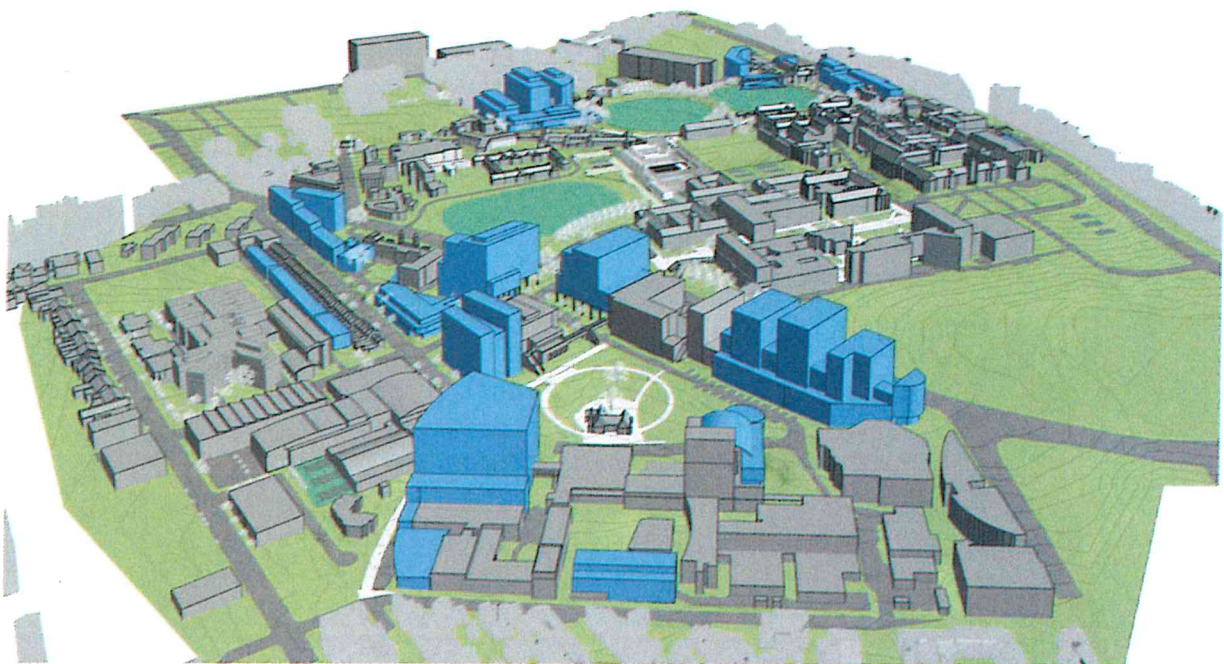




Planning &
Environment

**STATE SIGNIFICANT DEVELOPMENT
ASSESSMENT REPORT:
*The University of Sydney Campus
Improvement Program Concept Proposal
(SSD 6123)***



Secretary's Environmental Assessment Report
Section 89H of the *Environmental Planning and
Assessment Act 1979*

January 2015

ABBREVIATIONS

Applicant	The University of Sydney
CIV	Capital Investment Value
Consent	Development Consent
Council	City of Sydney
Department	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environmental Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
LEP	Sydney Local Environmental Plan 2012
Minister	Minister for Planning
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

Cover Photograph: Western aerial photomontage view of indicative Campus Improvement Program built form.

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EXECUTIVE SUMMARY

This report provides an assessment of a staged State significant development application (SSD 6123) lodged by the University of Sydney (the applicant) seeking approval for the delivery of new development and infrastructure across the University's Camperdown and Darlington Campuses.

The subject site extends across the University's Camperdown and Darlington Campuses, generally bound by Parramatta Road, Victoria Park, University Colleges and the Royal Prince Alfred Hospital, City Road, Abercrombie Street and Cleveland Street within the City of Sydney Local Government Area (LGA).

Known as the Campus Improvement Program (CIP), the application seeks approval for precinct-based building envelopes and built form design controls, open space, pedestrian and vehicular access arrangements, public domain works, transport linkages and indicative land uses (primarily educational but with incidental/ ancillary residential, retail, commercial and recreational uses) for each precinct.

The proposal is State significant development because it is development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million, under clause 15 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*. Therefore the Minister for Planning is the consent authority.

The site is zoned SP2 Infrastructure – Educational Establishment under the *Sydney Local Environmental Plan 2012* (Sydney LEP). Development proposed within the CIP is permissible with consent.

The application was exhibited from 30 January 2014 until 28 February 2014, and relevant public authorities and surrounding landowners were notified. The Department received nine submissions from public authorities and 81 submissions from organisations and the general public (including 72 objections). Key issues raised in submissions related to adequacy of public consultation, perceived over development and suitability of the proposed building envelopes, heritage impacts, ecological impacts, traffic and car parking impacts, amenity impacts and infrastructure requirements.

The applicant provided a Response to Submissions report (RtS) to address the issues raised during the exhibition, proposing a number of amendments to the building envelopes. The RtS was re-exhibited to relevant public authorities, surrounding landowners and previous submitters from 10 July 2014 until 25 August 2014. The Department received seven submissions from public authorities and 16 submissions from organisations and the general public (including 15 objections).

The Department considers the key issues associated with the proposal to be built form and urban design, heritage, traffic and transport, noise and vibration, and public consultation. The Department has carefully considered these issues together with all other issues raised by public agencies and the community and concludes that:

- the layout and scale of the proposed building envelopes is satisfactory and would not result in any adverse amenity impacts on adjoining land uses, subject to recommended built form and urban design future assessment requirements that must be addressed in any future development application for specific development of the CIP;
- buildings identified for demolition within the CIP, including the heritage significant International House, the Chemical Engineering Building, Blackburn Building and rear west wing of the Institute Building would result in some heritage impacts. However, these impacts are considered to be acceptable as the proposal would facilitate the protection of other buildings and places of greater heritage significance and would establish more

efficient and improved education and learning environments enabling the University to continue and enhance its role in providing leading tertiary education;

- the concept landscape plan supports and promotes the University's significant landscape character and encourages new opportunities to better integrate its Camperdown and Darlington Campuses with its surroundings;
- the additional traffic generated by the project can satisfactorily be accommodated within the surrounding local road network;
- the proposal will cater for additional 10,000 future additional student enrolments, including a potential 4,000 future student housing beds which will positively contribute to a vibrant and active campus environment and to the local economy;
- the Department has recommended a suite of conditions to ensure residual impacts associated with the CIP will be appropriately mitigated and/or managed.

Strategically, the CIP proposal directly aligns with the NSW Government's *A Plan for Growing Sydney* in facilitating a competitive economy with world-class services. Additionally, the CIP proposal will support the growth of complementary health and tertiary education activities in established strategic centres. The CIP proposal will strengthen the Broadway and Camperdown Education and Health precinct by providing world class teaching, learning, research and student accommodation facilities for the benefit of Sydney and NSW. Additionally, the University's CIP proposal supports key strategies of the NSW Government including NSW 2021, particularly through:

- improving the performance of the NSW economy and its competitiveness; and
- improving education and learning outcomes for all students through the provision of improved tertiary education facilities.

The University's CIP proposal would also generate significant public benefits. The proposal would invest close to \$1.4 billion into the local economy, generating approximately 14,700 direct and indirect construction jobs and 400 full time equivalent ongoing operational jobs. The project would also provide approximately 10,000 new student enrolments over the life of the CIP and the new campus facilities would significantly improve the provision of educational and research opportunities and outcomes.

The Department therefore concludes that the application should be approved, subject to conditions.

1. PROPOSED DEVELOPMENT AND SITE DESCRIPTION

1.1 The Proposal

This report is an assessment of a staged State significant development application (SSD 6123) lodged by the University of Sydney (University) seeking approval for a concept proposal, known as the Campus Improvement Program (CIP). The proposal provides the University with a long term master plan for the delivery of new development, access, public domain and infrastructure works across the University's Camperdown and Darlington Campuses, with substantial commencement within seven to ten years. In detail, the CIP proposes the establishment of precinct based building envelopes, built form design controls, open space, transport linkages and indicative land uses.

The project location is shown in **Figure 1**. The CIP project layout is shown in **Figure 2**, detailing the proposed CIP precincts, in which building envelopes for future development are proposed.

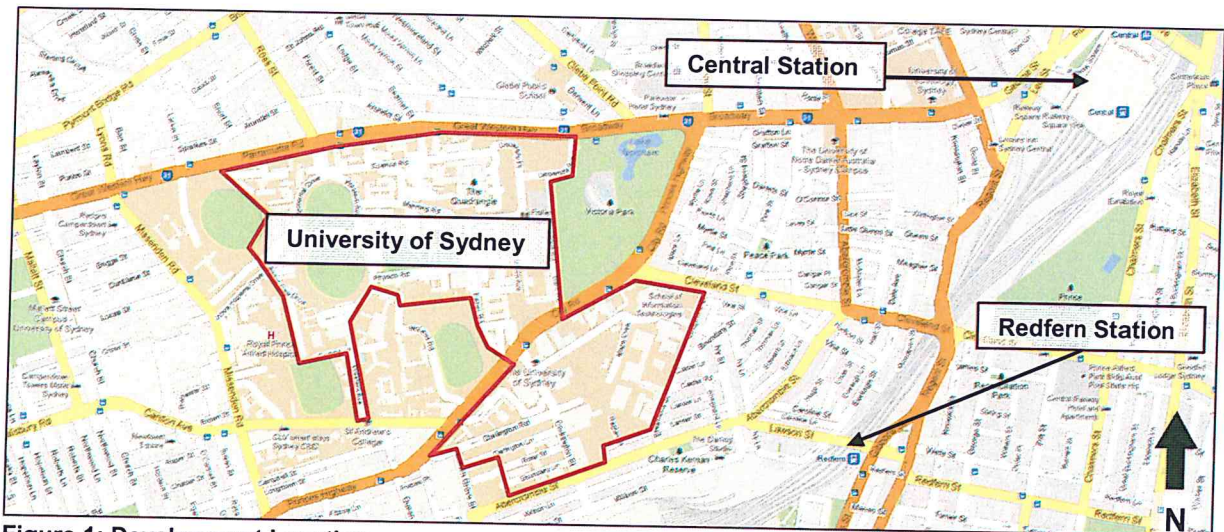


Figure 1: Development Location

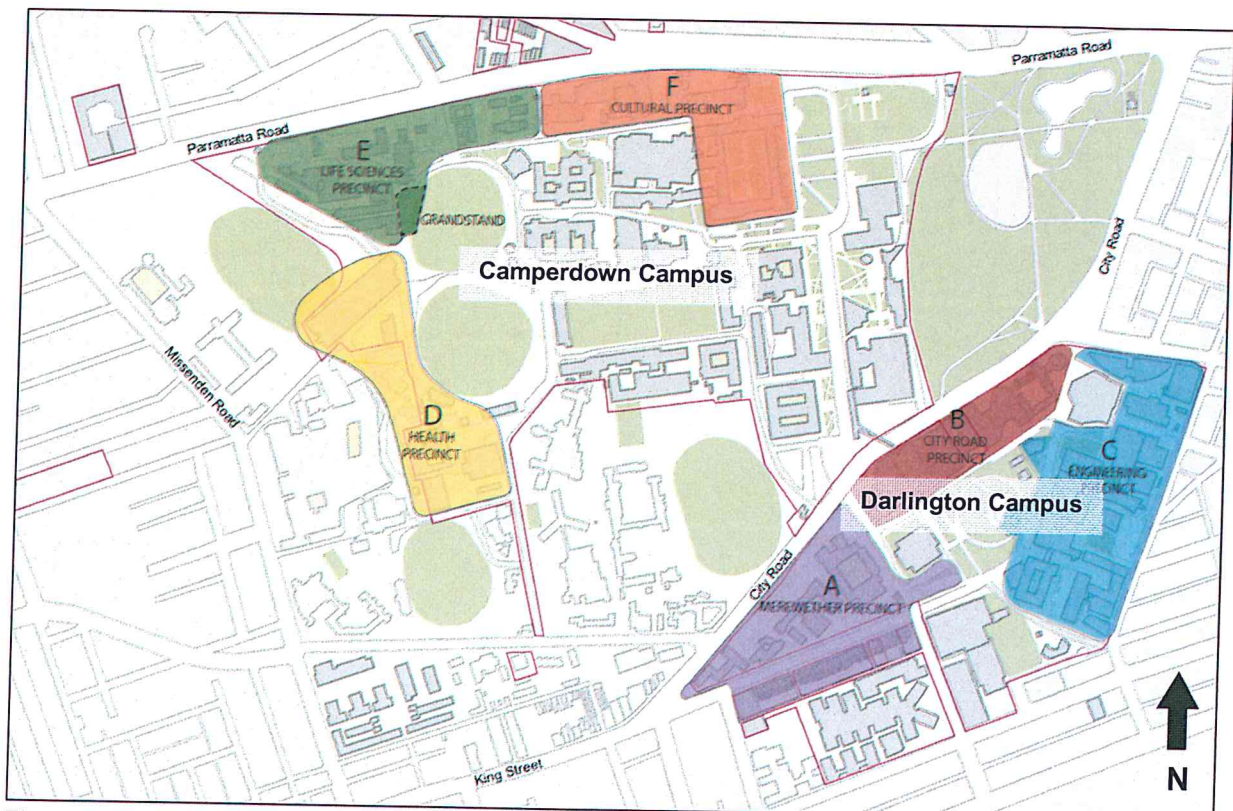


Figure 2: CIP Project Layout

1.2 Site Description and Surrounding Development

The University of Sydney's main campuses, Camperdown and Darlington, are situated approximately 2.5 km south-west of the Sydney CBD and comprise an area of approximately 50 hectares. The University has been developed progressively since its inception in the early 1850s and now contains over 230 buildings of varying architectural styles that contain the University's 16 educational faculties.

In 2013, student enrolments across all of the University's campuses totalled 50,206, of which 43,300 were accommodated within the Camperdown and Darlington Campuses. Total student enrolments comprise of approximately 65 to 70 per cent domestic students and 25 to 30 per cent international students. In 2012, the University employed approximately 7,500 full-time staff, of which 6,200 were accommodated within the Camperdown and Darlington Campuses.

The larger Camperdown Campus is bound by Parramatta Road to the north, City Road and Carillon Avenue to the south, Victoria Park to the east and the existing residential colleges, Missenden Road and the Royal Prince Alfred Hospital (RPA) to the west (see **Figure 3**).

The University's Darlington Campus is bound by City Road to the north-west, Cleveland Street to the north, Abercrombie Street and Shepherd Street to the south and east respectively, and Darlington Public School (Golden Grove Street) to the west (see **Figure 3**).

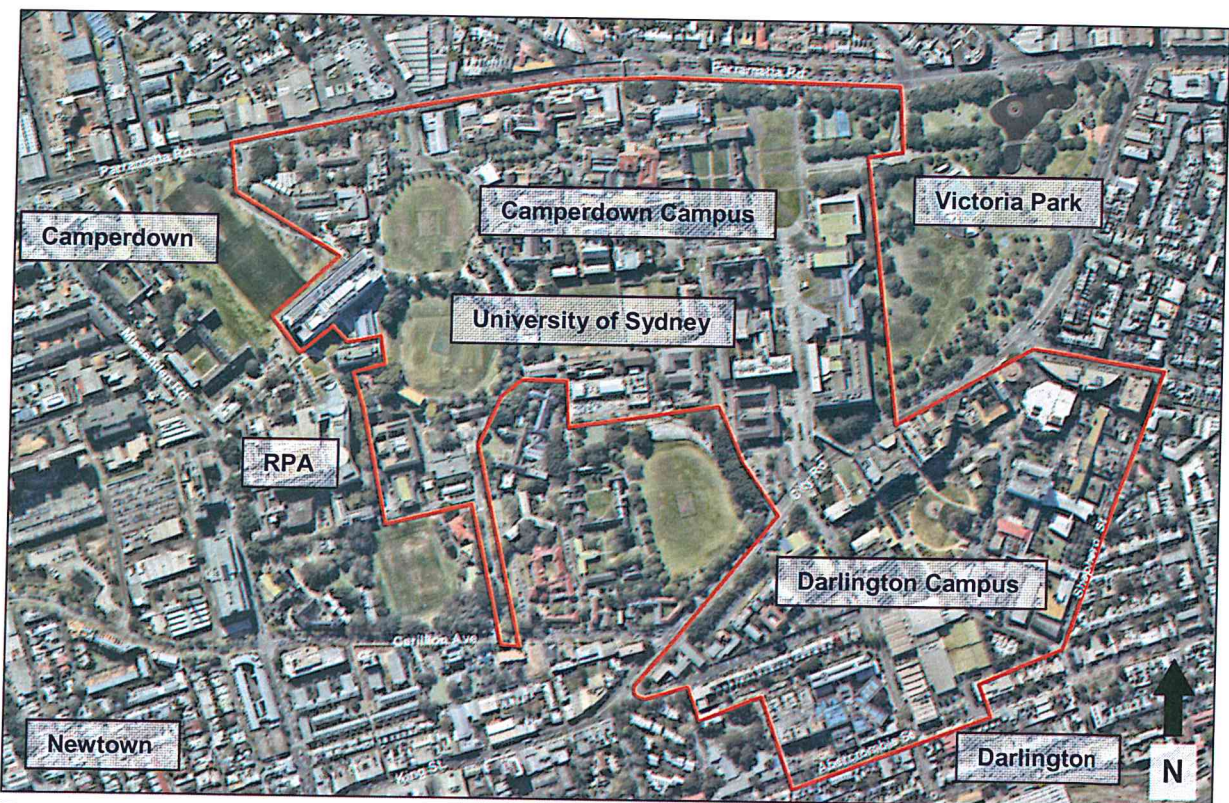


Figure 3: The University of Sydney Layout

The campuses are surrounded by a mix of land uses and built forms and two major arterial roads, City Road/King Street and Parramatta Road. Development opposite the north of the Camperdown Campus on Parramatta Road consists of a range of commercial/retail and residential land uses of varying heights (two to six-storeys), including a car dealership, the NSW Coroners Court and an office supplies premises, with residential development situated above the existing sandstone wall flanking the northern side of Parramatta Road.

Adjacent to the west of the Camperdown Campus is the RPA medical precinct, which fronts Missenden Road and contains a range of medical related and residential (private and residential colleges) land uses of varying scales and heights (maximum 10-storeys).

Development to the south and south-east of the Darlington Campus generally comprises one to two-storey residential terrace housing, with Eveleigh Carriage Works located further to the south adjacent to the existing railway line.

2. PROPOSED PROJECT

2.1 Key Development Components

The University of Sydney's CIP sets out a staged concept proposal for the delivery of new development across six precincts, access, public domain and infrastructure works and the establishment of precinct based building envelopes, built form design controls, open space, transport linkages and indicative land uses. No building work is proposed by the subject application.

Table 1 provides a summary of the proposal's key components and features (as amended by the applicant's Response to Submissions). The proposed key features of each CIP Precinct, including proposed envelopes defined by the unbroken red line, with future potential built form massing and articulation indicatively expressed by dashed blue lines and blue shaded areas, are outlined in greater detail below in Section 2.2. Indicative representations of potential future built form across the CIP is detailed in **Figures 4 to 7**.

Table 1: Key Development Components

Development Summary	The staged development application seeks approval for: - a concept proposal for the future development of the Camperdown and Darlington Campuses of the University of Sydney; and - precinct-based building envelopes, built from design controls, open space, transport linkages and indicative land uses.
<i>CIP Concept Proposal</i>	- Establishment and definition of a range of permissible University land uses in support of its role as an 'educational establishment'; - building envelopes and design guidelines within specific CIP precincts, providing for up to approximately 264,650 sqm of additional GFA; - identification of gateways and access arrangements, parking and servicing arrangements, vehicle/pedestrian/cycle prioritisation and connectivity, open space, landscaping, public art and future infrastructure provisions; - demolition, refurbishment and adaptive re-use of existing heritage significant buildings; - provision for the consolidation of off-campus staff and students to the Camperdown and Darlington Campuses; - increase of approximately 10,000 students (20 per cent increase) and 400 full-time equivalent staff (five per cent increase) by 2020; and - total future campus parking provision of 2,800 spaces (+443 spaces).
<i>Value / Jobs</i>	- \$1,396,400,000 capital investment value; and - 14,700 direct and indirect construction jobs and 400 operational jobs.
<i>Site Description</i>	- The University of Sydney, Camperdown and Darlington Campuses.

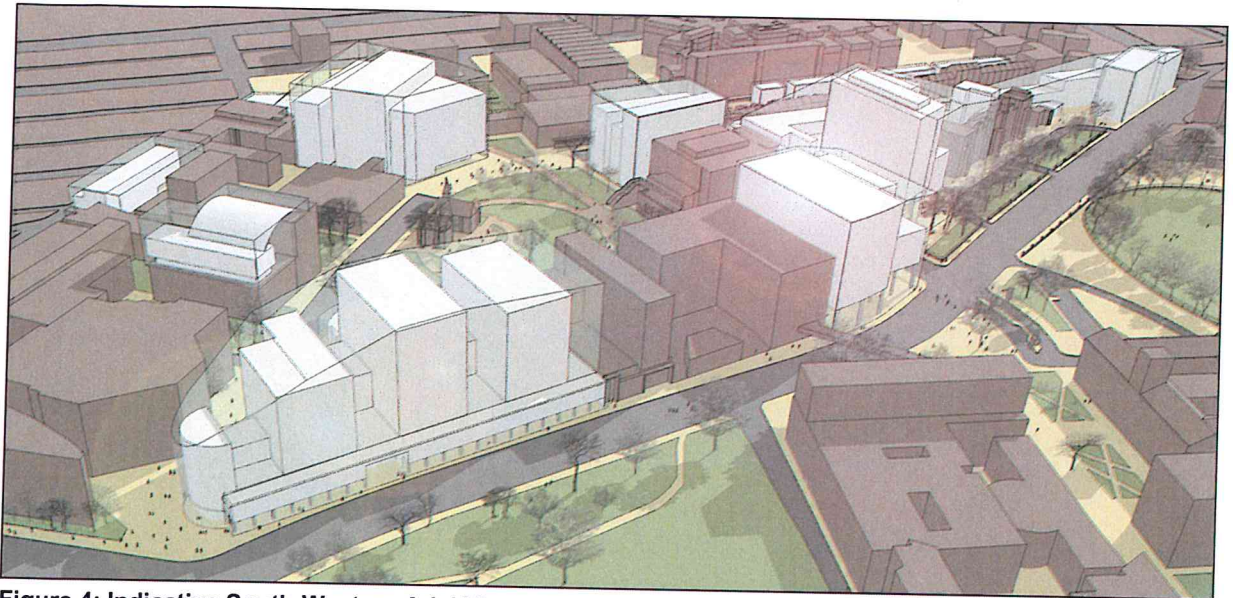


Figure 4: Indicative South-Western Aerial View – City Road/Merewether Precincts

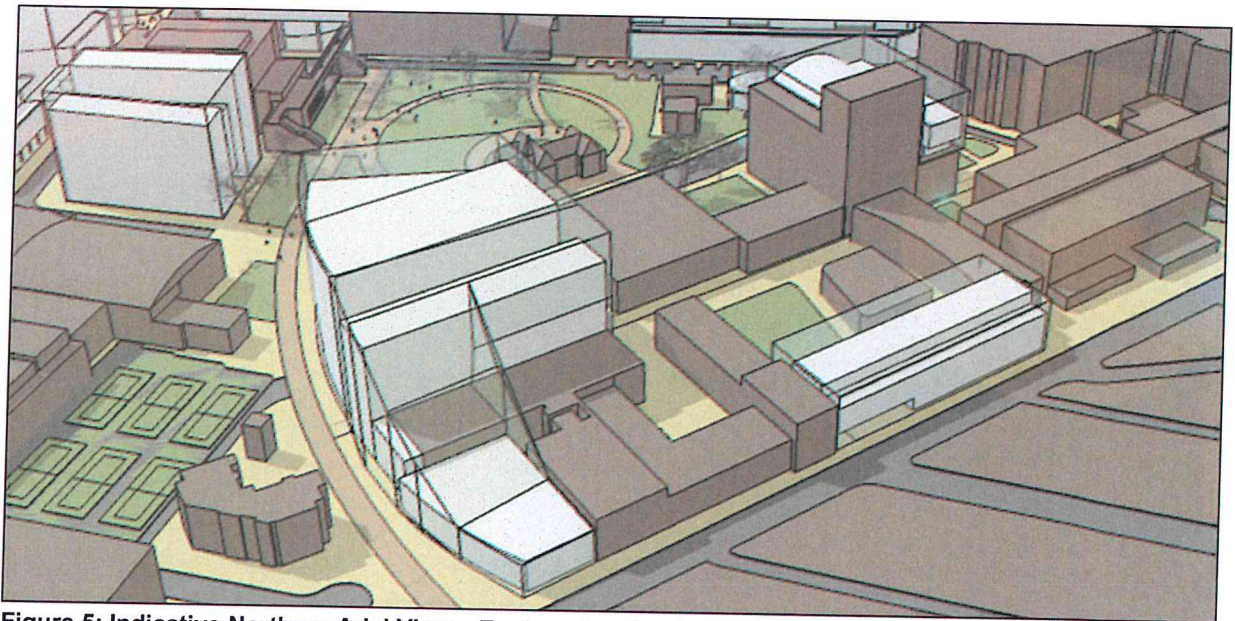


Figure 5: Indicative Northern Aerial View – Engineering Precinct

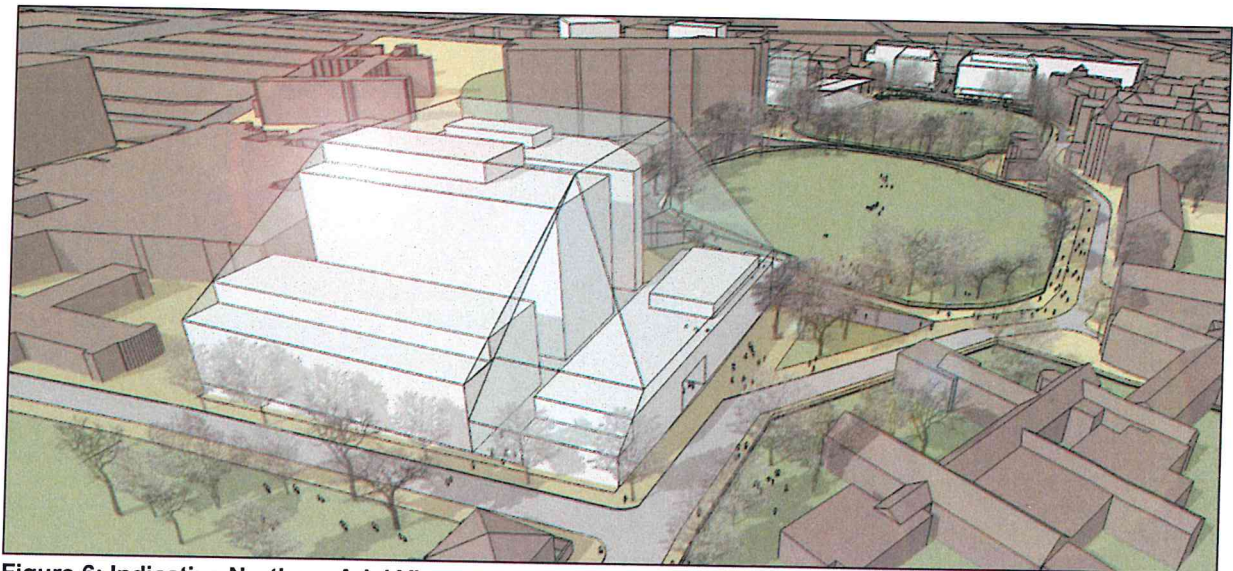


Figure 6: Indicative Northern Aerial View – Health Precinct

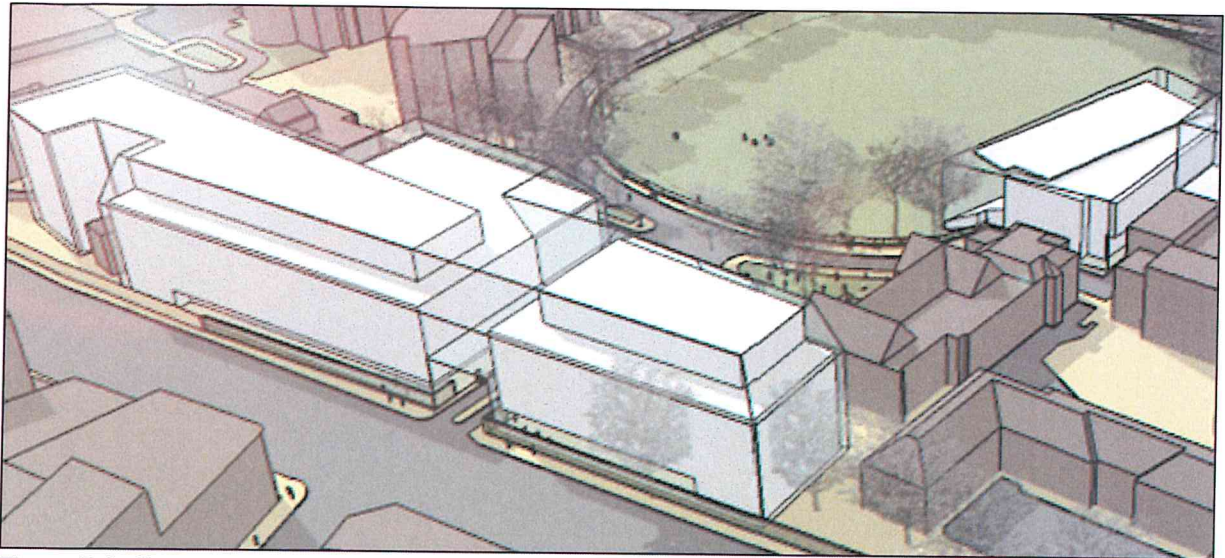


Figure 7: Indicative Southern Aerial View – Life Sciences Precinct

2.2 Key Features

Merewether Precinct (Figure 8)

- Mixed use precinct, comprising student accommodation, teaching and learning spaces, service delivery, ancillary facilities and basement parking;
- redevelopment of the Regiment and Merewether Building groups and rear of Darlington Road residential terraces;
- new building envelopes ranging in height from approximately 10 m to 50 m; and
- demolition of 13,040 sqm of GFA and development of 76,400 sqm of GFA (+63,400 sqm of GFA).

