

Project Application Environmental Assessment Report

166 - 174 Hawkesbury Road, Westmead

Westmead Millennium Institute and Westmead Research Hub

Submitted to
Department of Planning
On Behalf of Health Infrastructure

September 2010 • 09434

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Signature Date 17/09/10

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Statement of Validity

This Environmental Assessment has been prepared and submitted under Part 3A of the *Environmental Planning and Assessment Act* 1979 (as amended) by:

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In respect of A Project Application

Project Application

Applicant name Health Infrastructure

Applicant address Level 8, 77 Pacific Highway, North Sydney

Land to be developed 166 – 174 Hawkesbury Road, Westmead

Proposed development Medical Research Facility

Environmental Assessment

An Environmental Assessment (EA) is attached

Certificate I certify that I have prepared the content of this Environmental Assessment and to the best of

my knowledge:

 It is in accordance with the Environmental Planning and Assessment Act and Regulation.

 It is true in all material particulars and does not, by its presentation or omission of information,

materially mislead.

Signature

Name Alexis Cella

Date 17 September 2010

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- B QS Report WT Partnership

 Director General's Environmental Assessment Requirements and Authorisation

Department of Planning

D Survey Plans

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E Landscape Plans

Scape

F Tree Report

The Ents Tree Consultancy

G ESD Report and Green Star Strategy

Arup

H Drainage Concept Plan and Soil and Water Management Plans

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I Operating Policies

Capital Insight

J Environmental Site Assessment Report

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Volume 2

K Transport and Access Report

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L Vehicle Access Plans

Arup

M AHIMS Search

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O Pedestrian Wind Environmental Statement

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T Dangerous Goods & Hazardous Substances Review

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Various

Executive Summary

Purpose of this report

This Environmental Assessment Report (EAR) in relation to a medical research facility is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and State Environmental Planning Policy (Major Development) 2005.

The proponent is Health Infrastructure.

Overview of Project

The proposed development involves the construction of a maximum 8 storey medical research facility to accommodate the Westmead Millennium Institute (WMI) and support the achievement of the Westmead Research Hub (WRH).

Approval is sought for:

- Construction of a new 12,921m² medical research building, including ancillary support services;
- Provision of landscaping and construction of associated physical infrastructure; and
- Provision of at-grade parking for 50 car spaces.

The new medical research building will enable existing WMI staff and students spread across the Westmead Hospital to continue to undertake world class research within a consolidated location positioned in close proximity to existing research facilities.

The Site

The subject site is located within the grounds of the Westmead Health Campus (WHC), located at 166 – 174 Hawkesbury Road, Westmead. The WHC comprises the Westmead Hospital, the Children's Hospital Westmead (CHW), and the Children's Medical Research Institute (CMRI). The site is 10,200m² in area, with a 125m primary frontage to Hawkesbury Road.

The land is owned by Health Administration Corporation and Health Commission of NSW. The site is legally described as part Lot 100 and part Lot 101 in DP1119583.

The site is currently occupied by two clusters of single storey brick buildings and at grade car parking for hospital staff.

Planning Context

Section 5.0 of this EAR considers all applicable legislation in detail. The proposal complies with all relevant planning controls.

The site is currently zoned 'Special Uses' under the Parramatta Local Environmental Plan 2001. The proposal is permissible with consent and meets the objectives of the subject zone.

Environmental Impacts

This EAR provides an assessment of the environmental impacts of the project in accordance with the Director-General's Environmental Assessment Requirements and includes a draft Statement of Commitments (see Section 6.0) which sets out the undertakings to manage and minimise potential impacts arising from the development.

Conclusion

The proposal is entirely permissible under the planning controls for the site in the Parramatta Local Environmental Plan 2001.

The Draft Statement of Commitments has been prepared to inform the detailed design of the development and manage construction and on-going environmental impacts. The environmental assessment addresses the Director General's Requirements and demonstrates the impacts of the proposal can be satisfactorily managed and therefore the project should be approved.

In summary, the design and configuration of the proposed WMI building represents a balance between providing a medical research facility that can accommodate existing staff and students, providing a modern and state of the art medical research facility, supporting WMI to continue to be a world leader in medical research, taking advantage of an underutilised site strategically located within a medical research hub, minimising impacts on surrounding residential dwellings, minimising disturbance to the operations of air transport services, and providing a building of a size that ensures the project is commercially viable.

