St John of God Richmond Hospital

Environmental Impact Statement for State Significant Development

Mecone NSW Pty Ltd on behalf of
St John of God Health Care

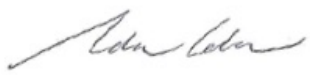
December 2020

mecone

Project Director

Adam Coburn

Signature*:



Date: 1 December 2020

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*This document is for discussion purposes only unless signed and dated by the Project Director.

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Statement of Validity

Applicant Details

Name: St John of God Health Care c/- Mecone NSW Pty Limited

Address: Level 2, 3 Horwood Place, Parramatta NSW 2150

Site and Proposal Details

Site Address: 235 Grose Vale Road, North Richmond

Legal Description: Lot 11 DP1134453

Proposed Development: Redevelopment of private hospital

Prepared by

Name: Adam Coburn

Qualifications: Bachelor of Environmental Planning, Master of Planning

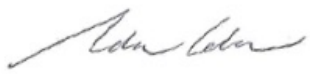
Address: Mecone NSW Pty Limited, Level 2, 3 Horwood Place, Parramatta NSW 2150

Certification

I certify that I have reviewed the content of this EIS and to the best of my knowledge:

- It is in accordance with Part 4 of the Environmental Planning and Assessment Act 1979 and Schedule 2 of the Environmental Planning and Assessment Regulation 2000;
- All available information that is relevant to the environmental assessment of the development to which the statement relates; and
- The information contained in the statement is neither false nor misleading.

Signature:



Name: Adam Coburn

Date: 16 December 2020

Executive Summary

Purpose of this report

This Environmental Impact Statement (EIS) has been prepared on behalf of St John of God Health Care (the applicant) to accompany a development application submitted to the Minister for Planning, pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), for redevelopment of St John of God Hospital Richmond.

The proposal has a capital investment value of $49,831,000 and is therefore classified as State significant development (SSD) by virtue of exceeding the $30 million threshold for private hospital development in *Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011*.

This EIS provides a comprehensive assessment of the potential environmental impacts resulting from the proposal and addresses the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Industry and Environment (DPIE) on 5 December 2019.

The site

The site is located at 235 Grose Vale Road, North Richmond, and is legally described as Lot 11 DP1134453. The site sits in a scenic rural context with views to Hawkesbury River and the Blue Mountains.

Existing development comprises St John of God Richmond Hospital, a private psychiatric hospital offering in-patient and out-patient services. The site has been used as a hospital since the 1950s.

The existing facilities include local heritage item Belmont House (a prime example of late-Victorian architecture) and an assortment of 1950s and later buildings.

Project history

The existing hospital is out-of-step with contemporary modes of psychiatric care, and piecemeal development over the years has resulted in a cluttering of buildings around Belmont House, which has reduced the item's heritage significance.

The applicant has identified a need to redevelop the site in order to meet growing consumer demand and expectations while improving the heritage setting of Belmont House.

Alternatives

Alternatives to the proposal include Option 1) Do nothing and Option 2) Retrofit existing facilities. Option 1 is unfeasible given the need to meet additional consumer demand and upgrade the facilities to contemporary standards. Option 2 is unfeasible due to the financial and logistical difficulties in remediating and upgrading the existing facilities to meet contemporary standards. Additionally, Options 1 and 2 fail to improve the setting of Belmont House.

The proposed demolition and construction of new facilities is preferred as it is cost-effective, allows for new best-practice facilities and improves the setting of Belmont House.

Overview of the project

The proposal seeks approval for:

- Site preparation works including partial demolition of existing facilities, earthworks and tree removal;
- Refurbishment of some existing facilities;
- Construction of 6 new buildings, ranging in height from 1–2 storeys;
- Increase in bed capacity from 88 to 112; and
- Integrated landscaping.

Consultation

Pre-lodgement consultation has been conducted with various stakeholders including Hawkesbury Council; relevant State agencies including Government Architect NSW, Transport for NSW, Roads and Maritime Services, Rural Fire Service; Royal Australian Airforce Richmond Base; neighbouring landowners; and local Aboriginal stakeholders. Comments provided by these stakeholders have been instrumental in the preparation of this EIS.

Planning context

This EIS has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). Section 5.2 of the EIS considers all applicable legislation in detail.

Hawkesbury Local Environmental Plan 2012 (the LEP) applies to the site, The proposal is permitted with consent in the RU1 Primary Production zone.

The proposal is generally consistent with all key relevant planning controls, with the primary exception being the LEP's 10m height limit. The proposal seeks a 3.4m variation to this control. A written clause 4.6 variation request has been prepared accordingly. The height variation is considered justified given it enables level access throughout the facilities for operational purposes and allows for a superior roof design that relates appropriately to the rural context.

Environmental impacts and mitigation measures

This EIS provides an assessment of the environmental impacts of the proposed development in accordance with the SEARs and sets out the undertakings made by the proponent to manage and minimise potential impacts arising from the development. The key environmental matters identified include:

- Built form and urban design;
- Environmental amenity;
- Transport and accessibility;
- Sustainability;
- Heritage;
- Aboriginal heritage;
- Noise and vibration;

- Contamination;
- Drainage;
- Bushfire hazard; and
- Biodiversity.

A range of mitigation measures has been recommended based upon the input of specialists. Subject to implementation of these measures, it considered that the identified potential impacts will be acceptable and manageable.

Conclusion

The proposal has been designed to avoid environmental impacts where possible. The proposal enhances the setting of Belmont House, is compatible with the rural context, minimises vegetation removal, manages bushfire risk through the use of suitable materiality, provides for adequate stormwater management and generally confines construction work to already disturbed areas of the site.

The EIS fulfils the requirements of the EP&A Act and Regulation and addresses all relevant matters for consideration prescribed by the SEARs, demonstrating that the potential impacts of the proposal can be satisfactorily managed or mitigated. In light of the above, and the evident benefits of the proposal, it is recommend that consent be granted to the application.

1 Introduction

This Environmental Impact Statement (EIS) has been prepared on behalf of St John of God Health Care (SJOG) (the applicant) to accompany an application for State significant development (SSD) submitted to the Minister for Planning seeking redevelopment of St John of God Richmond Hospital.

The proposal is classified as SSD pursuant to Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* given it is development for the purposes of a private hospital and has a capital investment value of more than $30 million (being $49,831,000).

The Secretary's Environmental Assessment Requirements (SEARs) for the project were issued on 5 December 2019.

This EIS has been prepared in the form specified in Preparing an Environmental Impact Statement (Department of Planning and Environment, June 2017) and addresses the issues raised in the SEARs.

1.1 Project Overview

The proposal seeks approval for the following:

- Site preparation works including partial demolition of existing facilities, earthworks and tree removal;
- Refurbishment of some existing facilities;
- Construction of 6 new buildings, ranging in height from 1–2 storeys;
- Increase in bed capacity from 88 to 112; and
- Integrated landscaping.

1.2 Project Objectives

The objectives of the proposal are to:

- Update the facility to best-practice standards and support a contemporary approach to mental health care;
- Meet the identified consumer demand for 24 additional beds;
- Preserve and enhance the heritage significance of Belmont House; and
- Ensure the development accords with the surrounding rural landscape context.

1.3 Project Background

The site has been operating as a hospital since approximately 1952 and has had significant upgrades since opening, with the majority of construction taking place in the 1970s and 1980s. The buildings are, for the most part, significantly out-of-step with consumer expectations and competitor standards. There is also an immediate need to upgrade capacity to meet consumer demand. Furthermore, due to the hospital's piecemeal development over the years, there is an undesirable cluttering of dated

buildings around Belmont House, which detracts from the item's heritage significance. The proposed development has been conceived as a response to these issues.

1.4 Alternatives

Option 1—Do nothing

The do-nothing scenario involves maintaining the existing building structure, layout and capacity. Under this scenario, the facility would deliver increasingly poor service that is out-of-step with contemporary standards and fails to respond to consumer demand. This approach is not acceptable given the proponent's commitment to delivering high quality mental health care and meeting demand.

Option 2— Retrofit and expand existing facilities

Option 2 involves retrofitting and expanding the existing facilities while maintaining the existing layout. This option was discarded for a number of reasons:

- The existing facilities were generally built in reaction to immediate needs rather than according to a masterplan. Buildings are positioned in an ad hoc manner, leading to a confusing and complicated layout. A new layout is required to simplify the campus, improve patient experience, increase operational efficiencies and provide clearer delineation between public and private areas.
- The hospital's physical environment fails to support contemporary models of clinical care. The current facility has 55 bedrooms for 88 patients and 30 shared bathrooms. The sharing of bedrooms and bathrooms has been identified as a particular barrier recovery. To enable consumer expectations of single rooms with ensuites, entirely new accommodation is required. But simply adding another building to the existing configuration would only add to an already cluttered site.
- There would be significant costs associated with remediating the existing facilities and upgrading the facilities to meet current acoustic, thermal and structural requirements.
- The existing corridors are very narrow and highly congested due to the ad hoc positioning of the existing buildings. The corridors have become a combined thoroughfare for caregivers, patients and their carers, which is invasive to patient privacy. A fit-out would not solve this issue.
- The applicant wishes to improve the hospital's relationship to Belmont House by increasing the heritage curtilage and returning the building to a more natural setting. This requires demolition of many of the existing buildings which are in close proximity to Belmont House.

Option 3—Demolish and construct new facilities (preferred option)

Option 3, the option proposed in this DA, involves demolishing a significant portion of the existing buildings and constructing brand new accommodation and other facilities. This option was chosen as it is cost-effective and gives the applicant the design freedom to achieve best-practice facilities while improving the setting of Belmont House.

The buildings attached to and closely surrounding Belmont House will be removed, allowing for the heritage item to be reviewed "'in the round" as originally intended.

The new buildings will be fit for purpose and appropriately positioned and scaled to maintain the dominance of Belmont House.

1.5 SEARs

The project SEARs were issued on 5 December 2019. The table below identifies where the SEARs are addressed within this EIS.

Table 1. SEARs

Requirement	Chapter of EIS
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 Environmental Planning and Assessment Regulation 2000 (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of 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 (completed, underway or proposed) • measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Throughout EIS Section 8
The EIS must also 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 25
Key issues	
The EIS must address the following specific matters:	
1. Statutory Provisions and Strategic Provisions	

Table 1. SEARs	
Requirement	Chapter of EIS
Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy (Infrastructure 2007) • State Environmental Planning Policy No. 64 – Advertising and Signage • State Environmental Planning Policy No.55 – Remediation of Land • State Environmental Planning Policy No. 44 – Koala Habitat Protection • Draft State Environmental Planning Policy (Remediation of Land) • Draft State Environmental Planning Policy (Environment) • Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997) • Hawkesbury Local Environmental Plan 2012. *Permissibility* Detail the nature and extent of any prohibitions that apply to the development. *Development Standards* Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. *Provisions* Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	Section 5.2
2. Policies	
Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW State Priorities • The Greater Sydney Regional Plan, A Metropolis of three cities • Future Transport Strategy 2056 and supporting plans • State Infrastructure Strategy 2018 – 2038 Building the Momentum • Greater Sydney Commission's Western City District Plan	Section 5.1

Table 1. SEARs	
Requirement	Chapter of EIS
• Sydney's Cycling Future 2013 • Sydney's Walking Future 2013 • Sydney's Bus Future 2013 • Crime Prevention Through Environmental Design (CPTED) Principles • Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GANSW), 2017) • Healthy Urban Development Checklist (NSW Health, 2009) • Draft Greener Places Policy • Hawkesbury Development Control Plan 2002.	
3. Operation	
Provide details of the existing and proposed hospital operations.	Section 2.3
4. Built Form and Urban Design	
Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	Section 6.1 Appendix 2
Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, green roof, cool roof and/or green wall, massing, setbacks, building articulation, materials and colours.	Section 6.1 Appendix 2 Appendix 3
Provide details of any digital signage boards, including size, location and finishes.	NA
Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	Section 6.1 Appendix 1
Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.	Section 2 Appendix 2
Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	Section 6.1
Provide a detailed site-wide landscape strategy, including: • details of the number of trees to be removed and the number of trees to be planted on the site.	Section 3.9 Appendix 3
Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape	Section 6.2.2

Table 1. SEARs	
Requirement	Chapter of EIS
including views to and from the site and any adjoining heritage items.	
Address CPTED Principles.	Section 5.1.7
Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	Section 6.1
5. Environmental Amenity	
Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts.	Section 6.2 Section 6.7 Appendix 1 Appendix 13a Appendix 13b
Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building and likely future development).	Section 6.2.2 Appendix 2
Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers.	Section 6.2.4 Appendix 24
Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	Section 6.2 Section 6.7 Appendix 1 Appendix 13a Appendix 13b
6. Staging	
Provide details regarding the staging of the proposed development (if any).	Section 3.11
7. 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, existing and future • public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development.	Section 6.3 Appendix 15

Table 1. SEARs	
Requirement	Chapter of EIS
• details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips. • the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development. • measures to integrate the development with the existing/future public transport network. • 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, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years). • the identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development. • details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site. • the proposed walking and cycling access arrangements and connections to public transport services. • the proposed access arrangements, including car and bus pick-up/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. • proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance. • proposed number of on-site car parking spaces for staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site. • an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development. • an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED. • emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle	

Table 1. SEARs	
Requirement	Chapter of EIS
movements (including vehicle type and the likely arrival and departure times). • the preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: o assessment of cumulative impacts associated with other construction activities (if any). o an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity. o details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. o details of anticipated peak hour and daily construction vehicle movements to and from the site. o details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle. o details of temporary cycling and pedestrian access during construction. Relevant Policies and Guidelines: • Guide to Traffic Generating Developments (Roads and Maritime Services, 2002) • EIS Guidelines - Road and Related Facilities (DoPI) • Cycling Aspects of Austroads Guides • NSW Planning Guidelines for Walking and Cycling • Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development • Standards Australia AS2890.3 (Bicycle Parking Facilities).	
8. Ecologically 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.	Section 6.4 Appendix 17
Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and	Section 6.4 Appendix 17

Table 1. SEARs	
Requirement	Chapter of EIS
water efficient design (including water sensitive urban design) and technology and use of renewable energy.	
Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance.	Section 6.4 Appendix 17
Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level.	Section 6.4 Appendix 17
Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: • hotter days and more frequent heatwave events • extended drought periods • more extreme rainfall events • gustier wind conditions • how these will inform landscape design, material selection and social equity aspects (respite/shelter areas).	Section 6.4 Appendix 17
9. Heritage	
Provide a statement of significance and an assessment of the impact on the heritage significance of the heritage items on the site in accordance with the guidelines in the NSW Heritage Manual (Heritage Office and DUAP, 1996).	Section 6.6 Appendix 6
Address any archaeological potential and significance on the site and the impacts the development may have on this significance.	Section 6.6
10. Aboriginal Heritage	
Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation.	Section 6.5 Appendix 5a Appendix 5b
Identify and address the Aboriginal cultural heritage values in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (Office of Environment and Heritage (OEH), 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010).	Section 6.5 Appendix 5a Appendix 5b
Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (Department of Environment, Climate Change and Water). The significance of cultural heritage	Section 6.5 Appendix 5a Appendix 5b

Table 1. SEARs	
Requirement	Chapter of EIS
values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR.	
Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR.	Section 6.5 Appendix 5a Appendix 5b
The EIS and the supporting ACHAR must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to the Environment, Energy and Science Group of the Department of Planning, Industry and Environment.	No unavoidable impacts have been identified
11. Noise and Vibration	
Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.	Section 6.7 Appendix 13b
Identify and provide a quantitative assessment of the potential noise and vibration impacts on the identified sensitive receivers due to the operations of the hospital.	Section 6.7 Appendix 13a
Relevant Policies and Guidelines: • NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA) • Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) • Assessing Vibration: A Technical Guideline 2006 (Department of Environment and Conservation, 2006) • Development Near Rail Corridors and Busy Roads - Interim Guideline (Department of Planning, 2008) • Australian Standard 2363:1999 Acoustics - Measurement of noise from helicopter operations.	Noted
12. Contamination	
Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.	Section 6.8 Appendix 10
Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.	Appendix 11a

Table 1. SEARs	
Requirement	Chapter of EIS
Relevant Policies and Guidelines: • Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998) • Sampling Design Guidelines (EPA, 1995) • Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011) • National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013)	Noted
13. Utilities	
Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.	Section 3.12 Appendix 20a Appendix 20b
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 3.12 Appendix 20b
14. Contributions	
Address Council's 'Section 7.11 (previously S94) Contribution Plan 2015' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	Section 6.9
15. Drainage	
Detail measures to minimise operational water quality impacts on surface waters and groundwater.	Section 6.10 Section 6.11 Appendix 21 Appendix 22 Appendix 23
Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties.	Section 6.10 Appendix 21
Relevant Policies and Guidelines: • Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH, 2013).	Noted
16. Flooding	

Table 1. SEARs	
Requirement	Chapter of EIS
Identify 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 (DIPNR, 2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation.	Section 6.11 Appendix 23
17. Bushfire	
Address bushfire hazard and, if relevant, prepare a report that addresses the requirements for Special Fire Protection Purpose Development as detailed in Planning for Bush Fire Protection 2006 (NSW RFS).	Section 6.12 Appendix 7
18. Biodiversity	
• Unless a waiver has been issued by the Planning Secretary, biodiversity impacts related to the proposed development (SSD-10394) are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017, the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. • The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. • The BDAR must include details of the measures proposed to address the offset obligation as follows: o the total number and classes of biodiversity credits required to be retired for the development/project the number and classes of like-for-like biodiversity credits proposed to be retired o the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules o any proposal to fund a biodiversity conservation action o any proposal to make a payment to the Biodiversity Conservation Fund. • If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. • The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM. • The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the	Section 6.14 Appendix 9

Table 1. SEARs	
Requirement	Chapter of EIS
Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016 . • Where a Biodiversity Assessment Report is not required, engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal. • Where a waiver has been issued, confirm that the project for which a waiver was granted is consistent with the proposal. Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.	
19. Sediment, Erosion and Dust Controls	
Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. Relevant Policies and Guidelines: • Managing Urban Stormwater - Soils & Construction Volume 1 2004 (Landcom) • Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) • Guidelines for development adjoining land managed by the Office of Environment and Heritage (OEH, 2013)	Section 6.14 Appendix 22
20. Aviation	
Provide a report prepared by a suitably qualified Aviation expert: • identifying whether the proposed development is located within any of the following Australian Noise Exposure Forecast (ANEF) contours as specified in Table 2.1 of AS 2021-2015 Acoustics – Aircraft Noise Intrusions – Building Siting and Construction: <20; Between 20 – 25; or >25. • providing details of any flight paths that may be impacted by the proposed development. identifying and assessing the potential impacts of the future development on the aviation operations of any nearby airports and affected flight paths of any existing on shore HLS in accordance with the relevant sections of the National Airports Safeguarding Framework (NASF). Relevant Policies and Guidelines: • National Airports Safeguarding Framework • Draft Guidelines for the establishment and operation of onshore Helicopter • Landing Sites available at: https://www.casa.gov.au/files/caap-92-2-2pdf .	Section 6.15

Table 1. SEARs	
Requirement	Chapter of EIS
21. Waste	
Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the 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. Relevant Policies and Guidelines: • Waste Classification Guidelines (EPA, 2014)	Section 6.16 Appendix 16
22. 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 3.1
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.	Throughout EIS
In addition to the documents and plans listed in the key issues above, the EIS must include the following:	
A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate)	Appendix 27
Architectural drawings showing key dimensions, RLs, scale bar and north point, including: • plans, sections and elevation of the proposal at no less than 1:200 • illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes • details of proposed signage, including size, location and finishes • detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality • site plans and operations statement	Appendix 1
Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and site boundaries	Appendix 4
Site Analysis and Context Plans, including:	Appendix 2

Table 1. SEARs	
Requirement	Chapter of EIS
• open space network • active transport linkages with existing, proposed and potential footpaths and • bicycle paths and public transport links	
Sediment and Erosion Control Plan	Appendix 22
Shadow Diagrams	Appendix 1
View analysis, photomontages and architectural renders, including from those from public vantage points	Appendix 2
Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: • integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed • plan identifying significant trees, trees to be removed and trees to be retained or transplanted	Appendix 3
Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: • architectural design statement • diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal • detailed site and context analysis • analysis of options considered to justify the proposed site planning and design approach • visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items • summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice summary report of consultation with the community and response to any feedback provided	Appendix 2
Geotechnical and Structural Report	Appendix 12
Accessibility Report	Appendix 19
Arborist Report	Appendix 8
Salinity Investigation Report	Covered in contamination report – Appendix 10

Table 1. SEARs	
Requirement	Chapter of EIS
Acid Sulphate Soils Management Plan	Covered in contamination report – Appendix 10
Schedule of materials and finishes.	Appendix 1
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders, and affected landowners . In particular, you must consult with: • Hawkesbury City Council • Government Architect NSW (through the NSW SDRP process) (GANSW) • Transport for NSW (TfNSW) • Transport for NSW (Roads and Maritime Services) (TfNSW(RMS)) • NSW Rural Fire Service • Department of Defence Royal Australian Air Force Base Richmond. • Consultation with GANSW, TfNSW and TfNSW (RMS) should commence as soon as practicable to agree the scope of investigation. 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 4
Further consultation after 2 years	
If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	Noted

1.6 Structure of EIS

The structure of the EIS is based on Preparing an Environmental Impact Statement (Department of Planning and Environment, June 2017) and is as follows:

- **Section 1:** Introduction
- **Section 2:** Site analysis

- **Section 3:** Proposal description
- **Section 4:** Consultation
- **Section 5:** Strategic context
- **Section 6**: Statutory context
- **Section 7:** Assessment of key issues
- **Section 7:** Assessment of other issues
- **Section 8:** Environmental risk assessment and mitigation measures
- **Section 9**: Conclusion and justification

2 Site Analysis

2.1 Regional Context

The site is located in the suburb of North Richmond in the City of Hawkesbury local government area. The site forms part of Sydney's Western City region and is positioned approximately 17km north of Penrith city centre, 37km northwest of Parramatta central business district (CBD) and 56km northwest of Sydney CBD.

The figure below provides a context showing the site's location relative to the surrounding region.

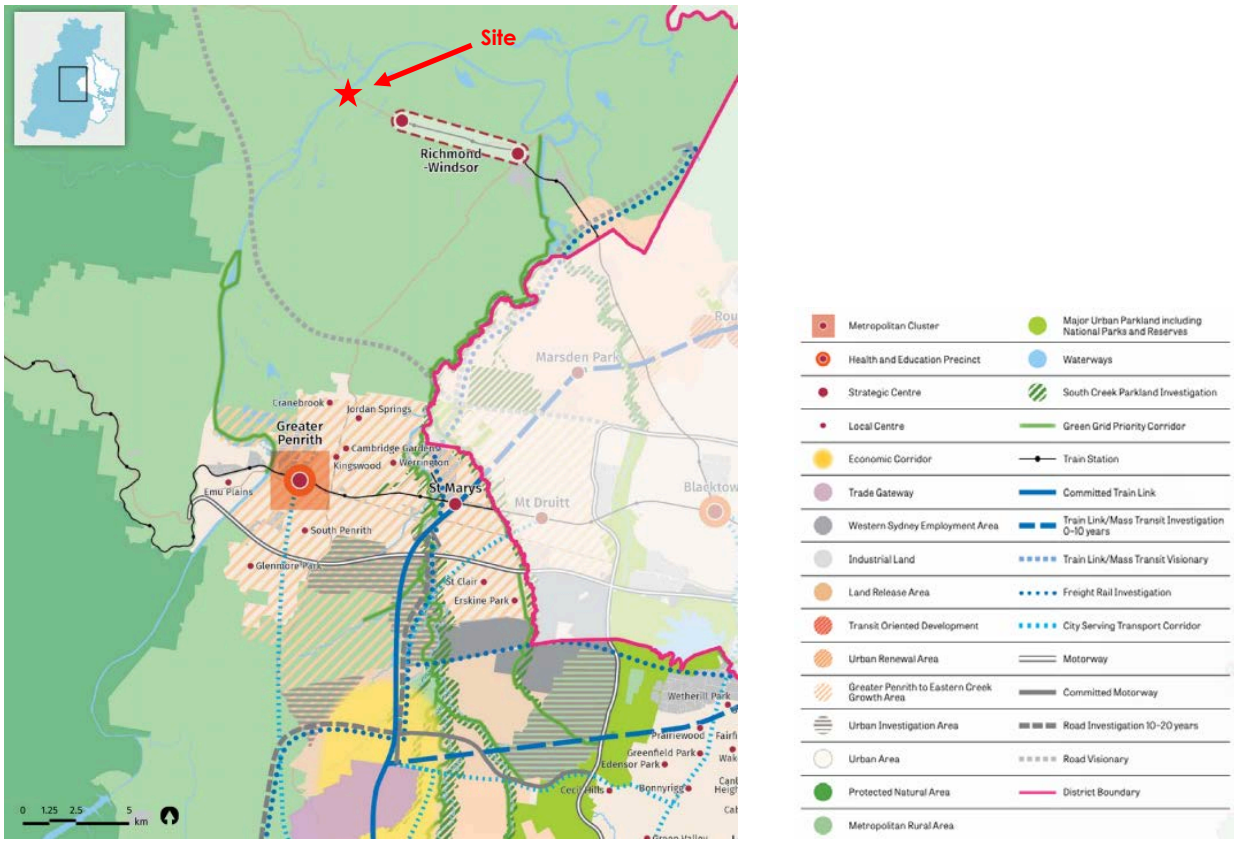


Figure 1. Regional context map
Source: Western City District Plan

2.2 Local Context

The site is positioned in a low density rural context immediately north of the Hawkesbury River. Surrounding development includes a stud farm and other equine-related facilities. North Richmond residential area is approximately 600m to the northwest of the site, and North Richmond local centre is approximately 2.25km to the northwest. Land across the river is agricultural in nature.