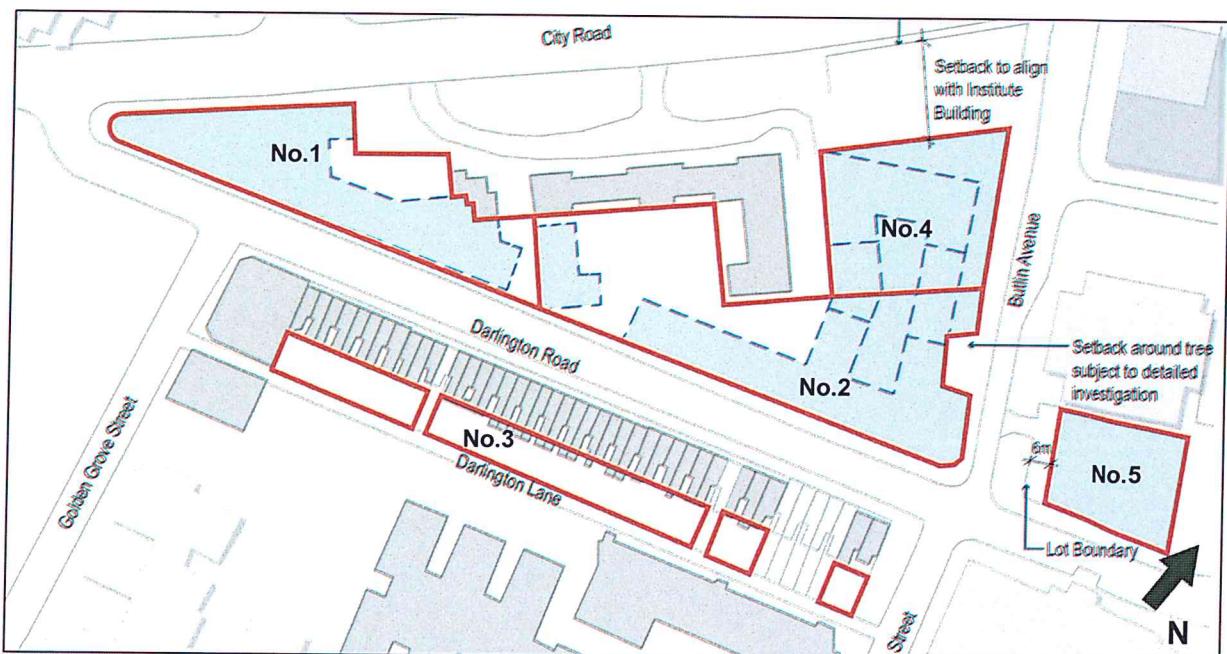


Figure 8: Merewether Precinct

City Road Precinct (Figure 9)

- Mixed use precinct comprising teaching and learning facilities, student accommodation, retail and amenities;
- redevelopment of International House, Wilkinson Building and Wentworth Building;
- new building envelopes ranging in height from approximately 30 m to 60 m; and
- demolition of 30,500 sqm of GFA and development of 93,300 sqm of GFA (+62,800 sqm of GFA).

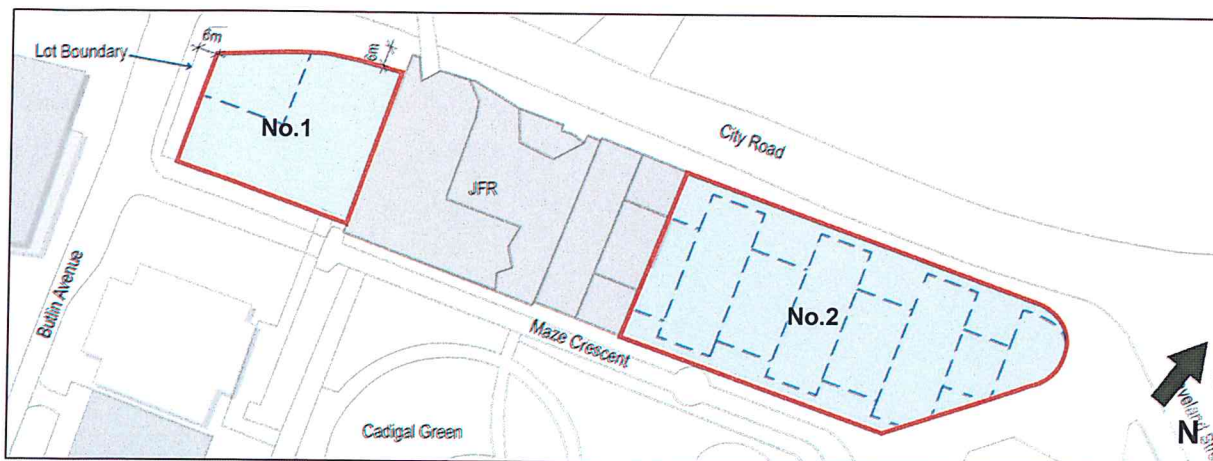


Figure 9: City Road Precinct

Engineering Precinct (Figure 10)

- Retention of the Faculty of Engineering and establishment of a service delivery centre;
- redevelopment of the Chemical Engineering Building and Civil Engineering Building groups;
- new building envelopes ranging in height from approximately 9 m to 46.5 m; and
- demolition of 6,550 sqm of GFA and development of 49,040 sqm of GFA (+42,500 sqm of GFA).

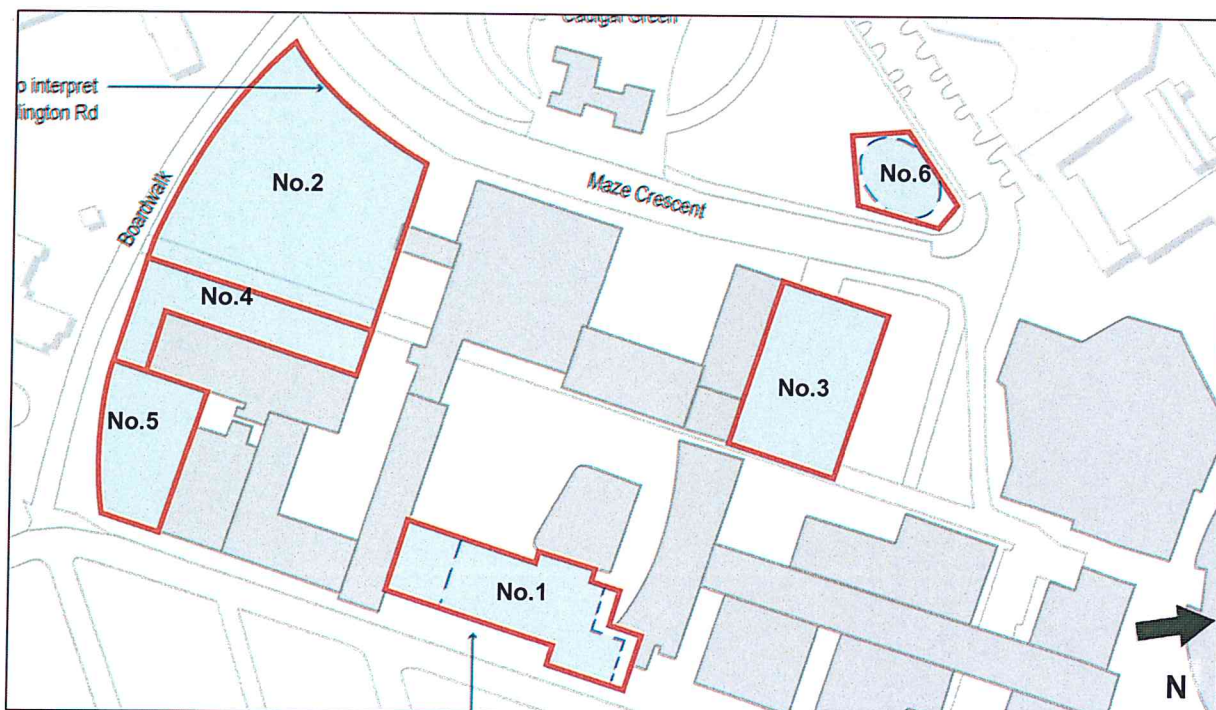


Figure 10: Engineering Precinct

Health Precinct (Figure 11)

- Co-location of the faculties of Nursing and Midwifery, Health Sciences, components of Medicine, Pharmacy and Dentistry;
- redevelopment of the Bosch and Blackburn Building groups;
- new building envelopes facilitating a mixed use precinct comprising health clinics, shared learning and teaching spaces, laboratories, library facilities, student accommodation, service delivery and basement parking;
- new building envelopes ranging in height from approximately 22 m to 47.4 m; and

- demolition of 18,780 sqm of GFA and development of 75,500 sqm of GFA (+56,700 sqm of GFA).



Figure 11: Health Precinct

Life Sciences Precinct (Figure 12)

- Co-location of the faculties of Veterinary Sciences, Agriculture and Environment and Biological Science, service delivery and basement parking and new Oval No.2 grandstand;
- redevelopment of the Gunn, McMasters, Evelyn Williams Building groups, part-redevelopment of the JD Stewart Building and relocation of demountable building structures;
- new building envelopes ranging in height from approximately 14 m to 28 m; and
- demolition of 9,700 sqm of GFA and development of 46,950 sqm of GFA (+37,250 sqm of GFA).

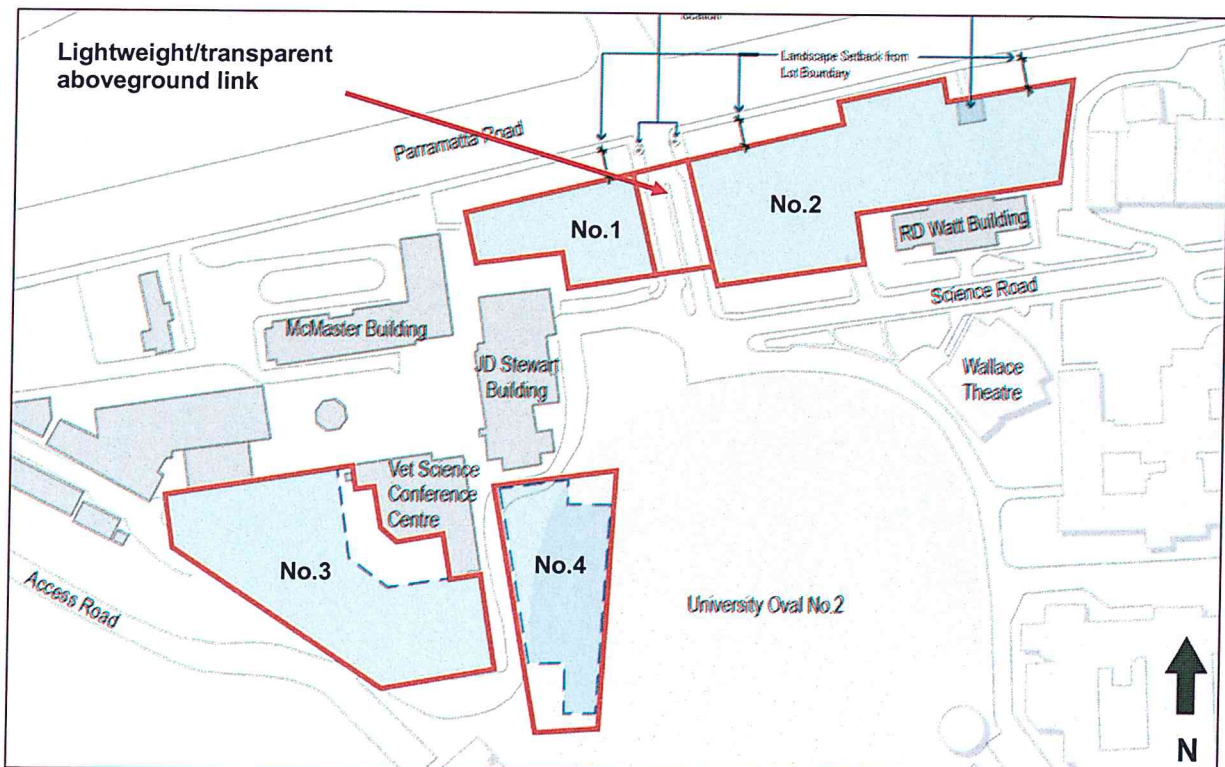


Figure 12: Life Sciences Precinct

Cultural Precinct (Figure 13)

- Establishment of a cultural precinct and new building envelope with an approximate height of ten metres;
- redevelopment of the Botany Glasshouse; and
- demolition of 370 sqm of GFA and development of 2,370 sqm of GFA (+2,000 sqm of GFA).

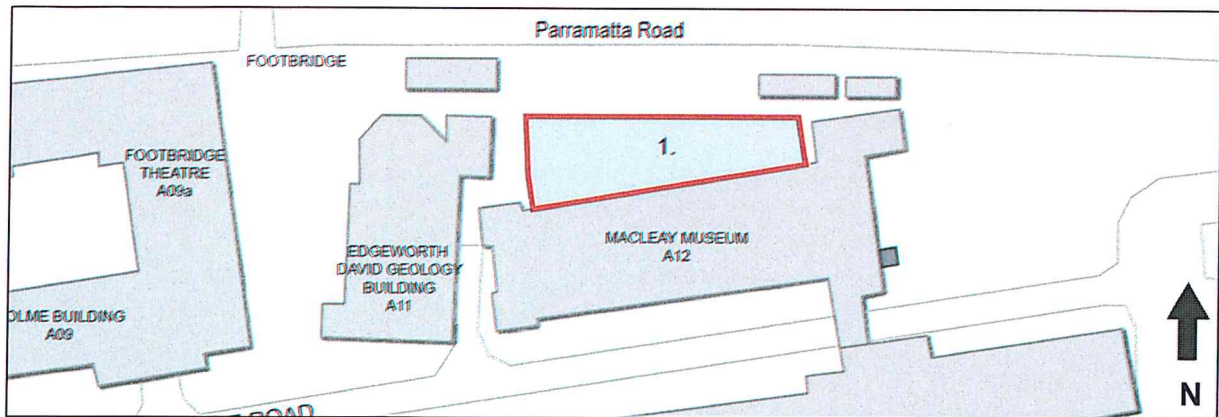


Figure 13: Cultural Precinct

2.3 Justification

The applicant states that the successful implementation of the CIP is key to ensuring that the University maintains its position as a leading teaching, learning and research institution in Australia. Specifically, the CIP will:

- support the strategic direction of delivering integrated teaching and learning, research, and student accommodation;
- allow for the identification of the most appropriate and sustainable development precincts to eliminate ad hoc and costly development;
- allow the University to manage development, services and facilities in an integrated and more efficient manner; and
- provide a significant increase in affordable student accommodation on campus.

The CIP also seeks to address the University's current 1.9 per cent annual population growth rate, equating to approximately 60,050 staff and students by 2020, which represents an overall increase of approximately 10,400 staff and students currently on campus.

3. STATUTORY AND STRATEGIC CONTEXT

3.1 SEPP (State and Regional Development) 2011

The proposal is State significant development because it is development for the purpose of an educational establishment (including associated research facilities) with a capital investment value (CIV) in excess of \$30 million, under clause 15 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*. Therefore the Minister for Planning is the consent authority.

3.2 Permissibility and Zoning

The site is zoned SP2 Infrastructure – Educational Establishment under *Sydney Local Environmental Plan 2012 (SLEP)* (see **Figure 14**). Development for the purpose of an educational establishment is permissible with consent, which is defined under SLEP as:

“educational establishment means a building or place used for education (including teaching), being:

- a school, or
- a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.”

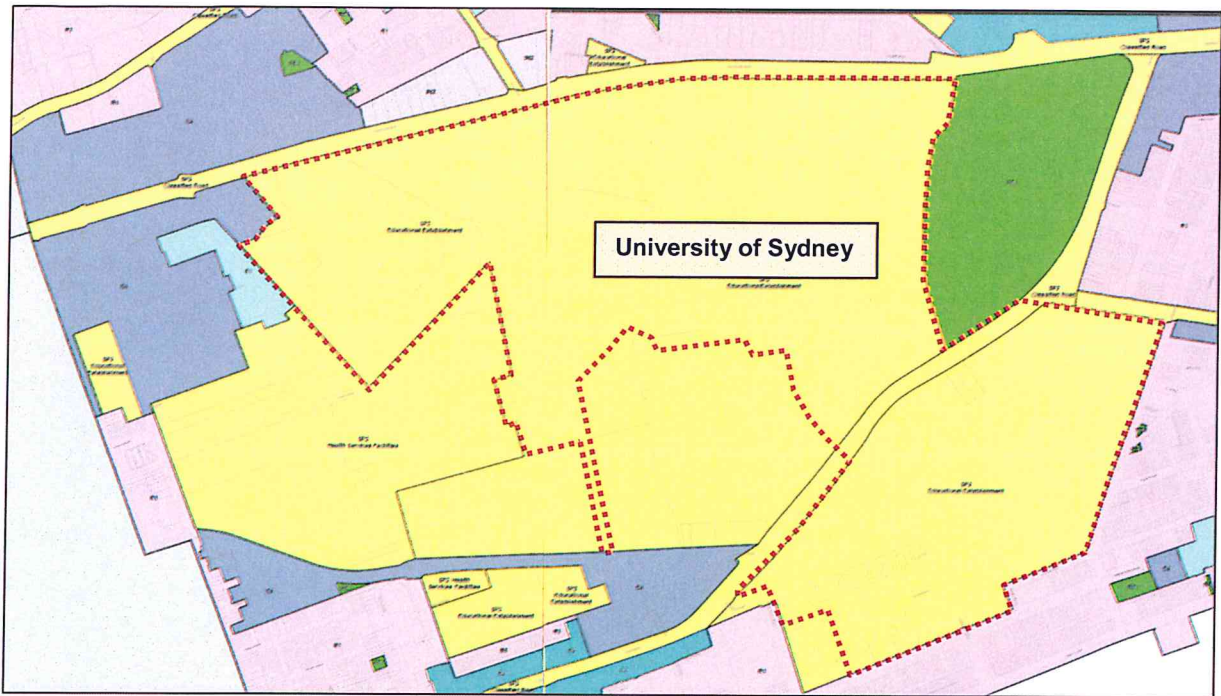


Figure 14: The University of Sydney SLEP 2012 Zoning

The application primarily seeks consent for the redevelopment of existing faculties, but also seeks approval for a broad range of ancillary land uses across the CIP Precincts to support the future role and function of the University as an 'educational establishment', including residential, retail, commercial and recreational land uses.

The University proposes a range of land uses under the CIP for endorsement, including residential, retail, commercial and recreational land uses that support the role its role in providing a formal education to its students. The Department is satisfied that these land uses are generally consistent with the definition of an "educational establishment" under the SP2 Infrastructure zoning of the site, and accordingly, to be permissible under SLEP.

The Department does not, however, consider it appropriate to use the subject application to introduce and seek endorsement for specific land uses for future development under the CIP. While the Department does not intend on restricting or limiting certain land use activities from specific CIP Precincts, future development applications for development within each precinct will need to satisfactorily demonstrate permissibility as an "educational establishment" as defined under SLEP.

Further consideration of the SLEP is provided in **Appendix B**. No specific development standards (i.e. building height or floor space ratio) apply to the site. Under SLEP a number of local heritage items are identified, while the Camperdown Campus is identified as a local heritage conservation area. Further consideration of heritage is provided in section 5.2.2 of this report.

3.3 Environmental Planning Instruments

The Department's consideration of relevant EPIs (including SEPPs) is provided in **Appendix B**. The proposal is generally consistent with the relevant requirements of the EPIs.

3.4 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the EP&A Act, as set out in section 5 of the Act. The proposal complies with the objects of the EP&A Act because the proposal promotes the orderly and economic use, development and redevelopment of the University's inner city campus. The proposal would protect the land for

public education purposes and promote the social and economic welfare of the community through the provision of improved educational services.

3.5 Ecologically Sustainable Development

The EP&A Act adopts the definition of Ecologically Sustainable Development (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:

- (a) *the precautionary principle,*
- (b) *inter-generational equity,*
- (c) *conservation of biological diversity and ecological integrity,*
- (d) *improved valuation, pricing and incentive mechanisms.*

The Department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process via a thorough assessment of the environmental impacts of the project. The applicant has also identified a range of ESD initiatives within the design of the project, including:

- the application of the University's sustainability framework to all buildings;
- the integration of environmental performance to ensure future building designs are energy resource efficient, minimise emissions, and create healthy environments;
- the design of multifunctional buildings to support for efficient use of infrastructure and encourage more diverse learning and research;
- the incorporation of infrastructure to encourage more sustainable and healthier modes of transport, including improved pedestrian and cycle networks and end-of-trip facilities;
- increased education and awareness to promote more sustainable and energy efficient behaviours; and
- improved biodiversity and resilience of campus habitats through the establishment of native species and strategic plantings to improve outdoor amenity conditions.

The Department has considered the development in relation to the ESD principles and is satisfied that the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act and EP&A Regulation.

3.6 Environmental Planning and Assessment Regulation 2000

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

3.7 Strategic Context

NSW 2021

NSW 2021 is the NSW Government's key strategic planning document, providing a 10-year plan to guide policy and budget decisions to assist with the rebuilding of NSW. Key objectives of the plan relevant to University's CIP involve returning the quality of services provided within the State, improving the performance of the NSW economy and its competitiveness and improving education and learning outcomes for all students through the provision of improved tertiary education facilities.

Specifically, the CIP plans to make provision for up to 4,000 on-campus student accommodation beds, which is planned to place downward pressure on the cost of living for the surrounding locality by alleviating rental demand for lower cost housing, significantly contributed to by current off-campus student residents. The CIP will also facilitate improvements to the NSW skill base by enabling improved access for people to gain higher levels of tertiary education and qualifications.

A Plan for Growing Sydney

A Plan for Growing Sydney provides the most current and comprehensive plan to manage the growth and development of the Sydney metropolitan region over the next 20 years. The University is located within the Broadway and Camperdown Education and Health Precinct that has connections to the global economic corridor and two adjacent urban renewal corridors.

The Plan encourages the growth of complementary education activities strategic centre, which the University's CIP proposal significantly contributes to as part of the world class Broadway and Camperdown Education and Health precinct.

The proposed CIP will continue to strengthen this education and health cluster for the benefit of Sydney and NSW through the identification and facilitation of redevelopment opportunities across the campus to provide world class teaching, learning, research and student accommodation facilities.

The CIP also represents a direct investment in the locality of approximately \$1.4 billion worth of development and construction, supporting approximately 14,700 direct and indirect construction jobs and an additional 400 new university operational jobs.

Sydney City Draft Regional Strategy

The Draft Strategy identifies the project site as being located within the Sydney Education and Health Precinct. A key objective of the Draft Strategy is to promote existing and emerging clusters, including the education hub around the existing university. The proposal will be consistent with the Strategy in promoting the growth and strength of the Sydney Education and Health Precinct and the wider 'creative crescent' to promote innovation while also supporting and encouraging business and educational development to cluster around existing magnet infrastructure.