1.0 Introduction

This Project Application and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project Application seeks approval for a medical research facility, at 166 - 174 Hawkesbury Road, Westmead.

The report has been prepared by JBA Urban Planning Consultants Pty Ltd for the proponent, Health Infrastructure, and is based on information provided by Health Infrastructure, design information provided BVN Architecture (**Appendix A**) and the supporting technical documents provided by the expert consultant team (see Table of Contents).

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Requirements (DGRs) under Part 3A of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report.

The report is structured as follows:

Section 1: Introduction, overview of the environmental assessment and approvals process, overview of the project, background, project team, and capital investment value.

Section 2: Site location and context, landownership, existing development, surrounding development, summary of opportunities and constraints.

Section 3: Description of the proposed development.

Section 4: Summary of Director General's Requirements

Section 5: Environmental Assessment of the Project Application.

Section 6: Draft Statement of Commitments.

Section 7: Conclusion

The appendices include a range of technical studies undertaken to inform the Project Application and its environmental assessment. These studies address the DGRs for the environmental assessment. They provide a technical assessment of the environmental impact of the proposed development, and recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

1.1 Overview of Approval Sought

This Project Application seeks approval for:

- Construction of a new 12,921m² medical research building, including ancillary support services;
- Provision of landscaping and construction of associated physical infrastructure; and
- Provision of at-grade parking for 50 car spaces.

1.2 Background

Westmead Millennium Institute

The Westmead Millennium Institute (WMI) is one of the largest and most productive medical research institutes in Australia, conducting world class biomedical, population health and translational research.

Established in 1996, WMI has grown rapidly and is approaching 500 staff and students (400 full-time equivalents). The Institute's research focus spans infectious and immune diseases; cancer and leukaemia; mental illness and liver, kidney, eye, heart and respiratory disease.

WMI is closely affiliated with Westmead Hospital (with researchers currently accommodated within the hospital) and University of Sydney and research extends from the laboratory to the patient using the basic tools of molecular and cell biology, genetic epidemiology, imaging technology and clinical research.

The growth of WMI has created enormous strains on research space within Westmead Hospital, leading to overcrowding and dislocation of research groups into multiple locations (often separated by up to 450m) and has resulted in an inability to accept applications from leading scientists and groups to join the Institute from interstate and overseas.

Westmead Research Hub

Westmead Research Hub (WRH) is a cooperative venture that has been formed to focus the biomedical research activities of the Westmead Health Campus (WHC) for the purpose of sharing resources and infrastructure. It is designed to promote an environment of excellence in research and technology access for the purpose of both individual and collective research productivity.

The key stakeholders in the venture are:

- The Westmead Millennium Institute;
- Westmead Hospital;
- Children's Hospital at Westmead;
- The Children's Medical Research Institute; and
- University of Sydney.

The vision of the Hub is to be a world leader in health and medical research based on globally competitive research and health outcomes, which directly benefit the Australian and Western Sydney communities and are linked to the development of a vibrant regional biotechnology and health services industry.

1.3 Approvals Process

State Environmental Planning Policy (Major Development) 2005 identifies development to which Part 3A of the EP&A Act applies and which therefore requires approval from the Minister for Planning ('the Minister').

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 of the SEPP, is declared to be a project to which Part 3A of the Act applies. The project falls into the class of development described in Clause 19 of Schedule 1 – 'medical research and development facility'.

The project's estimated Capital Investment Value is \$124.2 million, as detailed in the Quantity Surveyors Statement prepared by WT Partnership (**Appendix B**), and is well in excess of the \$15 million threshold. The project will also employ over 400 people (full time equivalent), which is well in excess of the 100 person threshold.

In accordance with Section 75B of the EP&A Act and Clause 6 of the SEPP, the applicant sought the opinion of the Minister as to whether the project is of the kind to which Part 3A of the Act applies. On 12 April 2010, the A/Executive Director, Major Projects Assessment, as delegate of the Minister for Planning, formed the opinion that the development is of a kind described in Schedule 1 and is thus declared to be a project to which Part 3A of the Act applies for purposes of Section 75B of the Act.

Subsequently, the Director-General issued the Environmental Assessment Requirements for the project under Part 3A of the Act. A copy of these requirements is included at **Appendix C**. A table cross-referencing the location in this report where the requirements are covered is located in Section 4.0.

This report constitutes the Environmental Assessment Report (EAR) for a Project Application for the site.

