STATE SIGNIFICANT DEVELOPMENT ASSESSMENT REPORT:
UNSW Materials Science and Engineering Building
UNSW Kensington Campus
(SSD 5373)

Director-General's Assessment Report
Section 89H of the
Environmental Planning and Assessment Act 1979

June 2013

ABBREVIATIONS

Applicant	University of New South Wales
CIV	Capital Investment Value
Department	Department of Planning and Infrastructure
DGRs	Director-General's Requirements
Director-General	Director-General of the Department of Planning and Infrastructure, or his delegate/nominee
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
LEP	Local Environmental Plan
Minister	Minister for Planning and Infrastructure
PAC	Planning Assessment Commission
Regulation	Environmental Planning and Assessment Regulation 2000
RtS	Response to Submissions
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development

HYPERLINKS

Hyperlinks (CTRL + click to access) are included in this document to allow quick navigation to explanations and interpretations of commonly used legal, scientific or industry terms / phrases used in this document. The explanations / interpretations appear in the glossary appendix. Be sure to print the relevant glossary appendix to enable interpretation of these terms or phrases when printing the main body of the report.

Cover Photograph: Perspective view of the northern elevation (*Source: Grimshaw*)

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EXECUTIVE SUMMARY

This report is an assessment of a State significant development application lodged by the University of New South Wales (UNSW) seeking approval for the construction of the Materials Science and Engineering Building, a nine storey education and research building, at the UNSW Kensington Campus.

The project has a capital investment value (CIV) of approximately $125 million and will generate 144 operational jobs and 300 construction jobs.

The development is State significant development under clause 15 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), as it is a development for education purposes and has a CIV of more than $30 million. The Minister for Planning and Infrastructure is the consent authority.

The site is zoned SP2 Infrastructure under the Randwick Local Environmental Plan 2012 and was zoned 5 Special Uses under Randwick Local Environmental Plan 1998 (Consolidation) (RLEP 1998) at the time of lodgement of the application. The development is permissible in the current zone and under the provisions of the previous zone.

The proposal was exhibited from 22 November 2012 until 21 December 2012. The department received submissions from Randwick City Council, the Sydney Regional Development Advisory Committee (SRDAC), Environment Protection Authority (EPA), the Sydney Airport Corporation Limited (SACL) and Sydney Water. No submissions were received from the public. The matters raised in the submissions included consistency with the DCP, strategic planning, building height, urban design, amenity impacts, parking provisions, development contributions, technical issues with noise assessment and construction noise impacts.

The applicant provided a Response to Submissions, which:

- incorporated minor design changes to the treatment of the façade, reduced the size of the basement, removed the café, provided a small retail space and redesigned the rooftop plant;
- provided further justification for the bulk and scale, including further details regarding the strategic vision for the campus, and for the request for exemption from payment of development contributions;
- provided clarification regarding the car parking numbers on campus; and
- provided further details regarding contamination and acoustic impacts.

The department has assessed the merits of the proposal and has found the key issues associated with the project include: built form; transport and traffic; and development contributions. The department is satisfied that the impacts of the proposed development have been addressed in the Environmental Impact Statement and Response to Submissions, and can be adequately managed through the recommended conditions.

The department considers the site to be suitable for the proposed development and that the application is consistent with the objects of the EP&A Act (including ecologically sustainable development), NSW 2021, the draft Metropolitan Strategy for Sydney to 2031 and the draft East Subregional Strategy. The department is further satisfied that the subject site is suitable for the proposed development as it will consolidate and support the Randwick Education and Health Specialised Precinct and provide additional employment opportunities. The department therefore considers the development would be in the public interest and recommends that the State significant development application be approved, subject to conditions.

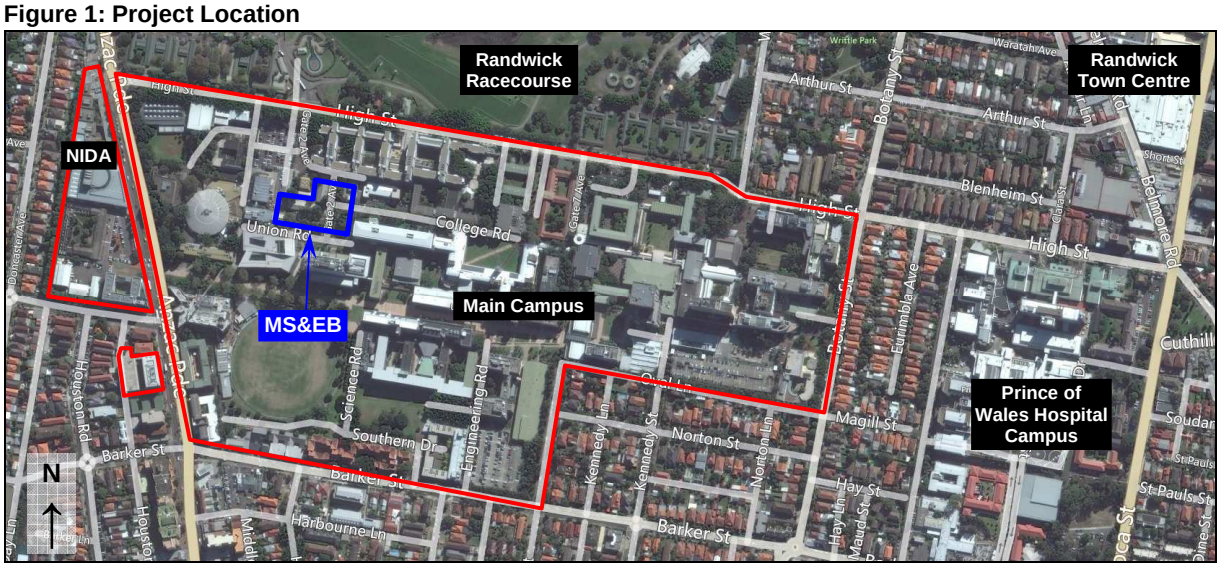
1. PROPOSED DEVELOPMENT AND SITE DESCRIPTION

1.1 The Proposal

The University of New South Wales (UNSW, the applicant) proposes to construct the Materials Science and Engineering Building (MS&EB), located at the UNSW Kensington Campus (Lot 3 DP1104617).

The project location is shown in **Figure 1**.

Figure 1: Project Location



1.2 Site Description and Surrounding Development

UNSW Kensington Campus has an area of approximately 38 hectares and is under the ownership of the UNSW. The campus contains a variety of medium and high rise educational and research related buildings, ancillary colleges, multi-level car parks, at-grade car parking areas and open space areas. The campus has been used for educational purposes since 1949.

The proposed Materials Science and Engineering Building (the site) is located towards the north-east of the main campus off Gate 2 between Union and College Roads and forms part of Lot 3 DP 1104617 (see **Figure 2**). The site is relatively flat and is occupied by outdated university buildings, access roads and at-grade car parking areas (see **Figure 3**).