3.8 Secretary's Environmental Assessment Requirements

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

4. EXHIBITION CONSULTATION AND SUBMISSIONS

4.1 Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the Secretary publically exhibited the application and accompanying information for 30 days following the date of first publication. The application was publically exhibited:

- on the Department's website from 30 January 2014 until 28 February 2014;
- at the Department's Information Centre and Council's offices from 30 January 2014; and
- published in the Sydney Morning Herald and Daily Telegraph on 29 January 2014 and Inner West Courier on 30 January 2014.

The Department received nine submissions from public authorities, including the City of Sydney (Council), the Environmental Protection Authority (EPA), the Office of Environment and Heritage (OEH), Roads and Maritime Services (RMS), the NSW Heritage Council, Sydney Local Health District (Royal Prince Alfred Hospital), Sydney Water, Transport for NSW and Ausgrid.

The Department also received a total of 81 submissions from the public, community groups and organisations, of which, 72 (89 per cent) objected to the proposal and nine (11 per cent) did not object but raised concerns. The Department also notes that 49 per cent of public and organisation submissions received consisted of pro-forma letters. The key issues raised in submissions related to public consultation, built form and urban design, heritage impacts,

traffic and transport impacts, ecological impacts, amenity impacts and infrastructure servicing requirements. A summary of the issues raised in submissions is provided below.

4.2 Public Authority Submissions

City of Sydney

Council welcomed a campus-wide assessment to address future development, advising it generally supports the improvement and redevelopment of educational facilities, but raised concerns with the perceived failure of the CIP to provide a campus-wide approach and strategic vision and integrate with existing colleges, the public domain and landscape character, and the applicant's failure to address matters it identified in pre-lodgement consultation with the University.

Council's submission outlines a number of precinct-based and landscape design recommendations, including suggested deletion of building envelope elements, building envelope height reductions and increased setback requirements, traffic and transport recommendations and an opposition to the proposed demolition of existing University buildings identified as having high levels of heritage significance. Council's submission also identified a number of key issues with the proposal, including:

- a competitive design process should be undertaken for future DAs;
- prior to any approval, a landscape master plan should be prepared to inform the CIP, incorporating the entire campus and colleges;
- the proposed demolition of International House is inconsistent with the Grounds Conservation Management Plan (GCMP) and should be considered for retention;
- the City Road Precinct Building envelopes should be reduced in height to RL 65 to be more consistent with adjoining development and setback from City Road;
- development proposed within the Merewether Precinct should maintain and enhance the landscape setting and significance of the Institute Building;
- the height of the G08 Carpark Building envelope should be a maximum height of RL 65 – RL 67 and in the form of a podium/tower design;
- the height of the Regiment Building envelope is bulky and over-scaled and should be lower in height than the height of Moore Theological College and step down to the two to three storey scale of surrounding residential properties;
- development at the rear of the Darlington Road terraces should be subservient to the scale of the existing terraces at the street frontage;
- the proposed demolition of the Chemical and Civil Engineering Buildings is not supported and a conservation management plan should be developed for the Engineering Precinct, identifying buildings to be retained and conserved;
- retention of the Blackburn Building should be investigated;
- building envelopes west of the Ross Street gates should be setback further;
- the height of the building envelopes east of the Ross Street gates should be reduced to be no higher than the main ridge line of the RD Watt Building;
- the extent of the building envelope between the RD Watt Building, existing substation and Hayden-Laurence is not supported; and
- the location and size of the McMasters Building envelope addition should be reconsidered.

Environmental Protection Authority

The EPA provided comments on the existing site conditions of the University and potential areas of environmental concern and contamination sources and the necessity for any associated risks to be clearly identified. It also noted the necessary extractive industry licensing requirements under the *Protection of the Environment Operations Act 1997*, having regard to the proposed future basement excavation.

Office of Environment and Heritage

The Office of Environment Heritage provided advice to the Department regarding Aboriginal cultural heritage, commenting that the applicant's Aboriginal Heritage Due Diligence report did not meet the SEARs as it was not a full archaeological and cultural assessment. It considered a robust assessment should be undertaken at this stage to identify the presence or absence of objects.

Heritage Office of Office of Environment and Heritage and NSW Heritage Council

Advice was provided for the Department's consideration, including recommended precinct building envelope amendments and conditions and provision of in principal support for the updated GCMP for The University of Sydney. Key amendments recommended are provided as follows:

- the draft chronologically phased landscape character analysis and landscape legacy plan should be further developed for inclusion within the GCMP;
- International House is considered to be of State heritage significance and should be retained, with a heritage curtilage established to protect views and assist in maintaining its heritage significance, and a conservation management plan and heritage impact statement prepared;
- a heritage curtilage should be established for the Institute Building and Superintendent's residence to protect views and assist in maintaining their heritage significance;
- the 19th century palisade fence and brick boundary wall should be retained and conserved; and
- the Darlington Road terrace building envelopes should be reduced to 8.6 m in height and setback between four to six metres from the existing terraces.

Transport for NSW / Roads and Maritime Services

Transport for NSW/RMS detailed support for the applicant's holistic approach to transport and proposed travel demand strategy, and provided the following key comments for the Department's consideration:

- consideration should be given to retaining the existing number of on-site car parking spaces to encourage greater public and active transport participation;
- concerns are raised regarding the proposed gateway (and potential future access road) on Missenden Road and potential additional traffic and associated congestion impacts on the local road network; and
- proposed wayfinding should incorporate clear and appropriate directions to public transport.

Sydney Local Health District – Royal Prince Alfred Hospital (RPA)

The Sydney Local Area Health District (SLHD) is supportive of the aim proposed by development within the Health Precinct of the CIP. However, concerns were raised regarding the proposed scale and location of the building envelopes that would potentially impact on the hospital's clinical services. The SLHD provided the following comments for the Department's consideration:

- the proposed development of very tall buildings along the common boundary, and in part located over our boundary, has the potential to limit the future development of RPA to meet the growth demand for services;
- the proposed building envelope heights are out of context with the surrounding RPA buildings and the western edge of the building envelope should be angled/stepped back to reduce potential impacts on the RPA's heritage listed Gloucester House;
- the proposed scale and zero setback has the potential to create overshadowing and amenity impacts on the RPA's eastern campus, including the historic area and existing trees between the sites;
- the applicant has had no formal discussions regarding the proposed potential future access to the Health Precinct from Missenden Road and it is unlikely that SLHD would agree to such an arrangement; and

- there is an absence of shared and integrated planning along the common boundary, but SLHD / RPA are keen to work with the University to develop a joint long-term plan to develop integrated facilities along its common boundary.

Sydney Water

Sydney Water provided the following comments for the Department's consideration:

- the applicant is required to submit a preliminary water and wastewater requirements brief to enable Sydney Water to make an informed study to specify any works required to service the development; and
- the applicant is required to amend the proposed building envelopes to ensure that no buildings and permanent structures are located over or within one metre of Sydney Water's stormwater assets.

Ausgrid

Ausgrid recommended a number of conditions for inclusion in any development consent.

4.3 Public Submissions

The Department received a total of 81 public submissions during the exhibition of the EIS, including submissions from the following six organisations/groups:

- REDWatch;
- Residents Acting in Darlington's Defence (RAIDD);
- Chippendale Residents Interest Group;
- The National Trust of Australia (NSW);
- St Andrews College; and
- Wesley College.

A summary of the key issues raised in all public submissions received is provided in **Table 2**.

Table 2: Public Submission Summary

<i>Issue</i>	<i>Issue summary</i>
<i>General</i>	Future developments should be subject to individual development applications (DAs) so that each building and use is specified and appropriate conditions imposed.
	The Darlington community does not benefit from the proposed development.
	The CIP should not be approved until local infrastructure is upgraded to accommodate the proposed increased activity.
	Proposed student accommodation locations should be clearly identified and management measures outlined that deal with anti-social behaviour that may impact on the amenity of surrounding residents.
	The CIP should look at softening the edge of the University with residential interfaces and improving permeability through the campus.
<i>Consultation</i>	The University failed to consult with the community and as such has not complied with the Secretary's Environmental Assessment Requirements (SEARs).
	Details of community consultation outlined within the EIS are incorrect.
	Exhibition period is insufficient to enable a review of the EIS and prepare a response.
	Consultation with the community would have enabled the CIP to establish a proposal for improved pedestrian access and connections.
<i>Height, Bulk and Scale</i>	Objection is raised to the 66 per cent increase in floorspace and building up to 19-storeys in height and impacts of insufficient setbacks, open space and landscaping.

	Concern is raised regarding the cumulative impact the proposed height, bulk and scale will have on existing University buildings and low-rise heritage conservation residential precinct.
	The University should prepare a more detailed design principles report that articulates commitments to setbacks, materials, architectural expression, articulation, separation of forms and access.
	Any approval should restrict the University to the development of up to only 85 per cent of the proposed building envelopes.
<i>Merewether Precinct</i>	Objections are raised to the development of the precinct, particularly the scale of the proposed Regiment and Merewether Building envelopes and their impacts on the heritage significance of the Institute Building.
	Objections are raised to the overshadowing impacts development of the precinct will have on the existing public housing in Golden Grove Street and on Darlington Public School playground.
<i>City Road Precinct</i>	The large multi-storey buildings will dominate the suburb and overshadow surrounding streets and their scale is not in keeping with the heritage values of the surrounding residential area.
<i>Engineering Precinct</i>	Objection is raised to the destruction of the existing eucalypt trees (locally referred to as the Eucalypt Grove) and the construction of a three-storey building on Shepherd Street.
	The loss of the Eucalypt Grove will remove the last greenery left for residents and reduce the visual amenity of Shepherd Street.
	Proposed Engineering Precinct building envelopes will generate overshadowing, privacy, light spill and noise impacts on Shepherd Street and Calder Road residential properties.
<i>Health Precinct</i>	The Chris O'Brien Lifehouse Building should not be used as the benchmark for the height of buildings within the precinct.
	The scale of the Health Precinct's proposed building envelopes are out of character with the locality and would dwarf Wesley College and St Andrews College.
	The proposed building envelopes fronting Western Avenue and their zero setback are a bad urban design outcome.
	The building envelopes have been designed to soften their impact on St Andrews College Oval, but at the expense of Western Avenue and Wesley and Women's Colleges.
	St Andrews College plans to redevelop the existing Gillespie Hall on the corner of Western Avenue and Cadigal Lane as a new social hub and entry feature to the college. Any use of Cadigal Lane primarily for service vehicle access would be regrettable and a potential pedestrian safety risk.
	Relocation of the proposed built form opposite the existing Gillespie Hall would enable the creation of a new plaza that clearly identifies the new building group and also presents as an entrance to the adjoining St Andrews College precinct.
	The indicative building footprint arrangements are not explained and seem contrary to the aims of protecting key University open spaces and would also significantly overshadow St Andrews College's College Oval.
	Objection is raised to the redevelopment of the Victor Coppleson Building and its surrounds and impact on the Bruce William Pavilion and existing catering businesses and terms of existing licensing agreements.
	Any development of the southern side of Oval No.1 will prevent any future plans to develop the oval as an authorised AFL ground for top level fixtures.
	The heritage curtilage of Oval No.1 does not stop at the picket fence, but at the fence line behind the trees surrounding the oval, and building envelope No. 5 should not take precedence over the O'Neill memorial and the curtilage around the oval should be preserved.

<i>Heritage</i>	The GCMP should be finalised in consultation with Heritage NSW and made available to enable the community to assess the heritage impact of the CIP.
	The heritage impact assessment's significance listing of the Blackburn Building as "moderate" seems to be an underrating.
	Objections are raised to the proposed infill of every Darlington Road terrace backyard and associated heritage impacts.
	The National Trust strongly opposes the demolition of International House.
<i>Traffic and Transport</i>	Transport and access has not been addressed and no traffic assessment of the proposed centralised service delivery centre has been undertaken.
	Concerns are raised regarding the proposed location of the centralised service delivery centre adjacent to a major pedestrian access point from Redfern Station and potential conflict it may create.
	Concerns are raised over the proposed location of the centralised service delivery centre and the use of Shepherd Street as a key access route, which could result in large heavy vehicles waiting along small local residential streets.
	The University's access plan is misguided, as students and staff are willing to drive and illegally park. The proposed student and staff population increase will place greater pressure on existing residential street parking.
	The cost of on-campus parking needs to be reviewed to minimise the disconnect between significant vacancies within proposed car parks and congested residential streets.
	Objection is raised to the removal of the ability for vehicular through-traffic on the Camperdown Campus and introduction of large car parks on the Darlington Campus and associated increased traffic congestion on local residential streets.
	Objection is raised to Butlin Avenue being turned into a shared pedestrian/traffic zone.
<i>Access</i>	The University acknowledges existing pedestrian connections and infrastructure between Redfern Station and University are constrained but provides no solution and instead proposes an increased density.
<i>Student Population</i>	Objection is raised to the increase in student population from 49,500 to 60,000 by 2020, which would place further stress on local infrastructure.
<i>Amenity</i>	Concern is raised that the majority of the proposed development is located on the Darlington Campus. The CIP should locate high impact land uses and activities on the main campus away from sensitive residential areas.
	Objection is raised to the potential increase in noise from plant and equipment on new buildings close to residential homes.
	All noise impacts by future development should be assessed cumulatively and a public noise policy should be developed by the University.
	Objection is raised to the increased student housing accommodation, its density and issues associated with the management of students living within close proximity to residential homes.
	The University has not demonstrated measures to avoid, minimise and offset potential impacts from "active events" undertaken near residential properties. Such activities should not be undertaken on Cadigal Green.
	The proposed three storey infill additions to the Darlington Road terraces will generate overshadowing impacts on existing private residents.
<i>Flora and Fauna</i>	Objection is raised to the removal of existing mature trees and vegetation and loss of habitat and connectivity for a range of native species.
	Objection is raised to the destruction of the existing eucalypt trees (commonly known as the eucalypt grove) in the Engineering Precinct car park contrary to the submitted ecological assessment.

4.4 Applicant's Response to Submissions

The applicant prepared a Response to Submissions report (RtS) that addressed issues raised during exhibition, provided an urban design peer review of the CIP, proposed amendments to CIP building envelopes, updated the GCMP, and included a concept landscape plan. Key CIP amendments proposed within the RtS are outlined in **Table 3**.

Table 3: RtS CIP Amendments

Precinct	CIP Amendments
<i>Merewether Precinct</i>	- Regiment Building envelope height increased by six metres from RL 67.3 to RL 73.3 at its western edge; - Merewether building envelope City Road setback increased to the alignment of the adjoining Institute Building; - Merewether Building envelope maximum height reduced by 6.4 metres from RL 89.50 to RL 83.10; and - indicative building footprints within the Darlington Road terrace envelopes amended to delete footprint sections adjacent to privately owned terraces to reduce potential amenity impacts.
<i>City Road Precinct</i>	- Wilkinson/International Building envelope height reduced by 10.77 metres from RL 78.125 to RL 67.35 at its western edge and its maximum height centrally located; - Wentworth building envelope amended to provide six metre City Road setback; and - Wentworth Building envelope profile amended to delete the eastern 12 metre tower form setback to the existing Jane Foss Russel Building.
<i>Engineering Precinct</i>	- Chemical Building envelope height increased by 400 mm from RL 33.6 to RL 34.0 and its layout recessed west into the precinct, increasing its setback from Shepherd Street to retain row of existing mature eucalypt trees and; - Workshop building envelope height reduced by 17.9 metres from RL 66.3 to RL 48.3.
<i>Health Precinct</i>	- Building envelope layout amended to align correctly with its western boundary and to include the Bruce William Pavilion; and - building envelope maximum height reduced by 4.6 metres from RL 77.1 to RL 72.5 and its profile amended to provide a stepped transition down to its Western Avenue edge.
<i>Life Sciences Precinct</i>	- Deletion of the McMaster Building envelope; - Ross Street Building envelopes (No.1 and No.2) amended to provide landscaped setback to Parramatta Road; - height of Ross Street Building envelope No.1 and part of envelope No.2 reduced by six metres from RL 49.5 to RL 43.5; and - minor increase to the layout of the Grandstand Building envelope to its north and south.
<i>Cultural Precinct</i>	- No amendments proposed.

The RtS and EIS was re-exhibited from 10 July 2014 until 25 August 2014. The Department received seven submissions from public authorities and 16 submissions from organisations and the general public. A summary of submissions received from public authorities is provided below:

City of Sydney Council

Council provided detailed comments for the Department's consideration following a review of the CIP Precinct amendments, a summary of which is provided as follows:

- the CIP lacks a comprehensive structure plan/framework for the campus and many of the City's concerns regarding building form, height, setback and footprint arise from the absence of this higher level piece of work;
- the buildings identified for demolition are generally considered as having high levels of heritage significance and their demolition is not supported;

- the City supports the proposed height of the Merewether Building envelope and its design should incorporate a tower design and podium level;
- the response that the proposed height of the Regiment Building envelope matches that of Moore College is incorrect and its height should be reconsidered;
- the City does not support the proposed RL 83.1 height of the Wentworth Building envelope and it should be reduced in height to RL 65 – RL 67 and setback 6 m from City Road;
- the junction of Eastern Avenue, City Road and Butlin Avenue should be considered as a major node and the Wentworth Building envelope should recede substantially away from this corner to enable the creation of this space;
- the Molecular Sciences Building/G08 Carpark Building envelope should have a maximum height of RL 65 – RL 67 and in the form of a podium/tower design;
- the Life Sciences Precinct Building envelopes No.1 and No.2 extend forward of the sandstone gate pillars towards Parramatta Road, which is strongly opposed and the southern extent of Building envelope No.1 should be reduced to retain views of the heritage significant JD Stewart Building from the Ross Street entry;
- sections of the Life Sciences Precinct Building envelope No.2, between the RD Watt Building, existing substation and Hayden-Laurence Building should be deleted from the proposal as they will be considerably taller than the RD Watt Building;
- the City does not support the Life Sciences Precinct above-ground link above the Ross Street entrance between building envelopes No.1 and No.2;
- the City supports the building envelope amendments within the Engineering Precinct to retain a row of mature eucalypt trees – further detailed investigations will be required to establish appropriate setbacks required to retain the trees;
- conflicts exist between the proposed building envelope footprints and intentions of the landscape master plan. Building envelopes should be amended accordingly to reflect the landscape master plan intentions; and
- concerns are raised with regards to the likely future impacts on tree protection zones and the limited opportunities for replacement canopy trees.

Heritage Office of the Office of Environment and Heritage and NSW Heritage Council

A number of recommended amendments were provided, including the following:

- International House should be retained and a conservation management plan prepared;
- the Darlington Road terrace building envelopes should be reduced to 8.5 m in height and setback 6 m from the existing terraces; and
- the above-ground link structure between the Life Sciences Precinct Building envelopes No.1 and No.2 should be deleted to maintain the identified significant visual axis.

Office of Environment and Heritage

In its submission on the RtS, OEH reiterated its previous advice, noting that Aboriginal cultural heritage should be undertaken at this stage to identify the presence or absence of objects.

Sydney Local Health District – Royal Prince Alfred Hospital

SLHD commented that the RtS had failed to adequately address their concerns originally raised during the exhibition of the EIS. SLHD reiterated its comments raised during the exhibition of the EIS, whilst also noting it wished to work cooperatively with the University to develop a joint, long-term plan for the establishment of an integrated health/research/education sub-campus.

Transport for NSW / Roads and Maritime Services

No objections were raised by TNSW or RMS, acknowledging the applicant's response regarding the potential access arrangements from Missenden Road being only conceptual only, with no formal access proposed in the CIP.

Sydney Water

Sydney Water reiterated its comments previously provided during the exhibition of the EIS.

Sydney Airport

Sydney Airport noted that the proposed Merewether and Regiment Building envelopes penetrated Sydney Airport's Obstacle Limitation Surface (OLS). It advised that should the applicant decide to proceed with the development of these building envelopes, the Federal Department of Infrastructure and Regional Development would need to make a determination relative to airspace protection.

Public Submissions

A total of 16 public submissions from organisations and the public were received during the exhibition of the RtS, including 13 public submissions of objection and a petition containing 146 resident signatures, two organisation submissions objecting and raising concerns, and one organisation submission of support. Organisation submissions were received from the following:

- REDWatch;
- Residents Acting in Darlington's Defence (RAIDD); and
- St Andrews College.

A summary of new key issues raised in public submissions on the RtS is provided as follows:

- the removal of vehicle access to the rear of Grandstand No.1 Oval will jeopardise servicing requirements to existing businesses and emergency and maintenance access for the oval;
- the envisaged increased student enrolments within the Health Precinct will increase the demands for outdoor passive recreation space within the precinct and have the potential to impact the existing dilapidated ovals;
- the rationale for a centralised service centre has merit, but its location would be better served if it were located at the intersection of Shepherd Street and Cleveland Street; and
- the amendments to the Shepherd Street Building envelope within the Engineering Precinct are insufficient and more should be done to preserve the existing eucalypt trees.

4.5 Applicant's Supplementary Response to Submissions

In response to the additional concerns raised during the exhibition of the RtS, the applicant submitted a Supplementary RtS report, further amending CIP precinct building envelopes (see **Table 4**) and providing responses to those additional key concerns.

Table 4: RtS Supplementary Response CIP Amendments

Precinct	CIP Amendments
<i>Merewether Precinct</i>	- Regiment building envelope maximum height reduced by 2.7 metres from RL 73.3 to RL 70.6 to be consistent with the approved height of the Moore Theological College development opposite on City Road; and - Merewether Building envelope maximum height reduced by 3.1 metres from RL 83.1 to RL 80.0 to limit its penetration into Sydney Airport's OLS and podium height reduced by 2.85 metres from RL 55.85 to RL 53 to be consistent with the reduced parapet height of the adjoining Institute Building.
<i>City Road Precinct</i>	- Wentworth Building envelope maximum height reduced by 3.1 metres from RL 83.1 to RL 80.0.
<i>Engineering Precinct</i>	- Northern setback of the new building envelope at the corner of Maze Crescent and University Boardwalk amended to interpret the former Darlington Road alignment.
<i>Health Precinct</i>	- Building envelope layout amended to provide a minimum six metre setback to its western common boundary with RPA Hospital and to exclude the Bruce William Pavilion and Victor Coppleson Building; and - maximum building envelope height reduced by 9.1 metres from RL 72.5 to RL 63.4.
<i>Life Sciences Precinct</i>	- Relocation of Ross Street gate pillars forward of Building envelopes No.1 and No.2 to their original historical position.
<i>Cultural Precinct</i>	- No amendments proposed.

The Department's assessment has been finalised based on the final design as detailed in the RtS and RtS supplementary response. The Department is satisfied that the Response to Submissions report, supplementary RtS report and additional information have adequately responded to the issues raised and provides a sound basis for an appropriate merit assessment. Key issues raised have been further considered in Section 5 of this report.

5. ASSESSMENT

5.1 Section 79C Evaluation

Table 5 identifies the matters for consideration under section 79C of the EP&A Act that apply to State significant development, in accordance with section 89H of the EP&A Act. The table also represents a summary for which additional information and consideration is provided for in Section 5.2 (Key and Other Issues) and relevant appendices or other sections of this report and the EIS, referenced in the table. The EIS has been prepared by the applicant to consider these matters and those required to be considered in the SEARs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the EP&A Regulation.

Table 5: Section 79C(1) Matters for Consideration

s. 79C(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Consideration of relevant EPIs has been undertaken and is documented in Appendix B. The proposed development satisfactorily complies.
(a)(ii) any proposed instrument	Not applicable.
(a)(iii) any development control plan	Clause 11 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i> provides that development control plans do not apply to State significant development.
(a)(iiia) any planning agreement	Where relevant, development contributions may apply to future detailed development applications, though would be dependent on the nature of the proposed development, i.e. teaching and learning developments may warrant dispensation compared with potential residential development for student housing. Applicable contributions plans include the <i>Redfern-Waterloo Authority's Contributions Plan 2006</i> , <i>Redfern-Waterloo Authority's Affordable Housing Contributions Plan 2006</i> and Council's <i>Section 94 Development Contributions Plan 2006</i> .
(a)(iv) the regulations	The development application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to development applications (Part 6 of the EP&A Regulation), public participation procedures for SSDs and Schedule 2 of the EP&A Regulation relating to environmental impact statements.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development	The Department's assessment has given consideration to the likely impacts of the proposed development.
(c) the suitability of the site for the development	The subject site is appropriately zoned SP2 Infrastructure – Educational Establishment under SLEP 2012. The concept proposal seeks to improve land use integration and operational efficiency of the University.
(d) any submissions	Consideration has been given to submissions received during the exhibition of the application. See sections 3 and 4.2 of the Department's assessment. Key issues raised include bulk and scale, heritage, traffic and transport, environmental and residential amenity and ecological impacts.
(e) the public interest.	The concept proposal would provide The University of Sydney and NSW with internationally competitive research, laboratory

	and teaching facilities appropriately co-located in proximity to existing scientific and teaching research facilities. The concept proposal also seeks to provide affordable on-site student accommodation to assist in reducing the existing demand on local residential properties.
Biodiversity values exempt if: (a) On biodiversity certified land? (b) Biobanking Statement exists?	Not applicable. Not applicable.

5.2 Key and Other Issues

The Department considers the key assessment issues for the application to be:

- built form;
- heritage;
- design excellence;
- traffic and transport;
- environmental and residential amenity; and
- the public interest.

5.2.1 Built Form

Bulk and scale

The proposal identifies six campus precincts (see **Figure 15**) to facilitate the co-location of faculties and schools, and to provide opportunities for shared learning, teaching, student accommodation and ancillary support services. A total gross floor area (GFA) of 263,100 sqm is predicted across the six precincts, equating to an approximate 39 per cent increase in GFA across the campuses over the envisaged seven-year life of the CIP development program.