1.4 Project Team

An expert project team has been formed to prepare the Project Application and includes:

Proponent Health Infrastructure

Project Manager Capital Insight

Urban Planning JBA Planning

Architects BVN Architecture

Landscape Architects Scape

Quantity Surveyors WT Partnership

Geotechnical AECOM
Contamination AECOM

Infrastructure and Services Arup
Environmental Sustainability Arup

Arborist The Ents Tree Consultancy

Water Cycle Management Arup

Traffic and Transport Scape and Arup

Wind Windtech
Reflectivity Windtech
Noise ARUP

Hazards and Waste Safety Engineering & Technical Services

Building Code of Australia Blackett Maguire + Goldsmith

Accessibility Access Australia

Helicopter Consultant Heli-Consultants Pty Ltd

2.0 Site Analysis

2.1 Site Location and Context

The subject site is located within the grounds of the Westmead Health Campus (WHC), located at 166 – 174 Hawkesbury Road, Westmead. The WHC comprises the Westmead Hospital, the Children's Hospital Westmead (CHW), and the Children's Medical Research Institute (CMRI).

The site is more specifically located on the eastern portion of the WHC, fronting Hawkesbury Road, between the junctions of Helen Street and Jessie Street.

The site has an area of 10,200sqm, with a frontage of approximately 125m to Hawkesbury Road. The site is located some 600m north of Westmead railway station, 315m west of Parramatta Park, 940m south of the Cumberland Highway, and approximately 1.5km north-west from Parramatta CBD (refer to Figure 1).

The site is located within the Parramatta Local Government Area.

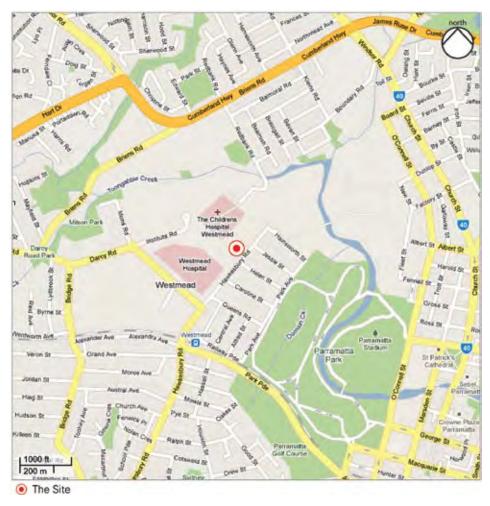


Figure 1 - Locality Plan

2.2 Land Ownership

The land is owned by Health Administration Corporation and Health Commission of NSW. The site is legally described as part Lot 100 and part Lot 101 in DP1119583, as shown on the Site Survey at **Appendix D**.

2.3 Existing Development

The aerial photo at **Figure 2**, together with the Site Survey (refer **Appendix D**), illustrates the existing distribution of buildings and uses on the site and surrounds.

The eastern portion of the site (fronting Hawkesbury Road) is currently utilised as an at-grade car park for the exclusive use of hospital staff. There are two clusters of single storey brick buildings over the site. One cluster is located in the northern corner of the site and includes four buildings of various sizes. These are known as the Chesalon buildings.

The other cluster of buildings is located within the southern part of the site adjacent to Hawkesbury Road, and also includes 4 buildings of various sizes. These are known as the Marion Villa buildings. These two clusters of buildings are offset to the boundaries and to each other.

Between these two clusters of buildings is an informal parking area. Vehicle access to the site can be made via a direct and controlled egress point from Hawkesbury Road. This driveway access serves both areas of car parking over the site. These areas collectively accommodate approximately 100 car parking spaces.

To the north east of the site, further along Hawkesbury Road, is a shared driveway (known as Hospital Road). This egress has restricted access and provides direct access to the adjoining CMRI building, the rear of the Kids Research Institute (KRI), and also offers access to the rear of the Children's Hospital and associated parking areas.

Separate approval/s are to be sought in relation to the demolition of the existing buildings on site. It is intended that the existing number of at grade parking spaces currently provided on site for hospital staff will generally remain, with parking to be accommodated in the southern half of the site (outside of the subject site boundaries).

Photographs of the site are shown at Figures 3 – 8 below.