Figure 2: Existing site layout

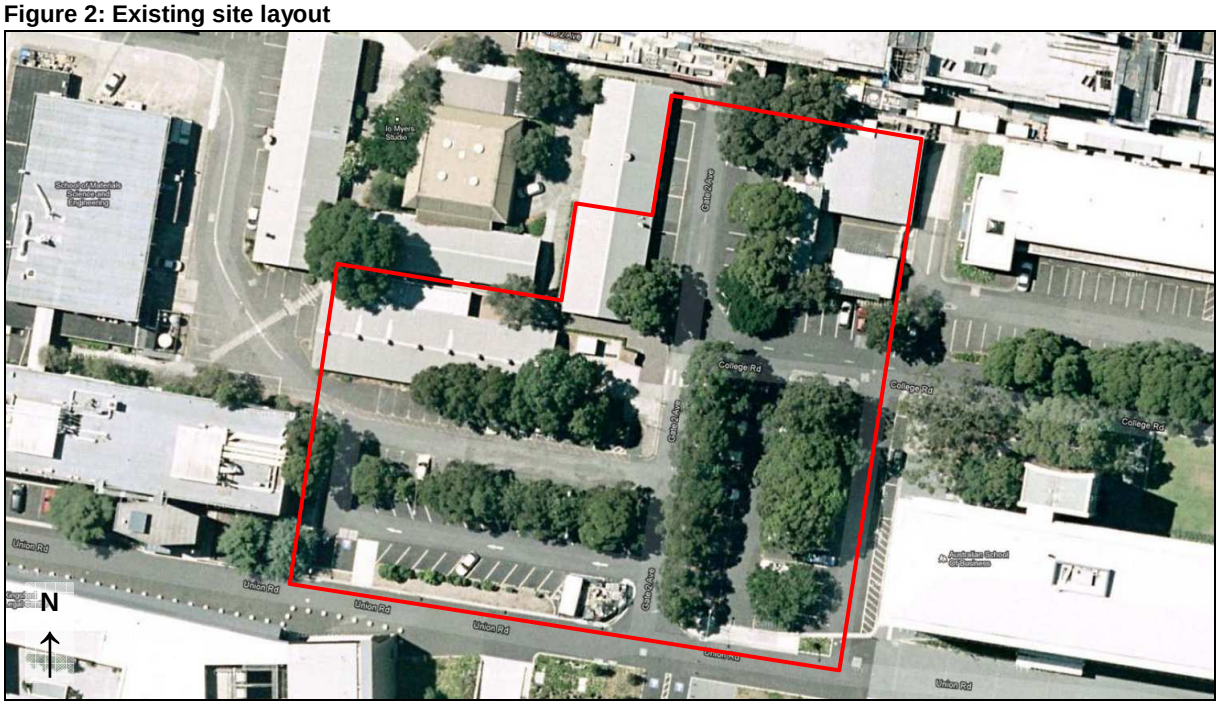
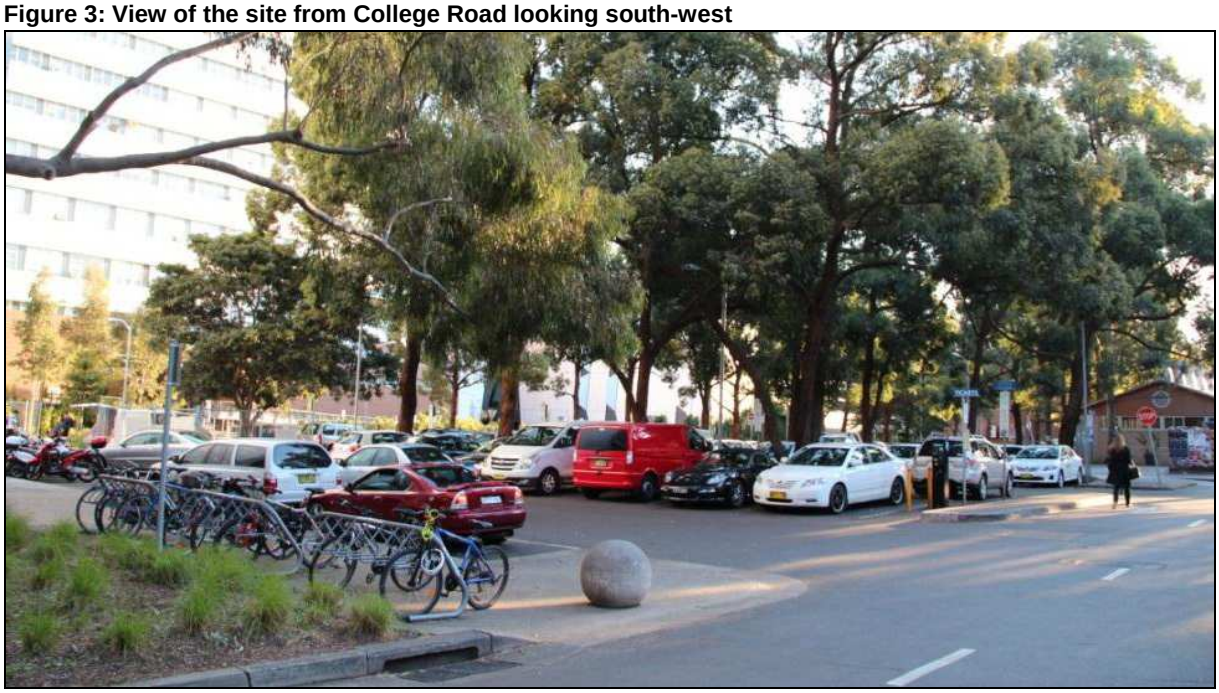


Figure 3: View of the site from College Road looking south-west



The applicant has subsequently commenced early works on the subject site approved under an REF by the UNSW as development permitted without consent under clause 29 of the Infrastructure SEPP (see **Figure 4**). The works will facilitate the reconfiguration of the lower campus, including new roads and services infrastructure, which will support the proposed MS&EB development and future campus development. The approved works are located within the subject site and adjoining land and include:

- staged demolition of buildings E9, D11a, D11c, D10a (Bore water plant), D11b (Substation), D10 (south);
- demolition/removal of hardstand areas, walkways and kerbing;
- removal of 16 trees and landscaping to provide for the proposed new road and services infrastructure;
- removal of 35 car parking spaces and 24 motorcycle and loading spaces to accommodate the construction of the new road;
- relocation/provision of new infrastructure services trenches/pipes and relocation of services including high voltage and communications infrastructure works;
- construction of new stormwater drains to connect to the existing system; and
- construction of a new road from 3rd Avenue to Union Road.

Figure 4: View of the site from the south-east undergoing REF works

The land uses surrounding the University campus include the Randwick Racecourse to the north and low and medium density housing to the east, south and west. Further to the east is the Prince of Wales Health Campus.

The land uses surrounding the MS&EB include:

- low scale university buildings and medium scale student accommodation to the north;
- the Australian Business School Building to the east;
- the Law Building and Chemical Sciences Building to the south; and
- the existing Materials Science and Engineering Building to the west.

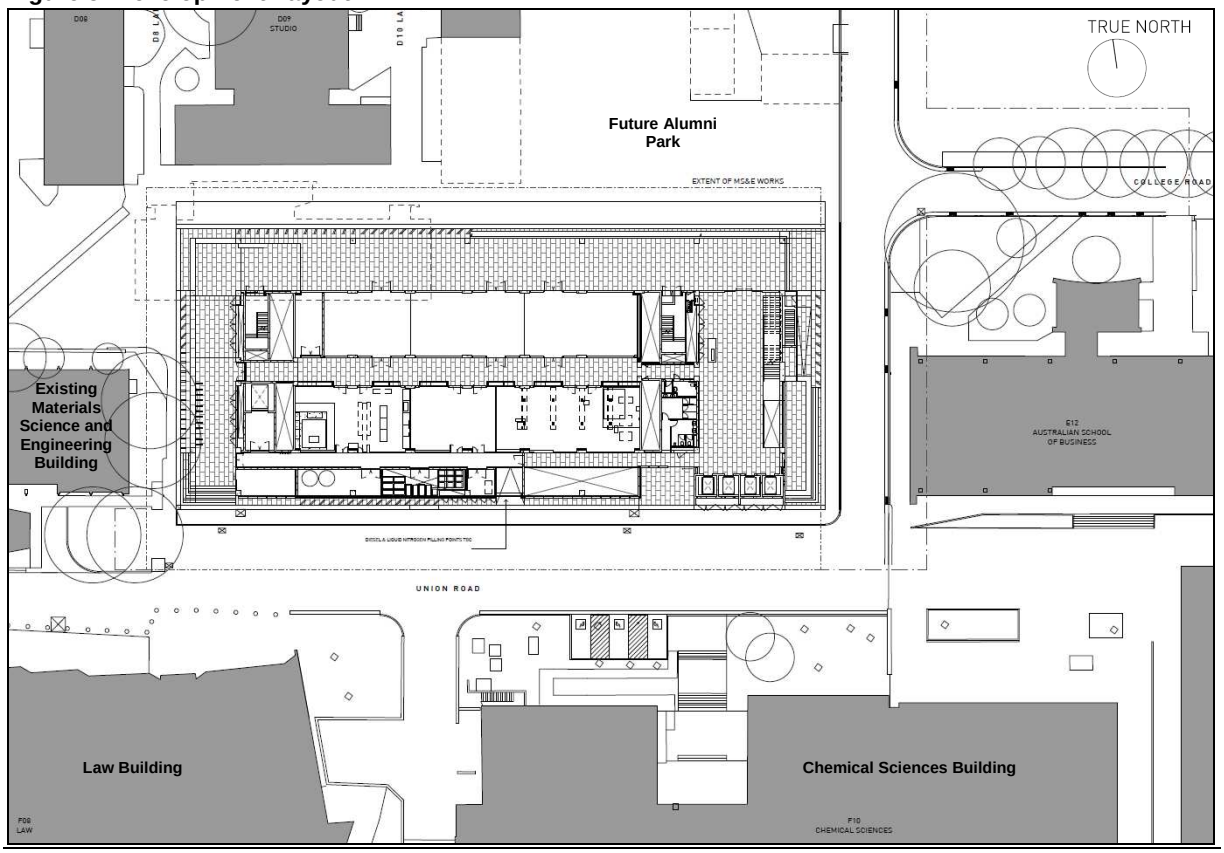
1.3 Key Development Components and Features

Table 1 provides a summary of the development proposal's key components and features and shown in **Figure 5** is the development layout.

Table 1: Key Development Components

Development Summary	• removal of an 84 space at-grade car park • bulk excavation • construction of a nine storey education and research building comprising research space, teaching and learning space, offices, exhibition area, retail spaces and shell space • tree removal • landscaping works • loading zone.
GFA	18,101 sqm
Wall Height	44.1 metres
Capital Investment Value	$125,811,038
Jobs	144 new operational and 300 construction jobs

Figure 5: Development Layout



2. STATUTORY AND STRATEGIC CONTEXT

2.1. SEPP (State and Regional Development) 2011

The proposal is for a 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 (Educational Establishments) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. Therefore the Minister for Planning and Infrastructure is the consent authority.

2.2. Delegated Authority

On 27 February 2013, the Minister for Planning and Infrastructure delegated responsibility for the determination of State significant development under Division 4.1 of Part 4 of the EP&A Act to the Executive Director, Development Assessment Systems and Approvals. The proposal complies with the terms of that delegation as council has not objected to the proposal, no political disclosure statement has been made and no public submissions were received.

2.3. Permissibility and Zoning

The site is zoned SP2 Infrastructure under the Randwick Local Environmental Plan 2012 and the development is permissible in the zone. The site was zoned 5 Special Uses under Randwick Local Environmental Plan 1998 (Consolidation) (RLEP 1998) at the time of lodgement of the application and the development was permissible in the zone.

The savings provisions under Randwick Local Environmental Plan 2012 apply to the development as the application was lodged prior to the gazettal of the Randwick Local Environmental Plan 2012 (RLEP 2012) on 15 February 2013 and therefore the zoning under RLEP 1998 applies.