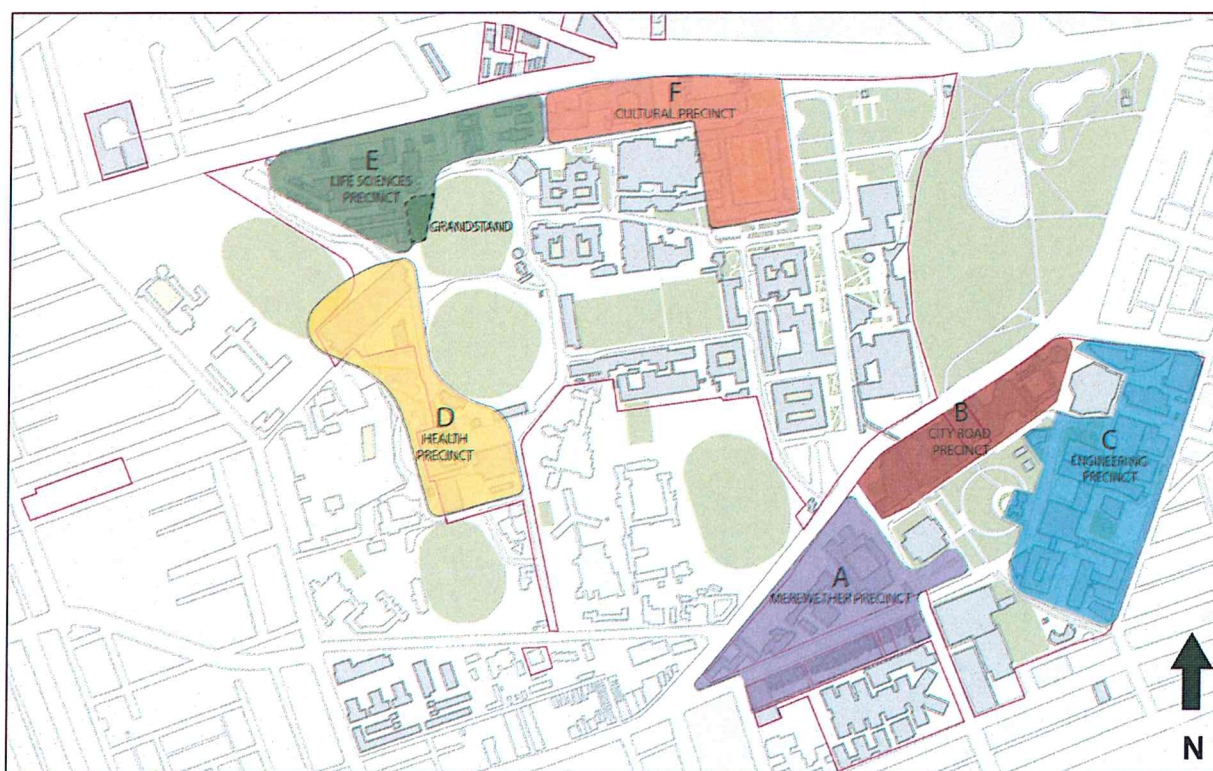


Figure 15: Campus Improvement Program Precincts

The CIP provides indicative additional GFAs within each precinct, which represent an estimated 85 per cent occupancy of the total GFA available within the proposed building envelopes. However, the applicant does not seek approval for any maximum GFA controls,

stating that the proposed building envelopes and design guidelines would control the bulk and scale of future buildings but also allow for flexibility in the design.

In response to initial concerns raised by the Department, Council and public during the exhibition of the EIS, the applicant commissioned an independent urban design review of the proposed CIP Precincts, from which a number of building envelope amendments were recommended. Amendments recommended and adopted (in part) by the applicant included:

- reduced building envelope footprints accommodating increased setbacks, particularly the Ross Street Gate building envelope, Merewether Building envelope, Wentworth Building envelope and Shepherd Street Building envelope;
- reduced building envelope heights; and
- revised indicative building footprints within building envelopes, providing for improved future contextual relationships within each precinct.

The Department is of the opinion however, that the proposed building envelopes are potentially too expansive, and in some instances, allow for more than just design flexibility for future built form. In addition, height controls and design guidelines alone cannot provide complete assurance that acceptable built forms would be achieved within each precinct. In this respect, it is important to control the maximum GFA to ensure that future developments are appropriately designed within the boundaries of the building envelopes and minimise the potential for their overdevelopment.

In this regard, the Department recommends the imposition of a term of approval to restrict the maximum CIP Precinct GFA to the notional 85 per cent as presented by the applicant. The proposed term of approval would provide a greater reassurance that acceptable built form outcomes are achieved within future development, but still provide the applicant flexibility to design buildings to meet the requirements of the University, but also ensure that distinct podium/tower designs evolve within larger envelopes where taller built form is envisaged.

Precinct built form and urban design

Merewether Precinct

The Merewether Precinct is proposed to accommodate future mixed use development, comprising student accommodation, administration offices, retail and support services, with an indicative maximum GFA of 63,400 sqm. Five building envelopes are proposed, with building envelope heights ranging from approximately 9 m to 45 m, including the Regiment Building envelope (No.1), Institute/Merewether Building envelope (No.2), Darlington Road Terrace Building envelopes (No.3), Merewether Building envelope (No.4) and G08 Carpark Building envelope (No.5) (**Figures 16 to 19**).

The applicant identifies that the location of the Merewether Precinct's primary frontage to City Road provides an opportunity to establish buildings taller in height and designed with an "iconic status", particularly the Merewether and Regiment sites.

Echoing concerns raised by Council and within public submissions, the Department originally requested the applicant consider reducing the height of the Regiment and Merewether Building envelopes to improve their relationship with existing and proposed development surrounding the precinct. The applicant was also advised to better address potential amenity impacts on adjoining private residences from the proposed building envelopes at the rear of the University owned Darlington Road.

In response, the applicant proposed a number of building envelope amendments and provided further justification for unchanged building envelopes, as follows:

- Darlington Road Terrace Building envelope has been amended by removing sections of indicative built form adjacent to privately owned residences to minimise any potential overshadowing impacts;
- Darlington Road Terrace Building envelopes would be subservient in scale to the existing terraces and a reduction in envelope height from approximately 10.5 m (varying) to 8.5 m is not considered necessary;
- the proposed height of the G08 Carpark Building envelope (RL 74.7) is considered appropriate and remains unchanged as it transitions in scale from the Wentworth Building envelope fronting City Road and surrounding public domain and adjacent aquatic centre would be unaffected by development at this scale;
- Regiment and Merewether Building envelope heights have been reduced to minimise their Sydney Airport OLS penetration and to ensure the Regiment Building envelope height is consistent with the approved Moore Theological College Library and Administration development, at RL 70.6; and
- the City Road setback of the Merewether Building envelope has been increased and aligned with the Institute Building and the building envelope podium height has been reduced to RL 83.10.

In regards to potential impacts on Sydney Airport's airspace, the Department acknowledges that applicant has amended the maximum heights of the Regiment and Merewether Building envelopes (RL 70.6 and RL 80, respectively) to generally comply with the airport's obstacle limitation and is therefore unlikely to result in any potential adverse impacts (see **Figure 16**). Notwithstanding, a future assessment requirement is recommended to ensure that prior to the lodgement of future development applications within these envelopes, the applicant has satisfied any requirements of the Federal Department of Infrastructure and Regional Development.

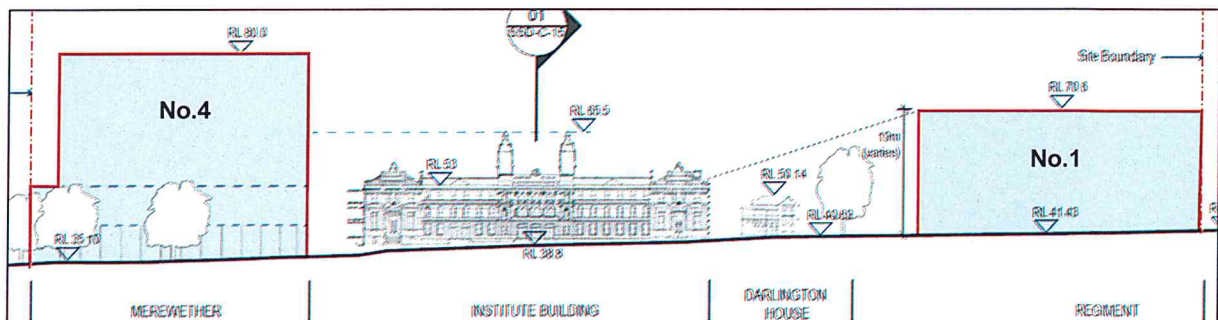


Figure 16: City Road Elevation

Regiment Building Envelope No. 1

The proposed Regiment Building envelope footprint seeks to enhance the characteristics of the corner site and create an iconic gateway to the University precinct. The envelope footprint proposes zero boundary setbacks at the corner to its City Road and Darlington Road frontages, while the City Road setback then increases to provide a curtilage to the existing Institute Building.

The approved height of the Moore Theological College Building at RL 70.6 is the upper measurement of the rooftop plant enclosure, setback approximately six metres from the building façade, while the building design has a predominant parapet height of 24.8 m (RL 67.7). The Department is satisfied that the proposed RL 70.6 height of the Regiment Building envelope along its City Road frontage is satisfactory, though is of the opinion that a future assessment requirement is required to ensure any rooftop plant enclosures are appropriately setback from the street wall of the building to minimise bulk and scale impacts and provide greater consistency with the approved Moore Theological College Building opposite. Future development applications would also be required to satisfactorily demonstrate design excellence and appropriate built form massing, and be subject to design conditions and parameters associated with any approval given for the CIP.

In response to the Darlington Road frontage, the Department supports the proposed tapering of the scale of the Regiment Building envelope's secondary frontage (see **Figure 17**). However, to ensure that potential bulk and scale streetscape impacts along this frontage are minimised, the RL 70.6 height should be restricted to the site's principle City Road frontage. Consequently, the secondary Darlington Road frontage should have a maximum height of RL 67.3 (approximately 25 m) that tapers to RL 55.45 (approximately 17 m) to provide a built form transition to adjacent residential development, thereby reducing potential amenity impacts (see **Figure 17**).

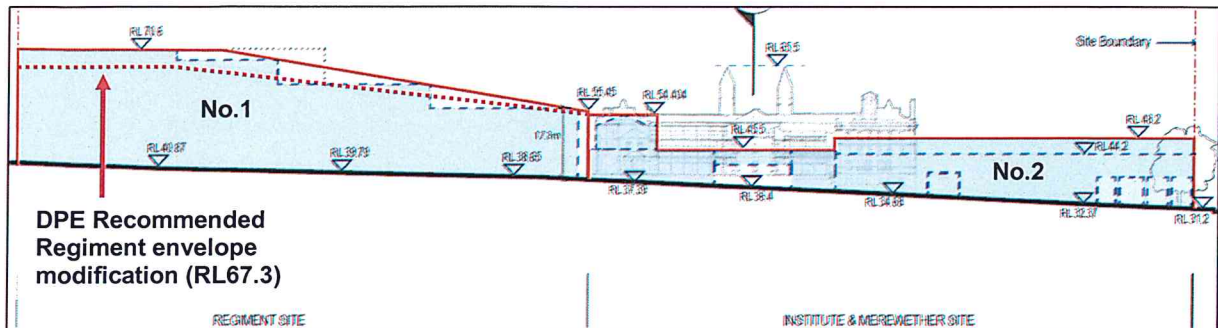


Figure 17: Darlington Road Elevation

Merewether and Institute Building Envelopes No.2 and No.4

The Department raises no objections to the proposed scale and indicative building footprint of the revised Institute/Merewether Building envelopes (No.2 and No.4). The footprint provides a suitable curtilage to protect the heritage significance of the existing Institute Building and its proposed height provides a transition from Darlington Road through to the City Road (see **Figure 18**).

The amendments to the Merewether Building envelope, including a reduction in height and increased City Road setback, are supported by the Department and would allow prominent views to the Institute Building to be retained and creates an opportunity for a new vista from Maze Crescent (currently obscured by the existing Merewether Building) (see **Figure 8**).

The Department also notes that Council supports the revised envelope height and footprint, though advised that the building envelope should incorporate a podium and tower design, with a podium height of RL 53 consistent with the lowest parapet of the adjoining Institute Building. The Department also considers it appropriate that a future assessment requirement be imposed to ensure that a distinct podium and tower design is achieved. This is recommended within the Development Consent.

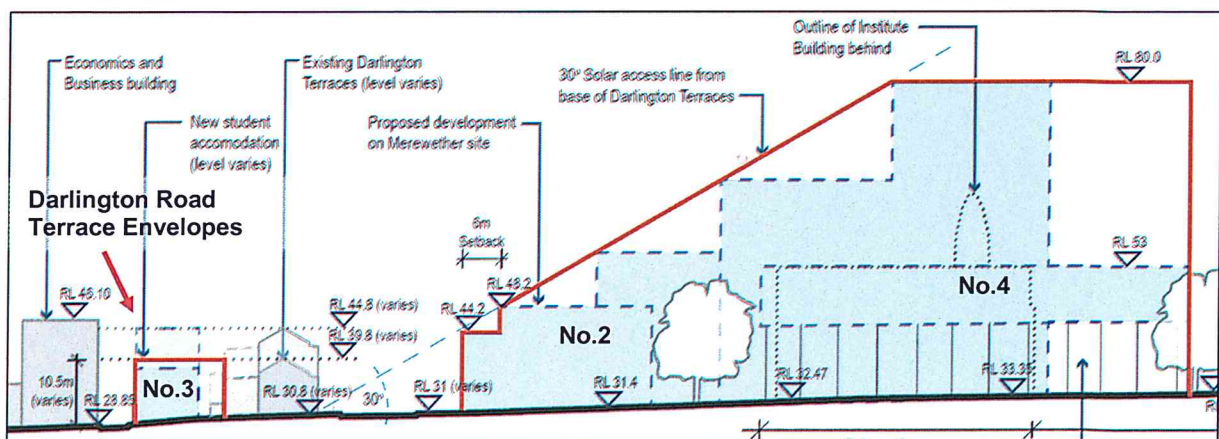


Figure 18: Butlin Avenue/Codrington Street Western Elevation

Darlington Road Terrace Envelopes No.3

Council and the Heritage Office (of OEH) generally support the proposed building envelopes at the rear of the Darlington Road terraces, however retain concerns regarding the scale of future built form and the potential impact on the terraces.

The Department is generally satisfied with the proposed footprint and scale of the building envelopes (see **Figure 19**), noting the applicant's commitment that future buildings additions would be subservient in scale to that of the existing terraces (see **Figure 20**). Future development within the rear yards of the terraces would therefore not be visible from Darlington Road, minimising potential impacts on the heritage significance of the terraces. The Department, though, recommends that a future assessment requirement be imposed to ensure that the design of the future built form at the Darlington Lane frontage expresses the existing terrace pattern and not be developed as one large building mass that extends along the length of the lane.

The applicant's proposed indicative built form also suggests a proposed setback (approximately four metres) between new built form and the rear of the existing terraces, no built form in sections adjacent to privately owned residential terraces to minimise potential amenity and privacy impacts, and the retention of existing mature vegetation at the rear of the terraces.

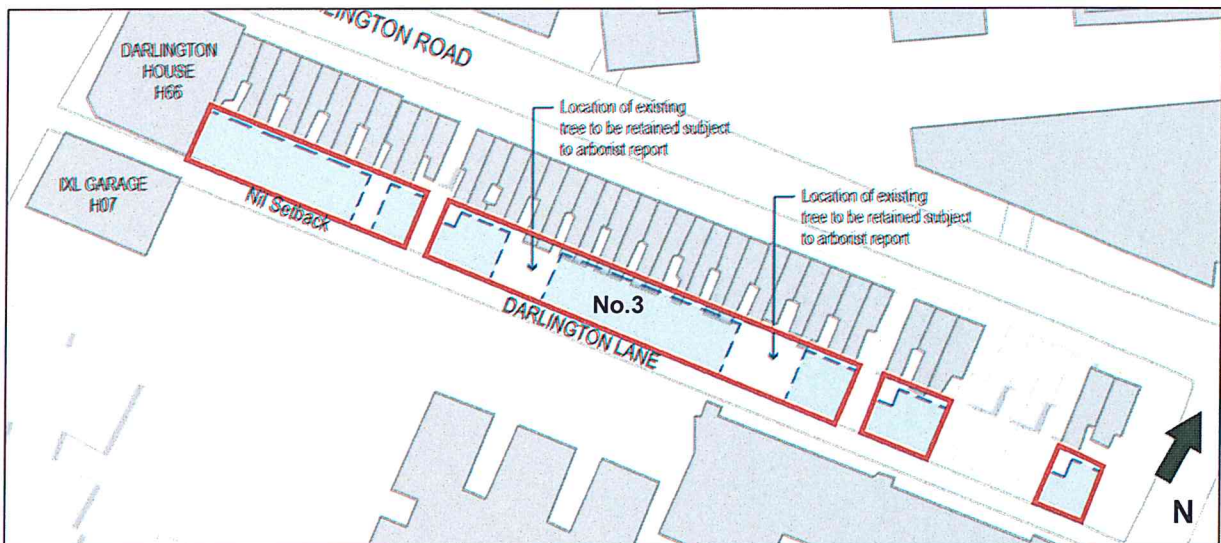


Figure 19: Darlington Road Terrace Envelopes

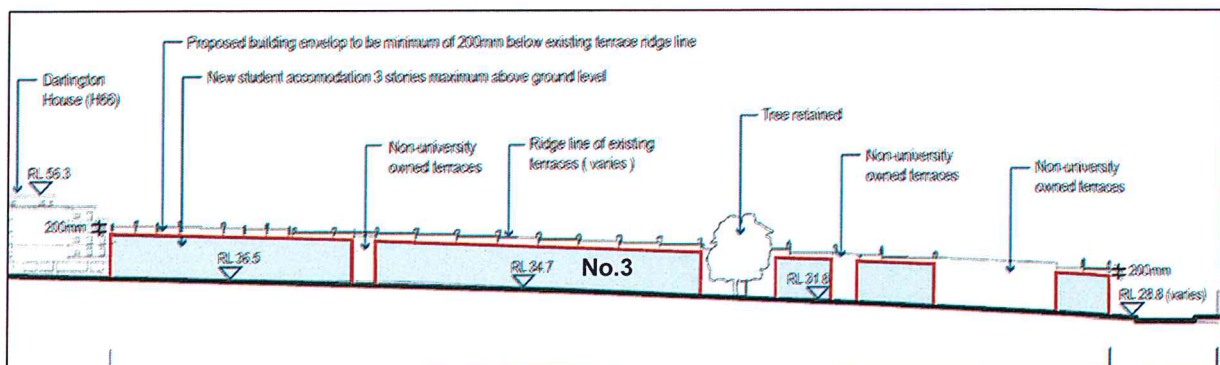


Figure 20: Darlington Road Terrace Envelopes (No.3) – Darlington Lane Northern Elevation

G08 Carpark Building Envelope No.5

The proposed building envelope footprint generally conforms to the outline of the existing G08 car park site, which the Department considers appropriate. However, the Department is of the opinion that the proposed height of the building envelope (RL 74.7), identified for future

teaching and learning facilities, is out of context with the scale of existing development surrounding the site (Molecular Sciences Building at RL 57.3 and University of Sydney Sports and Aquatic Centre at RL 40) and provides a poor transition in scale to the proposed Wentworth Building (RL 80) (see **Figure 21**) and Merewether Building envelopes (RL 80).

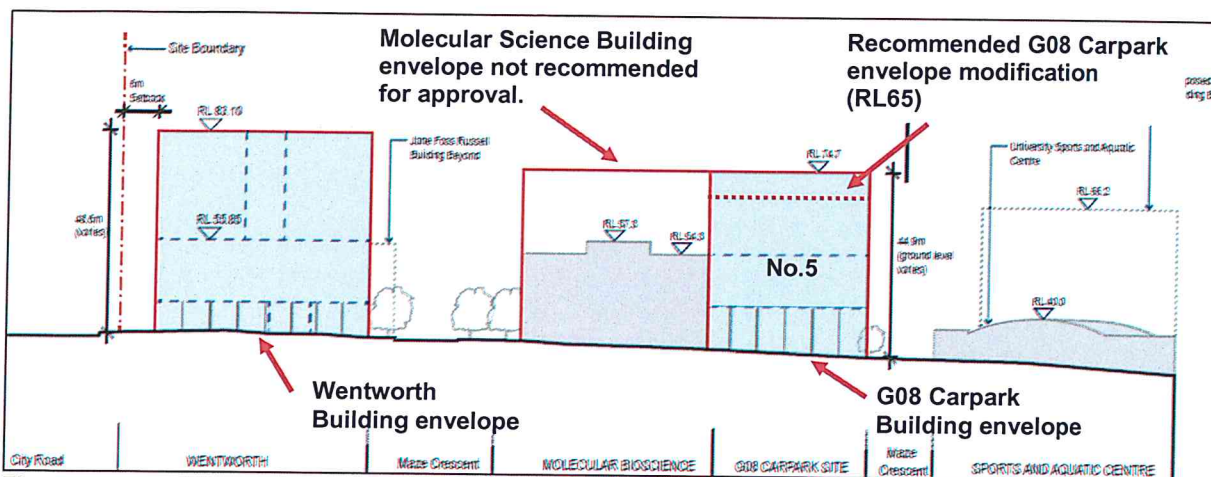


Figure 21: Butlin Avenue Eastern Elevation

In this regard, the Department considers that the building envelope should be restricted to RL 65, as also recommended by Council, and have a podium/tower design. Accordingly, the Department recommends a future assessment requirement to this effect. The recommended height will provide an improved transition from its immediate surroundings, such as the Abercrombie Precinct Redevelopment (RL 51.35 – 54.65), to future development proposed within the Merewether and Wentworth Building envelopes. Further, as no clear details of a building envelope have been provided regarding future proposed development above the existing Molecular Sciences Building adjacent to the G08 Carpark Building envelopes site, any approval of the CIP would not extend to the Molecular Sciences Building.

City Road Precinct

The City Road Precinct is proposed to accommodate future mixed use development, comprising learning and teaching facilities, student accommodation, and retail and amenities to support the University. Two envelopes are proposed with heights ranging from approximately 30 m to 57 m and comprising an indicative maximum GFA of 62,800 sqm, including the Wentworth Building envelope (No.1) and Wilkinson/International Building envelope (No.2) (see **Figure 9**). The applicant proposes to demolish buildings identified as not being fit for purpose and unable to be cost effectively adapted or refurbished, including International House, the Wilkinson Building and Wentworth Building to enable the redevelopment of the precinct and create a mixed use precinct with an active city edge and improved permeability.

The applicant identifies that the precinct's location on City Road towards the Sydney Central Business District (CBD) provides the opportunity to reflect the taller heights established on the CBD's western edge, particularly the development being undertaken at the University of Technology and former Carlton United Breweries site.

Wentworth Building Envelope No. 1

The proposed footprint, height and scale of the Wentworth building envelope is supported by the Department (see **Figure 22**). The proposed 3.1 m height reduction to RL 80 provides a consistent building envelope height with the Merewether Building envelope located opposite, providing a gateway to the Darlington Campus, while also providing a transition in scale down to the G08 Carpark Building envelope and surrounding Darlington Campus.

The Department recommends that the design of the Wentworth Building envelope be subject to a future assessment requirement to ensure that a distinct podium and tower built form is delivered on the site to minimise the potential of a large bulky building being designed at a critical site within the precinct. The proposed podium height of RL 55.85 is generally consistent with the height of the adjacent Jane Foss Russel Building which is considered appropriate.

Wilkinson/International Building Envelope No.2

Notwithstanding the concerns raised by Council and agencies regarding the proposed demolition of International House, the proposed redevelopment of the proposed City Road Precinct was generally supported by Council and the agencies. In response to the concerns raised, the applicant's RtS and RtS supplementary submission retained the overall maximum height of the International/Wilkinson Building envelope at RL 84.6, though amended the envelope profile to provide a better transition in scale from the Seymour Centre to the east and the adjacent approved St Michael's development to the west. This was achieved by moving the maximum building envelope height to the centre of its footprint and reducing the height of its western edge to RL 67.35 (consistent with the adjacent St Michael's development), creating a more tapered building envelope profile (see **Figure 22**).

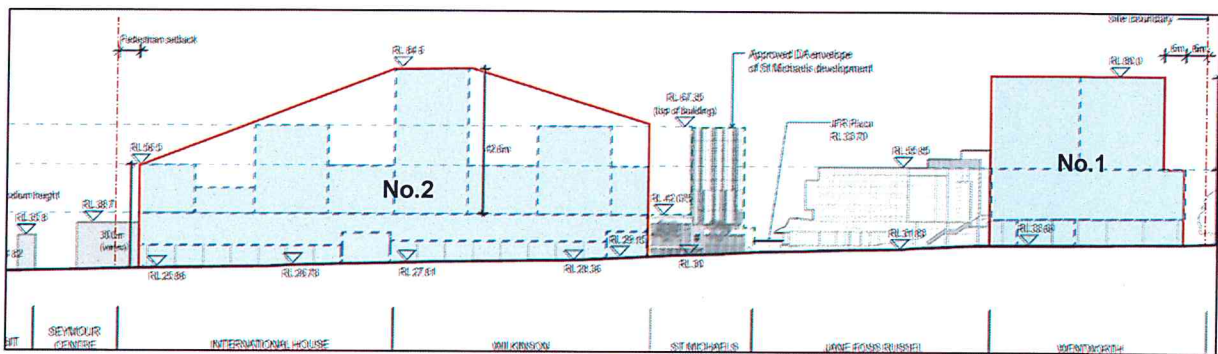


Figure 22: City Road Elevation

The applicant's amended International/Wilkinson Building envelope provides three indicative built forms consistent to or smaller than the approved St Michael's development at RL 67.35, and one larger indicative building form centrally located within the footprint at RL 84.6, approximately 17 metres taller. Council's City Road setback recommendation has not been adopted, however the applicant has advised that an allowance has been made for future built forms to incorporate a colonnade, which would effectively provide a wider footpath.

Existing development fronting City Road has generally been developed to the street edge, including the new St Michael's development (currently under construction). The proposed zero setback to City Road of the podium/tower design of the International/Wilkinson Building envelope would retain the established street wall, but provide improved pedestrian amenity via a future colonnade.

The amendments to the International/Wilkinson Building envelope are supported by the Department and provide an improved response to the precinct's immediate setting. They will ensure future built form is generally consistent with the scale of the St Michael's development, while offering an opportunity to develop a taller building form element to provide variation and interest in the City Road skyline. Furthermore, the indicative built form within the building envelope depicts a podium and tower design consistent with the adjoining St Michael's development, with tower forms separated and setback from the podium edges.

However, to ensure the future built form proposed within the International/Wilkinson Building envelope is satisfactory, the Department recommends a future assessment requirement requiring buildings to be of a podium/tower design, with a maximum podium height of RL 42.075, and tower forms appropriately separated to create slender built forms.

The Department supports the proposed City Road Precinct and building envelope designs, which respond appropriately to the surrounding context. Future development applications for the precinct will be required to satisfactorily demonstrate design excellence and appropriate built form massing, in accordance with design parameters associated with any approval of the CIP.

