SSD 16_7974: SUSAN WAKIL AO HEALTH BUILDING PRECINCT STAGE 1
UNIVERSITY OF SYDNEY, CAMPERDOWN CAMPUS

UNIVERSITY OF SYDNEY RESPONSE TO SUBMISSIONS

12 FEBRUARY 2018

The University of Sydney has reviewed all submissions received during the statutory public exhibition period of State Significant Application *SSD 16_7974 – Susan Wakil AO Health Precinct - Building Stage 1*, located on the western edge of the University's Camperdown campus and bounded by Western Avenue to the west, St Andrew's College to the south, Royal Prince Alfred Hospital to the west, and the University's Oval no.1 to the north.

The following changes have been made to the proposal:

- Revised internal planning (rooms, penetrations, voids).
- Reduction in overall floor to floor heights (now 3.9m) for Levels 4-9.
- Simplified landscape design in response to submissions and user group feedback.

The amendments to the proposal are minor in nature and do not result in any consequential environmental impacts. The changes reflect the University's proactive engagement with various user groups and consultation with the agencies listed below.

The University of Sydney's *Response to Submissions* (RtS) has been structured into the following categories to differentiate between sources of submissions, relevant disciplines, relevant issues, and changes to design.

APPENDICES – SUPPORTING DOCUMENTS	
• Appendix A	Revised Architectural Plans
• Appendix B	Revised Acoustic Report
• Appendix C	Revised Accessibility Report
• Appendix D	Revised Landscape Plans
• Appendix E	Bonacci Flood Assessment Report
• Appendix F	Thermal Comfort Summary
• Appendix G	SEPP 64 Assessment
• Appendix H	Stage 1 Campus Connections
• Appendix I	Cladding Details
• Appendix J	Dangerous Goods Report
• Appendix K	Swept Paths Drawings
• Appendix L	GRC Hydro Flood Assessment Report
• Appendix M	Revised BCA Report

1. University of Sydney Response to Department of Planning & Environment

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
DPE Key Issue	**University Project Response**
Noise Impacts **1.** Provide further background noise monitoring undertaken in accordance with the guidance material provided in the NSW Industrial Noise Policy.	Updated background noise monitoring has been conducted in accordance with the INP at the Royal Prince Alfred Hospital (RPA) and St Andrew's College, to supplement the existing monitoring data included in the original SSDA Acoustic Report. This updated background noise monitoring is included in the updated Acoustic Report at Appendix B. The updated Acoustic Report concludes that predicted noise levels from the site can operate in accordance with the INP subject to the inclusion of appropriate noise control measures for rooftop plant (refer response to Issue 3).
2. Provide further details regarding methodology used for predicting noise levels during demolition, site preparation, bulk earthworks, construction and construction-related activities.	Predictions have been carried out using a three-dimensional computer model to consider topographic and building shielding. The predictions are based on the ISO 9613-2 prediction algorithm, and are typical of noise levels expected under downwind conditions or a moderate ground-based temperature inversion. Refer to updated Acoustic Report at Appendix B. N.B. The University has previously gained approval for the demolition of the Blackburn Building via Part 5 of the EP&A Act. Contained in this Part 5 approval were management and mitigation measures pertaining to construction hours, construction noise and environmental management. The mitigation measures contained within that approval are copied below for reference: <u>Construction Hours</u> The hours of demolition or construction under the Part 5 approval, including delivery of materials to and from the site, is restricted as follows: • Between 7.30am and 5.30pm, Monday to Friday; • 7:30am to 3.30pm on Saturdays; • No work or deliveries on Sunday and/or public holidays; and • Safety inspections are permitted at 7.00am on work days. <u>Excavation Work</u> The use of any rock excavation machinery or any mechanical pile drivers or the like is restricted to the hours of 8.00 am to 5.00 pm (maximum) on Monday to Friday only, to minimise the noise levels during construction and loss of amenity to the surrounding area. <u>Construction Noise</u> a) Building contractors are to implement the requirements of the Office of Heritage and Environment "Interim Construction Noise Guideline (July 2009)" as far as practicable. b) Noise shall be attenuated with the use of engine silencing and substitution by alternative

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
DPE Key Issue	**University Project Response**
	processes to reduce noise emission levels from typical demolition equipment. In addition to these physical noise controls, the following general noise management measures shall be followed: - Plant and equipment shall be properly maintained; - Equipment shall be checked and calibrated to the appropriate design requirements and to ensure that maximum sound power levels are not exceeded; - Where possible, plant shall be strategically positioned on site to reduce the emission of noise to the site, surrounding neighbourhood and to site personnel; - Unnecessary noise shall be avoided when carrying out manual operations and operating plant; and - Any equipment not in use for extended periods during demolition work shall be switched off.
3. Provide a revised acoustic assessment that includes a quantitative assessment of the construction and operational noise and vibration impacts against revised project specific noise levels identified in accordance with the NSW Industrial Noise Policy and further background noise monitoring. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.	The updated acoustic report at Appendix B provides a quantitative assessment of construction noise and vibration and identifies that some impacts may occur at RPA and Wesley College, but that other sensitive land uses will not experience noise or vibration levels more than relevant construction noise and vibration targets. The impacts at RPA and Wesley College will be managed through the implementation of a Construction Noise & Vibration Management Plan based on the recommendations contained within Section 5.3 of the Acoustic Report at Appendix B. The Report includes the current design information and selections for the proposed rooftop plant. The site will operate in compliance with the INP criteria at the nearest noise sensitive land uses (RPA and Wesley College) subject to adopting the recommendations contained within Section 6.3 of the Acoustic Report at Appendix B.
Hazards & Risks **4.** Provide detailed information on the dangerous goods proposed to be stored or handled on the site, including clear indication of their class, quantity and location.	The applicant is currently resolving the particulars/specifications of dangerous goods to be stored/handled on site with the University's various user groups. Planning is well underway and a comprehensive report detailing the classes, quantities and locations of dangerous goods will be provided to NSW DPE once available (in the coming weeks).
Other **5.** Detail the quantum of gross floor area of the Blackburn Building.	The internal GFA of Blackburn building is 11,260 m^2 The Blackburn building houses an existing population of 240 staff.
6. Provide a breakdown of staff and students to be accommodated in the building from the three faculties/schools.	Proposed Staff/Students in Susan Wakil Health Precinct Stage 1 (SWH1) building will accommodate a total of 683 staff and 1,752 students. Of this projected SWH1 building population:

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
DPE Key Issue	**University Project Response**
	• 100 staff and 474 students will be relocated from the University's **Faculty of Nursing and Midwifery at the University's Mallet Street building at Camperdown**. This site already forms part of the University's Camperdown campus (as clearly defined by the Campus Improvement Program – SSD 13_6123) and all Faculty staff and students regularly use various buildings and attend lectures and educational establishment functions within the whole Camperdown campus. Consequently, this relocation does not represent a net increase of staff or students to the Camperdown campus. • 22 staff and 0 students will be relocated from the University's **Central Clinical School (CCS) located at the Royal Prince Alfred Hospital, Camperdown**. This site already forms part of the Camperdown suburb and co-locates with the University's Camperdown campus. All CCS staff and students regularly use various buildings and attend lectures and educational establishment functions within the whole Camperdown campus. Consequently, this relocation does not represent a net increase of staff or students to the Camperdown campus. • 7 staff and 0 students will be relocated from the University's **Central Education Support (CCS) located Level 3, the Box Factory on Ross Str, Camperdown**. This site already forms part of the suburb and co-locates with the University's Camperdown campus. All CES staff and students regularly use various buildings and attend lectures and educational establishment functions within the whole Camperdown campus. Consequently, this relocation does not represent a net increase of staff or students to the Camperdown campus. • 555 staff and 1,278 undergraduate students will relocate from **Cumberland campus at Lidcombe**. Notwithstanding, of this population, 173 staff and 192 students already regularly use various buildings and attend lectures and educational establishment functions within the Camperdown campus. Consequently, the net relocation from Cumberland to Camperdown campus is only 382 staff and 1,086 students. The existing **Blackburn building** (which will be demolished and replaced by the new SWH1 building) has a current population of 240 staff and 483 students. **Consequently, the net population increase to the SWH1 building and the Camperdown campus will be 142 staff and 603 students.**
7. In accordance with condition B18 of the approved Campus Improvement Program (CIP), all bicycle parking and associated end-of-trip facilities are to be provided in accordance with the City of Sydney's policies and controls.	Requirements for onsite bicycle parking for individual buildings are guided by the Sydney DCP (SDCP 2012) clause 3.11.3, Table 3.5, which requires one bicycle space each for every 10 students and 10 staff respectively. The projected population of the proposed building is 683 staff and 1752 students, meaning the following bike parking and end of trip facilities are required per the SDCP 2012:

SSD 16_7974 – SUSAN WAKIL HEALTH PRECINCT – BUILDING STAGE 1	
DPE KEY ISSUE	**UNIVERSITY PROJECT RESPONSE**

	Bicycle Parking	Lockers	Showers
Staff	69 Required 69 Provided	69 Required 72 Provided	4 Required 7 Provided
Students	176 Required 176 Provided	176 Required 184 Provided	9 Required 18 Provided

As demonstrated, the proposal (as amended), is compliant with the City of Sydney's DCP controls.

Notwithstanding, the University's Sustainable Transport and Mobility Plan (STAMP), which integrates the campus' mobility provision as a whole, identifies some 1,700 bicycle spaces, 146 showers and 422 lockers available throughout the campus. A copy of the STAMP was included within the SSDA submission (Appendix AA of the EIS document).

2. University of Sydney Response to Government Architect's Office

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
GAO Key Issue	**University Project Response**
Alterative Design Excellence Process **1.** We are satisfied that a suitable Alternative Design Excellence Process has been undertaken thus far on this project.	Noted
2. More detailed information to be provided on Stages 2 & 3 including: • Integration with Stage 1, buildings, streets, lanes and public domain	A conceptual Masterplan for the Health Precinct was prepared as part of the Architectural Design Competition process. This led to the development of the Upper Wakil Garden being considered as a main focal point for all three stages. Connections to RPA and Charles Perkins Centre have been anticipated by direct entry points to the West and North. Future circulation and connections to the broader campus have been considered as far as possible, with final designs of Stages 2 and 3 subject of future SSD application(s). Notwithstanding BLP has prepared diagrams at Appendix H which describe the intended connections (conceptually) to Stages 2 and 3.
• Connections (temporary and permanent) with the university (including Grandstand if necessary) and RPA including circulation, way finding, services, spatial planning and façade finishes.	As above.
• Confirmation that Competition wining architect will be retained is a lead design role for duration of the project to Occupation Certificate.	The University confirms that BLP in association with DS+R will be retained as the design architects until construction completion.
• Test fit of furniture for typical spaces	Design documentation has not progressed to a stage where a test fit of typical furniture can be provided to the DPE for comment. Test fit documentation is to be submitted as part of the Design Development phase of project which will occur towards the middle of 2018. The DERP will have a role in the event a modification is required that involves significant change to external facades
Circulation studies to address issues raised by the Jury.	Please refer to Appendix E Design Excellence Review Panel as submitted as part of the of the SSD-7974 submission. Section 4 Design Competition Jury Design Excellence Issues- Ref 1 identifies the resolution of the circulation studies through the increased circulation corridors and stair widths.
• A physical materials board to be supplied with material shown in proportions intended to be used.	A physical materials board is supplied together with this response.
• Details on section and elevations showing materials and detailing. Cladding details to be provided at 1:20 scale.	Conceptual cladding details at 1:20 are included in Appendix I.
• Details on podium planters for trees to support the creation of a green Lower & Upper Wakil garden canopy.	Details on podium planters for trees are included in Appendix D.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
GAO Key Issue	**University Project Response**
• Comprehensive flooding analysis to demonstrate building performance during 1:100 year peak flood event.	A flood model and report has been prepared by GRC Hydro, dated 18 December 2017 and is included at Appendix L. The model and report investigated and discussed the impact of the development in the surrounding area and the downstream catchment. The report also investigated the net change in floodwater storage and impact downstream. In the report, on page 6, Image 4 shows the flood level at multiple locations around the building. The report advises that the proposed development provides an additional 1987m3 of flood storage volume. The net effect of the additional flood storage is a general reduction in the flood depth downstream. The detail is shown in Figure 1 of the report's Appendix.
• Details on architectural and landscaping design impacts of the flooding strategy.	The landscape design and architecture has been designed to incorporate the flooding strategy. Ingress of flood waters will be to the south of the building below the carpark. This will be treated as open bars for this stage. This ingress point will be superseded in future stages by an entry point off Gadigal Lane, which will be designed as part of Stage 2/3. The egress of flood water has been considered as part of the Landscape response. Refer to Detail 04 in section 6.2 of Appendix D which shows the discharge grate allowing water to flow out from beneath the building along with the surcharge grate in the event the discharge becomes blocked. The egress of flood water is integrated as part landscape seating. Refer to Appendix D Landscape drawings for detail.
• Details on Wingara Mura strategy including interpretation of the creek line and relationship to broader public art strategy.	The public art strategy for the building (and Health Precinct) is subject to a wider strategy being developed by the University. Details of the *Wingara Mura* and public art strategy can be submitted to NSW DPE via a condition of consent for approval prior to OC of the completed building.
• Details on proposed building signage.	Refer to updated Architectural elevations included in Appendix A. Urbis have prepared a SEPP 64 assessment for signage, which is included at Appendix G.
• A report responding to Jury comments 1-10, including Jury endorsement.	Due to Jury availability, formal endorsement cannot be provided until late January. Endorsement to be provided to the DPE. *The DERP were not available for a review meeting until late January. The design team response to DERP comments is ongoing and will be submitted to the department when finalised – expected late February.*
3. Additional Concerns requiring attention • Provide specific details (1:10 – 1:20) on qualities of the **podium façade** including, but not limited to, materials, fixings, colour, form, window cleaning, and resistance to animal habitation, solar load attenuation, and views out from windows to adjoining spaces. Rationale: the podium façade will dominate adjacent pathways and open spaces; these details are necessary to address detailing, activation and design excellence.	Due the conceptual nature of the design, some of the requested information is not available at this time and will be resolved during the Design Development phase of the project. Conceptual façade and cladding details at 1:20 have been included in Appendix I.
• Provide specific details (1:10 – 1:20) on qualities of the **upper podium façade** including, but not limited to, materials, fixings, colour, form, window cleaning, and resistance to animal habitation, solar load attenuation, and	As above.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
GAO Key Issue	**University Project Response**
views out from windows to adjoining spaces. Rationale: the upper podium façade will dominate the architectural expression and performance of the building; these details are necessary to address design excellence.	
• Contractor to provide **1:1 Façade mock-up** of both podium and floating façade elements.	The proponent is willing to accept a condition requiring façade details be submitted prior to issue of a CC for the façade.
• ESD: Provide evidence that the building will not suffer excessive heat load in warmer months, or excessive heat loss in cooler months.	The building facade systems have been designed to achieve high levels of energy efficiency and thermal comfort performance. Preliminary dynamic thermal energy modelling conducted to date indicates that the facade energy performance will significantly exceed the minimum performance requirements of Part J of the National Construction Code (NCC). Refer to Appendix F. The modelling has also been used to assess thermal comfort risks of excessive heat loss or gain. Critical zones within the building were identified and modelling using the standard method for thermal comfort, the Predicted Mean Vote (PMV). Achieving a PMV between +/- 1 for 98% of occupied hours represents high thermal comfort, while a result of +/- 0.5 represents very high thermal comfort. The attached correspondence shows that all of the critical zones modelled achieve a very high level of thermal comfort of PMV +/- 0.5 for over 98% of the occupied hours. This therefore provides evidence that the building will not suffer excessive heat load in warmer months, or excessive heat loss in cooler months.
• Solar glare: Provide details on how this will be mitigated.	Solar glare will be mitigated by internal blinds to façade areas adjacent to regularly occupied spaces.
• Landscape plan: Provide details on: - Proportionate and adequate depths of planters - Retention strategies for retained trees - Soil depth - Soil quality - Irrigation - Drainage - On-going care and maintenance.	• Proportionate and adequate depths of planters – refer to landscape details in Section 6 of Appendix D – Revised Landscaping Plans. • Retention strategies for retained trees – refer to the Arborist report in the original SSDA submission. • Soil depth – refer to Soil Diagram on Section 3.7 of Appendix D. • Soil quality – will be specified as part of the CC documentation process. • Irrigation – an automatic watering system will be installed throughout the landscape area. Planted area to have a drip irrigation system, whilst turfed areas to have spray irrigation as illustrated in Section 3.8 of Appendix D. • Drainage – to be finalised during CC documentation process in conjunction with the Civil engineer. • On-going care and maintenance – care and maintenance regime to be as per the University Campus standard care and maintenance procedures.