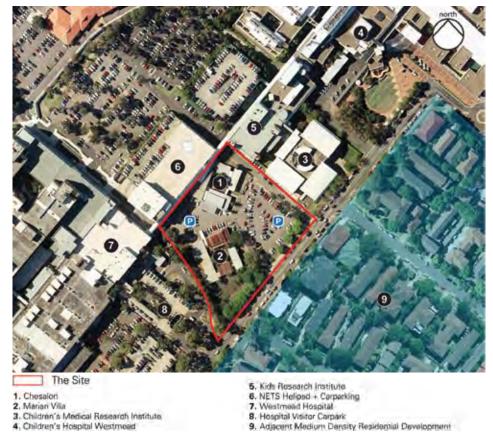


Figure 2 - Site Plan



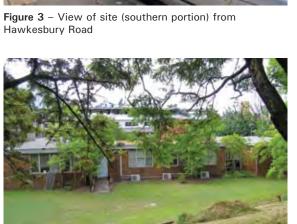


Figure 5 - Marion Villas as viewed from Hawkesbury Road.



Figure 7 - View from the centre of the site looking west between the two building clusters and informal car park areas



Figure 4 – View of site (northern portion) from Hawkesbury Road



Figure 6 – Eastern car park with Chesalon buildings in the background as viewed from Hawkesbury Road



Figure 8 - Marion Villas as viewed from eastern car park

2.4 Landform / Vegetation

The topography of the site falls away steeply from Hawkesbury Road where after a short distance it levels out to a relatively flat site. The difference in levels between Hawkesbury Road and the majority level site area is approximately four to five metres.

The Sydney geological map indicates that the site is underlain with Bringelly Shale of the Wianamatta Group. Bringelly Shale comprises carbonaceous claystone, laminte, fine to medium grained lithic sandstone and some minor coal bands. Site investigation results are consistent with the regional geology.

2.5 Drainage and Flooding

The closest surface water feature to the site is Toongabbie Creek located approximately 400m north of the site, which flows east towards Parramatta River. Parramatta River is located approximately 500m east of the site, and flows towards the south. Domain Creek is located approximately 450m to the south-east of the site and flows north-east towards Parramatta River.

The site slopes moderately to the north and west, where two stormwater drains are located outside the northern and western boundary of the site. Based on the topography of the site, the flood potential is considered to be low.

2.6 Access and Transport

Vehicular Access

Road access to the WHC is via Darcy Road from the west and Hawkesbury Road from the south. Direct access from the north and east is limited by Cumberland Hospital and Parramatta Park, respectively.

Darcy Road has three signalised crossings along the length of the WHC, including at the intersection of Darcy Road and Hawkesbury Road. The site is served by one access point off Hawkesbury Road.

WHC lies just to the south of the intersection of Cumberland Highway and Old Windsor Road. Old Windsor Road/Cumberland Highway provides a connection between the M2 and M7 to the north and M4 and Great Western Highway to the south.

Car Parking

The site currently provides at grade parking for approximately 100 vehicles. Across the whole WHC, there is around 5,800 car spaces spread across a number of areas (including dedicated parking buildings and at grade parking areas).

Rail

The site is located close to Westmead railway station, which is located approximately 600m south; within a 10 minute walk time. Westmead railway station is serviced by the North Shore & Western, Cumberland and Blue Mountains Lines. The North Shore & Western Line runs from Berowra to Emu Plains/ Richmond via Parramatta. The Cumberland Line runs from Campbelltown to Blacktown via Liverpool. The Blue Mountains Line runs from Central to Lithgow via Penrith.

Bus

The site is well served by a number of buses, providing access to greater western Sydney. The construction of the North-west T-way in 2007 has also improved accessibility to the WHC, with the Westmead T-way Station located adjoining the WHC at the intersection of Darcy Road and Hawkesbury Road. On weekdays, 10 routes stop at the Westmead T-way Station, with approximately 260 buses per day in each direction.

Pedestrian/Cycling

All the streets around the site have footpaths and there are pedestrian crossings at Hawkesbury Road / Darcy Road and Hawkesbury Road / Railway Parade.

Generally the street network provides good levels of pedestrian accessibility. Traffic islands along Hawkesbury Road facilitate informal pedestrian crossing. Walking paths through Parramatta Park provide access to Parramatta.

There are relatively few dedicated cycle route facilities in and around the Westmead Health Campus with existing facilities focused on Parramatta Park.

2.7 Heritage

A Section 149 Certificate issued by Parramatta City Council which covers the WHC (including the site) confirms that there are no items of environmental heritage on the land and that the site is not located within a conservation area.

A search of the NSW Heritage Branch Database also reveals that the site does not contain any items listed by the Heritage Council under the NSW *Heritage Act 1977*.