2.4. Environmental Planning Instruments

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

2.5. Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the Act, as set out in section 5 of the Act. The proposal complies with the objects of the Act as it would deliver additional educational and research facilities in a designated education and health precinct and promotes the social and economic welfare of the Sydney community through the orderly development of previously disturbed land within an urban setting for social infrastructure.

2.6. 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.

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 and rigorous assessment of the environmental impacts of the project. The proposal is considered to be consistent with ESD principles as described in Section 6.13 of the applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Regulation.

The proposal is located on a previously developed and disturbed site and seeks to construct a building that is capable of supporting the expansion of the School of Materials Science and Engineering, thereby considering the life-cycle of the proposed building. It would not result in the loss of any threatened or vulnerable species, populations, communities or significant habitats. The site is not subject to any known effects of flooding and is not subject to bushfires. The site would not be impacted by changes in sea level resulting from climate change.

The applicant has stated that the standard sustainability rating tools would be unsuitable for laboratories and the research space. However, the development would aim to:

- reduce energy use through the design of a high performance façade that balances the need for shading whilst optimising natural lighting and passive heating, zoned lighting control, use of

energy efficient fixtures, use of motion and daylight sensors, adoption of building systems that can monitor energy usage;
- reduce potable water use through use of bore water, capture and re-use of rainwater, and water efficient fixtures;
- facilitate reduction in operational waste and encourage recycling; and
- support active transport through the provision of cyclist facilities and no additional car parking.

The department is satisfied that the standard sustainability rating tools would not be appropriate in this instance and that the proposed sustainability initiatives will encourage ESD, in accordance with the objects of the EP&A Act.

2.7. Environmental Planning and Assessment Regulation 2000

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

2.8. Strategic Context

The department considers that the proposal is appropriate for the site given:
- it is consistent with the priorities of NSW 2021, the State's 10 year plan, to provide quality education services by providing new facilities to ensure optimal teaching and research spaces are provided to support tertiary education and ensure the State has a skilled workforce that can fully participate in the workplace;
- it is consistent with the guiding principle of the draft Metropolitan Strategy for Sydney to 2031 (draft Strategy) to integrate infrastructure, transport and land use as the development would support the ongoing delivery of social infrastructure at the Randwick Education and Health Specialised Precinct, which would be supported by the light rail extension infrastructure project outlined in the draft Strategy;
- the ongoing development of the education and research cluster at UNSW and delivery of new jobs is consistent with the metropolitan priorities to intensify the activity at UNSW, which would also assist in strengthening the Anzac Parade Corridor, one of the nine city shapers identified in the draft Strategy;
- it is consistent with the draft East Subregional Strategy as the delivery of new floorspace at a key asset within the Randwick Medical and Education Specialised Centre will contribute to the aim of consolidating and strengthening the Specialised Centre;
- it will provide social infrastructure that will promote the State's capacity for innovation and three important research centres; and
- it will provide direct investment in the region of $125 million, which would support 300 construction jobs and 144 new operational jobs.

2.9. Director-General's Requirements

The EIS is compliant with the Director-General's Requirements and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

3. EXHIBITION CONSULTATION AND SUBMISSIONS

3.1. Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the Director-General has made the application and accompanying information publicly available for at least 30 days following the date of first publication, in accordance with the Regulation. The department publicly exhibited it:
- on the department's website from 22 November 2012 until 21 December 2012 (30 days); and
- at the department's Bridge Street Sydney Information Centre and Randwick Council's offices from 22 November 2012 until 21 December 2012 (30 days).

The department also advertised the public exhibition in the Sydney Morning Herald and The Daily Telegraph on the 21 November 2012 and Southern Courier on 20 November 2012. The department notified adjoining landholders, and relevant State and local government authorities in writing.

No submissions were received from the public and a summary of the issues raised in submissions from the public authorities is provided in the following section.

3.2. Public Authority Consultation and Submissions

A total of five submissions were received from public authorities, as outlined below.

In its original submission dated 15 January 2013, **Randwick City Council**, acknowledges the potential benefits of the development, however does not support the proposal due to inconsistencies with 'Campus 2020', the relevant Development Control Plan (DCP) for the Kensington Campus, specifically the building height, building articulation and parking. Council provided the following comments for consideration:

- the wall height exceeds the 24 metre provisions in the DCP by over 20 metres and is considered to be excessive given the visual prominence and visibility externally from the site. The height of the building has not been adequately justified and is not supported;
- the height could potentially have adverse overshadowing impacts on open spaces and set an undesirable built form precedent;
- acknowledges the large floor plates are required to support the efficient delivery of research and laboratory spaces;
- bulk and scale is emphasised given the minimal articulation, modulation and visual interest in the design of the building;
- greater detail regarding potential overshadowing impacts is required;
- whilst the future light rail extension is acknowledged, the delivery of the light rail is still a number of years away;
- the loss of 84 existing car spaces and no provision of additional car parking to support demand generated by the development is not supported as it results in a total deficiency of 147 car spaces, which will adversely impact on on-street parking supply along High Street;
- assessment of car parking demand and supply is flawed and also does not recognise the geographical nature of the car parking demand on the campus;
- loss of the car share space is not consistent with the sustainable transport objectives;
- car parking loss as a result of redevelopment and new car parking to meet new demand should be accommodated in basement car parking;
- short term parking in the lower campus should be converted to visitor car parking;
- further details are required regarding the potential land contamination, potential for acid sulphate soils and noise assessment if the building is operational during the night time;
- storage and handling of dangerous goods and disposal of hazardous waste should be managed in accordance with relevant regulatory requirements; and
- recommended conditions are provided regarding legionella control and development contributions.

A subsequent submission was received from council dated 7 May 2013, which is discussed in Section 3.3 of this report.

Sydney Regional Development Advisory Committee (SRDAC) raised no objection to the development and provided the following comments for consideration:

- car parking should be provided to the department's and council's satisfaction;
- the swept path of the longest vehicle and manoeuvrability through the site is to be in accordance with AUSTROADS;
- layout of parking areas are to be designed in accordance with the relevant Australian Standards;
- a construction traffic management plan is required prior to construction;
- all vehicles to enter and exit the site in a forward direction;
- consideration of noise attenuation measures to address road traffic noise from High Street; and
- all works/ signposting to be at no cost to the RMS.

Environment Protection Authority (EPA) raised no objection to the development and provided the following comments for consideration:

- consideration should be given to the construction noise impacts on sensitive residential receivers on campus and identify adequate mitigation measures if necessary;
- technical issues with the acoustic assessment need to be addressed, including an adjustment to the external noise level criteria and additional noise monitoring at the most sensitive receiver;
- operational noise monitoring should be undertaken to confirm that the night time criterion can be achieved for residential receivers; and

- recommended conditions are provided regarding: additional noise monitoring; management of construction noise and vibration impacts, including preparation of a construction noise and vibration management plan; management of operational noise impacts; and undertaking operational noise and vibration compliance assessment. EPA also recommended standard conditions regarding management of water quality during construction, groundwater quality assessment, further contamination assessment and management of construction waste and air quality.

Sydney Airport Corporation Limited (SACL) advised that the proposed building would be a controlled action given it penetrates the Obstacle Limitation Surface.

This would therefore require a separate approval from the Commonwealth Department of Infrastructure and Transport (DIT). The application has been referred to DIT, which is currently finalising its assessment, noting that the SSD application can be determined prior to Commonwealth approval.

Sydney Water raised no objection to the development and recommended that a condition requiring the applicant obtain a section 73 certificate be imposed.

The department has fully considered the issues raised in submissions in its assessment of the development.

3.3. Applicant's Response to Submissions

The applicant has provided a response to the issues raised in submissions. The response included:

- minor design changes to the façades to provide greater articulation;
- reduction in the extent of the basement level;
- removal of the café;
- provision of a small retail space; and
- minor design modifications to the rooftop plant.

The response to submissions also provided: further justification for the bulk and scale of the proposed building, including reiterating that DCPs do not apply to SSD and that the University's new Urban Design Framework for the lower and western campus is more appropriate in guiding development than the Campus 2020 DCP; clarification regarding the supply of car parking across the campus; further details regarding contamination; further analysis of the acoustic impacts; and justification for exemption from development contributions.

The applicant's response to submissions was forwarded to council for comment given its original concerns regarding the development. Council has reviewed the response and changes to the proposal and has revised its position on the proposal in a supplementary submission dated 7 May 2013. Council recognises that the proposal's central location on the campus is suitable for a larger scale building that would support enhanced facilities and increase capacity for the School of Materials Science and Engineering. Council acknowledges that the Campus 2020 DCP is no longer relevant in terms of providing guidance to development on the campus and as such, the strategic urban design framework currently being progressed by the University should be finalised prior to future campus development to ensure the preferred strategic direction is acknowledged.

Council also reiterated its request that section 94A development contributions should be applied to the development and objected to the exemption request due to the:

- pressure on local infrastructure;
- 144 new additional staff, who will rely on public infrastructure;
- continued pressure on local infrastructure given the cumulative development being undertaken across the campus; and
- reduced car parking and associated impacts on the local street network.

4. ASSESSMENT

4.1. Section 79C Evaluation

Table 2 identifies the matters for consideration under section 79C that apply to State significant development, in accordance with section 89H of the EP&A Act. The table represents **a summary** for which additional information and consideration is provided for in Section 4 (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 DGRs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the EP& A Regulation.