3. University of Sydney Response to City of Sydney (CoS)

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
1. Section 94 Contributions: The CoS does not agree to the university's request for exemption or to reduce the amount of Section 94 Contribution applicable. The proposal seeks to permanently relocate students and staff from three existing campus', including one from outside the Local Government Area. CoS therefore seeks an appropriate Section 94 Contribution. If a condition applying a Section 94 Contribution is not imposed, then the CoS objects to this proposal.	**The University seeks the Minister for Planning's exemption to the application of S94 Contributions for this project.** The CoS argues that the proposed SWH1 building seeks to permanently relocate students and staff from three exiting campus' including one from outside the Sydney LGA. **Population:** The SSD Development Application for the SWH1 building declares that the new building will accommodate a total of **1,752 students and 683 staff**. Page 4-5 of this RtS report (in response to DPE) details the staff and student population intended to be accommodated within SWH1 building and the Camperdown campus. By factoring staff and student populations already attending the Camperdown campus, including the removal of staff and students from the existing Blackburn building (to be demolished and replaced by SWH1), the project will result in a net increase to the Camperdown campus of **142 staff and 603 students.** The University notes that the Sydney Development Contributions Plan 2015 (Sydney Contributions Plan) does not include students in the calculation of workforce as illustrated by: ***Table 7: Workforce occupancy rates – other development*** **"Infrastructure community** Tertiary Institutions – universities [33] [33] Students are not included in the workforce or development population when calculating the contribution. " **The University's shared interest:** The University acknowledges that the CoS needs to meet the demand for local infrastructure and provide public amenities and public services within the local area and that, to enable it do so, it makes and applies Contributions Plans. In 2016, the University attracted over 51,000 enrolments, employed over 7,500 permanent staff, and generated over 5,000 jobs in the areas of construction, facilities maintenance and services. The University is a significant employment node and destination, as well as a future employment provider through its qualified students. The University's Camperdown campus covers 33 hectares and wholly occupies the postcode of NSW 2006. The University has a shared interest with the CoS in the objectives to improve the amenities and provide adequate and appropriate infrastructure for use by the local community. **Statutory Context:** Under clause 226(1) of the *Environmental Planning & Assessment Regulation 2000*, Australian universities (within the meaning of the *Higher Education Act 2001*) are prescribed to be the Crown for the purposes of Division 4 of Part 4 of the EP&A Act which relates to Crown developments. The University is listed as an Australian university in Schedule

