

Development consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As the Minister for Planning, I approve the development referred to in schedule 1, subject to the conditions in schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



The Hon Rob Stokes MP
Minister for Planning

Sydney *22nd December,* 2016

SCHEDULE 1

Application No.:	SSD 7054
Applicant:	The University of Sydney
Consent Authority:	Minister for Planning
Land:	The University of Sydney, Camperdown Campus (Part Lot 11 DP 1171806 and Part Lot 1 DP 1171804)
Development:	<p>Construction and use of an education and research building, known as "LEES 1", with works including:</p> <ul style="list-style-type: none">• minor demolition works to the interface with the adjoining Carslaw Building;• site preparation works, including excavation and removal of nine trees;• construction of an eight storey science research and teaching facility, with level 1 basement storage and loading dock facilities and level 8 building services;• construction of building connections to levels 1 and 2 of the adjoining Carslaw Building;• business identification and signage; and• ancillary services, civil and landscaping works, including a new substation in the Carslaw Building basement.

DEFINITIONS

Advisory Notes	Advisory information relating to the consent but do not form a part of this consent
Applicant	The University of Sydney
Application	The development application and the accompanying drawings, plans and documentation described in Condition A2.
BCA	Building Code of Australia
Construction	Any works, including earth and building works
Council	City of Sydney Council
Certification of Crown Building works	Certification under s109R of the EP&A Act
Certifying Authority	Means a person who is authorised by or under section 109D of the EP&A Act to issue a construction certificate under Part 4A of the EP&A Act; or in the case of Crown development, a person qualified to conduct a Certification of Crown Building works.
Department	Department of Planning and Environment or its successors
EIS	Environmental Impact Statement titled <i>Environmental Impact Statement, LEES 1 Site, Proposed scientific research and teaching facility</i> , prepared by Urbis Pty Ltd and dated May 2016.
EPA	Environment Protection Authority, or its successor
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation or Regulation	Environmental Planning and Assessment Regulation 2000
Minister	Minister for Planning, or nominee
OEH	Office of the Environment and Heritage, or its successor
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
Response to Submissions (RtS)	Response to Submissions report and accompanying documentation prepared by the University of Sydney and dated 20 September 2016.
RMS	Roads and Maritime Services Division, Department of Transport or its successor
Secretary	Secretary of the Department of Planning and Environment, or nominee/delegate
Sensitive receiver	Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church) and children's day care facility.
Subject Site	The University of Sydney, Camperdown Campus (Part Lot 11 DP 1171806 and Part Lot 1 DP 1171804).
Zone of Influence	The horizontal distance from the edge of the excavation site or any construction zone (including on-site haulage routes) to twice the maximum excavation depth.

SCHEDULE 2

A ADMINISTRATIVE CONDITIONS

Development Description

- A1. Except as amended by the conditions of this consent, development consent is granted only to carrying out the development as described in Schedule 1.

Development in Accordance with Plans and Documents

- A2. The Applicant must carry out the project in accordance with the conditions of consent and generally in accordance with the:
- a) State Significant Development Application SSD 7054;
 - b) EIS, except where amended by the RtS;
 - c) The conditions of this consent; and
 - d) The following drawings, except for:
 - i) any modifications which are Exempt or Complying Development; and
 - ii) otherwise provided by the conditions of this consent.

