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Tower B, St Leonards: Stage 2 Design and Construction

12 Frederick Street, St Leonards

Environmental Impact Statement

State Significant Development Application
SSD 8894



Prepared for DEXUS Projects Pty Ltd
Submitted to the Department of Planning and Environment

February 2018

Certification of Environmental Impact Statement

Authors

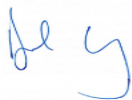
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Proposed development

Applicant	DEXUS Projects Pty Ltd
Applicant's address	PO BOX R1822, Royal Exchange NSW 1225
Land to be developed	12 Frederick Street, St Leonards
Legal description	Lot 1 DP 591747
Project description	Stage 2 Design and Construction for Tower B for health and medical purposes

Declaration

We certify that the contents of the Environmental Impact Statement, to the best of our knowledge, has been prepared in accordance with the requirements of clauses 6 and 7 of Schedule 2 of *Environmental Planning and Assessment Regulation 2000*; contains all available information that is relevant to the assessment of the development and that to the best of our knowledge the information contained in this report is neither false nor misleading.



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List of Abbreviations

BCA	Building Code of Australia
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EPAR	Environmental Planning and Assessment Regulation 2000
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EP&A Act	Environmental Planning and Assessment Act 1979
ESD	Ecologically Sustainable Development
SEPP	State Environmental Planning Policy
SSD	State significant development
WLEP 2012	Willoughby Local Environmental Plan 2012

Executive Summary

This Environmental Impact Statement (EIS) has been prepared by KEYLAN Consulting Pty Ltd on behalf of DEXUS Projects Pty Ltd to accompany a State significant development (SSD) application for Tower B: Stage 2 design and construction at 12 Frederick Street, St Leonards.

This EIS has been prepared and is submitted to the Department of Planning and Environment (DP&E) in accordance with Part 4, Division 2A, Section 83B of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The application is a Stage 2 development application (DA) for the concept proposal DA for a new building (known as Tower B) for medical specialist suites and associated allied health uses.

The concept proposal DA (SSD 8499) is currently under assessment and seeks approval for:

- a building envelope and indicative uses for Tower B that would be constructed on the podium of Tower A (SSD 7543)
- indicative uses comprising medical consulting rooms, operating and procedure rooms, accommodation for health care workers, patients and visitors and other ancillary uses such as conference rooms and a gymnasium.

This application is a further refinement of this concept proposal and seeks approval for the construction and use of Tower B.

The Site and Locality

The site is part of a larger 2.6-hectare site, known as 12 Frederick Street, St Leonards and is located opposite the Royal North Shore Private Hospital. The site is legally described as Lot 1 in DP 591747.

The site is bisected by a vegetated, steep sloped former quarry wall resulting in an approximate 16 metre level change across the site.

The northern corner of the subject site is occupied by a 2-storey warehouse building with rooftop car parking (proposed to be demolished under DA-2016/211, approved by Willoughby City Council on 29 June 2017). The southern corner of the subject site contains a former helipad, which is a cleared, flat area at the corner of Reserve Road and Westbourne Street.

The site is located approximately 500 metres to the north-west of St Leonards railway station, within the broader St Leonards Strategic Centre. The uses and character of this area have evolved so that there is a clear delineation between the more traditional industrial type uses to the north and more business and knowledge economy related uses in the south, where the subject site is located.

To the immediate south of the site is the Kolling Institute of Medical Research and other facilities which form part of the broader Royal North Shore Hospital precinct. To the west of the site is the North Shore Private Hospital and to the east is a collection of mixed warehousing and related developments.

To the north, beyond the 12 Frederick Street site, are large-format retail stores, including the Home HQ retail centre and a Bunnings Warehouse store. The nearest residential property is approximately 200 metres east of the site on Herbert Street.

The site is zoned IN1 General Industrial under Willoughby Local Environmental Plan 2012 (WLEP 2012). Hospitals are a prohibited use in the IN1 zone. A Planning Proposal has been prepared for a Schedule 1 amendment which would make hospitals a permitted use on the site and increase the FSR from 1.5:1 to 3:1. The Gateway Determination was issued on 19 September 2016 and Willoughby City Council (Council) publicly exhibited the Planning Proposal from 11 May to 8 June 2017. The Planning Proposal is currently with Department of Planning and Environment for finalisation.

Proposed Development

The proposal is for a Stage 2 DA for the concept proposal SSD 8499 and which sets out detailed design and construction for Tower B, situated on the northern and eastern sides of the 2-storey podium of Tower A (SSD 7543) on the site.

The new Tower B will:

- be 6-storeys in height with a maximum RL (inclusive of the lift overrun) of RL 138.350
- have a gross floor area (GFA) of 6,864 m² (equivalent to a FSR of 1.1:1)
- comprise health and medical purposes as part of the proposed North Shore Health Hub (Towers A and B) and ancillary to the Royal North Shore Hospital and North Shore Private Hospital, including medical specialist suites and associated allied health uses.

The proposal is SSD under the provisions of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) as it is development that has a capital investment value of more than \$30 million for the purpose of a *hospital*.

Section 4 of the EIS outlines the need for the proposal, project alternatives and the reasons behind the selection of the preferred option for the site.

The key benefits of the project will be to provide a range of services to meet demand for healthcare servicing in this location, strengthening and supporting the health and education precinct of St Leonards.

Strategic Context

Section 5 of the EIS outlines the strategic justification for the proposal. In summary, the project will reinforce the role of the St Leonards Strategic Centre as a major health precinct through additional employment opportunities associated with hospital uses and ancillary facilities and additional medical services.

Statutory Context

Section 6 of the EIS considers relevant State legislation and State and local environmental planning instruments, including:

- *Environmental Planning and Assessment Act 1979* – the proposal is SSD and the Minister for Planning is the consent authority. The proposal is consistent with the objects

of the Act and has been assessed against the matters for consideration under Section 79C

- *Biodiversity Conservation Act 2016* – the development is not likely to have any significant impact on biodiversity values
- *State Environmental Planning Policies (SEPPs)*, including:
 - *SEPP (State and Regional Development) 2011* – the proposal is SSD under the provisions of this SEPP and the Minister for Planning is the consent authority
 - *SEPP (Infrastructure) 2007 (ISEPP)* the proposed development is not classified as a traffic generating development under Schedule 3 of the ISEPP
 - *SEPP No. 55 Remediation of Land* - contamination and remediation issues are being addressed through SSD 7543, which demonstrates that the site is capable of being remediated for use as a hospital
 - *SEPP No. 64 Advertising and Signage* – the proposed signage zone will meet the requirements outlined in Schedule 1 of SEPP 64
 - *Willoughby Local Environmental Plan 2012* the development is consistent with the zoning and maximum floor space ratio for the site under WLEP 2012, subject to finalisation of the planning proposal

Environmental Planning Assessment

A detailed assessment of the potential environmental impacts of the proposal is contained in **Section 7**, which considers the following key issues:

Built form, urban design and visual impacts

Tower B has been carefully designed to take account of the form and scale of Tower A and the surrounding precinct. The tower is the tallest architectural feature on-site and cantilevers over the podium of Tower A (SSD 7543).

The tower will result in a scale of development that is appropriate within the surrounding context, providing an acceptable built form transition to the Kolling Institute located on Westbourne Street and is appropriately setback from the Reserve Road podium edge by 6 metres and the eastern boundary by 8.3 metres.

The height and scale of Tower B complies with the concept proposal. However, a number of elements have been refined which has resulted in an overall reduction in height and GFA as outlined below:

- the maximum building height has been reduced from RL 144.150 to RL 138.350
- the gross floor area has been reduced from 7,665 m² to 6,864 m²

Overall the proposed height and scale of the development is appropriate and acceptable as:

- the height and the tower/podium typology of Tower B ensures it integrates seamlessly with Tower A and positively contributes to the surrounding streetscape
- the proposed tower component is appropriately setback from the podium edge and addresses visual impacts to the surrounding land uses
- Tower B will frame the Tower A building when viewed from Westbourne Street and Reserve Road and due to its setback from Westbourne Street will not be visually dominant or overbearing

- the shadow analysis has confirmed that the height of the tower would not have any adverse impact on solar access to neighbouring properties or the public domain
- the completion of the North Shore Health Hub will result in a superior outcome¹⁸ for the site and surrounding health and education precinct.

Traffic, transport and parking

The site has frontages to Westbourne Street and Reserve Road. These roads provide access to Herbert Street to the east, Frederick Street to the north and Pacific Highway to the west and south. Pacific Highway provides links to a number of regional and state roads and the greater Sydney road network.

The site is well located in relation to public transport services, including the St Leonards Railway Station and high frequency bus services along the Pacific Highway which provide connections to Lane Cove, Chatswood, Macquarie Centre, North Sydney and the Sydney CBD.

The Transport Impact Assessment (TIA) concludes that Tower B will require 135 on-site car parking spaces. Parking is being provided as part of the Tower A development which, by itself, also requires 181 spaces. In addition to 24 spaces to offset the loss of on-street parking, this results in a maximum combined total of 340 car parking spaces on site. These rates are considered appropriate given the proximity of the site to various modes of public transport.

The TIA concludes there is adequate capacity in the surrounding road network to cater for the traffic generated by the development, with the exception of the Herbert/Westbourne Street intersection. The intersection is proposed to be upgraded to a roundabout in order to appropriately mitigate traffic generation and improve safety for all road users.

The construction of Tower B will be subject to a Construction Traffic Management Plan to ensure construction traffic impacts are appropriately managed and mitigated where possible.

Environmental Amenity

The shadowing and wind impacts of the proposed development have been modelled and tested which concluded that the proposed Tower B:

- will result in only minor overshadowing impacts during the mid-winter months
- the additional shadow casted by Tower B will be contained within the shadow of Tower A

Ecologically sustainable development

The EIS includes an Ecologically Sustainable Development (ESD) report prepared by DSA Consulting which identifies the sustainability attributes of the development. The report concludes the project has been designed to meet the highest standards of design and construction.

Noise and vibration

A detailed Noise Impact Assessment was prepared by Acoustic Logic. The assessment considers the potential noise impacts and also construction impacts of the Tower B operations on the surrounding land uses as well as noise and vibration impacts of surrounding land uses on Tower B.

The report concludes that:

- operational noise will comply with adopted noise emission guidelines at all times
- a preliminary assessment of mechanical plant noise emissions demonstrates that compliance is feasible with the required acoustic treatments
- detailed noise management practices should be implemented for the control of construction noise

Ecology

The Flora and Fauna Assessment report prepared in support of SSD 7543 concludes that it does not comprise remnant vegetation communities and it does not conform to any threatened ecological community listed under current legislation.

As no additional tree removal or other associated impacts are proposed as part of the Tower B development, these findings remain relevant to this application. It is concluded that the proposal will not have a significant impact on biodiversity values.

A request to waive the requirement for a biodiversity development assessment report under section 7.9(2) of the Biodiversity Conservation Act 2016 was submitted to DP&E and the Office of Environment and Heritage (OEH). On 30 January 2018, DP&E and OEH advised that the proposed development is not likely to have any significant impact on biodiversity values and that there is no need for the SSD application to include a Biodiversity Development Assessment Report

Building Code of Australia

Construction of Tower B will comply with the relevant BCA requirements and confirmation of compliance will be provided as part of the certification process, including a fire and risk assessment.

Development Contributions

Under Willoughby City Council's Section 94A *Development Contributions Plan 2011*, the applicable development contribution levy for development with a cost of more than \$200,000 is 1% of the cost of works.

Conclusion

This EIS has been prepared to consider the environmental, social and economic impacts of the proposed development. The EIS has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued on 1 December 2017 and complies with all relevant statutory requirements.

The EIS concludes that the proposal warrants approval for the following reasons:

- Tower B is an integral element of the proposed North Shore Health Hub, which is complementary to and will strengthen the role of St Leonards as a health and education precinct, consistent with the draft North District Plan
- the development will facilitate additional employment opportunities and health services in a strategic centre which is well located in relation to major transport infrastructure
- the proposed building form and scale of Tower B is considered appropriate within the surrounding precinct
- the design of Tower B will create visual interest and contribute positively to the overall amenity of the surrounding precinct

- the development will not generate any environmental impacts that cannot be appropriately managed, and is consistent with the relevant planning controls for the site
- granting consent for the construction of Tower B is considered to be in the public interest

1 Introduction

This Environmental Impact Statement (EIS) has been prepared by KEYLAN Consulting Pty Ltd on behalf of DEXUS Projects Pty Ltd to accompany a State significant development (SSD) application for Tower B: Stage 2 design and construction at 12 Frederick Street, St Leonards.

This EIS has been prepared and is submitted to the Department of Planning and Environment (DP&E) in accordance with Part 4, Division 2A, Section 83B of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The application comprises a Stage 2 DA for the concept proposal DA for a new building (known as Tower B) for medical specialist suites and associated allied health uses

The concept proposal DA (8499) is currently under assessment and seeks approval for:

- a building envelope and indicative uses Tower B that would be constructed on the podium of Tower A (SSD 7543)
- indicative uses comprising medical consulting rooms, operating and procedure rooms, accommodation for health care workers, patients and visitors and other ancillary uses such as conference rooms and a gymnasium.

This application is a further refinement of this concept proposal and seeks approval for the construction and use of Tower B, which:

- is 6 storeys in height with a maximum RL of 138.350
- has a gross floor area (GFA) of 6,864 m²
- will be used for health and medical purposes as part of the proposed North Shore Health Hub and ancillary to the Royal North Shore Hospital and North Shore Private Hospital, including medical specialist suits and associated allied health uses such as osteopath, physiotherapy and speech pathology.

A further related DA (Tower A SSD 7543) is also currently under assessment. Tower B will be constructed on the podium of Tower A. Together, the towers comprise of the proposed North Shore Health Hub offering a range of complementary medical services associated with the existing St Leonards health and education precinct.