SSD 16_7974 – SUSAN WAKIL HEALTH PRECINCT – BUILDING STAGE 1	
COS ISSUE	**UNIVERSITY OF SYDNEY PROJECT RESPONSE**
	1 of the *Higher Education Act 2001*. Consequently, this SSD application is a "Crown development application" to which Division 4 of Part 4 of the EP&A Act applies. This affords the University with special provisions to ensure that developments are not unreasonably refused or conditionally approved. This extends to conditions levying Section 94 Contributions which the CoS may not impose without the University's or the Minister's consent. **Reasons for University exemption from Section 94 Contributions** In addition to the statutory reasoning provided above, there is considerable justification for the Minister for Planning to exempt the application of the Section 94 Contributions Plans for the proposed development. The underlying purpose of Section 94 t Contributions is to meet the costs of local public infrastructure needed to support private development. The University considers the levying of Section 94 Contributions for University developments to be unreasonable, particularly given the past, current and planned future works and services the University contributes that have a material public benefit, not only to the University's students and staff, but also to the wider community. The University argues that development it undertakes should not be classified as private development because teaching and research facilities, libraries, laboratories, student accommodation, retail and professional services, recreational facilities, open space, and all other associated infrastructure, are integral to the University's broader educational and research functions, which are inherently public in nature. 1. **Sydney Contributions Plan:** The University's Camperdown campus is situated with the Sydney Contributions Plan's *South Precinct*. The Sydney Contributions Plan includes the following description: > The South precinct contains three villages: Redfern Street, King Street and Green Square. The South precinct contains one (1) high-quality integrated facility in the Redfern Street Village that meets the benchmark size. The King Street and Green Square Villages do not contain an integrated facility. Therefore, the Redfern Street Village is adequately provided for while the King Street and Green Square Villages are underprovided for. > The new population in the South precinct will place additional demand on the existing facility and generate demand for two new facilities: one the Green Square Village and one in the King Street Village. As there are no existing facilities in these villages, the new population's demand can only be met by providing new facilities. > The integrated facilities are needed to serve the rapidly growing needs of all age groups, particularly the 18–24, 25–34, 35–49 and 60–84 year old age groups, whose populations are forecast to almost double in the South precinct. This includes university students, young adults, and families with young children living and working in the inner city, and seniors. The University highlights that the Sydney Contributions Plan's South Precinct does NOT address or include the village of the University's Camperdown campus, which is located at least 1.7 kilometres northwest from the nearest Sydney Contributions Plan village of Redfern. This campus represents a 33 hectare site and a total suburb post code. The open

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
	space, footpaths/roads, infrastructure and community facilities provided within the Camperdown campus are entirely provided and financed through the University's own budget and services. The University argues that students and staff located on the Camperdown campus will not result in additional demand on infrastructure within the "villages" of Green Square, King Street and Redfern. **2. Excluded development:** Section 1.3 of the Sydney Contributions Plan lists development that is excluded from Section 94 Contributions including: • *9. Government Schools (established under the Education Act 1900 by the Minister for education).* While the University does not strictly meet the definition of a "school" it nevertheless performs similar educational services at a tertiary level. Furthermore, the University is established under the *Education Act 1900*. Consequently, the University argues that the same exclusion should apply to the universities. **3. Material public benefit from the Susan Wakil Health Precinct 1 (SWH1):** A consent authority may accept "a *material public benefit (other than the dedication of land or the payment of a monetary contribution) in part or full satisfaction of a [development contributions condition]".* The DPE's *Development Contributions Practice Note 2005* (Practice Note) sets guidelines to follow when establishing contributions plans in relation to both material public benefit and works in kind. The Practice Note describes a material public benefit as either being work undertaken that is specified in the schedule of a development contributions plan (i.e. works in kind) or the provision of public amenities and services that are not in any contributions plan. The proposed SWH1 building is located within the heart of the Camperdown campus, and will provide a vast range of community benefits, and related facilities, that the general public will use in lieu of Council facilities and other local facilities. These include: • A 2,000m^2 Health Clinic specifically designed for general public access and use; • A western connection to the adjoining Royal Prince Alfred Hospital for access and use by the general public, the University and health practitioners; • $15 million budget dedicated to the upgrade of footpaths, infrastructure, stormwater and sewer services; • 4,000m^2 new open space accessible and available for general public use; and • Lecture Theatres which will accommodate external educational events open to the general public. **4. Traffic & Transport:** The proposed development will have limited burden on roads because of existing established campus road infrastructure, as well as the site's proximity to key public transport hubs along City, Missenden, and Parramatta Roads which ensures that

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
	there is a reduced reliance on motor vehicle usage. The University also provides a free University shuttle bus service to transport people to and from the University campuses to Redfern Station. Sufficient bicycle storage and end-of-trip facilities (compliant with Sydney DCP2012) are proposed within the basement of the SWH1 building to encourage the use of active transport. Students will also have access to the numerous existing bicycle parking facilities throughout the Camperdown campus. **5. University provision of local infrastructure and community benefits as material public benefits:** The University has a public charter and its Camperdown campus is open to the public as an accessible and permeable precinct which provides a number of material public benefits to the local and broader community over and above its core focus on education and research. These benefits include significant areas of open space, sport and recreational facilities (including an aquatic centre), libraries, child care centres, medical services, retail facilities, professional services and large areas of open space, all of which are available for use by the general public. The University also maintains and upgrades the roads, pedestrian areas and stormwater drainage systems within and near its boundaries. These are analogous to the public amenities and services which the CoS provides for its local government area. **6. University financial commitments:** The University's commitment to the provision of local infrastructure is evident by the significant material public benefits provided by the University to Camperdown and Darlington. This includes over $100 million of capital investment since 2012 towards campus open space, stormwater infrastructure, traffic and pedestrian upgrades, and heritage/conservations works, in addition to the numerous other facilities and services offered by the University to the public. None of these facilities and services have been contributed to by the CoS. Some of the University's committed/funded campus wide infrastructure works and facilities include the following which benefit and/or are directly assessable to the local community are otherwise not required to be provided or funded by the State or Local Government: – Road works and upgrades and public domain works - $4.5M. – Stormwater Infrastructure works - $5.75M. – Publicly-accessible sporting facilities ($28M), including 10 outdoor venues, 5 indoor venues, the Darlington Sports and Aquatic extension and the No.2 Grandstand and associated facilities. Furthermore, the University continues to provide public access to many facilities and events, including 3 x child care centres, 9 x libraries, 3 x museums and a mix of retail and professional services outlets. A further $66M of capital investment is committed to the new Chau Chak Wing Museum on the Camperdown campus, again accessible to the broader community (SSD 16_7894).

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
	7. **University not-for-profit Status:** The University is a not-for profit public charity independently regulated by the Australian Charities and Not-for-profits Commission, specialising in tertiary education and research pedagogy. Universities are listed by the Australian Tax Office (ATO) as registered charities and 'the advancement of education' is a recognised category of charitable purposes under common law. Universities also continually provide, and maintain/upgrade, a wide range of social, cultural, and recreational public benefits and contribute to both State and Local Government planning justifications within which they sit, and which are available/ accessible, to the surrounding area's wider resident and worker populations. 8. **The University as a public authority/not a private developer:** The underlying purpose of Section 94 Contributions is to meet the costs of local public infrastructure needed to support private development. The University argues that development it undertakes should not be classified as private development because teaching and research facilities, libraries, laboratories, student accommodation, retail and professional services, recreational facilities, open space, and all other associated infrastructure, are integral to the University's broader educational and research functions which are inherently public in nature. Indeed, the University is prescribed as a public authority for development that is permitted without consent under the *State Environmental Planning Policy (Infrastructure) 2007* and the *State Environmental Planning Policy (Educational Establishments & Child Care Facilities) 2017*. 9. **The impact of Section 94 Contributions upon universities:** The levying of Section 94 Contributions on projects that are funded by external sources (including Commonwealth Government grants) simply diverts a portion of funds for educational purposes to local services, often doing so without a direct nexus to the development. Such planned works, services and provision of facilities may no longer be viable should the Sydney Contributions Plan be fully applied. The University considers this to be unreasonable, particularly given the past, current and planned future works and services the University contributes that have a material public benefit, not only to the University's students and staff, but also to the wider community. It is therefore unreasonable to require the University to pay Section 94 Contributions which will ultimately impact on the amount the University can spend on its core business of teaching and research, as well as public infrastructure and community facilities. Paying Section 94 Contributions will also significantly reduce the affordability of the proposed student accommodation as part of this development. 10. **Precedent of recent major project determinations:** The University highlights the following recent projects proposed by the University on the Camperdown campus, for which Section 94 Contributions were not sought by the CoS or the Minister for Planning: • Charles Perkins Centre (MP 09_0051): construction of a new 8 level Centre for