In terms of Aboriginal Heritage, the Certificate indicates that the WHC (including the site) has the potential to contain items of Aboriginal heritage and is within proximity of a recorded site. A search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken to confirm the location of Aboriginal heritage items in the area. The results from this search are further discussed at Section 5.8.

2.8 Utilities and Infrastructure

The site is currently served by a full range of utilities and services, as is expected given the site's location with the grounds of the Westmead Hospital Campus. A brief description of the service connections are set out below.

Water

A water reticulation line runs through the site. It is expected that the future buildings will be serviced by the water main line which is located on the northwestern side of Hawkesbury Road.

Sewerage

There are no public sewerage assets within the proposed building footprint. Located within the vicinity of Institute Road there is a gravity sewer main which drains toward the North-West of the development site. The future servicing of the development will be largely via gravity lines where possible to the main to the north-west.

Power

An Integral Energy substation is present at the eastern corner of the site (corner of Hawkesbury Rd and access road to CMRI), in the grassed area adjacent to the existing carpark. A second substation is located at the existing CMRI site in its south east corner adjacent to the road dividing the CMRI from the subject site.

Underground electricity assets are also present on the site, in the form of low voltage cables. It is not anticipated that existing electricity assets will pose any obstacles to redevelopment of the site.

Gas

The Westmead Hospital Campus has existing natural gas infrastructure and there is also an existing 75mm nylon 210 Kpa authorities gas main located in Hawkesbury Road. Due to the location of the existing precinct gas mains being remote to the proposed site it is proposed that the site be serviced by the authorities gas main in Hawkesbury road.

2.9 Surrounding Development

The site is bounded by Hawkesbury Road to the south-east, the Children's Medical Research Institute (CMRI) buildings to the north-east (refer to **Figure 10**), a multistorey car park and roof-mounted helipad to the north-west (refer to **Figures 6** and **7**), and an open air multi-deck carpark to the south-west (refer to **Figure 11**). Residential buildings, predominantly 3 – 4 multi-storey apartment blocks, are located adjacent the site to the south and east across Hawkesbury Road (refer to **Figures 12** and **13**). The site's immediate and broader context is illustrated within **Figures 2** and **9** respectively.

The adjoining CMRI building is a two storey concrete building. However, the CMRI was recently granted a Part 3A approval for construction of a part 5/6 storey medical research building including car parking, landscaping and associated infrastructure (see MPO8 0159).

To the north-west of the site, is a 4 to 5 storey building that includes a helipad at the upper most level and comprises car parking on the other levels. The building also accommodates an elevated pedestrian link known as the 'sky link', which connects the Westmead and Children's Hospital buildings and provides direct access to and from the helipad.

To the south east of the site is an access driveway from Hawkesbury Road. This provides access through to visitor car parking for Westmead Hospital and to further parking areas to the rear of the Helipad/Car park building. Directly west of the site is the main Westmead Hospital buildings (refer to **Figure 14**), with the Children's Hospital (refer to **Figure 15**) located to the north-east beyond the CMRI.

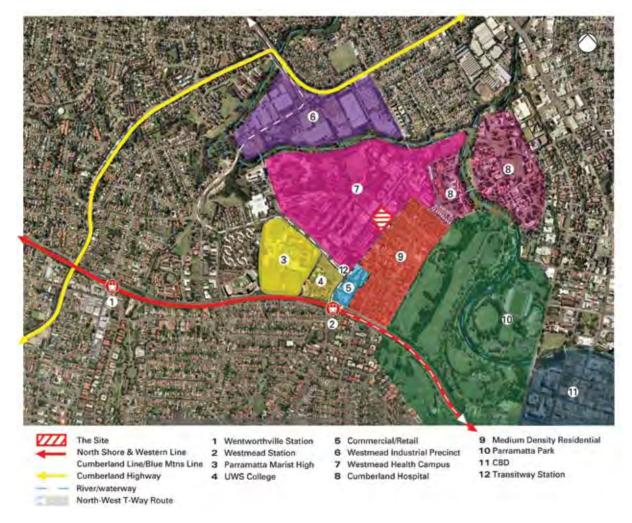


Figure 9 - Context Map



Figure 10 - View of CMRI building fronting Hawkesbury Road



Figure 11 - View of open air multi-deck carp park adjoining the site to the south