Architectural (or Design) Drawings prepared by <i>Rice Daubney</i>			
Drawing No.	Issue	Name of Plan	Date
HDR-AR-DWG-DA01	G	PLAN LEVEL 01	13/09/16
HDR-AR-DWG-DA02	G	PLAN LEVEL 02	13/09/16
HDR-AR-DWG-DA03	G	PLAN LEVEL 03	13/09/16
HDR-AR-DWG-DA04	G	PLAN LEVEL 04	13/09/16
HDR-AR-DWG-DA05	G	PLAN LEVEL 05	13/09/16
HDR-AR-DWG-DA06	G	PLAN LEVEL 06	13/09/16
HDR-AR-DWG-DA07	G	PLAN LEVEL 07	13/09/16
HDR-AR-DWG-DA08	G	PLAN LEVEL 08	13/09/16
HDR-AR-DWG-DA09	G	ROOF PLAN	13/09/16
HDR-AR-DWG-DA10	G	SECTION 1	13/09/16
HDR-AR-DWG-DA11	G	SECTION 2	13/09/16
HDR-AR-DWG-DA12	G	SOUTH ELEVATION	13/09/16
HDR-AR-DWG-DA13	G	WEST ELEVATION	13/09/16
HDR-AR-DWG-DA14	G	EAST ELEVATION	13/09/16
HDR-AR-DWG-DA15	G	NORTH ELEVATION	13/09/16
HDR-AR-DWG-DA16	G	SITE PLAN	13/09/16
HDR-AR-DWG-DA17	G	PUBLIC REALM PLAN	13/09/16
HDR-AR-DWG-DA18	D	SITE PLAN – TREE RETENTION	13/09/16
Landscape (or Design) Drawings prepared by <i>Oculus</i>			
Drawing No.	Rev.	Name of Plan	Date
DA_L-100	04	LANDSCAPE PLAN	19/05/16
DA_L-101	04	TREE PROTECTION AND REMOVAL PLAN	19/05/16
DA_L-102	04	LANDSCAPE FINISHES PLAN	19/05/16
DA_L-200	04	LANDSCAPE SECTION	19/05/16
DA_L-400	04	MATERIALS & PLANTING	19/05/16

Inconsistency between documents

- A3. If there is any inconsistency between the plans and documentations referred to above, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency. Where there is an inconsistency between approved elevations and plans, the elevations prevail.
- A4. The Applicant must comply with any reasonable requirements of the Secretary arising from the Department's assessment of:
- a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; and
 - b) the implementation of any actions or measures contained in these documents.

Design Quality Excellence

- A5. In order to ensure the design quality excellence of the development is retained:
- a) the design architects (*Rice Daubney*) are to have direct involvement in the design documentation, contract documentation and construct stages of the project;
 - b) the design architect is to have full access to the site and is to be authorised by the Applicant to respond directly to the consent authority where information or clarification is required in the resolution of the design issues throughout the life of the project;
 - c) evidence of the design architect's commission is to be provided to the Department prior to certification of any Crown building works, except for site preparatory works; and
 - d) the building materials and finishes used shall be consistent and in accordance with *The University of Sydney LEES 1 Project, Architectural Design Statement*, dated May 2016 and prepared by Rice Daubney.
- A6. The design architects for the project are not to be changed without prior notice and approval of the Secretary.

Building Code of Australia Compliance

- A7. All aspects of the building design shall comply with the applicable performance requirements of the BCA so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the ongoing benefit of the community. Compliance with the performance requirements can only be achieved by:
- a) complying with the deemed to satisfy provisions, or
 - b) formulating an alternative solution which:
 - i) complies with the performance requirements, or
 - ii) is shown to be at least equivalent to the deemed to satisfy provision, or
 - iii) a combination of a) and b).

Development Expenses

- A8. It is the responsibility of the Applicant to meet all expenses incurred in undertaking the development, including expenses incurred in complying with conditions imposed under this consent.

Lapsing of approval

- A9. This consent will lapse five years from the date of consent unless the works associated with the development have physically commenced.

Prescribed Conditions

A10. The Applicant shall comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the Regulation.

Dispute Resolution

A11. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.

Secretary's Approval, Agreement or Satisfaction

A12. Where the Secretary's approval, agreement or satisfaction is required under a condition of this consent, the Secretary (or nominee/delegate) will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Secretary may ask for additional information if the approval, agreement or satisfaction request is considered incomplete. When further information is requested, the time taken for the Applicant to respond in writing will be added to the one month period.

Legal Notices

A13. Any advice or notice to the consent authority shall be served on the Secretary.

B PRIOR TO COMMENCEMENT OF WORKS

Certified Plans

B1. Plans certified in accordance with section 109R of the EP&A Act are to be submitted to the Certifying Authority and the Department prior to commencement of each stage of the works and shall include details as required by any of the following conditions.

Design Modification – Eastern Avenue Façade Alignment

B2. Prior to the certification of aboveground works, plans satisfactorily demonstrating the following amendments must be submitted to the satisfaction of the Secretary:

- a) the western façade alignment of the building must be setback such that it does not project forward of the alignment of the western façade of the Carslaw Building; and
- b) in satisfying a) above, any design amendments to the building form is not to result in the footprint of the building moving any closer to the Moreton Bay Fig trees to the south.