SSD 16_7974 – SUSAN WAKIL HEALTH PRECINCT – BUILDING STAGE 1	
COS ISSUE	**UNIVERSITY OF SYDNEY PROJECT RESPONSE**
	Obesity, Diabetes and Cardiovascular Disease building (45,000m^2). • Australian Institute of Nanoscience (SSD 5087_2011): construction of a new 4 level Nanoscience building (10,540m^2). • Faculty of Arts & Social Sciences (SSD 7081): Construction of a 6 storey Arts & Social Science education and training building and public domain works (7,200 m^2) • F23 Administrative building (SSDD 7055): Construction of a 5 storey staff and administrative building and public domain works (9,800 m^2). • LEES1 Science building (SSD 7054): Construction of an 8 storey Science research and teaching facility (9,800 m^2). • Chau Chak Wing Museum building (SSD 7894): Construction of a 5 storey museum (7,700 m^2), subject to endorsed draft SSD conditions. These decisions were supported by the fact that University populations place lesser demand on Council community facilities as the University provides its own facilities and infrastructure specifically for the University and visiting populations. **11. Planning Circular D6:** The Department of Urban Affairs Planning's Circular D6 *Crown Development Applications and Conditions of Consent* specifically provides that where the applicant is a Crown authority (as applies to The University of Sydney) and the development is for Educational Services, then no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades. The D6 Circular does address levies collected for drainage infrastructure. However, the new Health Stage 1 building will not result in any additional burden on the City's drainage infrastructure. Furthermore all drainage infrastructure from the new development will be managed and financed by the university on campus. **Conclusion:** For the reasons set out above, it is considered there are more than adequate grounds for the Minister for Planning to fully exempt the proposed SWH1 building from the application of Section 94 Contributions. **Alternatives to payment of Section 94 Contributions – Carrying out public works comprising material public benefits** Section 2.4 of Sydney Contributions Plan specifies alternatives to the payment of a monetary Section 94 Contribution levy including providing a material public benefit. As outlined in Items 3of this RtS section (above), the SWH1 building development proposal incorporates various public benefits to be provided by the University. The public works proposed will not only benefit the University's students and staff, but also the local community and general public more broadly. If the Minister does not grant the exemption from Section 94 Contributions as requested in this

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
	section, it is open to the consent authority to compel the University to carry out these public works by including specific conditions of consent in the SSD application determination. The University is also willing to enter into a voluntary planning agreement with the Minister under section 93F of the EP&A Act, the terms of which would oblige the University to carry out these public works.
2. Landscaping and Trees • It is considered that a significant amount of design development is required before these plans could be described as 'detailed landscape plans'.	Refer to the Landscape Plans (separate from the Design Report) at Appendix D which show additional details.
• The indicative sections (particularly 'Lower Wakil Sections A & B') illustrate insufficient soil depth and volume to support the large species proposed. Mounding to achieve a minimum depth at the trunk is an unacceptable approach for planting of this scale on podium, and the minimum substrate depth (800-1000mm) must be achieved for the majority of all planters. The planter edge detail should be revised to accommodate this.	Additional information and sections have been provided to illustrate the soil depth. We note that while some of the nominated species could in fact grow to a larger size in deeper soil, it is the intent of the design team that the proposed growing conditions will reduce the capacity of the tree planting for a better landscape outcome.
• The proposal indicates that only three trees are to be retained. In order to ensure these trees remain viable, it is recommended that the proposal adopts all of the recommendations stated within the plans, Arborist's Report and the Arboricultural Impact Assessment, including tree protection specifications.	Noted.
• The landscape concept diagrams highlight several areas on both levels that are designed for social interaction. However, the design of the raised planter/seating edges in these spaces is generally linear, and will only support interaction of small groups of 2-3 people. The spaces, in particular the Lower Wakil Garden, appear to have been designed more as a thoroughfare than a social space. It is recommended that the planters be redesigned to incorporate a more detailed, articulated edge that facilitates interaction for groups of people, particularly in the Upper Wakil Garden where space is more generous.	There is ample opportunity for large groups of student interaction to occur across the various turfed areas of the landscaped area. This area allows large groups of students to congregate also activating the northern aspect of the site. The linear seating was intended for interaction of smaller student groups; however, the design team have identified opportunities for the potential inclusion of loose tables and chairs adjacent to the planter walls, or fixed individual block seating also adjacent to the planter walls. This will be explored during the design development phase of the project.
• It is our understanding that during the pre-lodgement meeting, the concept of highlighting the former creek line in the landscape was described as part of the Wingara Mura strategy. This concept has been significantly compromised, and now consists of a 'Water Skim' (shallow, transient water feature) on the upper level, and a very small cascading water wall on the lower level. The two are connected by discontinued sections of 'Wingara Mura Paving'- details of which are unclear. Given the importance of the Wingara Mura strategy in the university campus improvements, this concept should be strengthened to form a genuine, visible interpretation of culture and landscape heritage rather than a tokenistic addition of common landscape elements.	The public art strategy for the building (and Health Precinct) is subject to a wider strategy being developed by the University of Sydney. Details of the *Wingara Mura* and public art strategy can be submitted to NSW DPE via a condition of consent for approval prior to OC of the completed building.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
• Although this application only deals in detail with Stage 1 of the Health Precinct, it does present a masterplan for the precinct as a whole. The precinct interfaces with Gadigal Lane, directly adjacent to St Andrew's College. Although currently in poor condition, this lane has the potential to form a strong pedestrian connection from the main campus to St Andrews, the Health Precinct and RPA hospital. The masterplan does little to improve the condition of the lane, nor does it adequately ensure overlooking, activation and adequate passive surveillance of the lane. This must be addressed: if not in this current submission then in the submission for the relevant phase.	Gadigal Lane will be addressed in the future stages. We concur that the lane is an important connector between St Andrew's, RPA and the Health Precinct. It will also become an important service point and car access route to the extended Health Precinct. The eastern section will have direct connection to Upper Wakil Garden. Hence it will become a busy shared way with extensive activity and be provided with virtually constant passive surveillance. The detail of this will further developed as Health Precinct Stages 2 and 3 are progressed.
3. Flood Levels • The submitted Civil Design report has recommended a building finished floor level at RL 23m AHD at the south east corner of the site based on 1% AEP level however, the 1% AEP or PMF levels around the other areas of the subject development have not been considered. A more comprehensive flood assessment should be completed in order to determine the flooding behaviour around the subject development site including the basement.	In the flood report produced by GRC Hydro in Appendix L, image 4 shows the flood level for 1% AEP at multiple locations around the building. Figures 2 and 3 of the Appendix in the GRC Hydro report show that the proposed development only increases hazard locally around the proposed new building and it does not result in an increase in flood hazard elsewhere.
4. ESD • Any approval should make reference to the Umow Lai Sustainability Statement for the University of Sydney Health Precinct – Stage 1 and the application of the University of Sydney's Sustainability Framework to ensure Environmental Sustainable Design Commitments are delivered in full at construction and building commissioning stages. • The City advises that in order to minimise off-site biodiversity impacts, a clear commitment to all hardwood timbers (including timber indicated in landscape plans), being FSC-certified and preferably Australia-sourced is important. If approved, an appropriate condition of consent should be imposed specifying certified timber.	Agreed. Agreed.
5. Heritage Interpretation • Detailed design and development of the interpretation media, including specific locations and content, is to be prepared with input from the applicant's heritage consultant in accordance with the Heritage Interpretation Strategy and is to be submitted with, and completed at each stage of development of the Health Precinct.	The Applicant is willing to accept a standard condition of consent requiring the preparation of design details for the Heritage Interpretation Plan, per previous SSD DA conditions imposed by NSW DPE on other USYD projects. The condition proposed by NSW OEH below (requiring detailed designs of heritage interpretation to be resolved prior to OC) is considered reasonable and appropriate.
6. Oval edge Activation • The podium facade at the northern elevation of the building is relatively inactive. CoS request that the university address the opportunity to activate this edge at ground level and provide a direct relationship between the breakout/ common areas, gym uses and the outdoors.	Regarding activation of the Oval edge, the University notes the following: • The ground level north façade is occupied by specialist teaching spaces which enjoy the benefit of the landscape aspect across the oval. There are a series of teaching breakout spaces that occupy the north-eastern section at ground level. These spaces have extensive glazing that provides direct visual connection across the landscape forecourt to the oval. The University considers this an appropriate use in this location. • To the west of these spaces is a major northern entry that provides direct access to the building from the Charles Perkins Centre. It is expected that there will significant