Figure 12 – High rise residential development along Hawkesbury Road



Figure 13 – Multi-storey apartment block adjacent the site on Hawkesbury Road



Figure 14 - Adjacent Westmead Hospital building to the south-west of the site



Figure 15 - Children's Hospital Westmead

2.10 Summary of Site Opportunities and Constraints

The site presents the following opportunities:

- The site is a large (1ha), generally regularly shaped landholding in an urban context that does not immediately adjoin any residential dwellings;
- The site is located within a major existing medical and research hub;
- The site is currently used for a mix of ancillary medical related uses;
- The site will be unobstructed with existing buildings to be removed and the site to be utilised as a temporary car parking area;
- The site's shape, size and location within a medical hub presents a valuable landholding, providing an ideal re-development opportunity (especially given the existing low scale/aged development on the site);
- The site has a good level of access to public transport, with the Westmead T-Way Station (buses) and Westmead Railway Station located a short distance away;
- The built form of the surrounding area (existing and approved development) reflects medium and high density development; and
- The site is strategically located to contribute to the generation of a world class research hub.

The main constraints to development are as follows:

- The site adjoins a helicopter landing pad/flight paths;
- The site's frontage to Hawkesbury Road has a green and leafy character; and
- Residential development is located to the south and east of the site across Hawkesbury Road.

3.0 Description of Development Proposal

This section of the report provides a detailed description of the proposed development.

3.1 Overview

This Project Application seeks approval:

- Construction of a new 12,921m² medical research building, including ancillary support services;
- Provision of landscaping and construction of associated physical infrastructure; and
- Provision of at grade parking for 50 car spaces.

The vision for the Westmead Millennium Institute and Westmead Research Hub is to create a physically integrated research precinct between the adult and children's hospitals by co-locating WMI with the Children's Medical Research Institute (CMRI) and the Kids Research Institute (KRI). This would be the foundation of a Research Hub precinct capable of accommodating future growth of research on campus and stimulating the development of an adjoining biotechnology precinct. The latter will be a new industry and source of employment for the 1.8 million people of Western Sydney.

The proposed building will facilitate scientific, clinical, industry collaboration and translation and the efficient development and utilisation of research infrastructure. Physical consolidation will allow high technology centres in genomics, proteomics, cell imaging, flow cytometry and animal research to be focused in one location rather than distributed over three institutes more than 700m apart. This physical consolidation will also greatly facilitate efficient utilisation of all resources by all researchers on campus and reduce duplication of large equipment still further. The core facility concept is strongly supported by all researchers and institutes on the campus.

Architectural drawings of the proposed development prepared by BVN Architecture are located at **Appendix A**, the landscape plans prepared by Scape at **Appendix E**, and the photomontages/images of the proposed development at **Appendix A**.

3.2 Site Preparation

Existing buildings on site are to be removed, details of which will be the subject of a separate application and approval process.

Existing parking areas to be disturbed as a result of the proposed works will be relocated to other areas on the subject site and will continue to be used by existing hospital staff (not WMI staff and students).

3.3 Design Principles

The design principles underpinning the design of the proposed development are:

- The building is positioned to provide maximum connection between the existing research institutes (CMRI and KRI) and the core hub platforms accommodated in the new building.
- The design acknowledges the site's context within a 'future research precinct' and its potential benefits as a significant research community.

- The proposal is seen as the first stage of Westmead Hospital's 'future research precinct', located between Westmead Hospital and Children's Hospital Westmead. The expression of the building is distinctive in the campus in response to this and is expressed in a simple form and material palette.
- The design of the building has developed from the inside out and, in particular, in response to the development of the ideal arrangement of the lab areas, which constitute the greatest proportion of the project.
- The typical floorplate also allows for numerous staging scenarios in response to varying construction budgets, both current, projected and future brief requirements.
- The definition of the building envelope gains form in response to the broader setting, the orientation of the different elevations and the display of the functions of the building. The spaces within become legible on the façade.
- The internal planning and facades describe a rational design approach. The building's arrangement and its façade treatment respond to functional requirements and hence expresses a clear logic akin to the nature of the scientific research it houses.
- As a symbol and the face of this research precinct and community, the idea of 'seeing the science' is to be realised in the external form of the building along with a rational approach to dealing with the realities of the location, orientation and requirements of the different workspaces.

Figure 16 below illustrates how the design principles outlined above have been incorporated into the design of the proposed WMI building, together with providing context as to what the future streetscape will look like once CMRI is redeveloped.



