



Macquarie University Central Courtyard Precinct Redevelopment

*State Significant
Development Assessment
(SSD 8755)*

April 2019



April 2019

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Cover photo

Perspective of the proposal from the north-east (RtS)

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Glossary

Abbreviation	Definition
AHD	Australian Height Datum
BCA	Building Code of Australia
CIV	Capital Investment Value
CIP	Community Involvement Plan
Consent	Development Consent
Council	City of Ryde Council
Department	Department of Planning and Environment
DPI	Department of Primary industries
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
LEP	Local Environmental Plan
Minister	Minister for Planning
MQU	Macquarie University
OEH	Office of Environment and Heritage
RMS	Roads and Maritime Services
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development



Executive Summary

This report provides an assessment of a State significant development (SSD) application for the Macquarie University Central Courtyard Precinct Redevelopment (SSD 8755), located at Macquarie University, 192 Balaclava Road, Macquarie Park. The Applicant is Macquarie University and the proposal is located within the Ryde local government area (LGA).

The proposal seeks approval for the construction of a multi-storey Student Hub (including learning spaces, graduation hall and food and beverage retail outlets) and two student accommodation towers (342 student beds). Approval is also sought for redevelopment of the Central Courtyard (landscaped passive open space), installation of a new substation, installation of services, upgrade of western end of Science Road, tree removal and landscaping.

The proposal has a Capital Investment Value (CIV) of \$201.25 million and would generate 400 construction jobs. The proposal is SSD under clause 15 of the State and Environmental Planning Policy (State and Regional Development) 2011, as it is development for the purpose of a tertiary institution with a CIV of more than \$30 million. Therefore, the Minister for Planning is the consent authority.

The application was publicly exhibited between 21 June 2018 until 18 July 2018. The Department of Planning and Environment (the Department) received a total of eight submissions, including seven from public authorities, and one from the public in support of the proposal. An additional four submissions from public authorities were received in response to the Applicant's Response to Submissions (RtS).

The key issues raised in the submissions include built form, Aboriginal cultural heritage, site contamination, large vehicle movement (service and bus), vehicle access arrangements, construction impacts and noise impacts.

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

The Department's assessment of the project concludes that:

- the built form and urban design is suitable for the site and is consistent with urban design controls and principles established for the site under the approved concept plan (as modified) or the University campus.
- the noise impacts associated with the construction and use of the facilities can be appropriately mitigated, subject to a construction noise management plan, designing for the amenity of future residents on the site and closing windows and doors when the student bar is in use during the evenings.
- the potential impact on Aboriginal cultural heritage is satisfactory as the site has been substantially disturbed and the potential for Aboriginal cultural heritage to be present on the site is low, subject to the preparation of an Aboriginal Cultural Heritage Management Plan prepared in consultation with relevant cultural knowledge holders for the campus.

Further, the proposal would offer significant public benefits in terms of supporting the tertiary education sector and is consistent with key government strategic plans and policies, including the Greater Sydney Region Plan, North District Plan, State Infrastructure Strategy 2018-2038 and Future Transport Strategy 2056.

The Department concludes the proposal is in the public interest and recommends that the application be approved subject to conditions.



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1. Introduction

This report provides an assessment of a State significant development (SSD) application for the Macquarie University Central Courtyard Precinct Redevelopment at Macquarie University, 192 Balaclava Road, Macquarie Park (SSD 8755).

The proposal seeks approval for the construction of a multi-storey Student Hub (including learning spaces, graduation hall and food and beverage retail outlets) and two student accommodation towers (six and seven storey) providing 342 student beds and integrated academic uses with a shared basement. Approval is also sought for redevelopment of the landscaped Central Courtyard, installation of a new substation, installation of utilities/ services, upgrade of western extent of Science Road, tree removal and landscaping.

The application has been lodged by Macquarie University (the Applicant).

1.1 Site description

The subject site is located approximately 15 km north-west of the Sydney central business district in the Ryde local government area (LGA) (refer to **Figure 1**). The site is located centrally on the Macquarie University (MQU) campus.

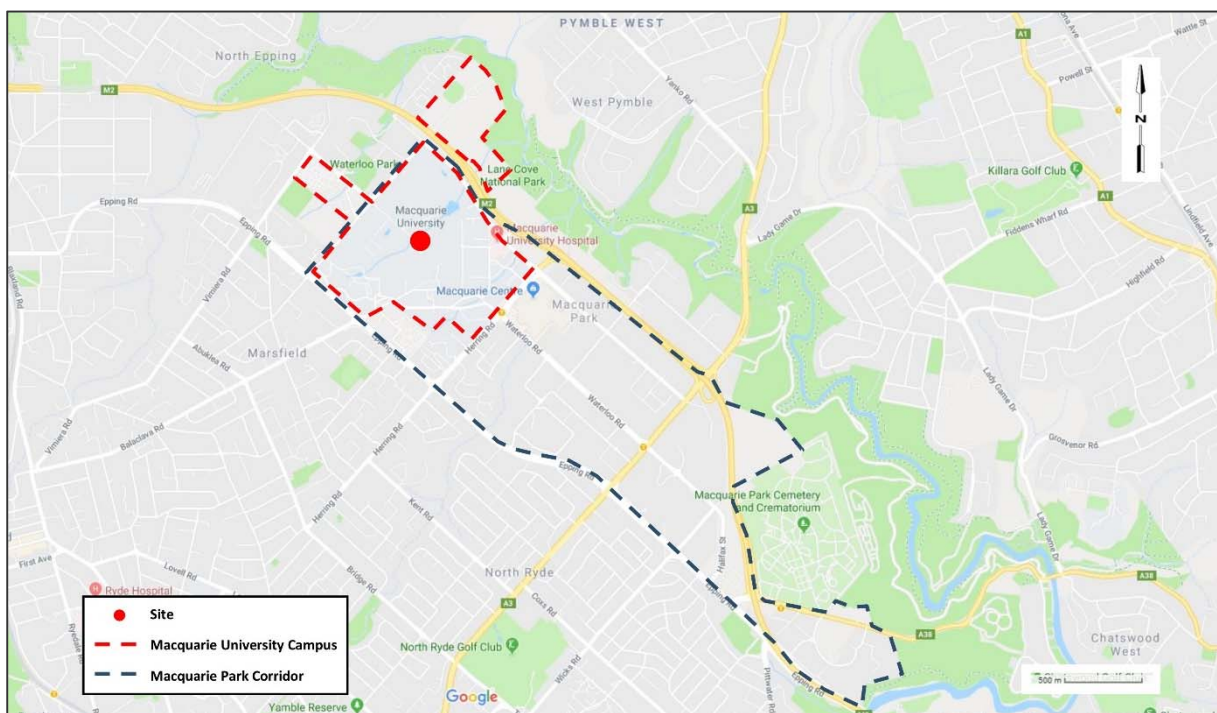


Figure 1 | Regional/Local context map (Base source: Google)

The MQU campus located at 192 Balaclava Road, Macquarie Park, is surrounded by a variety of land uses, including: Lane Cove National Park to the north; predominantly low to medium density with some high density residential areas to the south and west; and a major shopping precinct (Macquarie Centre) to the east (refer to **Figure 1**).

The MQU campus is located on 126 hectares and comprises teaching and research spaces, shops, cafes, recreational facilities, banks, a bar, pharmacy, bulk-billed medical clinic, private hospital, and other ancillary facilities (see **Figure 2**). The MQU campus is irregular in shape and is located on both sides of the M2 Motorway.

The proposed development site is comprised of predominantly vacant land. It previously accommodated Buildings C9A and C10A (the former Campus Hub) and the Central Courtyard, which were recently demolished and cleared by the Applicant under a separate approval from City of Ryde Council (Council) (LDA2017/0309).

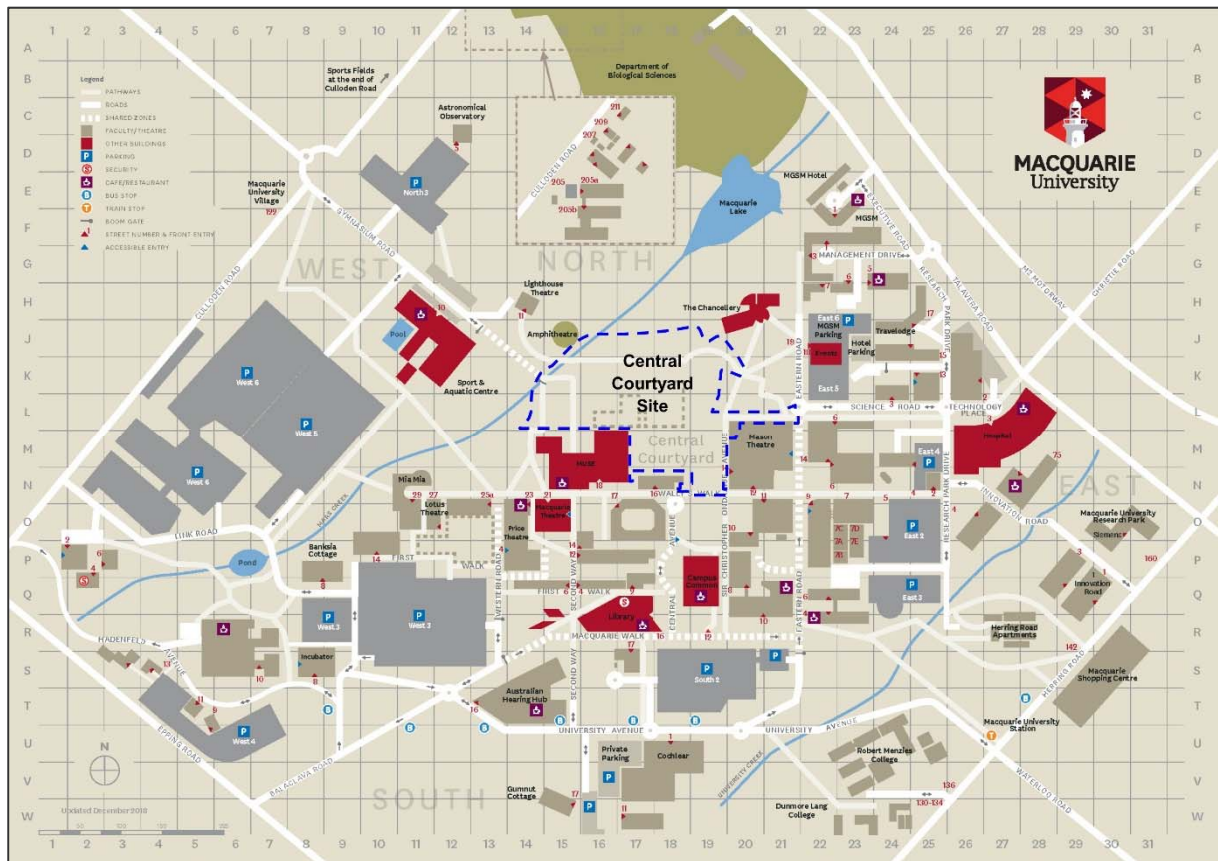


Figure 2 | MQU Campus (Base source: MQU website)

1.2 Surrounding development

The development site, subject to this application, is located within the larger Macquarie University Campus and is bounded by:

- open space areas to the north.
- recently refurbished Buildings E7A and E7B to the east.
- Building C8A and Wally's Walk to the south.
- Building C7A (MUSE) to the south-west.
- Sports and Aquatic Centre to the west.

Refer to **Figures 3** and **4** for site surrounds.