Table 2: Section 79C(1) Matters for Consideration

Section 79C(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Complies - see Appendix B
(a)(ii) any proposed instrument	At the time of lodgement of the application, the recently gazetted Randwick LEP 2012 had been exhibited. The Draft LEP has been considered in Section 4.2 and Appendix B.
(a)(iii) any development control plan	See Appendix B*
(a)(iiia) any planning agreement	Not applicable
(a)(iv) the regulations	The development application satisfactorily meets the relevant requirements of the Regulation, including the procedures relating to development applications (Part 6 of the Regulations), public participation procedures for SSD's and schedule 2 of the Regulation relating to environmental impact statements. Refer to discussion at Section 2.7.
(a)(v) any coastal zone management plan	Not applicable
(b) the likely impacts of that development	Appropriately mitigated or conditioned - refer to Section 4.2
(c) the suitability of the site for the development	Suitable - Refer to Sections 2.8 and Section 5
(d) any submissions	Refer to Sections 3.2 and 4.2
(e) the public interest	Refer to Section 4.2.5
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable

* Under clause 11 of the SRD SEPP, development control plans do not apply to state significant development. Notwithstanding, consideration has been given to relevant Development Control Plans at Appendix B.

4.2. Key and Other Issues

The department considers the key environmental assessment issues for the application to be:

- built form;
- transport and traffic;
- development contributions; and
- the public interest.

4.2.1. Built form

Strategic Context

'Campus 2020' is the relevant Development Control Plan (DCP) that applies to the Kensington Campus as required by clause 40A of the RLEP 1998 and identifies detailed planning provisions to guide development within the campus. The department notes that the Draft Randwick Comprehensive Development Control Plan (DCP) has recently been exhibited and transfers the provisions and controls in the Campus 2020 DCP to the draft Comprehensive DCP.

The university has recently prepared an Urban Design Framework for the UNSW Lower and Western Campus, which seeks to provide a new vision for the redevelopment of the lower campus. Council notes that the Urban Design Framework has not been endorsed and therefore the controls in the DCP are still relevant. However, council has acknowledged in its most recent submission that the Campus 2020 DCP is no longer adequate for assessing development in the context of the future growth of the University.

The department notes that DCPs do not apply to SSD. Notwithstanding, the department has considered the proposal against these documents as they provide guidance to the future spatial context of the site.

The Campus 2020 DCP identifies built form outcomes for redevelopment sites within the campus, including the indicative locations and alignments for the new building footprints and the preferred uses. However, recent development across the campus has resulted in significant departures from the built form and spatial context envisaged within the DCP (as shown in **Figure 6**). Most notably, the recently constructed student housing located to the north of the subject site between High Street and the site prevents the delivery of High Street Square. However, the new Urban Design Framework for the lower campus establishes a new vision and identifies a new campus layout, including new development areas and potential open space areas (see **Figures 7** and **8**). Accordingly, the department has taken into consideration the new campus layout and Urban Design Framework as this proposal seeks to implement this new vision.

Figure 6: DCP Building Height Plan

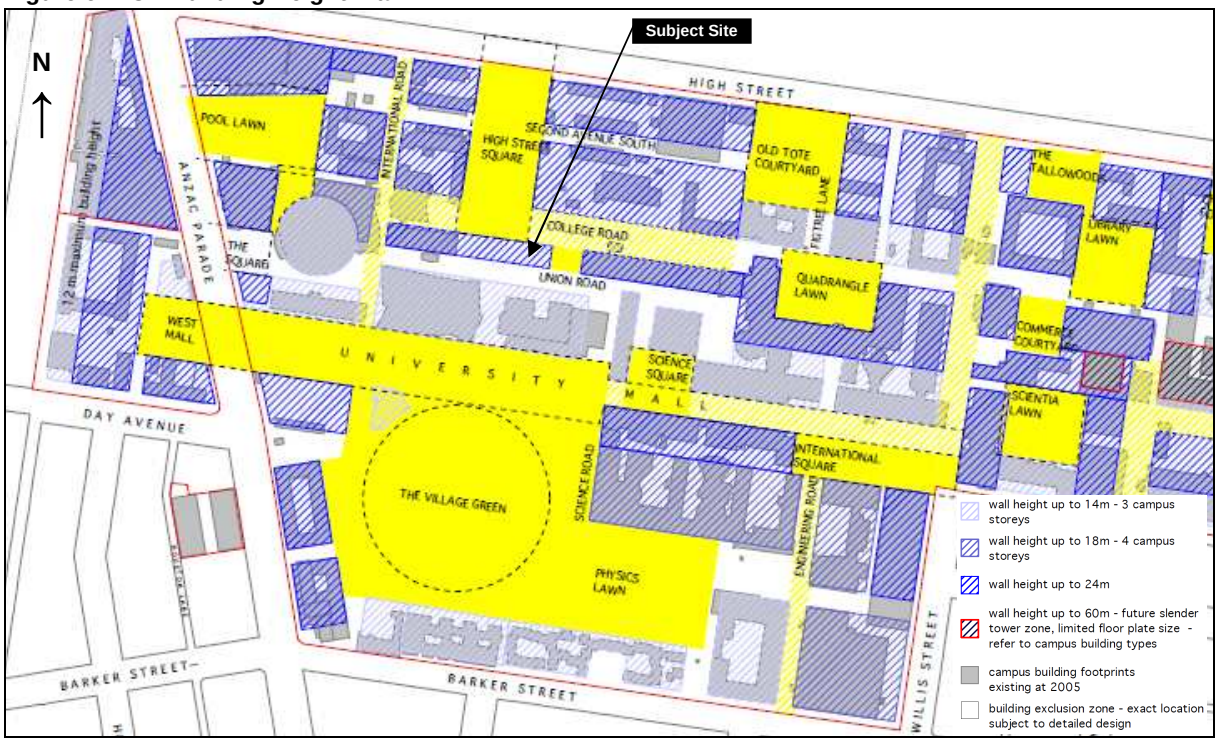


Figure 7: Urban Design Framework Development Potential

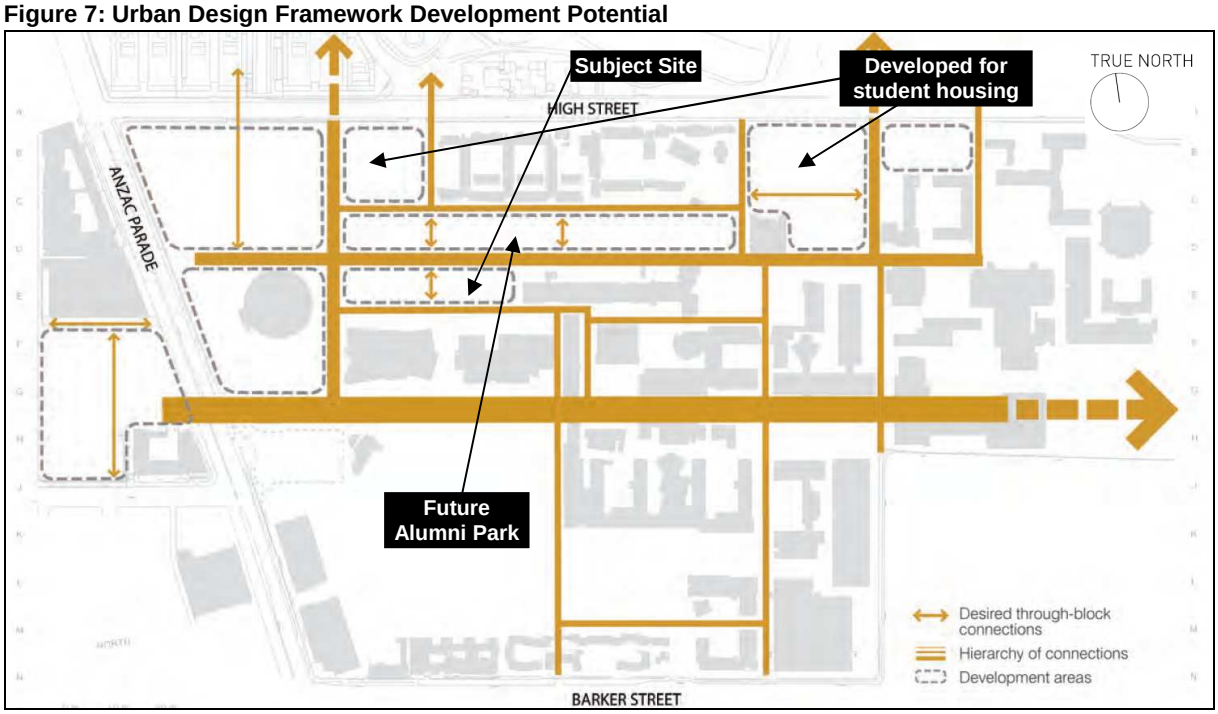
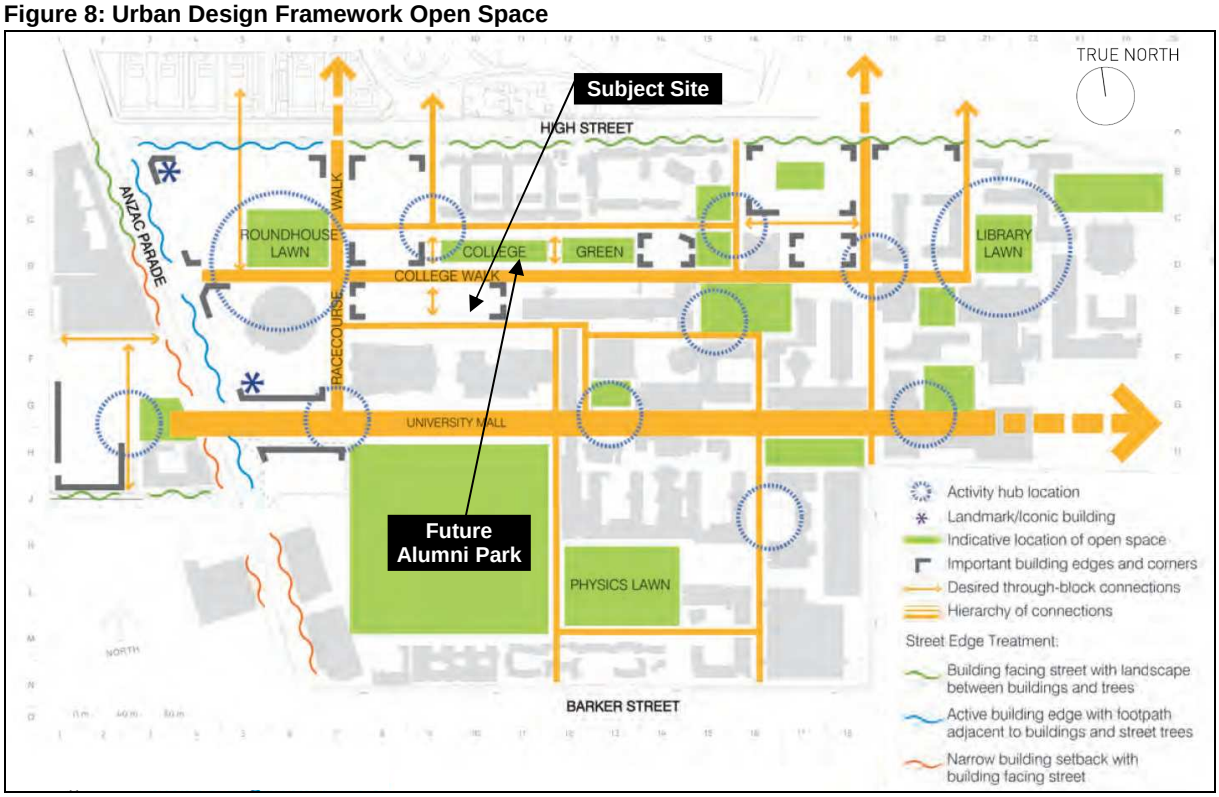