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
CoS Issue	**University of Sydney Project Response**
	pedestrian activity between these two buildings, helping to activate the landscape forecourt.
7. Colours, Materials, Finishes • Insufficient details provided (e.g. proposed materials of fins to slab edges). A detailed schedule of materials, colours and finishes is required and should correspond to coloured elevations so it is clear where the details specified are to be located on the building	A physical materials board is supplied together with this response.
8. Transport • CoS prefers that less or no cars be provided by this development • The proposed 88 student bicycle parking spaces significantly underestimates the cycling demands of the site. At a minimum, 1 space per 10 students is required, which equates to 264 spaces. • The proposed End of Trip Facilities appear to fall short of DCP requirements with respect to provision of personal lockers. It is recommended that staff and student bicycle parking facilities are required to meet the latest Australian Standards.	Car parking proposed is provided in accordance CIP approval **Disagree**: The new building will carter for a student population of 1,752, and not 2,640 as concluded by the Council. The new building will also cater for a staff population of 683 persons. The total population of the building is therefore projected to be 2,435 persons. The new building will comply with the 1:10 bicycle spaces for staff and students in accordance with the DCP guidelines (Tabl\e 3.5). **Disagree**: Refer to SSD compliance with the DCP as detailed under pages 3-4 of this RtS report on the same issue (response to Dept. Planning issues)
9. Information Not provided • Details on building signage • Details on public art incorporation into the building and surrounding public domain	Refer to updated Architectural elevations included in Appendix A Urbis have prepared a SEPP 64 assessment for signage, which is included at Appendix G.

4. University of Sydney Response to NSW Office of Environment & Heritage

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
OEH Issue	**University of Sydney Project Response**
1. No comments are, therefore, provided on the proposed built envelope, scale and footprint of the development as it will be fully contained within the previously approved SSD 6123 envelopes.	Noted
2. The Heritage Division has reviewed the assessment provided by the SoHI and raises no objection to the proposed development.	Noted
3. SSD 7974 includes reports, Archival Photographic Heritage Recording Blackburn Building, University of Sydney, dated August-September 2017 prepared by Heritage photos Pty Ltd and a Heritage Interpretation Strategy, dated 31 August 2017, prepared by Urbis, to satisfy Conditions of Consent for previously approved applications. These reports are mitigation measures for the demolition of the Blackburn Building (1931-33). These documents are considered to adequately meet the requirements of the SSD conditions.	Noted
4. It is noted that the intent of the Interpretation Strategy is to inform and guide interpretation planning and further work is required to develop and implement interpretation as part of the project. It is, therefore, recommended that if the project is approved, DPE should include the following conditions regarding interpretation: *A Heritage Interpretation Plan with implementation details and designs, based on the Heritage Interpretation Strategy Blackburn Building University of Sydney, dated 31 August 2017 prepared by Urbis is to be submitted for assessment and approval.* *The recommendations of this Heritage Interpretation Plan, once approved, must be implemented, to the satisfaction of DPE, prior to the issue of an Occupation Certificate or the commencement of the use, whichever is earlier.*	Noted
5. The SoHI section 6.6 ‘Potential Historical Archaeology' has considered archaeological work and reports over the past decade and notes that the GCMP concludes “the potential for archaeology, either Aboriginal or European, is considered to be low.” (GCMP, p.81). The site for the SWAOHB was heavily excavated for the construction of the Blackburn Building (1931-33) and additional ground disturbance occurred when the adjacent Bosch buildings and forecourt were built in the 1960s. It is concluded that the historic archaeology potential of the site is Low, due to the site having been heavily disturbed.	Noted

