9**. The proposed layouts for each floor are shown in **Figures 10 to 13**. **Figure 14** shows the pedestrian bridge over Reserve Road that would link Level 1 of the podium to the adjoining NSPH and RNSH multi-storey carpark. **Figures 15 to 18** depict proposed views of Tower A.



Figure 10: Ground Floor Tower A
(Base source: Tower A RtS)

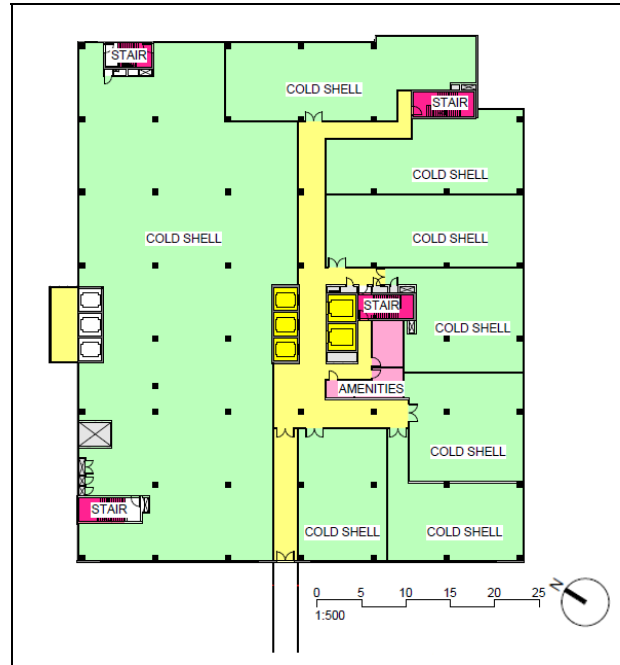


Figure 11: First Floor Tower A
(Base source: Tower A RtS)



Figure 12: Third Floor Tower A
(Base source: Tower A RtS)

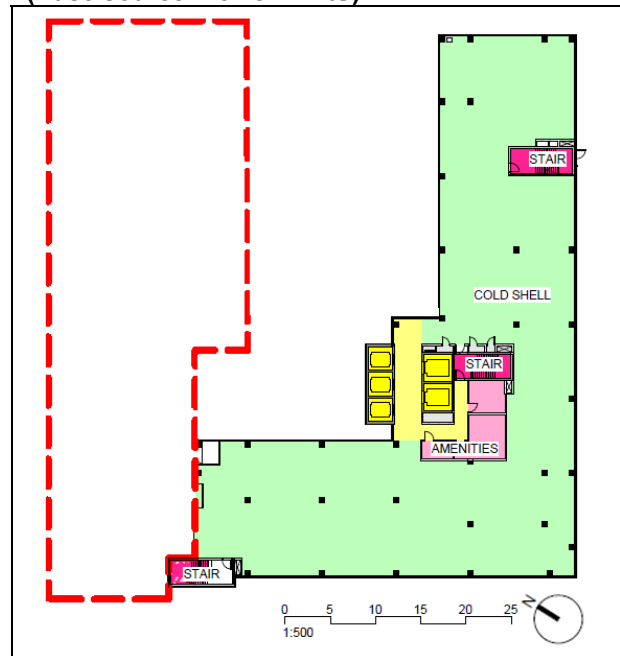


Figure 13: Third Floor to Fourth Floor Tower A
(Base source: Tower A RtS)

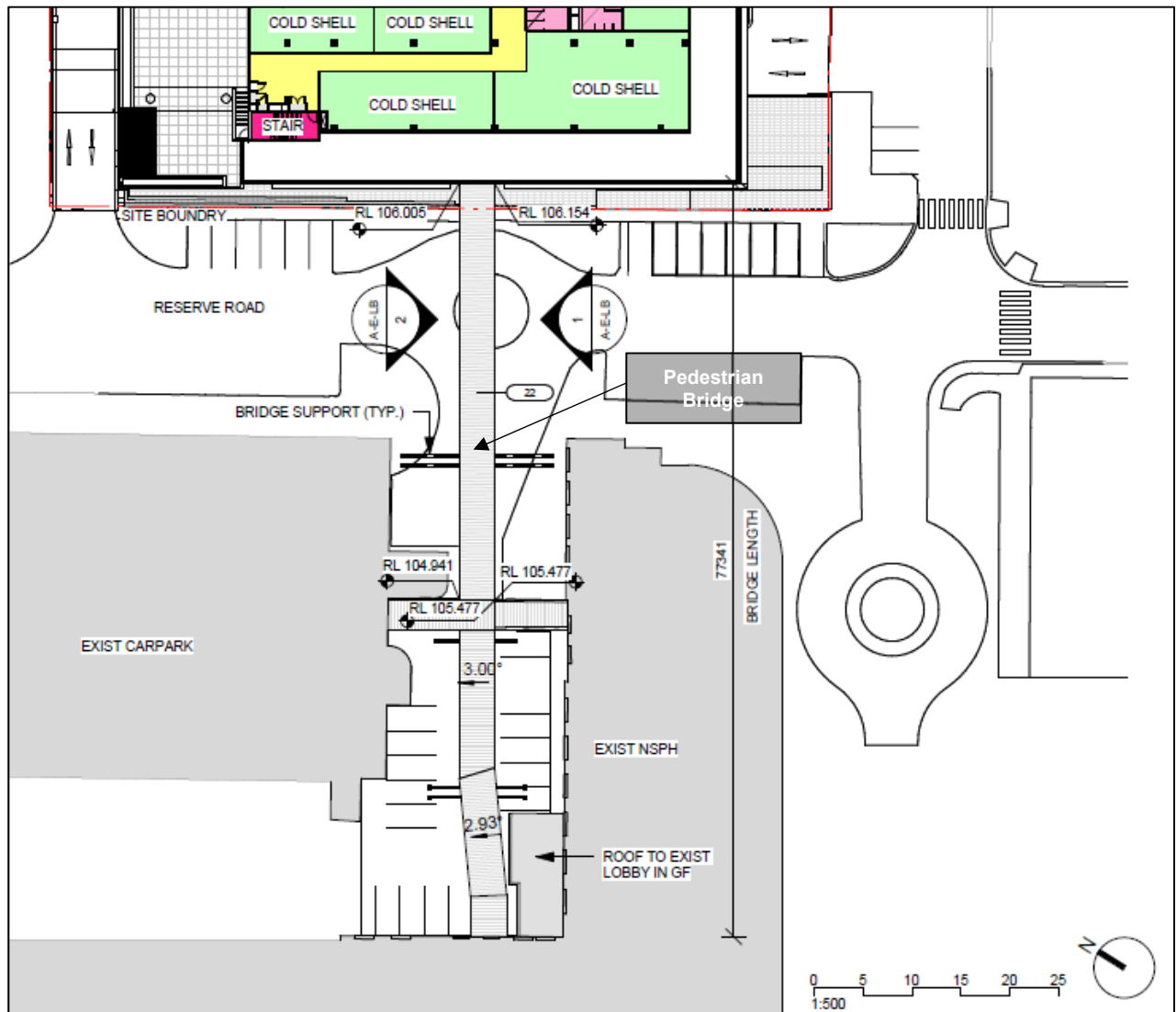


Figure 14: Proposed pedestrian linkage to NSPH (Base source: Tower A EIS)



Figure 15: Proposed view from the south
(Base source: Tower A RtS)



Figure 16: Proposed view from the east
(Base source: Tower A RtS)



Figure 17: Proposed view from the north-west showing footbridge over Reserve Road (Base source: Tower A RtS)



Figure 18: Proposed view from the north-east (Base source: Tower A RtS)

Tower B

The footprint of Tower B would be located above the northern extent of Tower A, as shown in **Figure 9**. The building would be constructed on columns and suspended above the podium floors of Tower A. Level 1 of Tower B would commence approximately at the same level as Level 3 of Tower A. Artist perspectives of Towers A and B are shown in **Figure 19**, noting that approval for the detailed design and construction of Tower B is subject to a separate development application.

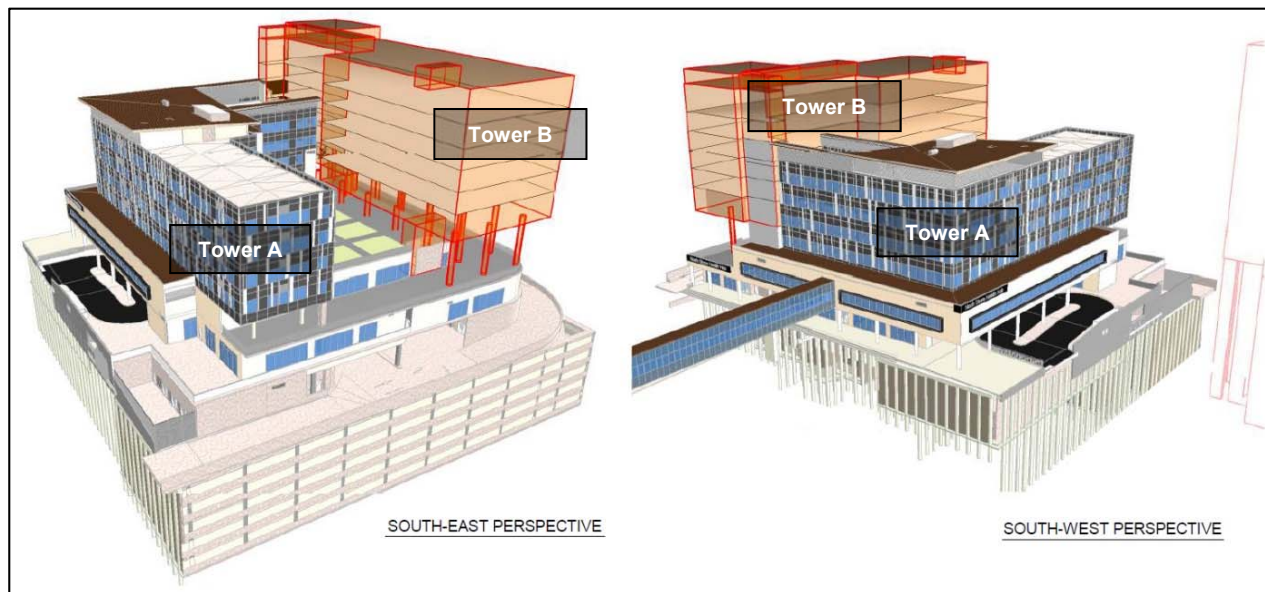


Figure 19: Proposed perspectives of Tower A and Tower B building envelope (Base source: Tower B RtS)

Car Parking and Access

A total of 340 car parking spaces are proposed in the basement floors of Tower A. The Applicant proposes that 205 parking spaces would be allocated to Tower A and 135 parking spaces would be allocated to Tower B. A loading dock to service Towers A and B would also be included on Lower Ground Level 1 of Tower A.

As shown in **Figure 20**, a ramped two-way internal access road running around the north-west and north-east boundary of the site would connect vehicular crossovers on Reserve Road and Westbourne Street to a basement vehicular access point located on the eastern side of the building. An additional vehicular crossover off Westbourne Street would provide access/egress to a one way pick-up/drop-off loop outside the main building entrance on Reserve Road at the ground floor level.

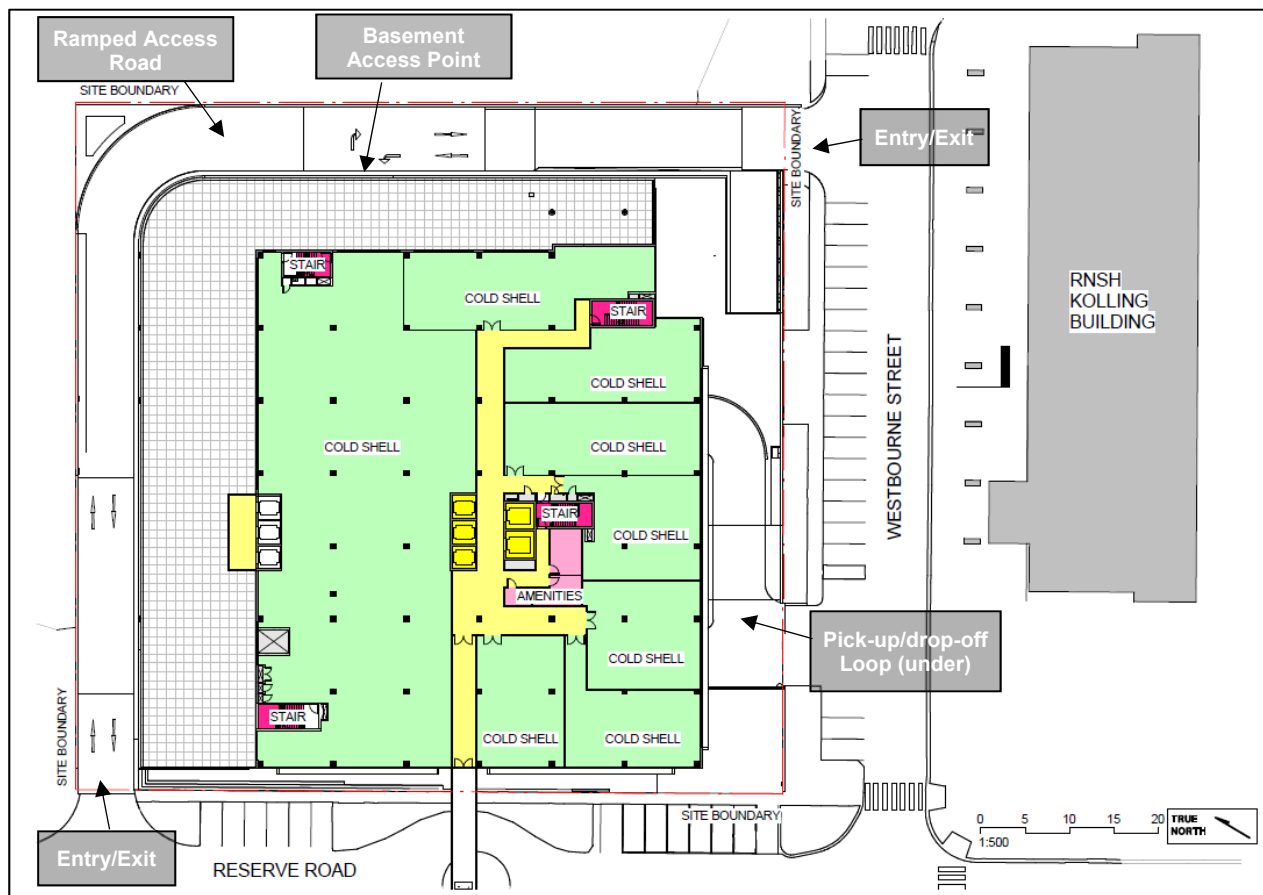


Figure 20: Proposed vehicle access (Base source: Tower A RtS podium level plan)

Landscaping

As detailed in **Figure 21**, the proposed landscaping plan includes five areas along Reserve Road for street tree and low-level planting. Additional planting would also be provided along the building edge fronting Reserve Road and adjacent to the Westbourne Street footpath.