Figure 8: Urban Design Framework Open Space



Bulk and scale

The development seeks to construct a nine storey building, including a plant level. The proposed building has an approximate length of 79 metres and depth of 33.5 metres. This floor plate is replicated for all the research levels (Levels 1-7), resulting in a large solid rectangular building.

The RLEP 1998 (which applies to the development due to the savings provisions in the recently gazetted RLEP 2012) and the RLEP 2012 do not impose any height or floor space restrictions.

The proposed building has a wall height of 44.1 metres (see **Figures 9** and **10**). The Campus 2020 DCP sets a maximum wall height of 24 metres for the subject site (see **Figure 6**), while the Urban Design Framework provides no height controls for the site.

Figure 9: Northern Elevation

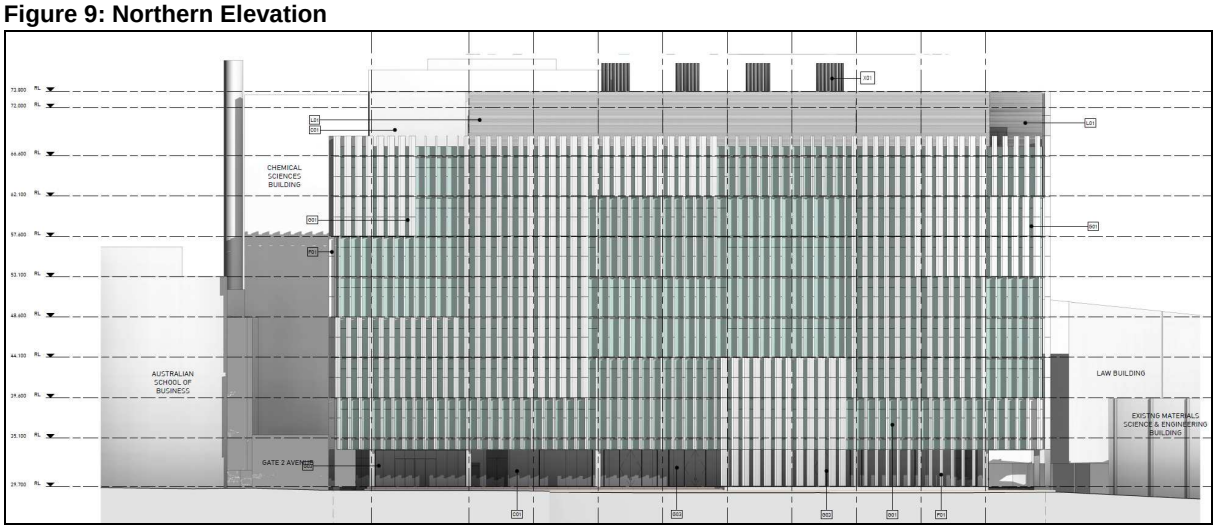


Figure 10: Perspective view of the northern elevation (future Alumni Park in foreground)

Council originally did not support the height of the proposed building as it exceeds the height controls in the Campus 2020 DCP by over 20 metres, and the bulk and scale of the building was considered excessive given the minimalist approach to the design of the building. Council has since acknowledged that given the proposal's central location on the campus and the potential for overall improvements to the campus amenity by consolidating development in larger envelopes, the height is acceptable subject to satisfactory amenity impacts. The amendments made to modulate and articulate the façade to minimise the visual bulk and scale of the proposed building are also considered to address matters raised about urban design and visual interest.

The large floor plate and regular rectangular floor layout replicated on all floors contributes to the visual bulk and scale of the building. The proposed floor plate extends beyond the alignments identified in the Campus 2020 DCP (see **Figure 6**). The applicant has argued that the larger floor plate is required to achieve the optimal research and office layout. The core of the building that supports the research laboratories is surrounded by the office, administrative and gathering spaces. This also optimises the amenity for the office areas and gathering spaces. The applicant has argued that the scale of the project responds to the new Urban Design Framework that has been developed for the lower campus, which includes a new two hectare open space area immediately to the north of the site, Alumni Park. Council and the department acknowledge that the large floor plate is the optimal layout for the proposed research space.

The department notes that the departures from the controls in the Campus 2020 DCP relate to the height and the building alignments, and subsequently result in a significantly larger building than that envisaged in the Campus 2020 DCP. Due to its large solid rectangular form and uniform façades, the design of the building exacerbates the visual bulk and scale of the building. However, the department considers the design modifications incorporated in the Response to Submissions, which provide more distinct angles (profiles) for the vertical fins and a clearer transition between the change in profiles, provides greater articulation and a modulated appearance resulting in greater visual interest in the façade (see **Figures 11** and **12**). The department considers that the modifications alleviate the uniformity and monolithic appearance of the façade.

Figure 11: Perspective view of the northernand western elevations as proposed in the EIS

Figure 12: Perspective view of the northern and western elevations as revised in the RtS

Amenity Impacts

The proposal is located to the south of the student housing and the future Alumni Park. Accordingly the most sensitive land uses (i.e. the student housing and future open space areas) will not be impacted by overshadowing from the proposed building. The Law Building and Chemical Sciences Building would be the most affected buildings during the winter solstice. However, a DCP compliant building would also have similar overshadowing impacts due to the size of the building footprint, the large form and massing characteristics of university buildings and the minimal distance between the site and the university buildings to the south. A compliant design would only reduce overshadowing to some upper levels of the Chemical Sciences Building during the winter solstice.

Accordingly, the department considers the overshadowing impacts acceptable, as the Law Building and Chemical Sciences Building would still receive sunlight during the winter solstice and additional overshadowing would not fall on future open space areas and the student housing.

Visual Impacts

The development is located within the lower campus and is surrounded by university buildings and therefore would only be partially visible, predominantly the upper levels, from areas north, east and west of the campus (see **Figure 13**), given the lower campus predominantly comprises medium scale buildings, except for the Chemical Sciences Building (see **Figure 14**). The department considers the height and scale of the building acceptable as:

- the height is comparable with the existing Chemical Sciences Building;
- a larger building envelope at one of the few remaining developable sites (see **Figure 7**) on the campus protects and allows for the transformation of a large part of the remaining adjoining space into a two hectare open space area, Alumni Park. This is planned within the new Urban Design Framework for the lower campus (see **Figure 15**);
- Alumni Park will provide an appropriate interface with the MS&EB and the student housing to the north of the Park;
- the additional floor space will support the growth in the School of Materials Science and Engineering, consistent with the long term sustainability of the campus;
- the height and scale of the building is generally consistent with the characteristics and massing of tertiary educational development;
- the proposed height would have acceptable overshadowing impacts given the current overshadowing from existing surrounding structures, which is confirmed by shadow diagrams submitted in the response to submissions;
- the larger scale development will provide an overall improved amenity outcome given the preservation of land for Alumni Park, which will also provide a buffer between the student housing and educational uses;
- the proposal aligns with the vision in the new Urban Design Framework, which provides a more realistic representation of the surrounding environment and future urban structure; and
- the larger building envelope (compared to that envisaged in Campus 2020 DCP) will be offset by the provision of the large open space area, the future Alumni Park.