5. University of Sydney Response to Transport for NSW

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
TfNSW Issue	**University of Sydney Project Response**
Swept Path Analysis • The proposed access arrangement requires service vehicles to straddle along Western Avenue to make the turns (ingress/egress) to the site and the loading dock. This proposed access arrangement would not be able to accommodate simultaneous vehicle movements into the site for general traffic and service vehicles, which carries a safety risk for pedestrians as the location of the straddling would occur near a pedestrian crossing; and • Sheet 6 of 7 of the swept path drawing shows swept paths for 8.8m and 12.5m vehicles using the area near the proposed drop off zone to turn around. The purpose of these vehicles is not clear, including how these movements would be achieved within the proposed kerb alignment. <u>Recommendation:</u> A Road Safety Audit (RSA) should be undertaken by a TfNSW accredited road safety auditor. The design drawings should be reviewed based on the results of the RSA.	A 12.5m heavy rigid vehicle is currently required to cross the centreline of Western Avenue in order to gain access to the site access this driveway for the existing use. Therefore, this is currently an existing condition in order to allow vehicles of this size to gain access to the site. This is replicated for the proposed development. Refer to sheet 2 and 3 of Appendix K. This would become less of an issue in the future stages if Western Ave north were to be terminated. Sheet 6 demonstrates the requirement for a fire vehicle to turnaround following the closure of Western Ave north. The proposed drop-off area is proposed to be constructed in a way that allows the service vehicle movement to be possible (i.e. no physical obstructions to prevent this from occurring). The fire brigade has two vehicles (12.5m heavy rigid vehicle and an 8.8m medium rigid vehicle). Both swept paths have been provided for information, and show that the medium rigid vehicle is acceptable in this location. The University requests the completion of a RSA as a SSD Condition of Consent.
Construction Pedestrian and Traffic Management Plan – Recommendations: TfNSW requests that the applicant be conditioned to the following: • Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with CBD Coordination Office within TfNSW and Roads and Maritime Services. The CPTMP needs to specify, but not to be limited to, the following: o Location of the proposed work zone; o Haulage routes; o Construction vehicle access arrangements noting construction vehicle access primarily as a Left-in an Left-out (LILO) arrangement from Western Avenue/Carillion Avenue; o Construction vehicle access arrangements; o Proposed construction hours; o Estimated number of construction vehicle movements; o Construction program; o Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works; o Cumulative construction impacts of projects including projects within the University of Sydney precinct. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road	**Agree.** The University agrees to the TfNSW request and that this be applied as a consent condition to the satisfaction of the Certifying Authority.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
TfNSW Issue	**University of Sydney Project Response**
network; and o Proposed mitigation measures, should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP.	
• Submit a copy of the final plan to the City of Sydney, prior to the issue of any Construction Certificate.	Noted and agreed – subject to being issued as part of above ground CC.

6. University of Sydney Response to EPA Submission

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
EPA has identified the following site specific concerns with recommendations submitted for DPEs consideration:	
Construction phase ***Hazardous Materials and Soil Contamination*** **Recommendation 1** The proponent be required to investigate whether any sanitary plumbing and drainage serving Blackburn Building research laboratories and the dangerous goods store may have been contaminated by radioactive substances.	Works to, or the demolition of,, the Blackburn building are not included in this SSD application. Demolition of the Blackburn building including removal of in ground services has been approved underREF1-2017 approved on 14 February 2017. The REF was concluded to have satisfied the relevant Object of the *Environmental Planning & Assessment Act 1979* and the matters prescribed by Division 3, clauses 112 and 113 of that Act.
Recommendation 2 The proponent be required to investigate whether any underground petroleum storage system is associated with the emergency generator located in the northern courtyard of the Blackburn Building.	***See comment above (re REF approval)***
Recommendation 3 The proponent be required prior to commencing work to prepare and implement an appropriate procedure for identifying and dealing with unexpected finds of site contamination, including – (i) asbestos containing materials, (ii) lead-based paint, and (iii)PCBs.	***See comment above (re REF approval)***
Recommendation 4 The proponent be required to ensure that following demolition of any existing structures and in ground utilities further investigation be undertaken of soil contamination within the footprint of those structures and utilities prior to undertaking any construction.	***See SKerr comment above (re REF approval)***
Recommendation 5 The proponent be required to ensure processes outlined in *State Environmental Planning Policy 55 - Remediation of Land (SEPP55)* are followed in order to assess the suitability of the land and any remediation required in relation to the proposed use.	***See comment above (re REF approval)***
Recommendation 6 The proponent be required to report to the EPA any contamination identified during further investigation which contamination meets the triggers in the EPA Guidelines for the Duty to Report Contamination.	***See comment above (re REF approval)***
Recommendation 7 The proponent be required to satisfy the requirements of the Protection of the	***See comment above (re REF approval)***