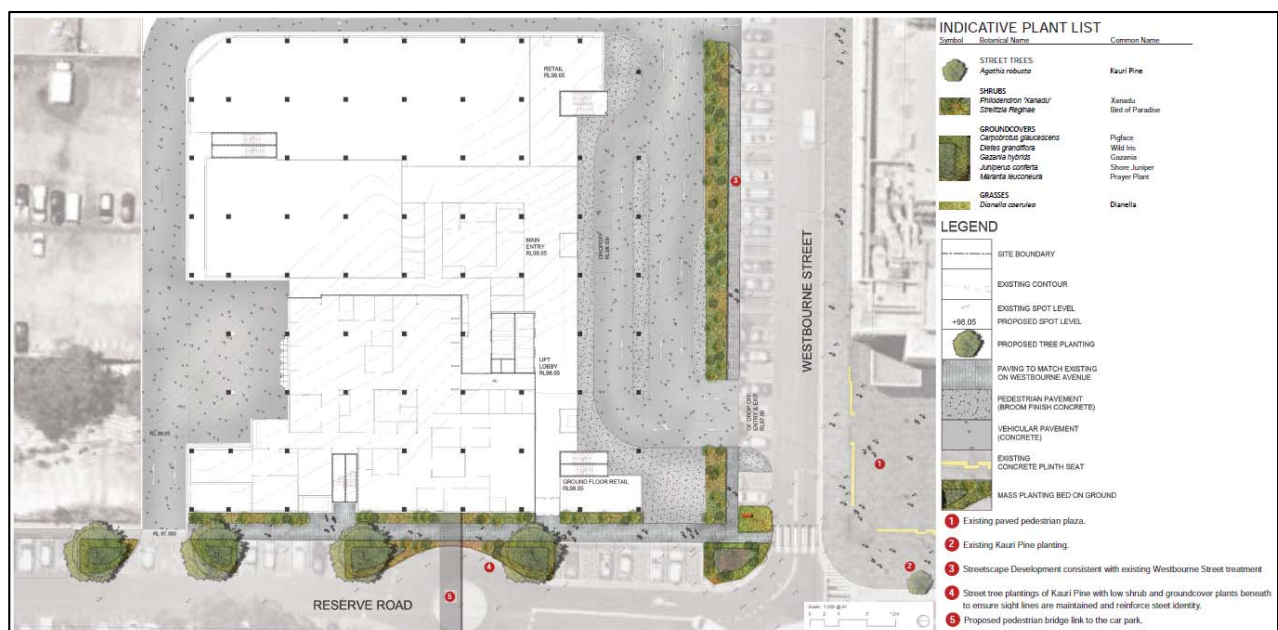


Figure 21: Proposed Landscaping Plan (Base source: Tower A RtS)

2.2 Project need and justification

The Tower B Environmental Impact Statement (EIS) detailed that the Applicant had undertaken a review of the site's healthcare catchment area, which includes Warringah, Chatswood-Lane Cove, North Sydney-Mosman, Ku-ring-gai, Ryde-Hunters Hill and Manly. The review identified high demand and short supply of healthcare services. Accordingly, the Applicant was seeking to deliver significant community benefit through addressing the identified need in the catchment for health care and related services. It was submitted that the proposed North Shore Health Hub development would:

- reinforce health services around the State significant North Shore Health Precinct through the agglomeration of leading healthcare providers, educators and ancillary uses
- expand upon the precinct's ability to attract and retain high calibre specialist across a comprehensive range of complementary specialties and services, with long-term teacher and training benefits
- create a contemporary business environment for medical professionals and staff close to transport and amenities
- provide positive economic and community benefits by creating jobs and community infrastructure.

The Tower A RtS details that since the abovementioned review of the healthcare catchment area was completed, the Applicant has undertaken an open market leasing campaign to confirm demand for health and medical services. The Tower A RtS and Tower B RtS detail that the revised uses proposed for Towers A and B reflect the responses from health and medical services to the open market leasing campaign undertaken.

2.3 Strategic Context

The Department considers that the proposal is appropriate for the site as:

- it is consistent with the *Premiers Priorities* to create jobs and improve service levels in hospitals through the provision of better access to healthcare services
- it is consistent with *A Metropolis of Three Cities - The Greater Sydney Plan* as it would provide for the expansion of health services and facilities to support Sydney's growing population
- it is consistent with the *State Infrastructure Strategy Update 2014* which recommends opportunities for a better mix of services from the private sector to deliver infrastructure and public health services
- it is consistent with the *NSW Long Term Transport Masterplan 2012* and *Future Transport Strategy 2056* as it would provide for the expansion of health services and facilities in a highly accessible location and provide access to additional new employment opportunities close to public transport
- it is consistent with the vision outlined in the Greater Sydney Commission's revised *draft North District Plan*, which prioritises growing and investing in the identified St Leonards Health and Education Precinct and growing investment, business and job opportunities in the identified St Leonards Strategic Centre
- it is consistent with the *Sydney's Cycling Future 2013* as it would promote and cater for bicycle use through the provision of cycling parking and end-of-trip facilities
- it is consistent with the goals of the strategic planning investigation currently being undertaken by the Department for the St Leonards and Crows Nest Planned Precinct to rejuvenate the area with new jobs and infrastructure
- it would provide total direct investment in the region of approximately \$112.5 million and support a total of 830 construction jobs and 276 operational jobs.

3. STATUTORY CONTEXT

3.1. State Significant Development

The Tower A application is SSD under section 4.36 (development declared SSD) of the EP&A Act as the proposal has a CIV of more than \$30 million and is for the purposes of a health, medical or related research facility under clause 14 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). The Minister for Planning is therefore the consent authority for the proposed development.

The Tower B application is SSD under section 4.36 (development declared SSD) of the EP&A Act as the proposal also has a CIV of more than \$30 million and is for the purposes of a health, medical or related research facility under clause 14 of Schedule 1 of the SRD SEPP. The Minister for Planning is therefore the consent authority for the proposed development.

3.2. Consent Authority

In accordance with the then Minister for Planning's delegation to determine SSD applications, signed on 11 October 2017, the Executive Director, Priority Projects Assessments may determine these applications as:

- the relevant Council has not made an objection to either application
- there are less than 25 public submissions in the nature of objection on both applications
- a political disclosure statement has not been made.

3.3. Permissibility

The site is zoned IN1 General Industrial under Willoughby Local Environmental Plan 2012 (WLEP), where health services facilities are prohibited. However, under clause 74 of Schedule 1 of WLEP, development for the purpose of a 'hospital' is permitted with consent on certain land at 12 Frederick Street, St Leonards (being the subject site).

The WLEP defines "hospital" as meaning: "a building or place used for the purpose of providing professional health care services (such as preventative or convalescent care, diagnosis, medical or surgical treatment, psychiatric care or care for people with disabilities, or counselling services provided by health care professionals) to people admitted as in-patients (whether or not out-patients are also cared for or treated there), and includes ancillary facilities for (or that consist of) any of the following:

- a) day surgery, day procedures or health consulting rooms
- b) accommodation for nurses or other health care workers
- c) accommodation for persons receiving health care or for their visitors
- d) shops, kiosks, restaurants or cafes or take away food and drink premises
- e) patient transport facilities, including helipads, ambulance facilities and car parking
- f) educational purposes or any other health-related use
- g) research purposes (whether or not carried out by hospital staff or health care workers or for commercial purposes)
- h) chapels
- i) hospices
- j) mortuaries."

Tower A originally contained ward beds intended for overnight patient stay. As detailed previously, the application was revised in the RtS and the ward beds were replaced with health care related uses. At the request of the Department, the Applicant provided legal advice that the proposal still met the WLEP definition for "hospital" as in-patients are patients who have been formally admitted to a hospital whether for overnight stay or for a day procedure. As the proposed development is being undertaken in order to provide a range of professional health care services of the kind identified in the definition of "hospital", the Department agrees with the Applicant's position that the development is permissible with consent as currently proposed.

3.4. Environmental Planning Instruments

Under section 4.15 of the EP&A Act, the Secretary's assessment report is required to include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been taken into account in the assessment of the project. The following EPIs apply to the site:

- SRD SEPP
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- State Environmental Planning Policy No. 64 – Advertising Structures and Signage (SEPP 64)
- Draft Remediation of Land State Environmental Planning Policy (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment)
- WLEP.

The Department's consideration of these EPIs and draft EPIs is provided in **Appendix B**. In summary, the Department is satisfied the application is consistent with the requirements of the EPIs.

3.5. Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent/ approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore in making an assessment the objects should be considered to the extent they are relevant. A response to the Objects of the EP&A Act is provided at **Table 4**.

Table 4: Response to the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) <i>to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources</i>	The proposal will not impact on the State's natural or other resources and will promote a better environment for the users.
(b) <i>to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment</i>	The proposal includes measures to deliver ecologically sustainable development, as detailed in Section 3.6 of this report.
(c) <i>to promote the orderly and economic use and development of land</i>	The proposal would facilitate redevelopment of the site for health care related uses.
(d) <i>to promote the delivery and maintenance of affordable housing</i>	Not applicable.
(e) <i>to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats</i>	The proposal would protect the environment, as detailed in Section 5 of this report.
(f) <i>to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)</i>	The site has been subject to previous quarry activities and disturbance.
(g) <i>to promote good design and amenity of the built environment</i>	The proposal promotes good design and amenity, as detailed in Section 5 of this report.

(h) <i>to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants</i>	The proposal would promote proper construction and maintenance of buildings subject to recommended conditions of consent.
(i) <i>to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State</i>	The proposal has been assessed by the Department in consultation with various Government Agencies and Council, as detailed in Section 4 of this report.
(j) <i>to provide increased opportunity for community participation in environmental planning and assessment.</i>	Appropriate level of community participation has been undertaken in the environmental planning and assessment, as detailed in Section 4 of this report.

3.6. Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

Tower A

The development proposes ESD initiatives and sustainability measures, including:

- building orientation to maximise efficient pedestrian/vehicular access and access to natural light, prevailing winds, natural ventilation and area views
- high-performance glazing
- net high building mass with consequential benefits in thermal storage and inertia
- water use minimisation and collection/reuse of rainwater
- energy and water efficient fittings and fixtures
- LED and fluorescent light fittings
- motion detectors and level sensors at the building perimeter and proximity sensors within car parking areas
- solar assisted gas fired hot water heaters
- waste sorting/separation and recycling during construction and operational phases.

Tower B

Whilst the Tower B application is only for a concept development application for a future building envelope and indicative uses, ESD initiatives and sustainability opportunities are highlighted for the future detailed proposal, including:

- building orientation to maximise functionality in line with providing efficient pedestrian and vehicular access and good access to natural light, prevailing winds, and natural ventilation and area views
- high performance glazing
- internal shading to minimise any occupant discomfort from glare
- net high building mass with consequential benefits in thermal storage and inertia
- installation of individual water meters in separate sections of the building
- fixtures and fittings to provide the best Water Efficiency Labelling Standards (WELS) rating
- efficient water use equipment to minimise water consumption
- water recycling
- cooling and heating systems
- all lighting will be selected to minimise consumption and associated heat loads on air conditioning systems

- appropriate recycling and waste disposal for waste minimisation.

The Department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process by a thorough assessment of the environmental impacts of the project. Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

3.7. Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

3.8. Secretary's Environmental Assessment Requirements

The Department notified the Applicant of the Secretary's Environmental Assessment Requirements (SEARs) for Tower A on 23 March 2016. The Department is satisfied that the Tower A EIS, as amended by the Tower A RtS, adequately addresses compliance with the SEARs to enable the assessment and determination of the application.

The Department notified the Applicant of the SEARs for the Tower B concept development application on 7 June 2016. The Department is satisfied that the Tower B EIS, as amended by the Tower B RtS, adequately addresses compliance with the SEARs to enable the assessment and determination of the application.

4. CONSULTATION AND SUBMISSIONS

4.1. Exhibition

In accordance with Section 89F of the EP&A Act (prior to the commencement of the Amending Act) and Clause 83 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), the Department publicly exhibited the Tower A application from 6 April 2017 until 22 May 2017 (47 days due to school holidays) and the Tower B application from 20 July 2017 until 18 August 2017 (30 days). The applications were exhibited on the Department's website, at the NSW Service Centre and at Council's office.

The Department placed a public exhibition notice for Tower A in the Sydney Morning Herald and Daily Telegraph on 5 April 2017 and the North Shore Times on 6 April 2017. Adjoining landholders and relevant State and local government authorities were also notified in writing.

The Department received a total of five submissions from public authorities. No submissions were received from members of the public. A summary of the issues raised in the submissions is provided at **Table 5** below and copies of the submissions may be viewed at **Appendix A**.

The Department placed a public exhibition notice for Tower B in the Sydney Morning Herald, Daily Telegraph and North Shore Times on 19 July 2017. Adjoining landholders and relevant State and local government authorities were also notified in writing.

The Department received a total of four submissions, comprising three submissions from public authorities and one submission from the general public. A summary of the issues raised in the submissions is provided at **Table 6** below and copies of the submissions may be viewed at **Appendix A**.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the applications (**Section 5**) and/or by way of recommended conditions in the instrument of consent at **Appendix C**.

4.1.1. Public Authority submissions

Table 5: Summary of public authority submissions – Tower A EIS exhibition

Council
Council did not object to the proposal, however, it provided comments in relation to: • land use • social and economic impact assessment • urban design and built form • patient amenity • landscaping • traffic and loading impacts • noise and vibration impacts • lighting • fire services • signage • payment of development contributions. Council also provided recommended conditions, should the application be supported, including recommended hours of construction.
Transport for NSW (TfNSW)
TfNSW did not object to the proposal, however, it provided comments in relation to: • construction overlap with the Temporary Transport Plan (TTP) for the conversion of the Epping-Chatswood Railway line to a metro line and the need for a revised Construction Pedestrian and Traffic Management Plan (CPTMP) • bicycle parking and end-of-trip facilities • bus services • inaccuracies in the Transport Impact Assessment.
Roads and Maritime (RMS)
RMS did not object to the proposal, however, it recommended conditions relating to: • carpark area layouts • sight lines for vehicular crossings • vehicle access and egress • the TTP and the need for a revised Construction Pedestrian and Traffic Management Plan (CPTMP).
NSW Environment Protection Authority (EPA)
EPA did not object to the proposal, however, it provided comments in relation to: • contamination • construction and operational noise and vibration • radiation licencing • waste management.
Sydney Water
Sydney Water did not object to the proposal, however, it provided comments in relation to: • drinking and waste water • Sydney Water E-Planning • Sydney Water servicing • building plan approval • trade wastewater requirements • backflow prevention requirements water efficiency • contingency plan recommendations.

Table 6: Summary of public authority submissions – Tower B EIS exhibition

Council
Council did not object to the proposal, however, it provided comments in relation to: • need for and amount of accommodation • gross floor area

• building envelope setbacks • traffic, parking and loading impacts • pedestrian and cycle access • noise impacts • lighting • fire services • signage • payment of development contributions. Council also provided recommended conditions, should the application be supported.
Transport for NSW (TfNSW)
TfNSW did not object to the proposal, however, it provided comments in relation to transport impact assessment and CPTMP requirements for subsequent detailed design development applications.
Roads and Maritime (RMS)
RMS did not object to the proposal, however, it provided comments relating to: • access points and direction of travel around the site • assessment of the traffic generation rates for the proposed development of the former ABC site.
NSW Environment Protection Authority (EPA)
EPA did not object to the proposal, however, it provided comments in relation to: • noise and vibration • radiation licencing • waste management.

4.1.2. Public submissions

No public submissions were received regarding Tower A. One public submission was received regarding Tower B, which did not object to the proposal but highlighted the importance of controlling operational noise from mechanical plant equipment.

4.2. Response to Submissions

Following the exhibition of the applications the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions for both applications.

On 1 December 2017, the Applicant provided a Tower A RtS and a Tower B RtS (**Appendix A**) on the issues raised during the exhibition.

Tower A

The RtS contained responses to each concern raised by public authorities. The RtS also included the following amendments to the proposal:

- modification of the proposed health care related uses, including the replacement of the originally proposed inpatient accommodation (128 beds), operating theatres, urgent care facility, support services and radiology/diagnostic imaging centre with additional specialist medical suites and operating theatres, medical imaging, pathology, medical centre, private health surgery facility and cancer care facility
- addition of a Level 2 outdoor terrace and a Ground Level public colonnade
- removal of ambulance bays
- modifications to stair cores, the outline of the building façade and internal floor plans
- revised vehicle access and pick-up/drop-off arrangements
- two additional basement levels (Lower Ground Levels 4 and 5)
- increased basement parking spaces (from 220 to 340), with 205 spaces allocated to Tower A
- reduced GFA from 11,586 sqm (FSR 1.9:1) to 11,031 sqm (FSR 1.8:1).

The RtS was made publicly available on the Department website and was referred to the relevant public authorities. An additional three submissions were received from public authorities, including

Council, TfNSW and the EPA. A summary of the issues raised in the submissions is provided at **Table 7** and copies of the submissions may be viewed at **Appendix A**.

Table 7: Summary of public authority submissions – Tower A RtS

Council
Council advised that it has no additional comments beyond its original submission.
TfNSW
TfNSW request a condition of consent requiring the provision a minimum of 21 bicycle parking spaces for employees and 11 bicycle parking spaces for Towers A and B combined.
EPA
The EPA had no additional comments.