Site Contamination

B3. Remediation approved as part of this development consent shall be carried out in accordance with the *Remediation Action Plan, Carslaw Building Extension, Eastern Avenue, The University of Sydney*, dated May 2016 and prepared by Douglas Partners.

B4. Upon completion of remedial works, the Applicant shall submit a Site Audit Report and Section A Site Audit Statement for the relevant part of the site prepared by a NSW EPA accredited Site Auditor. The Site Audit Report and Section A Site Audit Statement shall verify the relevant part of the site is suitable for the education land use and be provided to the satisfaction of the Certifying Authority.

Protection of Moreton Bay Fig Trees

B5.

- a) A \$60,000 bond for each of the four Moreton Bay Fig trees located adjacent to City Road, between Eastern Avenue and Barff Road, shall be lodged with Council to ensure the retention and protection during demolition/construction and adaptation to the altered environment of the tree(s) on the endorsed plans to be retained.
- b) The Applicant shall lodge the bonds with Council prior to the commencement of LEES 1 building works.
- c) The Applicant is responsible for the health and condition of the Moreton Bay Fig trees. In the event that at completion of the works, the City's Tree Management Officer determines that the existing trees have been damaged/destroyed (by activities associated with the proposal) to a value in excess of the retained bonds, the applicant shall lodge the excess to Council and to an amount determined by Council's Tree Management Officer.
- d) The bonds will be retained for a minimum period of 12 months from the date the final occupation of the LEES 1 building. At this time, a further inspection will be undertaken by the Consulting Arborist engaged throughout the demolition/construction phases of the development. The Consulting Arborist is to submit an Arboricultural Report to Council and the Secretary at the expiry of the 12 month bond period and prior to the bonds being refunded. If the report indicates that the tree/s require remedial works, the City's Tree Management Officer will assess the recommendations and determine any works prior to their execution by the Consulting Arborist.
- e) The following formula will be used for the retention of all or part of the tree bond/s:
 - i) an initial breach of any tree protection condition – 20 per cent of total bond for each tree;
 - ii) a second or continuing breach of any tree protection condition – 40 per cent of total bond for each tree;
 - iii) if after 40 per cent of the bond is retained, further breaches of the tree protection conditions occur, Council may instigate legal proceedings for the cessation of all works on the site; and
 - iv) death of any protected trees due to non-compliance with the tree protection conditions – Total 100 per cent of total bond for particular tree/s.

B6. Prior to the commencement of works, Tree Protection Zone/s (TPZ) must be established around all tree/s to be retained. Tree protection must be installed and maintained in accordance with the Australian Standard 4970 Protection of Trees on Development Sites.

Hazard Risk Reduction

B7. To ensure identified potential hazards and risks associated with the approved development's operation are satisfactorily minimised, the Applicant must prepare a detailed risk assessment that addresses the recommendations contained within the *Preliminary Hazard Analysis of Proposed LEES 1, Dangerous Goods Consultancy for the DA Applicant*, dated 28 April 2016 and prepared by CETEC Pty Ltd Dangerous Goods Consultancy.

Public Art

B8. Public Art is to be integrated into the development in accordance with the University of Sydney's *Public Arts Strategy* and *Wingara Mura-Bunga Barrabugu Strategy*, details of which are to be provided to the satisfaction of the Certifying Authority prior to the certification of aboveground works. The Applicant must submit a copy of the public art to the Department, prior to commencement of work.

Demolition

- B9. All demolition work shall comply with the provisions of Australia Standard AS2601: 2001 *The Demolition of Structures*. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance shall be submitted to the satisfaction of the Certifying Authority prior to the commencement of demolition works.

Ecologically Sustainable Development

- B10. Prior to the commencement of the works (excluding site preparatory works), the Applicant shall submit details of all design, operation and construction measures to the Certifying Authority demonstrating that the proposed new building has been designed to achieve a minimum Silver rating in accordance with The University of Sydney's *Sustainability Framework* scheme.