Engineering Precinct

It is proposed to retain the existing Engineering Faculty in its current location through the refurbishment and redevelopment of existing buildings within the Engineering Precinct. Six building envelopes are proposed with heights ranging from approximately 9 m to 42.5 m comprising an indicative maximum GFA of 42,500 sqm, including the Chemical Engineering Building envelope (No.1), a new building envelope at the corner of Maze Crescent and University Boardwalk (No.2), the Electrical Engineering Building envelope (No.3), the Workshop Building envelope (No.4), the Services Building envelope (No.5) and Glasshouse Building envelope (No.6) (see **Figure 10**).

The applicant seeks to improve and rationalise the internal and external spaces and demolish buildings identified as not being fit for purpose and unable to be cost effectively adapted or refurbished, which would enable the redevelopment of the precinct to improve teaching and research facilities, including the demolition of the heritage significant Chemical Engineering Building.

In response to the concerns raised regarding the proposed demolition of the 'heritage significant' Chemical Engineering Building, the applicant has stated that this building is the least adaptable building within the precinct and its proposed demolition is critical to enabling the precinct's upgrade. The applicant further advises that the proposed development of the existing Shepherd Street car park site is also essential to the precinct's future development direction and also enables the retention of other existing significant buildings.

Chemical Engineering and Services Building Envelopes No.1 and No.5

Concerns were raised by the public regarding the location of the proposed Chemical Engineering Building envelope and associated visual amenity impacts due to the proposed removal of an existing stand of trees within the existing car park on Shepherd Street. Concerns were also raised about potential overshadowing, privacy, light spill and noise impacts on Shepherd Street and Calder Road residents.

The applicant's RtS and RtS supplementary response proposed amendments to the layout of the Chemical Engineering Building envelope, with its footprint setback further into the site to enable the retention of a row of existing trees fronting Shepherd Street (see **Figures 23 and 24**) and its maximum height slightly increased from RL 33.6 to RL 34.

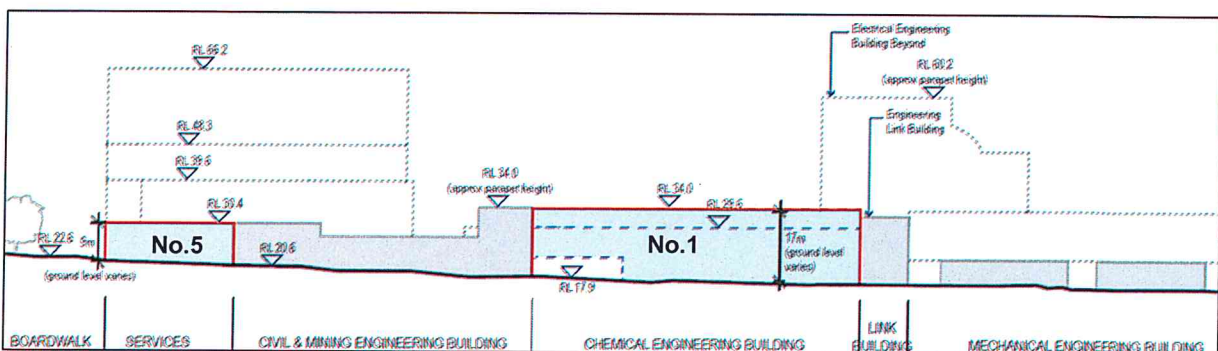


Figure 23: Shepherd Street Elevation – Chemical Engineering Building and Services Building Envelopes

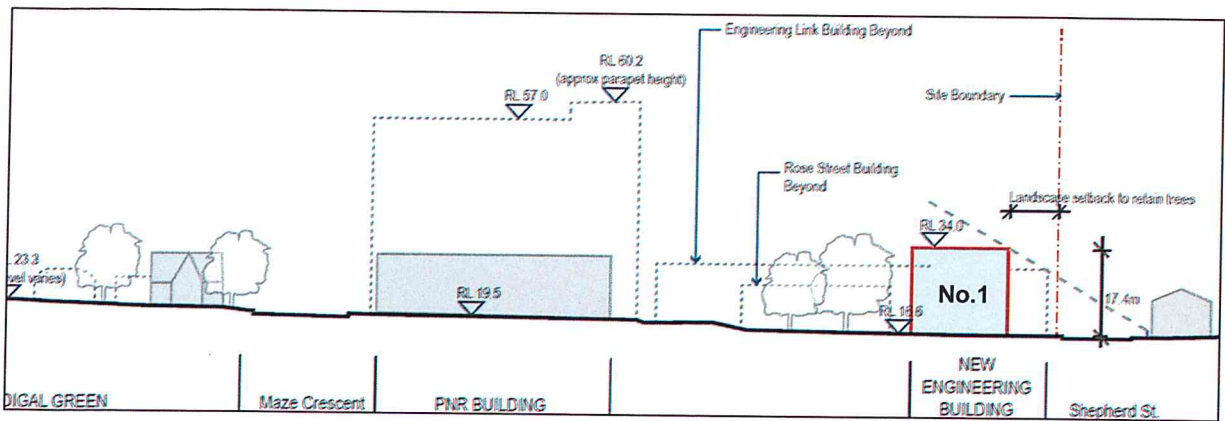


Figure 24: Shepherd Street Section – Chemical Engineering Building Envelope

The Department is generally satisfied with the proposed scale and height of the building envelopes, in particular the building envelopes fronting Shepherd Street (No.1 and No.5), which propose a scale generally consistent with existing built form within the precinct. Their footprint layout and proposed heights are consistent with existing University development that fronts Shepherd Street and would not give rise to adverse amenity impacts.

The Shepherd Road setback of the proposed Chemical Engineering building envelope is configured to allow for the retention of a row of existing mature trees located within the existing car park. Whilst not all trees are proposed to be retained, the retention of a row of trees will visually soften the appearance of future development on the site and assist in retaining a green outlook within Shepherd Street. To ensure this outcome is achieved, the Department recommends a future assessment requirement that at a minimum, the front row of existing eucalypt trees is to be retained in the future development of the site.

Workshop Building Envelope No.4

The Department had identified that the transition in height between the proposed lower scale building envelopes fronting Shepherd Street to the proposed larger building envelopes behind should be improved to minimise potential bulk and scale impacts on the surrounding lower scale development of the adjacent Darlington residential suburb. In response, the Workshop Building envelope height was amended and reduced by 17.9 metres from RL 66.3 to RL 48.3, providing a significant improvement to the transition in scale from Shepherd Street to the new proposed building envelope No.2 at RL 66.2 (see Figure 25).

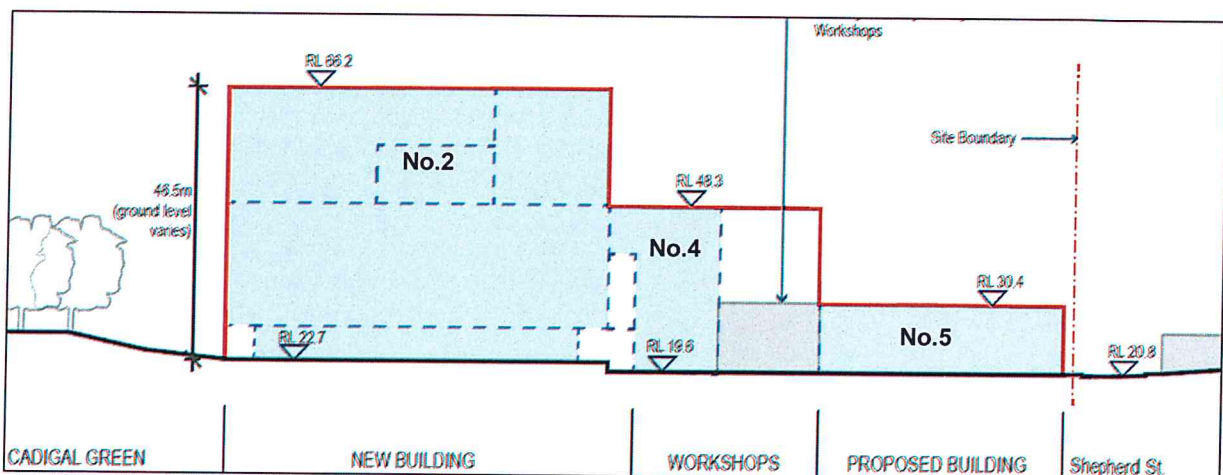


Figure 25: University Boardwalk Northern Elevation

The proposed amendments to the Workshop Building envelope are supported by the Department. The amendments provide for improved future built form outcomes and enable a more sympathetic interface with the adjoining residential properties on the opposite side of

Shepherd Street. In this regard, the stepped built form will provide a transition in scale and increased separation (approximately 80 metres) from the adjacent Shepherd Street residences to the precinct's largest building envelope (No.2) (see **Figure 25**). The amendments also provide a more balanced transition between the residential edge of the Darlington Campus to future larger scale development proposed within the Merewether and City Road Precincts.

The Department concludes that the proposed new building envelopes within the Engineering Precinct provide a balanced response to the future educational demands of the University and to the precinct's surrounding natural and built environment. Future development would still be subject to separate development applications and will be required to provide appropriately designed built form that respects the residential interface and the functional and operational needs of the Engineering faculty.

Health Precinct

Within the Health Precinct it is proposed to co-locate the faculties of Nursing and Midwifery, Health Sciences, and components of Medicine, Pharmacy and Dentistry through the redevelopment of the existing Blackburn-Bosch Building group. The Health Precinct is also proposed to accommodate future mixed use development that potentially may include health clinics, shared learning and teaching spaces, library facilities, residential and basement car parking.

One large envelope is proposed within the precinct (see **Figure 11**) comprising an indicative maximum GFA of 56,700 sqm, setback six metres to the adjacent RPA Hospital, with proposed maximum heights ranging from approximately 17 m along Western Avenue to 38.3 m adjacent to the RPA Hospital boundary. Within the building envelope, five indicative tower forms are shown, that transition in scale from Western Avenue (RL 48.8) and Cadigal Lane (RL 44.3) to potentially taller built form adjacent to RPA Hospital (RL 63.4) (see **Figures 26 to 28**).

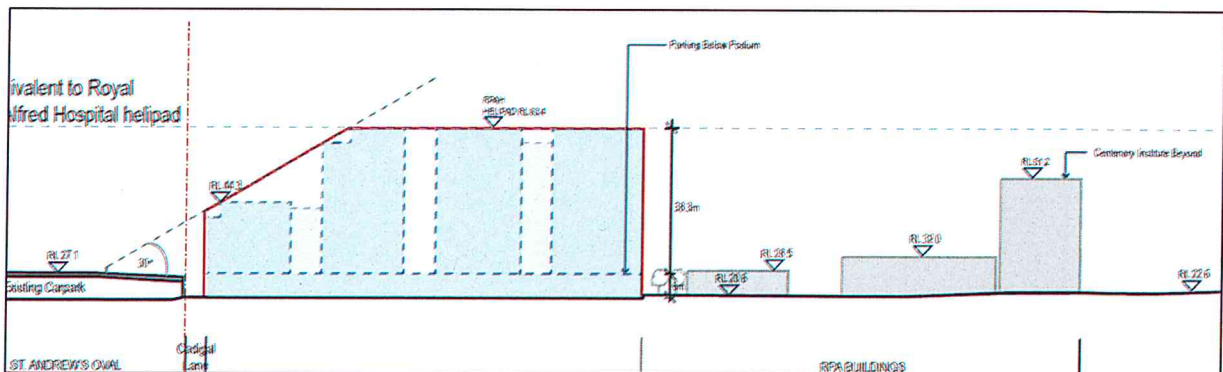


Figure 26: Mid-Envelope Western Section

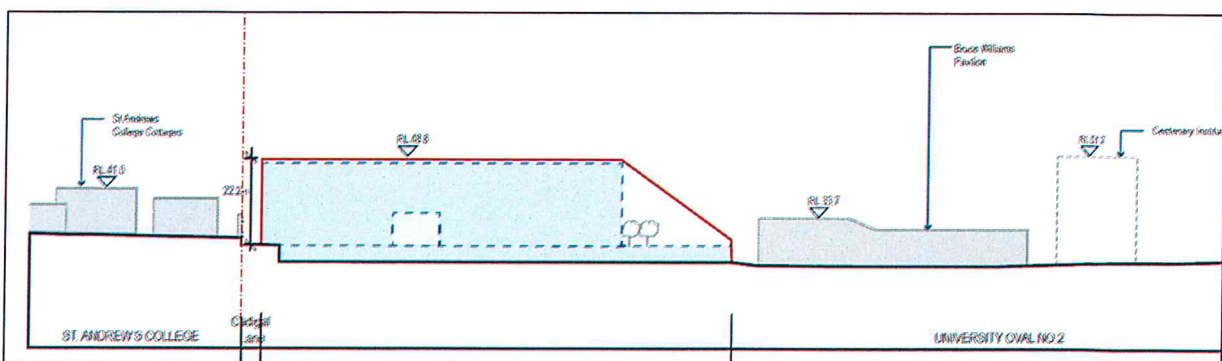


Figure 27: Western Section

The applicant seeks to demolish buildings identified as not being fit for purpose and unable to be cost effectively adapted or refurbished to enable the redevelopment of the precinct to create a new multi-faculty space for Health disciplines and construct a new interface between the University and RPA Hospital campuses to facilitate and promote integration and potential future connections with the hospital. Council advised that retention of the existing Blackburn Building within the precinct should be considered, however in the event of demolition, archival recording of the existing building should be undertaken.

The Department's initial assessment of the Health Precinct identified that use of the Chris O'Brien Lifehouse development for the precinct's maximum envelope height reference (as was originally proposed) was flawed as the two sites were visually and physically disconnected from each other. A maximum envelope height commensurate to the recently completed Charles Perkins Centre and neighbouring RPA Hospital was recommended for adoption by the applicant in any amended scheme submitted as part of their RtS.

Prior to lodging its RtS, the applicant undertook further consultation with the adjoining residential colleges and the RPA Hospital to better inform their design response for the precinct, a summary of which is included within its RtS. In the RtS and RtS supplementary response, the configuration of the Health Precinct was amended to correctly align the building envelope's western boundary and amend its footprint to provide a minimum six metre setback to RPA Hospital. The maximum height of the building envelope was also reduced by 13.7 metres, from RL 77.1 to RL 63.4, to be consistent with the height of the adjoining RPA Hospital helipad (see **Figure 28**).

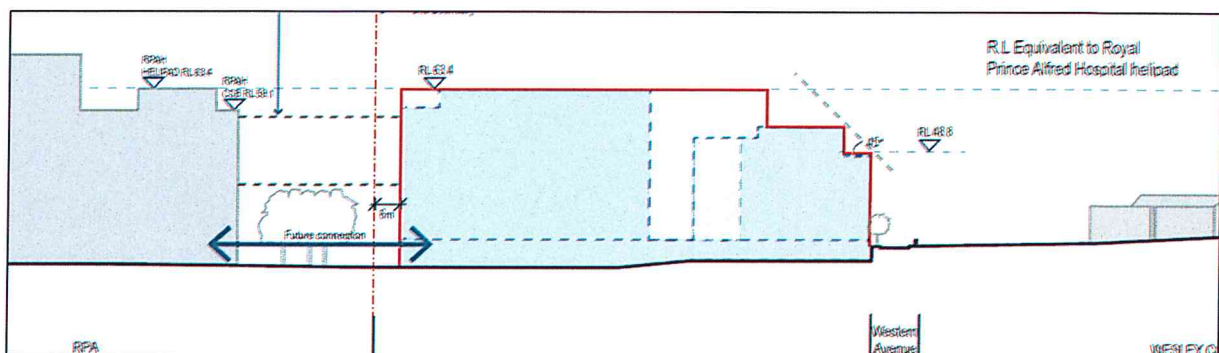


Figure 28: Mid-Envelope Northern Section

The amendments to the Health Precinct building envelope are supported by the Department, and will ensure future built form within the precinct provides a sympathetic response to the existing urban context, while not adversely constraining the development opportunities immediately adjacent to the precinct. The proposed amendments to the building envelope footprint to exclude the Bruce William Pavilion will also minimise impacts on the continued operations of existing businesses and will not restrict the ability for the potential future expansion of University Oval No.1 (not proposed in this application).

The tapered profile of the building envelope along its frontages within the University is supported by the Department, which will provide a transition to lower scale development adjacent, including St Andrew's College (Cadigal Lane), Wesley College, Wemen's College and University Oval No.1, and will also minimise potential overshadowing impacts.

The proposed six metre setback to RPA Hospital will assist in minimising potential bulk and scale impacts on the hospital, with the upper level of indicative built form also proposed to be stepped in from the building envelope footprint boundary. The applicant's RtS and RtS supplementary submission design response is considered to have satisfactorily addressed the key concerns raised. The Department also notes that a further submission was received from St Andrew's College that provides support for the revised scheme.

Future development applications will be required to provide an appropriate design response for the precinct and ensure that the built form respects the interfaces with the RPA Hospital, residential colleges, and University Oval No.1.

Life Sciences Precinct

Four building envelopes are proposed within the Life Sciences Precinct comprising an indicative maximum GFA of 37,250 sqm and heights ranging from approximately 18 m to 28 m. Building envelopes proposed include the Ross Street Building envelopes (No.1 and No.2), a new building envelope adjacent to the St Johns College oval (No.3) and the Grandstand Building envelope (No.4) (see **Figure 12**). A landscaped setback to Parramatta Road for building envelopes No.1 and No.2 is also proposed.

The applicant seeks to demolish buildings identified as not being fit for purpose and unable to be cost effectively adapted or refurbished, enabling the redevelopment of the precinct to improve learning and teaching facilities to create a multi-faculty precinct for Life Sciences and co-locate a number of life science schools and faculties, including Veterinary Sciences, Agriculture and Environment and Biological Sciences. It is also proposed to enhance the University's sports facilities through the future development of a new grandstand for University Oval No.2 and improve the University's Parramatta Road entrance through the creation of an enhanced gateway at the Ross Street entrance and retain and enhance heritage aspects of the precinct.

The Department's initial assessment of the Life Sciences Precinct concluded that the Ross Street envelopes should be reduced in height and scale to provide an improved urban response within the surrounding context. Clarification was also sought from the applicant regarding the justification for the proposed above-ground link between the Ross Street building envelopes No.1 and No.2, having regard to the necessity to retain heritage views from the existing entrance into the campus.

In response to the concerns raised, the applicant's RtS and RtS supplementary response proposed a number of building envelope amendments and provided further justification for elements of the precinct that remained unchanged. In summary, the RtS and RtS supplementary response detailed:

- the deletion of the McMaster Building envelope;
- a reduction in the height of the Ross Street Building envelopes No.1 and part of No.2 by six metres from RL 49.5 to RL 43.5;
- the amendment of the footprint layout of the Ross Street Building envelopes to provide a landscaped setback to Parramatta Road;
- a minor amendment to the layout of the Grandstand Building envelope footprint; and
- the relocation of the existing Ross Street gate pillars forward towards Parramatta Road to their original historical location.

The Department supports the proposed enhancement of the Ross Street Gateway and celebration of the University's original Parramatta Road entrance. The proposed stepped scale and height of the Ross Street Building envelopes (No.1 and No.2) satisfactorily responds to the scale of existing topography (see **Figure 29**), which rises approximately nine metres from the Ross Street gates to the eastern edge of building envelope No.2 and surrounding development, both within and outside of the University's grounds (see **Figure 30**). Additionally, future built form within the proposed envelopes will benefit from existing mature vegetation along the University's Parramatta Road frontage that will aid in visually softening building bulk and mass.

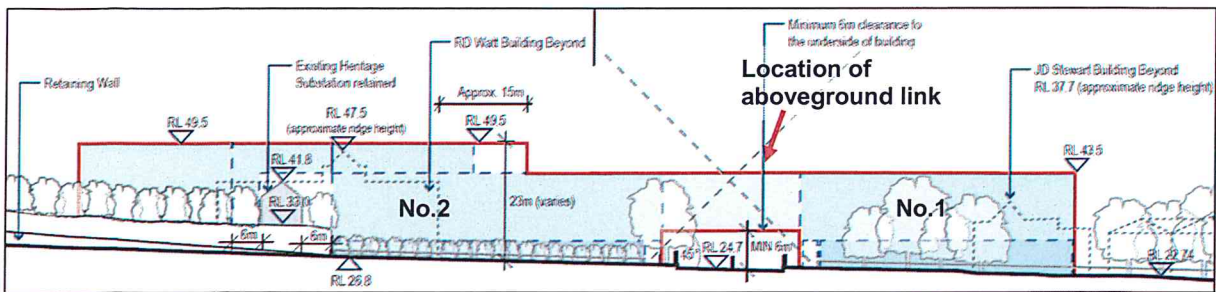


Figure 29: Parramatta Road Southern Elevation

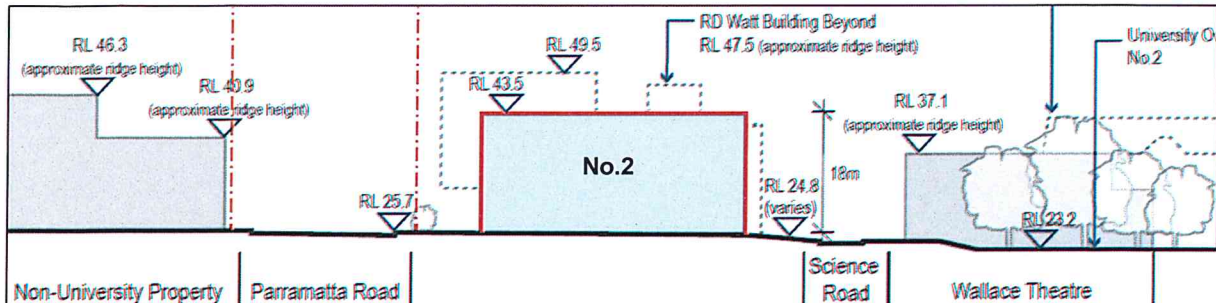


Figure 30: Ross Street Envelope No.2 Eastern Section

The Department also considers that Council's recommendation that further height reductions to building envelope No.2 in front of the RD Watt Building to retain views of the existing building from Parramatta Road is not necessary. In this regard, the Department agrees with the response provided by the applicant that the position and Parramatta Road frontage of the former McMillan Building (demolished in 2012) in front of the RD Watt Building, partly obscured views of the building from Parramatta Road. Significant existing vegetation within the University grounds and along the Parramatta Road frontage and the existing Old Substation Building also contribute to obscuring views to the RD Watt Building. In this regard, the Department is satisfied with the proposed scale and height of the Ross Street Building envelopes.

The applicant also states it is envisaged that the above-ground link between the proposed Ross Street Building envelopes No.1 and No.2 (see **Figure 29**) would be designed as a lightweight/transparent structure that would provide accessibility between the future built forms either side of the Ross Street entrance, but also retain and frame views associated with the Western Avenue axis.

The Department generally supports the above-ground link in concept, though acknowledges the concerns raised by Council and the Heritage Office and the potential impact the link may have on existing significant views into the University grounds. In this regard, the Department recommends a future assessment requirement that requires the applicant to satisfactorily demonstrate in a future development application for the link and associated buildings that the design, form, function and materials and finishes of the proposed aboveground link will not detrimentally impact on or restrict views associated with the Western Avenue axis.

The Department raises no objections to the proposed new building envelope adjacent to the St Johns College oval (No.3) and the Grandstand Building envelope (No.4). Their proposed scale provides an appropriate transition in scale from new and existing development along the University's Parramatta Road frontage to larger existing and proposed development centrally located within the University's Camperdown Campus. The proposed new Grandstand Building envelope will provide an opportunity for the University to add and improve its sporting facility infrastructure.

Notwithstanding the Department's support for building envelope No.3, it is recommended that a future assessment requirement be imposed requiring the south-western elevation of the future built form to be appropriately designed to articulate its façade and minimise any potential for a poor design response to its St John's Oval frontage.

Cultural Precinct

Within the Cultural Precinct it is proposed to internally refurbish the existing Macleay and Edgeworth-David Buildings to convert the Science Road area into a visitor destination that would accommodate cultural, museum and heritage components. A single building envelope, in the form of a new addition to the Macleay Building is also proposed, with an indicative maximum GFA of 2,000 sqm and maximum height of approximately ten metres (RL 49.2) (see **Figures 13 and 31**).

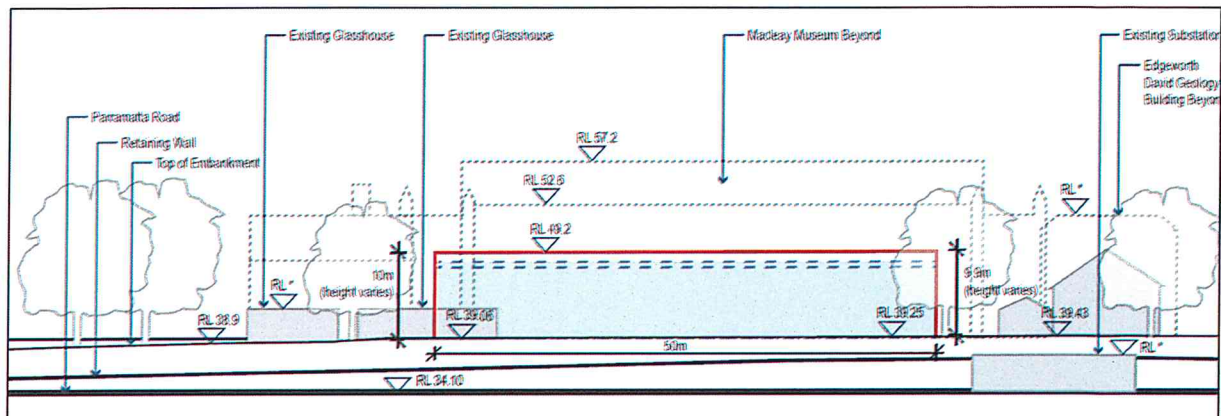


Figure 31: Macleay Museum Building Envelope Southern Elevation

The applicant seeks to relocate poor functioning teaching spaces from the precinct and refurbish the Macleay Building back to its original function and use. The applicant states that the precinct's refurbishment will facilitate improved public accessibility to the University's arts and museum collections.

Council did not raise objection to the envelope or future works proposed within the precinct but advised that future applications should be supported by a heritage impact statement. Concerns were raised with respect to the potential impacts of future development within the proposed envelope on an existing large fig tree.

The Department's assessment of the Cultural Precinct has not identified any significant issues with the proposed bulk and scale of the Macleay envelope. The Department concludes that the proposed scale and height of the envelope is minor in comparison to existing surrounding development (e.g. RL 53.1 to RL 63.1) and provides a sympathetic response to the scale of the existing Macleay and Edgeworth-David Buildings.

It is also noted that the applicant proposes the preparation of a heritage impact statement for any future development application lodged within the precinct that will assist in ensuring the future built form complements the heritage significance of the setting. The applicant will also be required to consider the site's elevated frontage to Parramatta Road and to ensure that existing significant vegetation is appropriately retained and protected.