Figure 13: View of the site from the west

Figure 14: Model view of the campus

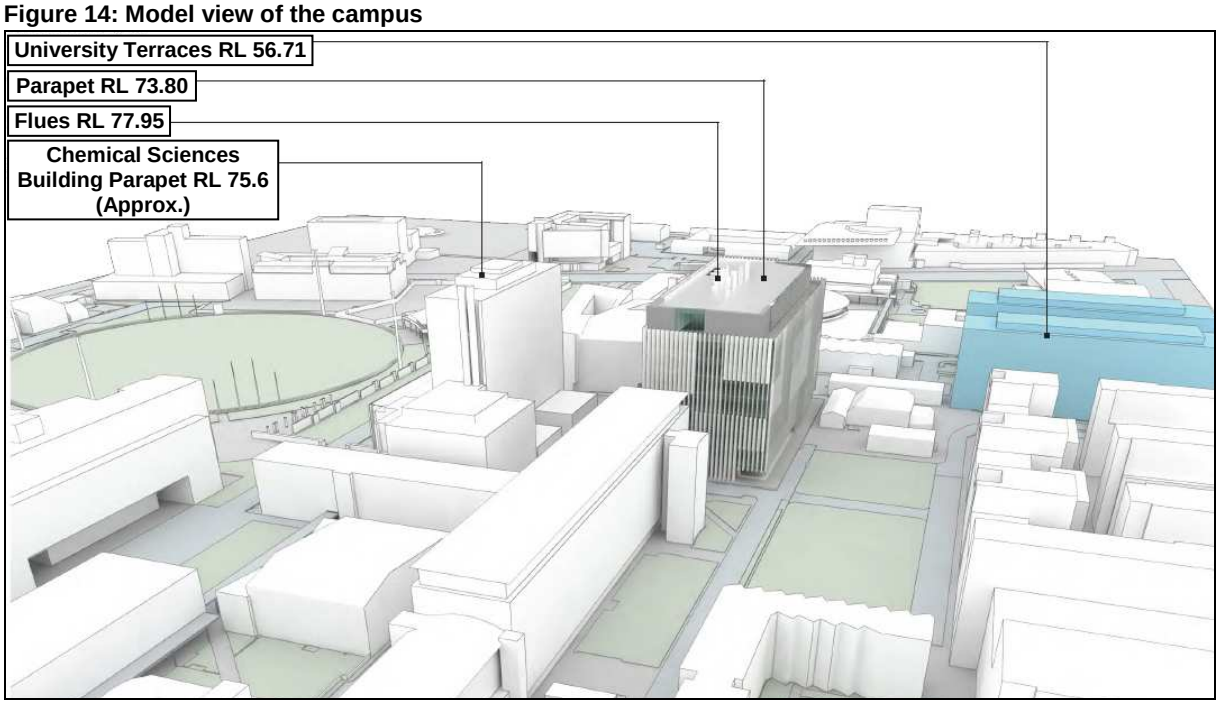
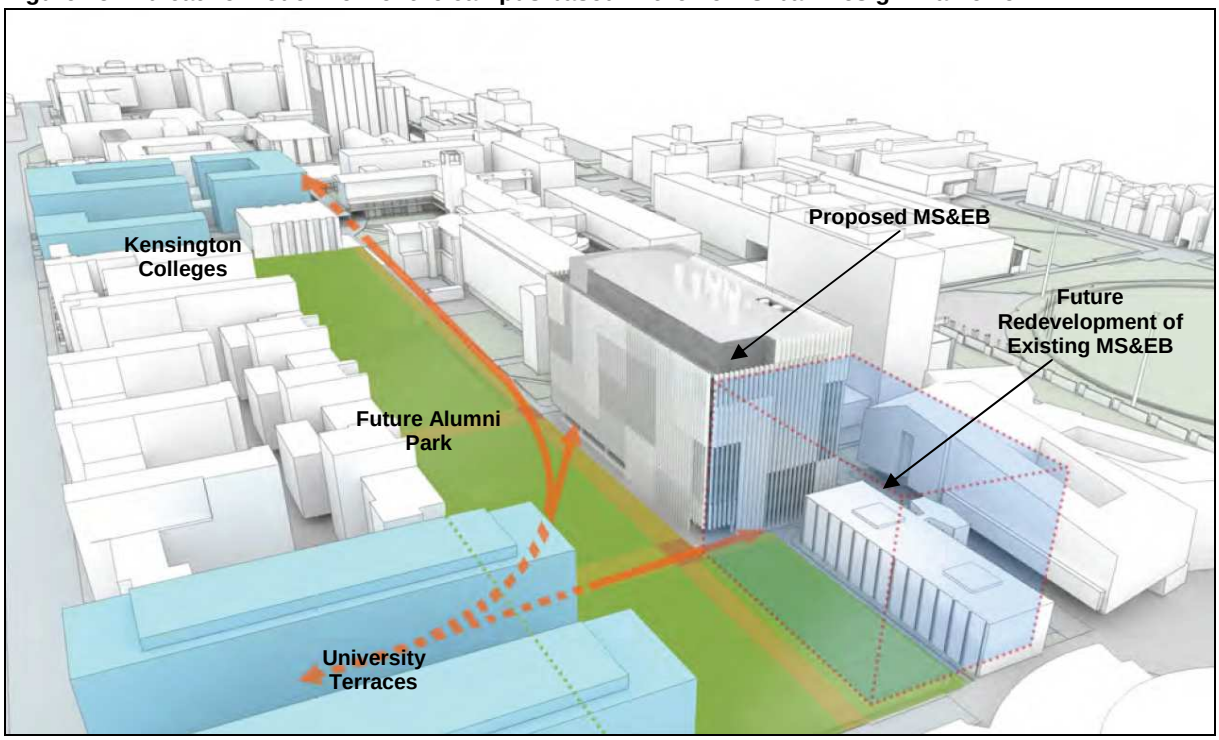


Figure 15: Indicative model view of the campus based in the new Urban Design Framework



Urban design

The department considers the proposal is appropriate for the site as it will strengthen the spatial context envisaged for the lower campus that has been partially delivered in the recently constructed student housing development, which itself departs from the heights and alignments outlined in the Campus 2020 DCP. The proposal will define the future open space area and reinforce University Walk (College Walk). The proposed building reflects the character of the campus and delivers the varying built form encouraged in the Campus 2020 DCP.

The proposed slab building is orientated broadside to the north and south to provide optimal environmental performance and limit overshadowing impacts. The configuration of the lower campus has been designed to facilitate the delivery of the Alumni Park (identified as the College Green in the new Urban Design Framework and to be known as Alumni Park), which will be bound by the surrounding academic uses and student housing. The reconfiguration of the spatial context provides

an improved relationship between the academic and student housing uses by providing a suitable buffer between the two uses.

Council has requested a more integrated design with the pedestrian environment on the lower levels. The department considers the design of the lower levels is appropriate as it reflects the desired hierarchy of connections in the new Urban Design Framework and supports the delivery of University Walk. The design reflects the subordinate role of Union Road as a pedestrian connection as it will support a loading and services area whilst promoting pedestrian activity along College Road, which will adjoin the new Alumni Park. The department considers the design provides an appropriate interface at the lower levels in response to the surrounding pedestrian environment.

The department considers that the delivery of Alumni Park is critical to the realisation of the revised layout and improved environmental and social outcomes for the campus. The department notes that the delivery of Alumni Park has already commenced with recent development of the lower campus with the new open space area to the north of the Australian Business School Building. The landscaped area to be delivered to the north of the MS&EB as part of the proposal will extend the open space area. Overall, the department considers that the new campus layout would provide improved amenity outcomes and user experience for students, staff and visitors.

4.2.2. Transport and traffic impacts

The development is primarily supporting existing students and staff and consolidating existing facilities in one location to support the School of Materials Science and Engineering. The new teaching, learning and research spaces are provided to meet current standards and best practice. The existing adjoining MS&EB is proposed to be redeveloped in the future. The proposal would also result in the loss of 84 car parking spaces on the campus. The applicant has argued that recent developments across the campus since 2011 which have consolidated the car parking on the campus in designated locations (on the perimeter of the campus in the vicinity of University entrances, including the recently completed student housing basement car parks) have resulted in the addition of 19 new car spaces across the campus.

The applicant argues that the redevelopment will not result in any significant additional traffic generation or demand for car parking as there will be only be 24 new staff in the short term and 144 new staff when the building is fully occupied in the medium to long term and no additional student numbers. This equates to a maximum of 11 vehicle trips per day and demand for eight car spaces and 35 vehicle trips per day and demand for 40 car spaces respectively, based on the current vehicle mode share of 35 per cent.

Whilst the recent developments on campus provide an additional 19 car spaces, the department notes that a number of the recent car parking spaces have been provided as an allocation to students occupying the student accommodation (approximately 89 car spaces). Therefore, as a result of the removal of the 84 car spaces, the actual car parking supply on campus post development for general staff and visitors would be a deficit of 70 car spaces across the campus. Accordingly, there is a potential short fall of between 78 and 110 car spaces.