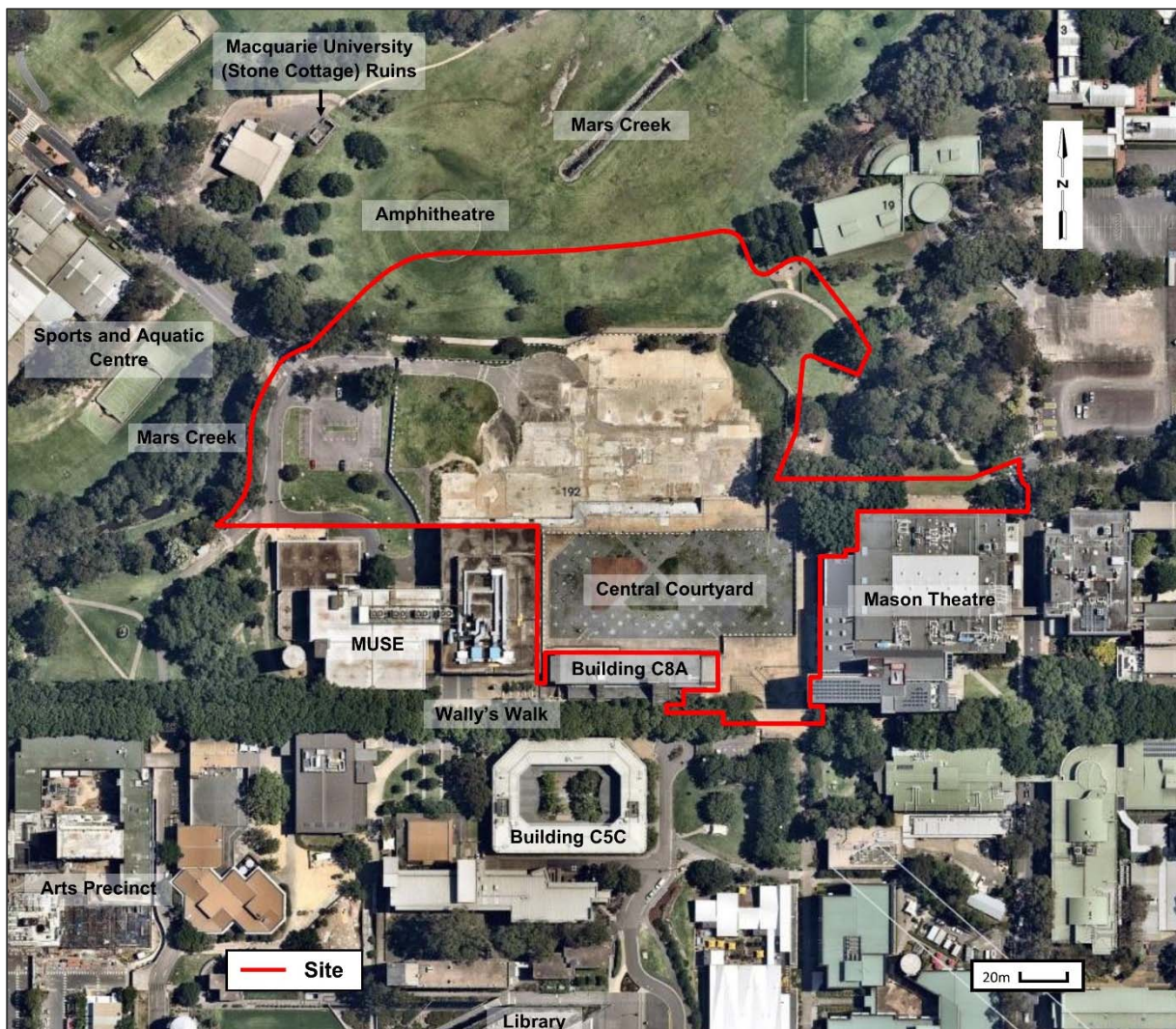


Figure 3 | Aerial view of development site and surrounds (Base source: Nearmap)



Figure 4 | View of the site from Wally's Walk – Central Courtyard in the foreground and recently demolished Campus Hub in the background (Source: Department)



2. Project

2.1 Physical layout and design

The proposal is for the Macquarie University Central Courtyard Precinct (MUCCP), which is seeking to replace the buildings accommodating the Student Hub (containing student support services) and provide integrated student housing centrally within the University campus. The proposal also seeks to redevelop the adjoining landscaped Central Courtyard. The MUCCP provides important facilities to support the student population, including learning spaces, graduation hall, ancillary retail outlets, accommodation towers, passive recreation areas, loading and waste management facilities and end-of-trip facilities.

The key components and features of the proposal (as refined in the Response to Submissions and supplementary information) are provided in **Table 1** and are shown in **Figures 5 to 8**.

Table 1 | Main components of the project

Aspect	Description
Project Summary	Construction and use of a multi-storey building for the Student Hub (including learning spaces, graduation hall and food and beverage retail outlets) and two student accommodation towers with a shared basement
Demolition	• Minor demolition works and bulk excavation
Built form	• Five storey (26.2m) Student Hub (including basement) • Six (24.7m) and seven (27.8m) storey accommodation towers (including basement)
Gross floor area (GFA)	• 14,952sqm of academic GFA
Student Beds	• 342 Beds (11,949sqm of GFA)
Uses	• Student Hub (replacing the now demolished building C10A), including: ◦ formal and informal teaching and learning spaces. ◦ a graduation hall with capacity for 800 people. ◦ food and beverage retail outlets, including a new student bar. • Accommodation Towers, including: ◦ 342 beds ◦ academic uses • Shared Basement
Access	• Upgrade of western extent of Science Road
Car parking	• Eight additional parking spaces

Aspect	Description
Bicycle parking	68 bicycle parking spaces
Public domain and landscaping	- Redevelopment of the landscaped Central Courtyard - Tree removal (52 trees) - Landscaping (including planting of 186 trees)
Utility works	- Installation of a new substation - Installation of utilities/ services
Hours of construction	- Monday to Friday – 7am to 7pm - Saturdays – 8am to 4pm
Jobs	400 construction jobs
CIV	\$201,250,000
Remediation	Remediation of petroleum impacted fill

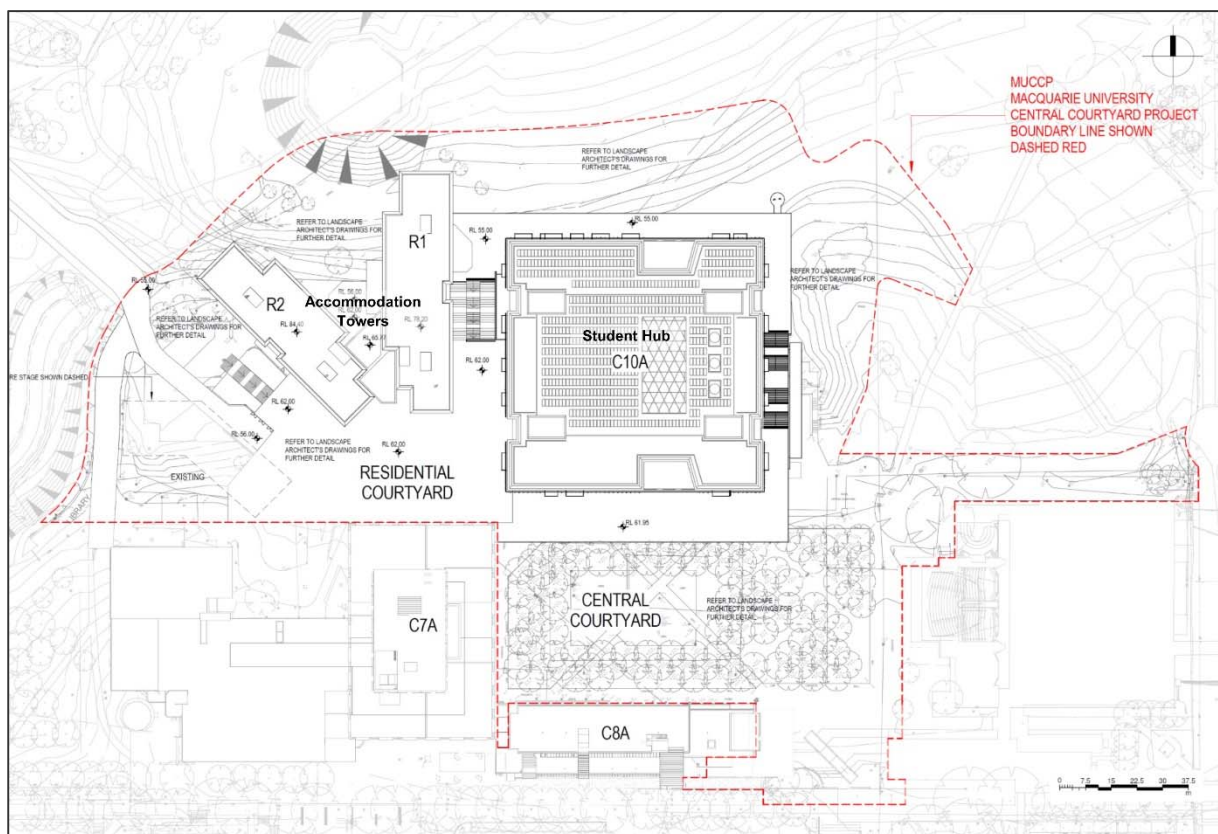


Figure 5 | Site Plan (Base source: RtS)



Figure 6 | Landscape Plan (Base source: RtS)



Figure 7 | Illustrative perspective of the Student Hub from the north-east (Source: RtS)



Figure 8 | Illustrative perspective of the northern elevation of the Student Hub (Source: RtS)

2.2 Construction and Timing

This application is for Stage 1 of the Macquarie University Central Courtyard Precinct Redevelopment, comprising the Student Hub and two residential towers. Future stage(s) will be subject to separate applications and is planned to include three more residential towers. As provided by the EIS, construction is scheduled to commence in mid-2019 and is expected to be undertaken over 20 months.

2.3 Related development

On 13 August 2009, the then Minister for Planning approved a concept plan (MP 06_0016) for the redevelopment of the MQU campus. The concept plan approval comprises the provision of 400,000sqm of floorspace for commercial uses, 61,200sqm of floorspace for academic uses 3,450 student housing beds, associated infrastructure, car parking and landscaping. The concept plan approval also identified a number of road upgrade works to facilitate the campus redevelopment and required the agreements for these upgrade works to be made with the first application for new commercial floorspace. Consideration of the consistency of the proposed development in accordance with the concept plan is provided at **Appendix C**.

The concept plan approval has been previously modified on a single occasion (MP 06_0016 MOD 1) on 9 November 2018 by a delegate of the Minister. The modifications included:

- amended height controls and increased floorspace provisions.
- increased academic floorspace from 61,200sqm to 157,000sqm.
- removal of restrictions capping floorspace within certain precincts and redistribution of floorspace.
- increased student population projections to the year 2036.
- modified terms of approval and Statement of Commitments.
- revised and consolidated Design Excellence Strategy and Urban Design Guidelines.

The proposed development is generally consistent with the controls identified for the academic core identified in the Design Excellence Strategy and Urban Design Guidelines (as discussed in **Section 6.1**).

On 21 November 2017, Council approved a development application (DA) for the demolition of the existing buildings on the site. These works have been completed.



3. Strategic Context

The proposed development comprising student accommodation, student support facilities and educational facilities is consistent with the NSW State Priorities to create jobs and contribute to increased housing supply. This would be achieved through the creation of 400 construction jobs as a result of the project and 342 beds for student housing.

The project also contributes to an increase in affordable housing supply for students of the University centrally within the campus. The project is considered justified as it proposes 342 beds in various housing configurations (single person studios, twin share rooms, four bedroom apartments and five bedroom apartments) exclusively for students enrolled and academics at the University, which would assist in meeting the current demand for affordable housing and reduce risks associated with overcrowding in illegal or unsafe accommodation.

The project is further justified as the location of the facility within the grounds of the University would serve to lessen traffic impacts on the surrounding road network, lessen the demand for car parking and generate fewer trips on public transport as students would not need to travel to and from the University campus via private vehicle or public transport.

The Department considers that the proposal is justified given it is consistent with:

- Greater Sydney Commission's A Metropolis of Three Cities – the Greater Sydney Region Plan, as it seeks to support education land uses around Macquarie University and student housing and support facilities.
- Greater Sydney Commission's North District Plan, as it would enhance an existing education facility that would consequently improve connections to foster a networked community.
- The State Infrastructure Strategy 2018-2038, as it would provide facilities to support modern and technologically enabled teaching and learning.
- Future Transport Strategy 2056, as it would provide improved facilities in a highly accessible location.

The proposed development would provide direct investment in the region of approximately \$201 million.



4. Statutory Context

4.1 State significant development

The proposal is SSD under section 4.36 (development declared SSD) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development has a CIV in excess of \$30 million (\$201.25 million) and is for the purpose of a tertiary institution under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011.

The Minister is the consent authority under section 4.5 of the EP&A Act.