Public Domain Works

- B11. Prior to the commencement of any footpath or public domain works, the Applicant shall consult with Council and Transport for NSW and demonstrate to the Certifying Authority that the streetscape design and treatment meets the requirements of these authorities, including addressing pedestrian management. The Applicant shall submit documentation of approval for each stage from Council and Transport for NSW to the Certifying Authority.
- B12. Prior to the commencement of any footpath or public domain works, the Applicant shall consult with Council to prepare a Public Domain Lighting Plan and demonstrate to the Certifying Authority that the plan addresses Council's requirements.

Notice of Commencement of Works

- B13. The Certifying Authority and Council shall be given written notice, at least 48 hours prior to the commencement of each stage of works on the subject site.

Reflectivity

- B14. The building materials used on the facades of the buildings must have a maximum normal specular reflectivity of visible light of 20 per cent and must be designed so as not to result in glare that causes any discomfort or threatens the safety of pedestrians or drivers. A statement demonstrating compliance with these requirements or where compliance cannot be met a report that demonstrates that the exceedance would not result in glare that causes any discomfort or threatens the safety of pedestrians or drivers is to be submitted to the satisfaction of the Certifying Authority prior to the commencement of aboveground works, except for site preparatory works.

Outdoor Lighting

- B15. All outdoor lighting within the site shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting. Details demonstrating compliance with these requirements are to be submitted to the satisfaction of the Certifying Authority prior to the certification of the relevant of works.

Access for People with Disabilities

- B16. The building must be designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any construction drawings.

Erosion and Sedimentation Control

- B17. A soil erosion and sediment control plan must be developed in accordance with the document *Managing Urban Stormwater—Soils & Construction Volume 1* (2004) by Landcom. Details are to be submitted to the satisfaction of the Certifying Authority and controls implemented prior to commencement of works involving vegetation removal or soil disturbance.

Pre-Construction Dilapidation Reports

- B18. The Applicant is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all retained existing and adjoining buildings within the site, infrastructure and roads within the Zone of Influence or public domain areas adjoining the site. The report must be submitted to the satisfaction of the Certifying Authority prior to the commencement of any works.

Service Vehicle Layout

- B19. To ensure the safety of pedestrians and vehicles are not adversely impacted, the Applicant must engage an independent Transport for NSW accredited road safety auditor to undertake a concept design (Stage 2) road safety audit of the loading arrangement in accordance with *AUSTROADS Guide to Road Safety Part 6: Road Safety Audit*.

Road safety measures recommended based on the results of the road safety audit must be implemented by the Applicant, details of which shall be submitted to the satisfaction of the Certifying Authority prior to the certification of the relevant works.

- B20. Plans demonstrating compliance with the following requirements shall be submitted to the satisfaction of the Certifying Authority prior to the commencement of relevant above ground works:
- a) all vehicles should enter and leave the Subject Site in a forward direction;
 - b) all operational vehicles accessing the site, including the loading dock, are to be limited to Large Rigid Vehicles or smaller only;
 - c) all demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping;
 - d) appropriate pedestrian advisory signs are to be provided at the egress from the car park;
 - e) all works/ regulatory signposting associated with the proposed development shall be at no cost to the relevant roads authority;
 - f) the swept path of the longest vehicle entering and exiting the Subject Site in association with the new work, as well as manoeuvrability through the Subject Site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement; and
 - g) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle and pedestrian access occurs, is to be addressed.

Bicycle Parking

- B21. Plans demonstrating compliance with the following bicycle parking requirements shall be submitted to the satisfaction of the Certifying Authority prior to commencement of works, except for site preparatory works, excavation and piling:
- a) the provision of a minimum 27 bicycle spaces, four showers and 102 lockers on the campus;
 - b) the layout, design and security of bicycle facilities must comply with the minimum requirements of Australian Standard AS 2890.3 Bicycle Parking Facilities, and be located in easy to access, well-lit areas that incorporate passive surveillance;

- c) appropriate pedestrian and cyclist advisory signs are to be provided; and
- d) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority.

Noise Management Measures

B22. Prior to commencement of works, the Applicant must incorporate the noise mitigation recommendations in the *University of Sydney F07 Carslaw Building Extension (LEES 1 Project)* prepared by Acoustic Studio, dated 16 March 2016, in the detailed design drawings and submit to the Department documentation demonstrating that the noise impacts have been adequately mitigated to not exceed the recommended operational noise levels for mechanical plant identified in the report.