The figure below provides a local context diagram.

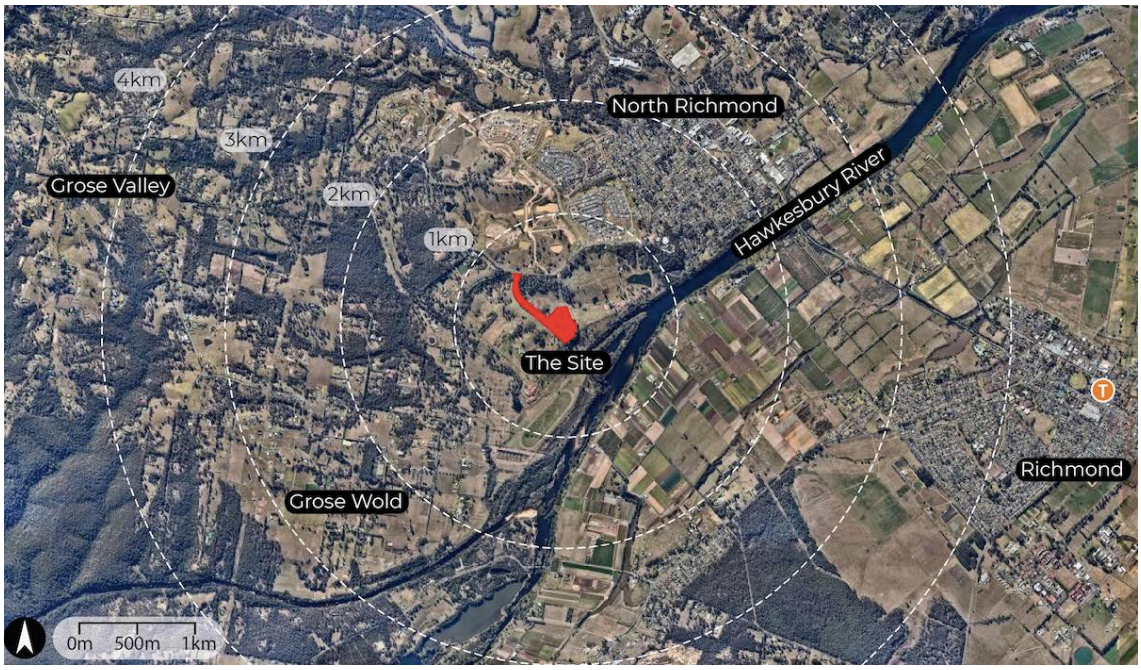


Figure 2. Local context diagram
Source: Mecone 2019

2.3 Site Description

The site is located on the south side of Grose Vale Road, to the north of Hawkesbury River, as shown Figure 3. An existing site plan of the main campus area is provided at Figure 4.

Figure 3. Site aerial image
Source: Mecone Mosaic 2019

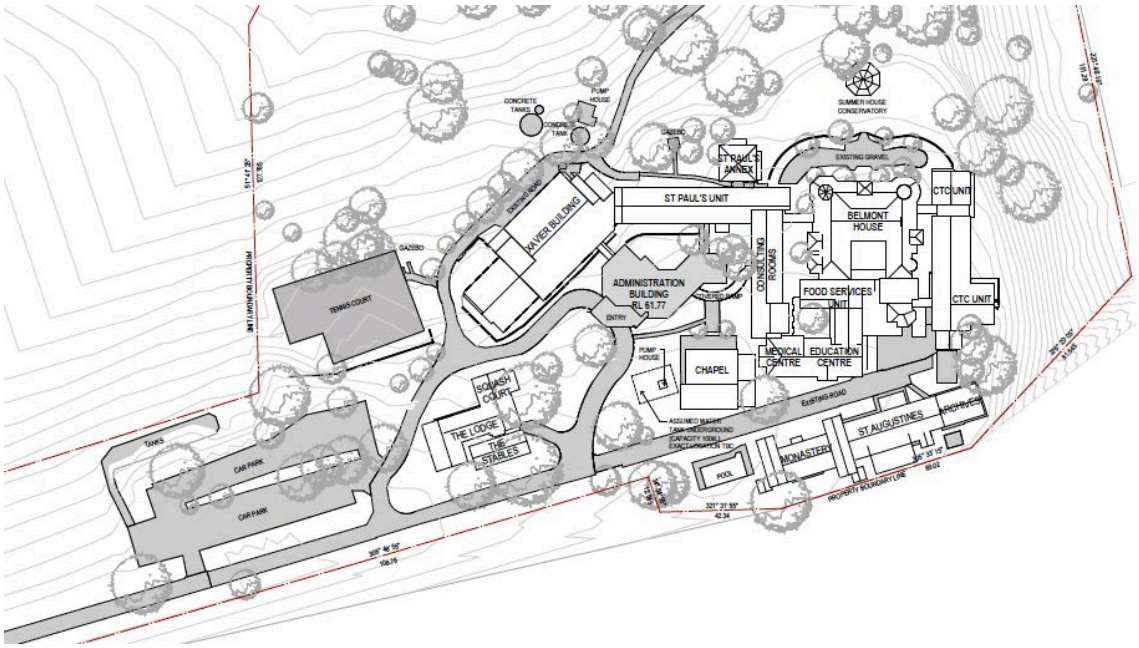


Figure 4. Existing site plan
Source: STH

The table below provides a summary description of the site.

Table 2. Site Description

Item	Details
Legal description	Lot 11 DP1134453
Address	235 Grose Vale Road, North Richmond (Also known as 177 Grose Vale Road, North Richmond)
Area	10ha
Frontage	Approximately 96m to Grose Vale Road (access driveway)
Topography	The site is situated on Richmond Hill, which sits at an elevation of approximately 65m to 70m Australian Height Datum (AHD). The access driveway into the site sits on a south east ridgeline, and the majority of the onsite buildings are situated on top of the Richmond Hill with moderate to steep slopes completely surrounding the site. The south east portion of the site bounded by very steep to extreme slopes towards Hawkesbury River (approximately 35 to 55 degrees). The topography of the surrounding area is hilly to undulating with moderate to steep slopes.
Existing development	The site contains St John of God Richmond Hospital, a private psychiatric hospital offering in-patient (88 beds) and outpatient services. The site has been used as a hospital since the 1950s.

Table 2. Site Description	
Item	Details
	Existing buildings/areas include Belmont House (local heritage item), Counselling and Therapy Centre (CTC), café, Monastery, Arts Building, Archives, Chapel, Administration Building, Xavier Building, The Lodge, St. Joseph's Building, consulting rooms, Food Services Unit, Medical Centre and Education Centre. Belmont House is considered a prime example of late Victorian architecture. The majority of the other buildings on the site were constructed in the 1950s or later and have no architectural significance. A detailed description of the site's buildings in a heritage context is provided in the heritage impact statement at **Appendix 6**. There is a place of Aboriginal cultural heritage significance on the site—the Battle of Richmond Hill Memorial Garden, which is located to the east of the Belmont Park mansion outside of the development area.
Access	The site is accessed via a private driveway connecting to Grose Vale Road.
Vegetation	The hospital grounds are landscaped and well maintained and include a formal terraced garden area connecting to Belmont House. There are a total of 445 mature trees scattered throughout the site. However, only a small number of remnant native trees have survived due to extensive vegetation clearing from the 1800s onwards. The densest tree cover occurs at the northern end of the site and on the steep slope towards Hawkesbury River.

Photos of the site are provided below.

Figure 5. Belmont House – north elevation
Source: Wier Phillips

Figure 6. St Augustines Building
Source: Wier Phillips

Figure 7. Hospital main entry
Source: Wier Phillips

Figure 8. St Augustines on right – looking towards existing loading area
Source: Wier Phillips

Figure 9. Education and Medical Centre
Source: Wier Phillips

Figure 10. Xavier Building
Source: Wier Phillips

3 Proposal Description

The proposed SSD seeks approval for redevelopment of St John of God Richmond Hospital comprising:

- Site preparation works including partial demolition of existing facilities, earthworks and tree removal;
- Refurbishment of some existing facilities;
- Construction of 6 new buildings, ranging in height from 1–2 storeys;
- Increase in bed capacity from 88 to 112; and
- Integrated landscaping.

Architectural drawings are attached at **Appendix 1**.

3.1 Key Components

The table below provides a summary of the key components of the proposal.

Table 3. Proposed Development Summary

Project Element	Summary
Use	Hospital including accommodation, consulting rooms, offices, chapel and dining facilities
Capacity	112 single occupancy bedrooms and ensuites for inpatients
New buildings	4 x residential pavilions 1 x central garden pavilion 1 x wellness centre
Maximum height	RL 73.77 13.4m from existing ground level (roof of residential pavilion 4) 2 storeys
Vehicular parking	Removal of 17 parking spaces to accommodate new buildings, resulting in total 129 spaces
Employment	Construction phase (direct and indirect): 601 jobs Operational phase (additional jobs created: 30 jobs
Hours of operation	Inpatient operations: 24 hours/day, 7 days/week Outpatient operations: 8am to 8pm, 7 days/week
Construction hours	Standard hours: 7am–6pm Monday–Friday 8am–1pm Saturday

Table 3. Proposed Development Summary	
Project Element	Summary
	No work Sunday and public holidays
Capital investment value	$49,831,000

3.2 Demolition

It is proposed to demolish the following eight existing buildings:

- Monastery (1950s building);
- Chapel (1950s building);
- St Augustines Building (1950s building);
- CTC Unit linked to eastern side of Belmont House (1970s building);
- St Pauls Unit and Gym (1970s building);
- Medical and Education Centre (1970s building);
- Consulting (1970s building) linked to western side of Belmont House; and
- Food Services Unit (1970s building) adjoined to the rear of Belmont House.

All buildings to be demolished were built in the 1950s or later and are not highly significant from a heritage or architectural perspective.

A demolition plan is included in the architectural drawings at **Appendix 1**.

3.3 Works to Belmont House

The Food Services Unit, Consulting building and CTC Unit are connected to Belmont House. Demolition of these buildings, therefore, will require detaching the building from Belmont House. Following demolition, the previously attached portions of Belmont House will be restored or "made good" under the guidance of a heritage consultant.

No demolition of heritage fabric is proposed. The slate-covered pitched roof form of the original kitchen and services wing was previously removed and replaced with a modern roof. The proposed demolition involves removal of this modern roof, but the heritage walls will remain.

Additionally, three rooms within Belmont House will undergo minor refurbishment including:

- A basement room cleaned and painted to temporarily house archives;
- Granda Room painted and new carpet installed; and
- Existing kitchen refurbished to become a general use room.

The location of these rooms is shown on the staging plans included in the architectural drawings at **Appendix 1**.

3.4 Refurbishment of Non-Heritage Buildings

It is proposed to refurbish/fit-out a number of non-heritage buildings on site to meet contemporary standards including:

- Fit out the Xavier Building to accommodate the Medical Centre and Counselling and Therapy (CTC) Unit;
- Refurbish the existing administrative building to meet contemporary standards and accommodate new pharmacy and chapel; and
- Fit out St Paul's Annex to accommodate offices and arts and crafts area.

3.5 Earthworks

The earthworks necessary for enabling the proposal are detailed in the civil schematic design report at **Appendix 23**.

The proposal will require cut up to approximately 1.9m, with the maximum cut at the northwest corner of residential pavilions 1 and 2. Some fill will be required around residential pavilions 3 and 4, but the exact fill depth and extant are unknown at this stage. This will be identified at the detailed design stage on the basis of geotechnical recommendations.

It is noted that the civil schematic design report does not include the wellness centre building.

3.6 Tree Removal

A total of 24 trees within the proposed development area will need to be removed, as identified on the tree removal and retention plan at Figure 11. A full-size version is provided in the architectural drawings at **Appendix 1**.

The building layout has been carefully designed to minimise tree removal and to preserve high-value trees. Only two of the 24 trees to be removed have been identified as having high retention value, with the other 22 having low or moderate value. The two high-value trees to be removed are located in the area of the new residential pavilions. A design choice was made to concentrate new built form to the rear of Belmont House—a strategy that allows for retention of the many high-value trees within the landscaped gardens at the front of Belmont House.

Further detail on the significance of and health of the trees is provided in the arborist report at **Appendix 8**.

Figure 11. Tree retention and removal plan
Source: STH

3.7 Built Form

A site plan and 3D perspective are shown in the images below.

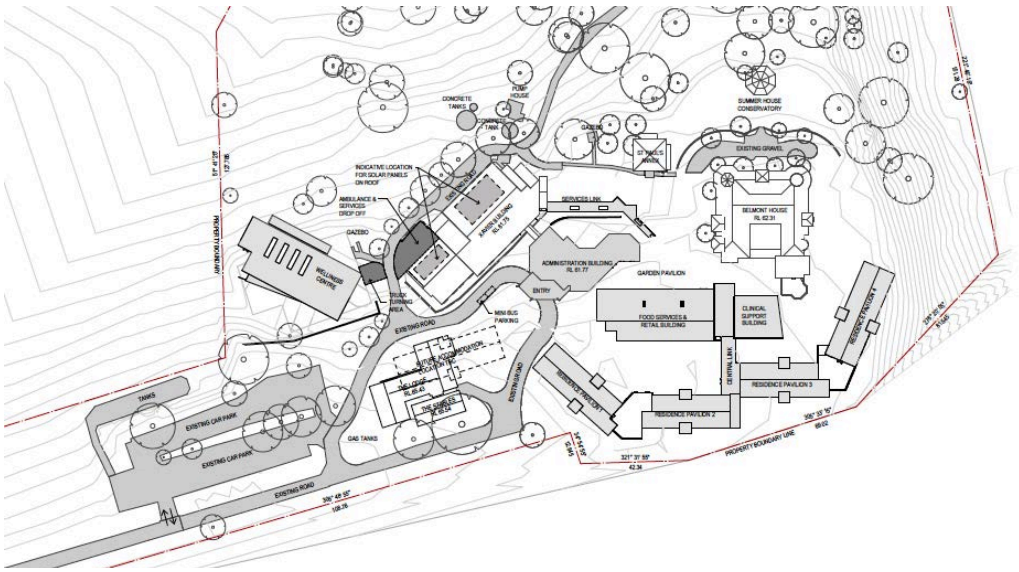


Figure 12. Proposed site plan
Source: STH

Figure 13. 3D view of proposal
Source: STH

New Buildings

Six new buildings are proposed:

- 4 x residential pavilions (connected);
- 1 x central garden pavilion; and
- 1 x wellness centre.

The residential pavilions have been positioned to open up the curtilage around Belmont House and to maximise residents' privacy and views to the Blue Mountains. The pavilions reflect an Australian country vernacular form with traditional building forms and pitched gabled roof lines. The architectural form also draws inspiration from the nearby Blue Mountains to create a "lodge" feel suitable to the retreat-like nature of the grounds. Each of the four pavilions contains 28 single occupancy rooms and plus associated staff clinical areas with generous guest lounge areas and break-out spaces. The residential pavilions are connected to each other by intermediate lounge, kitchen and staff areas.

The residences are connected to the garden pavilion via a 2-storey link building. The garden pavilion forms the main guest hub of the complex, containing a multipurpose space with dining, café and lounge areas.

The proposed wellness centre sits separate from the other new buildings, adjacent to Xavier House in the location of the current tennis courts. The centre has been designed with a similar architectural form as the main buildings, The centre will include a large pool, gymnasium and multi-purpose rooms for yoga, massage and hairdressing, etc.

Setbacks

The residential pavilions are set back at least 5m from the west side boundary, with the average setback being greater than 5m. This 5m minimum setback is an improvement upon the 1m minimum setback of the existing St Augustines Building.

In terms of internal separation, the new residential pavilion are set back at least 14.2m from Belmont House. There is at least 10m separation between the residential pavilions and the garden pavilion.

Height

The proposal is a maximum of two storeys with a maximum building height of RL 73.77 (or 13.4m measured from existing ground level at the highest point). All buildings are well below the tower of Belmont House, which peaks at approximately RL 76.23. The proposed maximum height is slightly above the LEP's 10m maximum. A clause 4.6 variation request has been prepared accordingly and is attached at **Appendix 14**.

Materiality and façade treatment

Material choice has been chosen not only for its traditional aesthetic but also its robust finish to mitigate bush fire risk. Texture and a natural colour palette further enhance the buildings' suitability within the prominent rural area.

3.8 Vehicular Access and Parking

Access

Access into the site will be maintained via the current driveway off Grose Vale Road.

Currently the driveway extends to a loading area near the southern end of the site. The driveway will be shortened in length as part of the proposal in order to accommodate the new residence pavilions, and the loading area will be relocated (see further discussion below).

Loading area and new services link

Currently the loading area is located in a highly visible location at the end of the driveway. It is proposed to relocate the loading area to a less conspicuous location behind the Xavier Building.

A new services link tunnel will also be constructed, connecting the new loading area to the basement lift of the new build. In addition to providing a pathway for deliveries and other services, the link will also function as a discreet pathway from the residences to the ambulance bay when required.

Parking

Seventeen (17) of the current 146 spaces (parallel spaces located along the current driveway) will need to be removed to accommodate the new buildings, resulting in a total of 129 spaces on the site. This reduced total parking is still more than sufficient for meeting minimum standards and hospital demand as discussed at section 6.3 of the EIS.

3.9 Landscaping

The proposal is supported by a comprehensive landscape concept at **Appendix 3** of the EIS. The objectives of the landscape plan are to:

- Respect and enhance the setting and existing natural features of the site;
- Provide pathways and spaces for physical activity and exploration;
- Encourage formal and social interactions;
- Provide gardens and spaces with familiar, human scale elements; an

- Encourage engagement with nature.

The landscape concept masterplan is shown in the figure below.

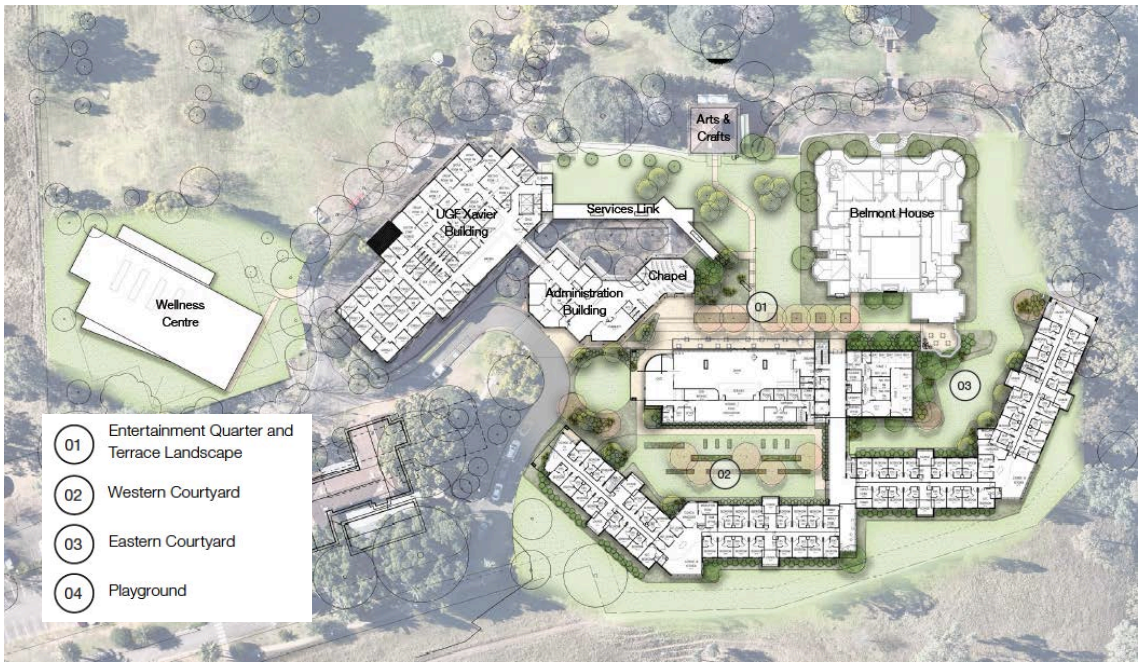


Figure 14. Landscape concept masterplan
Source: Arcadia

As seen in the concept masterplan, the landscaping is divided into four distinct zones including 1) the Entertainment Quarter and Terrace Landscape, 2) Western Courtyard and 3) Eastern Courtyard. A series of interconnected courtyards provide paths for walking, sitting and dining, and also a green outlook from adjoining rooms.

The plan includes more than 30 new tree plantings to compensate for the proposed removal of 24 trees.

3.10 Operations

The hospital will continue to operate under normal hours throughout development works. Specifically:

- For inpatient operations, the facility will operate 24 hours per day, seven days per week; and
- For outpatient operations, the facility operates 8am to 8pm, seven days per week in accordance with current arrangements.

To allow for ongoing use during construction, uses will be decanted from buildings to be demolished and placed in temporary locations until the works are complete. This is further described in the staging section below.

3.11 Staging

The proponent intends to stage the construction and occupation of the development to allow for continuous operational of the hospital, as outlined in the table below.

Detailed staging plans are provided in the architectural drawings at **Appendix 1**.

It is requested that any conditions of consent be written to enable the refurbishment, demolition, construction and occupation to occur in accordance with the proposed stages.

Table 4.	Proposed Staging
Stage	Details
Stage 1	• Minor refurbishment to Granda Room in Belmont House • Fit-out of basement room in Belmont House to house archives temporarily • Construct vehicle turnaround and main communication room shell at west end of Xavier Building
Stage 2	• Medical centre use to be temporarily relocated to current main admin building • Admin use to be temporarily relocated to current consulting rooms • Chapel use to be temporarily relocated to room in Belmont House • Demolish all structures proposed for demolition except for Food Services Unit, St Pauls Unit and consulting rooms
Stage 3	• Construct all new facilities
Stage 4	• Occupy new facilities
Stage 5	• Refurbish Xavier Centre to accommodate medical centre and CTC • Minor refurbishment to room on east side of Belmont House (change kitchen to public room)
Stage 6	• Refurbish main admin building to accommodate pharmacy and chapel
Stage 7	• Demolish St Pauls Unit, Food Services Unit and consulting rooms
Stage 8	• Refurbish St Paul's Annex building to accommodate offices and arts and crafts

3.12 Utilities

The site is currently serviced by electricity, water, sewer and gas. The existing water, sewer and gas connections will be adequate for servicing the proposal, while the electrical infrastructure will need to be upgraded. Specifically, it is proposed to augment overhead electrical infrastructure on Grose Vale Road and upgrade the existing on-site kiosk substation from 500kVA to 1,00kVA. The existing easements will be utilised and modification to these are not anticipated to be required.

For further detail, refer to the utilities reports at **Appendix 20a** and **Appendix 20b**.

4 Consultation

4.1 Hawkesbury Council

The proponent met with Hawkesbury Council, specifically the General Manager and Director of Planning, on 26 November 2019 to discuss the project. Key items discussed at the meeting are addressed in the table below.