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

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

4.2 Permissibility

The approved concept plan allows for additional student housing, academic and commercial floorspace across the campus. Therefore, the Minister for Planning or a delegate may determine the carrying out of the development.

Notwithstanding, the subject site is zoned B4 – Mixed Use under the Ryde Local Environmental Plan 2014 (RLEP). The objectives of the zone include integrating a mixture of compatible land uses in accessible locations to maximise public transport patronage and encourage walking and cycling. The proposed development is permissible with consent and is consistent with the objectives of the zone.

4.3 Other approvals

Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the State significant development approval process, and consequently are not required to be separately obtained for the proposal.

Under section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).

The Department has consulted with the relevant public authorities responsible for integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent (see **Appendix D**).

4.4 Mandatory matters for consideration

4.4.1 Environmental planning instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument (EPI) that is of relevance to the development the subject of the development application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been taken into account in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and the concept plan in **Appendix C** (which prevails in some and is satisfied the application is consistent with the requirements of the EPIs).

4.4.2 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent/ approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant. A response to the objects of the EP&A Act is provided at **Table 2**.

Table 2 | Response to the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposed development seeks to develop land within an existing university campus and would maximise efficiency by providing student facilities and housing in a central location and integration of academic facilities.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	Section 4.4.3 of this report considers the proposed development against the principles of ecologically sustainable development.
(c) to promote the orderly and economic use and development of land,	The proposed development is consistent with the concept plan, would meet the objectives of the Ryde LEP and provide improved facilities to support education infrastructure. The development would also generate construction jobs and infrastructure investment.
(d) to promote the delivery and maintenance of affordable housing,	The application proposes affordable accommodation options for students of the University.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposed development would not result in the loss of any threatened or vulnerable species, populations, communities or significant habitats.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The proposed development is not anticipated to result in any impacts upon built and cultural heritage, including Aboriginal cultural heritage. Notwithstanding, the Department has recommended a condition of consent requiring preparation and implementation of an Aboriginal Cultural Heritage Management Plan (See Appendix D).

Objects of the EP&A Act	Consideration
(g) to promote good design and amenity of the built environment,	The Department has consulted with the Government Architect NSW (GA NSW) throughout the assessment of the proposed development and considers the application would provide for good design and amenity of the built environment.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Department has considered the proposed development and has recommended a number of conditions of consent to ensure the construction and maintenance is undertaken in accordance with legislation, guidelines, policies and procedures (see Appendix D).
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposed development as outlined in Section 5.1 , which included consultation with Council and other public authorities and consideration of their responses.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal as outlined in Section 5.1 , which included notifying adjoining landowners, placing a notice in newspapers and displaying the proposal on the Department's website and at Council during the exhibition period.

4.4.3 Ecologically sustainable development

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

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

The Applicant is targeting a 5-Star Green Star (Australian Best Practice) rating and has identified initiatives that would minimise the consumption of resources, water and energy. The proposed ESD initiatives include: highly efficient façade system; use of highly efficient water fixtures and fittings; energy efficient lighting and on-site photovoltaic cells; water sensitive urban design measures to improve water quality from the site; rainwater harvesting; implementation of waste reduction policies; and improved indoor environmental quality, including maximisation of natural ventilation.

The Department has recommended conditions that evidence detailing that the final design targets and achieves the equivalent of the 5-Star Green Star rating be submitted to the satisfaction of the Certifying Authority at appropriate stages during the development process.

The Department has considered the proposed development in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision making process via a thorough and rigorous assessment of the environmental impacts of the proposed development. The proposed development is

consistent with ESD principles as described in section 6.12 of the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

4.4.4 Environmental Planning and Assessment Regulation 2000

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

4.4.5 Planning Secretary's Environmental Assessment Requirements

The EIS is compliant with the Planning Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

4.4.6 Section 4.15(1) matters for consideration

Table 3 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in **Section 6** (Assessment) and relevant appendices or other sections of this report and EIS, referenced in the table.

Table 3 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided in Appendix B of this report.
(a)(ii) any proposed instrument	Consideration has been given to draft EPIs at Appendix B .
(a)(iii) any development control plan (DCP)	Under clause 11 of the SRD SEPP, DCPs do not apply to SSD. Furthermore, the site is guided by the concept plan and consequential plans and guidelines. Consideration has been given to the concept plan at Appendix B .
(a)(iiia) any planning agreement	A Voluntary Planning Agreement between Council and MQU was executed in February 2013 and applies to the proposed development (see Section 6.4 for detail regarding contributions).
(a)(iv) the regulations <i>Refer Division 8 of the EP&A Regulation</i>	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Appropriately mitigated or conditioned - refer to Section 6 of this report.

Section 4.15(1) Evaluation	Consideration
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 3, 4 and 6 of this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. See Sections 5 and 6 of this report.
(e) the public interest	Refer to Sections 6 and 7 of this report.

4.4.7 Biodiversity Conservation Act 2016

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are “to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values”.

The impact of Macquarie University Central Courtyard Precinct Redevelopment on biodiversity values has been assessed in the BDAR accompanying the EIS and considered in **Section 6** of this report.



5. Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 21 June 2018 until 18 July 2018. The application was exhibited at the Department and on its website, at the NSW Service Centre and at City of Ryde Council's office.

The Department placed a public exhibition notice in the Sydney Morning Herald, Daily Telegraph and The Weekly Times Weekly on 20 June 2018, and notified adjoining landholders and relevant State and local government authorities in writing. The Department representatives visited the site to provide an informed assessment of the development.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the application (**Section 6**) and by way of recommended conditions in the instrument of consent at **Appendix D**.

5.2 Summary of submissions

The Department received a total of eight submissions, comprising seven submissions from public authorities and one submission from the general public. A summary of the issues raised in the public authority submissions is provided at **Section 5.3**. The submission from the general public was in support of the proposal.

5.3 Public authority submissions

A summary of the issues raised in the public authority submissions is provided at **Table 4** below and copies of the submissions may be viewed at **Appendix A**.

Table 4 | Summary of public authority submissions to the EIS exhibition

City of Ryde Council (Council)

Council did not object to the proposal, however raised matters in relation to transport and accessibility and requested:

- clarification be provided on the number of loading bays and adequate swept paths be provided for all the loading bays.
- demonstration that adequate swept path can be provided for the shuttle bus.
- the median on Gymnasium Road and bollards removed be reinstated post construction.
- an assessment of construction vehicle swept paths for all impacted intersections be provided.
- the Construction Traffic Management Plan (CTMP) be approved by Council.
- clarification regarding access arrangements at Culloden Road and Gymnasium Road, given Gymnasium Road provides access to several car parks and traffic report indicates there would be restrictions on access.

Council also provided recommended conditions of consent.

Transport for New South Wales (TfNSW)

TfNSW noted the following for consideration:

- the proposed development may coincide with the temporary shutdown of the Epping-Chatswood Rail Link and operation of the Station Link services for the Sydney Metro Northwest works. This would result in additional bus services stopping along Herring Road that needs to be managed accordingly.
- recommended construction vehicle movements be managed in coordination with TfNSW and recommended the development of a Construction Pedestrian and Traffic Management Plan, to be endorsed by the Sydney Coordination Office prior to the commencement of works.
- recommended that a wayfinding strategy be prepared to assist with increasing the mode share of walking and cycling for staff, students and visitors to the facilities.
- a campus/precinct wide waste management approach should be developed to collect waste to a holding point near the location of waste service bays.
- the quantum of bicycle parking to be provided with the proposed redevelopment needs to be clarified.

Environment Protection Authority (EPA)

The EPA raised concerns in relation to the following:

Construction

- the need for a detailed assessment of potential site contamination, including groundwater.
- noise and vibration impacts, including the need for standard construction hours and intra-day respite periods for highly noise intrusive generating work.
- the need for dust, erosion and sediment control and management measures.

Operation

- noise impacts on sensitive receivers (surrounding residence and aged care facilities) during operational activities such as mechanical services (especially air conditioning plant).
- Mars Creek pollution prevention.
- implementation of water sensitive urban design principles including stormwater re-use, and opportunities to minimise energy consumption generated from non-renewable sources.

The EPA also provided a number of recommendations including: requiring an unexpected finds protocol for hazardous materials; compliance with the Protection of the Environment Operations (Waste) Regulation 2014 in relation to asbestos waste; consultation with Safework NSW; construction hours; provision of respite periods; construction vehicle arrival and departure times; consideration of the use of non-tonal reversing alarms; implementation of environmental construction management measures; consideration of waste handling guidelines and waste collection.

Office of Environment and Heritage (OEH)

OEH advised that:

- the biodiversity assessment and the conclusion that one biodiversity credit was required to offset the impact on biodiversity values was satisfactory, and provided recommended conditions requiring retirement of the credit before any vegetation is removed.
- replacement tree planting should be provided at ratio of 2:1 using native species.
- as the excavation extends beyond the existing building footprint and is within the vicinity of Mars Creek, an Aboriginal Cultural Heritage Assessment (ACHA) is required and the due diligence assessment does not meet the relevant requirements for assessment of impacts on Aboriginal cultural heritage.
- the Stormwater Management Strategy satisfactorily addresses flooding and recommended a condition requiring a construction staging plan addressing flooding and the creek diversion.

Ausgrid

Ausgrid:

- recommended conditions associated with the integration of the proposed development with Ausgrid infrastructure (method of electricity connection, supply of electricity and requirements, conduit installation, managing vegetation, lighting and clearance for overhead service mains).
- advised that consideration should be given to the proximity of the proposal to existing electricity network assets.
- recommended conditions for undertaking work within or near an electrical easement.

Roads and Maritime Services (RMS)

RMS recommended the Applicant consult with the Sydney Coordination Office to coordinate traffic and transport impacts within the wider area and recommended development of a CTMP detailing the vehicle routes, number of trucks, construction hours, access and traffic controls to be approved by Council prior to construction certification.

Sydney Water

Sydney Water provided the following comments:

- there is adequate capacity in the water and wastewater trunk systems for connection and the Applicant must construct the necessary connections to the trunk systems.
- a Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained.

5.4 Response to Submissions and supplementary information

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

On 12 October 2018, the Applicant provided a Response to Submissions (RtS) (**Appendix A**) on the issues raised during the exhibition of the proposal, including the following changes:

- relocation of the student bar to the ground level northern terrace.
- addition of a function room on the basement level.
- adjustment of the building separation between the Student Hub and student accommodation components and reconfiguration of the loading dock situated between the two.
- redesign of back of house areas, including location of fire pump room under graduation stairs.
- increased width of primary circulation stairs to 5.7m wide.
- redesign of the skylight from glazed roof light to north facing sawtooth roof.
- further articulation of plant room.
- reduction of L1 and L2 floor to floor height from 5m to 4.6m.
- reduction in overall effective height by 165mm (RL85.45 to RL83.8) for the residential tower and 578mm for the Student Hub (RL83.65 to RL83.072).
- refinement of façade, including removal of steel frame and material change of vertical shading to aluminium.
- refinement of podium material from limestone panels to dry pressed brick.
- removal of a level from one of the residential towers.
- deletion of balconies to all residential floors.
- refinement of façade including removal of a portion of perforated metal screens and rationalisation of ceramic façade elements.
- replacement of aluminium composite soffits with fibre cement facade sheeting with an applied acrylic textured finish to achieve a monolithic appearance.
- introduction of louvres to bedroom windows to meet natural ventilation requirements.
- redesign of lift and stair cores to facilitate better planning outcomes.
- reconfiguration of the bedrooms in the apartments, resulting in an overall increase of two beds (340 beds to 342 beds).
- redesign of ground floor common areas including an introduction of an outdoor terrace extension of kitchen/dining and lounge spaces and introduction of laundry facilities on ground floor.
- redesign of back of house plant and waste areas in basement and ramp access to loading dock/carpark and main waste storage.
- the integration of loading dock within the basement of the residential towers.

The RtS was made publicly available on the Department website and was referred to the relevant public authorities. An additional four submissions were received from public authorities, including OEH, EPA, Transport for NSW and RMS. A summary of the issues raised in the submissions is provided at **Table 5** and copies of the submissions may be viewed at **Appendix A**. RMS advised that it has no comments in relation to the RtS.