Structural Details

B23. Prior to certification of relevant works, the Applicant must submit to the satisfaction of the Certifying Authority structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with:

- a) the relevant clauses of the BCA; and
- b) the development consent.

Mechanical Ventilation

B24. All mechanical ventilation systems must be installed in accordance with Part F4.5 of the BCA and must comply with the Australian Standards AS1668.2 and AS3666 *Microbial Control of Air Handling and Water Systems of Building*, to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection. Details demonstrating compliance must be submitted to the satisfaction of the Certifying Authority prior to the certification of the relevant works.

Stormwater and Drainage Works Design

B25. Final design plans of the stormwater drainage systems, prepared by a qualified practicing professional and in accordance with the requirements of Council must be submitted to the Certifying Authority prior to the commencement of stormwater and drainage works, except for site preparatory works. The hydrology and hydraulic calculations must be based on models described in the current edition of Australian Rainfall and Runoff.

Construction Environmental Management Plan

B26.

- a) Prior to the commencement of works on the Subject Site, a CEMP that addresses those works must be submitted to the Certifying Authority. The Plan must address, but not be limited to, the following matters where relevant:
 - i) hours of work;
 - ii) 24 hour contact details of site manager;
 - iii) traffic management, in consultation with the local Council, including a designated off-street car parking area for construction related vehicles;
 - iv) construction noise and vibration management, prepared by a suitable qualified person;
 - v) tree protection management;
 - vi) management of dust to protect the amenity of the neighbourhood;
 - vii) erosion and sediment control;
 - viii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Subject Site;
 - ix) external lighting in compliance with AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting;

- x) an Unexpected Finds Protocol (UFP); and
 - xi) waste classification (for materials to be removed) and validation (for materials to remain) during construction to confirm the contamination status in these areas of the site.
- b) The CEMP must not include works that have not been explicitly approved in the development consent. In the event of any inconsistency between the consent and the CEMP, the consent shall prevail.
 - c) The Applicant must submit a copy of the CEMP to the Department and to the Council, prior to commencement of work.

B27. The CEMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

Construction Noise and Vibration Management Plan

B28. The Applicant must prepare a Construction Noise and Vibration Management Plan (CNVMP), and the plan must:

- a) be prepared by a suitably qualified expert and submitted to the Certifying Authority;
- b) be prepared in consultation with all noise sensitive receivers where noise levels exceed the construction noise management level, in accordance with EPA guidelines;
- c) describe the measures that would be implemented to ensure:
 - i) best management practice is being employed;
 - ii) compliance with the relevant conditions of this consent;
- d) describe the proposed noise and vibration management measures in detail;
- e) identify the selection of alternative construction appliances to avoid the generation of excessive noise levels;
- f) include strategies that have been developed to address impacts to noise sensitive receivers where noise levels exceed the construction noise management level, for managing high noise generating works;
- g) implement intra-day respite periods for construction activities identified as annoying;
- h) implement noise reducing site/work practices and require regular noise checks of equipment;
- i) describe the consultation undertaken to develop the strategies in f) above;
- j) evaluates and reports on the effectiveness of the noise and vibration management measures; and
- k) include a complaints management system that would be implemented for the duration of the project.

B29. The CNVMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

Construction Waste Management Plan

B30.

- a) Prior to the commencement of works on the Subject Site, a Construction Waste Management Plan (CWMP), prepared by a suitably qualified person in consultation with the Council, must be submitted to the Certifying Authority. The Plan must address, but not be limited to, the following matters:
 - i) recycling of demolition materials including concrete, and rinse water; and
 - ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.

- b) Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the Certifying Authority prior to the removal of any hazardous materials.
- c) The Applicant must submit a copy of the plan to the Department and to the Council prior to the commencement of work.
- d) The Applicant must notify the Roads and Maritime Authority's Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the Subject Site, prior to the commencement of the removal of any waste material from the Subject Site.

B31. The CWMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

Construction Traffic and Pedestrian Management Plan

B32.