Tower B

The RtS contained responses to concerns raised by public authorities. The RtS also included the following amendments to the proposal:

- modification of the proposed health care related uses, including the replacement of indicative uses including medical consulting rooms, operating and procedure rooms, accommodation for healthcare workers, inpatients and visitors, and ancillary conference rooms and gymnasium with medical specialist suites and associated allied health uses
- reduction of a maximum building envelope height from approximately 41.29 m (excluding basement) to approximately 35.65 m (excluding columns)
- modifications to the indicative future building form, including removal of floors on Ground Level and Levels 8 and 9, replacement of floors on Levels 1 and 2 with columns, and replacement of floors on Level 2 with columns and a stair core
- replacement of a proposed basement level and 132 parking spaces below the Tower A basement level with the allocation of 135 parking spaces in the Tower A basement to Tower B
- reduced GFA from 7,655 sqm (FSR 1.2:1) to 7,000 sqm (FSR 1.1:1).

The RtS was made publicly available on the Department website and was referred to the relevant public authorities. An additional three submissions were received from public authorities, including Council, TfNSW and the EPA. A summary of the issues raised in the submissions is provided at **Table 8** and copies of the submissions may be viewed at **Appendix A**.

Table 8: Summary of public authority submissions – Tower B RtS

Council
Council advised that it has no additional comments, noting its support for the removal of inpatient accommodation from the proposal, subject to traffic and parking movement assessment.
TfNSW
TFNSW request a condition of consent requiring the provision a minimum of 21 bicycle parking spaces for employees and 11 bicycle parking spaces for Towers A and B combined.
EPA
The EPA has no additional comments to make.

At the Department's request, the Applicant provided an RtS Addendum for Towers A and B, which included the following:

- clarification of traffic generation and intersection operation associated with the operation of Towers A and B, prepared by GTA Consultants and dated 13 March 2018
- revised architectural plans for proposed Tower B elevations and sections, prepared by Billard Leece Partnership Pty Ltd and dated 14 March 2018
- revised architectural plans for the proposed Tower A elevated pedestrian bridge, prepared by Billard Leece Partnership Pty Ltd and dated 28 March 2018.

5. ASSESSMENT

5.1 Section 4.15(1) matters for consideration

Table 9 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in **Section 5** (key and other issues) and relevant appendices or other sections of this report and EIS, referenced in the table.

Table 9: Section 4.15(1) Matters for Consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Consideration of relevant EPIs has been undertaken in Appendix B . The project satisfactorily complies.
(a)(ii) any proposed instrument	Not applicable.
(a)(iii) any development control plan	Refer to Appendix B .
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations <i>Refer Division 8 of the EP&A Regulation</i>	The SSD application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to development applications (Part 6 of the EP&A Regulation), public participation procedures for SSDs and schedule 2 of the EP&A Regulation relating to environmental impact statements. Refer to Section 4 of this report.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The Department's assessment has given appropriate consideration to the likely impacts of the project and is satisfied it can be appropriately mitigated or conditioned. Refer to Section 5.2 of this report.
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 3 and 5 of this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. Refer to Sections 4 and 5 of this report.
(e) the public interest	Refer to Section 5 of this report.
Biodiversity values impact assessment not required if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable.
The likely impact of the proposed development on biodiversity values as assessed in the biodiversity development assessment report. (Section 7.14 of the Biodiversity Conservation Act 2016)	Not applicable as SEARs were issued prior to 25 August 2017. Accordingly, the proposals are 'pending planning applications' and not subject to Section 7 of the Biodiversity Conservation Act 2016.

5.2 Key assessment issues

The Department has considered the Tower A EIS and Tower B EIS, the issues raised in submissions, the Tower A RtS and Tower B RtS and the RtS Addendum in its assessment of the proposal in totality as a health care hub. The Department considers the key issues associated with the proposal are:

- built form and public domain
- noise and vibration
- traffic, transport and parking

- 20

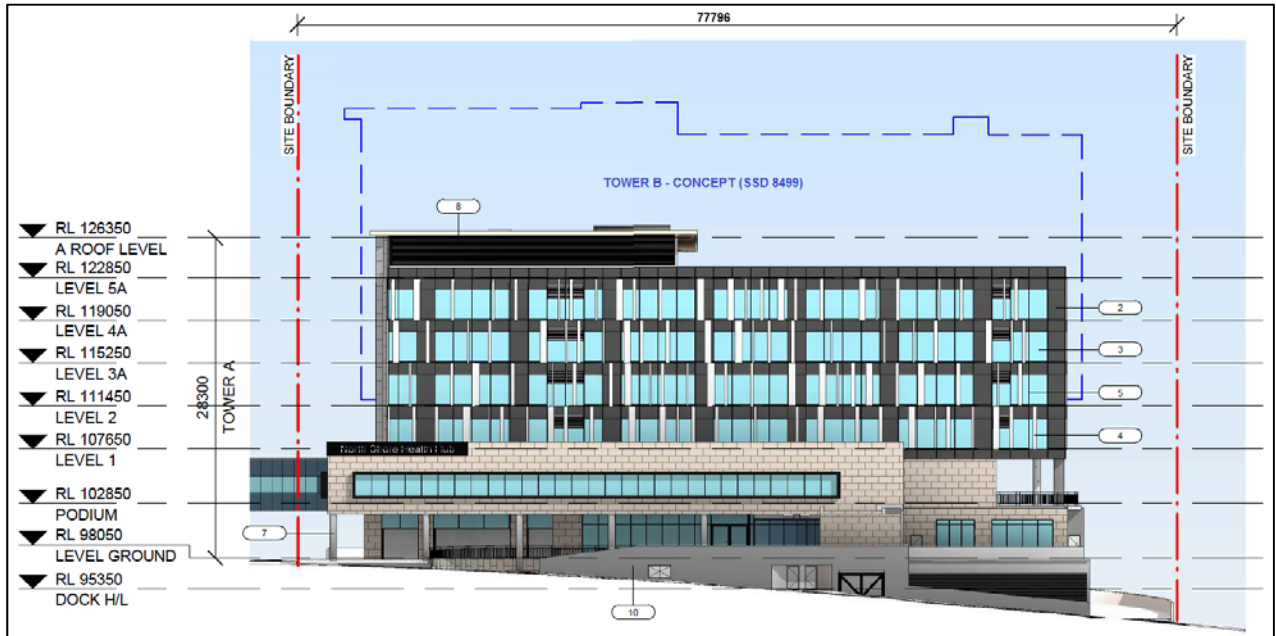


Figure 23: South-east elevation (Base source: Tower A RtS)

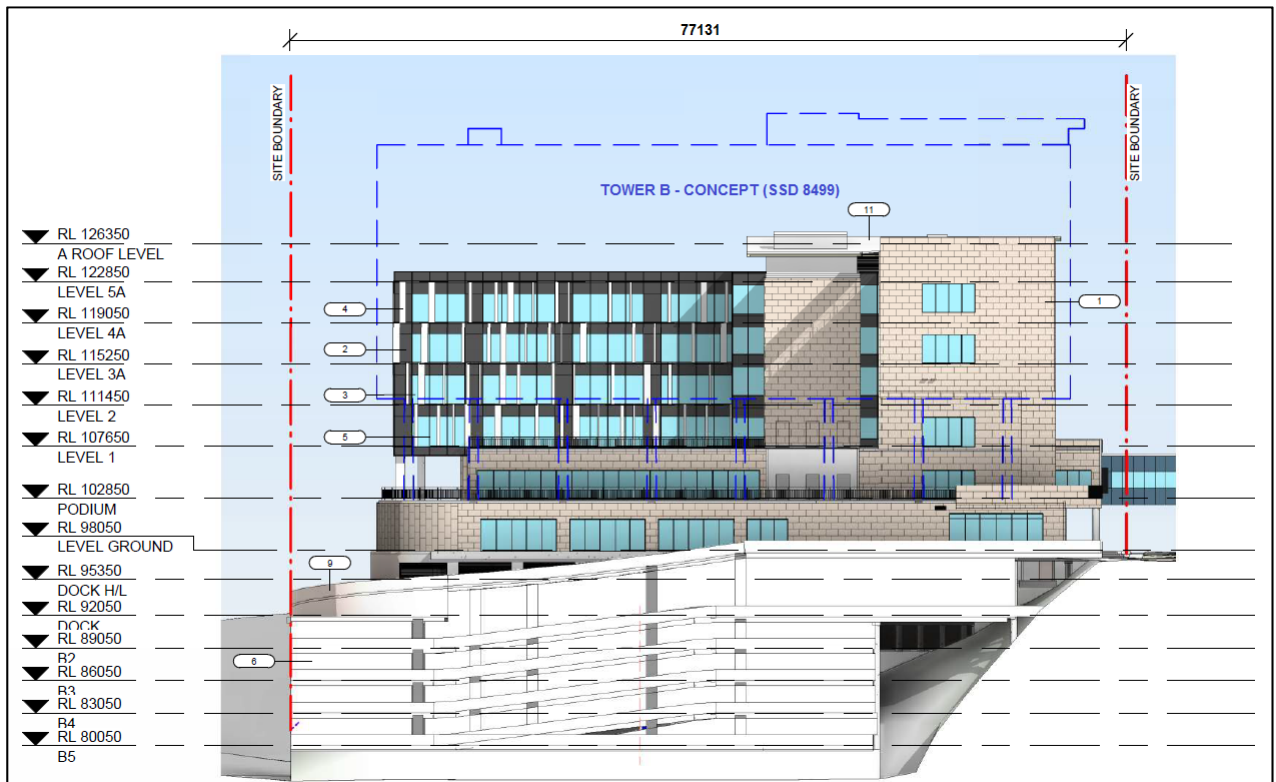


Figure 24: North-west elevation (Base source: Tower A RtS)

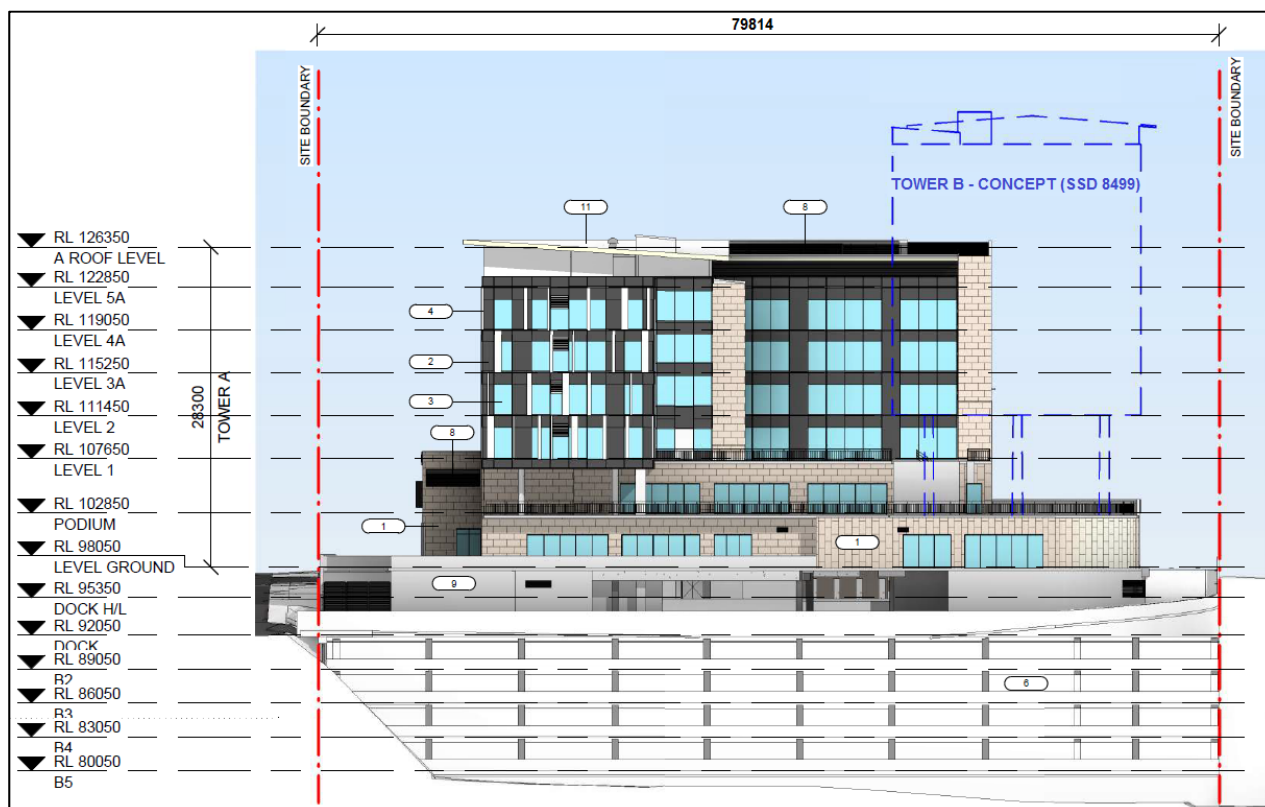


Figure 25: North-east elevation (Base source: Tower A RtS)

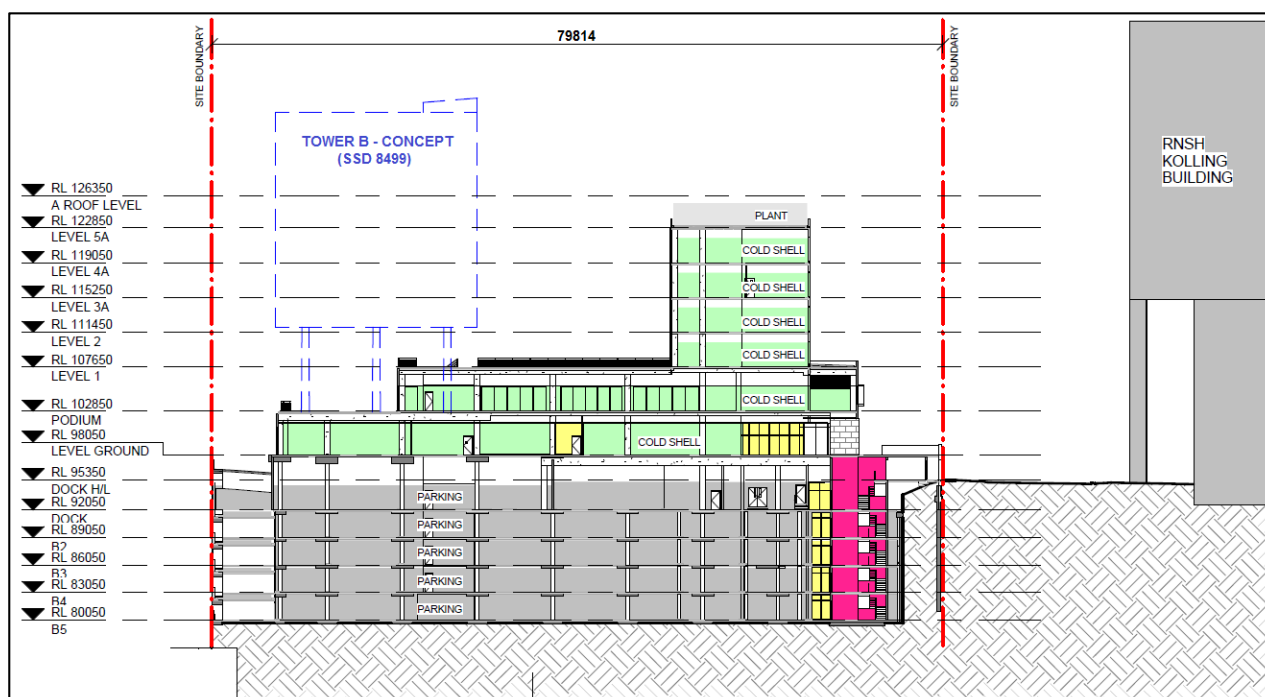


Figure 26: Tower A section (Base source: Tower A RtS)

The south-east facade of the building would front Westbourne Street and the adjacent 11 storey RNSH Kolling Institute building, the south-west facade would front Reserve Road and the adjacent six storey NSPH and seven-storey carpark, the north-east facade would front the two to four storey Australia Post facility and the north-west facade would front the two storey warehouse buildings to be retained by the Applicant on Lot 1 DP591747.

As shown in **Figures 27** and **28**, Tower A would be approximately 21.9 m lower than the Kolling Institute building, approximately 2.3 m higher than the NSPH and approximately 13.5 m higher than the RNSH multi-storey carpark. Due to the fall in topography of the site from south to north, the roof levels of the adjacent warehouse buildings and Australia Post facility would be lower than the finished floor level of the Ground Level of Tower A.