Table 5 | Summary of public authority submissions to the RtS

OEH

OEH advised that the assessment of the Aboriginal Cultural Heritage still did not meet regulatory requirements and further assessment should be undertaken prior to determination of the application.

EPA

EPA advised that it is generally satisfied with the Applicant's responses in relation to managing construction and operational environmental impacts and that previously recommended conditions to address potential site contamination should be applied.

Transport for NSW

TfNSW advised that the proposed inbound route for construction trucks was not supported and that an alternative route is recommended whilst the Station Link services are in operation, but this can be resolved in the preparation of the final CTPMP.

In response to submissions to the RtS, the Applicant provided Supplementary Information, which provided further assessment of impact on Aboriginal Cultural Heritage and further information on site contamination, including amending the proposal to include remediation.



6. Assessment

The Department has considered the EIS, the issues raised in submissions, the Applicant's RtS and Supplementary RtS in its assessment of the proposal. The Department considers the key issues associated with the proposal are:

- built form and urban design.
- noise and vibration impacts.
- Aboriginal cultural heritage.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 6.4**.

6.1 Built form and urban design

The proposed development has been designed to comply with the built form controls of the approved concept plan (as modified) and the Macquarie University Design Excellence Strategy and Urban Design Guidelines (MQU UDG), including the built form, access and landscaping provisions.

The proposal complies with the GFA and student housing provisions for the campus under the concept plan. The proposal would result in the delivery of an additional 14,952sqm of GFA for academic and related purposes and 342 beds, resulting in a remaining 133,518sqm of permissible academic floorspace for the campus and 3108 additional student accommodation beds across the campus.

The proposed building is proposed to be sited centrally on the campus and north of the existing academic buildings adjoining the Macquarie University Central Courtyard. The building comprises five, six and seven storey elements with the Student Hub component being a regular block shape design and the two student accommodation towers forming arms that extend diagonally towards the north-west (see **Figures 5 to 8**). The buildings are setback a minimum 250 metres from the University campus boundaries.

Key elements of the built form are discussed in the following sections.

Building Height

The application proposes the construction of a building with multiple heights of RL83.072 (26.2m-five storey) for the eastern component and RL80.7 (24.7m-six storey) and RL83.8 (27.8m-seven storey) for the western residential towers (refer to **Figures 9 to 14**). The building at its highest point (including rooftop plant) is proposed to be RL83.8, which is consistent with the built form controls in the MQU UDG approved under the concept plan (as modified), which identify buildings up to 10 storeys.

Council did not raise any concerns relating to the proposed built form of the development, including the building height.

The Department considers the proposed building would be of a comparable height to other recently constructed education and research buildings in proximity to the site, including the Macquarie University Library (constructed to a maximum parapet height of RL86.32), Australian Hearing Hub (constructed to a maximum height of RL101) and Arts Precinct Redevelopment (constructed to a maximum parapet height of RL67.7).



Figure 9 | Illustrative perspective of the proposal from the north (Source: RtS)

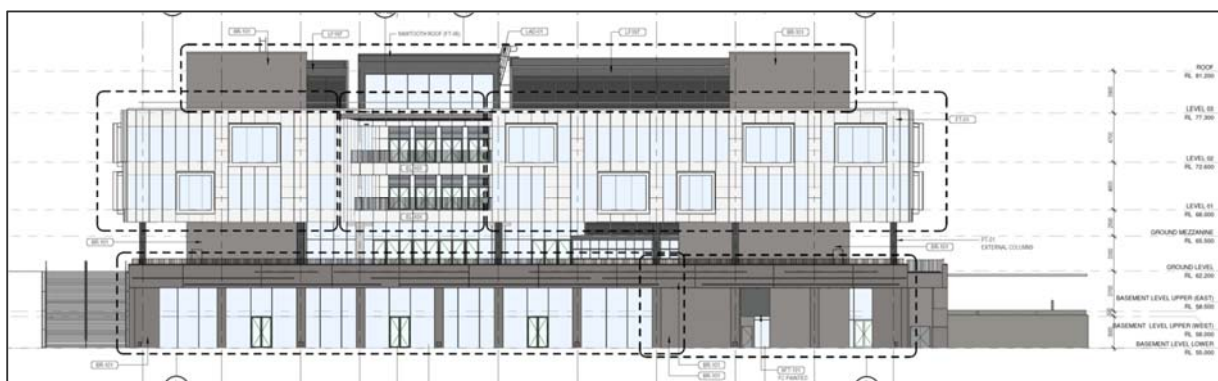


Figure 10 | Student Hub Northern Elevation (Source: RtS)

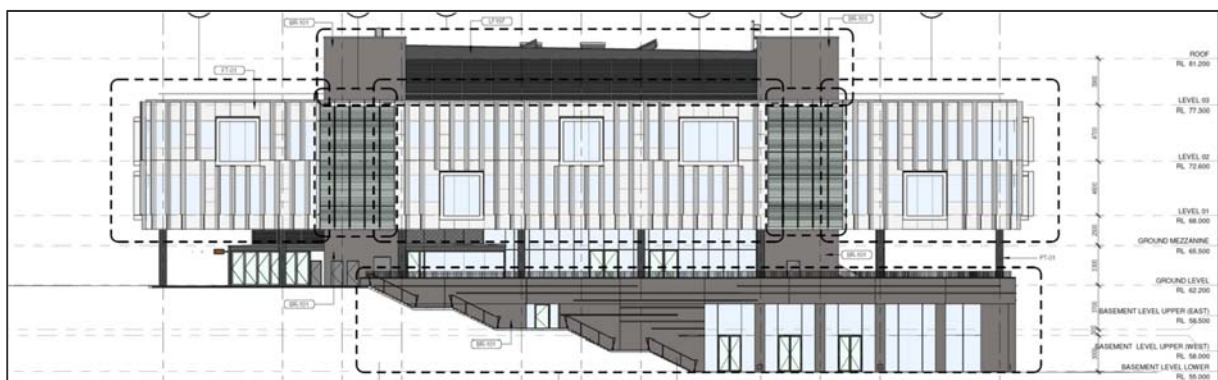


Figure 11 | Student Hub Eastern Elevation (Source: RtS)

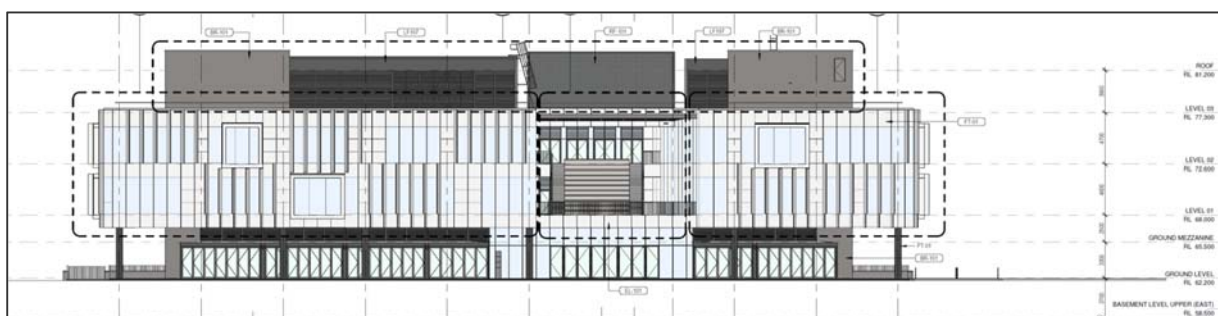


Figure 12 | Student Hub Southern Elevation (Source: RtS)



Figure 13 | Residential Towers Eastern Elevation (Source: RtS)



Figure 14 | Residential Towers Western Elevation (Source: RtS)

The application is generally consistent with the height controls established for the lots, being four storeys for Lot A16 and 10 storeys for A17 in the MQU UDG (refer to **Figure 15**). Consequently, the Department considers the maximum height of the proposed building is suitable for the location and will not adversely impact on the surrounding environment.

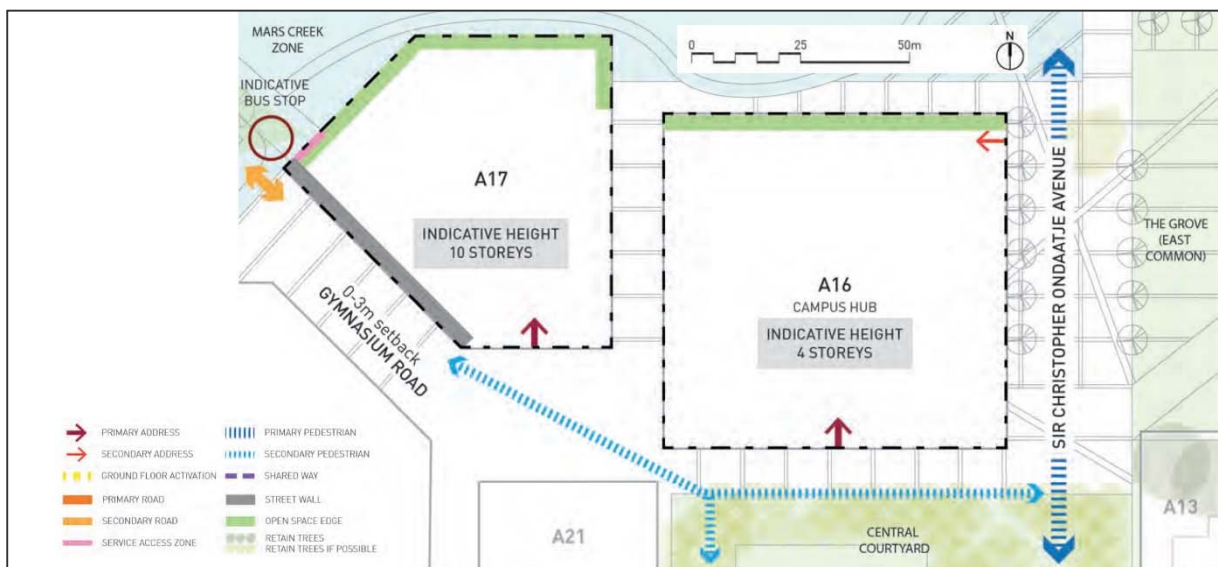


Figure 15 | MQU UDG Lot Controls (Source: MP 06_0016 MOD 1)

Urban Design

The approved concept plan (as modified) establishes the following design principles that would be relevant for redevelopment of the site.

Concept Plan

Built Form

- Definition of major spaces by built form.
- Reinforcement of main circulation spines with buildings that overlook the spaces.
- Activation of ground levels on major spaces with retail, cafes or student services.
- Buildings to have a clear address to either a road or a main open space.
- High turnover spaces in the Academic Core on the lower three floors.
- Increase the height in the Academic Core up to eight storeys to contain the size and increase the vitality of the core.
- Preservation of solar access to key open spaces.
- Improved security and surveillance.

Architectural Expression

- Embody environmentally sensitive design principles, including building facades that are environmentally responsive (i.e. shading to northern, eastern and western facing windows).
- Use colours and materials that are consistent and/or responsive to the design palette of existing materials, colour and finishes and use a common language for the precinct.
- Develop a comprehensive and unified lighting strategy.
- Develop a strong landscape setting.

The MQU UDG also identifies principles and guidelines for the campus that seek to: extend the existing geometric layout; deliver an efficient street network; reinforce the open space network; ensure a sense of place is maintained within the pedestrian environment; reinforce important vistas; and prioritise pedestrian amenity in the design of the movement network. More specifically, the MQU UDG also establishes access and landscaping directions for development of individual lots.

The key directions for lots A16 and A17 are that the development should reinforce the built edge to Gymnasium Road and Central Courtyard and with access off the Central Courtyard and pedestrian connection from the Central Courtyard to Gymnasium Road (refer to **Figure 15**). The buildings should address the open space areas to the north.

The Applicant's architectural design report considered the design principles established in the approved concept plan and MQU UDG. The urban design features that have been incorporated into the design to respond to those principles are:

- connections between the internal and external areas.
- revitalisation of the Central Courtyard to recognise its significance as the 'social and leisure heart' of the campus.
- addressing the parkland setting, including the lake and Mars Creek.
- facilities that are adaptable that can be used during different times of the day and year.