Table 5. Hawkesbury Council Consultation

Council comment	Response
The proposed height breach was discussed, and Council was generally supportive provided that the breach was clearly described and justified in a clause 4.6 variation request.	A clause 4.6 variation request is attached at **Appendix 14**.
Economic development and employment generation should be detailed in EIS.	It is estimated that the proposal will result in 30 additional jobs during the operational phase and 602 jobs during the construction phase.
Belmont House has a Friends of Belmont Group who should be consulted as well as Heritage Committee	Friends of Belmont House have been informed of the proposal. The group will have further chance for comment during the exhibition stage.
Local Aboriginal Groups should be consulted regarding the works	This has been carried out as part of preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR) (**Appendix 5a**).
There should be adequate consultation to the community and Councillors.	Pre-lodgement consultation with some community stakeholders has occurred as detailed in section 4 of the EIS. Further consultation will occur during the exhibition stage.
Some of the works, such as demolition could be done earlier as part of a separate DA.	An early works package was originally considered; however, for clarity and efficiency it was decided that a single SSD application be lodged with DPIE.

4.2 Government Architect NSW

The proponent has conducted pre-lodgement consultation with the Government Architect NSW (GANSW) through the State Design Review Panel (SDRP) process as required by the SEARs. A pre-briefing meeting was held on 15 January 2020, and a formal SDRP meeting was held on 29 January 2020. GANSW provided written comments following the formal meeting. These are addressed in the table below.

Table 6. GANSW Consultation	
SDRP Comment	Response
Design development should include/demonstrate the following: Clear internal and external circulation and wayfinding across different times and for various functions. Demonstrate elimination of 'secret tunnel' access for moving patients	Clear circulation and wayfinding will be provided as requested and will include but not be limited to: • Ambulance movements; • Delivery vehicle movements; • Refuse vehicle movements; • Staff vehicle movements; • Patient and visitor vehicle movements; • Staff pedestrian flows; • Patient pedestrian flows, and • Visitor pedestrian flows. The proposed "tunnel" is required be retained. This has duel purposes; • Its main function is for the movement of deliveries to the main hospital from the loading dock in the lower ground floor of Xavier House to the new hospital buildings without requiring the good, linen and refuse to be moved though public areas. • The hospital noted that there is on average the requirement for ambulance pick-ups about once a month. The tunnel allows for the patient to be escorted to the ambulance in a discreet and safe environment. The hospital has endorsed the proposed tunnel as meeting their clinical requirements as well as meeting the wellbeing and respect of their patients, which is critical to the hospitals model of care.
The contextual relationship of the proposed new buildings with the architectural language of the retained historic buildings.	The design report at **Appendix 2** discusses how the proposed new buildings architectural language responds to Belmont House. In summary, the architectural design: • Draws on the Australian vernacular of the 1800s; • Employs contemporary interpretations of the traditional forms; • Uses simple modern material choices that evoke materials used in the past;

Table 6. GANSW Consultation	
SDRP Comment	Response
	• Sites the new hospital back from Belmont House to allow the original building to take command of the site; • Removes the add-on buildings and extensions that have wrapped around Belmont House over the years to reveal its original architectural form and detail.
An increase in the variety of breakout / social spaces including smaller space opportunities in the proposed wide circulation paths, upstairs downstairs and indoor-outdoor spaces – explore opportunities for and provide a diversity of smaller gathering places throughout the proposed buildings and the site.	It is considered that the current design allows for sufficient variety of breakout/social spaces including: • Flexible seating areas within the two-storey link building; • Smaller lounge areas within the residences giving various degrees of separation or privacy from the wider hospital; • Communal areas to allow the patients and staff to socialise together, including external terrace areas; and • External courtyards between the pavilions.
The character, program and scale of the proposed communal building with its large and currently undefined internal spaces. Demonstrate how small group interaction can be supported within these larger volumes.	The communal garden pavilion building has been designed to allow for both staff and patients to eat together and requires a large space. Further delineation of the space through the use of partition walls, joinery, furniture, etc. can be investigated at the detailed design phase. It is noted that the café within the building will be a smaller space facilitating smaller group interaction.
All rooms should have an outlook, however modest. Landscape solutions should be employed in areas adjacent to courtyards or rooftops.	The design allows all bedrooms to have views. Buildings have been oriented to maximise views predominately toward the Blue Mountains, while bedrooms with a northern aspect look into landscaped courtyards. The layout of the pavilions ensures that there is reduced overlooking, and landscaping has been used as a buffer.
ESD principals must be clearly outlined and indicated on drawings, including water treatment and re-use, passive solar design, natural cross ventilation, daylighting, renewable energy systems, building envelope response to micro climate and thermal comfort.	ESD matters are addressed in section 6.4 and **Appendices 17a** and **17b**.

Table 6. GANSW Consultation	
SDRP Comment	Response
A tree retention and replacement plan to clearly explain the impacts of removing existing trees such as those around Belmont house.	The areas of vegetation removal are identified at Figure 3 of the BDAR at **Appendix 9**.
Established trees should be retained wherever possible and site planning carefully integrated with the existing landscape assets.	The buildings have been positioned to retain established trees where possible. It is noted that the location of the Wellness Centre has been changed from its originally proposed location on the vegetated south-eastern slope to the location of the current tennis courts, which has resulted in significantly less tree removal.
Internal green spaces and planting strategies within the proposed multiliving pavilions should be investigated to strengthen the connection between the upper/lower floor landscapes.	This can be investigated during the detailed design phase.

4.3 Agencies

The table below provides a description of who has been consulted, the issues raised, and how those issues have been addressed in the design resolution the proposal. The associated correspondence is attached at **Appendix 26**.

Table 7. Agency Consultation	
Agency	Outcome
Transport for NSW (TfNSW)	A letter was sent to TfNSW on 10 February 2020 with details of the application and a request for comment. TfNSW responded on 26 February 2020 confirming they had no additional comments beyond their SEARs input.
TfNSW Roads and Martime Services (RMS)	A letter was sent to TfNSW on 10 February 2020 with details of the application and a request for comment. No response has been received to date.
NSW Rural Fire Service (RFS)	A letter was sent to RFS on 10 February 2020 with details of the application and a request for comment. No response has been received to date. Additionally, a pre-DA meeting request was sent to RFS (via the project bushfire consultant) on 15 November 2019 to discuss the project. However, due to operational requirements, the RFS have not been able to hold the meeting.

Table 7. Agency Consultation	
Agency	Outcome
Department of Defence Royal Australian Air Force Base Richmond	An email was sent to RAAF Base Richmond on 13 January 2020 with details of the application and a request for comment, and then a formal letter was then sent on 10 February 2020. On 10 November 2020 the base provided confirmation that the proposed maximum height is acceptable from an aviation perspective. The base requested that details on crane heights be provided once known (a form was provided—included at **Appendix 26**). These details can be required as a condition of consent.

4.4 Community and Neighbour Consultation

SJOG Richmond has a long-standing relationship with the local community and neighbours.

Discussions regarding buildings, siting and timeframes have been undertaken the adjoining neighbours over the past few years to keep them informed of the project and allow for feedback. The discussions have been positive, and no objections have been received.

Discussions on the redevelopment have also been held with management of the Kingsford Smith RSL Retirement Village to the north of the site across Grose Vale Road.

Given the heritage significance of Belmont House, informative meetings have also been held with the "Friends of Belmont House" group.

5 Strategic and Statutory Context

This section of the report addresses the strategic and statutory context of the project. All plans, policies and guidelines identified in the SEARs have been considered.

5.1 Strategic Context

5.1.1 NSW State Priorities

The 12 NSW State Priorities were unveiled in 2015 in order to provide a framework row the economy, deliver infrastructure, protect the vulnerable, and improve health, education and public services across NSW. Through its provision of important mental health services, the proposal supports the priority of "Increasing cultural participation". The other priorities are generally not relevant given the proposal's nature and location.

5.1.2 The Greater Sydney Region Plan

The Greater Sydney Region Plan is the overarching strategic plan for the Sydney metropolitan area. The plan is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

Given the proposal's specialised nature and rural location, the majority of the Plan's objectives are not directly relevant. However, there are a number of general objectives relevant to the proposal including:

- Objective 7: Communities are healthy, resilient and socially connected;
- Objective 13: Environmental heritage is identified, conserved and enhanced; and
- Objective 34: Energy and water flows are captured, used and re-used.

Consistent with these objectives, the proposal supports a healthy and socially connected community through provision of important mental health services; conservation and enhancement of the heritage significance of Belmont House, and incorporation of water sensitive urban design principles into its stormwater management system.

5.1.3 Future Transport 2056

The Future Transport Strategy 2056 is an update of the NSW Long Term Transport Master Plan. It sets the 40-year vision, directions and outcomes framework for transport customer mobility in NSW. The Strategy will be delivered through a suite of accompanying plans, including Services and Infrastructure Plans and issue-based or placed-based Supporting Plans.

Given the proposal's rural location, the infrastructure projects identified in the strategy are generally not relevant to the proposal.

5.1.4 State Infrastructure Strategy 2018-2038

The State Infrastructure Strategy is a 20-year infrastructure investment plan for the NSW Government that places strategic fit and economic merit at the centre of investment decisions. The strategy's strategic objective for health infrastructure is to "Plan and deliver world-class health infrastructure that supports a 21st century health system and improved health outcomes for the people of NSW". The strategy primarily relates to public infrastructure, while the proposal is a private hospital; nonetheless, it is considered that the proposal is consistent with the strategy's objective in that it provides for the upgrading and expansion of a hospital incorporating best-practice approaches to mental healthcare.

The proposal also aligns with the following key guiding principles for health infrastructure identified in the strategy:

- Provide infrastructure that supports the delivery of world-class health care services;
- Develop fit-for-purpose infrastructure that is planned to align with forecast population growth and demographics; and
- Support improved health outcomes for people and the community.
- Deliver services more efficiently to contribute to managing the forecast increases in costs of providing health services through service improvements and ongoing contestability of service provision (where appropriate) for health infrastructure.

5.1.5 Western City District Plan

The Western City District Plan sets out the State government's planning priorities and decisions for Western City District, applying the Regional Plan's strategy on a district scale.

Given the proposal's specialised nature and rural location, the majority of the plan's objectives are not directly relevant to the DA. However, there are a number of general planning priorities relevant to the proposal including:

- Priority W4: Fostering healthy, creative, culturally rich and socially connected communities;
- Priority W12: Protecting and improving the health and enjoyment of the District's waterways; and
- Priority W16: Protecting and enhancing scenic and cultural landscapes.

Consistent with these priorities, the proposal supports a healthy and socially connected community through provision of important mental health services; conserves and enhances the heritage significance of Belmont House; preserves the Aboriginal cultural heritage associated with the site; preserves the rural character of the site; and incorporates water sensitive urban design principles into its stormwater management system.

5.1.6 Hawkesbury Development Control Plan 2002

Clause 11 of the SRDP SEPP states that development control plans do not apply to SSD applications. However, the SEARs for this project requires the application to address the Hawkesbury Development Control Plan 2012 (the DCP) as a relevant policy.

Accordingly, an assessment of the proposal against key relevant controls of the DCP is provided in the table below. Overall, it has been found that the proposal is consistent with the DCP, noting that there are very few controls directly relevant to hospital development in a rural zone.

Table 8. Hawkesbury DCP 2002 Assessment

Section	Objective/Control	Comment
Part C General Guidelines		
(1) Landscaping	A landscape concept plan is required for most developments in the Hawkesbury. The landscape plan is to be prepared by a suitably qualified person, and must incorporate the detail required by the DCP.	**Complies** A detailed landscape plan is attached at **Appendix 3**. Refer to Section 3.9 of this EIS for further discussion of the landscape scheme.
(2) Car parking	2.4 Access Considerations Service vehicle areas should be provided off-street with convenient access. Service areas should operate independently of other areas, and enable vehicles to enter and leave the site in a forward direction.	**Complies** The proposed service area at the rear of Belmont House is conveniently located, able to be operated independently of other areas and allows for vehicles to enter and leave the site in a forward direction.
	2.5 Rules • 1 space per 5 beds • 1 space per 2 employees • Provision for ambulance Applied to the proposal, the DCP rates require provision of 59 car spaces and 1 ambulance space.	**Complies** The proposal results in 129 total spaces (a net loss of 17 spaces compared to the current hospital), easily meeting the minimum requirement. The excess in parking is considered appropriate given the site's rural location, lack of alternative transport options, non-existent cycling and pedestrian infrastructure, and high car usage rates.
(4) Soil Erosion and Sediment Control	4.3 Guidelines for earthworks and erosion control To minimise soil erosion, one or more of the following measures may be	**Complies** A sediment and erosion control plan is attached at **Appendix 22**. The plan

Table 8. Hawkesbury DCP 2002 Assessment		
Section	Objective/Control	Comment
	required during earthworks (see DCP for detailed list).	details the range of measures proposed as part of the construction phase of the development to minimise erosion and sediment runoff.
(5) Bushfire Prone Land	The development must comply with relevant provisions of the following: • Building Code of Australia; and • Planning for Bushfire Protection	**Complies** The bushfire report (**Appendix 7**) and BCA report (**Appendix 18**) confirm the proposal will comply with relevant provisions of the BCA and Planning for Bushfire Protection, provided the recommendations in the report are followed.
(10) Heritage Conservation	Objectives: • To promote and protect the Hawkesbury area's natural and cultural heritage a sa valuable resource that must be conserved for future generations. • To consider the potential heritage significance of all properties identified in the LEP Heritage Map and other applications as a matter to be taken into account in the assessment of DAs affecting those properties. • To integrate conservation and management issues into the planning and development control process. • To ensure that any development with respect to a heritage site is undertaken in a manner that is sympathetic to, and does not detract from, the identified significance of the site. • To encourage innovative approaches to the conservation of Hawkesbury area's and heritage sites and to provide incentives for good management practice.	**Complies** The proposal has been designed to protect and enhance the heritage significance of Belmont House. Heritage impacts are addressed in further detail at section 6.6 and **Appendix 6** of the EIS.

5.1.7 Other Policies

The table below addresses other relevant policies.

Table 9. Response to Other Policies	
Policy	Response
Sydney's Cycling Future 2013	Sydney's Cycling Future presents a new direction for planning, prioritising and providing for cycling infrastructure in Sydney. There are no specific actions relevant to North Richmond contained within Sydney's Cycling Future. Given the hospital's rural nature and lack of connecting cycle infrastructure, cycling infrastructure is not proposed as part of this DA.
Sydney's Walking Future 2013	Sydney's Walking Future provides actions to make walking more convenient, better connected and safer. Again, given the sites relatively rural location, specialised use and no connecting pedestrian network, walking infrastructure is not proposed.
Sydney's Bus Future 2013	Sydney's Bus Future provides a fresh look at the entire us network, aiming to attract more bus customers to Sydney's network. This policy is generally not relevant to the proposal given that most hospital users arrive by car.
Better Placed: An integrated design policy for the built environment of New South Wales	This policy sets out the NSW Government's position on design in the urban environment. It provides clarity on what the NSW Government means by good design and functions to assist in the design and assessment of projects. The policy includes seven applicable objectives: • better fit – contextual, local and of its place • better performance – sustainable, adaptable and durable • better for community – inclusive, connected and diverse • better for people – safe, comfortable and liveable • better working – functional, efficient and fit for purpose • better value – creating and adding value • better look and feel – engaging, inviting and attractive. In accordance with these objectives, the proposal provides sustainable, functional, sensitive to its context and visually distinctive. Notably, the design has been reviewed by the SDRP as discussed at section 4.2.
Healthy Urban Development Checklist	The purpose of the Healthy Urban Development Checklist is to assist health professionals to provide advice on urban development proposals. The redevelopment will provide for a contemporary hospital, providing improved functionality and capability whilst improving efficiency. The proposal is considered consistent with the Checklist as it will provide a new development characterised by well-designed open spaces, quality environment, opportunity for social cohesion, healthy food and improved care facilities.

Table 9. Response to Other Policies	
Policy	Response
Draft Greener Places Policy	The Draft Greener Places Policy aims to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. The Policy is centred around the following four guiding principles: • Principle 1: Integration • Principle 2: Connectivity • Principle 3: Multifunctionality • Principle 4: Participation In accordance with these principles, the proposal successfully integrates building form and green open space; provides for a series of accessible connected open space; features multifunctional green space that simultaneously provides environmental performance and enhances facility amenity; and incorporates the needs of various stakeholders including patients, staff, visitors, parishioners, and local Aboriginal stakeholders.
Crime Prevention Through Environmental Design (CPTED Principles)	The proposal has been designed with regards to CPTED principles, in particular: <u>Natural surveillance:</u> Buildings, windows and entrances are oriented in a manner that will allow surveillance of public spaces. Areas of high activity, such as the communal dining area, are centrally located to maximise surveillance opportunities. Lighting will be provided for night-time illumination of walkways, entrances and exits to promote a safe environment. <u>Access control:</u> The proposal utilises footpaths, pavement and landscaping to clearly guide patients and visitors to the desired areas. Landscaping and lighting are used to prevent or discourage access to unmonitored areas. <u>Territorial reinforcement:</u> The proposal has been designed to reinforce clear ownership of spaces (public vs. private). Specifically, the buildings have been positioned and oriented so that communal/public areas are located in the centre of the site, while private areas (the residences) are located on the edges. This arrangement provides a legible and easily navigable differentiation of spaces. <u>Space/activity management:</u> Space/activity management will be achieved by ensuring premises are well maintained and care for and ensuring rapid repair of vandalism and replacement of lighting. These measures will be implemented by facility management staff.

5.2 Statutory Context

5.2.1 Environmental Planning & Assessment Act 1979

Section 1.3 Objects of Act

The proposed development is consistent with the objects of the EP&A Act in that it:

- Promotes the social welfare of the community;
- Promotes the orderly and economic development of land; and
- Promotes good design and amenity of the built environment.

Section 4.15 Evaluation

The development has been evaluated and assessed against the relevant heads of consideration under this section.

5.2.2 Environmental Planning and Assessment Regulation 2000

This EIS has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation. The table below outlines these requirements and identifies where each requirement has been addressed in this EIS.

Table 10. Schedule 2 of EP&A Regulation 2000

Section	Section of EIS
6. Form of environmental impact statement An environmental impact statement must contain the following information: a) The name, address and professional qualifications of the person by whom the statement is prepared'	Statement of Validity
b) The name and address of the responsible person,	Statement of Validity
c) The address of the land: (i) In respect of which the development application is to be made, or (ii) On which the activity or infrastructure to which the statement relates is to be carried out,	Statement of Validity
d) A description of the development, activity or infrastructure to which the statement relates,	Section 3
e) An assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule,	Section 6 Section 7

Table 10. Schedule 2 of EP&A Regulation 2000	
Section	Section of EIS
f) A declaration by the person whom the statement is prepared to the effect that: (i) The statement has been prepared in accordance with this Schedule, and (ii) The statement contains all information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and (iii) That the information contained in the statement is neither false nor misleading.	Statement of Validity
7. Content of environmental impact statement (1) An environmental impact statement must also include each of the following: a) A summary of the environmental impact statement	Executive Summary
b) a statement of the objectives of the development, activity or infrastructure,	Section □
c) 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,	Section 1.4
d) an analysis of the development, activity or infrastructure, including: i) a full description of the development, activity or infrastructure, and	Section 3
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	Executive summary
iii) the likely impact on the environment of the development, activity or infrastructure, and	Section 6 Section 7
iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and	Section 8
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	Section 5.2.6
e) a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d)(iv),	Executive summary

Table 10. Schedule 2 of EP&A Regulation 2000	
Section	Section of EIS
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 sub clause (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 0

5.2.3 Biodiversity Conservation Act 2017

The purpose of the Biodiversity Conservation Act 2017 (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

Cl. 7.9 of the BC Act requires any application for SSD to include a biodiversity development assessment report (BDAR). Accordingly, a BDAR has been prepared for the project and is attached at **Appendix 9**. The results of the BDAR are discussed at section 6.13 of the EIS.

5.2.4 Hawkesbury Local Environmental Plan 2012

The Hawkesbury LEP 2012 sets out the primary local statutory planning controls for the site. Key relevant provisions are addressed below.

Land use permissibility

The site is zoned RU1 Primary Production.

The development is best characterized as a "hospital", which is defined in the LEP as follows:

> ***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.

In accordance with this definition, the proposed development provides psychiatric care to in-patients and out-patients and contains ancillary facilities including health consulting rooms, accommodation for patients, café, patient transport facilities (ambulance) and chapel.

Hospitals are **permitted with consent** in the RU1 Primary Production zone.

Zone objectives

The objectives of the RU1 zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To encourage agricultural activities that do not rely on highly fertile land.
- To ensure that development occurs in a way that does not have a significant adverse effect on water catchments, including surface and groundwater quality and flows, land surface conditions and important ecosystems such as waterways.
- To promote the conservation and enhancement of local native vegetation including the habitat of threatened species, populations and ecological communities by encouraging development to occur in areas already cleared of vegetation.
- To ensure that development retains or enhances existing landscape values including a distinctive agricultural component.
- To ensure that development does not detract from the existing rural character or create unreasonable demands for the provision or extension of public amenities and services.

The proposal is consistent with the zone objectives in that it does not conflict with primary industry production, does not have an adverse impact on the water catchment and does not detract from the area's the rural landscape character.

Cl. 4.3 Height of buildings

The site is subject to a maximum height of 10m. The proposal's maximum height is 13.4m measured from existing ground level. A clause 4.6 variation request is attached at **Appendix 14**.

Cl. 4.4 Floor space ratio (FSR)

The site is not subject to an FSR control.

Cl. 4.6 Exceptions to development standards

A formal written request prepared in accordance with this clause has been prepared to justify the proposed height variation (**Appendix 14**).

Cl. 5.10 Heritage conservation

The contains a local heritage item:

> ***I412*** *– St John of God Hospital (former "Belmont Park", mansion, garden, building, gatehouse and curtilage).*

Additionally, there is a known place of Aboriginal cultural heritage significance on the site (Battle of Richmond Hill monument).

A heritage impact statement (**Appendix 6**) and Aboriginal cultural heritage assessment report (**Appendix 5a** and **5b**) have been prepared to determine the proposal's impacts on the site's heritage items/places. Refer to section 6.5 and section 6.6 of the EIS for further discussion.

Cl. 6.1 Acid sulfate soils

The site is identified as class 5 acid sulfate soils land and is within 500m of class 1, 3 and 4 land. An acid sulfate soils management plan is not required as the proposal involves only minor excavation (for foundations) which will not lower the water table.

Cl. 6.2 Earthworks

Pursuant to subclause 2(b), the earthworks included in the application do not technically require consent in themselves given they are ancillary to the main development.

Cl. 6.4 Terrestrial biodiversity

The site is identified as containing significant vegetation on the Terrestrial Biodiversity Map, as shown in the map extract below.

Figure 15. Terrestrial Biodiversity Map extract
Source: Hawkesbury LEP 2012

Biodiversity impacts are addressed at section 6.13 and **Appendix 9** of the EIS. In summary it has been found that the proposal will have minor and acceptable impacts.

Cl. 6.7 Essential services

The site is currently serviced by all essential services. The proposal will require upgrades to the electrical infrastructure as detailed in the utilities reports at **Appendix 20a** and **Appendix 20b**.

5.2.5 State Environmental Planning Policies

The key relevant State Environmental Planning Policies (SEPPs) are addressed in the table below.