The Environmental Impact Statements (EISs) for SSD 8499 and 7543 have both been publicly exhibited and Response to Submissions lodged. These DAs remain under assessment by DP&E.

This EIS has also been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EPAR) and the Secretary's Environmental Assessment Requirements (SEARs) issued on 1 December 2017.

This EIS provides a comprehensive environmental assessment of the project. It describes the subject site, the project and its benefits, and assesses the project against relevant matters set out in legislation, environmental planning instruments and planning policies and strategies. It should be read in conjunction with the supporting information and plans appended to this report.

The EIS demonstrates that the project is consistent with the relevant State and local strategic planning objectives applicable to the St Leonards Strategic Centre, will provide improved medical services for the local and broader community and will not result in any significant environmental or amenity impacts. Accordingly, the EIS concludes that the project warrants approval.

The structure of this EIS is summarised in **Table 1** below:

Section Number	Section Heading	Description
	Executive Summary	Concise summary of this report and its findings
1	Introduction	Overview of the EIS and the proposed development
2	Site Analysis	Description of the site and surrounding development
3	Proposed Development	Description of the project and consultation undertaken with key stakeholders
4	Planning Justification	Need for the proposal and alternatives considered
5	Strategic Planning Framework	Identifies the key strategic objectives that this EIS must address and the criteria the project must comply with
6	Statutory Planning Framework	Identifies the key legislation that this EIS must address and the criteria the project must comply with
7	Environmental Planning Assessment	Identifies key activities and assesses potential impacts on the environment
8	Environmental Risk Assessment	Identifies and assesses the potential environmental risks associated with the project and mitigation/management measures to manage any impacts
9	Conclusion	Concise statement of key findings

Table 1: EIS Structure

1.1 Project Objectives

DEXUS Projects Pty Ltd (DEXUS) as owner of the subject site, has undertaken investigations into the highest and best use of the site, consistent with the relevant strategic objectives of *A Plan for Growing Sydney*, *Draft Greater Sydney Region Plan*, revised *Draft North District Plan*, the St Leonards and Crow's Nest Station Precinct and the *Willoughby City Strategy 2013-2029* (refer **Section 5**).

These objectives relate to supporting health related infrastructure and land uses around the Royal North Shore Hospital and reinforcing the specialist health functions of St Leonards. To this end, DEXUS proposes to develop a new tower which comprises health and medical purposes as part of the proposed North Shore Health Hub and ancillary to the Royal North Shore Hospital and North Shore Private Hospital. These health and medical purposes include medical specialist suites and associated allied health uses such as osteopathy, physiotherapy and speech pathology.

1.2 Project Overview

An overview of the project is provided in **Table 3**:

Address	12 Frederick Street, St Leonards
Legal Description	Lot 1 in DP 591747
LGA	Willoughby
Zoning	IN1 General Industrial
Permissibility	- Proposal is prohibited in the IN1 zone - Planning Proposal (PP_2016_WILLO_001_00) to make hospitals a permitted use on the site and increase the FSR from 1.5:1 to 3:1 publicly exhibited 11 May – 8 June 2017 - Referred to the Department of Planning and Environment for Finalisation on 7 November 2017 and awaiting gazettal
Project	Stage 2 DA for a 6 storey tower on the podium of the proposed private hospital on the site (SSD 7543) with uses including: - Medical specialist suites - Associated allied health uses such as osteopathy, physiotherapy and speech pathology
Capital Investment Value	Approximately \$37,985,000 (excluding GST) (refer Appendix 2 – Quantity Surveyor Report)
Employment (estimate)	- Construction: approx. 330 workers - Operation: approx. 110 FTE positions

Table 2: Project Overview

1.3 SEARs

DP&E issued SEARs (SSD 8894) for the project on 1 December 2017 (**Appendix 1**). These requirements and where they are addressed in this EIS are set out in **Table 4** below

Environmental Assessment Requirement	EIS Reference	Supporting Study
General Requirements		
The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning & Regulation 2000</i> (the Regulation)	Section 1.4 Environmental Planning and Assessment Regulation 2000	N/A
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 8 Environmental Risk Assessment	
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of potential cumulative impacts due to other development in the vicinity		



Environmental Assessment Requirement	EIS Reference	Supporting Study
(completed, underway or proposed); and measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.		
The EIS must be accompanied by a report from a qualified quantity surveyor providing: - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived - an estimate of the jobs that will be created by the future development during the construction and operational phases of the development - certification that the information provided is accurate at the date of preparation.		Appendix 2 QS Report
Key Issues The EIS must address the following specific matters:		
1. Statutory and Strategic Context including: Address the statutory provisions contained in all relevant environmental planning instruments, including: - State Environmental Planning Policy (State & Regional Development) 2011 - State Environmental Planning Policy (Infrastructure) 2007; - State Environmental Planning Policy No.55 – Remediation of Land - State Environmental Planning Policy No.65 – Advertising and Signage - Willoughby Local Environmental Plan 2012. Permissibility Detail the nature and extent of any prohibitions that apply to the development and the nature and timing for any proposed Local	Section 6 Statutory Planning Framework	N/A



Environmental Assessment Requirement	EIS Reference	Supporting Study
Environmental Plan amendments to facilitate the proposed development. Development Standards Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. Tower B, St Leonards Concept Proposal In accordance with section 83D(3) of the EP&A Act, demonstrate that the proposal is consistent with the Tower B, St Leonards concept proposal (SSD 8499).		
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW State Priorities • A Plan for Growing Sydney • Draft Greater Sydney Regional Plan 2017 • NSW Long Term Transport Master Plan 2012 • Sydney's Cycling Future 2013 • Sydney's Bus Future 2013 • Sydney's Walking Future 2013 • Greater Sydney Commission's Draft North District Plan • Healthy Urban Development Checklist, NSW Health.	Section 5 Strategic Planning Framework	N/A
3. Built form and urban design • Address the height, density, bulk and scale, setbacks of the proposal in relation to the adjacent campus and the surrounding locality, topography and streetscape • Address design quality, with specific consideration of the overall site layout, streetscape, open space, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles • Detail how services, including but not limited to waste management, loading zones and mechanical plant are integrated	Section 3 7.2 Built Form	Appendix 4 Design Statement and architectural drawings



Environmental Assessment Requirement	EIS Reference	Supporting Study
into the design of the development.		
4. Environmental Amenity Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing, reflectivity from building facades and wind impacts. A high level of environmental amenity must be demonstrated.	Section 7.3 Environmental amenity	Appendix 4 Design Statement and architectural drawings Appendix 6 Wind Assessment Report
5. Transport and Accessibility Include a transport and accessibility impact assessment, which details, but not limited to the following: - accurate details of the current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities provided on the road network located adjacent to the proposed development - an assessment of the operation of existing and future transport networks including the bus network and their ability to accommodate the forecast number of trips to and from the development - details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips - the adequacy of public transport, pedestrian and bicycle networks and infrastructure to meet the likely future demand of the proposed development - the impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site in consultation with Roads and Maritime Services and Transport for NSW and identify measures to integrate the development with the transport network; - details of any upgrading or road improvement works required to accommodate the proposed development;	Section 7.4 Traffic and accessibility	Appendix 7 Transport Impact Assessment



Environmental Assessment Requirement	EIS Reference	Supporting Study
• details of travel demand management measures to encourage sustainable travel choices and details of programs for implementation • the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for upgrading or road improvement works, if required (note: traffic modelling is to be undertaken with scope to be agreed by TfNSW and RMS in advance) • the proposed active transport access arrangements and connections to public transport services • the proposed access arrangements, including car and bus pickup/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones • measures to maintain road and personal safety in line with CPTED principles • the proposed car and bicycle parking provision, including end-of-trip facilities, which must be taken into consideration of the availability of public transport and the requirements of Council's relevant parking codes and Australian Standards • proposed bicycle parking facilities in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance • details of the proposed number of car parking spaces and compliance with appropriate parking codes and justify the level of car parking provided on-site		



Environmental Assessment Requirement	EIS Reference	Supporting Study
• details of emergency vehicle access arrangements; • an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures • service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times) • in relation to construction traffic: assessment of cumulative impacts associated with other construction activities; ○ an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity; ○ details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process; ○ details of anticipated peak hour and daily construction vehicle movements to and from the site; ○ details of access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle; ○ details of temporary cycling and pedestrian access during construction ○ details of proposed construction vehicle access arrangements at all stages of construction ○ traffic and transport impacts during construction, including cumulative impacts associated with other construction activities, and how these impacts will be mitigated for any associated		



Environmental Assessment Requirement	EIS Reference	Supporting Study
traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact (which must include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities). Relevant Policies and Guidelines: • <i>Guide to Traffic Generating Developments (Roads and Maritime Services)</i> • <i>EIS Guidelines – Road and Related Facilities (DoPI)</i> • <i>Cycling Aspects of Austroads Guides</i> • <i>NSW Planning Guidelines for Walking and Cycling</i> • <i>Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development</i>		
6. Ecological Sustainable Development (ESD) • Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development • Demonstrate that the development has been assessed against suitably accredited rating scheme to meet industry best practice • Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.	Section 7.5 Ecological Sustainable Development	Appendix 8 ESD Report
7. Biodiversity • Biodiversity impacts related to the proposed development are to be assessed in accordance with the requirements of Section 7.9 of the Biodiversity Conservation	Section 7.11.2 Ecology	N/A



Environmental Assessment Requirement	EIS Reference	Supporting Study
Act 2016, including the preparation of a Biodiversity Development Assessment Report where required.		
8. Noise and Vibration - Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. And outline measures to minimise and mitigate the potential noise impacts on and from surrounding occupiers of land. <i>Relevant Policies and Guidelines:</i> - NSW Industrial Noise Policy (EPA) - Interim Construction Noise Guideline (DECC) - Assessing Vibration: A Technical Guideline 2006 - Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)	Section 7.6 Noise and vibration	Appendix 9 Acoustic Report
9. Sediment, Erosion and Dust Control - Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. <i>Relevant Policies and Guidelines:</i> - Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) - Approved Methods for Modelling and Assessment of Air Pollutants in NSW (EPA) - Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)		Appendix 10 Stormwater Strategy Plan
10. Contamination Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. <i>Relevant Policies and Guidelines:</i>	Section 7.12.2 Contamination	N/A



Environmental Assessment Requirement	EIS Reference	Supporting Study
<i>Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land (DUAP)</i>		
11. Utilities - Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure. - Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	Section 7.9 Utilities	Appendix 12 Utility and Water Management Plan
12. Contributions Address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	Section 7.11 Contributions	N/A
13. Drainage - Detail drainage associated with the proposal, including stormwater and drainage infrastructure. <i>Relevant Policies and Guidelines:</i> <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i>	Section 7.7 Drainage and flooding	Appendix 10 Stormwater Strategy Plan
14. Flooding Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Section 7.7 Drainage and flooding	Appendix 10 Stormwater Strategy Plan
15. Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the	Section 7.8 Waste	Appendix 11 Waste Management Plan



Environmental Assessment Requirement	EIS Reference	Supporting Study
measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.		
16. Construction Hours Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	Section 7.6 Noise and vibration	Appendix 14 Preliminary Construction Management Plan
Plans and Documents		
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following:		Appendix 4 Design Statement and Architectural Drawings
Architectural drawings (dimensions and RLs)		Appendix 4 Design Statement and Architectural Drawings
Site Survey, showing existing levels, location and height of existing and adjacent structures/building and boundaries		Appendix 13 Site Survey
Site Analysis Plan		Appendix 4 Design Statement and Architectural Drawings
Stormwater Concept Plan		Appendix 10 Stormwater Drainage Plan
Sediment and Erosion Control Plan		Appendix 10 Sediment and Erosion Control Plan
Shadow diagrams		Appendix 4 Design Statement and Architectural Drawings
View analysis/photomontages		Appendix 4 Design Statement and Architectural Drawings
Landscape Plan		N/A
Preliminary Construction Management Plan		Appendix 14 Preliminary Construction Management Plan
Preliminary Construction Traffic Management Plan		Appendix 7
Geotechnical and Structural Plan		Appendix 15 Structural Plan



Environmental Assessment Requirement	EIS Reference	Supporting Study
Accessibility Report		Refer to BCA Report Appendix 13
Arborist Report		N/A
Salinity Investigation Report		N/A
Acid Sulphate Soils Management Plan		N/A
Schedule of materials and finishes	Section 7.2.2 Design and materiality	Appendix 4 Design Statement and Architectural Drawings
Consultation		
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: - Willoughby City Council; - Transport for NSW; and - Roads and Maritime Services. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	Section 3.2 Consultation	N/A

Table 3: Secretary's Environmental Assessment Requirements

1.4 Environmental Planning and Assessment Regulation 2000

This EIS has been prepared in accordance with form and content requirements of Schedule 2 of the EPAR. An overview of how the individual requirements of the EPAR have been satisfied is included in the Table below.