- facilities that support diverse activities through a range of typologies, including: retail; food and beverage; learning and teaching; and student accommodation to promote activation.
- active 'street frontages' that support visitor and the residents to facilitate a constantly inhabited ground plane.
- a hierarchy of gathering spaces that respond to the functional uses and pedestrian movement.
- integration of the built forms, landscaping and public realm.
- protecting and enhancing the connection from Wallys Walk, through the Central Courtyard, to the Parkland and Mars Creek.
- seamless linkages to the surrounding precincts.

The Government Architect NSW (GA NSW) reviewed the original design as proposed in the EIS and recommended further consideration of the internal and external design elements relating to:

- location of tree planting to offset trees removed.
- amenity to the courtyard to the south of the student accommodation towers.
- adequate soil depth for tree planting to provide shade and mitigate wind impacts.
- providing outdoor seating suitable to the anticipated wind conditions.
- further articulation of the roofline of the Student Hub given the size of the building footprint (70m by 70m).
- alignment of the atrium spaces in the Student Hub building and optimising natural light.
- the placement of stairs, lifts, amenities and a teaching area along most of the northern frontage obscures panoramic views north of the Academic Core.
- insufficient resolution of the sustainability strategy, including orientation of photovoltaic cells on the student accommodation towers which could be optimised.
- compatibility of the materiality of the design, which adopts a contemporary finish (lightweight, metallic and reflective materials) compared to the surrounding face brick and off form concrete forms (a legacy of the 'Brutalist style architecture').

The Applicant provided a revised design in the RtS to address matters raised by GA NSW, including the following changes:

- further articulation of plant room.
- refinement of façade, including removal of steel frame and material change of vertical shading to aluminium.
- refinement of podium material from limestone panels to dry pressed brick.
- refinement of façade including removal of a portion of perforated metal screens and rationalisation of ceramic façade elements.
- replacement of aluminium composite soffits with fibre cement facade sheeting with an applied acrylic textured finish to achieve a monolithic appearance.
- introduction of louvres to bedroom windows to meet natural ventilation requirements.
- redesign of lift and stair cores to facilitate better planning outcomes.
- redesign of ground floor common areas including an introduction of an outdoor terrace extension of kitchen/dining and lounge spaces and introduction of laundry facilities on ground floor.

The building configuration is supported as:

- it provides better visual and physical connectivity with Mars Creek, Lake Macquarie and landscaped areas to the north of the Academic Core.
- it provides better utilisation of north facing frontages.
- the student accommodation provides a range of residential options.

The RtS was referred to the GA NSW who were satisfied that the revised design addresses the matters raised regarding the original design. The Department is of the view the proposed architectural design and detailing is appropriate for the site location and that the proposal is consistent with the design principles of the approved concept plan. The Department considers the revised design also addresses the lot controls for the site, which reinforce the vision of the MQU UDG. Further, the external appearance of the building and the proposed treatment of the campus' main civic spaces would be an appropriate revitalisation of an important location on the campus.

6.2 Noise and vibration impacts

An Acoustic Report was submitted with the EIS and additional information was provided with the RtS assessing the operational and construction noise impacts of the proposed development on noise sensitive receivers. The closest external noise sensitive receivers for the site are located over 420m from the site (refer to **Figure 16**). Accordingly, the proposal has considered mitigating impacts on noise sensitive receivers within the campus and the residential component of the development that forms part of the development.

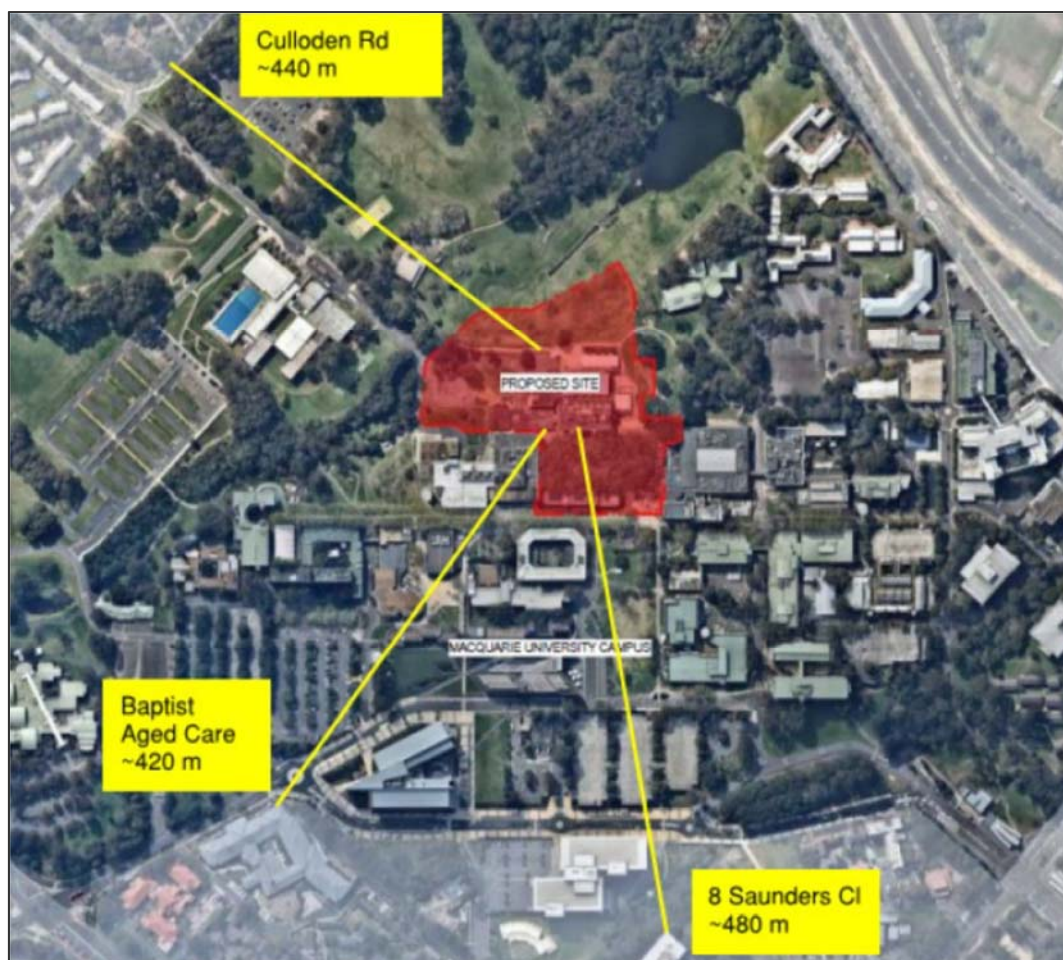


Figure 16 | Distance to residential sensitive receivers (Source: RtS)

The site is immediately surrounded by educational faculty buildings, with Building C8A (Lincoln - student wellbeing) located immediately to the south of the development site and open space areas to the north. Attended and unattended noise monitoring was undertaken to quantify the existing acoustic environment at the site. Attended background monitoring was undertaken at 12 locations within the site and one long-term unattended logger was installed within the development site (within the Central Courtyard).

Construction

The Interim Construction Noise Guideline (DECCW, 2009) (ICNG) outlines the process of establishing noise management levels (NMLs) to minimise construction noise impacts on sensitive receivers.

The NML (Noise Affected) during standard construction hours at the nearest sensitive residential receivers was set at 55dB $L_{Aeq}(15min)$ (using an average background levels in accordance with Australian Standards).

The Applicant has requested construction hours as follows:

- 7am to 7pm Monday to Friday.
- 8am to 4pm Saturday.
- no works on Sunday or NSW Public Holidays.

Saturday hours are extended from those recommended by the ICNG (8 am to 1 pm) however, given the location of the site and the works within the site, in addition to the hours recommended by Council, the Department supports the extension of construction hours on Saturdays.

Construction noise is not anticipated to have an impact off the Macquarie University site as a result of the distance to the residential receivers and comply with the NML without any mitigation. It should be noted however, that the university would remain operational during the 20-month construction period. The NML for the surrounding academic uses would be 45dB $L_{Aeq}(15min)$.

The Applicant has indicated that there is potential for noise generated by construction activities to impact upon the surrounding facilities of the university. As such, the Applicant has proposed to locate plant and equipment away from sensitive receivers and locate sheds, site offices and temporary buildings between the works and the most sensitive locations to provide some noise screening. Additionally, works will be programmed to ensure that noisy activities are undertaken concurrently where one activity can mask the other.

Given the distance to surrounding residential receivers, construction vibration is not expected to be significant for the proposed works.

The EPA made the following recommendations to ensure minimal noise impacts upon off-site noise sensitive receivers:

- construction-related works be undertaken during standard construction hours within the ICNG.
- intra-day respite periods be implemented for works identified in the ICNG as particularly annoying and intrusive.
- construction vehicles should not arrive outside of the approved construction hours.
- agreed with the Applicant that intrusive movement alarms on construction vehicles be investigated and replaced where possible.

In noting the recommendations of the EPA, the Department supports the request for extended construction hours on Saturdays. To address any potential impacts of the extended hours, the Department supported the mitigation measures of the Applicant as well as the recommendations for respite periods and movement alarms provided by the EPA.

The Department acknowledges that a development within an established environment (i.e. an operational university) would likely result in some noise impacts, and as such, has recommended conditions to ensure noise is minimised, where practicable. Additionally, a condition has been recommended requiring the Applicant to undertake noisy works (as defined within the ICNG) within specified time periods and respite periods be scheduled in accordance with the ICNG.

Operation

The Acoustic Report provided project specific noise levels for the nearest sensitive receivers, including the proposed student accommodation, in accordance with the relevant provisions of the NSW Industrial Noise Policy (EPA, 2000) (INP).

The anticipated noise generating activities include building services equipment and the operation of the student bar.

The EPA commented that the noise assessment considered only the noise impacts of the operation of the proposed development on-campus and did not include an assessment of potential operational noise impacts upon sensitive receivers off-campus. The EPA has recommended additional background data be collected at sensitive off-campus locations. The EPA also recommended mechanical plant and services be assessed.

In response to concerns raised by the EPA, the Applicant advised that in accordance with the INP, background noise monitoring is only required where significant noise is anticipated. Further, it is common practice to finalise design details prior to certification of construction drawings and the proposal would need to be designed to meet residential amenity criterion for the student accommodation.

The Department noted the Applicant's commitment to complying with the project specific noise levels established for the nearest on and off-campus sensitive locations and acknowledged the additional information provided by the Applicant within the RtS and EPA's satisfaction with the information submitted.

In considering the information presented and commitments of the Applicant within the EIS and RtS, as well as the comments from the EPA, the Department considers that the operational noise impacts of the proposed development can be adequately managed with adoption of mitigation measures and adherence to specified noise limits.

The Department concludes that noise impacts of the proposed development can be appropriately managed through the implementation of the commitments made by the Applicant and the recommended conditions of consent. The Department has recommended a condition of consent requiring the Applicant to operate plant and equipment in accordance with the established project specific noise limits outlined within the Acoustic Report.

6.3 Aboriginal cultural heritage

The Applicant submitted with the EIS a due diligence Aboriginal heritage assessment for the whole of the Macquarie University North Ryde campus in 2012 prepared by Mary Dallas Consulting Archaeologists (MDCA).

The assessment concluded that the campus had no visible evidence of Aboriginal use, however areas of potential archaeological sensitivity were identified. The areas of sensitivity identified as part of this study are not within the proposed development footprint and as such, the Applicant considers that the potential for Aboriginal cultural heritage impacts of the proposed development are negligible. The areas of sensitivity are generally located in areas of environmental conservation.

OEH advised that the assessment was not satisfactory and an Aboriginal Cultural Heritage Assessment (ACHA), including consultation with relevant cultural knowledge holders, is required given the sensitivity of the land.

The Applicant has provided further assessment of the potential for Aboriginal Cultural Heritage to be present on the site in the supplementary information submitted subsequent to the RtS. The further assessment prepared by Extent Heritage provided further justification to support the Applicant's assertion that an ACHA is not required. The Extent Heritage advice details the extensive disturbance across the site and concludes that it is considered that there is low risk of significant cultural materials being present in these areas that have been significantly disturbed, and that such cultural material would likely be heavily modified. In areas where there has been minimal excavation, Extent Heritage asserts that introduction of fill material onto an Aboriginal site is considered as 'harm', and as such any cultural materials would generally be considered destroyed even if present. The Applicant has advised that an ACHA is being prepared for the whole campus independently of this application, including consultation in accordance with OEH guidelines. This includes identifying the cultural knowledge holders for the land, who are now Registered Aboriginal Parties (RAPs) for the ACHA currently being prepared for the entire campus.