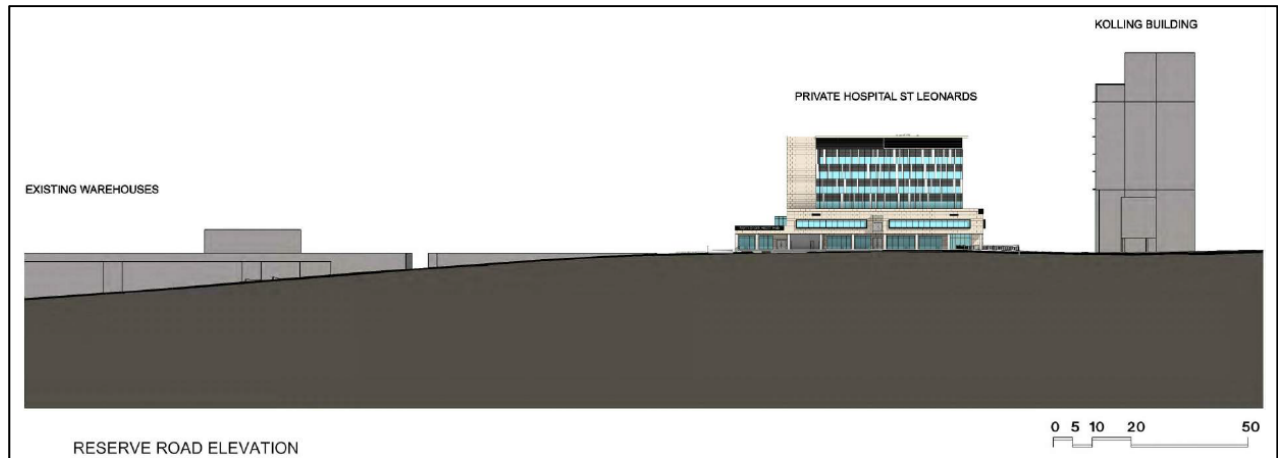


Figure 27: Extended south-west elevation (Base source: Tower A RtS)



Figure 28: Extended south-west elevation (Base source: Tower A RtS)

Tower A would be constructed from materials including: creme lightweight brickwork cladding; dark grey lightweight facade cladding; white lightweight facade articulation; dark grey powder-coated aluminium window mullions; tinted glazing; concrete blocks; light grey render and paint; dark grey powder coated louvre panels; high quality finish off form concrete; dark grey powder-coated louvre panel; and lightweight faux stone cladding.

The portion of Tower A located within Area 15 in the WLEP FSR Map would be subject to a maximum FSR of 3:1 under Clause 4.4A(23) of the WLEP as it would have a site area exceeding 1,000 sqm and would be for a hospital (the definition of which encompasses health services facilities). Tower A would have a FSR of 1.8:1, which would comply with the maximum FSR of 3:1.

Proposed views and artist perspectives of Tower A are shown in **Figures 15** to **18**. The Applicant submits that the proposed overall building mass, setbacks and articulation of Tower A generally follow a cascading height profile from the Kolling Institute building in the south-east to the lower height industrial buildings in the north-east, with the built form maintaining a similar bulk and cross-directional height to the NSPH and the RNSH multi-storey carpark in the west. Further, the Applicant submits that Tower A would become a visual landmark, with a positive impact on views along Westbourne Street and Reserve Road and a well-articulated silhouette from a distance.

Tower A would cast additional shadows during the winter months (being the worst-case scenario) that would affect portions of the public domain, the recessed lower levels of the north-west facade

of the Kolling Institute and the north-west and north-east facade of easternmost wing of the NSPH. The Applicant submits that through building setbacks and massing articulation, overshadowing impacts have been minimised and that affected buildings and public domain would receive more than three hours sunlight between 9 am and 3 pm. Tower A would also not overshadow any residential living areas or recreational open spaces.

Tower A would result in potential privacy impacts on the Kolling Institute and NSPH. However, the Applicant submits that: the windows of Tower A would include curtains and other internal screening devices; the majority of NSPH would be screened from Tower A by the RNSH multi-storey carpark; the curved windows on north-east facade of the easternmost wing of the NSPH are oriented towards the south-east and are separated from Tower A by approximately 25 m; the windows on the north-west facade of the Kolling Institute are separated from Tower A by approximately 27 m; and tinting and internal blinds are apparent on the adjacent windows of the Kolling Institute. Furthermore, Tower A would not overlook any existing residential properties and would not impact residential privacy.

A Wind Impact Assessment was included in the Tower A EIS which concludes that existing wind conditions at pedestrian level are relatively windy and the addition of Tower A would have marginal effects on existing conditions.

No issues were raised in public submissions regarding the proposed built form and Council commented that it was satisfied that the proposed built form, materials and finishes have been designed to fit with the surrounding context. However, Council did recommend that Tower A be amended to provide for a semi-private terrace for use by staff, patients and visitors. In response to Council's recommendation, the Tower A RtS amended the proposed design of Tower A to include a terrace on the roof of Level 1 (as shown in **Figure 9**). The rooftop terrace would be partially encircled by the upper floors of Tower A to the south-east and south-west.

The Department has considered the proposed building design within the context of the surrounding streetscape and adjoining development. It is acknowledged that due to the proposed height of the building and the change in elevation, Tower A would be highly visible and prominent from Reserve Road, Frederick Street, Herbert Street and Westbourne Street and generally visible from the light industrial precinct to the north-east. Tower A would also be higher than the adjoining NSPH building, multistorey carpark, Australia Post facility and warehouse buildings and would partially block views to the north-east and/or north-west from the Kolling Institute, RNSH and NSPH.

However, the Department considers the development appropriate for the site as:

- the proposed building height would be significantly lower than that of the adjacent Kolling Institute building (and newer buildings within the RNSH campus generally) and would maintain the cross-directional height transition to the existing NSPH and RNSH multi-storey carpark
- Tower A would be at an intermediate height between the Kolling Institute building to the south-east and the two-storey warehouse buildings to the north-west
- the overall scale and massing of the building would be generally consistent with the larger forms typical of hospital buildings and the bulky retail and warehousing structures within the immediate locality
- the proposed podium/tower design and setbacks would allow for adequate building articulation to reduce the perception of bulk
- the podium floors and/or upper floors would be setback adequately from adjoining buildings and Reserve Road and Westbourne Street
- an appropriate mix of materials and finishes have been proposed to provide visual relief and interest when viewed from the public domain and adjoining properties
- the building would result in acceptable overshadowing, privacy and wind impacts.

Accordingly, the Department considers that, on balance, the proposed built form and design of Tower A is acceptable for the site.

Tower B

The concept development application seeks consent for future Tower B footprint, envelope and height for the purpose of providing floor area for a 'hospital' and ancillary activities. The detailed architectural design of Tower B is the subject of a separate undetermined SSD application currently with the Department.

Representations of the proposed Tower B envelope are detailed in **Figures 29 to 32**. Excluding columns and stair core, the building would have an effective height of approximately 26.9 m (seven storeys). Including columns and stair core, from the roof level of the Tower A Ground Level to the top of the lift overrun, Tower B would be approximately 35.5 m (nine storeys) high. As shown in the indicative section at **Figure 33**, from the lowest level of the basement of Tower A (RL 80.05) to the top of the lift overrun (RL 138.35), Tower B would be approximately 58.3 m high.

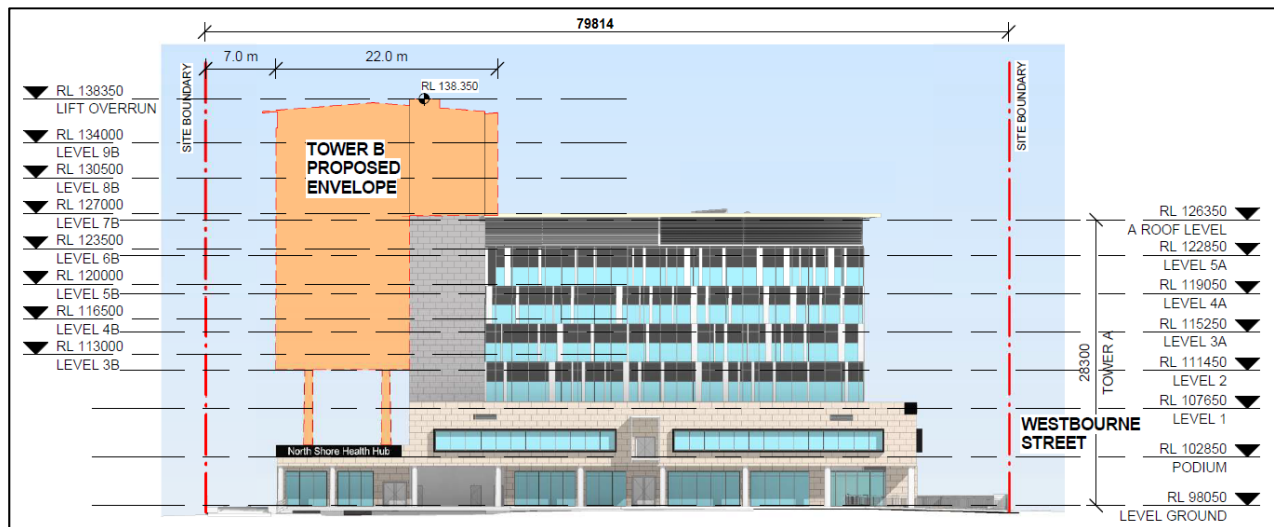


Figure 29: South-west elevation (Base source: Tower B RtS)

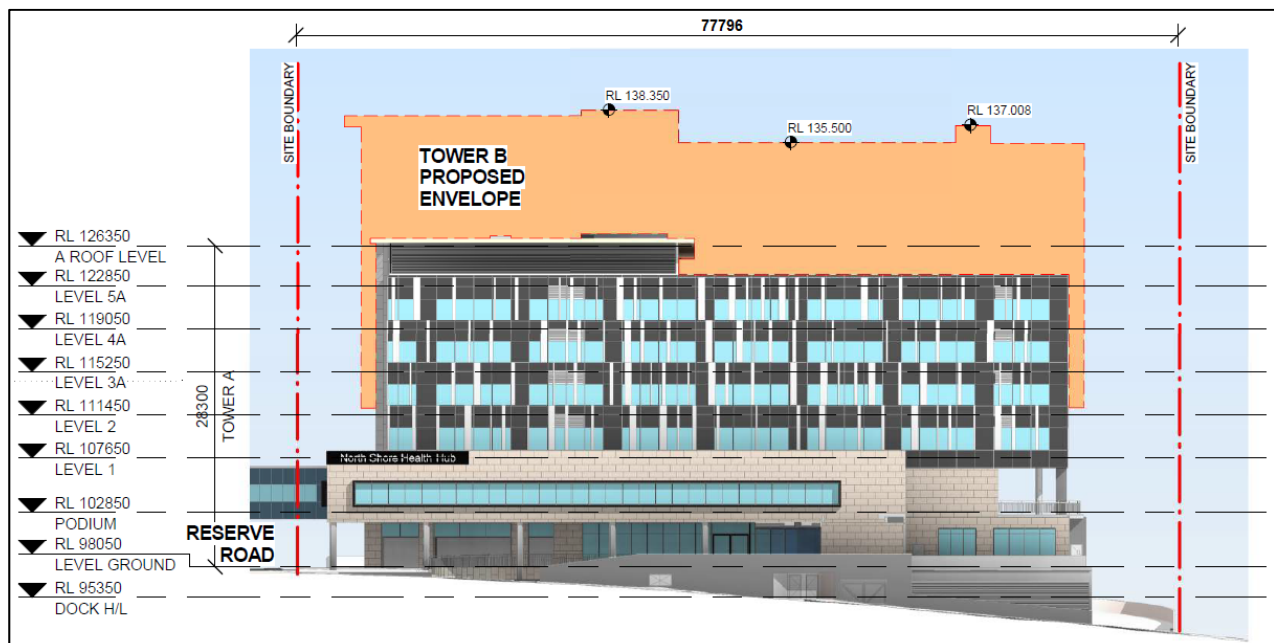


Figure 30: South-east elevation (Base source: Tower B RtS)

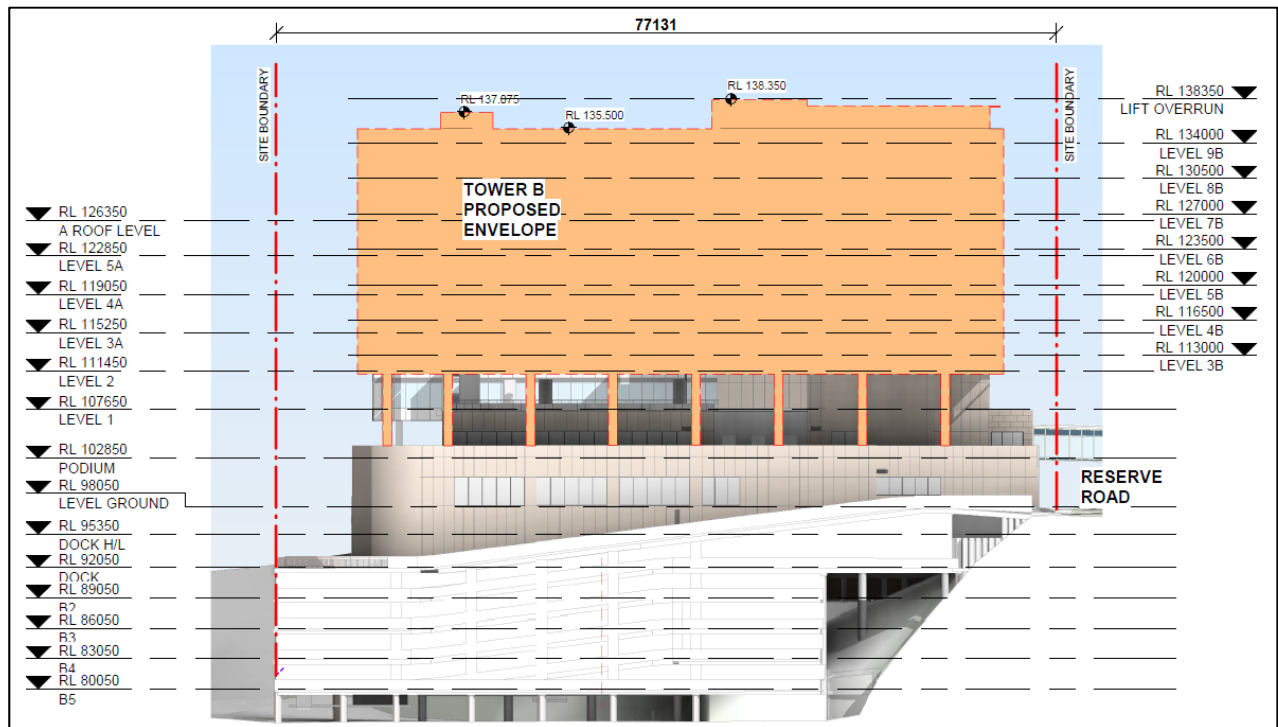


Figure 31: North-west elevation (Base source: RtS Addendum)