Environmental Planning and Assessment Regulations 2000 (extract)	Area addressed in EIS
(1) <i>An environmental impact statement must also include each of the following:</i>	
(a) <i>a summary of the environmental impact statement,</i>	Executive Summary
(b) <i>a statement of the objectives of the development, activity or infrastructure,</i>	Section 1 Introduction
(c) <i>an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure,</i>	Section 4 Planning Justification
(d) <i>an analysis of the development, activity or infrastructure, including:</i>	Sections 3 and 7 Proposed Development and Environmental Planning Assessment
(i) <i>a full description of the development, activity or infrastructure, and</i>	



Environmental Planning and Assessment Regulations 2000 (extract)	Area addressed in EIS
(ii) a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and (iii) the likely impact on the environment of the development, activity or infrastructure, and (iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and (v) a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out,	
(e) a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv),	Section 6 Statutory Planning Framework
(f) the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4). Note. A cost benefit analysis may be submitted or referred to in the reasons justifying the carrying out of the development, activity or infrastructure.	Section 7 Environmental Planning Assessment
(2) Subclause (1) is subject to the environmental assessment requirements that relate to the environmental impact statement.	N/A
(3) Subclause (1) does not apply if:	
(a) the Secretary has waived (under clause 3 (9)) the need for an application for environmental assessment requirements in relation to an environmental impact statement in respect of State significant development, and (b) the conditions of that waiver specify that the environmental impact statement must instead comply with requirements set out or referred to in those conditions.	N/A

Table 4: Requirements of the Environmental Planning and Assessment Regulation 2000

1.5 Project Team

An expert project team has been formed to deliver the project and includes consultants listed in Table below:

Role	Consultant
Urban Planners	KEYLAN Consulting Pty Ltd
Architecture/Urban Design	Billard Leece Partnership
BCA	McKenzie Group
Drainage and flooding	Warren Smith and Partners
Ecological Sustainable Development	DSA Consulting
Noise and vibration	Acoustic Logic
Project Manager	Savills
Quantity Surveyor	Slattery
Traffic	GTA Consultants
Utilities	Warren Smith and Partners
Wind	Cermak Peterka Petersen Pty Ltd
Structural Engineer	Northrop

Table 5: Project Team

2 Site analysis

2.1 Site location and context

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

This site is part of a larger 2.6-hectare site, known as 12 Frederick Street, St Leonards. The site is legally described as Lot 1 in DP 591747 and is bounded by Frederick Street to the north, Reserve Road to the west, Westbourne Street to the south and mixed warehousing and related development to the east (**Figure 1**).

The proposed North Shore Health Hub is located on a proposed lot (the 'site') that is regular in shape and has an area of 6,194 m². It fronts Westbourne Street and Reserve Road and is located opposite the existing North Shore Private Hospital to the west and the Royal North Shore Public Hospital to the south.

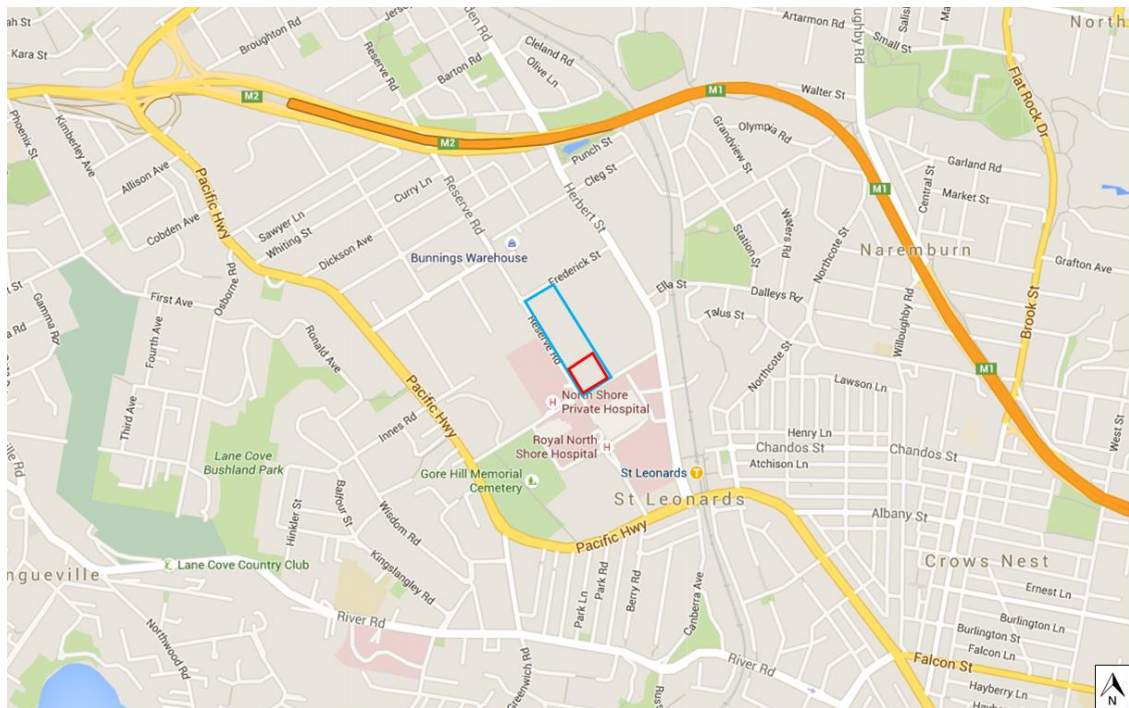


Figure 1: Hospital site (outlined in red) and the remainder of 12 Frederick Street (outlined in blue)
(Source: Google Maps)

2.2 Project area description

The site historically formed part of a former brick quarry that extended from Frederick Street to Westbourne Street and Reserve Road to Herbert Street. A steep sloped quarry wall bisects the site, resulting in an approximate 16 metre level change across the site. The quarry wall is the dominant feature of the site and has limited development to the northern (lower) and southern (upper) corners of the site (**Figure 2**).



Figure 2: Subject site (outlined in red) (Source: Google Maps)

The northern corner (lowest level) of the subject site is occupied by a 2-storey warehouse building with rooftop car parking (to be demolished under approved DA 2016/211). The warehouse is setback approximately 35 metres from Westbourne Street and between 33 to 55 metres from Reserve Road. The building has a single frontage onto an internal private warehouse access road that is accessed from Frederick Street and its rooftop car parking area is accessed from a ramped access way from Reserve Road.

The southern corner (highest level) of the subject site contains a former helipad, which is a cleared, flat area at the corner of Reserve Road and Westbourne Street.

The quarry wall comprises a steep, vegetated embankment which falls approximately 16 metres from Westbourne Street/Reserve Road to the base of the 2-storey warehousing building. The embankment continues east along Westbourne Street, where it is generally heavily vegetated. To the south along Reserve Road, the former quarry wall is generally exposed and less vegetated. The vegetation on the site consists mainly of native regrowth and exotic species, with some areas of significant weed infestation, and mature trees along the Westbourne Street frontage. Photographs of the site are provided below. Site survey plans are provided at **Appendix 3**.



Figure 3: View east over the quarry wall to the warehouse rooftop car park from Reserve Road
(Source: KEYLAN Consulting)



Figure 4: View west along warehouse access road from Herbert Street (left) and view south along the warehouse access road from Frederick Street (right) (Source: KEYLAN Consulting)

2.3 Surrounding development

The site is located approximately 500 metres to the north-west of St Leonards Railway Station, within the broader St Leonards/Artarmon employment area. The uses and character of this area continue to evolve in a way that there is a clear delineation between the more traditional industrial type uses to the north and more business and knowledge economy related uses in the south, where the site is located.

To the immediate south of the site is the Kolling Institute of Medical Research and other facilities which form part of the broader Royal North Shore Hospital complex. Due to the size of the hospital complex, it is interconnected with roads, surface and elevated pedestrian paths. To the west is the North Shore Private Hospital and to the east of the site is a collection of mixed warehousing and related developments.

To the north, beyond the 12 Frederick Street site, are large-format retail stores, including the Home HQ retail centre and a Bunnings Warehouse store.

A mental health facility at 10 Herbert Street, St Leonards, was approved on 15 November 2016 and is currently under construction.

The nearest residential property to the site is approximately 200 metres east of the site on Herbert Street. Photographs of the immediate site surroundings are provided below.



Figure 5: View looking east along Westbourne Street including the Kolling Institute to the south of the site (left) and view looking west along Westbourne Street including the Royal North Shore Hospital Clinical Services Building (right) (Source: KEYLAN Consulting)



Figure 6: View west towards Royal North Shore Car Park and North Shore Private Hospital beyond (left) and view looking south along Reserve Road, with Royal North Shore Hospital car park to the west (right) (Source: KEYLAN Consulting)

2.4 Relevant Planning History

DEXUS has lodged a number of separate DAs for the development of the site, as outlined in the table below.

Applications	Description	Status
Planning Proposal PP_2016_WILLO_001_00	Allow <i>hospital</i> as a permissible use and amend the floor space ratio of up to 3:1	- Gateway Determination issued on 19 September 2016 - Planning Proposal publicly exhibited from 11 May – 8 June 2017 - Referred to the Department of Planning and Environment for Finalisation on 7 November 2017
DA 2016/211	Demolition of existing warehouse structures and subdivision to create a separate lot for the North Shore Health Hub	- DA refused on 28 December 2016 - Section 82A review lodged with Council on 22 February 2017 - Consent granted on 29 June 2017 - Section 96(1A) modification lodged with Council on 1 November 2017, seeking minor modifications to the consent
SSD 7543	Construction of a new private hospital (Tower A and Podium)	- Publicly exhibited from 6 April – 22 May 2017 - Response to Submissions lodged 1 December 2017
SSD 8499	Concept proposal for the building envelope and indicative uses associated with the proposed health hub (Tower B)	- Publicly exhibited from 20 July – 18 August 2017 - Response to Submissions lodged 1 December 2017

Table 6: Relevant Planning History

3 Proposed Development

3.1 Project Description

The project involves the construction of a new tower, known as *Tower B*, situated on the northern and eastern sides of the 2-storey podium of the proposed Tower A (SSD 7543) on the site. Together, the towers comprise of the proposed North Shore Health Hub, which is intended to provide a range of complementary medical services associated with the existing St Leonards health and education precinct.

Proposed Tower B will:

- be 6- storeys in height with a maximum RL (inclusive of the lift overrun) of RL 138.350
- have a gross floor area (GFA) of 7,000 m² (equivalent to a FSR of 1.1:1)
- comprise health and medical purposes associated with the proposed health hub and ancillary to the Royal North Shore Hospital and North Shore Private Hospital, including medical specialist suites and associated allied health uses such as:
 - Urology
 - Plastic and reconstructive
 - Respiratory and sleep
 - Ophthalmology (eye surgery)
 - Gastroenterology
 - Colorectal
 - Orthopaedic
 - Cardiology
 - Cardiothoracic
 - Paediatrician
 - Obstetrician gynaecologist
 - General surgeons
 - Ear Nose and Throat
 - IVF
 - Laser treatments
 - Rehabilitation
 - Allied health
 - Dermatology
 - Physiotherapy
- include a signage zone with an area of 5.8 m by 0.7 m to incorporate future building identification signage on the building's western elevation

Tower B is physically integrated with proposed Tower A, being constructed on the podium of Tower A with a common lobby to enable transfer of patients between the two towers. Further, Tower A includes a first floor pedestrian bridge over Reserve Road to provide direct access between the health hub and the existing private and public hospitals and the transfer of patients between buildings for treatment and aligning of hospital medical and surgical services.

The proposed mix of land uses continue to meet the definition of a “hospital” in the *Willoughby Local Environmental Plan 2012* (WLEP 2012) as the facilities and uses within each tower comprise a building or place for professional health care services to in-patients and out-patients of the existing Royal North Shore Hospital and North Shore Private Hospital.

Accordingly, the North Shore Health Hub will be used for purposes that are ancillary to the adjacent hospitals.

It is noted that a number of physical changes have been made to the proposal refining the concept proposal for Tower B (SSD 8499) by:

- a reduction in maximum building height from RL 144.150 to RL 138.350
- deletion of levels 1 and 2 from the building envelope, with the Tower to be constructed on supporting columns on the Tower A podium. This enables provision of an extended, north facing outdoor terrace area on the podium
- deletion of levels 1 to 3 envelope element on the eastern side of the podium
- reduction in GFA from 7,655 m² (FSR 1.2:1) to approximately 7,000 m² (FSR 1.1:1)
- refinement of the range of uses for the building to include specialist medical suites and allied health uses.

As the proposed uses still meet the definition of “hospital” and the design changes are minor, the proposal remains consistent with the concept proposal (SSD 8499).

Extracts from the architectural plans are provided below.



Figure 7: Artist impression of Tower B looking east (Source: Billard Leece Partnership)



Figure 8: Artist impression of Tower B looking south (Source: Billard Leece Partnership)



Figure 9: Artist impression of Tower B looking north (Source: Billard Leece Partnership)

3.2 Consultation

DEXUS has undertaken extensive consultation on its proposed development of the site for the North Shore Health Hub. This is summarised in the table below:

Stakeholder	Consultation Summary
Willoughby City Council	DEXUS has held regular meetings with senior Council staff regarding the proposed development of the site and all current applications including the Planning Proposal, the DA for subdivision and demolition (DA 2016/211), SSD 7543 and SSD 8499 and the proposal subject to this EIS. This dialogue will be on-going during the exhibition and assessment of this EIS. GTA also consulted Council (as the relevant road authority) for feedback on the proposed roundabout at the Herbert Street/ Westbourne Street intersection during preparation of the TIA. At the time of completion of the TIA, no specific feedback was available. However, further consultation with Council on this issue has been arranged and will be on-going in parallel with the assessment of this DA.
TNSW and RMS	TNSW and RMS were consulted during the preparation of the Transport Impact Assessment (see Appendix 7).
Utility Providers	As outlined in the Utility and Water Management Plan (Appendix 12), consultation with utility providers has been undertaken for Towers A & B with offer letters provided for Tower A. Consultation for Tower B will continue as the design progresses.
Community Consultation	Details of community consultation undertaken by DEXUS in relation to the development of the site are outlined in Section 7 of the EIS for SSD 7543. In summary, DEXUS has undertaken a letterbox drop of surrounding landowners and established a dedicated community information line. DEXUS has recently commenced further consultation with surrounding land owners advising of the status of the Planning Proposal, SSD 7543 and the lodgement of this EIS for Tower B. DEXUS has also maintained the community information line.