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos wastes'.	
Recommendation 8 The proponent be required to consult with Safework NSW concerning the handling of any asbestos waste that may be encountered during the course of the project.	***See comment above (re REF approval)***
Noise and Vibration **Recommendation 9** The proponent be required to undertake background noise monitoring consistent with the guidance material provided in the New South Wales industrial Noise Policy.	Updated background noise monitoring has been conducted in accordance with the INP at the Royal Prince Alfred Hospital and St Andrew's College, to supplement the existing monitoring data included in the original SSDA Acoustic Report. This updated background noise monitoring is included in the updated Acoustic Report in Appendix B. The University notes that EPA has requested monitoring at Newtown North Public School (500 metres south of the site) and Childcare centre (400 metres south of the site). The University is of the view that, given the significant distance to these sites, monitoring conducted at St Andrew's College (and control of noise to this location) will adequately address these two sites.
Recommendation 10 The proponent be required to ensure all feasible and reasonable special noise mitigation and management measures are adopted to minimise noise and vibration impacts on Royal Prince Alfred Hospital, including – (i) planning every work site and work process and taking all such practicable measures as may be necessary to minimise movements that would activate audible reversing and movement alarms, (ii) selecting and locating access points and roads to the premises as far away as practicable from Royal Prince Alfred Hospital, (iii) using existing structures and topography to shield Royal Prince Alfred Hospital from noise impacts, (iv) locating and orienting plant and equipment that generates high noise levels, impulsive noise, intermittent noise, low-frequency noise or tonal noise, so as to minimise noise impacts on Royal Prince Alfred Hospital, (v) avoiding the simultaneous operation of two or more items of noisy plant or equipment close together and near Royal Prince Alfred Hospital, (vi) undertaking loading and unloading operations as far away as is practicable from Royal Prince Alfred Hospital, (vii) installing measures to dampen noise from impacts on metal trays, tipper bodies and waste bins/skips, (viii) processing and sorting demolition waste off site, and (ix) identifying and using least noisy construction methods, vehicles, plant and	Refer to updated Acoustic Report in Appendix B. This incorporates these measures into the proposed recommendations for control of construction noise and vibration. Note, also, that the Acoustic Report recommends that a Construction Noise and Vibration Management Plan be developed and implemented for the works. It is expected that the CNVMP would address the mitigation and management measures listed here as a minimum.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
equipment available for the type of work being undertaken, including using hydraulic shears (instead of highly intrusive noise generating implements such as rock breakers, rock hammers and concrete/demolition saws) to remove re-inforced concrete structural elements.	
Recommendation 11: The proponent be required to ensure that as far as practicable all demolition, site preparation, construction and construction-related work likely to be audible at any noise sensitive receivers, including residences and residential colleges, is undertaken only during the standard construction hours, being - (a) 7.00 am to 6.00 pm Monday to Friday, (b) 8.00 am to 1.00 pm Saturday, and (c) No work on Sundays or gazetted public holidays.	The University requests that the same hours of works be applied as those that were approved for the FASS project fronting Parramatta Rd, F23 and LEES1 projects fronting City Road, and comprising (proposed changes highlighted in red): a) 7.00 am to 6.00 pm Monday to Friday, b) 7:30 am and 3:30 pm Saturday, and c) No work on Sundays or gazetted public holidays.
Recommendation 12: The proponent be required to schedule intra-day 'respite periods' for construction activities identified in section 4.5 of the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers (i.e. surrounding residents).	**Agreed:** The University with support from the Acoustic consultant proposes that respite periods be developed as part of the detailed construction noise and vibration management plan to ensure that works are not unnecessarily restricted and the construction period protracted.
Recommendation 13: The proponent be required to ensure construction vehicles (including concrete agitator trucks) involved in demolition, site preparation, bulk earthworks, construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.	**Agreed and noted**: The University will comply with this condition.
Recommendation 14: The proponent be required to consider undertaking a safety risk assessment of site preparation, bulk earth works, construction and construction-related activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety.	**Disagree:** Due to the scale and scope of the project and the varying delivery vehicles the University does not believe that compliance with this proposed condition would be practical. All deliveries will be within the approved construction hours only. The site will be surrounded by 2100mm high solid hoarding. As part of the construction noise and vibration management plan, it is recommended that broadband beepers be installed where safe to do so and where practical management controls would allow. Delivery vehicles to this style of reverse alarm is impractical given that there is very limited control the contractor has over delivery company vehicles and noise management. In any case, the deliveries via Western Avenue will be a drive in/drive out type arrangement in which case reversing is unlikely and will be kept to an absolute minimum.
Dust control & Management **Recommendation15:** The proponent be required to: (a) minimise dust emissions on the site, and (b) Prevent dust emissions from the site.	**Agreed:** The University will comply with the proposed condition.
Waste Control & Management **Recommendation 16:** The proponent be required to ensure that: (1) all waste generated during the project is assessed, classified and managed in accordance with the "*Waste Classification Guidelines Part 1: Classifying Waste*" (Department of Environment Climate Change and Water, December 2009);	**Agreed:** The University will comply with the proposed condition.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
(2) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and (3) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.	
Recommendation 17: The proponent be required to ensure that concrete waste and rinse water are: (a) not disposed of on the development site, and (b) Prevented from entering waters, including any natural or artificial watercourse.	**Agreed:** The University will comply with the proposed condition.
Operational Phase **Recommendation 18:** The proponent be required to re-measure background noise levels, and measure representative noise levels for the area in accordance with the guidance material in the Industrial Noise Policy	**Agreed**: The University will comply with the proposed condition. Updated background noise monitoring has been conducted in accordance with the INP at the Royal Prince Alfred Hospital and St Andrew's College, to supplement the existing monitoring data included in the original SSDA Acoustic Report. This updated background noise monitoring is included in the updated Acoustic Report in Appendix B.
Recommendation 19: The proponent be required to: (a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially Royal Prince Alfred Hospital; (b) install the proposed emergency generator in an acoustically treated enclosure on the eastern side of the Stage 1 building and below roof level so positioned as to maximise any acoustic screening to Royal Prince Alfred Hospital that might be afforded by the Stage 1 building; (b) ensure mechanical plant and equipment, including any emergency generator, installed on the development site does not generate noise – (i) that exceeds 5 dBA above the rating background noise level (day, evening and night) measured at the western boundary of the development site, and (ii) that exhibits tonal or other annoying characteristics.	19(a): Refer to the updated SSDA Acoustic Report in Appendix B that includes the latest available design and selection of rooftop plant and other potential sources of environmental noise. 19(b): A back-up generator is no longer proposed and this has been removed from the updated SSDA Acoustic Report. 19(c): **Disagree.** All mechanical plant and equipment will be installed and operated to comply with the requirements of the NSW Industrial Noise Policy. Recommendation 19(c) requests compliance with noise limits that may be more stringent than that required under the INP.
Recommendation 20: The proponent be required to: (a) develop and implement an effective consultation and communication strategy (incorporating a responsive noise complaints management process) in respect	**Agreed:** These recommendations have been incorporated into the updated SSDA Acoustic Report in Appendix B.

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
of any operational noise impacts on Royal Prince Alfred Hospital; (b) undertake a noise monitoring program to 'ground truth' revised operational noise impact predictions on commissioning of mechanical plant and equipment, especially mechanical ventilation plant and equipment; (c) ensure that the following activities (where they are likely to be audible at Royal Prince Alfred Hospital) are only undertaken between the hours of 7.30 am to 6.00 pm Monday to Friday – (i) goods delivery; (ii) waste collection; (iii) emergency generator testing; and (iv) grounds maintenance involving the use powered equipment (including leaf blowers and lawn mowers).	
Air Quality **Recommendation 21:** The proponent be required to ensure that the emergency generator does not emit smoke and particulates likely to impact air quality at Royal Prince Alfred Hospital.	**N/A:** No back-up generator is proposed.
Waste Management **Recommendation 22:** The proponent be required to identify and implement feasible and reasonable opportunities for the re- use and recycling of waste, including food waste.	Please refer to Resource Recovery & Waste Management Standard revision 01 dated 30 September 2016.
Recommendation 23: The proponent be required to properly classify and manage clinical and related waste in accordance with the EPA's Waste Classification Guidelines.	**Noted**
Radiation Control Act and Regulation **Recommendation 24:** The proponent be required to apply for and obtain any necessary amendment to the 'radiation management licence' currently held under the name of the University of Sydney in respect of regulated material at the new facilities and the management and handling of any waste containing radioactive material.	**Noted**
Recommendation 25: The proponent be required to properly classify and manage solid and liquid wastes containing radionuclides in accordance with 'Part 3 Waste containing radioactive material, 2014' of the EPA's Waste Classification Guidelines.	**Noted**

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
EPA Issue	**University of Sydney Project Response**
Back-up Generator and Underground Petroleum Storage System **Recommendation 26:** The proponent be required to design, install and operate any underground petroleum storage system in accordance with the requirements of *the Protection of the Environment Operations (Underground Petroleum Storage System) Regulation 2014*.	No back-up generator proposed.

7. University of Sydney Response to Road & Maritime Services

SSD 16_7974 – SUSAN WAKIL HEALTH PRECINCT – BUILDING STAGE 1	
RMS Issue	**University of Sydney Project Response**
Roads and Maritime reviewed the submitted application and raises no objection to the proposed Health Precinct development at the University of Sydney at Camperdown Campus.	**Noted**

8. University of Sydney Response to St. Andrews College

SSD 16_7974 – Susan Wakil Health Precinct – Building Stage 1	
St. Andrews College Issue	**University of Sydney Project Response**
After considering the significant benefits that this development will provide to the University of Sydney students, the Royal Prince Alfred Hospital and the broader community, St Andrew's College expresses its support for the Development Application as submitted.	**Noted**