The Department notes that the development site has been substantially disturbed, with the university operating at the site since 1964. Given the findings of the previous study of the overall campus and the additional information submitted, the Department accepts the Applicant's conclusion regarding potential Aboriginal cultural heritage impacts of the proposed development.

The Department considers that an Aboriginal Cultural Heritage Management Plan (ACHMP) should be prepared for the site, in consultation with Registered Aboriginal Parties (RAPs) who have nominated for participation in the preparation of the ACHA. The ACHMP should outline:

- processes, timing, and methods for maintaining Aboriginal community consultation through the remainder of the project.
- detailed review and investigation of the Aboriginal cultural heritage that may be present across the site.
- processes for reviewing, monitoring, and updating the ACHMP as the project progresses, including incorporating any mitigation measures identified in the ACHA being prepared for the campus.
- procedures to ensure all works are to immediately cease if unexpected archaeological artefacts are found on-site during any stage of the works, and appropriate procedures for notification and recommencing works.
- protocols for the salvage required for the project and also for the long term management of any areas of cultural or archaeological significance, within the project boundaries, but not subject to salvage excavations.
- requirements for all salvage works to be carried out under supervision of a qualified archaeologist and representatives of the RAPs for the project.
- requirements for preparation of a final report outlining the results of any salvage work undertaken and any long term management of Aboriginal objects.

The Department has recommended a condition of consent requiring the Applicant to prepare and submit an ACHMP for approval prior to the commencement of any works on the site, and the ACHA being prepared for the campus be submitted for endorsement prior to occupation of the building.

6.4 Other issues

The Department's consideration of other issues is provided at **Table 6**.

Table 6 | Department's assessment of other issues

Issue	Findings	Recommended Condition
Biodiversity	A Biodiversity Development Assessment Report (BDAR) prepared in accordance with the Biodiversity Assessment Method (BAM), has been submitted. The BDAR provides an assessment of the likely impacts on biodiversity, potential impacts on any threatened species or populations, and a detailed description of the measures to avoid, minimise, mitigate and offset biodiversity impacts. The vegetation on the site comprises landscaped gardens and planted trees. The proposal would result in the removal of 0.07 hectare of native vegetation. The vegetation survey identified a single Plant Community Type (PCT) within the site, being Smooth – barked Apple – Red Bloodwood – Blackbutt tall open Forest on shale sandstone transition soils in eastern Sydney (PCT 1845). The BDAR asserts that given the small area of vegetation removal within an existing urban environment and retained vegetation, no additional measures to avoid or minimise impacts were considered. The proposal was assessed as not having any impact on any threatened species or endangered ecological communities. The BDAR calculated the biodiversity offset requirements to be one ecosystem credit to offset the biodiversity impacts of the proposal. OEH advised that the biodiversity assessment and the conclusion regarding impact on biodiversity values and offset requirements (one biodiversity credit) was satisfactory. The Department considers that the Applicant has sufficiently demonstrated that the proposal minimises and offsets the biodiversity impacts. Subject to the conditions requiring the retirement of the ecosystem credit or payment to the Biodiversity Conservation Fund (BCF), to offset the biodiversity impacts, the Department is satisfied that the impact on biodiversity values has been sufficiently mitigated.	The Department has recommended conditions of consent requiring the Applicant to retire the ecosystem credit or payment into the BCF to offset the biodiversity impacts of the development and evidence provided to the Department prior to any clearing or construction works.

Issue	Findings	Recommended Condition
Tree Removal	An Arboricultural Impact Assessment was undertaken by Australian Tree Consultants. The assessment considered 227 trees within the boundary of the proposed works. Of these trees, 169 were identified for removal and 58 for retention. The 117 trees within the Central Courtyard have already been removed due to safety concerns and offset planting of 120 trees has already been planted. The assessment recommended offset planting of two to one be provided to offset the impacts. Additionally, the assessment provided a number of recommendations to protect the trees to be retained, including installation of site boundary fencing and specific tree protection controls. In considering the Applicant's assessment, the Department notes that the Applicant intends on providing offset planting of 381 trees (186 on-site and 75 within the Mars Creek area and 120 previously planted on campus), retaining trees where possible and implementing protection for retained trees to avoid impacts during construction. OEH supported the replacement tree planting ratio of 2:1 with native species. The Department accepts that tree removal is necessary to accommodate the proposal and to address safety risks and that offset planting would sufficiently offset tree loss. The Department supports the recommendations within the Arboricultural Impact Assessment Report requiring the implementation of tree protection controls for all trees that have not been approved for removal.	The Department has recommended a condition of consent that the Applicant provide tree planting as committed to, preparation of a Landscape Management Plan and implement tree protection controls for all trees that have not been approved for removal.
Development Contributions	Development of the campus under the concept plan is subject to a Planning Agreement (PA) between MQU and Council (executed February 2013). In accordance with the terms of the PA, the proposed development is subject to development contributions as the proposed development includes student housing. Council requested that contributions be paid in accordance with the PA.	The Department has recommended a condition requiring payment of development contributions in accordance with the PA.

Issue	Findings	Recommended Condition
Contamination	A Preliminary Stage 1 Environmental Assessment was prepared by Environmental Investigation Services as part of the EIS. The results of the Preliminary Stage 1 Environmental Assessment classified existing soils as general waste (non-putrescible) and concluded further contamination testing would be required after the demolition of the former building on the site. In its submissions on the EIS and RtS, the EPA raised potential site contamination as an issue and advised that a detailed assessment of potential site contamination, including groundwater, was required. The Applicant submitted further assessment of site contamination as part of supplementary information and revised the proposal to include remediation works to address petroleum impacted fill, as outlined in a Remediation Action Plan. The Department is satisfied that upon completion of the remediation works, the site would be suitable for the intended uses.	The Department has recommended conditions of consent requiring the Applicant: • remediate the site. • verify the relevant part of the site is suitable for the residential, open space and commercial/industrial land uses after remediation. • prepare an unexpected finds protocol for contamination discovered during construction works. • validation of the remediation works.
Construction Traffic and Parking	The proposal will result in cumulative construction impacts occurring within the general locality resulting from the Sydney Metro Northwest works and other development on the campus, including redevelopment of the Arts Precinct. It is anticipated that up to 100 vehicles would be travelling to the site per day, with 15 two-way truck movements per hour during peak periods. It is anticipated that construction workers would travel to the site by public transport and construction parking demand generated by the proposal of approximately 50 spaces. Car parking areas on the site have been assigned to construction workers. TfNSW and RMS have identified that the construction traffic impacts will need to be coordinated with the TfNSW Sydney Coordination Office. The construction vehicles are not anticipated to result in significant traffic impacts. Subject to conditions requiring a final construction traffic management plan to be prepared with the relevant transport authorities, the Department is satisfied that	The Department has recommended a condition requiring that prior to the commencement of works, a final construction traffic management plan, including details of construction traffic management, be prepared in consultation with TfNSW Sydney Coordination Office and Council, and submitted to the Department.

Issue	Findings	Recommended Condition
	potential impacts associated with construction traffic can be appropriately managed and mitigated.	
Traffic and Parking	The proposal is replacing existing Student Hub facilities and delivering additional academic floorspace and student housing. The Transport Assessment submitted with the EIS concluded that the proposal would have a positive impact on traffic as it is consistent with the objectives of the concept plan and University's Travel Plan. Car parking on the campus is capped under the concept plan approval for academic uses, and since the opening of the Macquarie University railway station, private vehicle travel to the campus has significantly decreased and continues to be reducing as a mode share with the implementation of the University's Travel Plan. The proposal is consistent with the concept plan as it provides a minimal eight car parking spaces, comprising two spaces for persons with a disability and six visitor spaces, which is consistent with the capping of car parking under the concept plan and relocation of car parking to the peripheries of the campus. The limited provision of car parking would also be supported by extension of the shuttle bus service to the student accommodation and provision of bicycle parking and end-of-trip facilities. The provisions of student housing centrally on the campus would also further reduce vehicle trips to the campus. The Department considers the traffic and parking impacts of the proposal satisfactory.	The Department considers no conditions or amendments are necessary.
Overshadowing	The proposal would overshadow the Central Courtyard open space area. The additional overshadowing compared to the now demolished building is marginal. A minimum of 50 per cent of the Central Courtyard would maintain solar access during mid-winter when shadows are the most significant. The Department considers the additional overshadowing impacts acceptable as adequate level of solar access and amenity within the Central Courtyard can be maintained.	The Department considers no additional conditions or amendments are necessary.

Issue	Findings	Recommended Condition
Historic Heritage	A Statement of Heritage Impact was prepared by GBA Heritage Pty Ltd to assess the potential heritage impacts of the proposed development upon historic heritage. The site is listed as a heritage item on the RLEP 2014 but the area of significance is located approximately 60 metres north-west of the development site – being the Macquarie University Ruins. The proposed development would be confined to the site and impacts upon the curtilage of the significant the Macquarie University Ruins were assessed as having no adverse impacts as there are no views to or from the site to the Ruins. The Department supports the conclusions of the Applicant and considers that impacts upon the Ruins (refer to Figure 3) from the proposed development would be negligible.	The Department considers no conditions or amendments are necessary.
Student amenity	State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARH SEPP) aims to provide a consistent planning regime for the provision of affordable rental housing. A student accommodation facility is not explicitly defined under the ARH SEPP, however, it could be categorised as a “boarding house”. Under the ARH SEPP, rooms are required to provide a minimum GFA of 12sqm for a single lodger. Whilst not strictly applying to student accommodation, the proposed housing (which includes single person studios (17-30sqm), twin share rooms (37sqm), four bedroom apartments (89-97sqm) and five bedroom apartments (140sqm)) complies with these requirements. Furthermore, the variety in housing type will provide various housing options for students. The Department considers that adequate level of amenity can be provided for occupants of the student accommodation.	The Department considers no additional conditions or amendments are necessary.



7. Evaluation

The proposed SSD application seeks approval for an integrated education facility, student facilities and student housing development. The Department has reviewed the EIS, RtS, supplementary information and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The Department's assessment of the project concludes that:

- the built form and urban design is suitable for the site and is consistent with urban design controls and principles established for the site under the approved concept plan for the University campus.
- the noise impacts associated with the construction and use of the facilities can be appropriately mitigated, subject to a construction noise management plan, designing for the amenity of future residents on the site and closing windows and doors when the student bar is in use during the evenings.
- the potential impact on Aboriginal cultural heritage is satisfactory as the site has been substantially disturbed and the potential for Aboriginal cultural heritage to be present on the site is low, subject to the preparation of an Aboriginal Cultural Heritage Management Plan prepared in consultation with relevant cultural knowledge holders for the campus.

The proposal is consistent with key government strategic plans and policies, including the Greater Sydney Region Plan, North District Plan, State Infrastructure Strategy 2018-2038 and Future Transport Strategy 2056.

The proposal is considered to be in the public interest as it would provide public benefits, including:

- additional investment in educational infrastructure within a highly accessible location.
- growing the Macquarie Park health and education precinct.
- ensuring the State remains competitive in attracting students, staff and researchers in the tertiary education sector.
- providing diverse student housing options in an accessible and convenient location with integrated facilities.
- delivery of approximately 400 new construction jobs.

Based on its assessment, the Department considers that the project is justified and in the public interest, and that the site is suitable for the proposed development, given the significant social and economic benefits associated with the delivery of the educational facilities and supporting student services, including student housing. The project represents a significant investment in tertiary infrastructure that would continue to consolidate and grow the Macquarie Park health and education precinct, through the delivery of the approved concept plan.

Recommended conditions of approval and the implementation of measures detailed in the Applicant's EIS and RtS would ensure that the project would minimise and mitigate the residual environmental and social impacts of the project. Consequently, the Department recommends that the State significant development for the Macquarie University Central Courtyard Precinct Redevelopment be approved, subject to the recommended conditions of consent.