Conclusion

The Department's built form and urban design assessment has concluded that the size and layout of the proposed building envelopes within each CIP precinct complement the existing campuses and adjacent development.

Appropriately, larger new built form envisaged under the CIP has been sited adjacent to major arterial roads and centrally within the University's main Camperdown Campus, assisting in minimising potential bulk and scale impacts on the surrounding locality.

The Department has recommended future assessment requirements to assist in controlling future development within the proposed building envelopes, including the requirement for a number of development sites to have a podium/tower design and that future built form achieves design excellence. A condition of approval also recommends that the heights of the Regiment Building envelope and G08 Car Park Building envelope be reduced to provide a better transition with surrounding buildings.

Overshadowing

Concerns raised by RPA and public submissions during the exhibition of the EIS and RtS noted that future development proposed within the Merewether, Engineering and Health Precincts would generate overshadowing impacts on adjoining properties. The Department's initial assessment of the EIS also cited the potential for the building envelopes at the rear of the University owned terraces on Darlington Road to generate overshadowing impacts on the adjoining privately owned terraces.

In response to the concerns raised, the applicant proposed a number of amendments to the CIP Precinct building envelopes, including reducing the maximum height of the Regiment Building envelope, amending the indicative terrace built form adjacent to privately owned Darlington Road terraces, and reducing the height and layout of the Health Precinct Building envelope and increasing its western setback to RPA.

Details submitted within the urban design review of the applicant's RtS demonstrates that the proposed envelopes at the rear of the Darlington Road terraces will generate minor overshadowing impacts on adjacent privately owned residential terraces. The Department's assessment has concluded that, subject to the detailed design of future built form, approximately three hours of solar access could be provided to greater than 50 per cent of the rear private open space of these private properties, consistent with Council's controls.

The Department identified that the proposed Regiment Building envelope would generate potential adverse overshadowing impacts on the existing dwellings within the public housing estate located to the south, though these impacts would be generally limited to dwellings that front Darlington Road. Currently, existing development generates some overshadowing impacts, however this is generally limited to the afternoon during the winter solstice.

Acknowledging the potential impacts, the Department has recommended a design amendment to the Regiment Building envelope, restricting the secondary Darlington Road frontage envelope height to a maximum height of RL 67.3 (approximately 25 m) at the corner of King Street and Darlington Road, tapering to RL 55.45 (approximately 17 m) (see **Figure 17**). The recommended amendments will assist in reducing potential amenity impacts on surrounding properties from future built form and ensure that the existing public housing estate dwellings fronting Darlington Road opposite have access to sunlight between 9 am and 11 am and later in the afternoon, during the winter solstice.

Consideration of building envelopes within the Engineering Precinct indicates that overshadowing impacts on Shepherd Street residential properties would be minimal. Shadowing impacts occur only on the front of these houses from approximately 2.30 pm onwards during the winter solstice, with no impacts generated prior. Additionally, shadowing generated during the afternoon winter solstice would generally have no impact on the rear private open space areas of these residential properties, with greater than two hours of solar access provided to greater than 50 per cent of private open space areas.

The Department's assessment of potential overshadowing impacts from the Health Precinct building envelope indicates that existing University and RPA development within the immediate locality contributes considerably to impacts currently experienced by both parties. The Department is of the opinion that the applicant's proposed amendments to the Health Precinct Building envelope outlined in the RtS supplementary response, increasing its western setback to RPA and decreasing the envelope height will minimise potential overshadowing impacts from future built form, such that the potential additional impacts generated by the proposed development would be minimal in comparison to existing conditions.

Notwithstanding, the Department considers it appropriate that a future assessment requirement be imposed on any approval requiring all future development applications to demonstrate that proposed future development does not result in excessive overshadowing impacts on adjoining private properties and University land uses.

Public Domain and Landscaping

The applicant proposes to replace existing building footprints with upgraded or new building forms, with formal and informal open spaces proposed within and around building envelopes. The CIP also proposes to increase campus planting using the University's planting species register and to retain and upgrade the landscape canopy, providing the Darlington Campus with 23 per cent coverage and the Camperdown Campus with 28 per cent coverage. It is also proposed that future development applications within CIP Precincts would address landscaping in greater detail and be guided by the University's landscape design principles, including sustainability, design cohesion, continuity of material and design, campus or precinct identity, and maintenance and cost.

The applicant's RtS included a concept landscape plan, detailing existing and proposed open space and public domain areas (see **Figure 32**). The concept landscape plan has been developed following a review of the issues, opportunities and constraints and overall strategic intent of the CIP, providing a set of landscape and public domain principles for future development within the CIP.

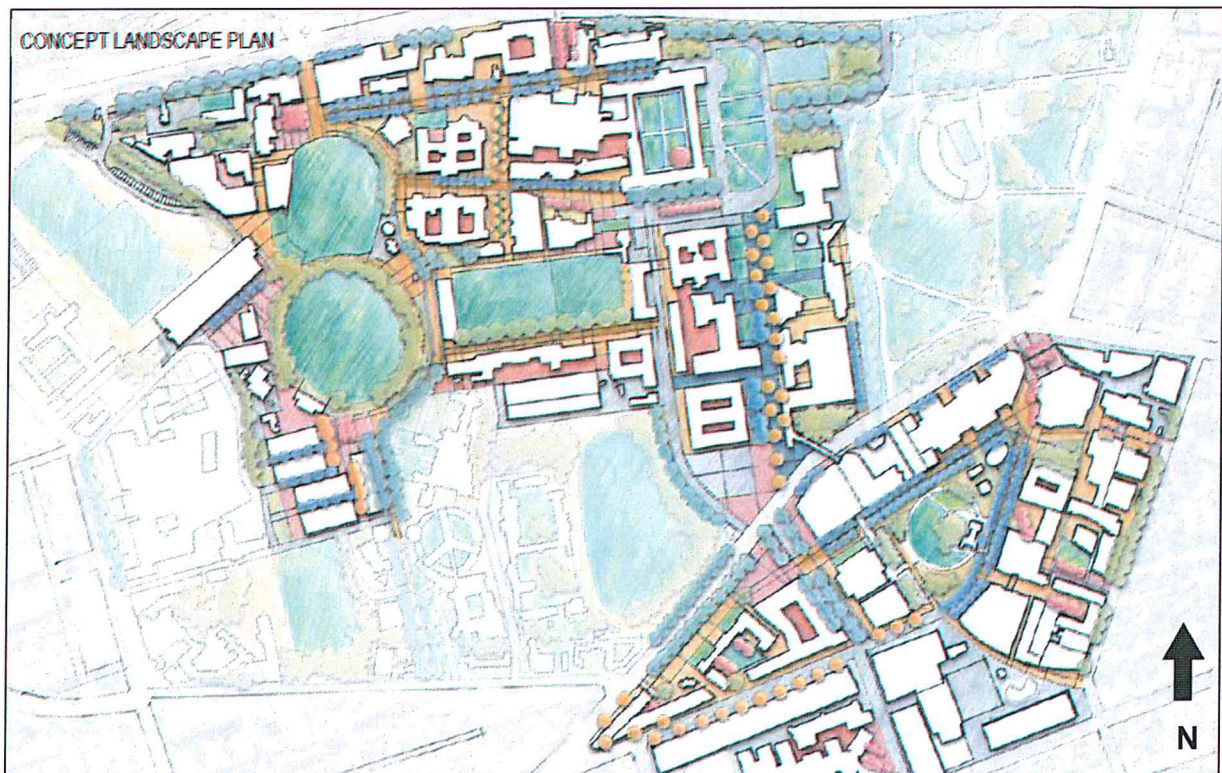


Figure 32: Concept Landscape Plan

Council commented that the proposed precinct building envelopes conflicted with the proposed concept landscape plan, and that the success of the proposed landscaping relied on indicative building footprints. Concerns were also raised in public submissions regarding the potential impacts that future development would have on tree protection zones, opportunities for replacement canopy trees and mature vegetation.

The Department notes that the concept landscape plan details indicative building footprints of potential built form within the proposed large building envelopes. The Department is of the opinion that the use of the indicative building footprints allows for a better understanding and assessment of the landscape concepts for each precinct.

The University's Grounds Conservation Management Plan (GCMP) identifies that the University's grounds are characterised by a number of different landscape typologies, ranging from picturesque landscapes (1850s – 1890s) to contemporary landscape design (see **Figure 33**). The Camperdown Campus cultural landscape is described as comprising a mix of buildings, open spaces, tree-lined avenues and internal streets and ornamental plantings. The Darlington Campus is described as more suburban largely defined by the existing street pattern, with institutional buildings having replaced existing residential terraces and with native gums and flora landscape elements well established.

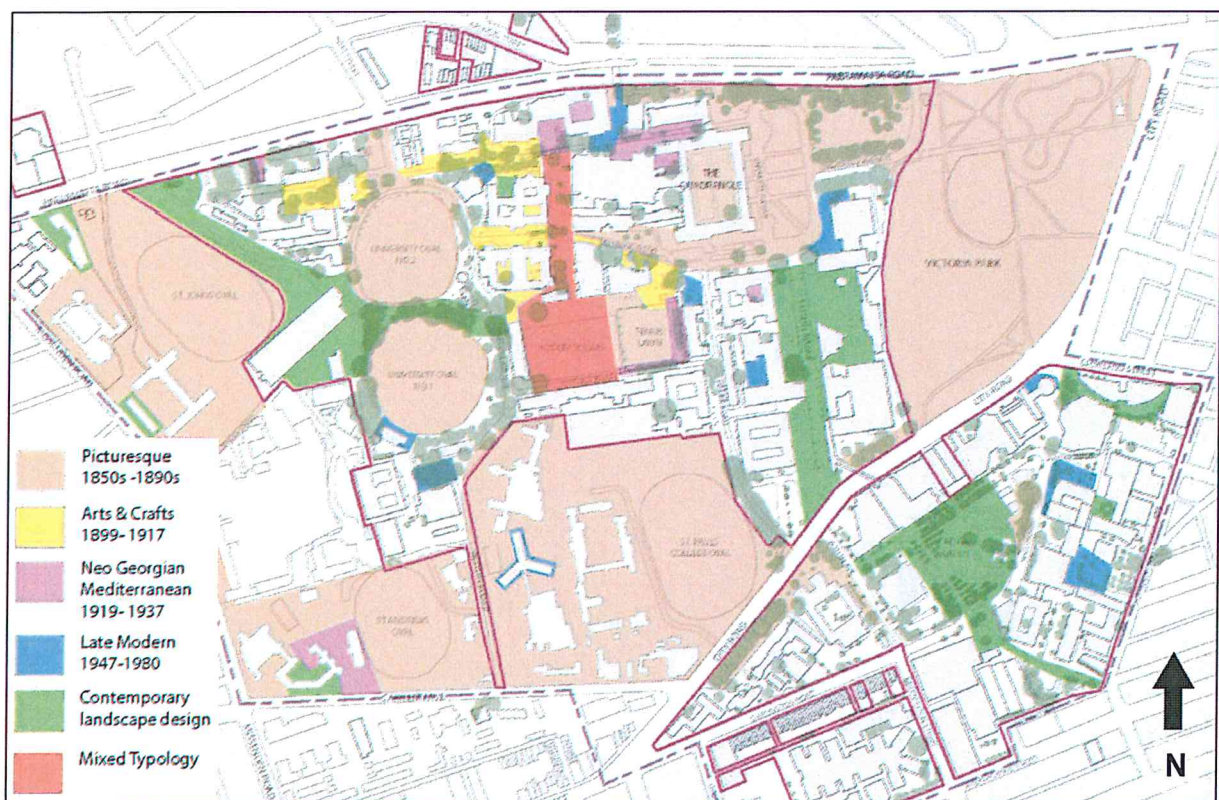


Figure 33: GCMP Landscape Typology

Importantly, the design principles of the concept landscape plan support and promote the University's significant landscape character and encourage new opportunities for the integration of the Camperdown and Darlington Campuses with the adjacent land uses through: reinforcing existing arrival points; promoting active street frontages to the public domain; allowing for increased permeability and connection through existing heritage significant walls and edges; and creating safer public domain areas.

The concept landscape plan also provides a framework for public domain and landscape design for both the Camperdown and Darlington Campuses, identifying a number of landscape and public domain policies for future works across the University's ground,

including the requirement that existing canopy trees and legacy trees be protected to maintain amenity and visual heritage.

More detailed precinct level guidance for the CIP is also provided within the University's concept landscape plan, with the indicative layout of building designs reinforcing key landscape design and public domain principles that are well established across the University's grounds. In this regard, precinct concept landscape plan designs seek to:

- strengthen visually significant vistas across the University's ovals from Western Avenue entrance (northern) and the Parramatta Road Ross Street entrance (southern);
- regenerate and create new squares and courtyards to frame existing and indicative buildings;
- reinforce existing campus entrances through the regeneration existing entries and promote increased permeability;
- retain significant mature vegetation and promote avenue planting within University grounds and along its edges at campus interfaces; and
- retain and integrate existing heritage significant landscape elements, including existing walls, fences, and sandstone kerb and guttering.

The Department concludes that the implementation of the proposed concept landscape plan and associated design principles and policies will ensure that future CIP development positively contributes to the culturally and heritage significant landscape character of the University. In addition, future development applications within the CIP would also be required to be accompanied by a landscape plan and have regard to the concept landscape plan and GCMP. The Department has recommended the imposition of a future assessment requirement to this effect.

The Department has considered built form and urban design along with public domain and landscaping and is satisfied that the proposed additional GFA and building envelopes can be satisfactorily accommodated within the identified precincts, subject to future assessment requirements.

5.2.2 Heritage

Key Heritage Impacts

The applicant's proposed CIP involves the proposed demolition of approximately 34 buildings across the campus (see **Figure 34**). The majority of these buildings (27) are identified as having little or only some heritage significance. The remaining seven buildings are identified as having moderate to high levels of heritage significance. It is noted that no buildings proposed for demolition are listed on the State Heritage Register.

The University as a whole is listed as a local conservation area under SLEP and is listed on the University's section 170 register under the *Heritage Act 1977*. In addition, the Blackburn Building, JD Stewart Building and the Institute Building (including the Darlington Centre), are listed on the University of Sydney's section 170 register.

The CIP was accompanied by a heritage impact assessment (CIP heritage report), as well as individual heritage impact assessments for each of the six CIP Precincts, which provide a number of recommendations to mitigate heritage impacts associated with the proposed future demolition and construction works.

The applicant has also revised its existing GCMP and submitted it with the CIP. The GCMP provides a detailed assessment and grading of the heritage significance of buildings (see **Figure 34**), significant landscapes and landscape elements, key view corridors and planning axes within the Camperdown and Darlington Campuses. The GCMP also provides a set of conservation policies to ensure that the heritage significance of the University and items of significance are appropriately managed as part of future development within the University

grounds. The applicant has also separately referred the revised GCMP to the NSW Heritage Council for endorsement.

Buildings identified within the GCMP for demolition (including their significance grading) include: International House, Wilkinson Building, Chemical Engineering Building, Wentworth Building (part), Blackburn Building, rear west wing of the Institute Building, Veterinary Precinct buildings (including the RMC Gunn Building) and JD Stewart Building's northern wing only (buildings identified for demolition are outlined black). Regarding the JD Stewart Building, the GCMP identifies the building as having exceptional heritage significance, however the later northern wing addition of the building (added in the late 1950's) is proposed to be demolished. This addition to the JD Stewart Building was considered to have only moderate to high heritage significance. It is noted that no objections have been raised to the demolition of this element of the JD Stewart Building.

Concerns were raised by Council, Heritage and the National Trust during the exhibition of the EIS and RtS regarding the proposed demolition of heritage significant buildings, as identified within the University's GCMP. In particular, the removal of three buildings, International House, the Chemical Engineering Building and Blackburn Building (see **Figures 35 to 38**), was generally not supported. Specifically, the GCMP identifies that fabric (e.g. landscapes and buildings) identified as having moderate or above levels of heritage significance and introduced prior to 1975 should be retained and conserved. Notwithstanding, removal of heritage significant fabric may be acceptable where its removal is essential and important to the continuation of the University's historical use.

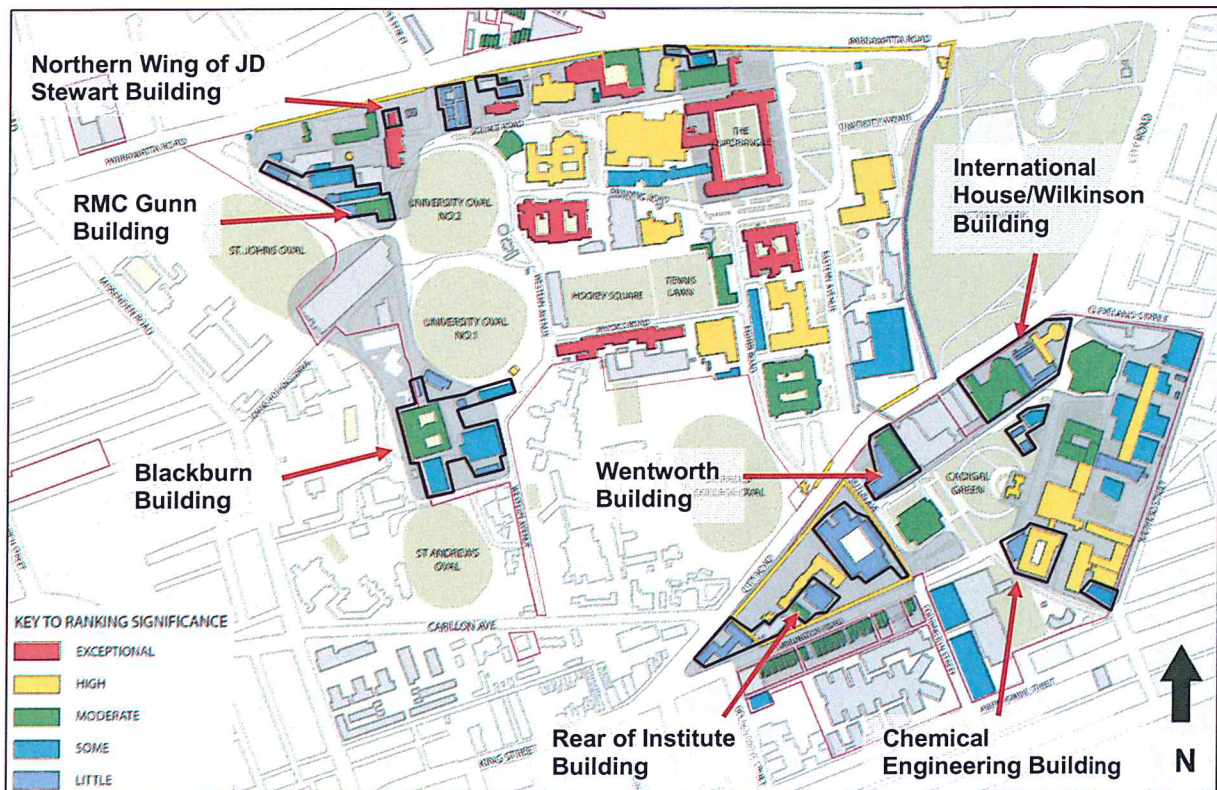


Figure 34: Heritage Significant Buildings – buildings identified for demolition outlined in black



Figure 35: Heritage Significant Buildings – International House (view from City Road) (Source: Google Maps)

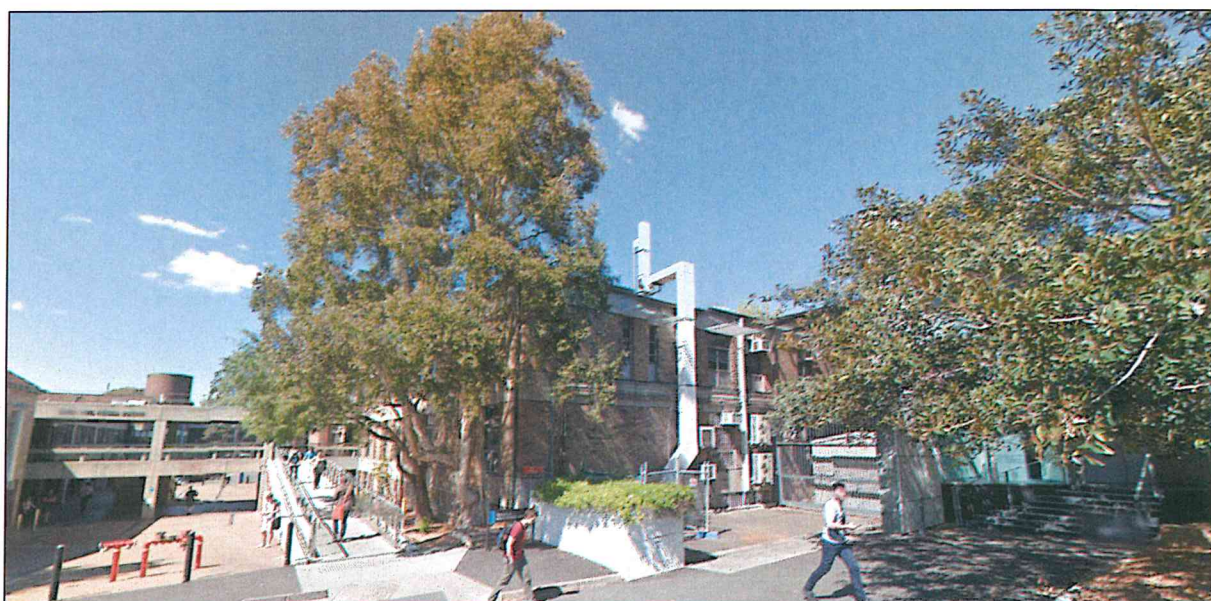


Figure 36: Heritage Significant Buildings – Chemical Engineering Building (view from Maze Crescent) (Source: Google Maps)



Figure 37: Heritage Significant Buildings – Chemical Engineering Building (view from University Boardwalk) (Source: The University of Sydney)



Figure 38: Heritage Significant Buildings – Blackburn Building (view from Blackburn Circuit) (Source: The University of Sydney)

International House, originally constructed between 1965 and 1967, and was designed in a Modernist architectural style and has cultural and social heritage significance due its association with the international movement of “International Houses” and influence of the Colombo Plan in education during the 1950s.

The applicant acknowledges that the existing rotunda building of International House has some architectural heritage significance. However, it states that the construction of International House was undertaken with minimal funding and as a result, the architectural detail and finishes of the student accommodation block component suffered, and that its adaptive re-use would be challenging in terms of achieving the current standards and requirements for affordable housing. It also notes that the construction of the Seymour Centre and the high wall constructed around its perimeter have diminished the visual prominence of International House, particularly the three-storey rotunda.

The University's vision includes the replacement of International House with a new landmark building that provides a principle gateway to the University and interpretation of the former Darlington Road alignment. Future development proposed for this location by the University is intended to accommodate a mixture of cultures, as International House was originally designed for, and would be designed to modern standards, providing significantly improved affordable student housing.

The Chemical Engineering Building, constructed during the mid-1960's, forms part of a collection of seven buildings constructed during this period for a new Engineering Precinct for the University. The buildings were all designed by the architectural firm Anchor Mortlock Murray, of which the Chemical Engineering Building is described as the 'earliest purely Brutalist architectural style building at the University'.

The applicant has identified that the Chemical Engineering Building is the least adaptable building within the Engineering Precinct due to its original design and layout specific to teaching during its period of construction, as well as the extensive array of internal infrastructure services, inefficient building floor plates and existing major structural deficiencies. Its removal would minimise potential burdens associated with the problematic task of upgrading the existing building for re-use and provide the opportunity for the construction of modern teaching facilities that meet the needs of the Faculty of Engineering and Information Technology. Its removal would also enable the remainder of the Engineering Precinct to be adaptably reused and upgraded.

The Blackburn Building, constructed between 1931 and 1933, was identified as having lesser architectural heritage significance than International House and the Chemical Engineering Building, though was considered to have moderate social and cultural heritage significance due to its associations between the University and Rockefeller Foundation and evolution of medical teaching at the University.

The Blackburn Building was identified for demolition by the applicant due its inability to be adaptively reused as a result of the level changes across each floor, poor accessibility, and low level of useable floorspace. The socially and cultural heritage significance associated with medical research and teaching currently undertaken within the Blackburn Building would continue through the redevelopment of the Health Precinct and continued occupation of the University's medical faculty.

The Department notes that retention of these buildings would significantly impact on the ability of the precincts within which they are located to be redeveloped. Approximately half of the developable footprint would be restricted in the City Road Precinct, while the Engineering Precinct and Health Precinct would not be capable of redevelopment, as the necessary developable floor space would not be made available if these buildings were retained. Having regard to the GCMP policy which outlines that demolition is appropriate if the removal of a heritage significant item is important to the continuation of the historical use of the place as a university, the Department considers the demolition of these buildings is acceptable. Their removal will unlock future development potential and facilitate the establishment of more efficient and improved education and learning environments, ensuring the continuation of the university use.

Further, the Department's assessment concludes that demolition of the identified heritage significant buildings (including International House, the Chemical Engineering Building and Blackburn Building) is acceptable given:

- buildings identified for demolition that are considered to be of high architectural heritage significance are not rare examples and their social and cultural heritage significance can be satisfactorily reinterpreted within future development;
- the CIP does not propose the demolition of any buildings of exceptional heritage significance and would generally be unaffected by future envisaged development;
- the inability to cost effectively adapt the existing buildings to meet the current and future teaching and learning requirements of the University;
- the creation of development potential through the proposed demolition of these buildings which allows for the retention and conservation of other items of greater heritage significance on the site, including significant buildings and landscape environs;
- future replacement buildings will be required to demonstrate design excellence to ensure they will positively respond to the heritage significance of their surroundings; and
- the buildings identified for demolition will enable the \$1.4 billion redevelopment of the respective precincts, enhancing the educational function of The University of Sydney and the provision of associated public benefits, particularly improved education and learning opportunities as well as generating approximately 14,700 construction jobs and 400 ongoing operational jobs.

Regarding the remainder of buildings identified for demolition, the Department notes that they are predominantly ranked as only having some heritage significance and that generally no objection was raised to their removal. While the removal of heritage significant fabric from the University would have some impact on the level of overall heritage significance of the campus, the Department raises no objection to their proposed future demolition as:

- they generally have limited heritage significance;
- their demolition would provide improved opportunities for regeneration of teaching spaces; and
- the University's significance as a teaching institution will be maintained and improved.

The Department has also recommended a suite of appropriate future assessment requirements to satisfactorily manage residual impacts, including a requirement for photographic archival recording and fabric surveys to be undertaken of buildings proposed to be demolished and the preparation of heritage interpretation plans and heritage impact statements with future development applications.