Figure 16 - Photomontage Hawkesbury Road east

3.4 Numeric Overview

A numeric overview of the proposed development is provided in Table 1 below.

Table 1 - Numeric overview of the proposed development

Component	Proposal
Site area	- 10,200m ²
Floor space Areas	- 12,921m ²
Density (maximum)	- Floor Space Ratio: 1.27:1
Building Height (maximum	- Building maximum (roof level): 36m
from ground level)	- Hawkesbury Road frontage: 31.7m
	- Hospital Road frontage: 36m
Car Parking	- 50 car parking spaces for senior staff and visitors
	- Three covered and one open service/delivery vehicle spaces

3.5 Building Description

Once fully constructed, the development will be a 7 -8 level building including a part basement level. The floor plates of levels 2 - 7 are generally the same; with the part basement level (i.e. lower ground level and mezzanine) and the upper ground level having a larger floor plate. Overall, there are 7 occupied levels of the building, with one level (level 7) containing plant.

There are longer term plans to develop a number of integrated research and medical buildings/facilities on the subject site. Funding is however only available for the proposed development at this stage. The design of the proposed building makes allowances for connections to future buildings.

Connections to the existing and future redeveloped CMRI building and the KRI building to the north and east of the site are also accommodated as part of the proposed development (as evident in the architectural plans included at **Appendix A**). These connections support the achievement of the Westmead Research Hub. The primary purpose of the connections is to enable staff and students the ability to access different research laboratories and equipment across a number of buildings whilst being within a contained and controlled environment and without the need to 'de-gown'. The connections proposed accommodate the scenario where the proposed WMI is built and the CMRI building has not yet been redeveloped (i.e. temporary connection), as well as permanent connections between the WMI building and the redeveloped CMRI/KRI.

A level by level breakdown of the various components of the proposed building is provided within **Table 2** below.

Table 2 - Key scheme details

Element	Details	GFA
Level B1 – Basement	- Sub-ground tanks	N.A
Level 00 – Lower Ground Floor	- Loading dock	2645m ²
	- Animal research / lab facilities	
	- Back of house	
	- Rear entry point – staff and researches only	
	- Bicycle parking	
	- Staff amenities	
Level 00M – Mezzanine	- Void	136m ²
	- Ceiling space	
	- Plant	
Level 1 – Upper Ground Floor	- Main pedestrian entry level (access from Hawkesbury Road)	1892m²
	- Main entry reception and administration	
	- Meeting / and function rooms	
	- Staff cafe	
	- Wet and dry labs	
	- Open courtyard and deck areas	
Level 2 – 6	- Wet and dry labs	1515m² (IvI 2)
	- Offices	1686m² (IvI 3)
		1678m² (IvI 4)
		1688m² (IvI 5)
		1681m ² (lvl 6)
Level 7	- Plant room	N.A

3.6 Building Envelope

The building is a predominantly 7 storey building when viewed from the public realm (i.e. along Hawkesbury Road). A further storey (lower ground and mezzanine), which sits below street level, is not readily visible given the slope of the site.

The maximum height of the building, measured along the building's rear elevation, is approximately 36m above ground level. As illustrated in **Figures 17 - 20**, the height of the building is uniform across the site, but by virtue of the topography of the site, the maximum height of the building at the site's Hawkesbury Road frontage is 31.7m.

The building is sited close to both the Hawkesbury Road and Hospital Road street frontages (setback 2.5m), consistent with the redeveloped CMRI building.

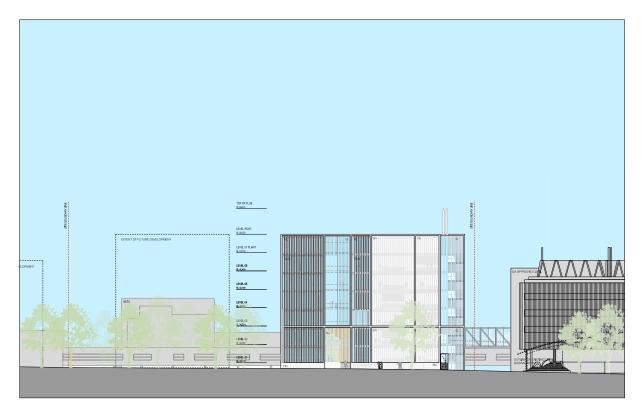


Figure 17 - South eastern elevation



Figure 18 - South western elevation