Table 7: Stakeholder Consultation

4 Planning Justification

4.1 Need for the proposal

As outlined in the EIS for SSD 8499, DEXUS has undertaken a comprehensive review of the site's healthcare catchment area and the associated need for healthcare development on the site. This involved a population based study which analysed catchment demographics and existing and proposed healthcare services¹.

The review identified the Primary Healthcare Catchment Area for the site comprises of Warringah, Chatswood-Lane Cove, North Sydney-Mosman, Ku-Ring-Gai, Ryde-Hunters Hill and Manly (Australian Bureau of Statistics Statistical Areas Level 3).

The Catchment Area and St Leonards Precinct has undergone significant change over the years, experiencing rapid increase in population growth placing further demand for additional medical and health care services.

The review identified that there was a shortfall across all medical progressions within the catchment, including dentists, psychologists, general practitioners, osteopaths and occupational therapists. All medical professions are anticipated to experience significant growth to 2026, with the greatest growth expected for physiotherapists, psychologists, general practitioners and dentists.

DEXUS is seeking to deliver significant community benefit through addressing demonstrated need for health care and related services within the site's catchment. It proposes to achieve this through the development of a world class specialist healthcare facility with leading service providers on an optimally located but underutilised site.

Since lodgement of the DAs for Tower A (SDD 7543) and Tower B (SSD 8499), DEXUS has undertaken further market testing for the use of the towers and, consequently, has refined the mix of land uses of the proposed North Shore Health Hub to reflect responses of health service providers and operators on what is required to meet public demand for healthcare services in this location (outlined in detail in the Responses to Submissions for each DA).

The proposed North Shore Health Hub will:

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

¹ "Review of Private Hospital Opportunities for St Leonards Health Precinct, New South Wales", Hardes and Associates, March 2017

4.2 Proposal alternatives

As outlined in **Section 2.4**, the EIS for the private hospital on the site (SSD 7543) specifically noted that the project had been designed to accommodate a future tower expansion to utilise the residual floor space under the 3:1 FSR sought under the Planning Proposal.

Further, as this tower would be located on the podium of the private hospital, proposed uses include a range of complementary health care uses and allied health services to meet the demands of the broader St Leonards Precinct.

The alternatives to the proposal include:

- **No further development on the site** – this option would result in the under-utilisation of the site under proposed planning controls and significantly limit the site's capacity to provide a range of specialist healthcare services and related uses and to provide significant additional employment opportunities. This would be a missed opportunity to providing significant community benefit through additional healthcare services in an area where these services are both in high demand and under-supplied.
- **Development for other land uses** – this option would involve the residual floor space on the site being developed for other permissible uses, such as industrial or warehousing or industrial uses, consistent with the site's IN1 General Industrial zoning. This option was not pursued by DEXUS due to the physical characteristics of the site, i.e., the steep embankment of the site is unsuitable for industrial type development which would costly engineering solutions. The low rents of industrial development would therefore deem it unfeasible. Furthermore, industrial development would forego the significant community benefits of developing the site for health care and related purposes.

These alternatives are inferior development outcomes that would undermine the site's capacity to provide additional specialist health services, related uses such as allied health and significant new employment opportunities, which will otherwise be achieved through the subject proposal.

5 Strategic Planning Framework

5.1 NSW Making it Happen

NSW Making it Happen sets out the NSW Premier's priorities to grow the economy, deliver infrastructure, and improve health, education and other services across NSW. It outlines the Government's program of investing \$68.6 billion over 4 years in transport, roads, schools, hospitals and renewed sports and cultural infrastructure.

Although *NSW Making it Happen* relates to investment in public infrastructure and services, the provision of the proposed hospital and associated specialist health facilities will enhance medical services provision in the Sydney metropolitan area and contribute to the achievement of key NSW Government priorities such as encouraging business investment, creating jobs, cutting waiting times for planned surgeries, and improving access to hospital emergency departments.

The proposal is consistent with these State-level strategic objectives.

5.2 A Plan for Growing Sydney

A Plan for Growing Sydney sets out the NSW Government's vision for Sydney to be "a strong global city, a great place to live" and includes several supporting goals and directions. The Plan's key goals are:

1. *A competitive economy with world-class services and transport.*
2. *A city of housing choice with homes that meet our needs and lifestyle.*
3. *A great place to live with communities that are strong, healthy and well-connected.*
4. *A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.*

There are several directions under Goal 1 that are relevant to the assessment of the proposal, including:

Direction 1.6: Expand the global economic corridor

The site is located within the Global Economic Corridor. The proposed redevelopment of the site for a private hospital and ancillary uses supports this direction through the provision of additional employment opportunities, including high-skilled jobs, and the capacity for additional mixed-use development that complements and strengthens the specialised health functions of St Leonards.

Direction 1.7: Grow strategic centres – providing more jobs closer to home

St Leonards is identified as one of Sydney's strategic centres under this Direction. This Direction seeks to focus employment growth in strategic centres in order to improve access to jobs and services, including health centres and hospitals.

The proposal is consistent with this Direction as it will facilitate additional employment opportunities and health services and ancillary facilities in a strategic centre which is well located in relation to major transport infrastructure (i.e. St Leonards Railway Station and surrounding bus routes and the future Sydney Metro Crows Nest Station).

Direction 1.9: Support priority economic sectors

This Direction seeks to support the growth of industry clusters in cost-effective locations, with a focus on a number of priority industries, including professional services. The proposal will grow the provision of hospital and related health services in a strategic centre already recognised as having a specialised health function around Royal North Shore Hospital.

Direction 1.10: Plan for education and health services to meet Sydney's growing needs

This Direction aims to support the provision of health and education services to cater for Sydney's growing and changing population. The Plan also identifies the following priorities for the St Leonards strategic centre, which are relevant to and clearly supported by the proposal:

- work with council to provide capacity for additional mixed-use development in St Leonards including offices, health, retail, services and housing
- support health-related land uses and infrastructure around Royal North Shore Hospital

The proposal supports this Direction and these actions through the provision of medical and allied health services that are ancillary to the existing health services of the broader St Leonards Precinct, Royal North Shore Hospital and Royal North Shore Private Hospital and provides expanded health services to the growing population.

5.3 Draft Greater Sydney Region Plan

In October 2017, the Greater Sydney Commission (GSC) released the revised *draft Greater Sydney Region Plan 2056* (draft Regional Plan). The draft Regional Plan sets out a 40-year vision for the region to establish a global metropolis of three cities – Western City, the Central River City, and the Eastern Harbour City, enabling the majority of people to commute to their nearest city within 30 minutes.

The Willoughby LGA is located within the Eastern Harbour City. The established Eastern Harbour City is seen as the global gateway, known for its strong global economy and building highly skilled workforce.

St Leonards is recognised as a “health and education precinct”. An objective relevant to the assessment of the proposal, includes:

Objective 21 – Internationally competitive health, education, research and innovation precincts

This Direction recognises the important role hospitals play in contributing to Greater Sydney's economy. The Plan acknowledges that “health care” is provided through a comprehensive network of services which ranging from large principal referral hospitals through to care in people's homes and community health centres.

“Health care” also includes ambulance services, population health and preventative services, mental health, primary care including general practice, allied health services, pharmacy, dental and residential aged care. The Plan states that the “*integration across all services is pivotal to efficient and effective delivery of health care.*”

The proposal supports this Objective through the provision of medical and allied health services that will allow for the clustering of complementary uses within the St Leonards health and education precinct.

The draft Regional Plan was publicly exhibited from 22 October to 15 December 2017. Once the Plan is finalised it is anticipated that it will replace *A Plan for Growing Sydney*.

5.4 Revised Draft North District Plan

In October 2017, the GSC released the revised *draft North District Plan 2017* which sets out the 20-year vision for the North District, which includes Hornsby, Hunter's Hill, Ku-ring gai, Lane Cove, Northern Beaches, Mosman, Ryde and Willoughby local government areas.

It provides the district level framework to implement the goals and directions outlined in the draft Regional Plan and is intended to be used to inform the preparation of Local Environmental Plans, planning proposals, and strategic land use and transport and infrastructure planning.

The draft Plan's key goals are to enhance Sydney's liveability, productivity and sustainability into the future. A key Planning Priority for St Leonards and the site is, '*Growing and investing health and education precincts* (Planning Priority N9)'. This Planning Priority delivers on Objective 21 of the draft Greater Sydney Region Plan, '*Internally competitive health, education, research and innovation precincts*'.

St Leonards is one of three "health and education precincts" within the North District. The precinct is recognised as having the potential to leverage off existing health facilities such as the Royal North Shore Public and Private Hospital and the Mater Hospital to grow jobs in complementary health services and existing education facilities.

In addition, the GSC has identified St Leonards as a Collaboration Area given its important health and education uses. St Leonards-Crows Nest is a Priority Precinct and DP&E and the GSC are working with NSW Health, Transport for NSW, NSW Department of Industry, TAFE NSW, Lane Cove, North Sydney and Willoughby Councils to improve liveability, productivity and sustainability of the area. This includes a baseline target for jobs in the precinct of 54,000 by 2036 (or higher target of 63,500).

The proposal will support the planning priorities and strengthen the health and education precinct by:

- contributing to the St Leonards job targets and enhance and reinforce the role of the St Leonards Strategic Centre as a knowledge based economy through additional employment opportunities associated with hospital uses and ancillary facilities
- strengthen the health functions and related uses of St Leonards through the provision of additional medical and complimentary allied health services.

The draft District Plan was publicly exhibited until 15 December 2017.

5.5 St Leonards and Crows Nest Station Precinct

In August 2017, DP&E released an Interim Statement on the key findings of the strategic planning investigation of the St Leonards and Crows Nest Station Precinct. The review analysed the existing employment floorspace in the precinct and future employment demands and requirements.

The Precinct is a major employment hub in Sydney and employed 44,000 people in 2016 from a diverse range of industries and occupations over an employment floorspace of 1,826,000 m².

The review identifies a number of existing industry specialisations including health care around the RNSH and Mater Hospitals, professional services in St Leonards, urban services (concrete batching plants, waste recycling and automotive services) in Artarmon and creative industries at Crows Nest.

The review divides the Precinct into 10 Character Areas. The site is located in the Artarmon Employment Character Area. With regards to this area, the strategy recommends:

...investigating opportunities to introduce smaller format incubator industries, retaining existing urban services, industry and mixed businesses associated with technology, IT and warehousing, attracting new businesses, improving connections and allowing employment to diversify and evolve over time...

The Health and Education Character Area is located immediately adjacent to the Artarmon Character Area and is noted as having the following opportunities and considerations:

- *The Health and Education character area is proposed to be retained for uses associated with the health and education industries building on the vision for a 'health and education super precinct'*
- *The Department will work with Health NSW to identify opportunities for additional capacity and growth in the health sector and providing improved connections from the Royal North Shore Hospital campus to the rest of the Precinct including other health related land uses.*
- *The Department will work with the Department of Education and TAFE NSW to identify future education needs and opportunities.*

The review identifies the St Leonards health and education precinct as a key employment area within the precinct and includes the health and education cluster centred around Royal North Shore Hospital and North Shore Private Hospital. In developing the strategic planning framework for the precinct, DP&E is working with Health NSW to identify opportunities for additional capacity and growth in the health sector.

The proposal will support the strategic planning framework for the St Leonards and Crows Nest Station Precinct as it will:

- deliver additional employment floor space to address the undersupply and demand, creating employment opportunities
- strengthen the existing health and education uses within the precinct through the provision of medical and allied health services
- provide a logical expansion of the Health and Education Character Area through additional capacity and opportunities for the growth of the health sector.

5.6 Willoughby City Strategy 2013-2029

The Willoughby City Strategy is the Council's community strategic plan, a long term vision and plan for the future of the City to help guide decision making and planning until 2029.

The City Strategy specifically notes that the St Leonard's business district adjacent to the Royal North Shore Hospital and North Sydney TAFE precinct is a major employment, health and education centre. The new facilities at the Royal North Shore Hospital have created a modern regional hospital with associated infrastructure.

It also includes goal 5.1.1(e), that implements the St Leonards Strategy as a specialist centre for health and education with neighbouring councils. The proposal will support this goal by reinforcing and expanding the specialist health functions of the St Leonards strategic centre.

5.7 NSW Long Term Transport Master Plan 2012

The *NSW Long Term Transport Master Plan 2012* establishes a framework for the Government to deliver an integrated, modern transport system. The Master Plan identifies what challenges the transport system needs to address to help foster economic and social performance in NSW. It provides guidance and actions (reforms, service improvements and investments) to address expected challenges over the next 20-year period.

The proposal involves the provision of specialist health uses in close proximity to rail and bus services and within an existing established medical precinct. In addition, the development will support a reduced reliance on private vehicles, assisting in improving the modal split between cars and public transport.

5.8 Sydney's Cycling Future 2013

The key objective of Sydney's Cycling Future is to ensure, for short trips, that cycling is a convenient and safe transport option. Achieving this will reduce road congestion and increasing capacity on the transport system. Sydney's Cycling Future also aims to increase the mode share of cycling around (metropolitan) Sydney for trips that can be made within a 20 to 30-minute ride.

The site is approximately 150 metres west of an existing north/south on-road cycle route along Herbert Street and south of an existing east/west on-road cycle route along Punch Street. Both routes connect into the wider Northern Sydney Cycle Network. In addition, the Willoughby City Council Proposed Bike Network Plan suggests the potential future provision of on-road cycle routes along Reserve Road and Westbourne Street.

The proposal will support the objectives and aims of Sydney's Cycling Future by providing specialist health uses in close proximity to the existing and proposed future bicycle network, which will encourage additional bicycle trips and use of cycle network infrastructure.