Other Heritage Impacts

Concerns were also raised regarding the potential heritage impact associated with the proposed rear additions to the University's Darlington Road terraces (listed as a local heritage item under SLEP), potential impact on the heritage significance of the existing fences and walls, and the proposed demolition of the rear west wing of the Institute Building.

The Heritage Office also recommended amendments to the building envelopes to provide more appropriate heritage curtilages to significant buildings and that envelope heights be decreased and their setbacks increased to minimise potential impacts on heritage significant buildings and fabric.

The applicant's heritage reports prepared for each precinct include a number of considered recommendations to ensure that future development has regard to the heritage significance of the University and appropriate mitigation measures are addressed. These recommendations include: the establishment of a clear curtilage around the Institute Building to protect its high heritage significance and views to the building; digital archival photo recording; integration of heritage interpretation within the design of future development; and the preparation of detailed heritage impact assessment reports. The Department considers such measures to be satisfactorily in ensuring that future development appropriately

addresses and interprets the existing the heritage significance of University buildings and places of significance. The Department recommends a future assessment requirement be imposed requiring future development applications within each precinct to have regard to, and comply with, all recommendations provided within respective precinct heritage reports.

Recent developments within the University, including the new Law Faculty Building and Australian Nanoscience Building (currently under construction) demonstrate the ability of the University to inserting modern built forms adjacent to existing heritage significant buildings and landscapes with minimal impact. In this regard, the sitting and scale of proposed building envelopes are considered appropriate and would allow for the development of new modern built forms within the heritage significant environment to complement the University, while keeping potential heritage impacts to a minimum.

In response to the concerns and recommended building amendments, the applicant's RtS amended the Merewether building envelope by aligning its City Road setback with the existing heritage significant building to retain its prominence along this frontage. The applicant also advised that the existing Institute Building conservation management plan would be updated for any future development application and that the façade design of future development fronting the Institute Building would be sympathetically designed to ensure the protection of its heritage significance. Minor alterations to boundary fences and walls are also proposed to provide new openings where appropriate to activate streetscapes and façades, details of which would be further outlined within future development applications.

The applicant also confirmed that the scale of any future rear additions to the University's Darlington Road terraces would be subservient in scale to ensure that their heritage significance is retained and has submitted amended indicative building envelope elevations demonstrating this. The Department also recommends that a further assessment requirement be imposed on any approval to ensure that future development at the rear of the existing terraces is subservient and retains the fine grain terrace subdivision pattern of the locally heritage significant items.

The Department is satisfied that the heritage assessments undertaken and implementation of the GCMP will ensure that potential heritage impacts on the University can be satisfactorily mitigated. The Department also notes that the applicant has agreed that heritage impact statements and heritage interpretation strategies would be prepared for future development applications and that digital archival recording would also be undertaken.

Aboriginal Heritage

The Camperdown and Darlington Campuses were occupied by Aboriginal people of the Cadigal and/or Wanngal clans and areas with Aboriginal archaeological potential exist across the University. The applicant's Aboriginal Heritage Due Diligence Report (report) states that a search of the Aboriginal Heritage Information Management System (AHIMS) identified 11 recorded Aboriginal sites that display a strong association with the alignment of the former Blackwattle Creek and Swamp (see **Figure 39**), which is now obscured by significant urban development.

Two sites are identified within University grounds and are located within the grounds of the new Law School (45-6-2745) and grounds of the Wilkinson Building (45-6-2822), which is located within the boundary of the proposed City Road Precinct (see **Figure 39**).

The report details that over the last 200 years the University grounds have been subject to extensive earth disturbance from various land use activities, including farming, grazing, landscaping, residential and multi-storey educational development, which has significantly reduced the potential for the preservation of archaeological deposits. It is also noted that the identified City Road Precinct Aboriginal site (45-6-2822) has previously been destroyed under a permit issued by OEH.

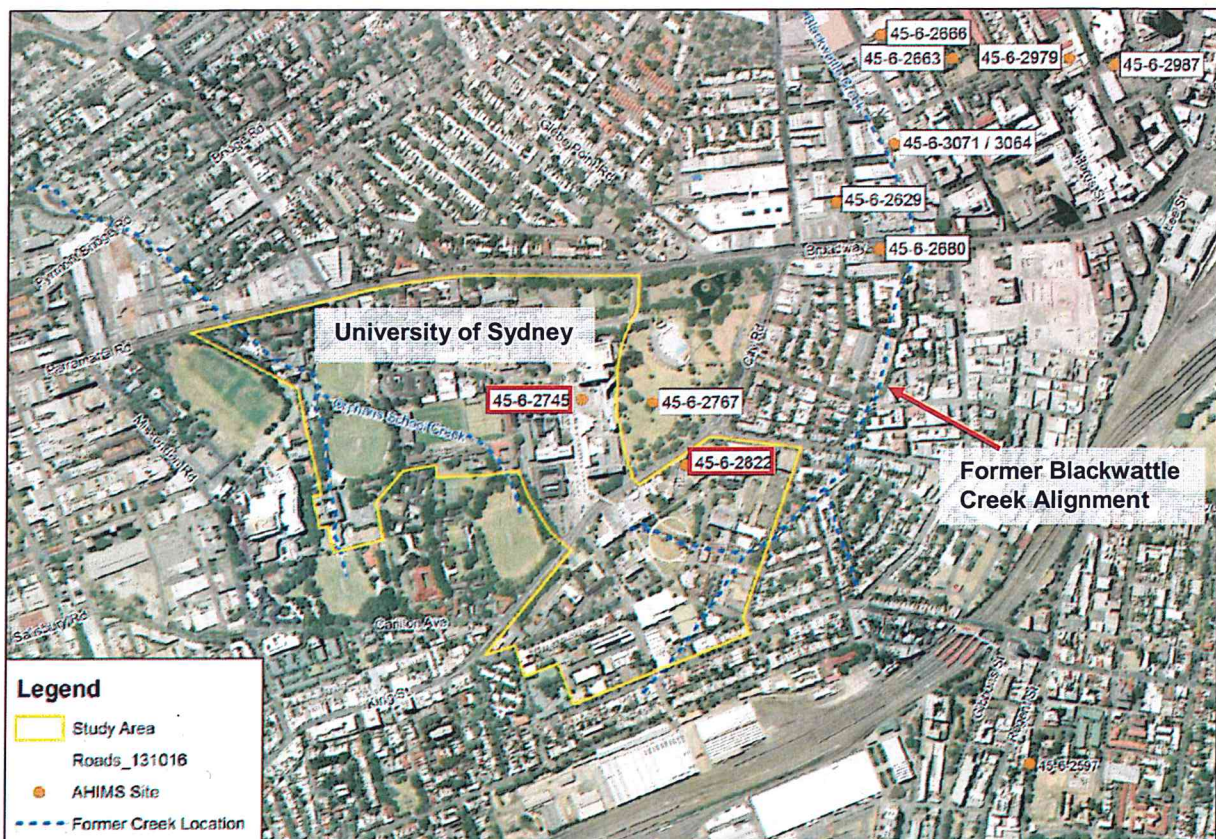


Figure 39: AHIMS Recorded Aboriginal Sites

OEH advised the Department that the applicant's report was not a full archaeological and cultural assessment and that a robust assessment should be undertaken at this stage to identify the presence or absence of objects. The Department acknowledges the concerns of OEH, though notes that any approval given would not include consent for construction works in the first instance, and that all indicative development identified within CIP Precincts would be subject to separate development applications.

Furthermore, sites identified for development within precinct building envelopes were generally identified with low or nil potential of having evidence of archaeological deposits. The indicative built form is typically located on sites currently occupied by existing development, with only the Life Sciences Precinct and Cultural Precinct identified as having moderate to low potential evidence of archaeological deposits.

The Department concludes that due to the moderate to low potential for evidence of archaeological deposits being identified and the heavily disturbed nature of many of the CIP precincts that impacts associated with the future development within the proposed envelopes would be minimal. In this regard, the Department is of the opinion that the applicant's EIS has satisfactorily assessed the potential for Aboriginal heritage impacts.

Notwithstanding, the Department recommends a further assessment requirement be imposed requiring the applicant to undertake necessary consultation in accordance with OEH's Draft Guidelines for *Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005* and *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, prior to the detailed design and layout of future built form. And where further investigations are warranted, archaeological and cultural assessments be prepared and submitted with future development applications.

5.2.3 Design Excellence

The CIP envisages a number of building envelopes that will facilitate the development of iconic, landmark buildings that would be required to demonstrate design excellence, particularly within the City Road and Merewether Precincts that have principal frontages to City Road.

To ensure that design excellence is achieved, the applicant proposes to apply the University's Architect Panel Establishment and Competitive Design Process, whereby architects from a group of pre-endorsed professionals would be invited to submit a tender for future development and take part in a design competition run by the University.

During the exhibition of the EIS and RtS, Council commented that competitive design processes should be undertaken in accordance with Council's design excellence process for all subsequent development applications that trigger the requirement in accordance with SLEP 2012.

The applicant responded to Council's comments within its RtS, advising that the University utilised an open tender process, the methodology for which was adopted from NSW Government Procurement policies and guidelines. The University's open tender process was used to establish panels of skilled professionals for a range of specialist professions, including BCA consultants, landscape architects, town planners, geotechnical, structural and civil engineers, traffic engineers and architects.

Notwithstanding the applicant's alternative approach, SLEP 2012 continues to apply to all future development under the CIP and therefore the design excellence requirements of SLEP 2012 must be followed. In this regard, development having a capital investment value of greater than \$100 million or a height of 25 metres above ground level, would be required to comply with the terms of SLEP 2012.

For development under the CIP that does not trigger the design excellence requirements under SLEP 2012, the Department is generally satisfied that the University's own design competition process would ensure that design excellence is achieved.

5.2.4 Traffic and Transport

The proposed CIP seeks to rationalise and improve the current access and parking arrangements of the University and provide well-defined access points for people, bicycles and vehicles. The CIP also proposes improved permeability, introduction of new designated vehicular drop-off and pick-up points at University gateways for taxis, buses and private vehicles and the provision of designated centralised service centre locations at the periphery of the campuses.

To achieve these outcomes, the applicant prepared and submitted an access strategy that addresses existing traffic and transport conditions, so that the University is best placed to:

- provide streets and movement networks for people and their various transport forms;
- provide access to convenient public transport; and
- ensure clear and interconnected movement networks are established that promote gateways and connections to broader transport networks.

During the exhibition of the EIS and RtS, Council and TfNSW detailed their support for the applicant's holistic approach to transport and proposed travel demand strategy and provided a number of recommendations to ensure that targeted mode shares can be reasonably achieved. However, comments provided within public submissions raised concerns with the proposed centralised service centre, car parking strategy and vehicular access changes, and potential impacts associated with increased students and staff and increased traffic and parking congestion on local residential streets.

Access

The CIP traffic strategy proposes the gradual removal of internal campus car parking as new basement car parking is provided within future developments under the CIP, at the periphery of the campus. The removal of internal parking would coincide with greater restrictions on through-campus vehicle access and movements, limiting vehicle access to proposed peripheral car parking stations and rationalised service centre locations (see **Figures 40 and 41**). The proposed changes to traffic conditions are designed to restrict through-campus vehicle movements, including opportunistic vehicle movements during the morning and evening peak periods, and allow for the implementation of 'shared zones' across existing University internal roads to provide pedestrian and cyclist priority.

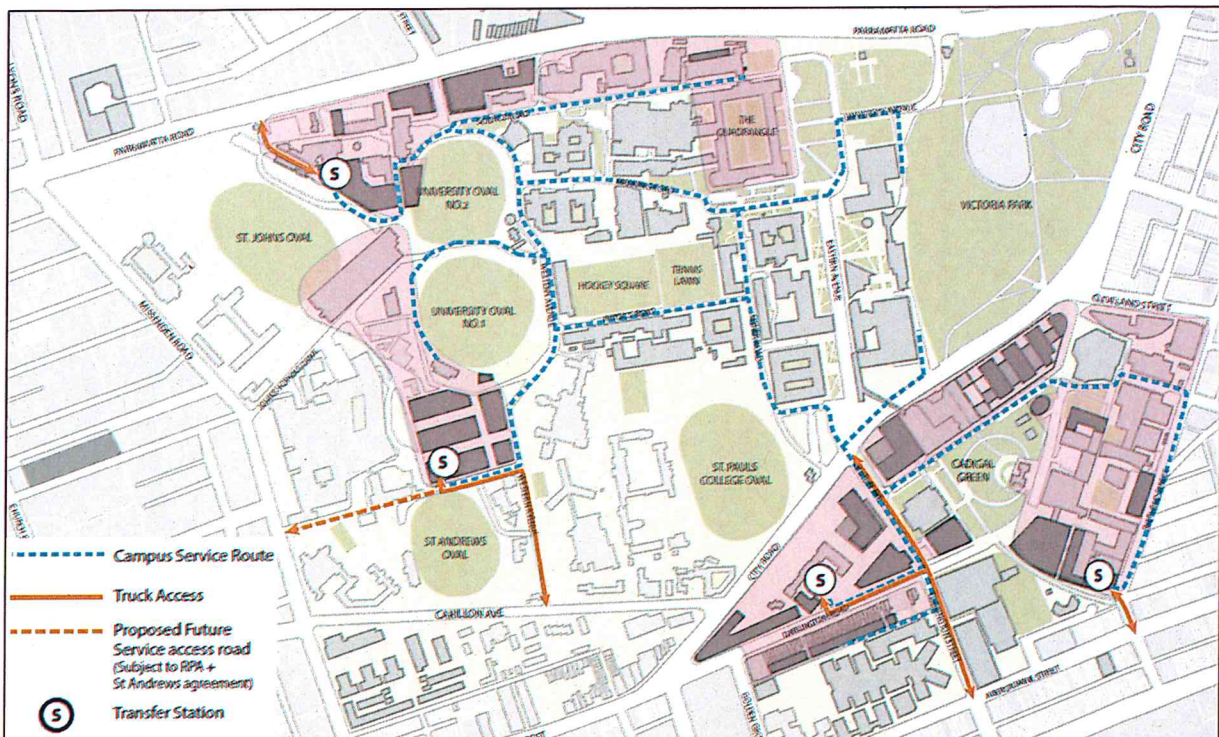


Figure 40: Proposed Service Strategy

The proposed creation of centralised service centres coincides with the proposed reduction of vehicle movements throughout the campuses. The rationalisation of service delivery centres would provide improved pedestrian safety and allows for better management of servicing through advanced notification of vehicle arrivals and times and minimises the necessity for multiple service deliveries throughout the University.

In response to concerns raised regarding the potential impacts on servicing and access to the existing University Oval No.1 Bruce Williams Pavilion due to the proposed redevelopment of the Health Precinct, the applicant has advised that provision would be made for continued service deliveries and access via Western Avenue.

In response to concerns raised regarding the proposed location of the Engineering Precinct service delivery centre and potential impacts on Shepherd Street and surrounding local residential streets, the applicant states that the concentration of service vehicle movements within the Engineering Precinct will streamline movements to a single service point on Shepherd Street, limiting service traffic on smaller local residential streets.

The applicant also stated within its RtS that the drop-off and pick-up location in Shepherd Street would not be pursued and that the proposed closure of the existing Engineering Precinct Shepherd Street car park would reduce the need for vehicles to access existing local streets. In addition, the Department notes that the applicant proposes enhancements to

existing street trees, vegetation and gateways along the Shepherd Street frontage, which in conjunction with the proposed and renewed built form, will provide improved pedestrian amenity and an improved urban design outcome rather than the current 'back of house' appearance of the Engineering Precinct's Shepherd Street frontage.

Car Parking

The University of Sydney's main campuses currently contain 2,227 car parking spaces, with approximately 200 additional spaces contained within existing projects currently under construction.

The CIP envisages the provision of only an additional 413 on-site car parking spaces (amounting to a total of 2,800 campus spaces), with no additional car parking provided for proposed future student accommodation. The applicant's CIP parking strategy proposes comparatively less additional car parking, when compared to current staff and student populations and parking provisions, in order to prioritise active transport modes (i.e. walking and cycling) and public transport initiatives (i.e. bus and train) and facilitate reduced private vehicle usage.

New car parking would be established within designated basement car parking stations at the periphery of the University's campuses (see **Figure 41**) in conjunction with the redevelopment of CIP Precincts, and existing internal car parking would be gradually removed.

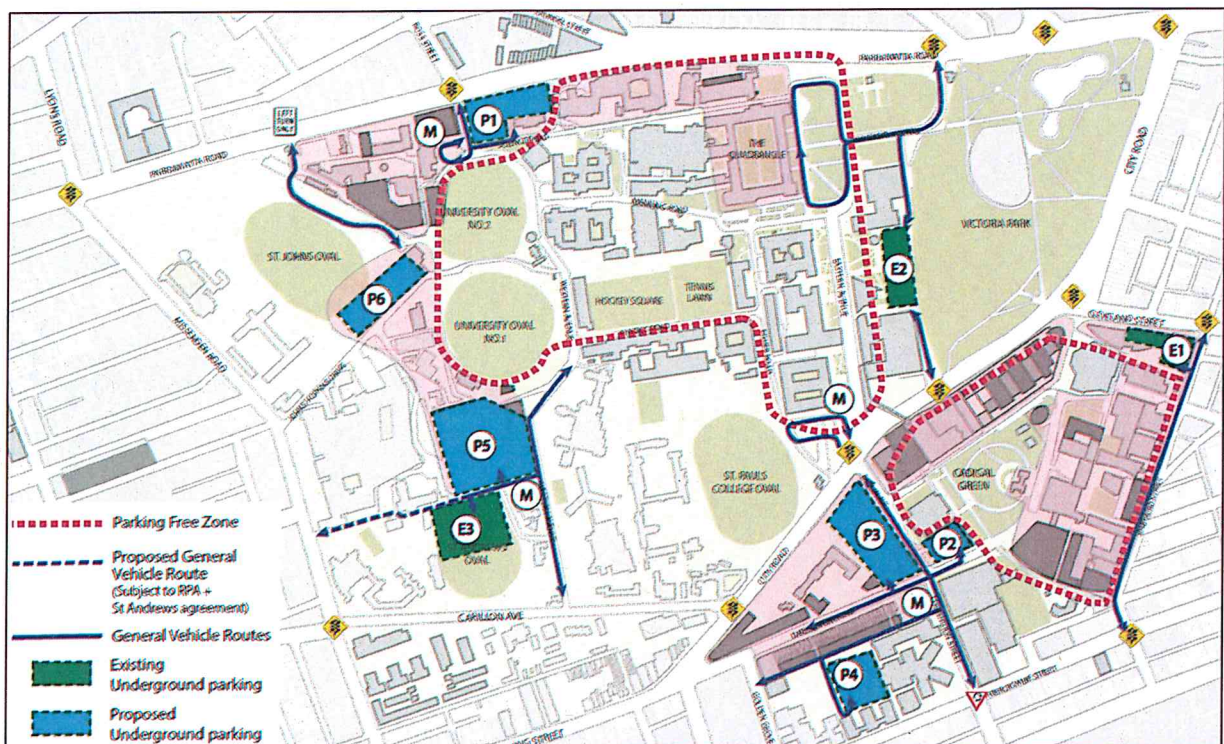


Figure 41: Proposed Car Parking Strategy

A number of public submissions raised concerns that students and staff were willing to drive and illegally park and that this contributes to a disconnect between high vacancies within on-campus car parks and congested residential streets. Council and TfNSW however, support the applicant's proposal and state that the envisaged total CIP car parking provision should be minimised so that greater public and active transport participation is generated.

The Department acknowledges that a portion of existing students utilise on-street car parking within the surrounding residential streets, though notes that the majority of on-street parking

surrounding the University's main campuses' is generally subject to regulatory parking restrictions, typically restricting parking periods to between one and two hours.

With regards to increased student enrolments associated with the development of University's and associated parking behaviours of students and staff, the NSW Land and Environment Court (LEC) established that previous unlawful use of on-street car parking should not be taken into consideration, but rather the future impacts that may be generated by the development and expansion of the University. The LEC also states that it is unreasonable for an applicant to make provisions on-site for peak car parking demands.

In this regard, previous studies undertaken of staff and student travel behaviour demonstrated a combined mode share of approximately 53 per cent for public transport, 26 per cent for active transport, while private vehicle use attributed for only 21 per cent of journeys.

The CIP car parking strategy identifies that public and active transport mode shares should target a 10 per cent increase to reduce the current 21 per cent private vehicle mode share. The Department notes that a targeted increase to active and public transport mode shares, and consequential decrease to private vehicle use, would absorb the potential on-street car parking demands and restrict any growth of the on-street car parking impacts to that currently generated by the University.

The strategy's potential is supported by previous studies that demonstrate approximately 60 per cent of staff and students live within 1.5 kilometres of a railway station, providing the potential for existing public transport patronage to be significantly increased. Furthermore, a larger number of staff and students that drive to the Camperdown and Darlington Campuses live within a 10 km active transport mode catchment, similarly demonstrating the potential for an increase in active transport mode shares.

In this respect, increasing the use of active and public transport modes is critical to ensuring that the applicant's proposed parking strategy is successful and that private vehicle use is discouraged and car parking demands are not transferred off-site to surrounding residential streets. Measures identified include, but are not limited to:

- reviewing of parking permit costs, utilising equitable pricing mechanisms;
- increasing motorcycle parking and provision for different vehicle types and occupancy levels to support car-pooling; and
- encouraging public transport use through ticketing incentives in consultation with TfNSW.

Additionally, the CIP proposes to increase active transport modes, such as walking and cycling, through the provision of high quality end-of-trip facilities (i.e. bicycle parking, showers, lockers and change rooms), improved connections and linkages for pedestrians and cyclists to public transport networks, increased public transport servicing and short-term reduced parking fee for staff and students attending the University for one to two hours to prevent parking within residential streets.

The Department supports the University's proposed car parking strategy and proposed increase to public and active transport modes. The applicant's mitigation measures propose that travel demand management would be monitored through a Sustainable Transport and Mobility Plan. To ensure that the targeted mode shares for active and public transport are achieved, the Department recommends that a future assessment requirement be imposed on any approval given for the CIP requiring the preparation of faculty based sustainable travel plans, which are to accompany the first application within each CIP Precinct. It is also recommended that all development applications are accompanied by traffic impact assessment reports detailing proposed car parking provisions (including the status of the closure of existing at-grade car parking areas, where relevant) and proposed measures to ensure that mode share targets are satisfactorily achieved.

Traffic

The applicant's access strategy report states that the proposed parking strategy and restrictions to through-campus vehicle movements is projected to generate only an additional 159 vehicle trips having regard to the limited additional on-site car parking as proposed by the car parking strategy (located on the University's peripheries) and the reduction of through-campus vehicle trips during the AM and PM peak periods.

The existing intersections surrounding the University will continue to operate at satisfactory levels of service (LOS), with the existing Western Avenue/Carillion Avenue campus intersection attracting the highest increase in intersection loads, resulting in a minor change to its LOS from B to C, where LOS C is still considered to be an acceptable level. Whilst a minor change to the LOS was predicted, the applicant has still identified the potential for the Western Avenue/Carillion Avenue campus intersection to be upgraded in the future to provide additional entry and exit capacity to improve its operational capacity. Additionally, the applicant identified a potential future access point from Missenden Road, however notes that this does not form part of the subject application and that any future connections would be investigated in consultation with St Andrew's College and RPA.

The Department's assessment of traffic impacts concludes that the proposed vehicle access restrictions through the University and limited on-site car parking provision is essential to establishing a transport mode shift away from the private vehicle and promoting a pedestrian priority focused environment that supports active transport modes. The Department is satisfied the applicant's traffic impact assessment has demonstrated that the proposed car parking and service vehicle strategy, and cumulative impacts over the life of the CIP would not have unacceptable impacts on the existing local road network.

The Department recommends a future assessment requirement be imposed requiring the submission of traffic impact assessment reports with future applications that address potential traffic and transport impacts associated with the relevant precinct development, including the requirement for future road and intersection upgrade works.

Pedestrian and Cyclist Accessibility

The CIP proposes the removal of general traffic from within the University grounds and implementation of campus shared zones along internal roads that will prioritise pedestrians and promote other active transport modes (see **Figures 42 and 43**). The CIP also seeks to address current issues concerning pedestrians and cyclists movements. This includes on-campus pedestrian and vehicle conflicts, footpath capacities, access and security of walking within pedestrian networks surrounding the University particularly within Redfern and to Redfern Station, and insufficient bicycle parking and end-of-trip facilities.

No concerns were raised by Council regarding the proposed pedestrian and cyclist prioritisation strategy, who provided a number of recommendations relating to bicycle parking, bicycle storage and end-of-trip facility provisions. In response, the applicant advised that these recommendations were reasonable and would generally be addressed in future detailed development applications. However, it noted that a shared zone would not extend to the existing boardwalk connection to Shepherd Street, due to the large number of existing pedestrian movements and width of the walkway.