8. Recommendation

It is recommended that the Executive Director, Priority Projects Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report.
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application.
- **agrees** with the key reasons for approval listed in the notice of decision.
- **grants consent** for the application in respect of Macquarie University Central Courtyard Precinct Redevelopment (SSD 8755).
- **signs** the attached development consent and recommended conditions of consent (refer to **Appendix D**).

Recommended by:

Megan Fu

Principal Planner

Social and Other Infrastructure Assessments

Recommended by:

David Gibson

A/Director

Social and Other Infrastructure Assessments



9. Determination

The recommendation is: **Adopted by:**

18/4/2019

Karen Harragon

A/Executive Director

Priority Projects Assessments



Appendices

Appendix A - List of Documents

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

1. Environmental Impact Statement
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8755
2. Submissions
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8755
3. Applicant's Response to Submissions
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8755
4. Applicant's Supplementary information
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8755

Appendix B - Statutory Considerations

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

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

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

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)
- Ryde Local Environmental Plan (RLEP) 2014.

COMPLIANCE WITH CONTROLS

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

Table 1 | SRD SEPP compliance table

Relevant Sections	Consideration and Comments	Complies
3 Aims of Policy The aims of this Policy are as follows: (a) to identify development that is State significant development	The proposed development is identified as SSD.	Yes
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2.	The proposed development is permissible with development consent. The proposal is for the purpose of a tertiary institution with a capital investment value (CIV) in excess of \$30 million, under clause 15(3) of Schedule 1.	Yes

State Environmental Planning Policy (Infrastructure) 2007

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

The development is located within the vicinity of an electricity transmission or distribution network and in accordance with clause 45 of the Infrastructure SEPP, the development must be referred to the relevant electricity supply authority for comment.

The application was referred to Ausgrid in accordance with the Infrastructure SEPP. Ausgrid advised that consideration should be given to proximity of the proposal to existing electricity network assets and it consents to the development, subject to conditions relating to integration of the proposed development with Ausgrid infrastructure and undertaking work within or near an electrical easement.

The proposal is therefore consistent with the Infrastructure SEPP given the consultation and consideration of the comments from the relevant public authorities. The Department has included suitable conditions in the recommended conditions of consent (see **Appendix D**).

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

The Education SEPP commenced on 1 September 2017 and aims to simplify and standardise the approval process for child care centres, schools, TAFEs and universities while minimising impacts on surrounding areas and improving the quality of the facilities. The Education SEPP includes planning rules for where these developments can be built, which development standards can apply and constructions requirements. The application has been assessed against the relevant provisions of the Education SEPP.

Clause 45(1) of the Education SEPP provides that development for the purpose of a university may be carried out by any person with development consent on land in a prescribed zone. The site is within an existing university, which is identified as a prescribed zone in clause 43 of the Education SEPP. The proposal is therefore permissible with consent under the SEPP. Notwithstanding, the proposed development is consistent with the approved concept plan, which prevails to the extent of any inconsistency with any EPI.

Clause 57 of the Education SEPP requires traffic generating development that involve addition of 50 or more students to be referred to the RMS. The Application was referred to RMS in accordance with this clause.

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. A Preliminary Stage 1 Environmental Assessment was prepared by Environmental Investigation Services as part of the EIS.

The results of the Preliminary Stage 1 Environmental Assessment classified existing soils as general waste (non-putrescible) and concluded further contamination testing would be required after the demolition of the former building on the site.

The Applicant submitted further assessment of site contamination as part of supplementary information and revised the proposal to include remediation works to address petroleum impacted fill, as outlined in a Remediation Action Plan.

The Department is satisfied that upon completion of the remediation works, the site would be suitable for the intended uses. The Department has recommended conditions of consent requiring the Applicant:

- remediate the site.
- verify the relevant part of the site is suitable for the residential, open space and commercial/industrial land uses after remediation.
- prepare an unexpected finds protocol for contamination discovered during construction works.
- validation of the remediation works.

Draft State Environmental Planning Policy (Remediation of Land)

The Draft Remediation SEPP will retain the overarching objective of SEPP 55 promoting the remediation of contaminated land to reduce the risk of potential harm to human health or the environment.

Additionally, the provisions of the Draft Remediation SEPP will require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant, categorise remediation work based on the scale, risk and complexity of the work and require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to council.

The Department is satisfied that the proposal would be consistent with the objectives of the Draft Remediation SEPP.

Draft State Environmental Planning Policy (Environment)

The Draft Environment SEPP is a consolidated SEPP which proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Once adopted, the Draft Environment SEPP will replace seven existing SEPPs. The proposed SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the existing SEPPs that are applicable, the Department concludes that the proposed development would generally be consistent with the provisions of the Draft Environment SEPP.

Ryde Local Environmental Plan (RLEP) 2014

The RLEP 2014 aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Ryde LGA. The RLEP 2014 also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the RLEP 2014 and those matters raised by Council in its assessment of the development (refer to **Section 5**). The Department concludes the development is consistent with the relevant provisions of the RLEP 2014. Consideration of the relevant clauses of the RLEP 2014 is provided in **Table 2**.

Table 2 | Consideration of the RLEP 2014

RLEP 2014	Department Comment/Assessment
Clause 5.10 Heritage conservation	The Department has considered the potential heritage impacts in Sections 6.3 and 6.4 of the report.
Clause 6.2 Earthworks	The development requires bulk excavation of the site. The Department has recommended conditions of consent to ensure drainage is managed through construction.

Clause 6.4 Stormwater
Management

The Department is satisfied that stormwater would be managed appropriately in accordance with this clause.

Other policies

In accordance with Clause 11 of the SRD SEPP, Development Control Plans (DCPs) do not apply to State significant development. Furthermore, the provisions ordinarily addressed in DCPs is addressed in the approved concept plan, which prevails.

Appendix C – Consistency with Concept Plan Approval

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
A1 Development Description (1) Except as modified by this approval, Concept Plan approval is granted only to the carrying out of development solely within the Concept Plan area as described in the document titled “Macquarie University State Environmental Planning Policy (SEPP) amendment and Concept Plan” dated April 2008, as amended by the “Macquarie University Concept Plan and SEPP (Major Projects) Amendment Preferred Project Report” dated March 2009, prepared by JBA Planning Consultants and Cox Richardson Architects and MP 06_0016 MOD 1 including: (a) The provision of an additional 400,000m² of commercial GFA and associated parking. (b) The Provision of an additional 157,000m² of academic GFA. (c) The provision of an additional 3450 beds for University purposes only. (d) Infrastructure upgrading and improvements to the road network as required, and (e) Rationalisation of University car parking locations. (f) A maximum of 171,000m² of GFA for Precinct D.	The proposal would result in the delivery of an additional 14,952sqm of GFA for academic and related purposes and 342 beds, resulting in a remaining 133,518sqm of permissible academic floorspace for the campus and 3108 student accommodation beds.
A2 Development in Accordance with Plans and Documentation (1) The development shall generally be in accordance with the following plans and documentation (including any appendices therein): (a) “Macquarie University State Environmental Planning Policy (SEPP) amendment and Concept Plan” dated April 2008, as amended by the “Macquarie University Concept Plan and SEPP (Major Projects) Amendment Preferred Project Report” dated March 2009, prepared by JBA Planning Consultants and Cox Richardson Architects and MP 06_0016 MOD 1. Except for otherwise provided by the Department’s modifications of approval as set out in Schedule 2, Part B and the Proponent’s Statement of Commitments set out in Schedule 3. (2) In the event of any inconsistencies between the modifications of this concept approval and the plans and documentation described in Part A, Schedule 2, the modifications of this concept approval prevail. (3) In accordance with Section 75P(2)(a) of the EPA Act, where there is an approved Concept Plan, any approval given under Part 4 of the Act by Council, must be consistent with that Concept Plan.	The Department considers the proposed development has been designed in accordance with the applicable requirements of the documentation.
A3 Gross Floor Area (1) The maximum additional gross floor area for academic use across the Macquarie University campus must not exceed 157,000sqm. (2) The maximum additional gross floor area for commercial use across the Macquarie University campus must not exceed 400,000sqm. (3) The maximum total gross floor area for Precinct D must not exceed 171,000sqm. If the maximum gross floor area is not achieved in	The proposal would result in the delivery of an additional 14,952sqm of GFA for academic and related purposes, resulting in a remaining 133,518sqm.

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
Precinct D, it can be redistributed elsewhere on the Macquarie University campus but Precinct D must not exceed a total of 171,000sqm (inclusive of existing gross floor area in Precinct D). (4) The maximum floor space ratio for any building on land identified within Macquarie University Concept Plan MP 06_0016 Floor Space Ratio Map 004 is not to exceed the floor space ratio shown for the land.	
A4 Consolidated Concept Plan	
A consolidated version of the Concept Plan, combining the approved components of the Environmental Assessment, Preferred Project Report, Statement of Commitments, and modifications required by this approval, is to be submitted to the Department within 3 months of the Concept Plan approval.	N/A
A6 Approvals by the Director General	
If any of the terms of the approval specify that an agreement is to be made between the proponent and a government agency or council, all parties to the agreement are to act reasonably. If no agreement is reached within 3 months of the commencement of negotiations, the issue can be referred to the Director General for a decision. Full details of the discussions and the dispute are to be provided in order for the Director General to make a decision.	N/A
A7 Lapsing of Approval	
Approval of the Concept Plan shall lapse 5 years after the determination date in Part A of Schedule 1, unless an application is submitted to carry out a development for which concept approval has been given.	The Concept Plan continues to be valid as the Australian Hearing Hub application (MP 10_0032) was submitted within five years of the approval.
A8 Building Height	
The maximum height of any building on land identified within Macquarie University Concept Plan MP 06_0016 Height of Buildings Map 003 is not to exceed the maximum height shown for the land.	N/A
A9 Planning Secretary Directions	
Consistent with the requirements in this approval, the Planning Secretary may make written directions to the Applicant in relation to: (a) the content of any guidelines, strategy, study, system, plan, program, review, notification, report or correspondence submitted under or otherwise made in relation to this approval, including those that are required to be, and have been, approved by the Planning Secretary; and (b) the implementation of any actions or measures contained in any such document referred to in (a) above.	N/A

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
B1 Car Parking (1) Car parking for commercial uses shall not exceed a maximum rate of 1 space per 80m² of gross floor area. <i>Note: variations to the car parking rates could be considered only where it can be demonstrated with certainty that upon completion of all development for commercial uses in accordance with the approved Concept Plan, compliance is achieved with the maximum prescribed car parking rate.</i> (2) The maximum car parking across the campus is 10,800 spaces, comprising a maximum of 5,000 car parking spaces for commercial uses and 5,800 car parking spaces for other uses. (3) New car parking for commercial buildings shall be located within basements (part of which may be above ground due to the slope of the site) and generally contained within the footprint of the building above. The design of any above ground car parking shall include architectural treatment of the elevations to reduce their visual impact and dominance. (4) The existing at-grade and above ground car parking areas within the site shall be consolidated into four car parks around the perimeter of the Academic Core (Precincts A and B). The design of any above ground car parks shall include architectural treatment of the elevations to reduce their visual impact and dominance.	The proposed development is generally consistent with these provisions as it provides minimal parking of eight spaces for primarily visitor and persons with a disability. These spaces will be provided within the basement level. The proposal is generally consistent with the overall vision to consolidate parking for academic uses in designated car parks located around the perimeter Precincts A and B.
B2 Transport and Pedestrian Management (1) (a) A 40% non-car mode share target shall be adopted for the academic and commercial uses on the site. (b) A 62% non-car mode share target shall be adopted for the academic uses on the site. (2) A travel survey of the academic and commercial uses shall be undertaken every five years and identify the mode share achieved for each transport type. A report shall be submitted to the Director General of the Department of Planning and shall include a summary of the survey methodology and results and recommendations to achieve the targets identified in (1)(a) and (1)(b).	The Applicant has identified that the mode share split to non-car mode was achieved once the Macquarie University railway station became operational. This application would further support the non-car mode with student housing located in a central and accessible location and no parking for the student accommodation.
B3 Road works (1) Indicative timing and staging plans for road intersection upgrades forming part of the Concept Plan must be addressed via agreement(s) with the Minister or Council for the relevant road and intersection works, or via a monetary contribution in lieu thereof. As part of any application that generates the need for the road intersection upgrades, details demonstrating compliance with any agreement or detailed plans for delivery of the upgrades must be provided. (2) The Concept Plan approval includes the following road intersection upgrades identified within Section 4.4 of the "Macquarie University Concept Plan TMAP" dated March 2009 and prepared by Cardno Eppell Olsen:	The Applicant has been engaged in ongoing discussions with the relevant road authorities to resolve the outstanding road work upgrades. The Applicant has made offers to enter into Planning Agreements with the Department and Council for the outstanding road works that have been identified as required from the additional transport assessments undertaken subsequent to the concept plan approval.