Table 11. Other SEPPs

SEPP	Comment
State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)	The proposal has a CIV of more than $30 million (being $49,831,000) and is for the purpose of a hospital. Therefore, the proposal is classified as SSD pursuant to cl. 14 of Schedule 2 of the SRD SEPP.
State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)	No clauses of the ISEPP are directly relevant to the proposal. The development is not traffic generating development under Schedule 3 of the ISEPP. While it is a hospital with more than 100 beds, it does not have access to a classified road or a road with access to a classified road.
State Environmental Planning Policy No. 64 – Advertising and Signage	No signage is proposed.
State Environmental Planning Policy No. 55—Remediation of Land (SEPP 55)	A phase 1 contamination report is provided at **Appendix 10**. The report concludes that the risk of contamination is low, that no detailed investigation is required and that the site is suitable for commercial/industrial land use (which is the relevant use for contamination criteria purposes). The consent authority can therefore be satisfied that the site is suitable for the proposed use in accordance with cl. 7 of SEPP 55.
State Environmental Planning Policy No. 44—Koala Habitat Protection	State Environmental Planning Policy (Koala Habitat Protection) 2019 (Koala SEPP) is now the relevant SEPP (commenced on 1 March 2020). Portions of the site are identified on the Koala Development Application Map; however, the main operative provisions of the Koala SEPP apply to the consent functions of councils and are therefore not applicable to this SSD application, which is to be determined by the Minister for Planning. Notwithstanding, it is noted that the survey conducted as part of the BDAR (**Appendix 9**) identified no evidence of koala presence at the site. it is also noted that the Koala Development Application Map excludes the portions of the site already covered by built form, and the proposal is generally confined to these areas.
Draft State Environmental Planning Policy	The Explanation of Intended Effect (EIE) for the draft SEPP was on exhibition from 31 January 2018 until 13 April 2018. The draft SEPP will retain the key operational framework of SEPP 55 and add

Table 11. Other SEPPs	
SEPP	Comment
(Remediation of Land) (Remediation SEPP)	new provisions relating to remediation works. The proposed new conditions are not relevant to the proposal given that no remediation works are proposed.
Draft State Environmental Planning Policy (Environment)	The draft Environment SEPP consolidates and simplifies seven existing SEPPs. The Explanation of Intended Effect (EIE) for the draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. Only one of the seven SEPPs to be consolidated are applicable to the proposal, namely State Environmental Plan No. 20—Hawkesbury-Nepean River (No. 2—1997). Based on the EIE, there are no changes to the provisions of this plan that would significantly affect the proposal.
Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No. 2—1997) (SREP 20)	The proposal is consistent with the policies and recommendations of this SREP in that it: • Will have no adverse impact on total catchment management; • Will have no adverse impact on the environmental quality of any environmentally sensitive area; • Will have no adverse impact the water quality of the river; • Will not adversely affect aquatic ecosystems; • Provides for the protection of the site's Aboriginal place of significance; • Minimises impacts on the site's flora; • Maintains the scenic character of the river; and • Is consistent with the metropolitan vision contained in the Greater Sydney Region Plan. No particular development controls under cl. 11 apply to the proposed development. The development is located outside of the regionally significant Nepean River scenic corridor boundary. Accordingly, the consent authority is not required to take into consideration the development's impact on the scenic character of the area under this SREP.

5.2.6 Other Approvals

No requirements for other approvals have been identified at this stage.

It is noted that the proposal is not required to obtain a bushfire safety authority from NSW RFS given it is SSD.

6 Assessment of Key Issues

6.1 Built Form

Methodology

A design report is attached at **Appendix 2**. The report addresses the height, density, bulk and scale, setbacks and interface of the proposal in relation to the existing development and the surrounding area. Key items from the report are outlined below.

Existing environment

The hospital has developed in piecemeal fashion, resulting in an assortment of dated 1–2-storey buildings cluttered around Belmont House. As shown in

Figure 16, Belmont House is tightly hemmed in on three sides by non-heritage built form, blocking views to and from the heritage item.

Figure 16. Existing built form cluttering Belmont House
Source: Nearmap

Setbacks

As shown in the site plan extract at Figure 17, the new built form has been well set back from Belmont House, creating an apron of space so that the heritage item can be viewed "in the round" as originally intended. The new residential pavilions are set

back at least 14.2m from Belmont House, while the garden pavilion is set back approximately 9.6m.

The new clinical support building is less than 2m from Belmont House, but this only occurs at the building corners. Regardless, this <2m separation is a substantial improvement over the current situation where the food services unit is attached directly to the rear of Belmont House.

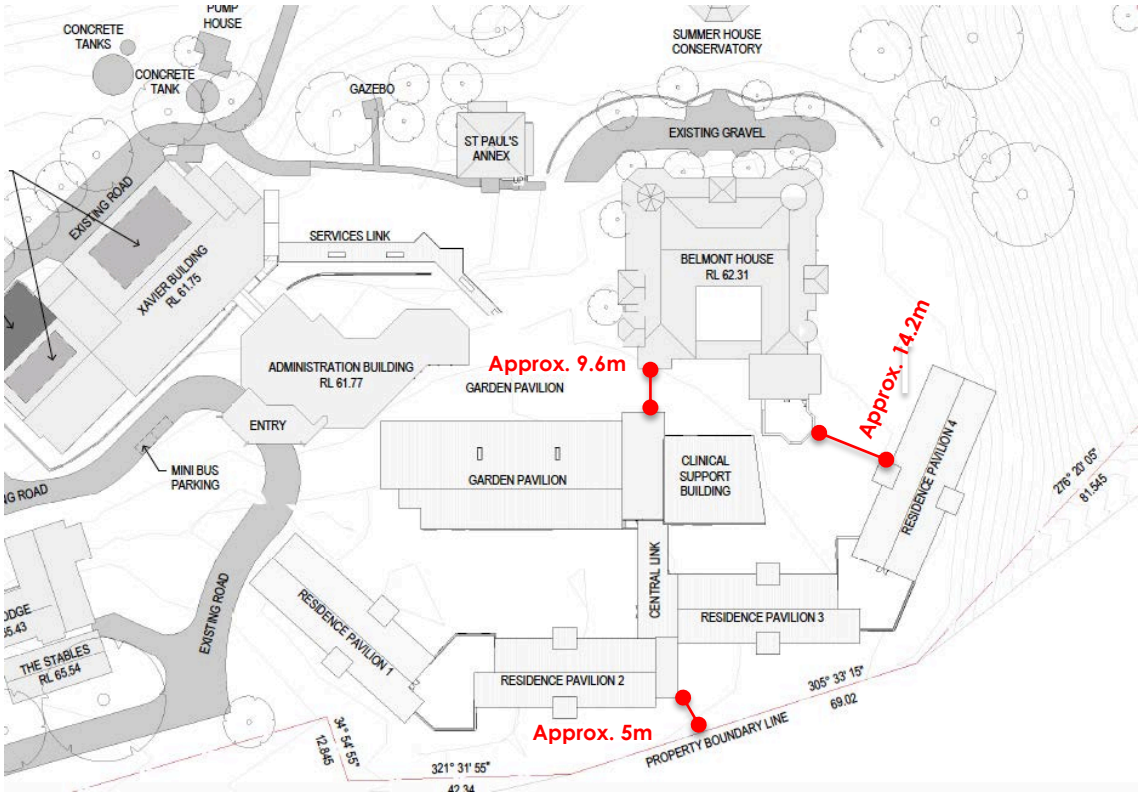


Figure 17. Site plan extract
Source: STH modified by Mecone

In terms of separation from site boundaries, the residential pavilions are set back at least 5m from the west side boundary, with the average setback being greater than 5m. This 5m minimum setback is an improvement upon the 1m minimum setback of the existing St Augustines Building.

Height

The proposal is a maximum of two storeys with a maximum building height of RL 73.77 (or 13.4m measured from existing ground level at the highest point). The maximum height has derived from the decision to provide two full storeys and traditional pitched roof form, while staying below the tower of Belmont House, which peaks at approximately RL 76.23.

The proposed maximum height is slightly above the LEP's 10m maximum. A clause 4.6 variation request has been prepared accordingly and is attached at **Appendix 14**.

Density

There is no FSR or other density control applicable to the site. The proposal's density reflects consumer demand and the site's ability to accommodate additional built form.

The proposal seeks to increase the hospital's bed count by 24 (from 88 to 112) (less than +30%). This is considered a minor to moderate increase that will have no significant impacts from a density perspective. The site is capable of accommodating the density increase from traffic, bushfire and biodiversity perspectives, as demonstrated throughout this EIS.

Bulk and scale

The proposed new buildings have been carefully designed to minimise bulk and scale and remain subordinate to Belmont House. This has been achieved through the use of low, simple pavilion forms, as illustrated in the elevation and section drawings below.

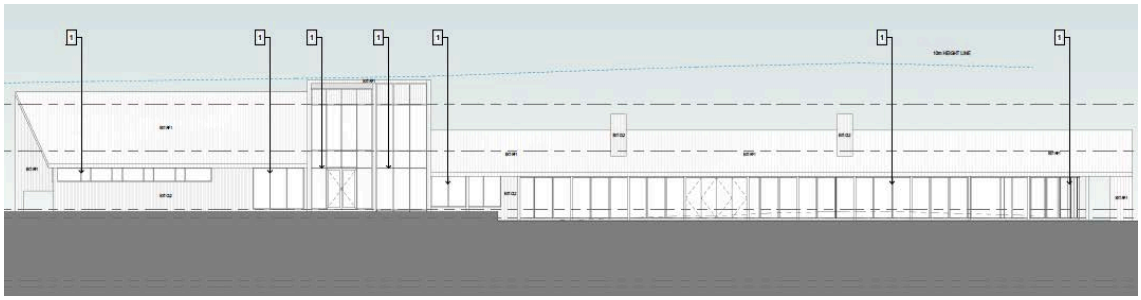


Figure 18. Food services building north elevation
Source: STH

Figure 19. Residential pavilions north elevation
Source: STH

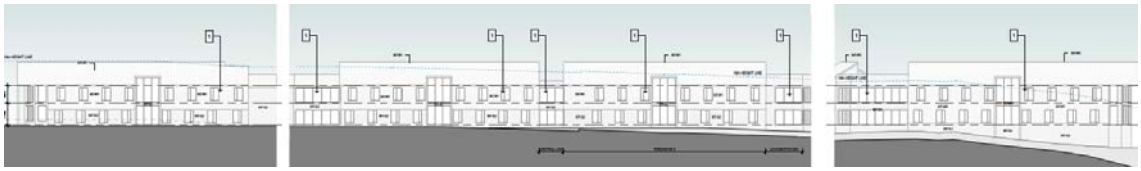


Figure 20. Residential pavilions south elevation
Source: STH

Figure 21. Section – dining area
Source: STH

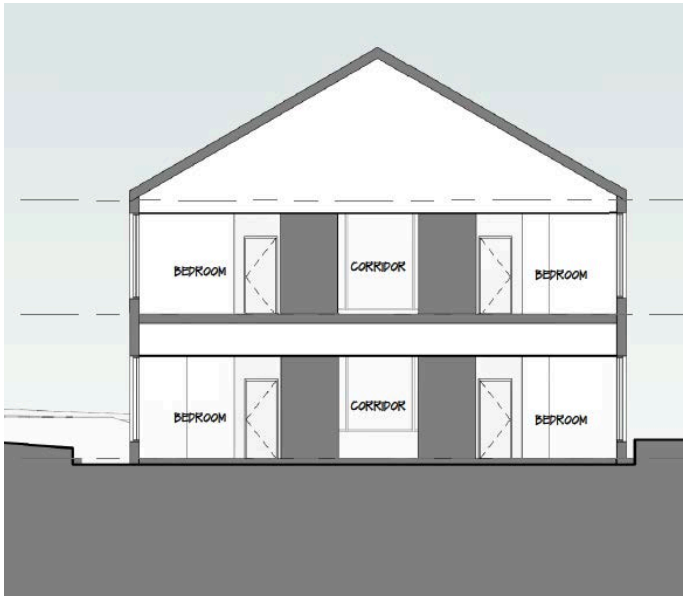


Figure 22. Section – typical residential pavilion
Source: STH

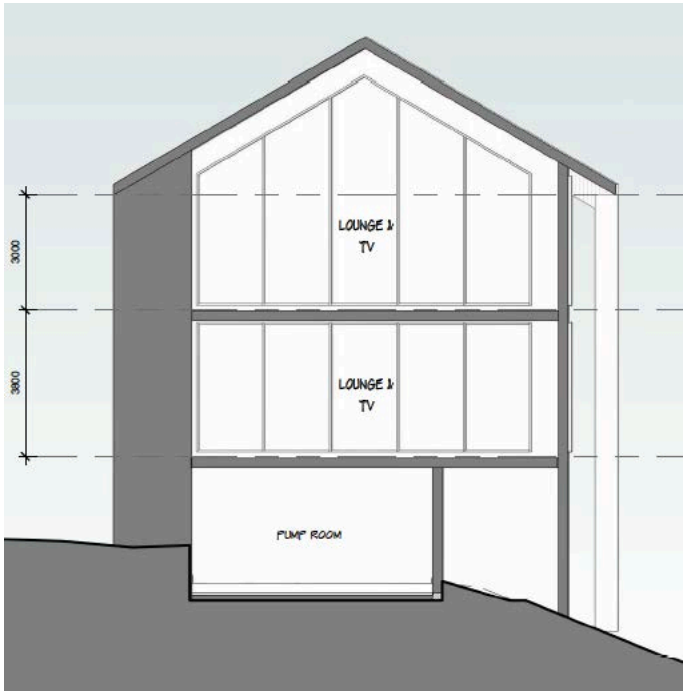


Figure 23. Section – Lounge and TV
Source: STH

Design quality and built form

The proposed built form is high quality and carefully considered. The design was developed in accordance with the following key conceptual ideas:

- The residential pavilions reflect an Australian country vernacular form with traditional forms and pitched gabled roof lines.
- The new buildings form a grouping of pavilions to the rear of Belmont House, which is reminiscent of large country homes where the utility and out-buildings were placed at the rear of the main house.

- Material choice, such as standing seam roofing and wall cladding, are reminiscent of the traditional corrugated barn.
- Alternating cladding in pre-finished fibre cement panels introduce muted earth tones to break up the mass at key points.
- Large glazed elements to public spaces bring the outdoors in the buildings and maximise views and access to the outdoors.
- The garden pavilion has a mono-pitched roof to clearly identify its use as a public space.

The 3D view below demonstrates the low-profile, country vernacular of the new buildings and their subordinate relationship to Belmont House.

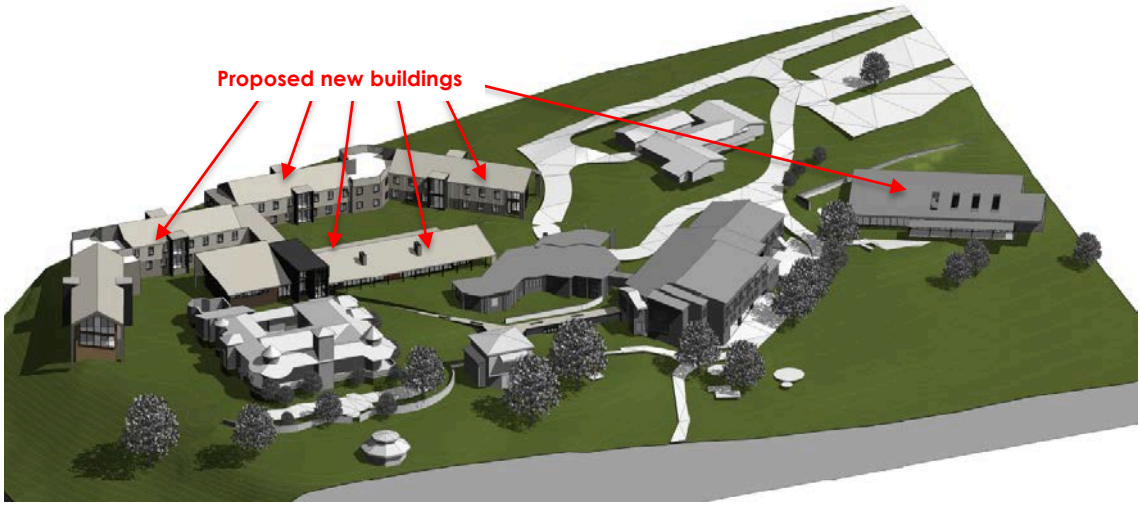


Figure 24. Built form 3D view
Source: STH

Interface with surrounding development, topography and streetscape

The proposal sits in an open rural context, separated from the nearest dwellings by approximately 300m. Accordingly, interface with surrounding development is not a key consideration. Notwithstanding, the proposal has been designed with a rural aesthetic to ensure it does not appear out of context with surrounding development.

The proposal relates appropriately to the topography. The proposed buildings are generally located on the level portion of the site in the location of the existing buildings. The new buildings maintain level access throughout, which is necessary from a clinical operations perspective. This has resulted in the need for some, though not excessive, cut and fill.

The proposed new buildings are located more than 500m from the nearest public road, and therefore streetscape interface is not a relevant consideration.

Services

A loading zone with turning bay has been provided at the west end of the rear of Xavier Building to allow for deliveries and pick-ups. It is noted that waste collection will occur at a separate collection point at the east end of the rear of Xavier Building. Further discussion regarding waste is provided at section 6.16 of the EIS.

Mechanical plant has been considered in the design of the development, with specialist consultants engaged from an early stage in the project. The architectural plans include the locations of lifts, communication rooms, utility rooms and other necessary rooms for services, and sections clearly indicate sufficient space for service bulkheads.

Aboriginal culture and heritage

The site includes a place of Aboriginal significance—the Richmond Hill Memorial Gardens. The proposal has located the new built form away from these gardens so as not to impact on their significance. The proposal has not included any overt Aboriginal cultural references in the design, as this would potentially draw attention away from the existing gardens. Considering the site as a whole, it is considered more appropriate to maintain the existing significant gardens and their curtilage rather than attempt to incorporate new Aboriginal cultural references into the design of the hospital. For further discussion on the significance of the gardens, refer to the Aboriginal Cultural Heritage Assessment Report at **Appendix 5a**.

Access to daylight, ventilation, acoustic separation

Bedrooms and common spaces have been oriented to achieve high levels of natural daylight and glazing to allow visual connection to outdoors. Primary spaces are generally located along the perimeter of buildings, harnessing the maximum amount of natural daylight.

The design features multiple covered outdoor areas with low thermal mass, keeping accessible outdoor air cool. This allows more natural ventilation to be harnessed in mixed mode ventilation. It is noted that individual patient rooms will not have operable windows given the special nature of the use.

The site is located in a rural setting and is not significantly affected by noise intrusion from surrounding uses, traffic or aircraft. Adequate acoustic separate within the new buildings will be achieved via appropriate construction methodologies and materials.

Access to landscape and outdoor spaces

The design includes multiple outdoor spaces that have been designed for the use of patients, staff and visitors, and to compliment the architecture. The spaces aim to provide a calm, reflective setting and celebrate the historical and natural features of the site. A series of interconnected courtyards provide paths for walking, sitting and dining, and also a green outlook for building occupants. Refer to the landscape plans at **Appendix 3** for further detail.

Future flexibility

The proposal has been designed as a purpose-built facility. Notwithstanding, the design allows for future flexibility through the use of generous open common areas, in particular those in the main garden pavilion. These areas will allow for routine informal socialising and also for formal programmed events when required.

Mitigation

No mitigation measures have been identified.

6.2 Environmental Amenity

6.2.1 Visual Privacy

The site is relatively isolated along a ridgeline, with the nearest sensitive uses being a residential dwelling approximately 300m to the southwest and another dwelling approximately 400m to the northeast. Given this significance separation, no visual privacy issues currently exist. The proposal locates the new buildings in the general location of existing buildings, and therefore no privacy impacts are anticipated.

No mitigation measures are necessary.

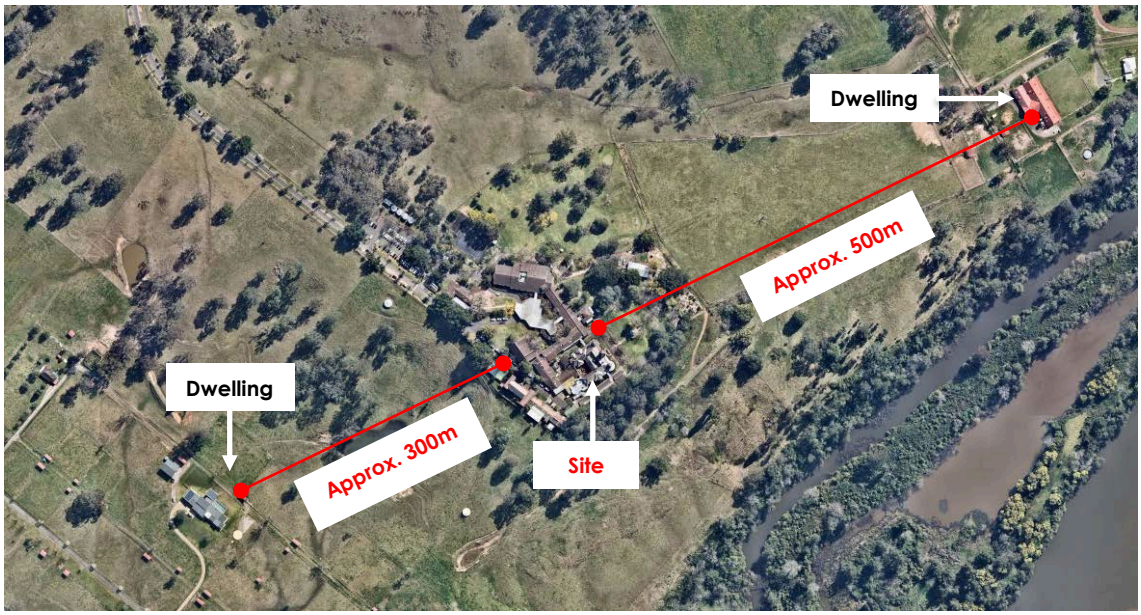


Figure 25. Nearest dwellings digram
Source: Nearmap

6.2.2 View Impacts

Methodology

View analysis has taken the form of a desktop review by the planner. The hospital is not readily visible from the public domain, and the new buildings are low in scale (two storeys) and positioned generally in the location of existing buildings. Specialist analysis is therefore considered unnecessary.

Existing environment

The site is situated in a rural context characterised by extensive grazed land, patches of remnant vegetation and rural buildings including some dwelling houses.

Grose Vale Road runs along a ridgeline, and the subject site extends as a spur from the road, forming a local high point. The land surrounding the hospital buildings falls away steeply to the south, east and west, especially towards the Hawkesbury River to the southeast.

Given its topographical location, the hospital benefits from expansive views to the south, east and west. Correspondingly, the hospital is visible from surrounding land to

the south, east and west. However, the site is not readily visible from surrounding public roads (with Grose Vale Road being the only one in the near vicinity). As shown in Figure 27 and Figure 28 below, the hospital buildings are not visible Grose Vale Road to the north, being largely shielded by vegetation. Also, there are no public parks in the near vicinity.

The hospital can be seen from some portions of Grose Vale Road to the west where is less vegetation buffer, as shown in Figure 30. However, the distance is such that the hospital does not form a major feature of the landscape when viewed from the road.

Figure 26. Viewpoint locations
Source: Nearmap

Figure 27. View 1 – Looking SE towards hospital from Grose Vale Rd entrance
Source: Google

Figure 28. View 2 – Looking SW towards hospital from Grose Vale Rd
Source: Google

Figure 29. View 3 – Looking SE towards hospital from Grose Vale Rd
Source: Google

Figure 30. View 4 – Looking NE towards hospital from Grose Vale Rd
Source: Google

Assessment

The proposal will not significantly change views in the area compared to the existing environment. The new buildings will be positioned in roughly the same location as the buildings to be demolished, and the height of the new buildings, at 1–2 storeys, will not be notably different than the 1–3-storey buildings they are replacing.

The new buildings have been designed with a rural Australian aesthetic including simple forms, pitched roofs and muted tones. The buildings will sit comfortably in the context without drawing undue attention or clashing with existing forms.

Mitigation measures

No mitigation measures have been identified.

6.2.3 Overshadowing

Shadow diagrams have been prepared by the architect to assess the overshadowing impacts of the proposal. Extracts are provided at Figure 31, and the full versions are provided at **Appendix 1**.

As shown in the diagrams below, the proposal will cause minor overshadowing to the adjoining land to the southwest during the morning hours at mid-winter. The shadow will disappear shortly after 12pm. The area of adjoining land overshadowed is undeveloped and contains no sensitive use.

Given the rural context and lack of immediately adjoining sensitive uses, the impact of the overshadowing is negligible.

No mitigation measures have been identified.

(Note: In the shadow diagrams, adjoining land is shown in white, while the site is shown green.)

9am 21 June

12pm 21 June

3pm 21 June

Figure 31. Shadow diagrams
Source: STH

6.2.4 Lighting

An external lighting strategy is attached at **Appendix 24**. The strategy outlines preliminary lighting design parameters with consideration of Australian Standards, Crime Prevention Through Environmental Design (CPTED) principles, minimisation of light spillage to nearby sensitive receivers, emergency efficiency, aesthetic suitability, control systems and maintenance costs.

Surrounding receivers sensitive to light spill include Catalina Stud to the northeast, Darley Farm to the west, Hawkesbury River to the south and Kingsford-Smith Village (retirement community) to the north, as shown in the figure below.

Figure 32. Surrounding receivers sensitive to light spill
Source: Nearmap

The following approaches will be incorporated into the external lighting design to minimise obtrusive lighting:

- Luminaire mounting heights selected to minimise spillage and cater for better lightning control;
- Light fittings will be set back as far as practically possible from the property boundary;
- Light fittings with narrow beam or sharp cut of angles; and
- Light fittings with low vertical aiming angles.

Subject to implementation of the lighting strategy, it is considered that the proposal will have no significant light spillage impacts. The site currently operates as a hospital, and the proposal will not significantly alter the lighting impacts of the existing facility.