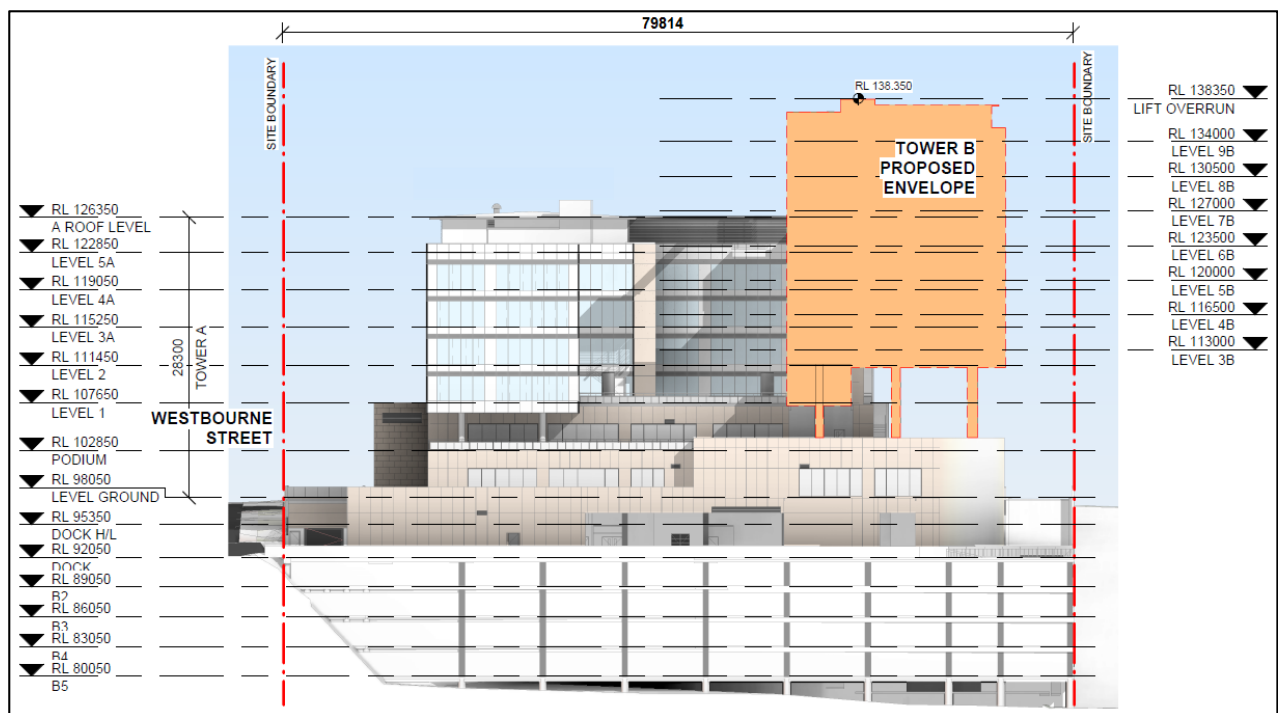


Figure 32: North-east elevation (Base source: RtS Addendum)

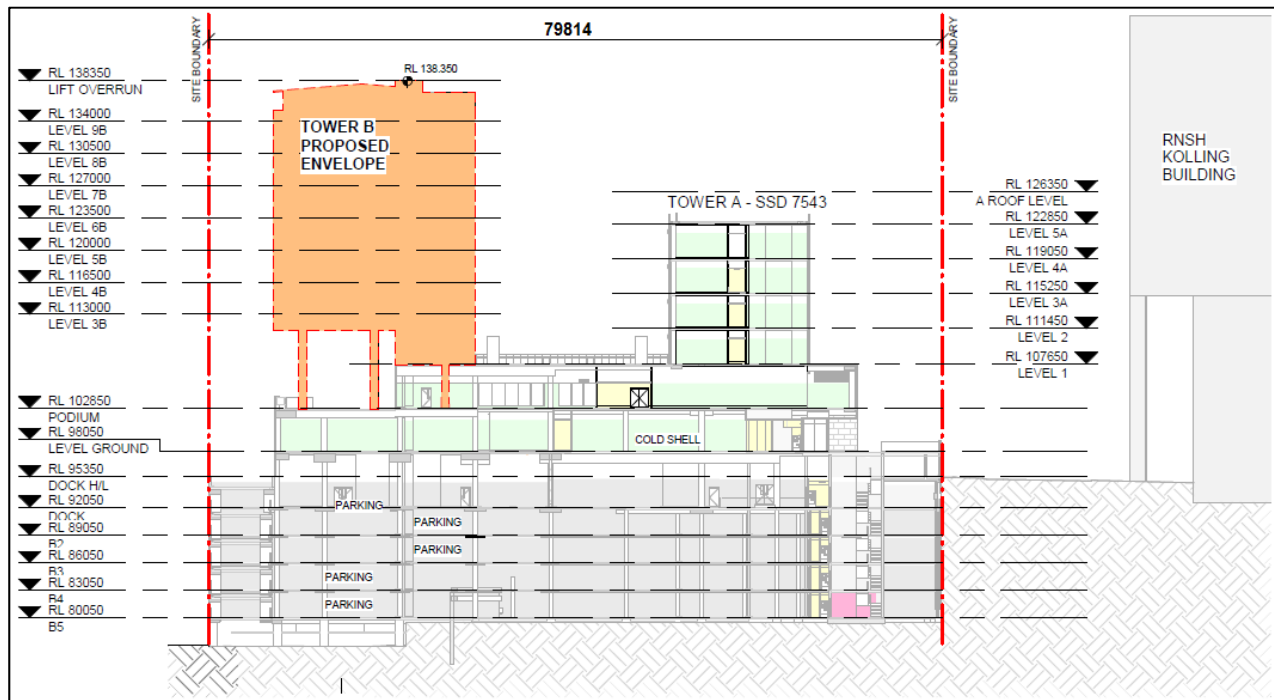


Figure 33: Tower B section (Base source: RtS Addendum)

The Applicant details that the proposed Tower B envelope has been carefully designed to take account of the form and scale of Tower A and adjacent buildings. Tower B would be approximately 11.85 m lower than the Kolling Institute building, approximately 10.05 m higher than Tower A, approximately 12.3 m higher than the NSPH building and approximately 19.5 m higher than the RNSH multi-storey carpark. The Tower B facades would be setback approximately 5.2 m from the south-west boundary fronting Reserve Road, 7 m from the north-west boundary fronting the warehouse buildings, 8.3 m from the north-east boundary fronting the Australia Post facility and 50.8 m from the south-east boundary fronting Westbourne Street.

Tower B would cast minor additional shadows to that of Tower A during the winter months, which would affect additional portions of the public domain, the recessed lower levels of the north-west façade of the Kolling Institute and the north-west and north-east façade of easternmost wing of the NSPH. The Applicant submits that the majority of shadow cast by Tower B would be contained within the shadow cast by Tower A and that further reductions to overshadowing impacts would be explored in the detailed design of Tower B. Tower B would also not overshadow any residential living areas or recreational open spaces.

Tower B would result in potential privacy impacts on the Kolling Institute and NSPH. However, the Applicant submits that Tower B: would be located approximately 70 m from the Kolling Institute; the curved windows on north-east facade of the easternmost wing of the NSPH are oriented towards the south-east and are separated from Tower B by approximately 41 m; and the detailed design of Tower B would include window tinting and internal blinds. Furthermore, Tower B would be partially screened by Tower A and the multi-storey carpark and would not overlook any existing residential properties and would not impact residential privacy.

A Wind Impact Assessment was included in the Tower B EIS which concludes that existing wind conditions at pedestrian level are relatively windy and the addition of Tower B would have marginal effects on existing conditions.

No issues were raised in public submissions regarding the proposed built form and Council commented that it considered the proposed building envelope setbacks to be appropriate. Council did query the accuracy of the Applicant's FSR calculation and requested that the combined FSR for Towers A and B be reduced to comply with the prescribed maximum FSR of 3:1. The Tower A

RtS reduced the FSR from to 1.9:1 to 1.8:1 and the Tower B RtS reduced the FSR from to 1.2:1 to 1.1:1. Accordingly, the combined FSR of 2.9:1 for Towers A and B would be in accordance with the WLEP control.

The Department has considered the proposed footprint, envelope and height within the context of the surrounding streetscape and adjoining development. It is acknowledged that due to the proposed height of the building and the change in elevation across the site, Tower B would be highly visible and prominent from Reserve Road, Frederick Street, Herbert Street and Westbourne Street and generally visible from the light industrial precinct to the north-east. Tower B would also be higher than Tower A and the adjoining NSPH building, multi-storey RNSH carpark, Australia Post facility and warehouse buildings and would partially block views to the north-east and/or north-west from the Kolling Institute, RNSH and NSPH.

However, the Department considers the proposed structure appropriate for the site as:

- the proposed building height would be significantly lower than that of the adjacent Kolling Institute building and of a similar scale to newer buildings within the RNSH campus
- to allow for natural light and air flow through to the Tower A rooftop-court courtyard requested by Council, the Tower B RtS proposed that the building would be constructed on columns that elevate the Tower B approximately 8.6 m above Tower A (in the absence of these columns, Towers A and B and the NSPH would be of a similar height)
- Tower B would be at an intermediate height between the Kolling Institute building to the south-east and the two-storey warehouse buildings to the north-west
- the overall scale and massing of the building would be generally consistent with the larger forms of hospital buildings and bulky retail and warehousing structures surrounding the site
- Tower B would be setback adequately from adjoining buildings and Reserve Road and Westbourne Street
- the building would result in acceptable overshadowing, privacy and wind impacts.

Accordingly, the Department considers that, on balance, the proposed footprint, envelope and height of Tower B is acceptable for the site.

Landscaping, Public Domain and Biodiversity

The proposed landscape and public domain design seeks to provide for a significant streetscape improvement that would assist in the integration of the proposed development into the surrounding public domain and medical precinct. The Applicant submitted a revised Landscape Concept Plan in the Tower A RtS, as shown in **Figure 21**. Street tree and low-level planting is proposed in five areas along Reserve Road. Additional planting is also proposed along the building edge fronting Reserve Road and adjacent to the Westbourne Road footpath. Stone paving is proposed to match the existing surrounding streetscape treatment.

The Applicant also submitted an Arborist Report which assesses the 42 trees that are required to be removed as a consequence of the proposed development, as shown in **Figure 34**. Of these 42 trees, four are locally occurring native species, including two Sydney Blue Gums (Tree Nos. 1 and 2), a Sydney Golden Wattle (Tree No. 33) and a Sweet Pittosporum (Tree No. 39).

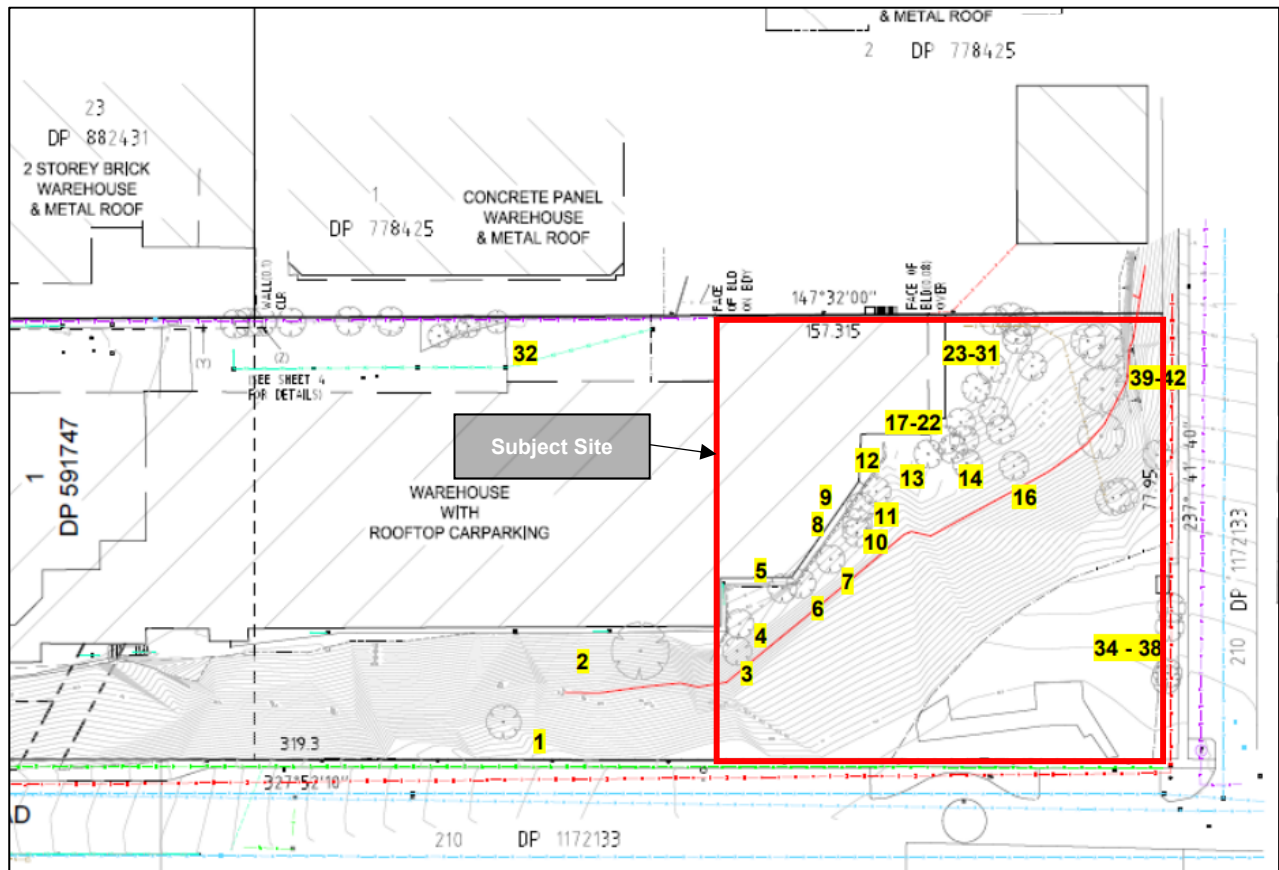


Figure 34: Assessed Trees (Base source: Tower A EIS)

The Arborist Report states that the Sydney Blue Gums and Sweet Pittosporum, which are representative species of the Blue Gum High Forest critically endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Threatened Species Conservation Act 1995*, are of little environmental value due to isolation from other areas of bushland and severe disturbance caused by construction and excavation. The Arborist Report concludes that the removal of the trees on the site would be adequately offset by the replacement planting proposed in the Landscape Concept Plan.

The Applicant's Biodiversity Report reasons that, although the site contains representative species of the Blue Gum High Forest critically endangered ecological community, the understorey is too degraded to conform to the *Environment Protection and Biodiversity Conservation Act 1999* listing for Blue Gum High Forest critically endangered community. The Arborist Report also submits that the vegetation is not considered to conform to the *Threatened Species Conservation Act 1995* listing for Blue Gum High Forest critically endangered ecological community as it is dominated by a proliferation of noxious weed species. The Sydney Blue Gum trees are relatively young, small, occur on highly disturbed landforms and are isolated from other vegetation within the subject site. The Arborist Report concludes that demolition and site preparation works would not be likely to have a significant impact on threatened species, populations or ecological communities listed under the *Threatened Species Conservation Act 1995* and *Environment Protection and Biodiversity Conservation Act 1999*.

Council raised concerns regarding the conclusions of the Arborist Report, commenting that removed trees should be replaced with suitable endemic species and not the Kauri Pines street trees proposed in the Landscape Concept Plan. Accordingly, Council requested a condition of consent requiring the submission of a revised Landscape Concept Plan that includes suitable endemic species to compensate for the loss of the Sydney Blue Gums and Sweet Pittosporum. In response to Council's concerns, the Applicant reiterated in the Tower A RtS that the Kauri Pine is

proposed as the existing street trees to the south of the site along Reserve Road are also Kauri Pine.

The Department notes the removal of existing trees on the site is necessary to allow for the proposed development. However, the two Sydney Blue Gums (Tree Nos. 1 and 2) and a Weeping Bottlebrush (Tree No. 32) identified in the Arborist Report are located outside the development site. Accordingly, their removal would not be permitted under any consent issued for Tower A (noting that no works are permitted under the Tower B concept development application) and the Department has recommended a condition of consent to this effect for Tower A.

The Department also acknowledges Council's request for the proposed Kauri Pine street trees to be substituted with suitably endemic species to compensate for the loss of the Sweet Pittosporum. Accordingly, the Department has recommended a condition of consent for Tower A requiring that the four Kauri Pine street trees proposed in the revised Landscape Concept Plan be substituted with street trees of a suitable species that complies with Council's *Street Tree Master Plan*.

Subject to the imposition of the relevant conditions, the Department is satisfied that landscaping, public domain and biodiversity impacts of the proposal can be appropriately managed.

5.3.2. Traffic, Transport and Parking

Construction Traffic

Tower A

The Tower A EIS included a preliminary Construction Management Plan (CMP) and a Construction Traffic Management Plan (CTMP) for Tower A.

The CTMP proposes that access and egress to the site from the Pacific Highway would be via Herbert, Frederick and Campbell Streets and Reserve Road, as shown in **Figure 35**.