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
(a) Epping Road / Balaclava Road intersection – additional through lane on Balaclava Road (south) and additional right turn lane on Balaclava Road (north) (b) Epping Road / Herring Road intersection – additional through lane on Herring Road (south), additional right turn lane on Epping Road (east), two through lanes and two right turn lanes on Herring Road (north) and adjusted signal phasing. (c) Waterloo Road / Herring Road intersection – left/through lane on Waterloo Road (east) and adjusted signal phasing. (d) Waterloo Road / Culloden Road intersection – realign Gymnasium Road to make fourth leg at roundabout and provide two lane circulating roundabout. (e) Talavera Road / Christie Road intersection – additional left turn slip lane, though lane/right turn lane on Talavera Road (east), departure lane becomes full traffic lane on Talavera Road (west) and adjusted signal phasing. (f) Talavera Road / Herring Road intersection – adjusted signal phasing.	
B4 Design Excellence and Urban Design Guidelines	
(1) The Design Excellence Strategy and Urban Design Guidelines to be prepared are to have regard to Macquarie Park Corridor DCP. (2) The Design Excellence Strategy and Urban Design Guidelines are to be prepared in consultation with Council and include provision for the accommodation of car parking in the basement of new buildings, including details in relation to the achievement of activated frontages, and details related to the provision of bicycle paths and associated facilities. (3) The Design Excellence Strategy and Urban Design Guidelines for Precinct E are to specifically address pedestrian crossing from the Macquarie Park railway station to the Academic Core, creating active frontages around the station particularly after hours, and integration of station services buildings into design of new buildings around the station plaza. (4) The Design Excellence Strategy and Urban Design Guidelines are to indicate the extent of setbacks required by the RTA. Such guidelines to be prepared in liaison with the /RTA, having regard to the micro simulation modelling and the extent of setback required to achieve additional capacity improvements and bus priority. (5) The Design Excellence Strategy and Urban Design Guidelines are to be submitted to the Department of Planning when revised and include a version control section that clearly documents and justifies changes made from the previous version. (6) The Design Excellence Strategy and Urban Design Guidelines are to be revised to: include overarching design principles in relation to height, depth, building separation and horizontal dimensions; and requirements to address public amenity along edges to the public forecourt of the railway station. The revisions must be submitted and approved by the Government Architect NSW within four months of approval of MP 06_0016 MOD 1. (7) An architectural design competition must be held in relation to proposed development on lots E10 and E11 where the Capital	The consolidated Design Excellence Strategy and Urban Design Guidelines (Guidelines) were approved as part of the approved modified concept plan (MP 06_0016 MOD 1). The revisions required under (6) to revise the Guidelines do not affect the development. The Department has considered the Guidelines in section 6.1 of the report.

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
Investment Value of the development exceeds \$100 million, unless an alternative design process is endorsed by the Government Architect NSW or Planning Secretary. An architectural design competition means a competitive process conducted in accordance with procedures approved by the Planning Secretary from time to time.	
B5 Setbacks	
(1) Road setbacks to facilitate additional capacity improvements and bus priority as identified in drawing University Avenue Revised Concept Plan, revision number P4, prepared by TaylorThomsonWhitting, dated 02.06.17, must be endorsed by Council. Any development adjoining the University Avenue, Herring Road and Waterloo Road intersection must demonstrate the endorsed setbacks have been adhered to. (2) The setbacks referred to in (1) above must form part of the agreements referred to in C15 of this approval.	The proposed development does not adjoin this intersection.
C1 Staging of Development	
(1) The Proponent shall demonstrate with each application for building works that the proposed development represents the orderly and coordinated development such that: (a) It may be serviced by existing infrastructure, by infrastructure approved by this Concept Plan, or is capable of being serviced; and (b) Access for vehicles and pedestrians is available and can be made available.	Access to the proposed development was considered within Section 6.1 of the report. The Department considers that the proposed development can be serviced by existing and proposed infrastructure.
C2 Urban Design Details	
(1) Future applications for increased height of buildings to the north of Macquarie University Station shall demonstrate by way of sections and elevations, the relationship of the proposed increase in building height with that approved by this Concept Plan. (2) Development within Station North (Precinct E) is to be set back 43 metres from the centre line of Waterloo Road. The Urban Design guidelines for Precinct E shall demonstrate by way of Sections and elevations how this setback is to be achieved, the proposal's relationship with the setbacks approved by this approval, as well as provision for activated frontages, and assessment of any adverse impacts including but not necessarily restricted to, visual impact and overshadowing.	N/A

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
C3 Landscaping (1) The Landscape Management Plan referred to in the Statement of Commitments is to be integrated with the Design Excellence Strategy and Urban Design Guidelines referred to in B4 of this approval and is to demonstrate: (a) Maintenance of the bush land setting of the site. (b) Achievement of the landscape principles articulated in the Statement of Commitments, and as shown in Figure 26 to the Environmental Assessment Report. (2) The Landscape Management Plan is to be prepared for each precinct and made publicly available on the University's website prior to or with the first application for new building works in each precinct.	The Guidelines includes a Landscape Management Plan. The proposal is generally consistent with the principles of the Landscape Management Plan.
C4 Riparian Zone, Flooding and Stormwater (1) The Stormwater Management Plan and other various plans referred to in the Statement of Commitments are to be: (a) Integrated with the Vegetation Management Plan and Threatened Species Plan referred to in the revised Statement of Commitments. (b) Revised in accordance with any modifications undertaken as part of this approval. A copy of the Stormwater Management Plan, as updated from time to time, must be published on the University's website. (2) A Stormwater Management Plan is to be submitted for approval with each application for new building works, as relevant.	A Stormwater Management Strategy was submitted with the application.
C5 Bushfire Protection (1) A Bushfire Management Plan is to be prepared in accordance with the requirements of 'Planning for Bushfire Protection 2006' (NSW Rural Fire Service), particularly in relation to Precinct B. The Bush Management Plan has to be prepared to the satisfaction of the NSW Rural Fire Service and submitted with each application for building works, as relevant. (2) Uses constituting 'Special Fire Protection Purposes' as defined in 'Planning for Bushfire Protection 2006' are to be undertaken in consultation with the NSW Rural Fire Service.	N/A
C6 Flora and Fauna (1) The Vegetation Management Plans, the Threatened Species Plan, and the Weed Management Plan referred to in the Statement of Commitments shall detail responsibility for each action, and shall include ongoing measures. (2) A copy of the Plans shall be published on the University's website. (3) All future development is to be undertaken in accordance with the 'Guidelines for Development Adjoining Department of Environment and Conservation Land' by DECC dated August 2006.	The biodiversity impacts have been considered in Sections 4.4.7 and 6.4 of the report.
C7 Environmentally Sustainable Development	

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
(1) The requirements in respect of environmentally sustainable development as set out at page 1 of the Statement of Commitments is to be submitted for approval with each new application for building works on the site, as relevant.	The Applicant provided an ESD report for the proposed development. The Department's consideration of ESD commitments is presented within Section 4.4.3 of the report and within the Department's recommended conditions of consent.
C8 Environmental Management and Contamination	
(1) The hazardous material audit, a Phase 1 contamination assessment and a targeted Phase 2 intrusive contamination assessment (if required) referred to in the Statement of Commitments is to be prepared and be submitted for approval with each application for building works, as relevant to the development.	The Department's consideration of the Applicant's contamination assessment is provided within Section 6.4 of the report. The Department has recommended conditions of consent to the site is remediated in accordance with the Remediation Action Plan and verification provided at the relevant stages in the construction process.
C9 Heritage / Archaeology	
(1) The Aboriginal Archaeology Strategy referred to in the Statement of Commitments is to be prepared in liaison with the Metropolitan Local Aboriginal Land Council and is to be submitted for approval prior to or with the first application for new building works within each precinct.	The Strategy was approved by the Department on 14 December 2012.
C10 Access, Traffic, Transport and Parking	
(1) The University Travel Plan (UTP) referred to in the Statement of Commitments is to be prepared in liaison with Council and the RTA, and approved by the Department of Planning, prior to or with the first submission of the first application for building works for academic/educational uses within the Academic Core. (2) The detailed micro-simulation model referred to in the Statement of Commitments is to be prepared in liaison with Council, the RTA and the Ministry of Transport and submitted to the Department of Planning for approval prior to or with the submission of the first application for new commercial floor space on the site. (3) The micro simulation modelling is to be prepared on the basis that there will be no additional access to the M2 Hills Motorway. (4) The micro simulation modelling is to form the basis for discussion in respect of the agreement between the Minister and the Proponent referred to at C15 below. (5) A Workplace Travel Plan referred to in the Statement of Commitments is to be prepared for each commercial development and submitted for approval prior to the occupation of that commercial development.	The University Travel Plan has been approved by the Department. The Applicant has prepared the micro-simulation model, which has been endorsed by the relevant road authorities.
C11 Child Care Strategy	

Concept Plan Approval Requirement (as modified)	Department Comment/Assessment
(1) The Child Care Strategy referred to on page 7 of the revised Statement of Commitments is to be prepared in consultation with Council and submitted for approval prior to or with the first application for new floor space.	The Strategy was conditionally approved by the Department on 14 December 2012 and was subsequently finalised on 7 November 2013.
C12 Transitional Matters (Triangle South of University Avenue)	
(1) As part of any future applications associated with the Cochlear development, the at-grade parking is to be relocated elsewhere and replaced with open space.	N/A
C13 Construction Staging	
(3) A Construction Management Plan, an Erosion and Sedimentation Plan, and a report detailing the existing geological conditions of each development site, and any potential geological impacts of development consistent with the Concept Plan must be submitted with any application for development and is to be integrated with any Vegetation Management Plan and Threatened Species Management Plan referred to in the Statement of Commitments.	The Applicant provided a Preliminary Construction Management Plan and Erosion and Sedimentation Plan as part of its application. The Department reviewed this documentation and has also included recommended conditions of consent requiring a final Construction Environmental Management Plan.
C14 Utilities	
(1) The following plans are to be prepared and approved by the relevant agencies prior to the submission of the first application for building works: (a) A detailed water supply infrastructure needs analysis is to be undertaken as indicated in the Statement of Commitments. (b) A detailed service master plan is to be prepared. (c) The water supply needs analysis and detailed service master plan to be prepared to the satisfaction of the relevant agency. (2) All electricity and other relevant services shall be accommodated underground, where ecological or landscape outcomes are not compromised.	N/A
C15 Agency and Council Agreements	
(1) Agreement(s) are to be made with the Minister for relevant road and intersection works or the provision of a monetary contribution in lieu of the upgrade of intersections, including any staging and bus priority measures, nominated under Conditions B3 prior to or with the first application for new commercial floor space on the site (2) Agreement(s) are to be made with Council for the construction of the shared use path on Epping Road, or the provision of a monetary contribution in lieu of the construction of the shared use path on Epping Road, in accordance with the terms of the offer dated November 2017 made by the Proponent to Council. (3) Proposed road works/significant intersections modifications along the classified road network and local street network, as identified within the agreement referred to in (1) above, are to be designed to	As stated within Section 6.4 , a Planning Agreement (PA) was executed between Council and the Applicant in relation to development contributions. The Department has included a recommended condition requiring payment of development contributions in accordance with the PA.

- meet the RMS standards and endorsed by a suitably qualified and chartered engineer and approved by the Department of Planning.
- (4) The agreement(s) referred to in (1) above are to include provision for a Works Authorisation Deed for any works referred to in the agreement as may be required by the RMS. The Proponent to be responsible for all public utility adjustment/relocation works and all works/regulatory signposts associated with the proposed development shall be at no cost to the RMS.
- (5) Agreement(s) are to be made with Council for the provision of development contributions and/or agreed works in kind required for the development of the site, prior to, or with the first application for new floor space on the site".

Appendix D - Recommended Instrument of Consent