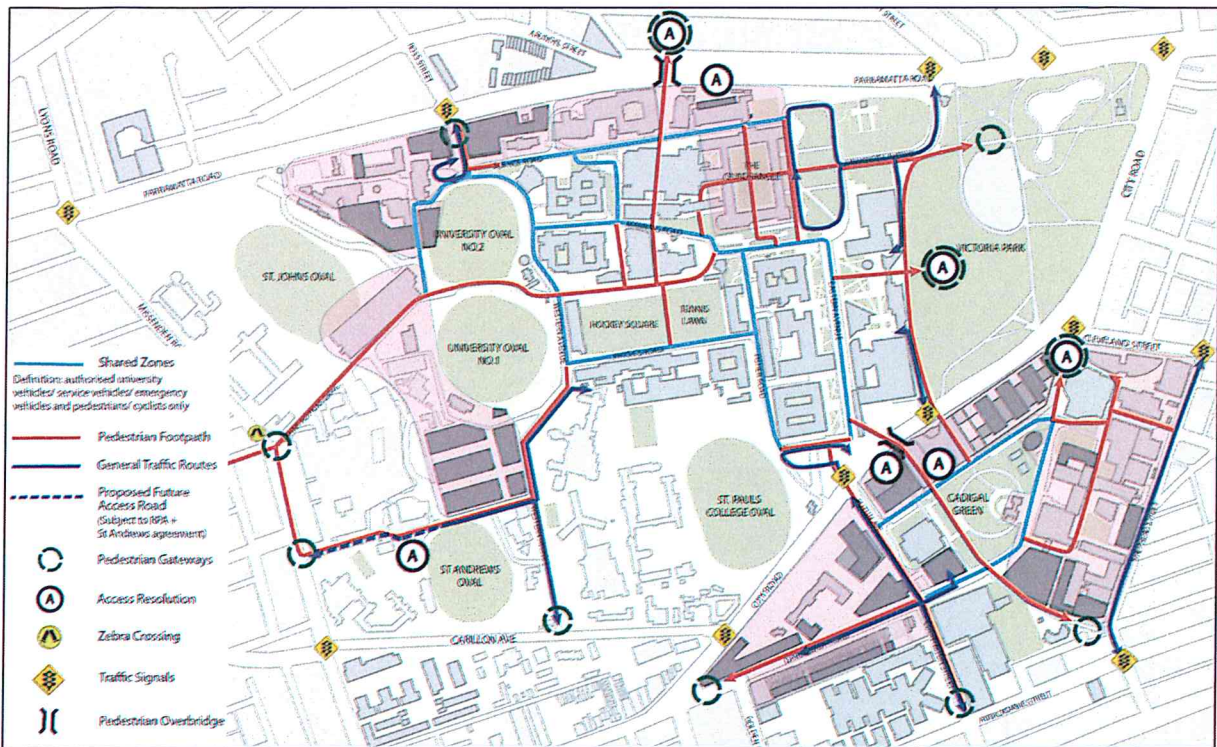


Figure 42: Proposed Pedestrian Network

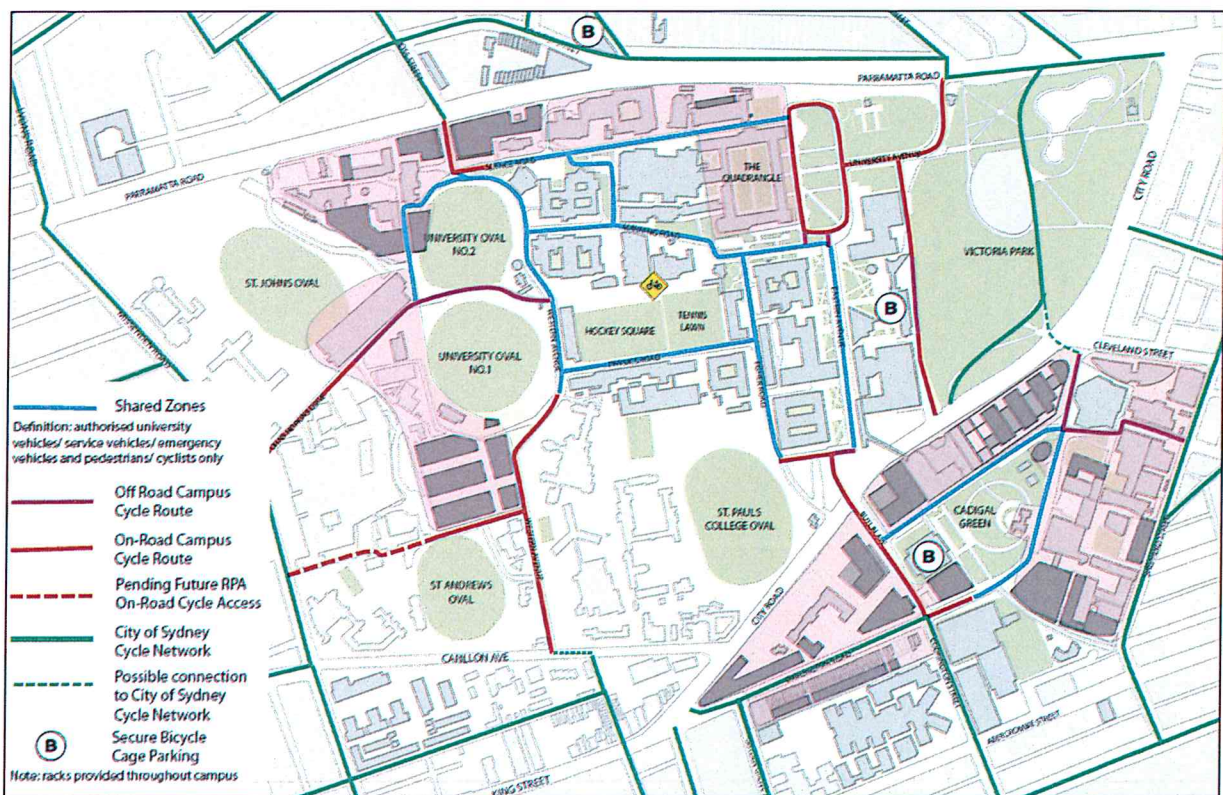


Figure 43: Proposed Bicycle Network

In response to the concerns raised regarding the need for upgrades to existing pedestrian infrastructure surrounding the University to support the additional demand created by development envisaged in the CIP, the applicant's RtS details that the University is currently contributing to Council's program of footpath improvement works along Abercrombie Street, which will improve pedestrian facilities for students and staff traveling between the University and Redfern Station.

The applicant also proposes improved wayfinding and delivery of well-designed pedestrian networks to deliver improved outcomes for movement and legibility throughout the campuses. Through improved pedestrian and cyclist connectivity and the implementation of an improved wayfinding network, pedestrian and cyclist movements would be further encouraged and would support an increase in this travel mode share. Improvements to connections and legibility would also assist in distributing pedestrians and cyclists around existing and new connections, reducing potential impacts and conflicts with existing infrastructure and adjoining land uses.

The Department concludes that the proposed pedestrian and cyclist strategy of implementing shared zones, providing improved end-of-trip facilities and establishing a hierarchy of connections to promote active transport modes, will assist the shift in transport modes and assist in reducing private vehicle usage. The establishment and implementation of a strong wayfinding strategy will provide clear and direct information that helps support the movement of people.

The Department recommends a future assessment requirement that development applications satisfactorily detail how pedestrian and cyclist facilities have been incorporated into the respective project and how the development integrates into broader campus strategies.

5.2.5 Noise and Vibration

Concerns were raised within public submissions regarding the potential increased amenity impacts from new plant and equipment on buildings located close to residential properties (particularly the Engineering Precinct) and that no measures have been identified to avoid and minimise potential impacts from 'active events' proposed within the CIP.

In response to the concerns raised, the applicant's RtS indicated that future built form would be designed to include measures to abate potential noise impacts, with details to be included in future development applications for specific buildings within the CIP building envelopes. The applicant also states that no social events or activities would be planned where a public residential interface exists.

The Department accepts that a detailed assessment of potential noise and vibration impacts at the current conceptual stage of the CIP is difficult, noting that no specific building designs, land uses and services requirements are known at this stage. Notwithstanding, the Department considers it essential that prior to the lodgement of any future development applications within each CIP Precinct, background noise assessments must be undertaken to provide a realistic benchmark for future potential noise impacts to be adequately assessed against. Such baseline data will also assist in assessing the future cumulative impacts as precincts are redeveloped over time. The Department recommends a future assessment requirement to this effect.

5.2.6 Other Matters

Consultation

The Secretary's Environmental Assessment Requirements (SEARs) issued to the applicant included the requirement that consultation be undertaken with relevant Government agencies, service providers, community groups and affected landowners during the preparation of the EIS. The applicant addressed community consultation within Section 10 of the EIS (Community Consultation) and Appendix N (Consultation Outcomes), which provide an outline of pre-lodgement community consultation undertaken.

Objections were raised during exhibition from the public and local community groups regarding the length of the exhibition period and the difficulty in reviewing all the documentation within the 30 days, and the applicant's perceived failure to undertake

adequate pre-lodgement community consultation, and accordingly its failure to satisfy the SEARs.

No provisions exist under Part 4.1 of the EP&A Act requiring an EIS to be reviewed for adequacy. Notwithstanding, the Department reviewed the submitted EIS prior to it being publicly exhibited and considered that the SEARs had been satisfactorily addressed for the purposes of exhibiting the application.

The applicant continued its own program of community consultation during the EIS exhibition period in response to the community's concerns and made the viewing of CIP content more accessible through the establishment of a dedicated website, email communications to interested community members, letterbox drops advising of community drop-in sessions, and establishment of a Campus Improvement Program exhibition display.

The applicant's RtS detailed the extended community drop-in sessions and meetings and provided responses to issues raised during those sessions. The Department subsequently publically exhibited the RtS and EIS for a further 30 days, with notification letters sent to relevant public authorities, surrounding landowners and previous submitters.

The Department is satisfied that the applicant's EIS met the requirements of the SEARs issued for the CIP concept proposal. The submitted EIS and RtS documentation were made publically available in accordance with the EP&A Regulation and all relevant government agencies, local authorities, community groups and affected landowners were notified of the proposal in writing, providing adequate opportunity to comment on the proposal.

University Population

Development proposed in the CIP seeks to relocate students and staff from existing satellite campuses to the main University campus. The CIP proposes an estimated campus population of 60,050 staff and students, representing approximately 10,000 additional students and 400 additional staff. The relocation of satellite campus activities onto the main Camperdown and Darlington Campuses would provide the University with the opportunity to remove inefficiencies associated with the duplication of services and facilities.

The CIP also proposes to provide up to 4,000 affordable student housing beds on or near the campus, which may be integrated with other facilities within mixed use buildings. This comprises approximately 30 percent of the overall GFA (approx. 80,000 sqm) sought by the CIP and will be focused within the Merewether and City Road Precincts. The applicant states that the increased provision of affordable student accommodation will assist in alleviating rental demand for lower cost housing within suburbs surrounding the University, freeing up housing for the wider residential market. It also notes that the increased presence of residential students on campus will improve and increase overall safety and security in and around the University campuses.

Concerns were raised within public submissions that an increased student population and on-campus accommodation would result in increased anti-social behaviour and amenity impacts for existing local residents.

In its RtS, the applicant detailed that approximately half of the projected population increase is a result of relocating existing satellite campus to the main campuses, of which a number of satellite campus students (approximately 70 per cent) already currently attend classes and lectures on the main campuses. It also states that the increased number of on-campus resident students would reduce the need for the use of private vehicles and public transport to commute to the University and that the management of future proposed student accommodation facilities would incorporate appropriate administration and security measures.

The Department considers the proposed University population increase to be satisfactory, noting that existing students and staff from satellite campuses, who currently attend the main campuses, contribute to a significant proportion of the project population growth.

The Department also raises no objections to the provision of up to 4,000 new affordable student housing beds on campus as it is well served by open space and recreational facilities. Moreover, it will provide a range of positive impacts. In particular the additional population would provide a more vibrant and active campus environment and would positively contribute to the local economy and the safety and security of the immediate locality. This residential population would also reduce pressure on public transport and local road networks as it would not be travelling to and from campus on a day to day basis. Further, the student accommodation would have limited impacts on the surrounding residential community, noting that the City Road and Merewether Precincts are generally well separated from nearby residential areas. No student accommodation is proposed within the Engineering Precinct, minimising any potential amenity impacts from this future use on residents living adjacent. The remaining CIP Precincts are generally located in areas that do not have a direct interface with local resident populations. In any case, future student accommodation would be the subject of future DAs, which will provide the opportunity to assess the design and operation of this use as part of the University operation.

Developer Contributions and Infrastructure

The University's Camperdown Campus is identified as being located within the Western Precinct of the City of Sydney Council's *Section 94 Contributions Plan 2006*, with contributions applicable for new staff.

The University's Darlington Campus is located within the Redfern-Waterloo precinct and is subject to both the *Redfern-Waterloo Authority Contributions Plan 2006* and *Redfern-Waterloo Authority Affordable Housing Contributions Plan 2006*. The contribution plans allow the Minister to impose conditions requiring the payment of a development levy of 2 per cent of the proposed development cost under section 94A of the EP&A Act and a contribution rate of \$74.58 per sqm of gross floor area of development for the affordable housing contributions plan under 94G of the EP&A Act.

The applicant states that the University should not be required to pay contributions for a number of reasons, including its Crown Authority status under clause 226(1) of the Regulation, the guidance provided by Circular D6, the proposed provision of public infrastructure and 4,000 additional affordable accommodation beds, the University's not-for-profit status, and the range of social, cultural and recreational public benefits provided.

Comments received from Council during the exhibition of the RtS stated that developments that are not distinctly for educational purposes or that do not provide a distinct community benefit could place significant additional demand on Council infrastructure and should be subject to Council's contributions plan. It stated that within future development applications, the opportunity would exist for an argument for a merit exemption to be provided by the applicant, which would be considered on a case-by-case basis.

The Department notes that in accordance with Circular D6, a clear nexus needs to be established for development proposed by the Crown and the works for which contributions would be collected for. In this regard, the Department notes that section 94 contributions for development envisaged by the applicant under the CIP for the purposes of an educational establishment is unlikely to be imposed. However, development not considered to be for the purposes of an educational establishment, and where a clear nexus is established, may be subject to section 94 contributions requirements.

However, as a section 94A plan collects indirect contributions without requiring a nexus to be established, the application of such a contribution plan to development proposed under the

CIP may be even further limited. Notwithstanding the above, the Department is of the opinion that consideration regarding the imposition and payment, or otherwise, of development contributions should be deferred to future development applications, where further details regarding the proposed development and future operational characteristics would be known.

Public Interest

The proposed CIP encourages the growth of the educational and research sector and will strengthen the University's role in the growth and development of the education and health precinct, and improve the provision of quality services provided within the state of NSW, a key goal of the NSW's Government's strategic document *NSW 2021*. The CIP will enable improved access for people to gain higher levels of tertiary education and qualifications, and consequently improve education and learning outcomes that will have significant benefits for the competitiveness and performance of the NSW economy.

The CIP also represents a direct investment into the economy of approximately \$1.39 billion supporting approximately 14,700 direct and indirect construction jobs. Once completed, the CIP would provide an additional 400 university operational jobs, and significantly improve the quality of teaching, learning, research and student accommodation facilities in the form of 4,000 affordable student accommodation beds that would itself place downward pressure on the cost of living for the surrounding locality by alleviating rental demand for lower cost housing.

In this regard, the Department considers the improved research, education, student accommodation and employment benefits generated by the proposed development to be in the public's interest.

5. CONCLUSION

The proposed SSD application seeks concept approval for precinct-based building envelopes and built form controls, open space, pedestrian and vehicular access arrangements, public domain works, transport linkages and indicative land uses that sets a detailed framework for the development over the next decade for The University of Sydney's Camperdown and Darlington Campuses.

The Department has reviewed the EIS and RtS, and considered the advice and comments of public authorities and the general public in its assessment of the concept proposal. Issues raised in submissions have been thoroughly considered and all relevant environmental issues associated with the proposal have been thoroughly assessed. The concept proposal is also consistent with the strategic objectives for the State and the region. The CIP has evolved in form and scale throughout the assessment process. A number of design refinements to building envelope footprints, heights and setbacks were made following feedback received from the general public, Council and government agencies during the exhibition of the original EIS and subsequent RtS, which will improve the scale of future built form within the campuses, particularly at its key frontages on Parramatta Road and City Road and its interface with the Royal Prince Alfred Hospital and existing residential dwellings in Darlington.

Based on its assessment, the Department is satisfied that the concept proposal 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 new and redeveloped University buildings and infrastructure. The concept proposal represents an approximate \$1.39 billion investment in education, research and student accommodation infrastructure that will provide improved quality tertiary education facilities and learning outcomes and meet the envisaged future tertiary education demands.

Recommended terms of approval and future assessment requirements will ensure that future development under the concept proposal can be designed, constructed and operated in a

manner that minimises and mitigates potential residual environmental and social impacts. In particular, the Department requires:

- that all future developments exhibit design excellence and where required, comply with the design excellence requirements under *Sydney Local Environmental Plan 2012*;
- modifications to building envelope heights to ensure future built form better integrates within the surrounding built environment;
- all future development to comply with built form and urban design requirements for each CIP Precinct, including GFA restrictions;
- that all future development applications be accompanied by a Heritage Impact Statement and outline how the recommendations of the University of Sydney Grounds Conservation Management Plan have been addressed;
- total campus car parking to be restricted to 2,800 spaces at the completion of all future development; and
- that all future development application are accompanied by a noise and vibration assessment, outlining any mitigation measures to ensure the amenity of adjoining sensitive land uses is protected through construction and operational periods.

Therefore, the Department recommends that the State significant development application for the University of Sydney's Campus Improvement Program concept proposal be approved, subject to the recommended future assessment requirements and terms of approval.

6. RECOMMENDATION

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Minister for Planning:

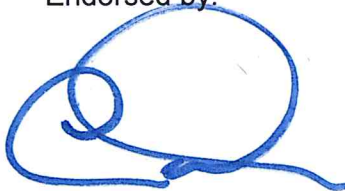
- (a) **consider** the finding and recommendations of this report;
- (b) **approve** the development by granting consent for the University of Sydney Campus Improvement Program, subject to the recommended conditions; and
- (c) **sign** the attached 'Instrument of Consent', attached at **Tag A**.

Prepared by:



Peter McManus
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Endorsed by:



Chris Wilson
Executive Director
Infrastructure & Industry Assessments

24.1.15



Marcus Ray
A/Deputy Secretary
Planning Services

03/02/15

APPENDIX A RELEVANT SUPPORTING INFORMATION

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

1. Environmental Assessment

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6123

2. Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6123

3. Applicant's Response to Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6123

APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S) AND DCP(S)

The primary controls guiding the assessment of the proposal are:

- a) *State Environmental Planning Policy (State and Regional Development) 2011*
- b) *State Environmental Planning Policy No.33 – Hazardous and Offensive Development*
- c) *State Environmental Planning Policy No.55 – Remediation of Land*
- d) *State Environmental Planning Policy (Infrastructure) 2007*
- e) *Sydney Local Environmental Plan 2012*
- f) *Sydney Development Control Plan 2012*

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

The aims of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) are to identify State significant development and State significant infrastructure and provide the necessary functions to joint regional planning panels to determine development applications.

The proposal is for SSD in accordance with section 89C of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it is development for the purpose of an educational establishment (including associated research facilities) with a capital investment value (CIV) in excess of \$30 million, under clause 15 of Schedule 1 of SRD SEPP.

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

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) provides clear definitions of hazardous and offensive industries and aims to facilitate development defined as such and to ensure that in determining developments of this nature, appropriate measures are employed to reduce the impact of the development and require advertisement of applications proposed to carry out such development.

The Department acknowledges that the University currently stores a number of goods that may be considered hazardous and offensive. However, these existing stores are not proposed to be amended under this application.

The concept proposal does not seek approval for development involving potentially hazardous and offensive development. The specific location of land use activities that may

involve the storage of goods or works of this nature would be determined in future development applications for individual buildings or precincts.

The Department is satisfied that the proposed development is not a hazardous or offensive development under SEPP 33, and that all necessary assessments under the SEPP 33 will be undertaken for future development applications.

State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55) is the primary environmental planning instrument guiding the remediation of contaminated land in NSW. SEPP 55 aims to:

- provide a state-wide planning approach to the remediation of contaminated land
- identify when consent is required or not required for a remediation work
- specify certain considerations that are relevant to applications for consent to carry out a remediation work
- require that remediation work meet certain standards and notification requirement.

Clause 7 of SEPP 55 identifies that a consent authority must not consent to the carrying out of any development on land unless:

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

A Preliminary Site Investigation Report (PSI report) (also referred to as a Phase 1 environmental assessment) accompanied the EIS to assess the potential for contamination, identify areas of potential environmental concern (AEC) and comment on the need for further investigations. The preparation of the PSI report included a site walk over, review of existing registers, previous environmental reports, and desktop assessment of existing and historical information.

The six precincts identified within the CIP proposal cover large areas of both the Camperdown and Darlington Campuses of The University of Sydney, with proposed building envelopes predominantly occupied by existing buildings and their associated land uses. These existing buildings are proposed to be demolished to facilitate the implementation of the CIP, which would be subsequently sought under future development applications within each precinct.

The following AECs were identified:

- existing science laboratories, predominantly located within Precinct C, D and E, and associated potential for contaminants to be present;
- the extent of imported fill across the campuses and associated potential for the presence of asbestos within the fill;
- potential presence of asbestos to be located within surface soils;
- building materials and potential contaminants identified within existing buildings proposed for demolition under future development applications, including asbestos and lead paint; and
- potential contaminants from former historical land uses.

The PSI report concluded that, whilst no intrusive soil sampling was undertaken, the identified contamination risks were not considered to restrict the site's continued use for educational establishment purposes, subject to the following recommendations:

- the storage and disposal practices for all dangerous goods within each precinct should be reviewed for compliance with relevant Dangerous Goods codes and standards;
- all recommendations provided in the hazardous buildings materials register should be implemented;
- the removal of any hazardous building materials from the site must be conducted in accordance with appropriate WorkCover codes and standards;
- detailed site inspections should be carried out prior to any future development works to investigate the areas of environmental concern; and
- any soil proposed for removal must be assessed against the NSW DECCW *Waste Classification Guidelines* prior to disposal.

The Department is satisfied that the proposed CIP Precincts are not contaminated and that the land is suitable for its continued use as an educational establishment, and that subject to the recommendations, the concept proposal satisfactorily addresses the requirements of SEPP 55.

State Environmental Planning Policy (Infrastructure) 2007

The aim of *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) is to facilitate the effective state wide delivery of infrastructure by providing greater flexibility in the location of infrastructure and service facilities, allowing the development of surplus government land, identifying relevant environmental assessment categories for development and relevant matters to be considered and providing for consultation with relevant public authorities.

Clause 104 Traffic-generating development of the Infrastructure SEPP applies to the proposed development as the proposal involves more than 50 students. In this regard, and in accordance with clause 104(3) of the Infrastructure SEPP, the Roads and Maritime Services were given written notice of the SSD application and due consideration was given to its comments.

Sydney Local Environmental Plan 2012

Consideration of the relevant controls contained within SLEP is provided below.

Table 1: Sydney LEP Compliance Table

City of Sydney LEP 2012	Objectives	Department Comment/ Assessment	Yes/No
Clause 5.10 Heritage conservation	- conserve environmental heritage - conserve heritage significance of items and conservation areas - conserve archaeological sites - conserve Aboriginal objects and places of significance	The proposed development has been designed to ensure the significance of the existing heritage items and University of Sydney conservation area are protected. The submitted archaeological and Aboriginal assessment and statement of heritage impact satisfactorily consider and assess the impact of the proposed development within the setting. The NSW Heritage Council considers the proposed development to be a satisfactory response.	Yes
Clause 6.21 Design Excellence	- development consent not to granted unless consent authority considers the development exhibits design excellence	No development is proposed by the concept proposal, only building envelopes. In response to comments	Yes

		provided by Council, the applicant provided evidence of the University's own process to ensure design excellence for new development on campus is satisfactorily achieved. Notwithstanding, complying with clause 4.6 Design excellence of SLEP is a legislative requirement and will be conditioned accordingly.	
Part 7, Division 1 Car Parking	- car parking spaces must not exceed set maximums	Increased on site car parking is proposed, though concept proposal proposes to rationalise and relocate primary campus car parking areas to the periphery of the site.	Yes
Clause 7.14 Acid sulfate soils	- to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage	The University's Camperdown and Darlington campuses are classified as Class 5 acid sulphate soils under the SLEP. The proposed building envelopes are not located within 500 m of land classed 1 to 4, though potential exists for acid sulfate below the water level north of Precinct D – Health. Further intrusive investigations are proposed by the applicant prior to the lodgement of any future development application across the campus and within the subject precinct.	Yes
Clause 7.15 Flood planning	- minimise the flood risk to life and property associated with the use of the land - to allow development compatible with the flood hazard, taking into consideration projected climate changes - to avoid significant adverse impacts on flood behavior and the environment	The applicant states that future developments provide the opportunity to address know flooding threats and will incorporate necessary mitigation measures to ensure that there is no increase in downstream flooding impacts or risk to surrounding properties.	Yes
Clause 7.16 Airspace operations	- to provide effective and on-going operation of Sydney Airport by ensuring it is not compromised by proposed development's penetrating the Limitation or Operations Surface	Sydney Airports noted that the proposed Merewether building envelope and the Regiment building envelope exceeded the obstacle limitation surface (OLS) for Sydney Airport, and that all other proposed building envelopes heights did not pose an issue. In response, the applicant has reduced the building envelope heights to the maximum level of the OLS. Notwithstanding, any determination will included a	Yes

		future assessment requirement that consideration be given to Sydney Airport's OLS and that where penetrations into the OLS are proposed, separate approval would be required from the Federal Department of Infrastructure & Regional Development.	
Clause 7.18 Car Parks	- development will not encourage private vehicle travel between 7 am – 9:30 am and 3:30 pm – 7 pm, weekdays - operational and use restriction will apply - the development will not adversely impact on local traffic congestion - primarily serve retail, education, entertainment and recreation facilities	The concept proposal proposes to rationalise car parking to the periphery of the campuses within new basement car parking stations of future buildings. Proportionally, greater reliance will be placed on improving mode share of sustainable and alternative transport methods rather than the private vehicle, such that the concept proposal is planned to not give rise to adverse impacts on the local traffic network.	Yes

APPENDIX C GLOSSARY

Accredited Assessment under the EPBC Act.

If the development involves a "controlled action" under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the development can be assessed as an accredited assessment under the EPBC Act. This means that separate assessment processes are not required under both the EPBC Act and the EP&A Act, and the NSW assessment process has been accredited by the Commonwealth. However, the Commonwealth Minister for the Environment maintains an independent approval role, and the Commonwealth provides input to certain stages of the assessment process

Where a controlled action is involved the Department has consulted with the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) throughout the assessment process.

Ecologically Sustainable Development can be achieved through the implementation of:

- (a) *the precautionary principle - namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:*
 - (i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
 - (ii) *an assessment of the risk-weighted consequences of various options,*
- (b) *inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
- (c) *conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*
- (d) *improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:*
 - (i) *polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*

- (ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*
- (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.(Cl.7(4) Schedule 2 of the Regulation)*

Objects of the Act

- (a) *to encourage:*
 - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) *the protection, provision and co-ordination of communication and utility services,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - (vii) *ecologically sustainable development, and*
 - (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

Relevant Environmental Planning Instruments.

These are EPIs that are required to be taken into consideration in the assessment of the development under s. 79C. A detailed evaluation of each is provided at Appendix B.

Section 79C Evaluation

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) *the provisions of:*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and*
 - (v) *any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),*
- that apply to the land to which the development application relates,*

- (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,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

Note. See section 75P (2) (a) for circumstances in which determination of development application to be generally consistent with approved concept plan for a project under Part 3A.

Note. The consent authority is not required to take into consideration the likely impact of the development on biodiversity values if:

- (a) the development is to be carried out on biodiversity certified land (within the meaning of Part 7AA of the Threatened Species Conservation Act 1995), or
- (b) a biobanking statement has been issued in respect of the development under Part 7A of the Threatened Species Conservation Act 1995.

TAG A

RECOMMENDED CONDITIONS OF APPROVAL