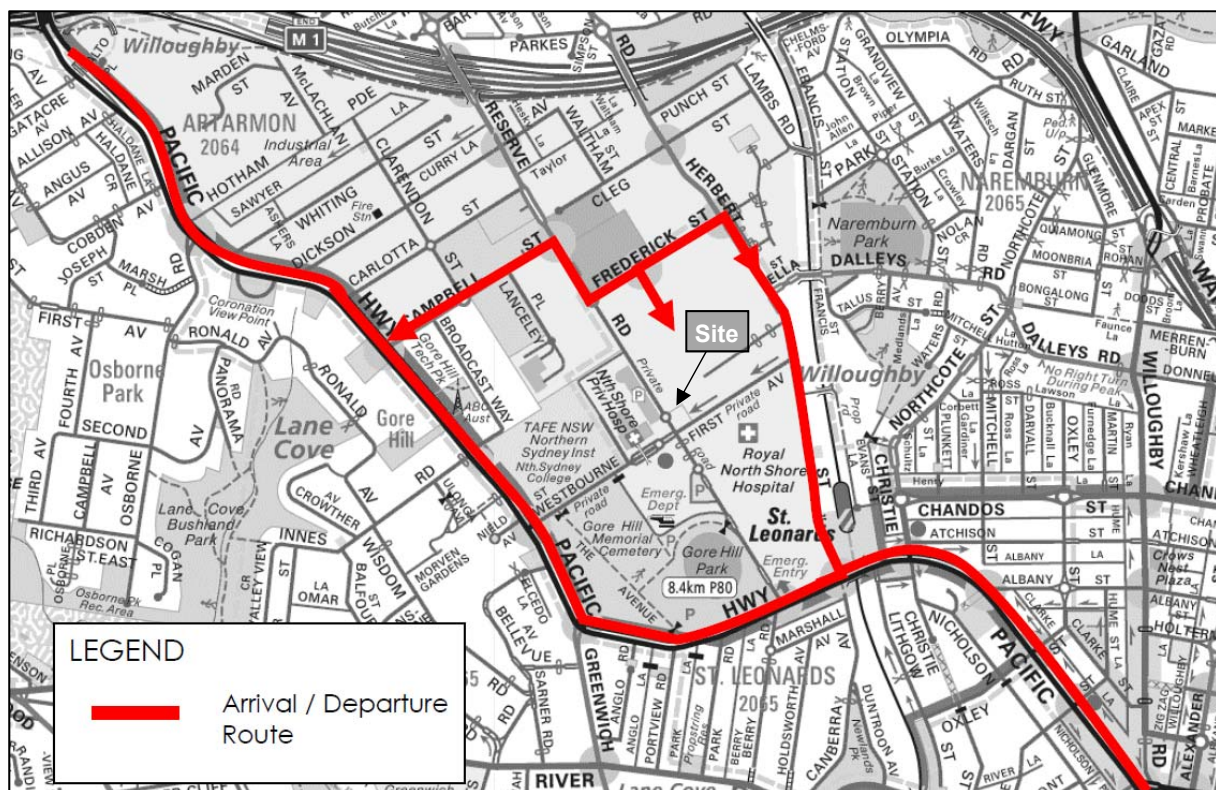


Figure 35: Construction vehicle approach and departure routes (Base source: Tower A RtS)

TfNSW raised concerns regarding the overlap of the proposed construction works and the operation of the Temporary Transport Plan (TTP) associated with the conversion of the Epping to Chatswood Railway line to a metro line. Bus services associated with the TTP will use the same roads as those proposed in the construction vehicle routes, including Herbert and Frederick Streets. TfNSW submitted that the submitted CTMP does not assess the proposed construction impacts in relation to bus and pedestrian movements associated with the TTP. Accordingly, TfNSW requested the imposition of a condition of consent requiring the Applicant to prepare (prior to the commencement of works and in consultation with TfNSW) a CTPMP that appropriately addresses the TTP. The Department notes that RMS requested a similar condition regarding the TTP.

The Department acknowledges the concerns raised by TfNSW and RMS and has recommended a condition of consent for Tower A requiring the submission of a CTPMP that adequately addresses the TTP. Subject to the imposition of the recommended condition of consent, the Department is satisfied that construction traffic impacts associated with Tower A can be appropriately managed.

Tower B

The Tower B EIS states that future construction of Tower B (subject to a separate development consent) would occur concurrently and in a similar manner to Tower A. Whilst construction of Tower B would increase the construction timeframes and/or traffic volumes, the Applicant submits that the Tower A CTMP would appropriately address construction traffic management for Tower B. Notwithstanding, the Department has recommended a condition of consent requiring that any future development application for the design and construction of Tower B be accompanied by a CTPMP (noting that the application currently with the Department contains such a plan).

Operational Traffic and Parking

Traffic Generation

The Tower A EIS and Tower B EIS included individual Traffic Impact Assessments (TIA). The Tower A RtS and the Tower B RtS included a supplementary combined TIA that responded to traffic generation modelling concerns identified by Council and RMS. The RtS Addendum further clarified the traffic generation and intersection impacts associated with the operation of Towers A and B.

Council requested that the Tower A TIA and Tower B TIA be amended to include assessment of traffic volumes for the next ten years. Council also requested that the Applicant submit a survey of existing traffic volumes and transport mode split of the NSPH to validate traffic generation and travel mode assumptions in the Tower A TIA. The supplementary TIA included combined Tower A and B traffic generation modelling for forecast 2026 traffic volumes and the RtS Addendum included individual Tower A and combined Tower A and B traffic generation modelling for 2016 and forecast 2026 traffic volumes. The supplementary TIA also advised that a survey of existing traffic volumes and transport mode split of the NSPH would require interview surveys to isolate NSPH activity given the shared nature of parking facilities within the health precinct. As an alternative, the Applicant submitted 2011 Census journey to work data for persons employed in the relevant Travel Zone, which indicates that approximately 58 per cent of employees travel by private vehicle and confirms that the adopted AM and PM peak generation rates are appropriate.

RMS requested clarification regarding any proposed changes to the existing restricted traffic flow on Reserve Road. RMS also requested that the Tower B TIA be amended to assess the use of Westbourne Street in association with the generation rates proposed for the former ABC site. The supplementary TIA confirms that no changes are proposed to the Reserve Road traffic flow and

that whilst traffic assessments completed for the former ABC site have not been available for reference, background traffic growth assumptions have been considered.

Considering the above, the Department is satisfied that the supplementary TIA and RtS Addendum adequately addresses the traffic generation modelling concerns identified by Council and RMS regarding Towers A and B.

The peak period traffic volumes generated by the proposal were determined by the Applicant in accordance with the RMS' *Guide to Traffic Generating Developments*. The RtS Addendum confirms that Tower A would potentially generate 141 trips in the AM peak and 170 trips in the PM peak, and Tower B would potentially generate 105 trips in the AM peak and 131 trips in the PM peak. Cumulatively, Towers A and B would potentially generate 246 trips in the AM peak and 301 trips in the PM peak.

The Applicant carried out peak period traffic surveys for seven key intersections surrounding the site and submitted a SIDRA analysis of these intersections under the following scenarios.

- existing 2016 traffic volumes and forecast 2026 traffic volumes without Towers A or B (base scenarios)
- existing 2016 traffic volumes and forecast 2026 traffic volumes with Tower A traffic (Tower A scenario)
- 2016 and forecast 2026 traffic volumes with combined Towers A and B traffic (Towers A + B scenario).

The results of the SIDRA intersection analysis are summarised in **Table 10**.

Table 10: Intersection Analysis

Intersection	Peak	Base Scenarios		Tower A Scenario		Towers A + B Scenario	
		2016	2026	2016	2026	2016	2026
Campbell Street/Pacific Highway	AM	B	B	B	B	B	B
	PM	B	B	B	B	B	B
Herbert Street/Cleg Street	AM	A	C	A	C	A	C
	PM	A	A	A	A	A	A
Herbert Street/Frederick Street	AM	B	F	C	D	C	E
	PM	B	C	B	C	B	C
Herbert Street /Pacific Highway	AM	B	C	B	C	C	C
	PM	B	C	C	C	C	C
Herbert Street /Westbourne Street	AM	A	C	A	D	C	F
	PM	A	B	B	F	E	F
Reserve Road/Campbell Street	AM	B	D	B	C	B	D
	PM	C	C	C	B	B	C
Reserve Road/Frederick Street	AM	A	A	A	A	A	A
	PM	A	A	A	A	A	A

The Herbert Street/Westbourne Street intersection would experience a reduction in service from:

- Level of Service (LoS) A under the 2016 base scenario to LoS E under the 2016 Towers A + B Scenario
- LoS B under the 2026 base scenario to LoS F under both the 2026 Tower A Scenario and Towers A + B Scenario.

Council raised concerns regarding the impact of the combined impacts of traffic associated with the development on the Herbert Street/Westbourne Street intersection. Accordingly, the Department has recommended a condition of consent for Tower A requiring that prior to final occupation of Tower A, the Applicant complete (in consultation with and to the agreement of Council) road upgrade works at the Herbert Street/Westbourne Street intersection to maintain the

2026 pre-development level of service. The Department has also recommended a condition of consent for Tower B requiring that any future development applications for the design and construction of Tower B are to be accompanied by a detailed assessment of parking, traffic and transport impacts, including mitigation measures and recommendations on intersection and infrastructure upgrades where necessary.

To promote sustainable travel and reduce reliance on the private car, Council has also requested that conditions of consent be attached to Towers A and B requiring that a green travel plan (GTP) be prepared for the health hub. Accordingly, the Department has recommended a condition for Tower A requiring the Applicant to prepare a GTP. The Department has also recommended a condition of consent for Tower B requiring that any future development application for the design and construction be accompanied by an updated GTP.

Subject to the imposition of the relevant conditions, the Department is satisfied that operational traffic impacts can be appropriately managed.

Vehicle Parking and Access

Parking Provision

The Tower A EIS proposed that 220 parking spaces would be provided in a three-level basement carpark and the Tower B EIS proposed that 132 parking spaces would be provided in an additional basement level below the three-level Tower A basement. Council requested that the car parking rates for Tower B be revised to more appropriately reflect the proximity of the site to public transport and the nature of the proposed uses.

The Tower A RtS and the Tower B RtS and the RtS Addendum amended the proposed uses for Towers A and B and proposed that a total of 340 parking spaces would be provided in an extended five-level Tower A basement. Of these 340 parking spaces, 205 would be allocated to Tower A and 135 would be allocated to Tower B.

As the Willoughby Development Control Plan (WDCP) does not prescribe a specific parking requirement for the proposed uses of Towers A and B, the Applicant calculated parking space provision based on the WDCP parking requirement for the similar use of 'Health Consulting Rooms', as amended to reflect relevant 2011 census journey to work data for persons employed in the relevant Travel Zone and to provide replacement parking for 24 on-street parking spaces that would be lost as consequence of the new vehicular crossovers on Westbourne Street and Reserve Road.

The Department acknowledges that Council requested that the car parking rates for Tower B be revised to more appropriately reflect the proximity of the site to public transport and the nature of the proposed uses. Whilst the number of parking spaces proposed to be allocated to Tower B has increased by three spaces, the Department notes that the proposed parking provision for Tower B has been informed by amended uses, a comparable WDCP parking requirement and relevant 2011 census journey-to-work data. Further, the cumulative number of parking spaces for Towers A and B has decreased by 12 spaces.

The 205 parking spaces allocated to Tower A parking allocation would include 24 replacement parking spaces for displaced on-street parking spaces. Council raised concerns regarding the loss of 24 on-street parking spaces, including disabled spaces, as a consequence of the new vehicular crossovers on Westbourne Street and Reserve Road, commenting that the proposed provision of 24 replacement spaces in the Tower A basement is not supported as the spaces would not be available for members of the public. In response to Council's concerns, the Tower A RtS reiterated that the replacement spaces in the Tower A basement carpark would be publicly accessible and that a reduction in the loss of on-street parking spaces would reduce sight lines and safety for the vehicular crossovers. The Department notes that Council had no further comment in response to

the Tower A RtS and that the remaining 181 parking spaces allocated to Tower A would also comprise a combination of tenant and publicly accessible parking.

Subject to the imposition of conditions of consent requiring that a maximum of 205 basement parking spaces are allocated to Tower A and a maximum of 135 basement parking spaces are allocated to Tower B, the Department is satisfied that the proposed parking provision would be appropriate.

The Department notes that RMS requested conditions of consent requiring that the layout of the proposed parking areas and the sight lines for vehicular crossings be in accordance with relevant standards and guidelines. The Department has recommended conditions of consent to this effect.

Loading

A loading dock is proposed on Lower Ground Level 1 of Tower A, with access via the vehicular crossover on Westbourne Street and the internal access road running along north-east boundary of the site.

RMS requested conditions of consent requiring that the layout of the proposed loading areas be in accordance with relevant standards. Council also raised concerns regarding vehicle access to and from the loading dock and the proposed shared car park and loading dock access. In response to RMS and Council's concerns, the Tower A RtS proposed an amended design and layout for the loading dock, noting that the revised scheme provides better separation of the loading dock from the carpark entry and that relevant standards would be complied with.

The Department has recommended conditions requiring compliance with the relevant standards for loading and that all unloading is to occur within the designated loading dock. Subject to the imposition of the recommended conditions, the Department is satisfied that the proposed loading dock design and location is acceptable.

Bicycle Parking

Following discussions with the Department, the Applicant has agreed to provide a total of 32 bicycle parking spaces (21 spaces for employees and 11 spaces for visitors) for users of both Tower A and Tower B in the basement of Tower A, along with end-of-trip facilities (showers, lockers etc.), in accordance with *Cycling Aspects of Austroads Guides 2017*. TfNSW is supportive of this number of spaces. A condition of development consent is recommended to be imposed on the Tower A consent requiring the delivery of the bicycle spaces.

5.3.3. Noise and Vibration

The Applicant submitted individual Noise Impact Assessments (NIA) for Tower A and Tower B. The EPA raised concerns regarding both NIAs, commenting that a quantitative assessment of the main noise and vibration generating sources during construction and operation of Towers A and B had not been made. Council also raised concerns regarding potential construction noise impacts, particularly in relation to surrounding medical facilities. Council: noted that the NIAs do not reference the *NSW EPA Industrial Noise Policy Amenity Criterion (To Hospital Wards)* and other relevant standards; requested that the NIAs be amended to include an assessment of the potential acoustic impact of surrounding industrial uses adjacent to the site on Tower A and Tower B patients and occupants (in accordance with the emerging draft WDCP); and recommended conditions of consent for Towers A and B prohibiting noise level exceeding activities during the RNSH's allocated patient rest period between 1 pm and 3 pm.

Council also raised concerns regarding vibration impacts associated with the construction of Tower A, requesting that the submitted draft Construction Management Plan be amended regarding vibration and recommending the conditions of consent requiring: that all piling be done using augured pilings; the establishment of a vibration working group with representatives of the NSPH

and RNSH; alarmed vibration monitors at sensitive receivers; vibration recording; rock excavation where practicable by way of rock saws as opposed to pneumatic hammers; vibration monitoring during excavation, piling and compaction; and rapid contractor feedback systems in the event of vibration exceedance.

A member of the public raised concerns regarding operational noise associated with Tower B on residential receivers.

The Applicant's Tower A RtS and Tower B RtS responded to the concerns of the EPA, Council and the member of the public. Revised individual NIAs for Towers A and B were submitted, together with a combined Review of Impacts from Surrounding Industrial Sites for both Tower A and B.

The revised NIAs identify sensitive receivers near the site, including RNSH immediately to the south-east, NSPH immediately to the south-west, industrial/commercial receivers immediately to the north and residential receivers on Herbert Street (the nearest of which is located approximately 200 m to the east of the site), as shown in **Figure 36**. Background noise monitoring was undertaken at the four locations shown in **Figure 36** to establish rating background levels (RBL) in accordance with the EPA's *Industrial Noise Policy* (INP). The results of background noise monitoring for residential receivers are presented in **Table 11**.