5.9 Sydney's Bus Future 2013

Sydney's Bus Future 2013 supports the delivery of a simpler, faster and better bus network which will attract more customers to use bus services throughout Sydney. Additional services and new routes are proposed under Sydney's Bus Future, enabling customers to travel directly to major centres and other transport interchanges.

The proposal will support the objectives and aims of Sydney's Bus Future by providing specialist health uses within walking distance (400 metres) of five existing bus services along the Pacific Highway, which will encourage additional bus trips and use of the existing bus network infrastructure.

5.10 Sydney's Walking Future 2013

Sydney's Walking Future 2013 supports the integration of walking into the transport system by promoting the benefits of walking, connecting communities by delivering safe walking infrastructure and engaging with partners across the NSW Government, with local government, non-government organisations and the private sector to develop initiatives and policies.

The proposal will support Sydney's Walking Future and encourage additional walking trips by providing specialist health uses within easy walking distance (300 metres) of the St Leonards major transport interchange. In addition, the location of the site adjacent to an existing medical precinct is expected to encourage a significant number of walking trips between facilities and services.

5.11 Healthy Urban Development Checklist

The *Healthy Urban Development Checklist* (HUD Checklist) was created to support the development of NSW Health staff's capacity to influence how land use decisions affect community health and ensuring that the key principles which promote health and wellbeing are considered at all levels of planning including policy development, plan making and development assessment. The purpose of the checklist is to assist health professionals to provide advice on urban development policies, plans and proposals.

The checklist is structured into ten chapters, each one focused on a characteristic that is important for healthy urban development. The proposal is consistent with the relevant provisions of the HUD Checklist as:

- the project provides for a new private hospital adjacent to existing medical and hospital facilities and services
- the project will generate additional employment during construction and operation
- a green travel plan will be prepared prior to operation to ensure that sustainable travel options are encouraged for staff and visitors
- the proposed building is of a high standard of architectural design that will have a positive impact on the existing streetscape. The overall design of the building is further enhanced by setbacks that reduce the perceived bulk and scale of the development
- a detailed consultation process has been undertaken with relevant stakeholders.

6 Statutory Planning Framework

6.1 Environmental Planning and Assessment Act 1979

The EP&A Act provides the statutory framework for planning in NSW.

Section 89C of the EP&A Act enables certain developments to be declared SSD by means of a State Environmental Planning Policy (SEPP) or by order of the Minister for Planning. The project is SSD under the provisions of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) as it is development that has a capital investment value of more than \$30 million for the purpose of a hospital (**Section 6.2.1**). The Minister for Planning is the consent authority for SSD.

The proposal is partly prohibited and partly permissible under WLEP 2012. Council has supported a Planning Proposal to amend Schedule 1 of WLEP 2012 to make *hospital* a permissible use on the site (**Section 6.3**). Section 89E(5) of the EP&A Act 1979 enables an application for SSD that is wholly or partly prohibited to be considered in accordance with a concurrent planning proposal that would make the development permissible.

The proposed development is a further stage DA which relates to the concept proposal for the construction of a new tower (SSD 8499). Whilst SSD 8499 is yet to be determined, it has been publicly exhibited (from 20 July to 18 August 2017), and the Response to Submissions was submitted to DP&E on 1 December 2017. The proposal for the construction and use of Tower B is consistent with the concept DA (SSD 8499), as amended through the Response to Submissions.

The Minister (or the Minister's delegate) is required to take into consideration the matters listed under Section 79C of the EP&A Act when determining the development application.

This report responds to the requirements of Section 78(8A) of the EP&A Act which requires the preparation of an EIS, the SEARs and Schedule 2 of the EPAR as outlined in **Sections 1.3** and **1.4** above.

6.1.1 Objects

The proposal is consistent with the objects contained in Section 5 of the EP&A Act as it is considered to promote the orderly and economic use and development of land without resulting in an adverse impact on the environment. An assessment of the proposal against the objects of the EP&A Act is provided within **Table** below.

The Objects of the Act	Response
<i>The objects of this Act are:</i> <i>(a) To encourage:</i>	
<i>(i) The proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,</i>	This proposal does not involve the removal of any vegetation (site clearing and potential ecological impacts are dealt with through SSD 7543). It will not adversely impact on any natural resources and will not result in any adverse environmental outcomes.

The Objects of the Act	Response
(ii) <i>the promotion and co-ordination of the orderly and economic use and development of land,</i>	The proposed development will augment the medical facilities and functions of the St Leonards Strategic Centre, consistent with the aims and objectives of <i>A Plan for Growing</i>, the <i>Draft Greater Sydney Region Plan</i>, the revised <i>Draft North District Plan</i> and the <i>Willoughby City Strategy 2013-2019</i>. Further, the proposed development is located within close proximity to the St Leonards Train Station and existing public transport infrastructure (bus and cycling facilities), and has been designed to encourage increased public transport usage by staff and visitors. Accordingly, it is considered the proposed development will facilitate the co-ordination of the orderly and economic use of the land consistent with this object of the Act.
(iii) <i>the protection, provision and co-ordination of communication and utility services,</i>	The Utility and Water Management Plan prepared to support SSD 7543 demonstrates that the proposed private hospital can be adequately serviced. Further consultation has commenced with relevant service providers in relation to the Tower B proposal.
(iv) <i>the provision of land for public purposes,</i>	The proposed development does not necessitate the provision of land for a public purpose.
(v) <i>the provision and co-ordination of community services and facilities, and</i>	The proposed development will facilitate the construction and of new specialist medical suites and associated allied health uses. These services have been designed to seamlessly integrate with the existing medical services provided within the broader St Leonards Strategic Centre.
(vi) <i>the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and</i>	Refer to response to a(i).
(vii) <i>ecologically sustainable development, and</i>	The proposed development will be carried out in accordance with the principles of ESD, as outlined in Section 7.5 .
(viii) <i>the provision and maintenance of affordable housing, and</i>	N/A
(b) <i>to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and</i>	The proposed development is SSD and therefore the Minister for Planning is the consent authority. Willoughby City Council has been consulted by the DP&E during the preparation of the SEARs and will be consulted through the DA assessment process.
(c) <i>to provide increased opportunity for public involvement and participation in environmental planning and assessment.</i>	The proposed development will be publicly exhibited in accordance with the requirements of the EP&A Act.

Table 8: Objects of the EP&A Act

6.1.2 Section 79C Assessment

The Minister (or the Minister's delegate) is required to take into consideration the matters listed under Section 79C of the EP&A Act when determining the development application including environmental planning instruments, social and economic impacts, site suitability, the built and natural environment and the public interest.

The proposal has been evaluated and assessment throughout this EIS against the relevant heads of consideration contained in Section 79C of the EP&A Act and has been prepared to mitigate environmental impacts of the development.

The proposal is consistent with the objects of the EP&A Act as it is considered to promote the orderly and economic use and development of land without resulting in an adverse impact on the environment.

An evaluation of the proposal against the provisions of Section 79C (1) of the Act is provided below:

Section 79C (1) Provision	Response
(a) the provisions of:	
(i) any environmental planning instrument, and	The relevant environmental planning instruments are addressed at Section 6 .
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	A Planning Proposal to amend Schedule 1 of the WLEP 2012 to permit a hospital use and increase the floor space ratio on the site from 1.5:1 to 3:1 has been publicly exhibited and is with DP&E for finalisation. This is further discussed in Section 2.4 .
(iii) any development control plan, and	As the proposal is SSD, DCPs do not apply (clause 11 of the State and Regional Development SEPP).
(iiia) any planning agreement that has been entered into under Section 93F, or any draft planning agreement that a developer has offered to enter into under Section 93F, and	A draft Voluntary Planning Agreement (VPA) has been prepared to support the Planning Proposal. The draft VPA outlines a contribution of \$250,000 towards sports and recreational facilities. The draft VPA does not preclude the application of section 94 contributions to development on the site.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	The requirements of the EPAR are addressed in Section 1.4 .
(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,	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 site is suitable for the proposal and the proposed development does not have any unacceptable impacts subject to the proposed mitigation measures, as discussed in Section 7 .

Section 79C (1) Provision	Response
(c) <i>the suitability of the site for the development,</i>	The proposal has been designed to seamlessly integrate with the Royal North Shore Hospital Precinct. Further, the proposed development will not create any adverse overshadowing, wind, traffic or noise impacts and the site is therefore considered suitable for the development as discussed Section 7 .
(d) <i>any submissions made in accordance with this Act or the regulations,</i>	Any submissions made on this subject development application will be duly considered and addressed in the Response to Submissions. In addition, the Department will consider any public submissions relating to the proposal during its assessment of the application.
(e) <i>the public interest.</i>	The proposal is in the public interest as it will provide additional hospital and specialist medical uses and strengthen employment within the St Leonards Strategic Centre, without adversely impacting the surrounding environment. Public interest is addressed further at Section 7 .

Table 9: Response to Section 79 (1) provisions

6.2 State environmental Planning Policies

6.2.1 State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP declares certain types of development and infrastructure to be of State and regional significance.

Clause 8 of the SRD SEPP declares development to be SSD where a development is not permitted without consent and is listed in Schedule 1 or 2 of the SRD SEPP. Schedule 1 of the SRD SEPP includes:

14 Hospitals, medical centres and health research facilities

Development that has a capital investment value of more than \$30 million for any of the following purposes:

- (a) *hospitals,*
- (b) *medical centres,*
- (c) *health, medical or related research facilities (which may also be associated with the facilities or research activities of a NSW local health district board, a University or an independent medical research institute).*

The proposed development has a capital investment value of over \$30 million and is development for the purposes of *hospital*, as defined in the WLEP 2012:

Hospital means 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.

The proposed development relates to a second tower (Tower B) on the podium of the proposed private hospital at 12 Frederick Street, St Leonards. It will be physically and functionally integrated with the private hospital and will comprise medical and other ancillary uses, for patients, visitors and health care workers of the hospital and broader St Leonards Precinct, as listed within the definition of specialist uses that meet the definition of a “hospital” in the WLEP 2012.

Accordingly, as it is not an independent use of land, but an ancillary use to the proposed private hospital it therefore meets the definition of hospital.

6.2.2 State Environmental Planning Policy (Infrastructure) 2007

Clause 104 of the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) requires that DAs for certain traffic generating development, as set out in Schedule 3 of the policy, be referred to the Roads and Maritime Services (RMS) and that any submission from the RMS be considered prior to the determination of the application.

The proposal does not meet the criteria for hospitals outlined in Schedule 3 of the ISEPP in terms of number of beds and access to a classified road. However, it is understood that the DP&E will still refer this DA to the RMS for comment.

6.2.3 SEPP No 55 Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) applies to the State and states that where a development application is made concerning land that is contaminated, the consent authority must not grant consent unless:

- (a) *It has considered whether the land is contaminated, and*
- (b) *If the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

Relevant site investigations have been undertaken as part of SSD 7543 (Tower A) in accordance with SEPP 55 and the *Managing Land Contamination – Planning Guidelines SEPP 55 Remediation of Land*.

A Detailed Site Investigation Report and Remedial Action Plan was prepared for SSD 7543. The Remedial Action Plan concluded that, subject to the completion of the proposed remediation works, the site could be made suitable for the proposal in accordance with SEPP 55. These findings remain relevant to the proposed development of this report.

It is noted that the draft Remediation of land SEPP is currently on public exhibition until 31 March 2018. The new SEPP is proposed to replace SEPP 55 and will continue to require that remediation works on environmentally sensitive land or carried out in association with designated development are undertaken only with development consent.

6.2.4 SEPP No 64 Signage

State Environmental Planning Policy 64 Advertising and Signage (SEPP 64) aims to ensure that advertising and signage is well located, compatible with the desired amenity of an area and of high quality.

SEPP 64 applies to all signage, advertisements that advertise or promote any goods, services or events and any structure that is used for the display of signage that is permitted under another environmental planning instrument.

Under WLEP 2012, a building identification sign means a sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol but does not include general advertising of products, goods or services.

The proposal includes a signage zone for future building identification signage with dimensions of 5.8m by 0.7 m, located at a height of approximately RL 130.500 – 138.350 on the western elevation of the building. An assessment of the proposed signage zones against Schedule 1 of SEPP 64 is contained at **Appendix 5**.

6.3 Willoughby Local Environmental Plan 2012

The proposal is located on land zoned IN1 General Industrial under WLEP 2012, as shown in the Zoning Map extract in the **Figure** below. Whilst hospitals are prohibited in the IN1 zone, the current Planning Proposal seeks to amend Schedule 1 of WLEP 2012 to make hospitals an additional permitted use on the site.

The maximum allowable FSR on the site is 1:1. Clause 4.4A of the LEP allows this to be increased to 1.5:1 if the site area is greater than 1,000 m² and site coverage does not exceed 45 percent.

The current Planning Proposal seeks to increase the FSR on the site to 3:1. The combined GFA of Tower A and Tower B is 18,581 m², achieving an FSR of 1.3:1.