6.2.5 Wind

The current facilities are not known to suffer from any notable adverse wind impacts.

Given the low height of the proposal (two storeys max) and lack of known current wind issues, it is considered that the proposal will have no unacceptable wind impacts. Specialist input is considered unnecessary.

No mitigation measures have been identified.

6.3 Transport and Accessibility

Methodology

A traffic impact assessment is attached at **Appendix 15**. The report assesses the potential traffic impacts associated with the proposed increased number of beds and assesses the suitability of hospital', access, internal circulation and servicing arrangements.

The report utilises SIDRA analysis to determine potential traffic impacts. TTPA undertook an on-site survey in September 2019 to determine the existing traffic movements and parking demand at the site.

Existing environment

The site access is provided via a private access road connecting to Grose Vale Road, an unclassified regional road that intersects the Bells Line of Road at North Richmond.

Grose Vale Road functions as collector road, providing access to the local hospital and shopping centre in North Richmond. The road also provides access to rural and residential properties at Kurrajong, Grose Vale and North Richmond.

The surrounding road network and traffic controls are illustrated in Figure 33.

A recent survey of traffic conditions on Grose Vale Road at the hospital entrance was undertaken on Monday, 23 September 2019 during the morning and afternoon peak periods. The results are provided at Appendix B of the traffic report. The operational performance of the intersection was assessed using SIDRA, and the results (provided at Appendix C of the traffic report) indicate satisfactory performance. The results also

indicate that traffic conditions in the local area are also generally satisfactory. In particular, regular lengthy gaps are available in the Grose Vale Road traffic flow.

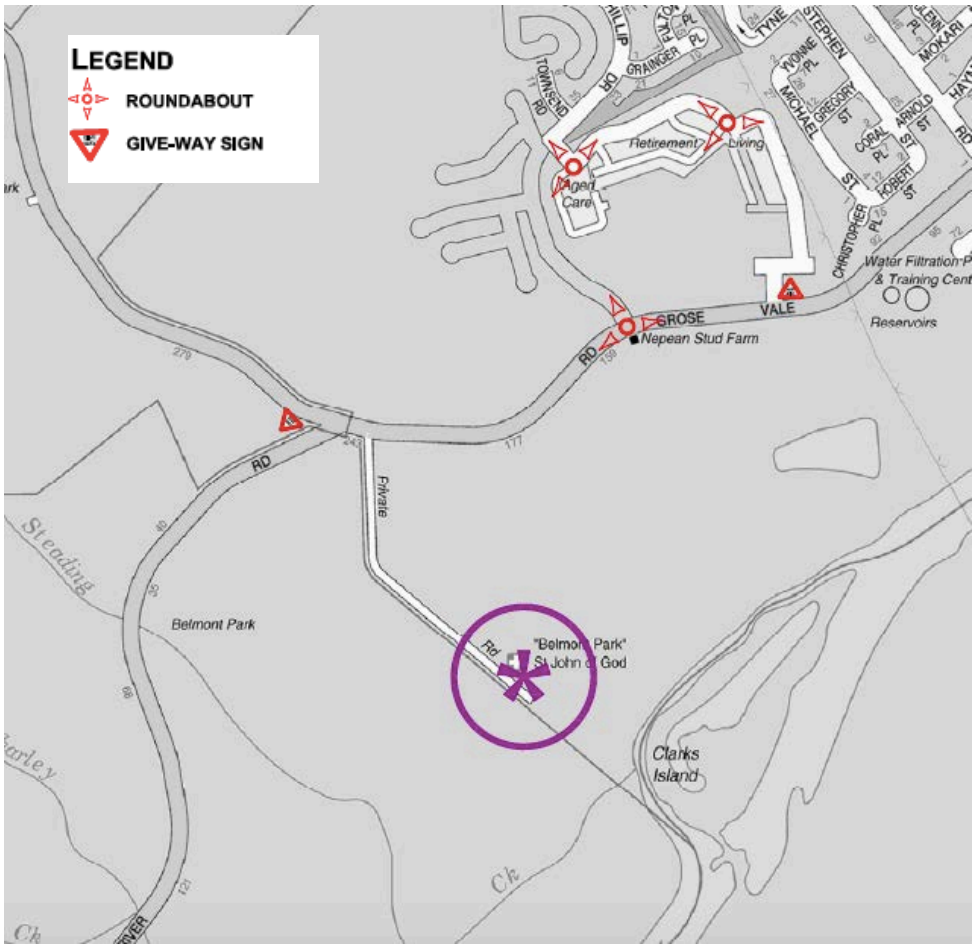


Figure 33. Traffic network and controls
Source: TTPP

The hospital currently provides for 146 on-site car spaces, including at-grade carpark, grassed parking, on-street parking and undercroft parking. The location of the current parking is identified at Figure 34. A recent survey of the occupancy levels of the existing carpark found that at its busiest period there is ample spare capacity, with 18 vacant spaces available.

The site is poorly serviced by public transport given its rural location. As such, hospital patients and staff generally arrive by car. Bus service 680 runs in the vicinity of the site, with a bus stop 560m west of the hospital, providing a half hourly loop service to North Richmond and Richmond Station. Richmond Tran Station, located over 4km from the site, provides direct train services to Blacktown, Parramatta and the City.

Pedestrian and cycle networks along Grose Vale Road are non-existent, with no formalised footpaths or cycle paths provided. Accordingly, no cycling facilities are provided on site.

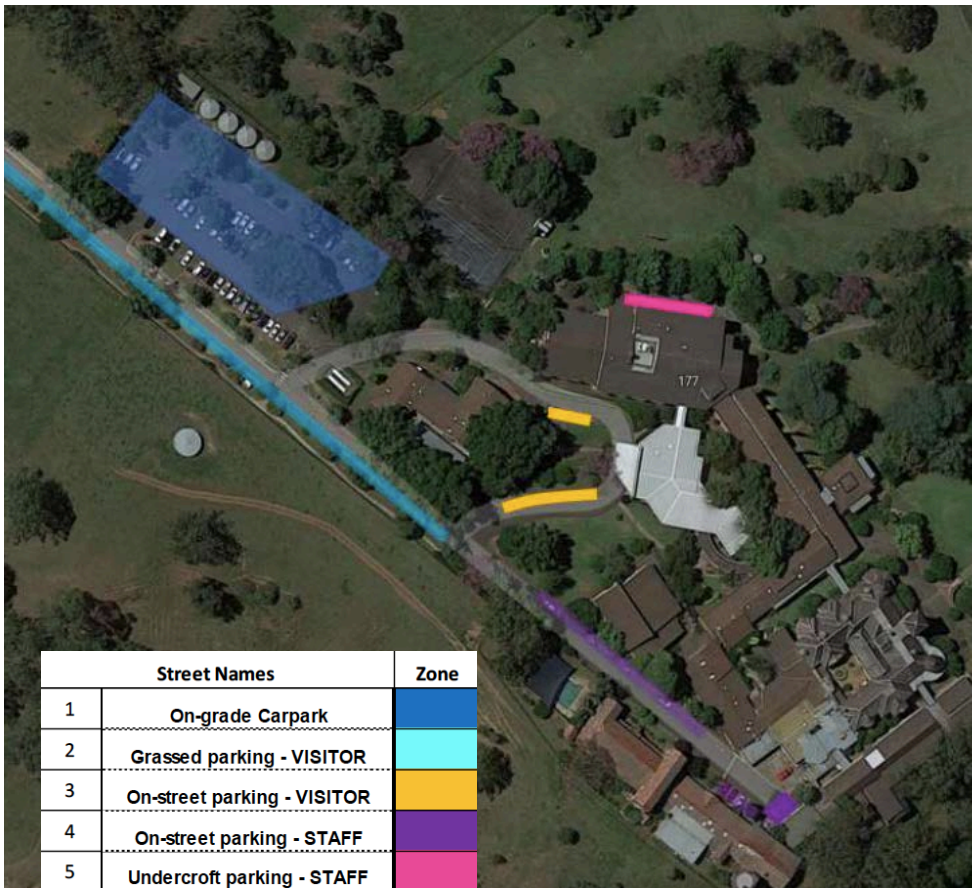


Figure 34. Existing parking diagram
Source: TTPP

Traffic impacts – operation

Based on the rates obtained from the 2019 survey, it is estimated that the proposal will result in a net increase in vehicle trips of 83 and 51 vehicle trips in the weekday AM and PM peak periods, respectively, translating to a total of 266 vehicles per day. This is equivalent to some 1–2 vehicles per minute during peak hours, which is minor in the context of the surrounding road network.

To assess the impact of background traffic growth on the surrounding road network, the increase in traffic due to the surrounding developments in the region is obtained from the North Richmond "Redbank" Transport Management and Accessibility Plan (TMAP) report dated 20 March 2013.

A SIDRA assessment of the site access intersection with the projected additional volumes reveals that satisfactory operations will continue. The additional 1–2 vehicles per hour during the peak hours will not create any unacceptable congestion or conflict at either the hospital entrance or nearby intersections. The detailed results of the SIDRA assessment are provided at Appendix C of the traffic report.

While traffic impacts will be minor, a Green Travel Plan (discussed further below) has been prepared as required by the SEARs to further alleviate vehicle demand. No other mitigation measures to alleviate traffic impacts are considered necessary.

Access

The existing site access off Grose Vale Road will be retained. Crash data for roads around the Hospital has been obtained from TfNSW Centre for Road Safety – Crash and Casualty statistics LGA view. The data relates to the five-year period to December 2018. During this period, no crashes were recorded in the vicinity of the hospital. The data indicates that there are no significant hazards/risks at Grose Vale Road.

While there is no acute safety concern at the site access, it is proposed to provide a convex mirror to the west of the existing driveway to extend sightlines for exiting vehicles to westbound vehicles on Grose Vale Road, as shown in Figure 35.

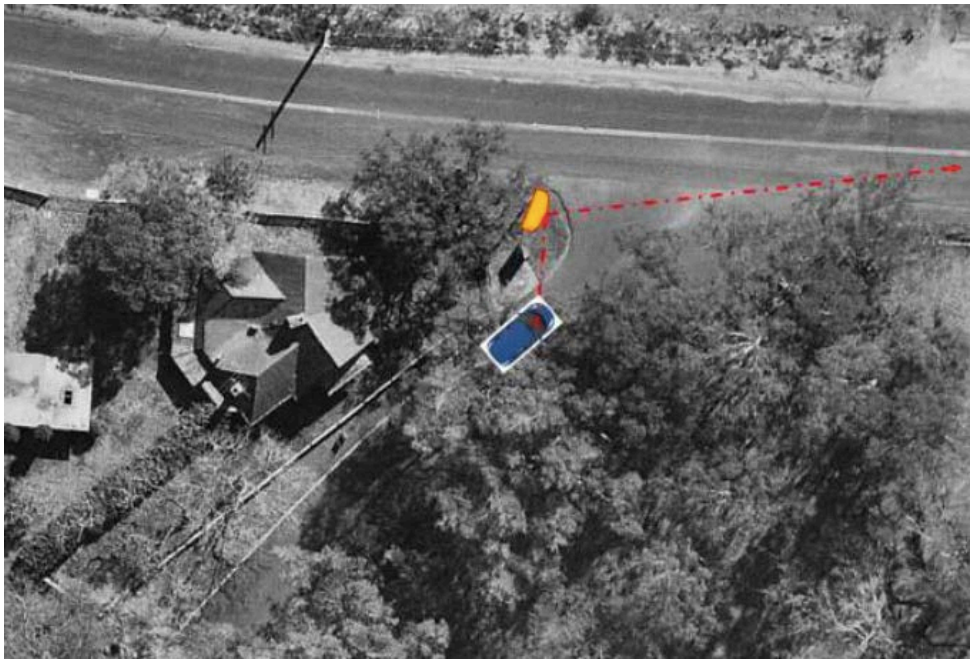


Figure 35. Proposed convex mirror location
Source: TTPP

Traffic impacts – construction

Construction traffic access will occur via the existing service off Grose Vale Road.

It is estimated there will be an average of 6 truck arrivals per day, with a maximum of 12 trucks per day during peak construction (up to 24 truck movements per day).

It is estimated that there will be a maximum of 50 construction workers on site. On-site parking on the existing grassed areas will be available for workers, and a tool-drop off facility will also be provided to encourage car-pooling and public transport use.

A preliminary CTMP has been prepared to outline methods for mitigated construction vehicle impacts (refer to section 8 of the traffic report). The preliminary CTMP comments on construction site access arrangements, truck travel routes and pedestrian and cycling access.

The existing internal road and kerb radii have been designed to accommodate an MRV (8.8m long), and therefore any requirements for access by HRV (12.5 long) during the construction stage will be completed under the management of traffic controllers. Such arrangements will be provided in the future detailed CTMP.

Queuing of construction vehicles will not be permitted on the service road, with call-up procedures to be put into place to manage arrivals.

It is noted that workers typically begin and end their workday outside of network peak periods (i.e., 6.30am to 3.30pm) and as such are unlikely to significantly impact the surrounding road network. Workers will be encouraged to use Peck Road, Hayman Street, Monti Place and Charles Street during the school hours to ensure minimal conflicts with the school related traffic.

Parking

Seventeen (17) of the existing 146 on-site car spaces will be removed to accommodate the proposal, resulting in a total of 129 spaces. The spaces to be removed are located along the portion of the driveway that will be shortened (area shown purple at Figure 34 above). Compliance with relevant minimum parking rates is outlined in the table below.

Table 12. Parking Compliance

Component	DCP Min.	RMS Min.	Proposed
Beds	23 spaces	N/A	129 spaces
Employees	36 spaces	N/A	
Consulting Room	NA	18 spaces	
Ambulances	1 space	N/A	1 space
Total	77 + 1 ambulance space		1 ambulance space

The proposed parking is significantly in excess of the spaces required the Hawkesbury DCP and RMS Guide to Traffic Generating Development. This is due to a variety of reasons, namely lack of high frequency public transport in the near vicinity and non-existing bicycle routes and footpaths along Grose Vale Road.

Mitigation measures

A Green Travel Plan has been prepared to identify measures and initiatives that could be implemented to encourage more sustainable traffic modes. Key travel demand measures in the plan include:

- Extension of on-demand existing shuttle bus services between the hospital and key public transport facilities;
- Lobby TfNSW and bus operators for a bus stop with shelter near the site access;
- Liaise with TfNSW and other stakeholders regarding implementation of Regional On Demand Transport project; and
- Promote car-pooling thorugh the use of priority car parking spaces and other incentives.

The more detailed Green Travel Plan would be prepared following any future approval of the application.

The preliminary CTMP will be refined and implemented in order to minimise potential conflicts between construction vehicles and other vehicles/pedestrians.

A convex mirror will be installed at the intersection of the hospital driveway and Grose Vale Road to improve visibility for vehicles existing the hospital.

6.4 Ecologically Sustainable Development

The proposal includes a range of ecologically sustainable development (ESD) initiatives, including solar panels, rainwater harvesting and the implementation of a green travel plan to discourage car use.

The application is supported by an ESD Report attached at **Appendix 17**. Key issues are addressed below.

Assessment against suitably accredited rating scheme

The project will be designed to a level that will enable the building to be benchmarked against an equivalent 4 Star Green Star building.

Statement regarding responsiveness to CSIRO projected impacts of climate change

- In response to projected rising temperatures, the project design seeks to ensure the passive thermal design elements are fundamentally sound, ensuring average daily temperature and peak extreme temperature days are managed as best as possible.
- In response to potential increase in the frequency and duration of fire-weather climate and drought events, the project is seeking to reduce the amount of potable water use with the development to minimise stress on water supplies. The project will also use a waterless heat rejection system to further reduce consumption.
- In response to potential increases in heavy rainfall events, the project seeks to provide rainwater collection to assist in reducing rainwater runoff. In addition, the project's water sensitive urban design (WSUD) system will be design to cope with extreme rainfall events.

Consideration of Green Star performance

As noted above, the project will be designed to a level that will enable the building to be benchmarked against an equivalent 4 Star Green Star building.

Section J

The proposed development will seek to optimise energy efficiency & thermal performance to comply with Section J 2019 via design external façade design elements which improve the building passive thermal performance (e.g., fixed external shading, insulated façade elements, etc.).

In addition to the above, thermal comfort modelling will be included to demonstrate compliance with the new NCC 2019 code, with a minimum performance of -1.0 < PMV <1.0 in each mechanically conditioned zone. The design of the building fabric

will demonstrate compliance with this clause through dynamic modelling of the building against a reference case.

ESD principles in EP&A Regulation

There are four ecologically sustainable development (ESD) principles defined by cl. 7(4) of Schedule 2 of the EP&A Regulation that must be considered in the assessment of the proposal. These are addressed briefly in the table below.

Table 13. ESD Principles under EP&A Regulation

Principle	Description	Comment
Precautionary principle	The precautionary principle says that 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.	There are no threats of serious or irreversible environmental damage associated with the proposal. The proposal provides for a development that avoids environmental impacts where possible and locates new buildings generally in the location of current buildings.
Intergenerational equity	The principle of intergenerational equity says that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	The proposal seeks to maintain the environmental assets of the site by maintaining existing trees where possible and providing for appropriate management of stormwater. The proposal also seeks to improve the environmental character of the site through new and improved landscaping, and to minimise the consumption of resources where possible.
Conservation of biological diversity and ecological integrity	This principle says that conservation of biological diversity and ecological integrity should be a fundamental concern.	The proposal generally maintains the footprint of the existing facility, thereby conserving the biological and ecological integrity of the land. The proposal will implement appropriate stormwater management systems and have no detrimental impact on surrounding waterways.
Improved valuation, pricing and incentive mechanisms	This principle says that environmental factors should be included in the valuation of assets and services.	This project will integrate several initiatives which aim to minimise pollution and other undesirable environmental outcomes. Contractors will be requested to provide and abide by an Environmental Management Plan and

Table 13. ESD Principles under EP&A Regulation		
Principle	Description	Comment
		Environmental Management System which are in accordance with NSW Environmental Management Systems Guidelines or a similar standard.

6.5 Aboriginal Heritage

Methodology

An Aboriginal Cultural Heritage Assessment Report (ACHAR) is attached at **Appendix 5a**, with the supplementary Archaeological Report (AR) at **Appendix 5b**. The ACHAR has been prepared in accordance the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011).

The ACHAR includes archaeological investigations prepared in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b) (the Code) and the results of consultation with Aboriginal stakeholders undertaken as per the process outlined in the Aboriginal Cultural Heritage Consultation requirements for Proponents 2010 (DECCW 2010a)(consultation requirements).

Existing environment

The site is located on a terrace platform approximately 200m from Hawkesbury River. The proximity to a perennial source of water and location on a terrace platform are positive indicator for Aboriginal artefacts to exist at the site.

A search of the Aboriginal Heritage Information Management System (AHIMS) register identified 40 Aboriginal cultural heritage sites registered within a 5km search area, with none of these sites being located within the site.

However, the site contains a known place of Aboriginal significance—the Richmond Hill Memorial Gardens, which was constructed in 2010 to commemorate the Battle of Richmond Hill, one of the earliest recorded battles between Aboriginal people and European settlers. The Memorial Gardens are located on the eastern edge of the site, well outside of the area of the proposed works.

Archaeological investigations

An archaeological scientific assessment was undertaken and is presented in detail in the AR at **Appendix 5b**. The results of the investigation are illustrated in Figure 36.

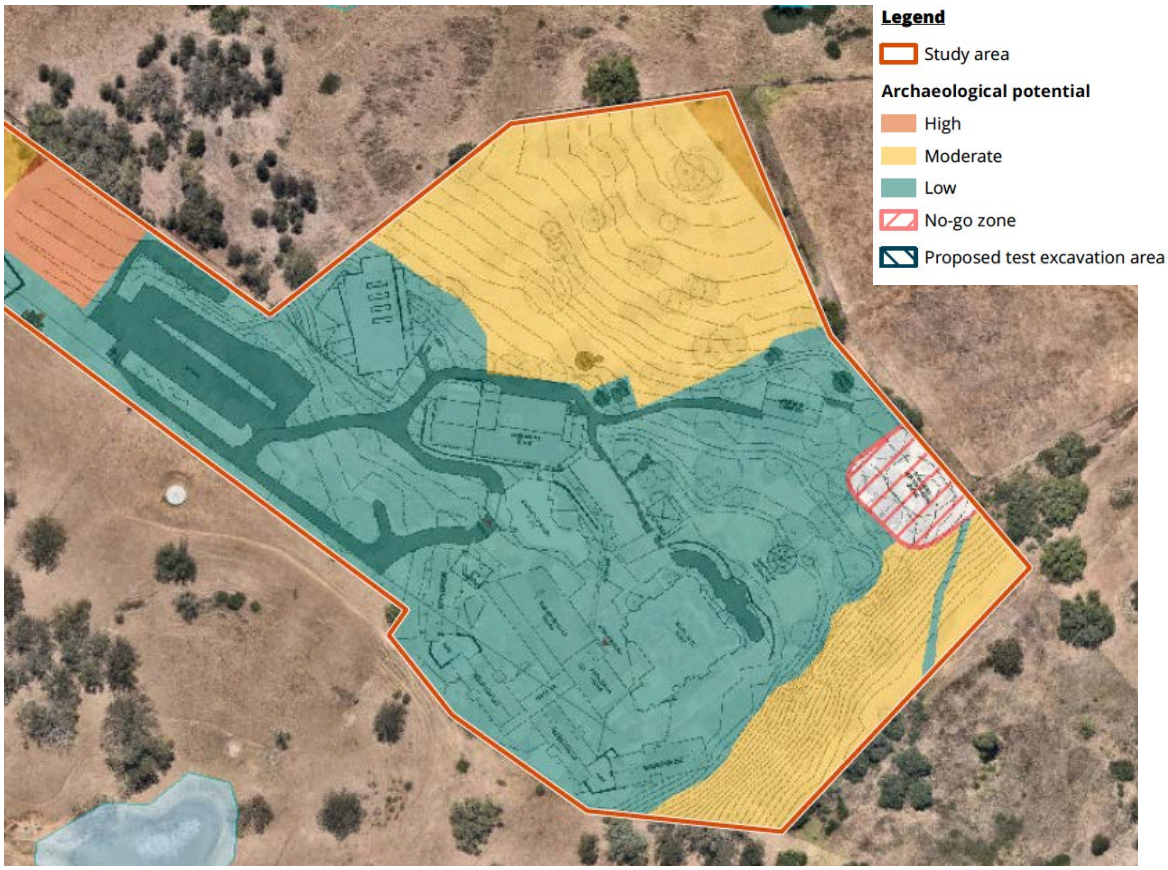


Figure 36. Aboriginal archaeology survey results
Source: Biosis

The proposed works are located wholly within the area identified as having low archaeological potential. The low potential of the area is due to land already being disturbed due to construction of hospital and grounds.

Consultation

Consultation was carried in four stages:

1. Identification of relevant Aboriginal stakeholders: In accordance with consultation guidelines, relevant bodies and known Aboriginal stakeholders were notified of the development, requesting registration of interest in the project. Additionally, a public notice was placed in the *Western Weekender* on 17 January 2020. A total 17 Aboriginal stakeholders registered their interest.
2. Presentation of information about the project: On 3 February 2020, details about the project were provided to the 17 registered Aboriginal parties (RAPs).
3. Gathering information about cultural significance: On 3 February 2020, a project methodology pack was provided to each RAP. Four RAPs responded in support of the methodology. It was clarified during this process that the site does not contain any known burial grounds. No information was gathered during the field survey. However, a meeting on 2 July 2020 with the Aboriginal representative for the Richmond Hill Memorial Gardens provided additional, pertinent information on the significance of the memorial and Battle of Richmond Hill.

4. Review of draft ACHA report: ON 3 August 2020 draft ACHA and AR reports were provided. Three responses were received provided feedback. Two responses stated support for the ACHA. The third RAP questioned if areas of moderate and high archaeological potential should be considered as areas of potential archaeological deposits (PADs). It was clarified to this RAP that it was not possible to confirm if they are PADs without test excavation, and test excavation is not occurring as part of this project given the works are confined to areas of low archaeological potential. No further response from this RAP was received after this clarification.

Statement of significance

The ACHAR includes a statement of significance based on the criteria in the requirements of the Code, the Burra Charter and the Guide to Investigating and Reporting on Aboriginal Heritage. The criteria are addressed below:

- Cultural: Discussions with the local Aboriginal communities reflect that the study area is high in value due to the connection to the Memorial Gardens and its location in proximity to the Hawkesbury River.
- Historical: The site is connected to the Battle of Richmond Hill.
- Scientific. The site possesses some archaeological values, with areas of both moderate and high potential throughout.
- Aesthetic: The site is located on a terrace platform, overlooking the Hawkesbury River, with both Aboriginal and European people selecting to utilise this area due to its outlook and strong associations with healing. The Memorial Gardens and areas of moderate and high archaeological potential have remained largely unaffected by development (excluding the landscaping visible throughout), providing unencumbered views to and from the Hawkesbury River.