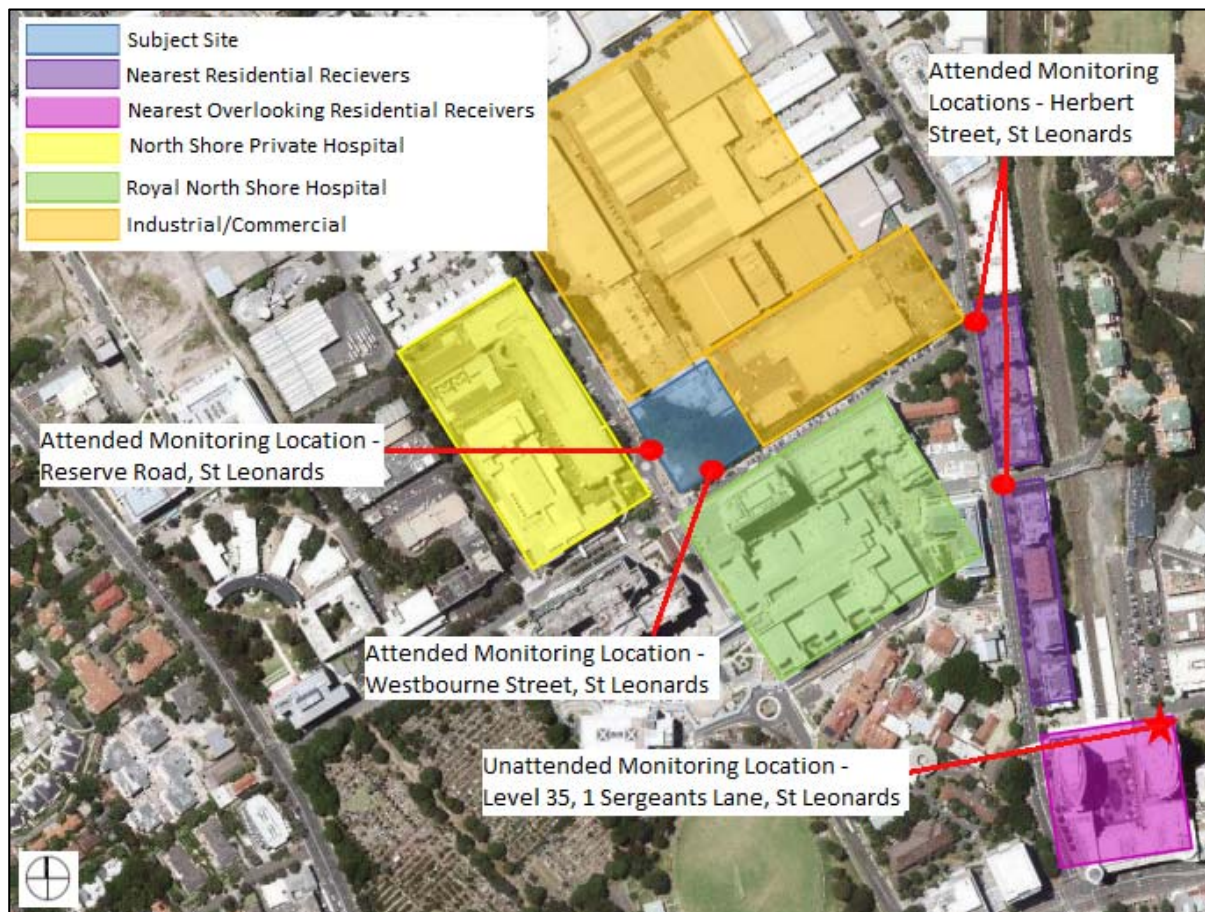


Figure 36: Noise monitoring locations (Base source: Tower A RTS)

Table 11: Rating Background Noise Levels

	Day (7 am – 6 pm)	Evening (6 pm – 10 pm)	Night (10 pm – 7 am)
Herbert Street (Ground Level)	63dB(A)Leq(15min)	62dB(A)Leq(15min)	57dB(A)Leq(15min)
	53dB(A)L90	51dB(A)L90	46dB(A)L90
Sergeant Lane (Elevated)	60dB(A)Leq(15min)	59dB(A)Leq(15min)	54dB(A)Leq(15min)
	57dB(A)L90	55dB(A)L90	50dB(A)L90

Construction Noise

The EPA's *Interim Construction Noise Guideline* (ICNG) outlines the process of establishing construction noise management levels (NMLs) for surrounding sensitive receivers. Based on the established background noise levels and ICNG recommended NMLs, construction NMLs for sensitive receivers have been established as outlined in **Table 12**.

Table 12: Construction noise management levels (L_{Aeq}(15))

Sensitive Receiver	Day (7 am – 6 pm)	Saturday (7 am – 6 pm)	Highly noise affected Noise Level
Herbert Street (Ground Level Residences)	63 (Background + 10 dBA)	58 (Background + 5 dBA)	75
Sergeant Lane (Elevated Residences)	67 (Background + 10 dBA)	62 (Background + 5 dBA)	75
Hospital Wards and Operating Theatres (Internal)	45	45	-
Industrial Premises (External)	75	75	-

The revised NIAs state that whilst noise and vibration impact from the construction works will depend on the particular methods proposed to be employed by the demolition/building contractor, an assessment has been carried out for likely construction activities and predictions are provided of the likely levels of noise generation. The revised NIAs state that the NMLs are likely to be exceeded during construction, particularly during excavation, piling and erection of the structure.

The NIAs note that construction noise impacts could be minimised by: using augured piling rather than driven or vibratory piling where feasible; locating static plant away from southern and western boundaries to maximise distance from RNSH and NSPH receivers; using electric cranes rather than diesel cranes where practicable and acoustic screening of diesel crane engines if used; and advising affected receivers when highly noise effected levels are likely to be reached. Accordingly, the NIAs propose several construction noise mitigation measures, including: when proposed construction activities and plant/method is finalised, an acoustic review should be undertaken to identify the extent and duration of potential exceedances of the NMLs; identification of feasible acoustic controls or management techniques when exceedance of NMLs may occur; for activities where acoustic controls and management techniques cannot guarantee compliant noise levels, implementation of a notification process whereby receivers are made aware of the time and duration of noise intensive works; and implementation of noise monitoring program during construction.

The revised NIAs recommend a Construction Noise and Vibration Management Plan (CNVMP) be prepared for both Towers A and B addressing appropriate management of construction noise. The Department has recommended a condition of consent for Tower A requiring that a CNVMP be prepared in consultation with Council and noise sensitive receivers and a condition of consent for Tower B requiring that any future development application for detailed design and operation are to be accompanied by a NIA.

The Department has also recommended a condition of consent for Tower A limiting the hours of construction to those requested by Council, between 7 am and 5:30 pm Mondays to Fridays and between 7:30 am to 3 pm Saturdays. Council requested hours of construction precluding pile driving or other activities that would exceed NMLs during the RNSH's dedicated patient rest period between 1 pm and 3 pm. To accommodate for the patient rest period, the Department has recommended a condition of consent for Tower A providing for an extended respite period between 12 pm and 3 pm from all rock breaking, rock hammering, sheet piling, pile driving and similar activities. The Department has also recommended a condition of consent for Tower A requiring that where practicable and where sensitive receivers may be affected, piling activities are to be completed using bored piles.

EPA provided no further comment on the Tower A RtS or Tower B RtS. Subject to compliance with the recommended conditions of consent and implementation of the proposed mitigation measures, the Department is satisfied that construction noise impacts of Towers A and B can be appropriately managed.

Construction Vibration

The EPA's *Assessing Vibration: A Technical Guideline* (Vibration Guideline) outlines the criteria for exposure to continuous and impulsive vibration (vibration criteria), as outlined in **Table 13**.

Table 13: Criteria for Exposure to Continuous and Impulsive Vibration (Peak velocity (mm/s))

Sensitive Receiver	Day (7 am – 10 pm)	
	Preferred	Maximum
Residences	0.28	0.56
Critical Working Areas (including hospital operating theatres and precision laboratories)	0.14	0.28
Offices	0.56	1.1
Workshops	1.1	2.2

The NIAs state that construction vibration is predicted to comply with the vibration criteria, except where sheet/vibratory piling or vibratory rollers are used. The NIAs proposes several construction vibration mitigation measures, including: the use of rock saws as opposed to pneumatic hammers where practicable; vibration monitoring; rapid feedback of monitoring results to contractors; and the preparation of a detailed CNVMP. In addition to a condition of consent for Tower A requiring the preparation of CVNMP in consultation with Council and vibration sensitive receivers, the Department has recommended a condition of consent for Tower A requiring vibration monitoring to be carried out on all vibration sensitive receivers during demolition and construction works. In the event exceedance of the vibration criteria, vibratory activities are to cease and alternative work methods are to be implemented.

The Department notes that the construction of Tower B would not require excavation, earth retention works or soil compaction. Nevertheless, the Department has recommended a condition of consent for Tower B requiring that any future development applications for detailed design and operation are to be accompanied by a NIA that addresses vibration impacts.

EPA provided no further comment on the Tower A or Tower B RtS. Subject to compliance with the recommended conditions of consent and implementation of the proposed mitigation measures, the Department is satisfied that construction vibration impacts can be appropriately managed.

Operational Noise

Based on the established RBLs, the project specific noise levels detailed in **Table 14** were established for Towers A and B, which are the most stringent of the intrusive and urban amenity criteria for sensitive receivers in accordance with the INP.

Table 14: Project specific operational noise management levels

Sensitive Receiver	Time	Noise management level dB(A) _{Leq(period)}
Herbert Street (Ground Level)	Day (7 am – 6 pm)	53
	Evening (6 pm – 10 pm)	52
	Night (10 pm – 7 am)	47
Sergeant Lane (Elevated)	Day (7 am – 6 pm)	50
	Evening (6 pm – 10 pm)	49
	Night (10 pm – 7 am)	44
Hospital Buildings (Internal)	When in use	35-40
Hospital Buildings (External)	When in use	50-55
Commercial	When in use	65

The NIAs state that whilst final plant has not been selected, an indicative assessment of primary plant items, including rooftop cooling towers, air handling plant, chillers, basement emergency generators and substation, has been carried out. The NIAs recommend various acoustic treatments, including: acoustic screens, louvres or attenuators for cooling towers; wall and ceiling cladding for water cooled chiller plant rooms; external louvres and internal linings for fan and air handling unit ducting and acoustic treatment of fan casings; and intake and discharge silencers, vibration isolation and soffit treatment for emergency generators. The NIAs conclude that compliance with the project specific noise levels would be achievable subject to detailed acoustic review of selected plant items and the adoption of acoustic treatments, including: acoustic screens, louvres or attenuators for cooling towers; wall and ceiling cladding for water cooled chiller plant room; external louvres and internal linings for fan and air handling unit ducting; and intake and discharge silencers, vibration isolation and soffit treatment for emergency generators.

The NIAs also include an assessment of operational noise against the EPAs *Sleep Disturbance Guidelines*, which states that the car start/door close between 10 pm and 7 am would have a predicted noise level of 62dB(A)L_{1(1min)} and result in marginal compliance for the RNSH receivers. In accordance with the Application Notes of the EPAs *Industrial Noise Policy*, the NIAs provided a more detailed assessment for RNSH receivers. The detailed assessment notes that during a noise event of 62dB(A)L_{1(1min)} at the window of a residence the noise level inside the room with the window open would be approximately 52dB(A)L₁ and that as per the EPAs *Road Noise Policy* notes, internal noise events of 50-55dB(A) are unlikely to awaken people from sleep. It is also noted that the EPAs superseded *Environmental Criteria for Road Traffic Noise* suggests a 0 to 1 per cent probability of sleep disturbance for a noise event of 52dB(A)L_{1(1min)}.

Whilst the EPA provided no comment on the Tower A RtS or Tower B RtS, the Department acknowledges the concerns of Council and members of the public regarding operational noise. Accordingly, the Department has recommended conditions of consent for Tower A requiring:

- that all plant and equipment must be maintained and operated in a properly and efficiently
- noise associated with plant, machinery or other equipment must not exceed 5dB(A) above RBLs when measured at the boundary of the sensitive receiver
- noise monitoring to verify that operational noise levels do not exceed NMLs
- the provision of noise attenuating measures should noise monitoring identify exceedance of NMLs.

Subject to compliance with the recommended conditions of consent and implementation of the proposed mitigation measures, the Department is satisfied that operational noise impacts associated with Tower A can be appropriately managed.

Regarding Tower B, the Department notes that operational noise impacts associated would be assessed in relation to any future development application for detailed design and operation.

Noise Intrusion

Council requested that the Applicant submit an assessment of the potential acoustic impact of surrounding industrial uses adjacent to the site on Tower A and Tower B patients and occupants. The Tower A and Tower B RtS included the requested assessment, which concluded that patients and occupants would not be adversely impacted by surrounding industrial uses and that no additional acoustic treatment of facades would be required to treat against existing industrial noise. Considering the above, the Department is satisfied that the potential acoustic impact of surrounding industrial uses upon Tower A and Tower B patients and occupants would be acceptable.

5.3.4. Contamination

SEPP 55 is the primary environmental planning instrument guiding the remediation of contaminated land in NSW. SEPP 55 requires a consent authority to consider whether the land is contaminated, and if so, whether the land will be remediated before the land is used for the intended purpose.

The proposal was accompanied by a Detailed Site Investigation (DSI). The DSI was based upon a previous Phase 1 Preliminary Site Investigation (PSI), which identified areas of environmental concern relating to fill materials of unknown quality, former on-site quarry and tile/brick works, the on and off-site storage and use of hydrocarbons, and a former off-site printing workshop. The DSI assessed the significance of the areas of environmental concern identified in the PSI by way of the analysis of samples from eight drilled boreholes (BH1 to BH8), three hand augured boreholes (AH01 to AH03), and groundwater monitoring wells installed in BH2 and BH3 (as shown in **Figure 37**). A site walkover also identified in the southern portion of the site a concrete pad that appears to be an Underground Petroleum Storage System (UPSS), comprising a hand pump, vent pipe and potential an underground storage tank (UST) (as shown in **Figure 38**).

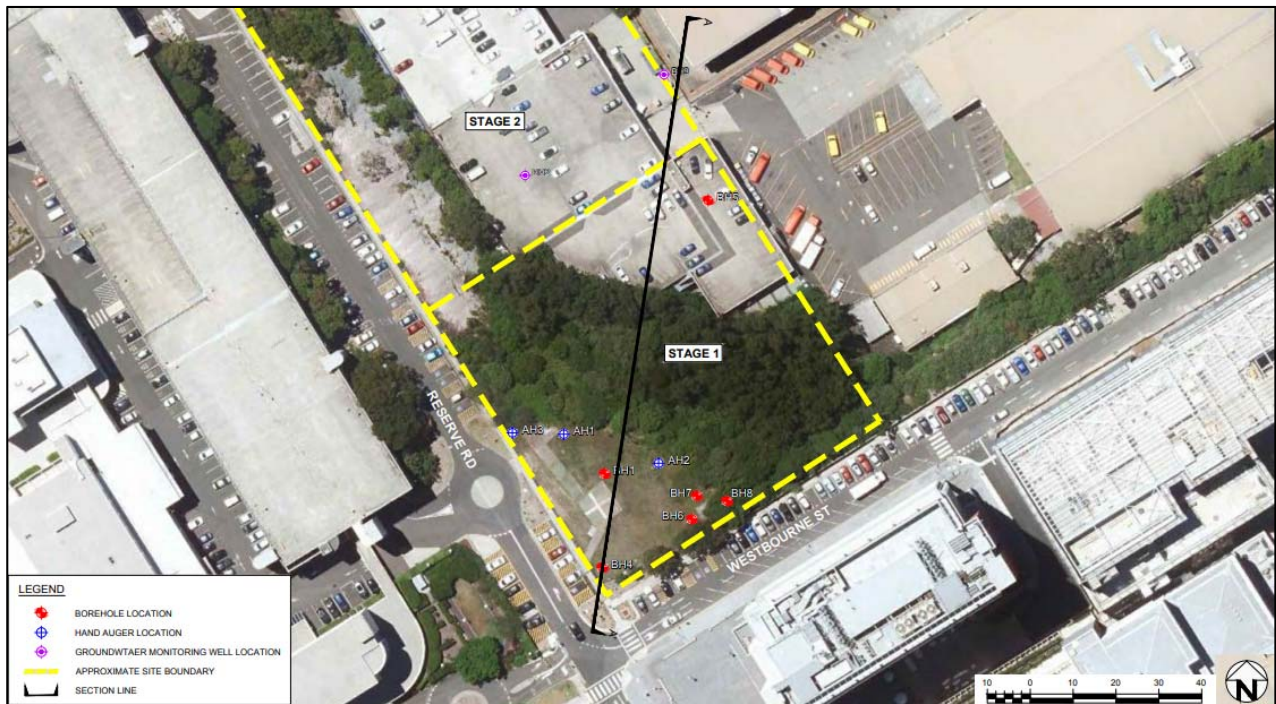


Figure 37: Sampling locations (Base source: Tower A EIS)



Figure 38: Potential UPSS (Base source: Tower A EIS)

The DSI concluded that the site is suitable for the proposed development in accordance with SEPP 55 as concentrations of contaminants of potential concern were not identified in any soil or groundwater samples above the adopted health or ecological investigation criteria. Nevertheless, the DSI acknowledged uncertainties associated with potentially unidentified contamination between investigation positions and limitations to investigation methods. Accordingly, the DSI recommended a Hazardous Building Materials Survey be completed prior to demolition and a Construction Environmental Management Plan (CEMP) be developed detailing:

- procedures to remove hazardous materials prior to demolishing existing on-site structures and the suspected UPSS and any impacted soils
- procedures to manage and/or classify spoil for beneficial use or disposal off site
- an unexpected contamination finds management protocol
- site access controls.