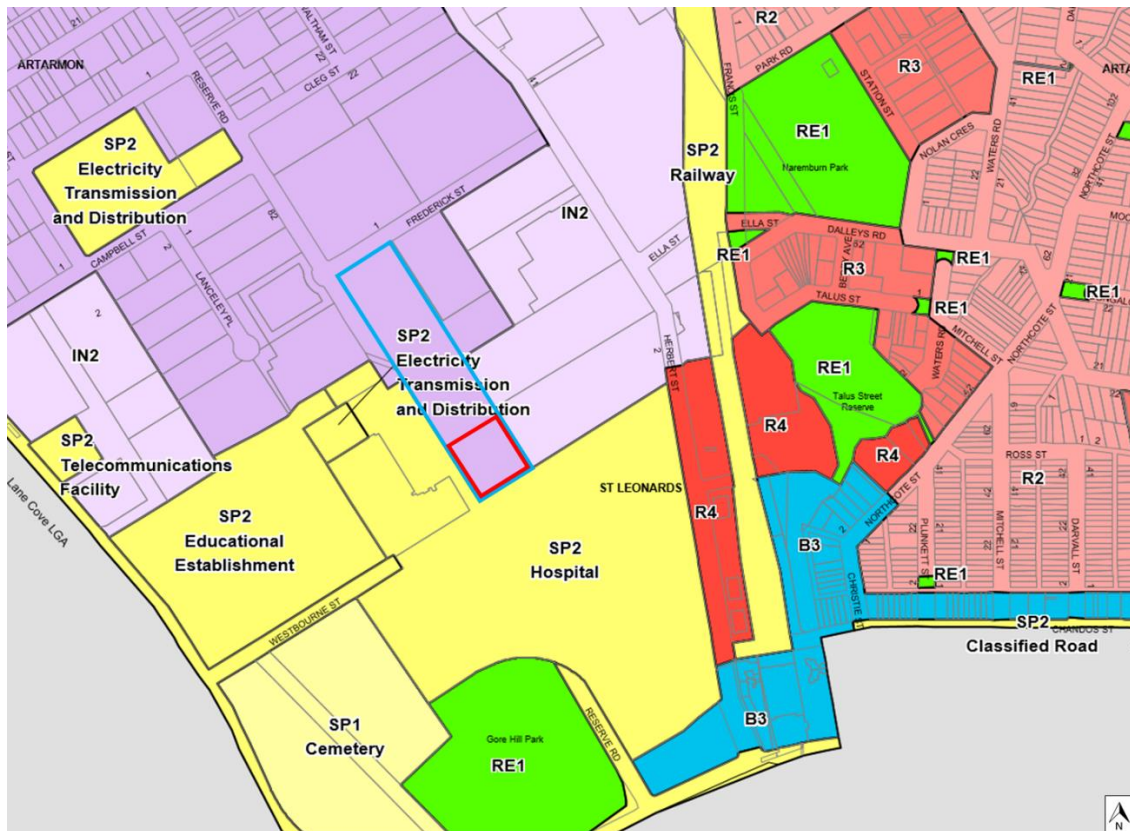


Figure 10: Zoning Map extract with site subject to current Planning Proposal shown in red outline
(Source: WLEP 2012)

6.4 Development Control Plans

The *Willoughby Development Control Plan (DCP) 2006* (WDCP) applies to all land in the Willoughby LGA. In relation to the Willoughby DCP, which supplements the WLEP 2012 and provides more detailed guidance, clause 11 of the SRD SEPP states that DCPs do not apply to SSD.

Notwithstanding, it is noted that Council proposes to amend WDCP in relation to the site as follows:

Before granting consent for development for the purposes of a hospital at part 12 Frederick Street, St Leonards (part Lot 1 DP 591747), a comprehensive noise assessment considering both the noise impact of the hospital on surrounding uses and the noise impact of surrounding uses on the hospital must be submitted.

A Noise Impact Assessment (NIA) has been undertaken for this proposal which has assessed the noise impact of the hospital on surrounding uses (**Appendix 9**).

6.5 Other Legislation

6.5.1 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) commenced on 25 August 2017, changing the way in which biodiversity impacts are assessed and addressed in the development and use of land throughout the State.

Under the new BC Act (Section 7.3 and 7.9), State significant development proposals require an accredited ecologist to prepare a biodiversity development assessment report (BDAR). The BDAR reflects the current 7-part test in section 5A of the EP&A Act and the assessment must include the following:

- *assesses the biodiversity values (as defined in s1.5 of the BC Act) of the land the subject of the proposed DA, in accordance with the BAM*
- *assesses the impact of the proposed DA, proposed activity or proposed clearing on the biodiversity values of that land*
- *sets out the measures the proponent proposes to take to avoid or minimise the impact*
- *specifies the number and class of biodiversity credits that are required to be retired to offset the residual impacts on biodiversity values of actions to which the BOS applies.*

The consent authority must consider if the proposed development is likely to have serious and irreversible biodiversity impacts when assessing SSD or SSI and determine any additional and appropriate measures that would minimise the impacts, if a consent or approval was to be granted.

Notwithstanding, under section 7.9(2) “the Planning Agency Head and the Environment Agency Head [may] determine that the proposed development is not likely to have any significant impact on biodiversity values”. If this determination is made, a BDAR is not required.

The Flora and Fauna Assessment undertaken as part of SSD 7543 (Tower A), concluded that the site does not comprise of remnant vegetation communities and does not conform to any threatened ecological community listed under current legislation. As such the construction of Tower B is unlikely to impact on any biodiversity values (as defined in section 1.5 of the BC Act).

In line with the above, a request to waive the requirement for a biodiversity development assessment report under section 7.9(2) was submitted to DP&E and the Office of Environment and Heritage (OEH) for consideration.

On 30 January 2018, DP&E and OEH advised that the proposed development is not likely to have any significant impact on biodiversity values and that there is no need for the SSD application to include a BDAR (**Appendix 16**).

7 Environmental Planning Assessment

7.1 Overview

In assessing the potential impacts of the development and merits of the proposal the following matters were considered:

- the SEARs and agency input to the SEARs
- relevant environmental planning instruments, policies and guidelines
- relevant provisions of the EP&A Act, including the objects of the Act
- relevant documents related to the project including the technical documents forming this EIS

7.2 Built form

The concept proposal established the vision and planning and development framework which has formed the basis for the consent authority to assess future development proposals within the site. It articulates what the Applicant is seeking to achieve for future development and sets the broad parameters for the development of Tower B.

Tower B is intrinsically linked to the concurrent separate DA (SSD 7543) for the construction of a 6-storey private hospital on the site (Tower A) and seeks to integrate a new tower on the northern part of the Tower A podium for use as medical specialist suites and allied health uses. The Tower A proposal envisaged the inclusion of a future tower and has been designed to facilitate the inclusion of Tower B.



Figure 11: Integration of towers south-west perspective (Source: Billard Leece Partnership)

Tower B comprises:

- a six storey element (maximum height RL 138.350) above the podium of Tower A
- 6,864 m² GFA (equivalent to a FSR of 1.1:1).

A Design Statement has been prepared by Billard Leece Partnership (**Appendix 4**), which outlines the how Tower B has been designed and developed in response to Tower A and the broader site context.

7.2.1 Height and scale

The site is a largely undeveloped parcel of land located immediately adjacent to the Royal North Shore Hospital Precinct (NSHP) (a Priority Precinct), at the intersection of Westbourne Street and Reserve Road. The site represents an underutilised resource and its efficient redevelopment at an appropriate scale to realise its maximum potential is in the public interest and the interest of the growth of the NSHP.

The surrounding area comprises a diverse range of buildings, building heights and land uses. Significantly:

- the site is located opposite the 11-storey Kolling Institute building (RL 147.60) and the 5-storey North Shore Private Hospital and a 5-storey public car park
- there are significant topographical changes within the immediate surrounding area
- the proposed Tower A building is 6-storeys in height (RL 126.65) and establishes a new continuous street frontage to the corner of Westbourne Street and Reserve Road.

Tower B has been carefully designed to take account of the form and scale of Tower A and the surrounding precinct. Tower B is the tallest architectural feature on-site and cantilevers over the Tower A podium.

The tower will result in a scale of development that is appropriate within the surrounding context, providing an acceptable built form transition to the Kolling Institute located on Westbourne Street and is appropriately setback from the Reserve Road podium edge by 6 metres and the eastern boundary by 8.3 metres.

In addition, the height and scale of Tower B complies with the concept proposal (SSD 8849); however, a number of elements including the building envelope and maximum height have in fact been reduced (as detailed in the **Table** below).

Concept (SSD 8849)	Proposal (SSD 8894)
Maximum building height of RL 144.150	Maximum building height of RL 138.350 Resulting from deletion of: • levels 1 and 2 from the building envelope, with the Tower to be constructed on supporting columns on the Tower A podium. This enables the provision of an extended, north facing outdoor terrace area on the podium (Tower A) • levels 1 to 3 envelope element on the eastern side of the podium.
Gross floor area of 7,655 m²	Gross floor area of 6,864 m²

Table 10: Design comparison

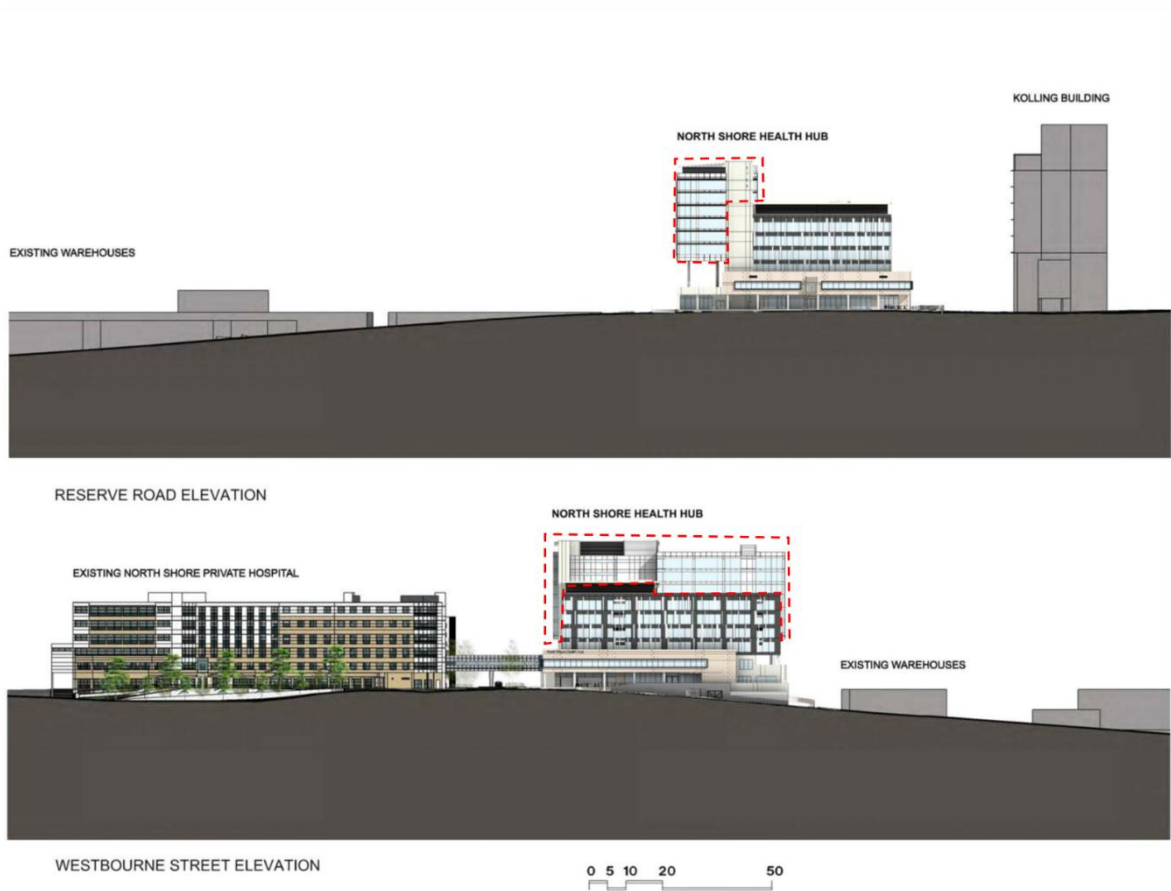


Figure 12: Sighting of Tower B in the surrounding precinct (Source: Billard Leece Partnership)



Figure 13: View from intersection of Reserve Road and Westbourne Street (Source: Billard Leece Partnership)



Figure 14: View looking east along Westbourne Street (Source: Billard Leece Partnership)



Figure 15: View looking south along Reserve Road (Source: Billard Leece Partnership)

Overall, the proposed height and scale of the Tower B development is appropriate and acceptable as:

- it is consistent with the built form character of the surrounding area, which comprises a modulated and varied skyline and a range of multi-storey buildings used for hospital and related purposes
- the height and the tower/podium typology ensures it integrates seamlessly with Tower A and positively contributes to the surrounding streetscape
- it is appropriately setback from the podium edge to reduce visual impacts to the surrounding land uses
- it will frame the Tower A building when viewed from Westbourne Street and Reserve Road and due to its setback from Westbourne Street will not be visually dominant or overbearing
- it will contribute to the creation of a visually iconic and aesthetically pleasing development
- long views along Westbourne Street towards the site demonstrate that the development will not have a significant visual impact and south along Reserve Road demonstrate that the development is compatible with the existing NSHP built form
- the shadow analysis has confirmed that the height of the tower would not have any adverse impact on solar access to neighbouring properties or the public domain (refer to **Section 7.3**)
- overall, the development of the North Shore Health Hub will result in a superior built form outcome for the site and surrounding health and education precinct.

7.2.2 Design and materiality

The application of façade materials for Tower B has been carefully considered to create a modern interpretation of the existing neighbouring North Shore Private Hospital.

The south-west and north-east façade of Tower B will be constructed of a glazed curtain wall system that spans floor-to-ceiling. The south-west façade incorporates vertical fins to shade the building's interior to shade from the summer sun.

While the north-east façade is without sun shade devices to allow for maximum daylight to be captured. Details of the façade materials are provided in the **Figure** below.

The design and materials selected for Tower B are of high quality and standard, and will fit within the surrounding precinct.



Figure 16: Proposed signage zone western elevation Tower B (Source: Billard Leece Partnership)

7.2.3 Signage zones

The proposal includes the provision of a business identification signage zone as shown on the architectural drawings. The proposed signage zone is 5.8 m by 0.7 m and located on the western facade of Tower B between RL 130.500 – 138.350 (Level 9B and the lift overrun) (refer to **Figure** below). Future signs with the proposed signage zones will be subject to separate future development applications, as required.