The draft Metropolitan Plan for Sydney to 2031 identifies the delivery of light rail to the university which would support the modal shift away from private vehicle use envisaged in UNSW's transportation strategy in the DCP. The applicant contends that the continued delivery of the sustainable transport measures, outlined in UNSW's transportation strategy (such as implementing public transport upgrades, reduced car parking, provision of on campus student accommodation), and the realisation of the light rail will ensure the private vehicle mode share continues to fall. Therefore, as the private vehicle mode share is expected to fall in the medium and long term, the total vehicle trips is expected to be fewer than the predicted 35 vehicle trips per day and the demand for 40 car spaces is not expected to eventuate. Also as there are various routes to the university and the various university car parking areas, traffic would be dispersed amongst these routes and as the arrival and departure times would also vary (due to class time tabling), the actual traffic travelling during the peak periods would be significantly lower. The applicant concludes that the vehicle traffic generated by the development, in traffic engineering terms, is insignificant and therefore would not have a significant impact on the operation of the surrounding road systems or intersections.

The department considers that the car parking shortfall and traffic generation re acceptable as:

- the private vehicle mode share is expected to continue to fall;
- significant public transport initiatives are programmed in the medium and long term;

- the increased student accommodation on campus is one of the initiatives to reduce demand for car parking and the spaces allocated to these students can offset demand generated by the occupants of the new MS&EB;
- the short term traffic generation and car parking deficiency is considered minimal and acceptable; and
- the proposal is consistent with the UNSW transportation strategy to encourage greater use of sustainable transport modes. The applicant has included the provision of 10 additional bicycle racks as part of the development for the students. However, the department considers the number of bicycle racks should be increased to 24 to also cater for staff in accordance with Planning Guidelines for Walking and Cycling and end of trip facilities (lockers, showers and change rooms) should be provided. A condition to this affect has been recommended.

4.2.3. Development contributions

The applicant has requested an exemption from council's Section 94A (s94A) Development Contributions Plan 2012 (s94A plan), which applies a one per cent levy for development with a capital investment value greater than $200,000 unless an exemption applies. The proposal does not fall within any of the categories that are afforded an exemption. Therefore, the development contribution normally required for this development under council's s94A plan would be approximately $1,258,110.

Notwithstanding, the applicant has sought an exemption for the following reasons:

- the University provides significant community benefits given the public character of the University and the material public benefits provided by the University;
- the development is generally replacing existing University floor space and would not result in additional demand on local infrastructure;
- the University is a not for profit organisation, and subsequently any surplus income is better redirected into research and education; and
- the University provides a wide range of social, cultural and recreational facilities that contributes to the local area and the residents and worker population of the local area.

Council considers that development contributions should be required as the development does not fall within the exempt categories and council's ongoing provision of local infrastructure supports the operations of the University, which is dependent on the ongoing provision of infrastructure by council. Furthermore, council is of the opinion that employment growth within Randwick City will be linked with the growth of the University, therefore placing continued pressure on council infrastructure. Therefore council contends that the payment of contributions is appropriate and reasonable and rejects the exemption request by the applicant.

Section 94A plans do not require any connection between the development which the levy is imposed and the facilities on which the levy is to be used. Section 94A plans are used where it is difficult to prepare a Section 94 Plan to establish the nexus between development and the increased demand for public facilities and services.

Notwithstanding, a section 94A condition has to be reasonable, and as the University is a 'not for profit' organisation providing a social benefit, the Minister must consider this when determining whether to apply a contributions requirement. In accordance with section 94B(2)(b) of the EP&A Act, the Minister may impose a condition under section 94A, and if imposed, may have regard to any contributions plan that applies.

The department's previous application of levying development contributions for educational establishments has varied as each case has been considered on its merits with consideration of the various s94 or s94A plans that have applied. In this case, the proposed development would not result in an increase in the number of students and would support an additional 144 new staff. Therefore, the department considers the full levy should not be applied to the development.

Council's s94A plan allows for applicants to make an offer to council to carry out works or provide a material public benefit towards which the levy was to be applied if the applicant does not wish to pay the levy. Council has indicated that public domain improvement works to the value of $480,000, including along Barker Street between Anzac Parade and Gate 14, would be appropriate to support the redevelopment occurring across the campus and the associated demand generated on council's infrastructure. The applicant has indicated that they would be supportive of payment towards these public domain improvements.

The department considers that the provision of public domain improvements along the University's frontage would provide material public benefit for the community and the University as well as offset works identified in council's s94A plan. The reduced amount is considered to be an appropriate amount in the circumstances given the new building would be largely supporting existing students and staff as well as the University's status as a not for profit organisation and the social benefits of the proposal. In this instance, it is recommended that a development contribution of $480,000 be paid to council towards public domain improvements, including footpath works along the northern side of Barker Street. Therefore, in accordance with section 94B(2)(b) of the EP&A Act, the department has included a recommended condition that the development contribution of $480,000 be paid prior to commencement of works.

4.2.4. Other matters

Noise Impacts

The applicant has prepared an Acoustic Report which concludes that the operation of the proposed building is not expected to generate any adverse noise impacts on the adjoining noise sensitive receivers (student accommodation to the north and adjacent University buildings). The report acknowledges the potential noise impacts from the operation would be from the plant and that the noise generated from the plant can be adequately mitigated to meet noise limits using conventional methods including: strategic location and orientation of plant; selection of plant; noise enclosures; noise barriers; acoustic louvers; and noise attenuators.

The applicant has indicated that further investigation of the mitigation measures is required at the detailed design stage. The department has therefore recommended appropriate conditions to ensure that the applicant identifies and adopts the necessary mitigation measures required to ensure that the rooftop plant and equipment complies with relevant noise criteria prior to commencement of works.

The applicant has indicated that the acoustic construction impacts on the closest sensitive receivers (offsite housing and stables at the racecourse) meet noise management levels due to the distances to these receivers and therefore do not require any additional mitigation measures. However, the report has not addressed the ability to comply with the noise management levels for the adjacent University buildings or the student housing along High Street and recommends that a Noise and Vibration Management Plan be prepared to address the impacts on the university accommodation and university buildings to minimise disruption and risk of damage. The EPA recommended that construction noise impacts on student housing be identified and adequately mitigated. Accordingly, the department recommends that the noise management levels be identified in accordance with the interim construction guidelines for the student housing and acoustic attenuation measures to mitigate construction noise impacts be prepared for the student housing.

The department has recommended conditions to ensure construction noise impacts on student housing are mitigated and has included a condition requiring measures be incorporated into a Construction Management Plan and implemented during construction.

Tree Removal

In addition to the 16 trees to be removed as part of the early works, the proposal seeks to remove 37 trees as part of the development. The department notes that 29 of the trees are located within the proposed building footprint and eight are located within the landscaped area where the future Alumni Park is to be located. The applicant has indicated that offset tree planting will be undertaken with the future construction of Alumni Park.

4.2.5. Public interest

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

- delivering sustainable development on the campus by considering the life cycle of new structures and future campus requirements;
- consolidating development in designated areas in the new framework for the campus to support the delivery of a large passive open space area for the lower campus;
- improved urban design and pedestrian outcomes for the site;
- delivering improved research facilities to facilitate collaboration with industry to support innovation;
- supporting the recruitment and retention of researchers and lecturers through the delivery of more modern and fit-for-purpose teaching, learning and research space; and
- consolidating and providing further investment in education and research infrastructure in the Randwick Education and Health Specialised Centre.

5. CONCLUSION AND RECOMMENDATION

5.1. Conclusion

The construction of the Materials Science and Engineering Building would provide public benefit through contributing to the ongoing development of the Specialised Randwick Education and Health Centre.

The proposed works would provide best practice research and teaching space that will attract quality researchers and funding. This will consolidate and strengthen UNSW's role as a key asset in the education and health precinct in eastern Sydney.

The proposal is considered to be in the public interest as it would deliver significant social, economic and environmental benefits to the wider community by providing additional educational and research spaces and supporting the generation of operational and construction jobs.

The department is satisfied that the proposed development satisfactorily responds to the issues raised and recommends that the SSD application for the construction of the new building be approved, subject to conditions. The department's recommended conditions of consent will ensure that the construction and future operation of the proposed facilities will maintain the environmental and residential amenity of the surrounding environment.

5.2. Recommendation

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Development Assessment Systems and Approvals, as delegate of the Minister for Planning and Infrastructure, grants development consent for the construction and operation of the Materials Science and Engineering Building (SSD 5373).

Endorsed by:

18/6/13

Heather Warton
Director, Metropolitan and Regional Projects North

Approved by:

19.6.13

Chris Wilson
Executive Director, Development Assessment Systems and Approvals

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=5373.

2. Submissions
   http://majorprojects.planning.nsw.gov.au/index.pl?action=list_submissions&job_id=5373.

3. Applicant's Response to Submissions
   http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=5373.

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

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

The proposal is for SSD in accordance with s. 89C of the *Environmental Planning and Assessment Act 1979* (EP&A Act) 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 (Educational establishments) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011.

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.

A preliminary hazard analysis assessment is required if the development is identified as a potentially hazardous or potentially offensive development. The applicant has indicated that dangerous goods that would be handled or stored on the site would be below the threshold levels and therefore a preliminary hazard analysis assessment is not required as the development would not be a hazardous or offensive development.

State Environmental Planning Policy No. 55 – Remediation of Land
SEPP 55 aims to provide a state wide approach to the remediation of contaminated land. In particular, SEPP 55 aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying under what circumstances consent is required, specifying certain considerations for consent to carry out remediation work and requiring that remediation works undertaken meet certain standards.

The contamination assessment undertaken for the site indicates that the potential concentrations of contaminants are below the site assessment criteria. The contamination located to the north of the site would have no impact given the remedial works undertaken and the Environmental Management Plan in effect to manage residual site contamination. The contamination assessment concluded that there was 'no potential for off-site migration' of the contamination and this part of the site is subject to an on-going maintenance order. The contamination assessment concluded that the site and the soil conditions are suitable for continued use of the site for education and open space purposes.