The demolition of on-site buildings would occur under DA 2016/211 granted by Council. However, in line with the recommendations of the DSI, the Department has recommended conditions of consent for Tower A requiring a CEMP and Construction Waste Management Plan (CWMP).

Notwithstanding the conclusion of the DSI, due to the presence of the suspected UPSS, the proposal was also accompanied by a Remediation Action Plan (RAP).

The RAP identifies the following data gaps and uncertainties:

- the presence of a UST and the type of products stored therein has not been confirmed
- intrusive investigations were not sufficient to confirm whether contamination is present at the base of the suspected UST
- heavy vegetation and steepness rendered the exposed face of the former quarry inaccessible for intrusive investigation equipment, resulting in uncertainty regarding the assessed quality of fill in this area
- as only one of the eight drilled boreholes extended below the proposed construction formation depth, uncertainty remains regarding the quality of the deep fill being retained beneath the proposed development
- the presence of buildings and tenant activities restricted investigation and reduced the sampling density across the northern portion of the site, resulting in uncertainty regarding the assessed quality of fill in this area.

The RAP proposes a remediation strategy that comprises removal of the UST, associated fuel infrastructure and any impacted soils, together with a Validation Plan to confirm that soils remaining on the site do not pose unacceptable risk. The RAP also proposes an Unexpected Finds Strategy and recommends the implementation of a Site Management Plan. The RAP concludes that if remediation is carried out in accordance with the RAP, then the site would be made suitable for the proposed development.

The Department notes that the EPA recommended that a Site Audit Statement (Part B) be required, prior to the commencement of remediation works, confirming that the proposed RAP is appropriate, and a Site Audit Statement (Part A) be required, prior to the commencement of construction, confirming the suitability of the proposed land use.

The Department acknowledges that the site is capable of being remediated to ensure it can be made suitable for the proposed health related uses. In this respect, the Department is satisfied that the investigations undertaken by the Applicant satisfactorily demonstrate that the site can be made suitable for the proposal in accordance with Clause 7 of SEPP 55. The Department has recommended conditions of consent requiring a site validation report and site audit statements be prepared by an accredited site auditor prior to and upon completion of the remediation works.

5.3 Other issues

The Department's consideration of other issues is provided at **Table 15**.

Table 15: Department's assessment of other issues

Issue	Consideration	Recommendation
Development Contributions	- Section 7.12 of the EP&A Act provides for the consent authority to impose a condition requiring the Applicant to pay a contributions levy, as authorised under a contributions plan. - The Department has recommended a condition of consent for Tower A requiring the Applicant to pay \$756,150.48 (subject to indexing) in monetary contributions. The contribution is payable to Council and equates to one percent of the estimated total cost to construction of Tower A. In accordance with Section 7.12(3) of the EP&A Act, contributions are to be applied towards the provision, extension and augmentation of public amenities or public services.	The Department has recommended a condition for Tower A requiring payment of \$756,150.48 (subject to indexing) in monetary contributions.
Signage	- Council requested that details and plans of Tower A signage plan/details be submitted, together with an assessment against relevant provisions of SEPP 64 Advertising and Signage. - The Applicant has confirmed that relevant signage is not sought for Tower A and the Department has recommended a condition of consent excluding building identification signage. - Signage for Tower B would be assessed in future development applications for the design and construction of Tower B.	The Department has recommended a condition for Tower A excluding building identification signage.
Building fit-out	- Cold shell space is proposed on all floors of Tower A. - Accordingly, it is considered appropriate that separate consent be obtained for Tower A for the future fit-out of various spaces within the building.	The Department has recommended a condition of consent for Tower A requiring the Applicant to lodge separate DAs for the future fit-out of Tower A.
Pedestrian Bridge	- Construction of an elevated pedestrian bridge over Reserve Road is forms part of the proposed development, linking the existing NSPH with Tower A. - The bridge is finished lightweight cladding to compliment adjoining buildings, with continuous slot windows along its southern and northern elevations.	The Department has recommended a condition of consent requiring the preparation of a CEMP and that the impacts of the bridge construction be included in the plan.

5.4 Public Interest

The proposal is considered to be in the public interest as it would provide for the delivery of new health care related activities, including medical imaging, pathology, a medical centre, private health surgery, specialist suites, operating suites, allied health services and pharmacy retail. The proposal would also generate a total of 830 construction jobs and 276 operational jobs.

The proposal would also address State priorities of 'improving service levels in hospitals' and 'delivering infrastructure' through the provision of new health facilities and integrated healthcare infrastructure.

6. CONCLUSION

The Department has reviewed the Tower A EIS and RtS, the Tower B EIS and RtS and the RtS Addendum and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The Department considers that the proposal is consistent with the *Premiers Priorities*, as it would create jobs and provide for better access to healthcare services, and *A Metropolis of Three Cities – The Greater Sydney Plan*, as it would provide for the expansion of health services and facilities to support Sydney's growing population. The proposal would also generate approximately 830 construction jobs, 276 operational jobs and \$112.5 million in total direct investment.

The Department concludes the environmental impacts of Towers A and the concept development application for Tower B are acceptable and can be appropriately mitigated through the implementation of the recommended conditions of consent. Consequently, the Department considers the development of Towers A and the concept development application for Tower B is in the public interest and should be approved subject to conditions.

7. RECOMMENDATION

In accordance with section 4.38 of the *EP&A Act 1979*, it is recommended that the Executive Director, Priority Projects Assessments as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **grants consent** to the State significant development application for SSD 7543 subject to conditions;
- **grants consent** to the State significant development application for SSD 8499 subject to conditions; and
- **signs** the attached development consents and recommended conditions of consent (**Attachment C**).

Recommended by:



David Gibson
Team Leader
Social Infrastructure Assessments



Karen Harragon
Director
Social and Other Infrastructure
Assessments

Decision

The recommendation is Approved by:



David Gainsford
Executive Director
Priority Projects Assessments
as delegate of the Minister for Planning.

29/6/18.

APPENDIX A RELEVANT SUPPORTING INFORMATION

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning and Environment's website as follows.

1. Environmental Impact Statements

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7543
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8499

2. Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7543
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8499

3. Applicant's Response to Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7543
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8499

APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S)

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

To satisfy the requirements of section 4.15(a)(i) of the EP&A Act, this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No. 55 – Remediation of Land*
- *Draft Remediation of Land State Environmental Planning Policy*
- *State Environmental Planning Policy No. 64 – Advertising Structures and Signage*
- *Willoughby Local Environmental Plan 2011.*

COMPLIANCE WITH CONTROLS

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The aims of the SRD SEPP are to identify State significant development and State significant infrastructure and confer the necessary functions to joint regional planning panels to determine development applications.

The proposal is for SSD in accordance with section 4.36 of the EP&A Act because it is development for the purposes of a health, medical or related research facility with a capital investment value (CIV) in excess of \$30 million, under clause 14 (hospitals, medical centres and health research facilities) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011, as in force at the time of lodgement.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

The ISEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

The development constitutes traffic generating development in accordance with clause 104 of the ISEPP and therefore must be referred to RMS for comment. The applications were referred to RMS and TfNSW and their comments are summarised in **Section 4** of this report.

The proposal is considered to be consistent with the ISEPP given the consultation and consideration of the comments raised has been undertaken in the Department's assessment at **Section 5** of this report.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)

SEPP 33 aims to provide clear definitions for hazardous and offensive industries and ensure that consideration of any application to carry out hazardous and offensive industries is accompanied by sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact.

The Applicant submitted with the Tower A RtS an assessment of the applicability of SEPP 33 to the Tower A proposal. The assessment analysed the proposal against the screening methods for potentially hazardous development and potentially offensive development and concluded that as the proposal is neither potentially hazardous nor potentially offensive industry, SEPP 33 does not apply to Tower A.

SEPP 33 would be assessed in future development applications for the design and construction of Tower B.

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. The EIS includes a contamination assessment for the site which concludes the site is suitable for the proposed development in accordance with SEPP 55 as concentrations of contaminants of potential concern were not identified in any soil or groundwater samples above the adopted health or ecological investigation criteria. The EIS also included a RAP which concludes that if remediation is carried out in accordance with the RAP, then the site would be made suitable for the proposed development.

The Department is satisfied that the investigations undertaken by the Applicant satisfactorily demonstrate that the site can be made suitable for the proposal in accordance with Clause 7 of SEPP 55. The Department has recommended conditions requiring a site validation report and site audit statements be prepared by an accredited site auditor prior to and upon completion of the remediation works.

The Department also recommends conditions relating to ensure measures are in place should any unanticipated contamination be found during works.

Draft Remediation of Land State Environmental Planning Policy (Draft Remediation SEPP)

An Explanation of Intended Effect for the Draft Remediation SEPP and Draft Contaminated Land Planning Guidelines are on exhibition until 13 April 2018.

The Explanation of Intended Effect sets out the key changes proposed to SEPP 55 which largely relate to:

- categorisation of remediation works base on scale, risk and complexity
- more clearly specifying remediation works requiring development consent
- introducing certification and operational requirements for remediation works that can be undertaken without development consent
- requiring environmental management plans relating to post remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as containment cell) to be provided to Council.

The key operational framework of SEPP 55 is to be maintained and new provisions are unlikely to significantly affect the subject applications. As such, the Department is satisfied that the proposal would be consistent with the intent of the Draft Remediation SEPP.

Draft Environment State Environmental Planning Policy (draft Environment SEPP)

The draft Environment SEPP is a consolidated SEPP which proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Once adopted, the draft SEPP will replace seven existing SEPPs. The proposed SEPP will provide a consistent level of environmental protection to that which is currently delivered under

the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the existing SEPPs that are applicable, it is concluded that the proposed development will generally be consistent with the provisions of the draft Environment SEPP.

Willoughby Local Environmental Plan 2011 (WLEP)

The WLEP aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Willoughby LGA. The WLEP also aims to conserve and protect natural resources and foster economic, environmental and social wellbeing.

The site is zoned IN1 General Industrial under Willoughby Local Environmental Plan 2012 (WLEP), where health services facilities are prohibited. However, under clause 74 of Schedule 1 of WLEP, development for the purpose of a hospital (the definition of which encompasses health services facilities) is permitted with consent on certain land at 12 Frederick Street, St Leonards (being the subject site).

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the WLEP and those matters raised by Council in its assessment of the development (refer to **Section 5**). The Department concludes the development is consistent with the relevant provisions of the WLEP.

Other Policies

In accordance with Clause 11 of the State and Regional Development SEPP, Development Control Plans (DCP) do not apply to State significant development. Notwithstanding, the objectives of relevant plans and policies that govern the carrying out of the project are appropriate for consideration in this assessment in accordance with the SEARs and are considered below.

Table 1: Consideration of the Willoughby DCP

DCP Provisions	Department's Consideration
C.3 Sustainable Development • minimise consumption of resources • facilitate energy efficient development	• An Ecologically Sustainable Development (ESD) report was included in the Tower A EIS which details measures regarding sustainability, thermal massing, building fabric, water sensitive urban design, energy efficiency, recycling and waste disposal. • The Department has recommended a condition of consent for Tower A requiring that the Applicant meet sustainability benchmarks by obtaining a Green Star Certificate for construction and operation. • ESD would be further considered in future development application for detailed design and operation of Tower B.
C.4 Transport Requirements for Development • Encourage the use of public transport in areas close to transport nodes • Ensure that appropriate facilities are provided for bicycles • Ensure that provision is made for a reasonable number of parking spaces for vehicles generated by	• An assessment of traffic and parking implications associated with Towers A and B was provided with the applications. Vehicle access and internal circulation would be in accordance with relevant Australian Standards. • The Department has recommended conditions of consent for Tower A requiring that prior to final occupation of Tower A, the Applicant complete (in consultation with and to the agreement of Council) road upgrade works at the Herbert Street/Westbourne Street intersection to maintain the 2026 pre-development level of service. The Department has also recommended a condition requiring the Applicant to prepare a Green Travel Plan for Tower A.

a development including visitor, employee, service and commercial vehicles • Ensure that vehicular movements and parking do not impede pedestrian traffic safety and efficiency	• The Department has recommended conditions of consent for Tower B requiring any future development applications for the design and construction of Tower B are to be accompanied by a detailed assessment of parking, traffic and transport impacts, including mitigation measures and recommendations on intersection and infrastructure upgrades where necessary. The Department has also recommended a condition of consent for Tower B requiring that any future development application for the design and construction be accompanied by an updated Green Travel plan. • The Department considers that the proposal would provide a sufficient vehicle and bicycle parking for Towers A and B.
C.5 Water Management • Applies Water Sensitive Urban Design principles which minimise impacts on the natural water cycle • provides a safe and effective framework for the control, re-use and disposal of rainwater and stormwater • reduces flooding risk in urban areas	• A Stormwater Management Plan, Stormwater Drainage Plan and Drainage Details, and Stormwater Strategy Plan were included in the Tower A EIS. • The Department has recommended a condition of consent for Tower A requiring that final drainage design plans of the stormwater drainage and onsite detention system are to be prepared by a suitably qualified engineer generally in accordance with the requirements of Council. A condition of consent is also recommended requiring preparation of a Stormwater Quality Management Plan. • Stormwater would be further considered in future development application for detailed design and operation of Tower B.
C.8 Waste Management • Waste minimisation and resource recovery-encouraging improved environmental outcomes • ensuring waste systems are easy to use and that collection vehicles are able to access buildings to remove waste and recycling materials	• A Waste Management Plan was included in the Tower A EIS which described current policies, waste definitions and procedures and provides goals and targets to ensure ongoing improvement in waste management, including the generation, handling, storage and disposal of all forms of waste. • The Department has recommended a condition of Consent for Tower A requiring that an appropriate area will be provided within the premises for the storage of garbage bins, recycling containers and all waste and recyclable material generated by the premises • Waste would be further considered in future development application for detailed design and operation of Tower B.
C9. Preservation of Trees and Vegetation • minimise unnecessary removal of trees • encourage the planting of trees that are appropriate for site conditions • encourage the planting of local native species where appropriate	• The Applicant submitted a Flora and Fauna Assessment Report and an Arborist Report as part of the Tower A EIS. The proposal would result in the removal of all existing trees on the subject site. • The Department has recommended a condition of consent precluding the removal of the two Sydney Blue Gums (Tree Nos. 1 and 2) and a Weeping Bottlebrush (Tree No. 32) identified in the Arborist Report prepared by Accurate Tree Assessment and dated April 2016, which are located outside the subject site. • The Department has also recommended conditions of consent requiring the protection of existing street trees and that four street trees be provided in accordance with Council's <i>Street Tree Master Plan</i>.
C.11 Safety by Design • crime prevention principles including surveillance and access control	• The Department has recommended a condition of consent requiring that the Applicant design and construct Tower A having consideration for Crime Prevention through Environmental Design principles. The Department has also recommended a condition of consent requiring that CCTV and suitable lighting must be provided on the external perimeter of the Tower A. • Safety would be further considered in future development application for detailed design and operation of Tower B.

APPENDIX C RECOMMENDED CONDITIONS OF CONSENT

The recommended conditions of consent can be found on the Department of Planning and Environment's website as follows.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7543

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8499