Mitigation measures

Biosis has made the following recommendations:

- No further investigations are required for areas assessed as having low archaeological potential.
- Further assessment required in the form of test excavations prior to development within areas of moderate or high archaeological potential.
- The Richmond Hill Memorial Gardens should be listed on the Hawkesbury LEP as a local heritage item.
- As per the consultation requirements, the proponent should continue to inform Aboriginal stakeholders about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project.
- Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations.

6.6 Heritage

Methodology

A heritage impact statement is attached at **Appendix 6**. The report assesses the impacts of the proposal on the heritage significance of Belmont House. The report has been prepared in accordance with NSW Heritage Office's (now Heritage NSW) publications Assessing Heritage Significance (2001 update) and Statements of Heritage Impact (2002 update).

A site visit was carried out in September 2019.

Existing environment

Local heritage item on site

The site is listed as a heritage item of local significance (item no. 1412) by Schedule 5 of Hawkesbury LEP 2012. This schedule identifies the item as follows:

> *St John of God Hospital (former "Belmont Park", mansion, garden, building, gatehouse and curtilage)*

See below Hawkesbury LEP 2012 heritage map extracts.

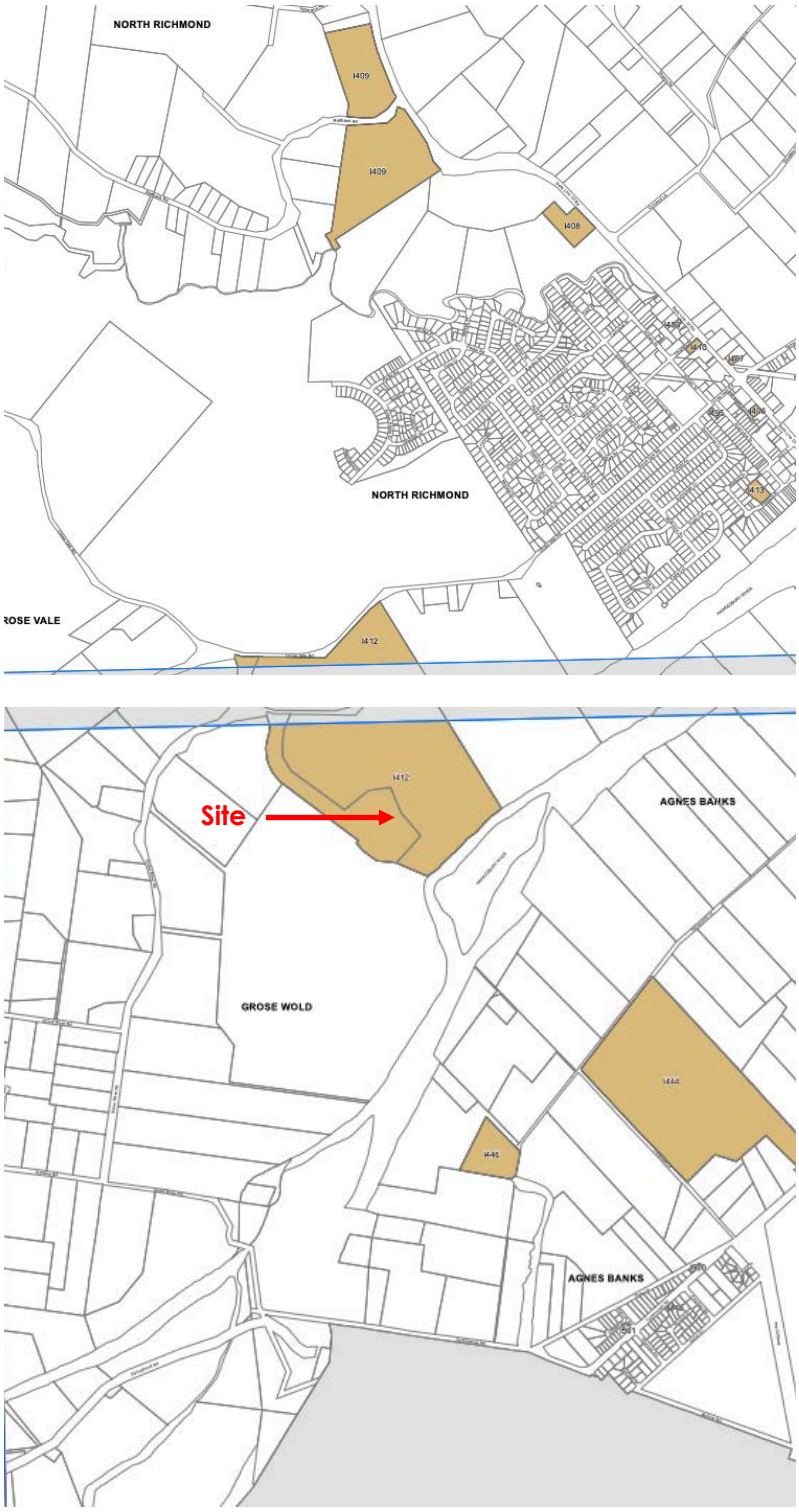


Figure 37. Heritage map extracts
Source: Hawkesbury LEP 2012

Belmont House can continue to be read and understood as a grand Late Victorian period mansion; however, alterations and additions have been carried out since the 1950s to facilitate its use as a mental health care hospital. The mansion was originally located in a carefully landscaped setting and sighted so that it had extensive views over the surrounding landscape extending towards Sydney to the east and the Kurrajong hills and Blue Mountains escarpment to the west. The construction of the later buildings has reduced the east and west views and vista from Belmont House

and views back to Belmont House. The northern views and vistas to and from Belmont House have been maintained.

The site has been used as a mental health facility since the 1950s when it was purchased by the Brothers of the Hospitaller Order of St John of God.

The site is not listed on the Stage Heritage Register under the NSW Heritage Act and not located within a heritage conservation area as defined by Schedule 5 Part 2 of Hawkesbury LEP 2012.

Surrounding heritage items

> There is a heritage item listed on the State Heritage register within the vicinity of the site—01826' (Yobarnie Keyline Farm), No. 108 Grose Vale Road, North Richmond (Item no. 01826 under the NSW Heritage Act 1977). This item is located to the north of the site on the opposite side of Grose Vale Road.

Impact on Belmont House heritage item

The proposed works will have the following effects on the heritage significance of the site:

- The most significant fabric on the site—notably Belmont House, the summer house, associated gardens, terraces, tennis courts, stables, gate house, landscaped grand driveway—is retained.
- The site boundaries are not altered.
- Later and intrusive additions to Belmont House will be removed. Restoration works will follow the removal of the intrusive fabric under the guidance of a heritage consultant.
- The removal of intrusive and later fabric and structures attached to Belmont House will improve and help restore the setting, views and vistas to and from Belmont House.
- The removal of buildings currently surrounding Belmont House will improve the understanding of it as a "villa" in the round, as it was originally intended. The role the removed buildings have played in the use of the site as a health care facility can be interpreted through the retention of other later buildings on the site.
- The removal of architecturally less significant structures on the site will provide space to construct better designed facilities and landscape areas more conducive to administering mental health care.
- The construction of new and modern health care buildings will ensure the ongoing and long-term use of the site.
- The refurbishment of the site as a state-of-the-art mental health facility will ensure the capital growth required for ongoing repair and maintenance for Belmont House and associated heritage fabric.
- The proposed works maintain the long association of The St John of God administration with the site. St John of God have been protective custodians of the site since the 1950s. Their ongoing association with the site ensures the preservation of the heritage significance of the site for future generations.

Impact on nearby State heritage item

The proposal will have no impact on the significance of the State heritage item in the vicinity, No. 108 Grose Vale Road, North Richmond, for the following reasons:

- The proposal will not be visible to or from No. 108 Grose Vale Road.
- No. 108 Grose Vale Road has been substantially altered altered through the development of a new housing estate. This has resulted in the loss of much of its significance as a pastoral estate that pioneered experiments in soil conservation, erosion control and water management.

Mitigation measures

The restoration works to Belmont House (to take place after the attached Food Services Unit is demolished) should be undertaken under the supervision of a heritage consultant. No other mitigation measures have been identified.

6.7 Noise and Vibration

Methodology

An operational acoustic report is attached at **Appendix 13a**, and a construction noise and vibration management plan (CNVMP) is attached at **Appendix 13b**. The reports assess the impacts associated with noise emissions from the site during the operational and construction phases, and provide recommendations for ensuring compliance with relevant criteria.

Attended noise measures of 15-minute duration were conducted on site at the locations shown in Figure 38 to characterise the acoustic environment for noise intrusion into the development and to determine any noise impact on the surrounding receivers. The measurement results were used in conjunction with the unattended measurement data (described below) to calibrate and determine variations in different spots around the site.

Unattended noise measurements of existing ambient noise levels were conducted between 24th Sept 2019 and 3rd Oct 2019. The loggers were set to measure continuous measurements at 15-minute intervals.

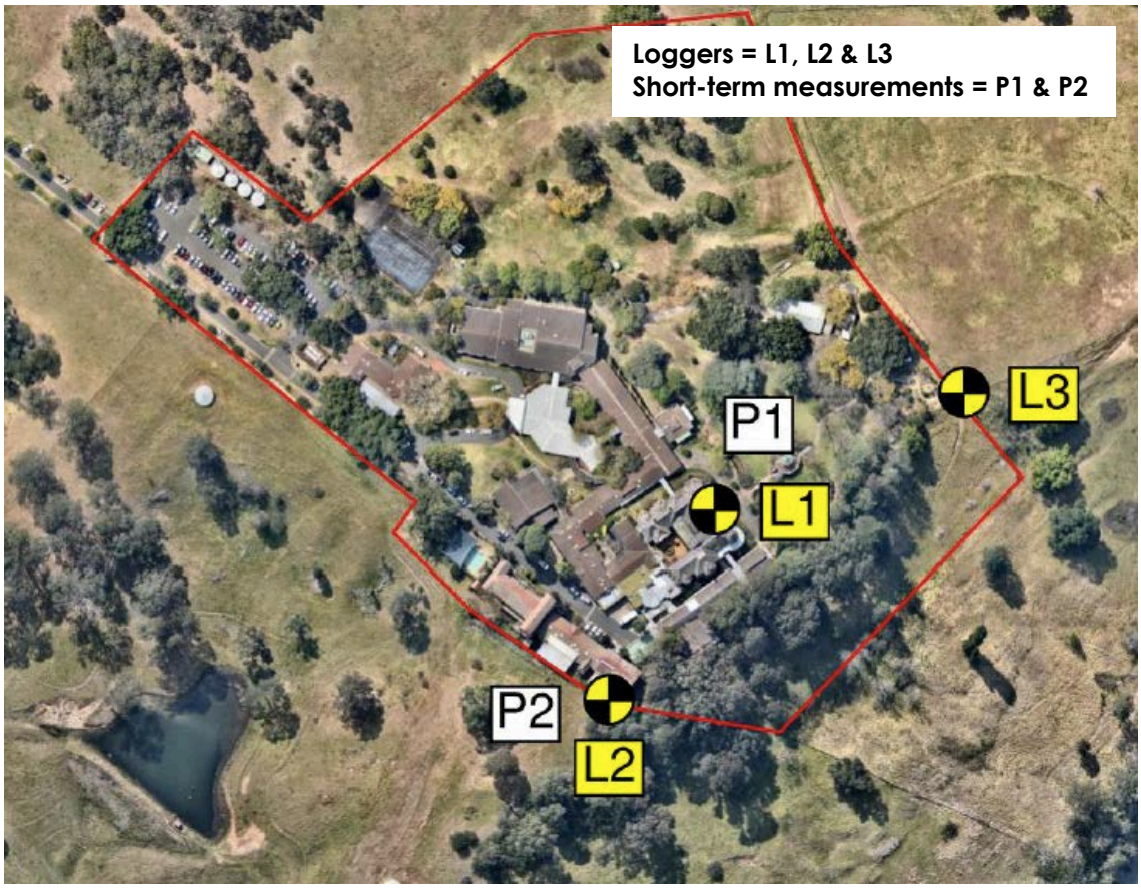


Figure 38. Background noise measurement locations
Source: Stantec

Existing conditions

The site is located in a rural setting generally surrounded by grazing land. As determined by the noise measurements, the existing background noise is typical for a rural area and dominated by natural sounds. The night ambient noise levels are defined by the natural environment and infrequent human activity. During the day, within the hospital grounds, low level mechanical noise from the hospital's services is the dominant source of noise.

The nearest public road is Grose Vale Road, approximately 500m to the north of the main hospital buildings. The nearest residential receivers are the dwellings located on the neighbouring properties to the northeastern and southwestern sides—approximately 400m and 300m, respectively, from the site.

The site is well outside of the 20–25 ANEF contours for RAAF Base Richmond, and therefore aircraft noise from the base is not a notable issue.

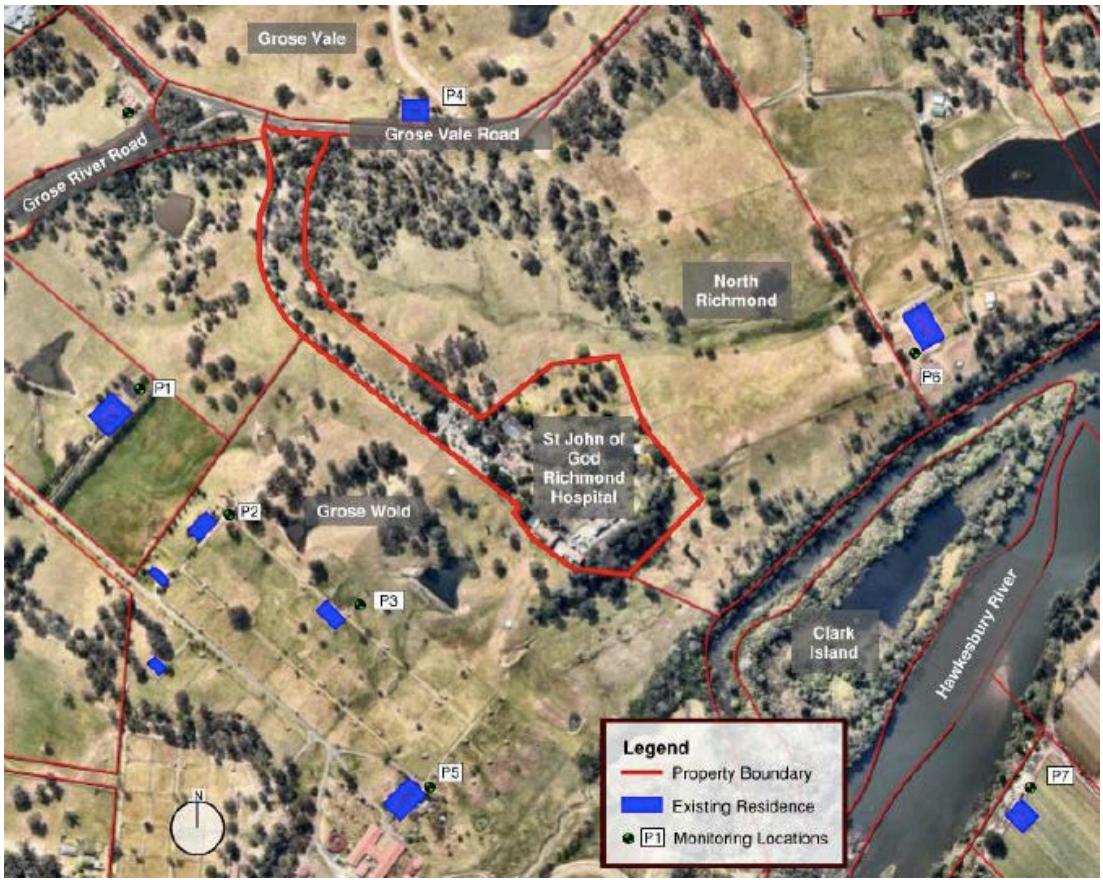


Figure 39. Map showing nearest residences and potential monitoring locations
Source: Stantec

Assessment – operational noise

Operational acoustic and vibration criteria for the project are set out in section 5 of the operational acoustic report. The criteria are based on the requirements of NSW Road Noise Policy (2011), NSW EPA's Noise Policy for Industry and Noise Guide for Local Government, NSW Ministry of Health's Engineering Services Guidelines, and NSW EPA's Assessing Vibration: A Technical Guideline.

In regards to mechanical plant, the proposal will include typical building services plant and equipment. While details on the specific plant are not available at this time, compliance with the relevant noise criteria is expected to be unproblematic. The proposal has made provision for mechanical plant in rooftop recesses, which effectively provide acoustic parapets that will mitigation the prorogation of noise from those plant areas. In areas where plant is located at ground level, acoustic barriers could be implemented should it be deemed necessary. Mitigation measures for the plant can be refined once the plant is selected.

In regards to ambulance operations, Ambulance Services of NSW has advised that sirens are not used within hospital sites, the only exception being a short burst alerting potential motorists of the ambulance's presence when absolutely necessary. Noise levels generated by ambulance activities during operation phase of the project will be similar to the current environment, with residential properties located along the local roads to experience similar noise to what they experience now.

There will be reduction in vehicle parking spots on site following the development, and therefore additional traffic noise impacts on surrounding residents is not expected.

The proposal will result in no helicopter noise impacts as there is no helicopter landing pad or helicopter movements on the site.

Overall, it is anticipated that the proposal will result in operational acoustic impacts similar to the current environment. Noise level predictions indicate that the most stringent noise criterion (night-time criterion) will be met with the implementation of mitigation measures for external mechanical plant, which are yet to be refined.

Assessment – construction noise and vibration

Construction noise and vibration criteria in accordance with the NSW Interim Construction Noise Guideline are set out in section 4 of the CNVMP.

The demolition, excavation and construction phases area expected to last a total of 18 months. The machinery used during these phases are expected to result in sound power levels ranging from 102 dB(A) (small electronic hand tools) up to 113dB(A) (excavator with hydraulic hammer). A full list of expected machinery and sound levels are provided at section 5.2 of the CNVMP.

A noise model was developed using commercial software SoundPLAN v8.1 to assess the noise impact from the various construction stages. The noise model represents the reasonable worst-case scenario, meaning that all equipment of each stage is operating simultaneously during a 15-minute period.

The noise model results show that the predicted noise levels at the surrounding residential receivers meet the relevant noise management level at each construction stage even without mitigation measures.

Nonetheless, it is recommended that mitigation measures be implemented to minimise impacts on uses within the site that will be ongoing while construction is occurring.

In regards to vibration, the nearest sensitive receivers are other buildings on the site. The nearest residences are located well outside the safe working distance for cosmetic damage and human response, being more than 200m from the works. It is recommended that attended vibration monitoring be conducted at the commencement of works to verify safe working distances for buildings within the site. If the vibration levels exceed the relevant criteria, reasonable and feasible mitigation measures and additional vibration monitoring should be implemented.

Mitigation measures

In accordance with the operational acoustic report and CNVMP, the following project-specific mitigation measures are recommended:

- Noise mitigation measures for operational plant should be refined as plant equipment is selected;
- 2.5m-high sound attenuating barriers should be erected between construction areas and buildings in use during all demolition, excavation and construction works;
- At least 1 respite period 12pm–1pm should be provided per day during the most intensive periods of hammering and rock breaking; and

- Frequent and proactive communication with surrounding residents and hospital staff and patients is recommended.

Section 7 of the acoustic report also contains general recommendations and noise minimisation strategies for the construction phases that should be considered.

6.8 Contamination

Methodology

A phase 1 preliminary site investigation (PSI) is attached at **Appendix 10**. The investigation includes a site history review, site inspection, fieldwork investigations and analytical testing results.

Fieldwork investigations comprised a total of 12 boreholes as shown in Figure 40, advanced to a maximum depth of 3m below ground level.

The proposed development is contained within areas of the site with minimal access to soil, and the proposed development is considered to be primarily commercial/industrial with minimal access to soil. Therefore, based on the current and proposed future land use, the investigation has adopted the health investigation levels (HILs), health screening levels (HSLs), ecological investigation levels (EILs) and ecological screening levels (ESLs) for a commercial/industrial land use setting.

Figure 40. Borehole locations
Source: EP Risk

Existing conditions

The site has been operating as a hospital since approximately 1952 and has had significant upgrades since opening, with the majority of construction taking place in the 1970s and 1980s.

Potentially contaminating activities and contaminations of potential concern include:

- Historical use as a hospital;
- Demolition of structures potentially containing asbestos;
- Importation of potentially contaminated fill material; and
- Operation of above ground diesel tank and liquid petroleum gas tanks.

Assessment

Results of the analytical testing indicated that concentrations of contaminants of potential concern were all below the adopted commercial/industrial criteria. A fragment of bonded asbestos was detected in soil in one borehole; however, the concentration of asbestos in soil was below the adopted criteria.

Based on aerial photography and site inspection, the onsite buildings are considered to potentially contain asbestos containing materials that may present a risk to future occupants; however, it is considered this can be managed appropriately during construction/demolition.

Based on the results of the site inspection and analytical testing, the PSI identifies that a detailed site investigation is not required subject to implementation of the recommendations in the report. The PSI also identifies that the site is suitable for commercial/industrial use (which, as noted above, is the relevant use for contamination criteria purposes). As such, the consent authority can be satisfied under cl. 7 of SEPP 55 that the site can be made suitable for the proposed use.

Mitigation measures

The PSI recommends that an unexpected finds protocol should be implemented to manage risks associated with encountering unforeseen contamination.

6.9 Contributions

Hawkesbury Section 94A (now 7.12) Contributions Plan 2015 applies to the land. Pursuant to section 2.7 of the plan, the proposal is exempt from contributions payment given that it is for the purpose of a hospital.

6.10 Drainage

Concept stormwater drainage plans are provided at **Appendix 22**, and stormwater management is also addressed in the civil schematic design report at **Appendix 23**. An extract of the plan is provided below.