The department is satisfied that, in accordance with clause 7 of the SEPP, the investigations undertaken of the subject site demonstrate that the site can be made suitable for the continued use for the intended purpose.

State Environmental Planning Policy (Infrastructure) 2007
The aim of the 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.

Schedule 3 of the Infrastructure SEPP requires traffic generating development to be referred to the RMS. The proposal was referred to the RMS who raised no objection to the development.

A program of early works was also approved under Part 5 of the EP&A Act for the subject site and the adjoining areas, relying on clause 29 of the Infrastructure SEPP, to facilitate redevelopment of the site, including the following works:

- staged demolition of buildings E9, D11a, D11c, D10a (Bore water plant), D11b (Substation), D10 (south);
- demolition/removal of hardstand areas, walkways and kerbing;
- removal of 16 trees and landscaping to provide for the proposed new road and services infrastructure;
- removal of 35 car parking spaces and 24 motorcycle and loading spaces to accommodate the construction of the new road;
- relocation/provision of new infrastructure services trenches/pipes and relocation of services including high voltage and communications infrastructure works;
- construction of new stormwater drains to connect to the existing system; and
- construction of a new road from 3rd Avenue to Union Road.

Randwick Local Environmental Plan 1998 (Consolidation)
The development is consistent with the aim of the special uses zone in the RLEP 1998 to support the development of land for educational purposes. Consideration of the relevant clauses of the LEP is provided in **Table 1**.

Table 1: Consideration of RLEP 1998

RLEP 1998	Criteria	Complies	Department Comment / Assessment
Clause 28	Tree Preservation Orders	Complies	The development seeks to remove 37 trees as part of the development. The department notes that 29 trees are located within the proposed building footprint and eight are located within the future open space area. The applicant has indicated that offset tree planting will be undertaken in the future Alumni Park.
Clause 37A	Development in Special Uses Zone	Complies	The proposal is compatible with the character of the locality as it is for education and research purposes and is located within the campus and at least 70 m from the closest campus boundary. It will not adversely impact on the amenity of adjoining properties as it is screened by surrounding university buildings and is comparable is height with the nearby Chemical Sciences Building and will complement the university campus skyline.
Clause 40A	Site Specific Development Control Plan	Complies	'Campus 2020' is the relevant DCP for guiding development on the Kensington Campus and provided in Table 3 is consideration of the relevant provisions in the DCP.
Clause 43	Heritage Provisions	Complies	The proposed development is located over 150 metres from the Old Tote Courtyard Heritage Conservation Area on High Street and has no direct views to, or from, the conservation area. The proposal would be screened by the student accommodation surrounding the conservation area and would have no impact on the heritage values of the conservation area.

Draft Randwick Local Environmental Plan 2012 (Draft RLEP 2012)

The development is consistent with the aim of the Draft RLEP to support the efficient use of land, vibrant centres, integration of land use and transport, and an appropriate mix of uses. Consideration of the relevant clauses of the LEP is provided in **Table 2**.

Table 2: Consideration of Draft RLEP 2012

RLEP 2012	Criteria	Complies	Department Comment / Assessment
Clause 5.9	Preservation of trees or vegetation	Complies	The proposal seeks to remove 37 trees as part of the development. The department notes that 29 trees are located within the proposed building footprint and eight are located within the landscaped area where the future Alumni Park is to be located. The applicant has indicated that offset tree planting will be undertaken in the future Alumni Park.
Clause 5.10	Heritage conservation	Complies	The development does not seek to undertake any work in the conservation area located on the campus.
Clause 6.1	Design Excellence	Complies	The department considers the development exhibits design excellence and the proposal has been reviewed by the UNSWs Campus Design Advisory Panel; activates the ground level and provides an appropriate interface with the surrounding public domain areas; is generally consistent with the character of the university; considers the potential life cycle of the structure and caters for future growth to achieve a sustainable design; and has minimal view impacts.
Clause 6.2	Essential services	Complies	The department considers the site is adequately serviced and can cater for the development as the applicant has commenced augmentation works to support the development.
Clause 6.7	Airspace operations	Complies	The department has consulted with the relevant Commonwealth body who has indicated that the proposed development is below the Limitation or Operations Surface.
Clause 6.10	Stormwater management	Complies	The stormwater management for the development will be designed and managed in accordance with the campus wide stormwater strategy prepared for UNSW by ANA Technical Services Pty Ltd and endorsed by council.
Clause 6.11	Development requiring the preparation of a DCP	Complies	The DCP for the UNSW Kensington campus was considered in the department's assessment of the proposal.

The Randwick Local Environmental Plan 2012 has now been gazetted and the provisions relevant to the site are generally consistent with provisions in the Draft RLEP 2012. Therefore, whilst the RLEP 2012 does not strictly apply to the site due the savings provisions, the development generally complies with the provisions in the current LEP regardless.

Development Control Plans

It is noted that clause 11 of the State Environmental Planning Policy (State and Regional Development) 2011 provides that development control plans do not apply to SSD. Notwithstanding, consideration of relevant controls has been given in **Table 3**.

Table 3: Consideration of the relevant DCP

DCP Provisions	Department Comment / Assessment
5.1 Sustainability • consistent with UNSW Environmental Management Plan • demonstrate energy efficiency • reduce potable water use • target 5 star green star rating • increase open space	The development is consistent with the whole-of-life cycle approach as it considers the long term requirements of the School of Materials Science and Engineering and the life cycle of the proposed building. The applicant has also demonstrated that appropriate sustainability measures have been incorporated in the proposal as discussed in Section 2.6 of the report.
5.2 Sense of Place • demonstrate consistency with key sense of place features	The iconic campus spaces identified in the DCP will not be impacted by the proposal as the only iconic space in the vicinity of the site is High Street Square, which will no longer be delivered. The future College Green/Alumni Park will be framed by the proposed building and the education uses along College Road. The proposal would not impede any views or vistas to and from the iconic campus buildings or iconic campus spaces.
5.3 Legibility • maintain and enhance views • address desired permeability • desirable locations for new public rooms with primary frontages to High Street Square	The development would have minimal impact on existing and potential view corridors, as the views into the site from Gate 2 are now restricted as High Street Square will no longer be developed. The proposed building is consistent with the form of the campus buildings and would provide an appropriate background to the future College Green/Alumni Park. The colonnade along College Road supports the covered access envisaged for University Walk. As High Street Square will no longer be developed the provision of public room facing the Square is unachievable and redundant. However, as the proposal will be addressing the future College Green/Alumni Park, the provision of a public room is still considered a desirable outcome to activate the site and promote social activity. The proposal provides teaching spaces along the ground floor fronting College Road and utilises full height glazing to activate and connect with the new open space area and also provides an exhibition space.
5.4 Knowledge Clusters and Hubs • new High Street Square Hub	The new hub is expected to be surrounded by academic and housing uses. The new hub cannot be delivered given the construction of student housing at this location. The potential for a new hub at the future College Green/Alumni Park would be a reasonable expectation and the proposal and the uses within the building would be consistent with the facilities required to support a new hub.
5.5 Landscape • retain existing significant trees and areas of vegetation	The proposal seeks to remove 84 trees including high retention priority trees. The high retention priority trees conflict with the location of the building footprint and the University Walkway. Therefore, the department considers the removal of these trees acceptable. The applicant has indicated that offset tree planting will be undertaken in the future Alumni Park. The structural tree planting has not been provided to College Road and Union Road. The department considers as Union

	road is a shared zone which will accommodate service vehicles and due to the larger building footprint the ability to provide the structural planting is constrained. Furthermore, the future planting within the College Green/Alumni Park open space will likely offset the recommended structural planting along College Road.
5.6 Buildings • new buildings to be located in location zones • new buildings or extensions to be located behind identified building alignments • maximum wall height of 24 metres • rooftop plant to occupy maximum 50 per cent of building footprint	The proposed building extends into the College Road alignment whilst maintaining the Union Road alignment. The design of the larger floor plate necessitates the intrusion into the College Road alignment. The variations are considered acceptable as the College Road alignment is now redundant given the new campus layout and larger open space area to be provided between the student housing and the site. The maximum wall height control for the site is 24 metres. The proposal exceeds the height controls, which is considered satisfactory in this instance (see discussion at Section 4.2.1 of the report) and due to the laboratory and research functions of the proposal, the expanded rooftop plant zone is also considered acceptable with the setbacks to the northern and eastern building edges.
5.8 Retail and Services • desirable location for future retail	The proposal provides two retail spaces, one fronting College Road and one fronting Union Road. The retail spaces will help activate the site and are considered a positive outcome for the site.
5.11 Transport and Parking • demonstrate consistency with Transportation Strategy, including reduction in parking permits whilst providing short term visitor spaces	The development is consistent with the strategy as it provides no additional car parking and will provide additional bicycle racks. The proposal will result in the loss of short term visitor spaces, however, overall car parking on the campus is only marginally lower when taking into consideration the cumulative development that has occurred on the campus.

APPENDIX C GLOSSARY

Delegated Authority

On 27 February 2013, the Minister for Planning and Infrastructure delegated his functions under section 89E of the *Environmental Planning and Assessment Act 1979* to Executive Director, Development Assessment Systems and Approvals to determine applications where:

(a) the relevant council has not made an objection, and
(b) a political disclosure statement has not been made, and
(c) there are less than 25 public submissions in the nature of objections.

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 project 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.

APPENDIX D RECOMMENDED CONDITIONS OF CONSENT