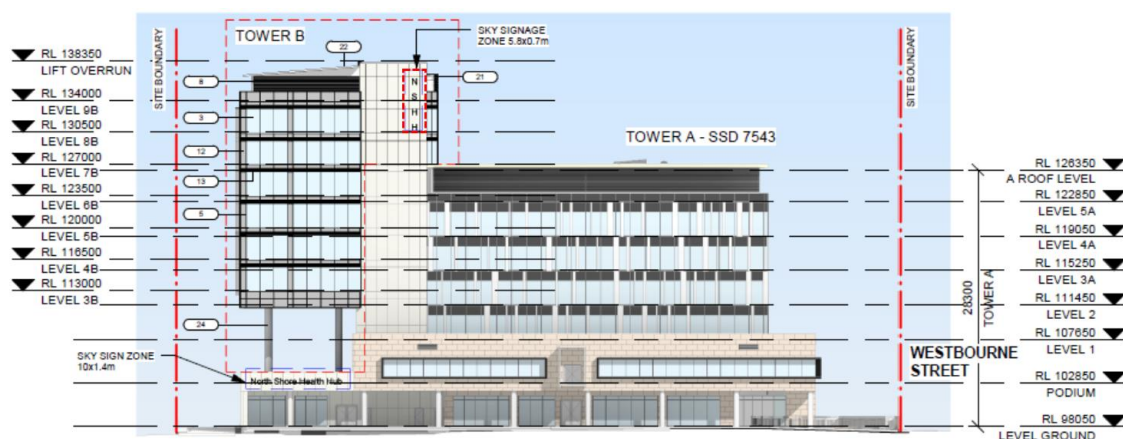


Figure 17: Proposed signage zone western elevation Tower B (Source: Billard Leece Partnership)



Figure 18: Artist impression of proposed signage zone (Source: Billard Leece Partnership)

In addition, the future signage zones ensure that future signage will not overwhelm the building or have an adverse impact on its appearance. A detailed consideration of the relevant SEPP 64 assessment criteria is provided at **Appendix 5**.

7.3 Environmental amenity

7.3.1 Wind

A Wind Assessment Report has been prepared by Cermak Peterka Petersen Pty. Ltd. (**Appendix 6**).

Due to the existing taller neighbouring buildings and the accelerated, channelling wind flow, the wind conditions at pedestrian level along the street frontages of the development site are, at times, relatively windy.

The Wind Impact Assessment Report concludes the following:

- the development is expected to have little effect on channelling winds as the site is largely protected by the North Shore Private Hospital and car park
- the addition of the proposed Tower B will have minimal effects on the wind conditions at pedestrian level and the surrounding public domain is expected to remain suitable for use from a comfort perspective
- the proposed development will not have a significant impact on the existing wind conditions at ground level along Reserve Road and Westbourne Street at pedestrian level
- Tower A will shield Tower B from winds from the south
- the podium is expected to be windy, however mitigation measures have been recommended to minimise the impact including planter boxes and vertical screening.

7.3.2 Solar access

Shadow Diagrams have been prepared by Billard Leece Partnership (**Appendix 4**), which illustrate the extent of overshadowing from the proposed Tower B and the cumulative impacts with Tower A. The shadow diagrams confirm that the greatest overshadowing impact is in mid-winter (21 June), during the winter solstice.

The solar analysis submitted with the Tower A application demonstrate that the Tower A development would result in only minor overshadowing impacts on the corner of the neighbouring North Shore Private Hospital at 9 am and the lower levels of the Kolling Institute building at 3 pm during mid-winter.

The Shadow Diagrams for Tower B show that the proposed tower will only contribute to a minor additional overshadowing impact to surrounding medical buildings. The majority of overshadowing cast by Tower B will be contained within the shadow of Tower A (see **Figure** below).

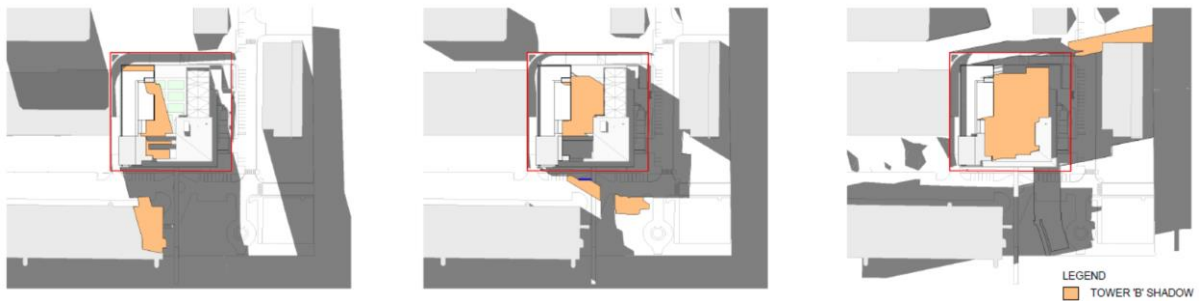


Figure 19: Shadow impact analysis (additional shadow outlined in orange) on surrounding buildings
(Source: Billard Leece Partnership)

Overall the proposal is considered to have only a minor overshadowing impacts and it is therefore acceptable.

7.3.3 Privacy

Privacy impacts have been considered within the Design Report prepared by Billard Leece Partnership (**Appendix 4**).

The Design Report confirms that the closest potentially affected buildings are Royal North Shore Private Hospital (NSPH) on Reserve Road and the Kolling Institute building on Westbourne Street.

Tower B would not have an adverse privacy impact on neighbouring medical buildings as:

- it will be located more than 80 m away from the Kolling Institute building
- it will be located approximately 25 m away from the NSPH. In addition, the curved façade design of the NSPH directs views away from the subject site
- the detailed design of the building (as part of future DAs) will include tinted windows and inbuilt blinds to further enhance privacy

The site does not adjoin any existing residential properties and therefore would not have any adverse impacts on existing residential privacy.

7.3.4 Safety and security

Consideration of safety and security has been integral to the design of the North Shore Health Hub. The design of Tower B reflects Crime Prevention Through Environmental Design (CPTED) principles in that it:

- **surveillance:** encourages passive surveillance of the site, so that activity on the podium and surrounding public streets is easily noticed by users
- **access control:** access to the Tower will be strictly controlled by a hierarchy of security points, including alarming fire stairs, CCTV system will also be utilised and full time security patrol
- **territorial reinforcement:** the entire North Shore Health Hub has been designed to be clearly identifiable, with well-lit and visible entry points, and minimal hidden spaces or alcoves
- **space management:** the site will be well-maintained and managing promoting a sense of ownership.

7.4 Traffic and accessibility

A Transport Impact Assessment (TIA) has been prepared by GTA Consultants and is provided at **Appendix 7**. Key findings of this assessment are provided within the following section.

7.4.1 Existing traffic conditions and car parking

The subject site has frontages to Westbourne Street and Reserve Road. These roads provide access to Herbert Street the east, Frederick Street to the north and Pacific Highway to the west and south. Pacific Highway provides links to a number of regional and state roads and the greater Sydney road network.

The development is well serviced by train and buses with St Leonards train station located 400 metres from the development site and five bus services along Pacific Highway. The site is approximately 150 metres west of an existing north / south on-road cycle route along

Herbert Street and south of an existing east / west on-road cycle route along Punch Street, both of which connect into the wider Northern Sydney Cycle Network. In addition, the Willoughby City Council Proposed Bike Network Plan suggests the potential future provision of on-road cycle routes along Reserve Road and Westbourne Street.

Ticketed on-street car parking is provided along Westbourne Road and Herbert street, typically restricted to between 2-4 hour duration parking. The multi-storey Royal North Shore Car Park, operated by Wilson, is located on the western side of Reserve Road opposite the subject site.

7.4.2 Proposed traffic generation, distribution and car parking

Given the physical and operational integration of the buildings, the TIA addresses Tower B traffic generation and parking rates cumulatively with Tower A.

Applying the RMS *'Guide to Traffic Generating Developments'* rates to the proposed development indicates that the cumulative traffic generation would be 246 AM trips and 301 PM trips. This equates to approximately four to five vehicles per minute.

The TIA has considered the post development traffic conditions and concludes that the majority of intersections assessed would continue to operate at a satisfactory Level of Service (LOS). However, the level of service (LOS) of the Herbert/Westbourne Street intersection would reduce from A to F without any upgrade.

Accordingly, the TIA identifies the upgrade of the intersection to a roundabout to address the increase in traffic generation as a result of the development and maintain its current LOS A. The TIA includes a concept design for the roundabout and on-going consultation with Council (as the relevant road authority) is occurring on this matter.

The TIA also includes a detailed assessment of car parking requirements for the proposal and concludes that Tower B will require 135 on-site car parking spaces. Parking is being provided as part of the Tower A development which, by itself, also requires 181 spaces. In addition to 24 spaces to offset the loss of on-street parking, this results in a maximum combined total of 340 car parking spaces on site. These rates are considered appropriate given the proximity of the site to various modes of public transport.

In addition, 22 bicycle spaces and associated end of trip facilities will be provided, exceeding Willoughby Council's DCP requirements.

The TIA also includes a framework for a Green Travel Plan to encourage the use of sustainable modes of transport by future staff and visitors. Site specific measures include:

- compliance with the stringent parking controls applicable to the site
- provision of a Travel Access Guide (TAG) which would be given to all staff and visitors
- public transport information boards to make staff and visitors more aware of the alternative transport options available
- promotion of bicycle facilities including secure bicycle parking for staff, bicycle racks for visitors and end of trip facilities
- connect staff working at the site to carpool together by creating a carpool club
- replacement of the existing GoGet share pods within the site.

7.4.3 Construction traffic

A preliminary Construction Traffic Management Plan (CTMP) was prepared by as part of the Tower A application (SSD 7543). The CTMP provided an assessment of the construction traffic impacts and examined the impacts of likely construction works on the surrounding road network. It also provides details of likely vehicle routes, numbers of trucks, hours of operation, access arrangements, and traffic control measures.

The overall principles of traffic management during the construction activity are to:

- provide an appropriate and convenient environment for pedestrians
- minimise the impact on pedestrian movements
- maintain appropriate capacity for pedestrians at all times on footpaths around the site
- maintain appropriate public transport access
- restrict construction vehicle movements to designated routes to/from the site
- manage and control construction vehicle activity in the vicinity of the site
- minimise impacts to general traffic in the vicinity of the site.

The TIA confirms that Tower B will be constructed in a similar manner and most likely concurrently with Tower A and the podium construction. It also concludes the additional construction traffic generated in relation to Tower B would be negligible.

7.5 Ecologically Sustainable Development

An ESD Report has been prepared by DSA Consulting and is provided at **Appendix 8**. The Report outlines the sustainability attributes of the development and confirms that the project will meet the *NSW Health Guidelines* sustainability benchmarks of achieving an improvement on the minimum energy efficiency measures outlined in Section J of the National Construction Code.

A variety of sustainability measures are proposed to ensure the project is capable of being developed and operated in a sustainable manner. The key sustainable features include:

- 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, using low emittance double glazing panels
- 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 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

In addition, the proposed development is considered to be consistent with the 5 key ESD principles as shown in **Table** below:

ESD Principle	Consistency
Precautionary principle	
If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	The proposal is supported by environmental studies and technical reports which conclude that there are no environmental constraints that preclude the development of the site in accordance with the proposal, subject to appropriate management in future planning, design, construction and operational stages. Accordingly, subject to the implementation of the recommended Mitigation Measures the proposed development will not result in serious impact of the environment.
Inter-generational Equity	
Present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generation.	The proposal has been developed to directly benefit current and future generations in that it contributes to the provision of health services and related uses of the community without causing significant impact to the environment.
Conservation of biological diversity and ecological integrity	
The conservation of biological diversity and ecological integrity should be a fundamental consideration.	The development site does not contain any threatened or vulnerable species, populations, communities or significant habitats. Construction and ongoing operations of the facility will be managed in accordance with the Mitigation Measures, ensuring no significant indirect impacts on the surrounding environment.
Improved valuation, pricing and incentive mechanisms	
Improved valuation, pricing and incentive mechanisms, namely environmental factors should be included in the valuation of assets and services.	The cost of infrastructure and measures to ensure an appropriate level of environmental performance on the site has been incorporated into the cost of development. In addition, the level of waste will be appropriately managed during the construction of the development.

Table 11: Consideration of the proposal against ESD principles

On this basis of the above assessment, the proposal is considered to be consistent with the principles of ESD.

7.6 Noise and vibration

A NIA has been prepared by Acoustic Logic (refer to **Appendix 9**), considering potential noise impacts of the Tower B construction and operations on the closest receivers, which are shown in the figure below:



Figure 20: Nearest sensitive receivers (Source: Acoustic Logic)

7.6.1 Construction noise and vibration

It is noted that construction works associated with Tower B will not include excavation, earth retention works (piling) and soil compaction which are primary vibration generating activities, as these works will be undertaken through the construction of Tower A (SSD 7543).

The NIA has identified that construction activities associated with the use of hand tools, concrete pumps and slab finishing equipment are likely to exceed EPA “Noise Effected” levels. However, these exceedances are unlikely to occur for extended periods except in close proximity to concrete trucks.

In order to manage the potential construction noise impacts of the project, the NIA has outlined a number of mitigation measures that can be applied. These include:

- a detailed acoustic review (including vibration isolation of plant equipment) should be undertaken following equipment selection and design layout
- identify feasible acoustic controls or management techniques (for example, selection of plant, use of screens around static plant, notification of adjoining land users, respite periods) where exceedance of noise levels may occur

- for activities where acoustic controls and noise management techniques still cannot be guaranteed compliance with noise levels implement a notification process whereby nearby sensitive receivers are made aware of the time and duration of the proposed works
- implement a noise monitoring program during construction

In addition, the proposed construction hours will assist in mitigating potential construction noise. Construction works will be carried out in accordance with the Environment Protection Authority *Interim Construction Noise Guidelines*, as outlined in **Appendix 14**.