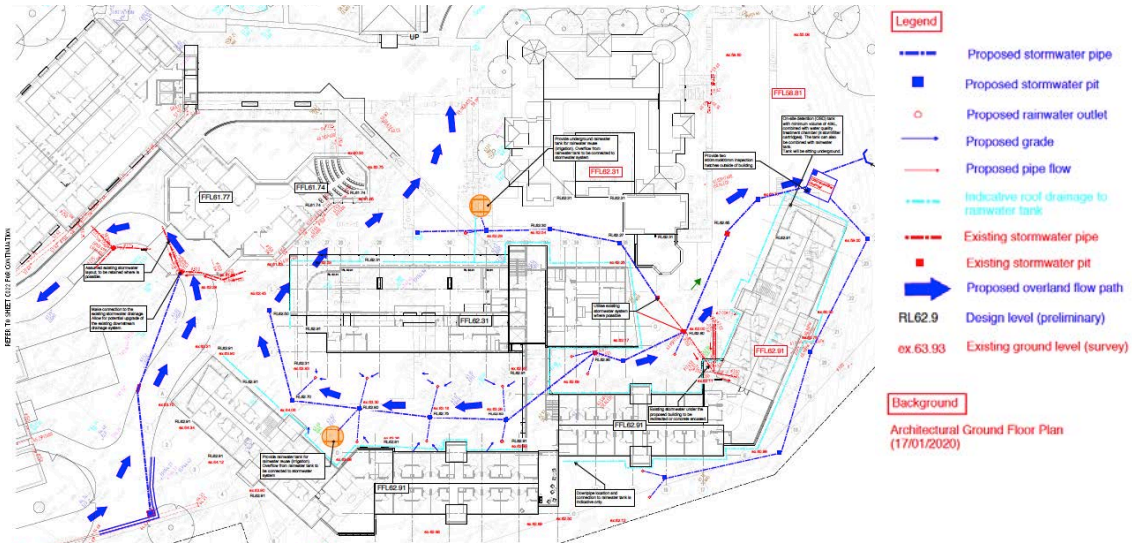


Figure 41. Concept stormwater plan – sheet 1
Source: Bonacci

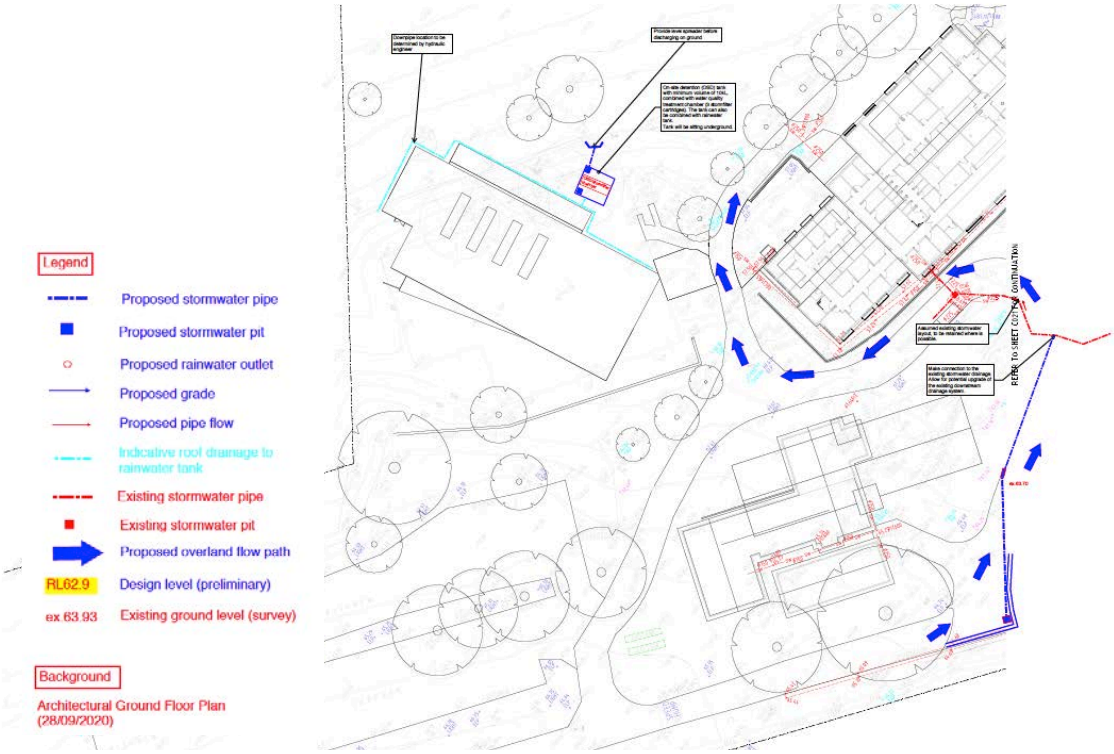


Figure 42. Concept stormwater plan – sheet 2
Source: Bonacci

DRAINS modelling has been utilised to analysis to determine the on-site detention (OSD) volume, and MUSIC modelling has been utilised to determine the proposal's impacts on water quality.

Overland flow

There is an existing overland flow path from Grose Vale Road and along the internal access road kerb and gutter, discharging to the undeveloped bushland to the southeast. This existing overland flow path will be blocked by the proposed buildings.

Accordingly, a new overland flow path will be provided along the existing internal road and towards the northern undeveloped land. Redirection of the overland flow path will be achieved by constructing new kerb and gutter for a portion of the existing access road between residential pavilions 1 and 2 and the Stables.

Stormwater management design

Stormwater management systems will be installed in accordance with Hawkesbury DCP Appendix E – Civil Works Specification. The proposal will install/upgrade the site's internal stormwater drainage system including pits, underground pipes, and kerb and gutter to cater for storm events up to the 5-year ARI. The existing points of discharge for the underground stormwater drainage system will be maintained where possible.

On-site detention (OSD)

An OSD tank will be installed in accordance with Hawkesbury DCP's "Option 1", which involves sizing the OSD to ensure that the post-development peak flow rates for all recurrence intervals up to the 100-year are less than the pre-development peak flow rates. DRAINS modelling indicates that the an OSD with at least 40 cubic metres is required to maintain existing flow rates.

Water quality treatment

The proposed water quality treatment train will include stormfilter cartridges, Enviropods, a grassed buffer and rainwater tank with a volume of 15kL. The MUSIC modelling results indicate that with the proposed water quality control measures implemented, total pollutant rates will be reduced in post-development conditions.

6.11 Flooding

Flooding is addressed in the civil schematic design report at **Appendix 23**. Assessment has taken the form of a desktop review of flood maps. Key points from the report are discussed below.

Based on the information from Hawkesbury City Council's Flood Extent Maps (see Figure 43 and Figure 44), the site is located outside the 100-year Average Recurrence Interval (ARI) and Probable Maximum Flood (PMF) flood extents.

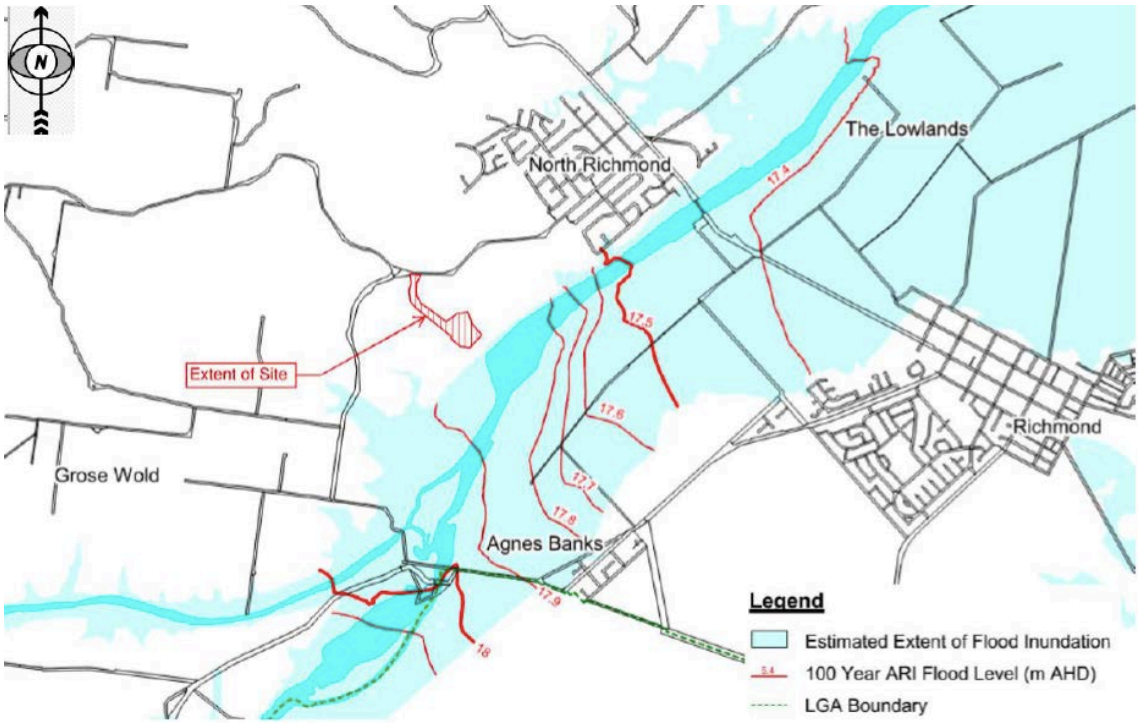


Figure 43. 100 year ARI flood extent
Source: Hawkesbury Floodplain Risk and Management Study and Plan (December 2012)

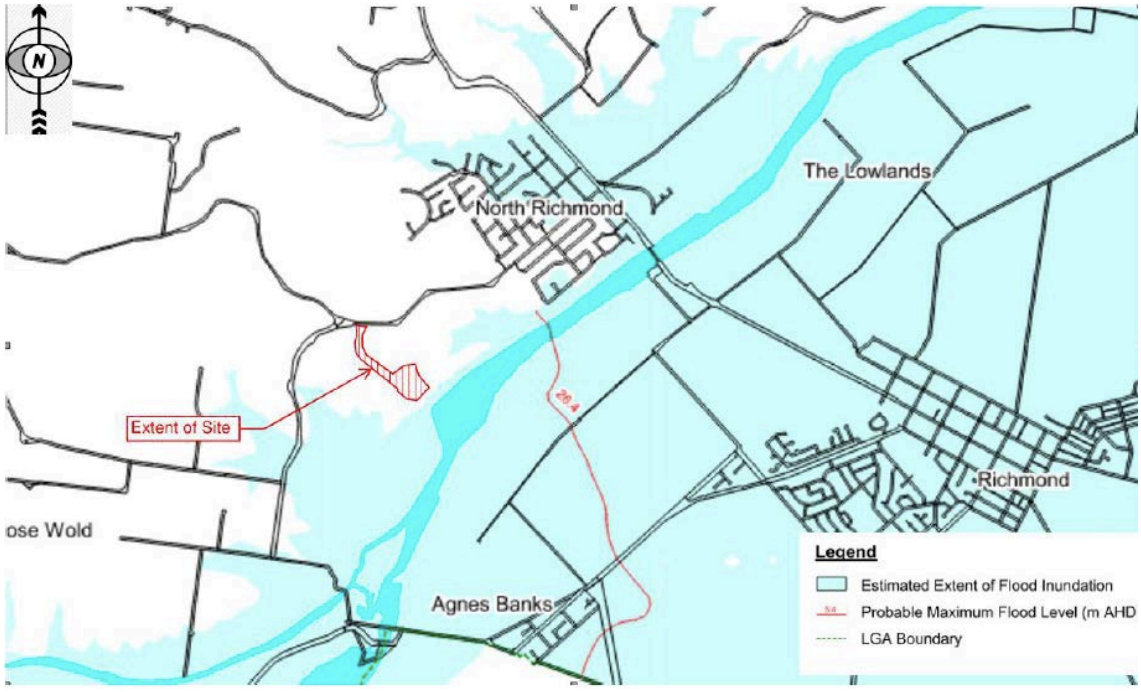


Figure 44. PMF flood extent map
Source: Hawkesbury Floodplain Risk and Management Study and Plan (December 2012)

The site is outside of the 100-year ARI and PMF flood events, and therefore flood risk is considered minimal.

No mitigation measures have been identified.

6.12 Bushfire Hazard

Methodology

A bushfire assessment report is attached at **Appendix 7**. The author of the report is a Fire Protection Association Australia Bushfire Planning and Design Level 3 Certified Practitioner.

The report addresses bushfire hazard and the requirements for special fire protection purpose development as detailed in Planning for Bush Fire Protection 2019 (PBP).

Note: Hospital development is identified as Special Fire Protection Purpose (SFPP) development in section 100B of the Rural Fires Act 1997. They are generally required to obtain a Bush Fire Safety Authority (BFSA) from the RFS and are also "integrated developments" under section 4.45 of the EP&A Act. However, SSD projects are exempt from requiring a BFSA and are not integrated development.

Existing environment

The site is identified as containing bushfire prone land including Category 1 and Category 2 vegetation (see Figure 45).

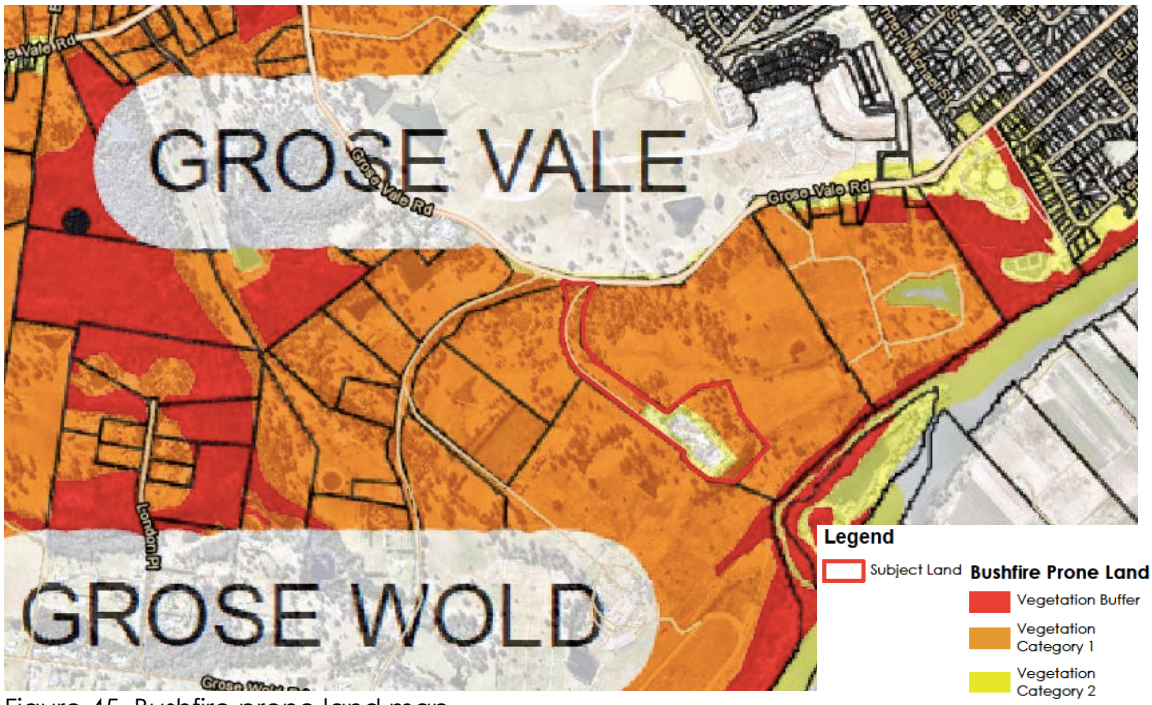


Figure 45. Bushfire prone land map
Source: Hawkesbury LEP 2012

The configuration of the existing development and adjoining grazed land provides a high likelihood that the site will be impacted by bushfire. There is potential for the site to be impacted from three sides with bushfire attack in the form of ember attack, smoke, radiant heat and direct flame contact.

Contiguous areas of forest vegetation do not run into the site. The surrounding land is effectively managed for rural purposes, which breaks up heavier fuels and provides good opportunity for fire services to access fires.

The main access road into the site is the only access point. A second access cannot be provided but is not considered necessary.

Within the hospital, the grounds are well managed and meet the RFS standards for asset protection zones (APZs).

The vegetation affecting the site includes:

- Remnant forest to the south east (0.8ha) and north west (.58ha) of the buildings;
- Small portion of woodland (2.87ha) to the south west of the buildings;
- Surrounding grassland which are grazed and could be considered managed; and
- An area of forest vegetation (6.95ha) is to the north and north west of the site impinging on the access road into the site.

Bushfire Attack Level (BAL)

The bushfire report identifies the BALS applicable to the development. BAL is a measure of severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, and is the basis of establishing requirements for construction of buildings in bushfire prone areas.

The report considers two options for BALs:

- Option 1 (Figure 46): With an easement negotiated with adjoining landowners to the south west and north of the wellness centre to ensure the current practice of grazing, which provided minimal fuel, will be continued. The negotiations for the easements are ongoing.

- Option 2 (Figure 47): Without easement.

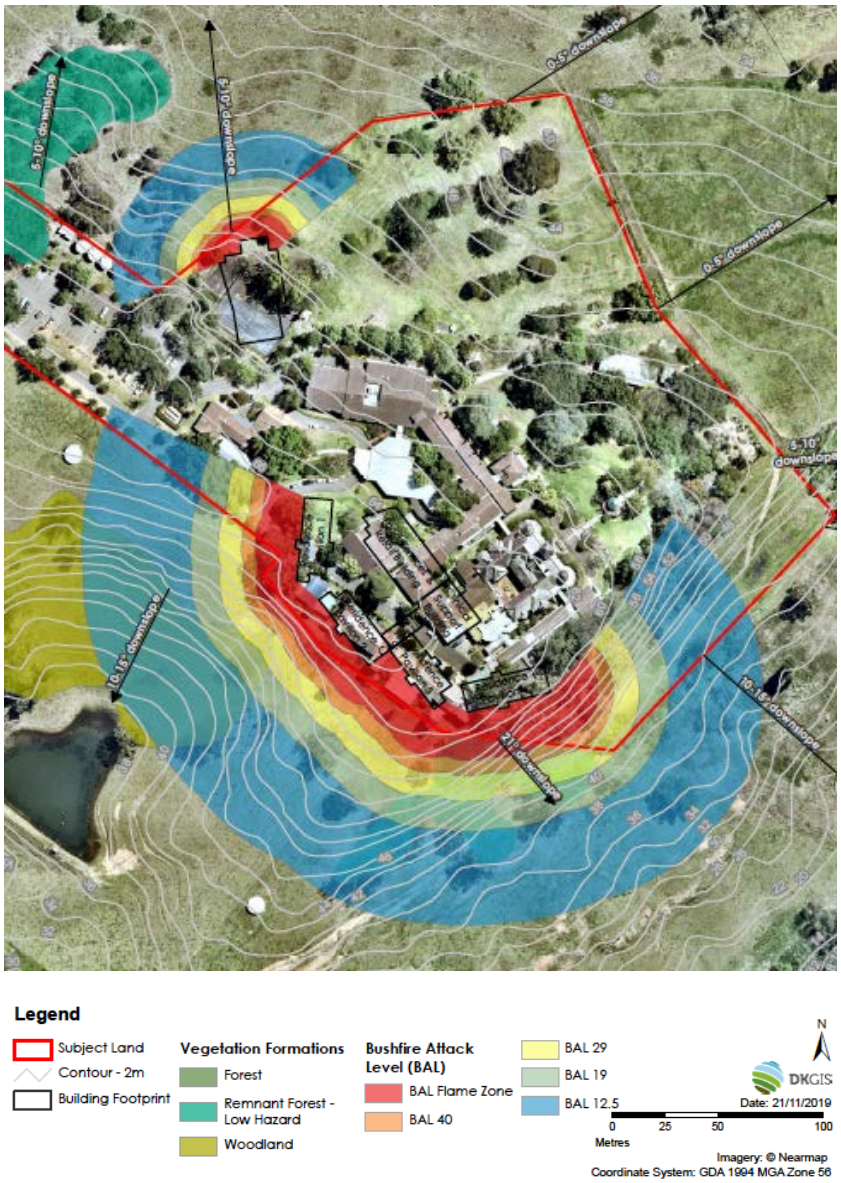


Figure 46. Bushfire attack levels – option 1 (with easement)
Source: Blackash

Figure 47. Bushfire attack levels – option 2 (without easement)
Source: Blackash

Asset protection zone (APZ)

The report recommends that an APZ be established to the property boundaries. The APZ is to be established and managed as an Inner Protection Area (IPA). In practical terms, the IPA is typically the curtilage around a dwelling, consisting of a mown lawn and well-maintained gardens.

Given the existing well-kept nature of the grounds, it is expected that compliance with the APZ recommendation will not be problematic.

Planning for Bushfire Protection (PBP)

The aim and objectives of PBP are addressed in the table below. In summary, the proposal complies with all aims and objectives.

Table 14. Compliance with Aim and Objective of PBP		
Aim	Meets criteria	Comment
The aim of PBP is to use the NSW development assessment system to provide for the protection of human life (including fire fighters) and to minimise impacts on property from the threat of bushfire, while having due regard to development potential, onsite amenity and the protection of the environment.	Yes	Landscaping, defendable space, access and egress, emergency risk management and construction standards are in accordance with the requirements of PBP and the aims of PBP have been achieved. The BAL is shown in Tables 1 and 2 of the bushfire report.
Objectives	Meets criteria	Comment
Afford occupants of any building adequate protection from exposure to a bushfire.	Yes	A bushfire risk assessment has bene completed for the site. The BAL is shown in Table 1 and 2 of the bushfire report. Detailed emergency management arrangements will be put in place to avoid the threat of bushfire to occupants.
Provide for defendable space to be located around buildings.	Yes	Defendable space is provided on all sides of the proposed development.
Provide appropriate separation between a hazard and buildings, which, in combination with other measures, prevent direct flame contact and material ignition.	Yes	An APZ to the site boundaries for the new works commensurate with the BAL has been provided. Separation will be provided in the form of easements, or construction will compy with the AS3959.
Ensure that safe operational access and egress for emergency service personnel and occupants is available.	Yes	The site has direct access to internal and public roads, and access and egress for emergency vehicles and evacuation is adequate.
Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads, in the asset protection zone	Yes	A bushfire management plan will be completed prior to the start of the relevant bushfire danger period.
Ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bushfire fighting).	Yes	Fire services are being updated throughout the site.

Mitigation measures

The proposal is required to respond and implement an appropriate level of bushfire protection measures, as per PBP, to provide a "better bushfire outcome" than currently exists on site. In order to achieve this, the bushfire report includes the following recommendations:

- Buildings are to be constructed in accordance with Australian Standard for the Construction of Buildings in Bushfire Prone Areas. Details are provided in section 18 of the bushfire report. (Note: the construction standards vary according to the BAL utilised.)

- An APZ should be established to the property boundary at the commencement of buildings works. The APZ should be established and maintained in perpetuity as an IPA.

- Any gas services are to be installed and maintained in accordance with the relevant Australian Standards.

- An updated emergency management plan should be concluded which includes trigger points and actions that reflect a range of likely scenarios for the site.

6.13 Biodiversity

Methodology

A Biodiversity Development Assessment Report (BDAR) is attached at **Appendix 9**. The BDAR includes information in the format detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method (BAM). The author of the report is BAM-accredited.

The purpose of the report is to document the finds of an assessment undertaken for the project in accordance with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the BAM.

Key findings from the report are outlined below.

Existing environment

The native vegetation extent within the site occupies an area of approximately 0.22ha or 17% of the total site area. This vegetation comprises planted and remnant native vegetation and is generally concentrated at the southeast end of the site and along the lot's access handle as shown in Figure 48.

The remaining 83% of the site comprises cleared land, including exotic vegetation and buildings. As per section 5.1.1.5 of the BAM, the areas of cleared land do not require further assessment.

The native vegetation on the site has been identified as aligning with three plant community types (PTCs):

- PCT 1081: Red Bloodwood–Grey Gum woodland (0.16ha in area);

- PCT 1395: Narrow-leaved Ironbark–Broad-leaved Iron Bark–Grey Gum open forest (0.07ha in area); and

- PCT 849: Grey Box–Forest Red Gum grassy woodland (1.06ha in area).

PCT 1081 occurs within the site as scattered planted natives over an exotic ground layer. Some of this PCT occurs within the area of the proposed works. This PCT is not associated with any listed threatened ecological community (TEC).

PCT 1395 occurs within the site as remnant vegetation to the southeast of Belmont House on the slope towards Hawkesbury River. This PCT is associated with the Shale Sandstone Transition Forest critically endangered ecological community (CEEC). A very minor portion of the proposed works (i.e., the southern tip of residence pavilion 4) extends into this PCT.

PCT 849 occurs within the site as remanent vegetation, regrowth vegetation and planted natives along the site's access handle. This PCT is associated is associated with Cumberland Plain Woodland CEEC. No works are proposed in the area of this PCT.

Figure 48. Native vegetation within site
Source: Cumberland Ecology

The Southern Myotis (bat) has been assumed as present within the subject land. The vegetation within the site is located within 200m of a waterbody with pools/ stretches 3m or wider including a river and dam. Some hollow-bearing trees have been recorded within the site. As such, the habitat within the subject land is considered to comprise both breeding and foraging habitat.

Direct impacts

The proposal would result in the following direct impacts:

- Loss of 0.12ha of PCT 1081 Red Bloodwood–Grey Gum woodland—fully cleared to allow for new buildings;

- Loss of 0.06ha of PCT 1395 Narrow-leaved Ironbark–Broad-leaved Iron Bark–Grey Gum open forest, including 0.01ha cleared for new buildings and 0.05ha managed as an APZ for bushfire mitigation purposes (largely in its current condition).

Other impacts

The proposal would result in potential indirect impacts including inadvertent impacts on adjacent habitat or vegetation; reduced viability of adjacent habitat due to edge effects; reduced viability of habitat due to noise, dust or light spill; transport of weeds and pathogens from the site to adjacent vegetation; and loss of breeding habitats. Due to the highly modified nature of vegetation both within and adjacent to the site, these potential indirect impacts are not considered to be significant.

The proposal would result in minor prescribed impacts (i.e., impacts unrelated to clearing of vegetation) including removal of human-made structures, removal of non-native vegetation and removal of habitat connectivity. None of these impacts are considered to be significant.

Impacts requiring offset

The loss of PCT 1395 (Narrow-leaved Ironbark–Broad-leaved Iron Bark–Grey Gum open forest) has been identified as requiring an offset of 1 credit.

Serious and irreversible impact assessment

One serious and irreversible impact entity—Shale Sandstone Transition Forest CEEC—will be impacted by the project. Specifically, 0.06ha of this entity will be cleared and/or managed as an APZ as identified above.

A detailed assessment against the principles of cl. 6.7 of the BC Regulation 2017, extracted from the BDAR, is provided in the table below. Overall, the assessment indicates that the project is unlikely to result in a significant and irreversible impact to the CEEC.

Table 15. Serious and Irreversible Impact Assessment

Clause	Response
(a) the action and measures taken to avoid the direct and indirect impact on the potential entity for an SAII	The actions and measures taken to avoid impacts to Shale Sandstone Transition Forest include amendments to the location of building footprints, amending the design of buildings to reduce APZ requirements, removal of managed gardens within the TEC, and wholly containing construction disturbance to within the development footprint or cleared land. Mitigation measures proposed to be undertaken during construction have also been designed to minimise indirect impacts to the retained area of Shale Sandstone Transition Forest within the study area.
(b) the area (ha) and condition of the TEC to be impacted directly and indirectly by the proposed development.	Approximately 0.06 ha of Shale Sandstone Transition Forest will be impacted within the subject land. A further 0.36 ha will remain within the study area, which is located in proximity to the subject land and may be indirectly impacted by the project. Within the subject land, the

Table 15. Serious and Irreversible Impact Assessment	
Clause	Response
The condition of the TEC is to be represented by the vegetation integrity score for each vegetation zone	Shale Sandstone Transition Forest has a current vegetation integrity score of 29.5. As the BAM plot undertaken for Shale Sandstone Transition Forest overlaps between vegetation to be impacted within the subject land and vegetation to be indirectly impacted within the study area, the vegetation integrity score of 29.5 is also considered to be representative of areas that will be indirectly impacted within the study area by the project.
(c) a description of the extent to which the impact exceeds the threshold for the potential entity that is specified in the Guidance to assist a decision-maker to determine a serious and irreversible impact	There is currently no defined threshold for this SAII entity. No thresholds are currently defined for TECs within the Sydney Basin IBRA bioregion, and Cumberland Ecology understands that the EES does not intend to determine any of these thresholds at the current time.
(d) the extent and overall condition of the potential TEC within an area of 1000ha, and then 10,000ha, surrounding the proposed development footprint	Within an area of 1,000ha surrounding the subject land, approximately 117ha of Shale Sandstone Transition Forest is mapped as occurring. This was derived using the broad scale vegetation mapping for the Shale Sandstone Transition Forest mapped by OEH (2013) and the Sydney Metropolitan Area mapped by OEH (2016). The condition of Shale Sandstone Transition Forest within an area of 1,000ha surrounding the subject land is expected to be in a similar condition to that within the subject land and study area, with variation of condition existing within these areas. Within an area of 10,000ha surrounding the subject land, approximately 1,320ha of Shale Sandstone Transition Forest has been mapped. This was derived using the aforementioned mapping clipped to include a 10,000 ha area surrounding the centre of the subject land. The condition of Shale Sandstone Transition Forest within an area of 10,000ha surrounding the subject land is likely to be variable, with occurrence of intact high quality remnants and areas containing degraded remnants with only scattered trees.
(e) an estimate of the extant area and overall condition of the potential TEC remaining in the IBRA subregion before and after the impact of the proposed development has been taken into consideration	Approximately 14,025ha of Shale Sandstone Transition Forest is mapped as occurring within the Cumberland IBRA subregion. This value is derived from mapped areas included within OEH (2013), OEH (2016) and Tozer et al. (2010). The project will result in the removal or modification of approximately 0.06ha of Shale Sandstone Transition Forest within the subject land, which represents 0.0004% of the extent within the Cumberland IBRA subregion. The current extent of Shale Sandstone Transition Forest amounts to 20-40% of the original distribution (NSW Scientific Committee 2014). The condition of Shale Sandstone Transition Forest has been reduced by a number of threats including urban development, inappropriate fire regimes, anthropogenic climate change, removal of wood, physical damage from recreational activities, rubbish dumping, grazing, mowing and weed invasion. The overall condition of

Table 15. Serious and Irreversible Impact Assessment	
Clause	Response
	Shale Sandstone Transition Forest across the Sydney Basin bioregion is unlikely to change as a result of the project, as the condition present within the subject land is highly modified and reflects the dominant condition of the community through its current extent.
(f) an estimate of the area of the potential TEC that is in the reserve system within the IBRA region and the IBRA subregion	A total of approximately 14,025ha of Shale Sandstone Transition Forest occurs within the Cumberland IBRA subregion, of which approximately 364 ha occurs in the reserve system. A total of approximately 21,301ha of Shale Sandstone Transition Forest occurs within the Sydney Basin IBRA bioregion, of which approximately 556ha occurs in the reserve system.
(g) the development, clearing or biodiversity certification proposal's impact on: (i) abiotic factors critical to the long-term survival of the potential TEC; for example, how much the impact will lead to a reduction of groundwater levels or the substantial alteration of surface water patterns	The project will not involve changes to groundwater levels, surface water patterns and soil disturbance that would impact the Shale Sandstone Transition Forest that will be retained within the study area. The project is unlikely to have any impact on abiotic factors critical to the long-term survival of the TEC, both within the study area and adjoining areas.
(ii) characteristic and functionally important species through impacts such as, but not limited to, inappropriate fire/flooding regimes, removal of understorey species or harvesting of plants	The project will result in the removal or modification of 0.06ha of Shale Sandstone Transition Forest, comprising an area of canopy trees above a highly disturbed understorey. Within the subject land, a substantial change will occur to 0.004ha where the composition of the community will be entirely removed. Within the building envelopes, this includes the removal of one Eucalyptus tereticornis (Forest Red Gum) as well as understorey species. A small change will occur within 0.054ha within the APZ, where only canopy trimming is proposed.
(iii) the quality and integrity of an occurrence of the potential TEC through threats and indirect impacts including, but not limited to, assisting invasive flora and fauna species to become established or causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants which may harm or inhibit growth of species in the potential TEC	The Shale Sandstone Transition Forest within the subject land has previously been modified as a result of previous clearing and ongoing. A suite of invasive flora species, including high threat exotics, are known to occur within this community within the subject land, and there is the potential for an increase of such species in areas of retained Shale Sandstone Transition Forest if left unmitigated due to changing land uses and management. The project is considered unlikely to result in the regular mobilisation of fertilisers, herbicides or other chemicals or pollutants which may harm or inhibit growth of species in areas of retained Shale Sandstone Transition Forest. The quality and integrity of the remaining areas of the TEC surrounding the subject land is unlikely to be

Table 15. Serious and Irreversible Impact Assessment	
Clause	Response
	significantly impacted, due to the modified nature of the surrounding vegetation.
(h) direct or indirect fragmentation and isolation of an important area of the potential TEC	Shale Sandstone Transition Forest is considered to be one of the most fragmented vegetation types in the Sydney region, with an estimated 1,115km of interface with cleared or degraded land, and a high proportion of remnants (90%) are mostly very small (>10 ha) (NSW Scientific Committee 2014). The removal or modification of 0.06ha of Shale Sandstone Transition Forest will not significantly increase fragmentation or isolation of an important area of the TEC, as it predominantly requires clearing at the edge of treed habitat, rather than creating fragmented habitat patches. Some fragmentation will occur between isolated planted native trees, including scattered trees in the surrounding landscape. Although the project will increase the amount of overall fragmentation, it will not result in the isolation of important areas of habitat.
(i) the measures proposed to contribute to the recovery of the potential TEC in the IBRA subregion.	Mitigation measures to be implemented for the project will assist in minimising potential impacts to retained Shale Sandstone Transition Forest within the study area. Biodiversity offsets as determined by the BAM are proposed to be purchased within the IBRA subregion or surrounding subregions, in accordance with the offsetting rules under the BAM, that will contribute to the recovery of Shale Sandstone Transition Forest in the surrounding landscape.

Mitigation measures

The BDAR has identified the requirement for 1 ecosystem credit for the loss of PCT 1395.

Additionally, the following general mitigation measures have been developed to mitigate impacts to native vegetation and habitat that are unable to be avoided:

- Weed management: Appropriate weed control activities will be undertaken in accordance with the Greater Sydney Regional Strategic Weed Management Plan 2017 – 2022 (LLS: Greater Sydney2019).
- Delineation of clearing limits: Clearing limits marked either by high visibility tape on trees of metal/wooden pickets, fencing or an equivalent boundary marker. Disturbance, including stockpiling, restricting to clearing limits.
- Tree protection measures: Inductions to communicate tree protection measures and installation of fences around specified tree protection zones. All work is to be carried out by a suitably qualified and insured arborist.
- Pre-clearance survey: Pre-clearance surveys will be conducted in all areas of vegetation that are required to be cleared. Pre-clearing surveys will be

undertaken within one week of clearing. Habitat features will be marked during the pre-clearing survey.

- Staging of clearing: Vegetation clearing will be conducted using a two-stage clearing process. Animals disturbed or dislodged but no injured will be assisted to move to adjacent bushland or other specified locations. If animals are injured, appropriate steps will be taken to humanely treat the animal.

- Sedimentation control: Construction activities will be undertaken in accordance with "The Blue Book" (Landcom 2004). This includes installing sediment control fences, covering soil stockpiles and avoiding soil disturbance prior to heavy rainfall.

6.14 Sediment, Erosion and Dust

A sediment and erosion plan is attached at **Appendix 22**. An extract is provided below.

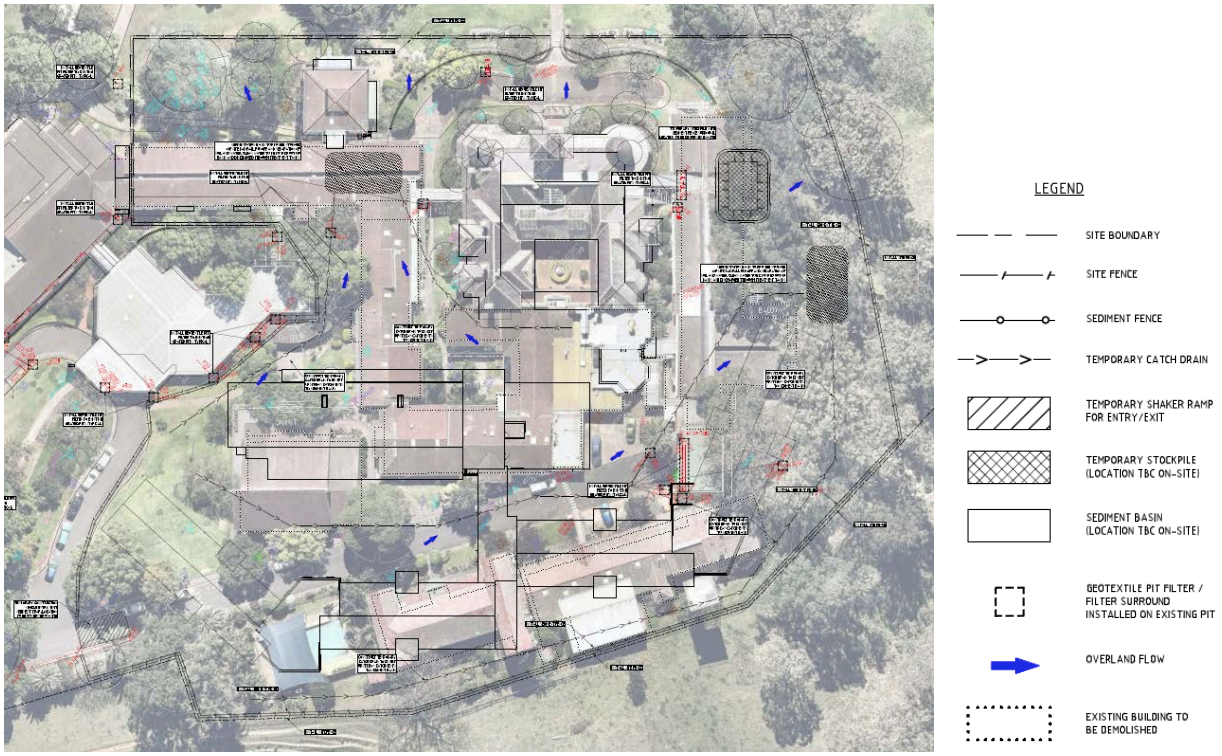


Figure 49. Sediment and erosion control plan
Source: Bonacci

Erosion and sediment control for the site will be implemented during construction. The design of these measures will be in accordance with the Managing Urban Stormwater – Soil & Construction Volume 1 (Landcom, 2004).

6.15 Aviation

The Royal Australian Air Force (RAAF) Base Richmond was consulted prior to lodgement of the application. Specialist aviation advice has not been prepared given the positive response from RAAF and low likelihood of aviation impacts.

The site is located more than 6km west of RAAF Base Richmond, as shown in Figure 50. There are no other airports or flights paths in the near vicinity.

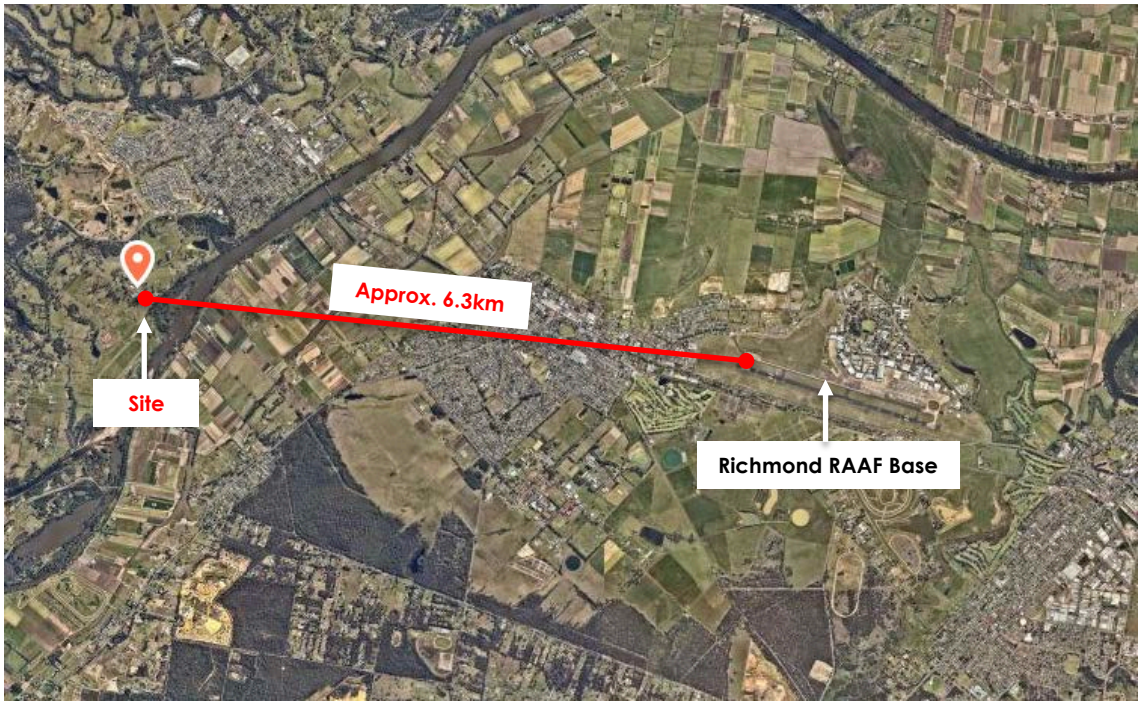


Figure 50. Richmond RAAF base in relation to site
Source: Nearmap

RAAF has confirmed in writing that the proposed maximum height of RL 73.77 is acceptable from an aviation perspective (see correspondence at **Appendix 26**).

RAAF has requested that details on crane heights be provided once the information is available. This can be required as a condition of consent. No other mitigation measures have been identified.

6.16 Waste

Demolition and construction

The expected waste volumes during demolition and construction are identified in the table below.

Table 16. Demolition and Construction Waste Details

Type of Material	Demolition Estimated volume or area	Construction Estimated volume or area
Excavation material	500m3	5,000m3
Green waste	900m2	50m2
Bricks	9,600m2	-
Tiles	8,800m2	-

Table 16. Demolition and Construction Waste Details		
Type of Material	Demolition Estimated volume or area	Construction Estimated volume or area
Concrete	9,500m2	250m2
Timber	9,700m2	300m2
Plasterboard	2,300m2	100m2
Metals	200m2	20m2
Asbestos	900m2	-
Other waste	-	20m2

Operational

An operational waste management plan is attached at **Appendix 16**. The report considers the proposal's waste generation, bin requirements, waste rooms and collection arrangements.

The predicted waste generation of the proposal is outlined in the table below.

Table 17. Operational Waste Details			
Waste type	Waste Generation (L/week)	Required Bins	Collection Frequency
General waste	9,800	9 x 1,100L	1 per week
Paper and cardboard recycling	5,600	6 x 1,100L	1 per week
Co-mingled recycling	1,400	6 x 240L	1 per week
Organics	918.4	8 x 120L	1 per week
Confidential documents	537.6	9 x 240L	1 per month

The waste room is located at the rear of Xavier Building, as shown in Figure 51 below. The room is approximately 60sqm in size, which is sufficient for holding the quantity of bins nominated in the table above.

Waste management will continue as per current operations. Cleaners and staff will be responsible for transporting waste from designated operational locations to the waste room.

The waste collection vehicle will enter the site from Grose Vale Road and park adjacent to the waste room. The bins will be collected directly from the waste room.

Pharmaceutical waste bins and sanitary waste will be collected directly from their operational locations by an appropriate contractor.

It is recommended that the proposal comply with the waste management measures contained in the waste management plan. No other mitigation measures have been identified.

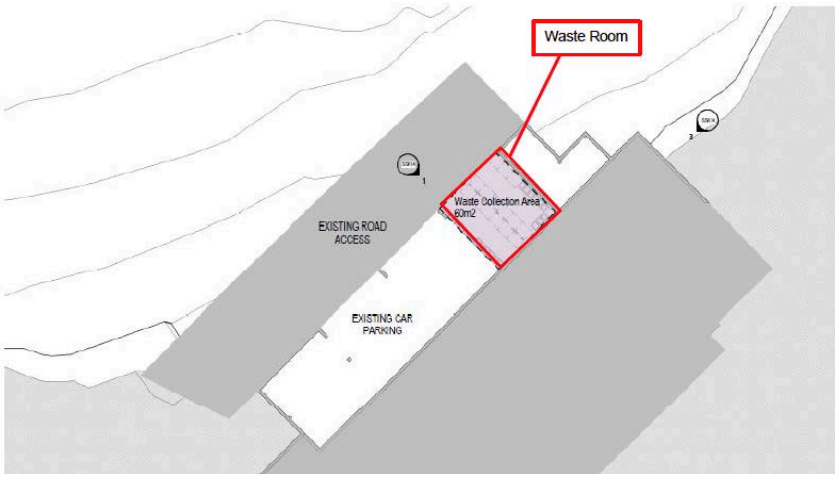


Figure 51. Waste collection area
Source: Elephant's Foot

7 Assessment of Other Issues

7.1 Geotechnical

The geotechnical investigation at **Appendix 12** addresses geotechnical issues. The report provides the results of subsurface investigations (boreholes) to inform the structural design of the proposal. The report does not identify any fundamental issues that would significantly affect construction of the development.

7.2 Salinity

The preliminary site investigation at **Appendix 10** address salinity. The report notes that a search of the National Land and Water Resources Audit indicated that there is a moderate dryland salinity potential across the site. The report does not identify salinity as a cause for concern.

7.3 Acid Sulfate Soils

The preliminary site investigation at **Appendix 10** addresses acid sulfate soils. The report notes that the site is located on class 5 acid sulfate soil land, the CSIRO Atlas of Australian Acid Sulfate Soils identifies the site it be within area of extremely low probability of occurrence (1-5% to low probably of occurrence (6-70%) of acid sulfate soils.

Given the site's soil classification and lack of proposed significant excavation, it is considered that the risk of acid sulfate soils impacting on the proposal is low.

7.4 Accessibility

An access review report is attached at **Appendix 19**. The report assesses the proposal in the context of AS1428 series, Building Code of Australia, DDA Access to Premises Standards and Commonwealth Disability Discrimination Act.

The report concludes that accessibility requirements pertaining to external site linkages, building access, common area access and sanitary facilities can be readily achieved.

8 Risk Assessment and Mitigation Measures

Table 18. Risk Assessment and Mitigation Measures

Item	Potential Impact	Mitigation Measures	Residual Impact
Environmental amenity	Negligible overshadowing of surrounding properties	No mitigation measures identified	Negligible
	Wind conditions at the site may change slightly following the development, but no adverse impacts identified	Nil	Negligible
	Views to and from the site may change slightly, but no adverse impacts have been identified	Nil	Low
	Light spillage visible to surrounding properties	A lighting management strategy will be implemented	Low
Transport and accessibility	Conflict between construction vehicles and other vehicles/pedestrians	A construction traffic management plan will be implemented	Low
	Increased vehicle traffic	A green travel plan will be implemented	Negligible
ESD	Poor, inefficient use of energy and resources	Building will be designed to achieve 4 Star Green Star Section J will be complied with	Low
Heritage	Damage to Belmont House following demolition of buildings attached to the heritage item	Restoration works will be carried out under the guidance of a heritage consultant	Low
Aboriginal heritage	Damage to unexpected archaeological relics	An unexpected finds protocol will be implemented	Low
Noise and vibration	Increased noise during construction	Project-specific and general recommendations in CNVMP will be implemented	Low
	Increased noise to surrounding residences during operations	Acoustic consultant will refine measures once plant and equipment are selected	Low

Table 18. Risk Assessment and Mitigation Measures			
Item	Potential Impact	Mitigation Measures	Residual Impact
Contamination	Potential impacts from unexpected contamination	An unexpected finds protocol will be developed and implemented	Low
Drainage	Negative flow impacts on surrounding property	A stormwater management system including on-site detention will be implemented	Low
	New buildings will block existing overland flow path	Overland flow path will be re-routed	Low
	Reduced quality of water exiting the site	A water treatment train will be implemented to ensure improved quality of water exiting the site	Low
Flooding	No adverse impacts identified	Nil	Nil
Bushfire hazard	Exposure to ember attack, radiant heat and direct flames	The buildings will be constructed with appropriate bushfire rated materials in accordance with the adopted bushfire attack level Site will be managed as an inner protection zone	Low–Moderate
Biodiversity	Minor direct impacts on PCT 1395	1 BAM offset credit is required as identified in BDAR	Low
	General impacts that are unable to be avoided	Implement general construction management measures as detailed in BDAR	Low
Sediment, erosion and dust	Erosion and sediment runoff during construction	Implement measures in the sediment and erosion control plan	Low
	Dust impacts during construction	Dust will be managed by standard methods as part of the future construction	Low

Table 18. Risk Assessment and Mitigation Measures			
Item	Potential Impact	Mitigation Measures	Residual Impact
		management plan to be prepared by the building contractor	
Aviation	No risk of interference with RAAF Richmond Base operations due to building height	Provide crane height details to RAAF Richmond Base once known	Low
Waste	Odour and visual impacts of waste during demolition, construction and operation phases	Follow procedures and recommendations in waste management plan	Low
Geotechnical	Risk that building structure and methodology may not be appropriate for subsurface conditions	Follow recommendations in geotechnical report	Low
Salinity	Low risk of saline soils affecting the proposal	No mitigation measures have been identified given the low risk	Low
Acid sulfate soils	Low risk of acid sulfate soils affecting the proposal	No mitigation measures have been identified	Low

9 Conclusion and Justification

This EIS is submitted to the Minister for Planning to accompany an SSD application for redevelopment of St John of God Hospital Richmond.

In accordance with the requirements of Schedule 2 of the EP&A Regulation, this EIS considers the relevant statutory instruments and strategic documents, built form and social and environmental impacts. Further, this EIS provides an assessment of the environmental risks of the proposed development in accordance with the SEARs issued by DPIE on 15 December 2019.

We recommend approval of this application for the following reasons:

- The proposal will improve and expand the psychiatric care services offered at the hospital;
- The proposal will generate jobs, both short-term and ongoing;
- The proposal's design is the result of detailed analysis of the site and consultation with the community, hospital operator and GANSW;
- The proposal will improve the heritage qualities of Belmont House by removing detracting additions and opening up views to the item;
- The potential environmental impacts of the proposal can be satisfactorily mitigated subject to the recommendations of the technical supporting documentation accompanying this EIS;
- The site is suitable for the proposal; and
- The proposal is in the public interest.

This EIS fulfils the requirements of the EP&A Act and Regulation, addresses all relevant matters prescribed by the SEARs and demonstrates that the potential impacts of the proposal can be satisfactorily managed or mitigated.

In light of the above, we strongly recommend that the proposal be granted consent.

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