Acoustic Logic have concluded that should the recommended noise management practices should be implemented any adverse noise impacts associated with the construction of the Tower B will be mitigated to an acceptable level.

7.6.2 Operational noise

Acoustic Logic has reviewed the internal noise goals and existing external noise on the site. The project has proposed the following treatments to minimise the impact of external noise during operation:

- external glazing to be a minimum 6mm Float with full perimeter acoustic seals
- light weight external walls to be constructed with external aluminium cladding with metal backing, pan, cavity insulation, and minimum 13mm plasterboard internally
- masonry external walls are acoustically acceptable without upgrade
- masonry external walls are acoustically acceptable without upgrade
- roof to be concrete

Operational noise levels at nearby residences are predicted to be below the Highly Noise Effected level. In addition, the NIA notes that the hospital building will be designed to meet the recommended internal noise levels for helicopter noise. Acoustic Logic conclude that based on the proposed design of the building and the location of the existing flight paths, no external upgrade would be required to the building shell to manage the impacts of helicopter noise.

An assessment of the mechanical plant noise has been undertaken and a number of relevant mitigation measures provided for consideration in the selection of the plant equipment and their location.

The NIA concluded that operational noise associated with the proposed development will comply with the EPA guidelines at all times.

Acoustic Logic has recommended the following mitigation measures:

- undertake a detailed acoustic review of all external plant items following equipment selection and duct layout design.

Implementation of the above recommendation will also meet the requirements of the draft amendment to the Willoughby Development Control Plan:

F.6 Planning Principles for Certain IN1 Land in Artarmon and St Leonards

Before granting consent for development for the purposes of a hospital at part 12 Frederick Street, St Leonards (part Lot 1 DP 591747), a comprehensive noise assessment considering both the noise impact of the hospital on surrounding uses and the noise impact of surrounding uses on the hospital must be submitted.

In light of the above assessment and based on the finding of the NIA, it is concluded that the site will not have any adverse impacts on surrounding residential receivers subject to appropriate mitigate measures.

7.7 Drainage and flooding

A Stormwater Strategy Plan (SMP) and civil drawings has been prepared by Warren Smith and Partners (**Appendix 10**). The SMP addresses the relevant guidelines and ensures that the development achieves the requirements as outlined in Willoughby Council's Development Control Plan.

The development site has a total catchment area of approximately 6,194m² and the land falls in a northerly direction. The southern section of the site has a grade of 8.8 per cent towards the existing warehouse building. An existing drainage channel and pipe system are located at the southern boundary and northern corner of the site and connect to the exiting stormwater system in Fredrick Street (see **Figure** below).

All overland flow would be contained within the road reserve and therefore not discharge into the property for storm events up to and including the 1 per cent AEP storm event.

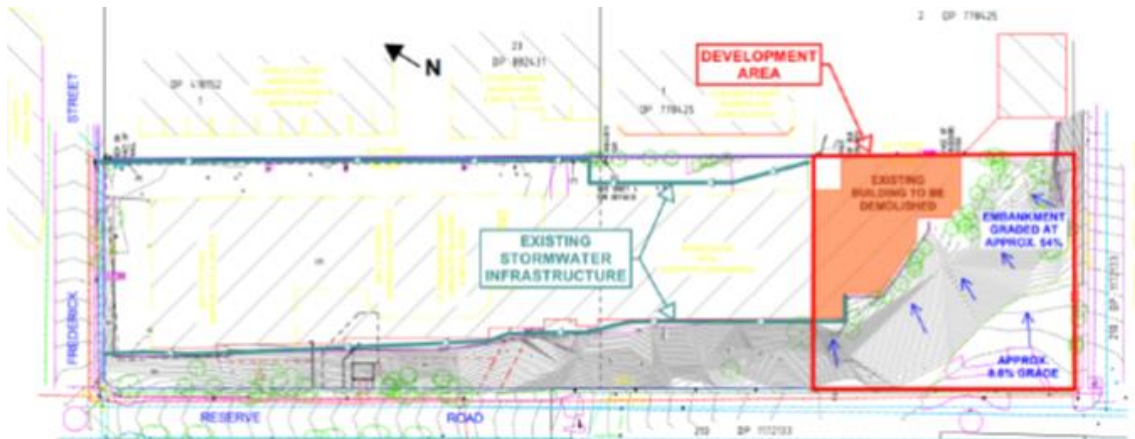


Figure 21: Site topography and existing stormwater/drainage infrastructure (Source: Warren Smith and Partners)

The stormwater strategy for the site includes:

- the capture of rainfall over a 5,968m² area
- installation of an OSD tank with a minimum capacity of 236kL and 25 Psorb stormwater filters across the site to facilitate the storage and treatment on-site
- implement the erosion and sediment control measures and strategies in the Stormwater Strategy Plan prepared by Warren Smith and Partners for the duration of the construction works.

In light of the above, it is considered that the proposed development is capable of incorporating appropriate stormwater, flooding mitigation and prevention measures.

7.8 Waste

The North Shore Health Hub is committed to minimising the environmental impact of its operations. The overall aim is to avoid, reduce, re-use and recycle before finally disposing of any remaining non-recyclable and hazardous wastes in a responsible way.

A Waste Management Plan was prepared in support of SSD 7543. This Plan describes waste management policies and procedures (refer to **Appendix 11**) that will apply to the North Shore Health Hub (including Tower B), such as:

- adopt and implement the Waste Management Plan throughout the hospital
- monitor performance and report KPIs quarterly
- review the Waste Management Plan on a yearly basis
- develop concise waste segregation principles and provide practical guidelines for re-usable products
- foster commitment from all staff and management to actively participate in waste avoidance, reduction, re-use and recycling programs
- development and maintain a waste management education program for all staff to increase awareness of Workplace Health and Safety issues and waste minimisation principles
- adopt policies and procedures to minimise the environmental impact of waste treatment and disposal.

7.9 Utilities

As part of the EIS for SSD 7543, the Applicant has consulted with the relevant utility providers regarding servicing capacity and the potential impact of the proposal on this existing infrastructure.

The responses from the relevant utility providers confirm that the proposed development is not expected to have any adverse impacts on the existing utilities infrastructure.

Warren Smith and Partners have undertaken a supplementary assessment (**Appendix 12**) that addresses the additional servicing requirements of Tower B. The supplementary assessment confirms that consultation has commenced with service providers and will continue to ensure that the proposal can be adequately serviced.

7.10 Building Code of Australia

The proposed new hospital and North Shore Hub will comply with the relevant BCA requirements and confirmation of compliance will be provided as part of the certification process.

A fire and risk assessment will be undertaken in consultation with the Certifying Authority and Fire and Rescue NSW, which will demonstrate that the development will comply with the Performance Requirements of the BCA.

BCA and accessibility compliance reports are provided and a Fire Engineering Statement is provided at **Appendix 13**.

7.11 Contributions

Under Willoughby City Council's *Section 94A Development Contributions Plan 2011*, the applicable development contribution levy for development with a cost of more than \$200,000 is 1% of the cost of works.

7.12 Other Issues

Tower B will not alter the assessment of other issues addressed in SSD 7543, including:

7.12.1 Ecology

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

All existing vegetation on the site is proposed to be cleared as part of SSD 7543. The Flora and Fauna Assessment report prepared in support of that EIS concludes that it does not comprise remnant vegetation communities and it does not conform to any threatened ecological community listed under current legislation.

The Assessment also concluded that subject to the implementation of the management measures to safely relocate any bat species if they are identified on-site, the project will not result in any adverse ecological impacts.

As no additional tree removal or other associated impacts are proposed as part of the Tower B development, these findings remain relevant to this application.

In line with the above, it is concluded that the proposal will not have a significant impact on biodiversity values. Accordingly, as discussed in **section 6.5.1**, DP&E and OEH have formally advised that under section 7.9(2) of the BC Act a Biodiversity Development Assessment Report is not required in support of this SSD application.

7.12.2 Contamination

The proposal may require some additional earthworks to accommodate an additional level of basement car parking. However, this is not expected to alter the findings of the contamination investigations undertaken for the site as part of SSD 7543, which conclude that the site can be made suitable for the proposed hospital.

7.12.3 Landscaping

The proposed landscaping plan formed part of SSD 7543 (Tower A) and will provide a high quality and attractive landscape which will enhance the surrounding streetscape.

On-site landscaping includes a mixture of hard and soft landscaping treatments at ground and podium level for the enjoyment of visitors, patient and staff members.

8 Environmental Risk Assessment

This section provides an environmental risk analysis to identify potential environmental impacts associated with the proposal and proposed mitigation measures, as required by the SEARs.

Risk Type	Potential Impact/s and Risk/s	Mitigation Measures
Built form and urban design	Impact on significant views and vistas Impacts of height and scale of development Impacts on surrounding character	- The tower is appropriately located and proportioned to take account of the form and scale of Tower A and the surrounding built form context. It will positively contribute to the surrounding streetscape. - The proposed tower includes appropriate setbacks and addresses visual impacts to the surrounding area - The proposed tower would not have any adverse impacts on views along Westbourne Street or Reserve Road. - The proposed materials and façade treatment will assist in creating visual interest and contribute to public amenity.
Environmental Amenity	Potential overshadowing of public domain Potential impact of the proposal on existing wind conditions Impacts on safety and security	- The proposed development will not result in any additional overshadowing. - The proposal is largely shielded by surrounding tall buildings. The addition of the proposal will have minimal impact on the existing wind conditions. - The design of the North Shore Health Hub is considered to be consistent with the key CPTED principles and will provide for a well-designed and safe built environment.
Transport and Accessibility	Traffic operational impacts Construction traffic impact.	- The car parking provision is considered conservative, however responds to the proximity of the site to access various modes of public transport. - The estimated traffic generation would not adversely impact on the operation of the majority of surrounding intersections, with the exception of Herbert/Westbourne Street. - The TIA proposes that Herbert/Westbourne intersection be upgraded to a roundabout to improve efficiency and safety for all road users. - The proposal would result in negligible increase in traffic during construction. - A CTMP will be implemented during construction and any traffic impacts will be appropriately managed and mitigated.
ESD	Sustainability and incorporation of ESD principles	A variety of sustainability measures have been devised to ensure the development is capable of being developed and operated in a sustainable manner.

Risk Type	Potential Impact/s and Risk/s	Mitigation Measures
Noise and Vibration	Acoustic and vibration impacts of the development upon closest receivers	- Noise mitigation techniques will be applied to the construction and operation of the proposed development as per the recommendations of the NIA. - A detailed acoustic review of all external plant items following equipment selection and duct layout design will be undertaken in accordance with recommendations of the NIA. - A Construction Noise and Vibration Management Plan will be prepared employing the noise mitigation techniques recommended within the NIA.
Air Quality	Air quality impacts during construction	Air quality impacts will be appropriately managed and mitigated during the construction phase of the development in accordance with relevant Construction Management Plan.
Utilities	Impacts on existing utilities infrastructure	Continue to consult with and obtain the necessary approvals from the relevant authorities and utility providers regarding the proposed development.
Stormwater and flooding	Impacts on surrounding sites	- Installation of an OSD tank with a minimum capacity of 236 kL and 25 Psorb Stormwater filters across the site to facilitate the storage and treatment of stormwater on-site. - Implement the erosion and sediment control measures and strategies in the Stormwater Strategy Plan prepared by Warren Smith and Partners for the duration of the construction works.
Ecology	Impacts due to the removal of trees and vegetation	No additional tree removal or other associated impacts are proposed as part of the Tower B development.
Waste	Disturbance resulting from the generation, handling, storage and disposal of all forms of waste	A Waste Management Plan has been proposed for SSD 7543 and will be used to guide the Tower B development.
Contamination	Suitability of the site for the proposed use	A Construction Environmental Management Plan and Remedial Action Plan has been prepared for SSD 7543 and will be used to guide the Tower B development.

Table 12: Environmental Risk Assessment

9 Conclusion

This EIS has been prepared to assess the environmental, social and economic impacts of the proposal. This EIS addresses the matters outlined in the SEARs issued by DP&E on 1 December 2017 and has been prepared in accordance with the requirements of Schedule 2 of the EPAR. It addresses all relevant strategic and statutory documents, policies and instruments, assesses potential environmental impacts and outlines proposed mitigation measures to address these impacts.

It is therefore concluded that the proposal is in the public interest and warrants approval for the following key reasons:

- Tower B is complementary to the St Leonards health and education precinct and will reinforce the role of the precinct as identified in the draft North District Plan
- the development will facilitate additional employment opportunities and health services in a strategic centre which is well located in relation to major transport infrastructure
- the proposed building form, scale and design is considered appropriate and articulated to fit within the surrounding precinct
- the design of Tower B will create visual interest and contribute positively to the overall amenity of the surrounding precinct
- assessment of Tower B has demonstrated that the development will not generate any environmental impacts that cannot be appropriately managed, and is consistent with the relevant planning controls for the site
- the area and shape of the site allows for the provision of the Tower, whilst not resulting in any significant adverse impacts, including overshadowing, privacy and wind
- operational noise associated with the construction of Tower B is predicted to be below the Highly Noise Effected level, and will be appropriately managed and mitigated
- all construction impacts associated with Tower B can be appropriately managed and mitigated during the construction phase of the development
- appropriate development contributions will be made
- granting consent for the construction of Tower B is considered to be in the public interest.

Given the planning merits described above, and significant public benefits, it is requested that the Minister (or delegate) approve the application.