- a) Prior to the commencement of works on the Subject Site, Traffic and Pedestrian Management Plan (TMP) prepared by a suitably qualified person must be submitted to the Certifying Authority. The Plan must be prepared in consultation with the Council, CBD Coordination Office within Transport for NSW and RMS.
- b) The Plan must address, but not be limited to, the following matters:
 - i) ingress and egress of vehicles to the Subject Site, including Swept path analysis;
 - ii) impacts on cyclists and pedestrians and bus services;
 - iii) cumulative construction impacts of projects;
 - iv) loading and unloading, including construction works zones;
 - v) predicted traffic volumes, types and haulage routes;
 - vi) pedestrian and traffic management methods;
 - vii) construction hours and program;
 - viii) cumulative construction impacts of surrounding construction projects and coordination of activities to manage and minimise road network impacts; and
 - ix) details of impacts identified, duration and proposed mitigation measures.
- c) Any alterations to the public road, involving traffic and parking arrangements, must be referred to and approved by the relevant traffic committee.
- d) The Applicant must submit a copy of the final plan to the Council, prior to the commencement of works.

B33. The TMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

Utility Services

B34. Prior to the commencement of work the Applicant is to negotiate with the utility authorities (e.g. Ausgrid and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the building structure.

B35. Prior to the commencement of works, except for site preparatory works, written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.

C DURING CONSTRUCTION

Hours of Work

- C1. The hours of construction, including the delivery of materials to and from the subject site, shall be restricted as follows:
- a) between 7 am and 6 pm, Mondays to Fridays inclusive;
 - b) between 7.30 am and 3.30 pm, Saturdays; and
 - c) no work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- i) the delivery of materials is required outside these hours by the Police or other authorities; or
- ii) it is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or
- iii) variation is approved in advance in writing by the Secretary or her nominee.

Erosion and Sediment Control

- C2. All erosion and sediment control measures, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

Disposal of Seepage and Stormwater

- C3. Any seepage or rainwater collected on-site during construction or ground water shall not be pumped to the street stormwater system unless separate prior approval is given in writing by Council.

Approved Plans to be On-site

- C4. A copy of the approved and certified plans, specifications and documents incorporating conditions of consent and certification shall be kept on the subject site at all times and shall be readily available for perusal by any officer of the Department, Council or the Certifying Authority.

Site Notice

- C5.
- a) A site notice(s) must be prominently displayed at the boundaries of the Subject Site for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifying Authority and Structural Engineer.
 - b) The site notice(s) is to satisfy all but not be limited to, the following requirements:
 - i) minimum dimensions of the notice are to measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30 point type size;
 - ii) the notice is to be durable and weatherproof and is to be displayed throughout the works period;
 - iii) the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice; and
 - iv) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the Subject Site is not permitted.

Protection of Trees

C6.

- a) No street trees are to be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property.
- b) All street trees shall be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction due to an emergency, shall be replaced, to the satisfaction of Council.
- c) All trees on the Subject Site that are not approved for removal are to be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during construction.
- d) A suitably qualified arborist be present on-site during the basement level one excavation works and during the erection of hording/scaffolding to ensure that no damage to existing Moreton Bay Fig trees occur as nominated in the *Aboricultural Impact Assessment Tree Protection Specification* prepared by Tree IQ, dated 11 April 2016. No additional pruning is permitted to accommodate hording/scaffolding or construction works unless otherwise agreed to by Council's Tree Management Officer.
- e) A permanent drip irrigation system must be installed prior to construction works to support the future health of the Moreton Bay Fig trees during prolonged dry periods and minimise physiological stress.

Protection of Stone Kerbs

C7.

- a) The existing stone kerbs on the sites frontages are to be retained and properly protected during excavation and construction works.
- b) Temporary removal and storage may be approved by Council to avoid damage.

Construction Noise Management

- C8. The development must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the CNVMP.
- C9. If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the NSW Industrial Noise Policy), 5 dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.
- C10. The Applicant must schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved by the Secretary:
- a) 9 am to 12 pm, Monday to Friday;
 - b) 2 pm to 5 pm Monday to Friday; and
 - c) 9 am to 12 pm, Saturday.
- C11. Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where outlined in the CNVMP.
- C12. Any noise generated during the construction of the development must not be offensive noise within the meaning of the *Protection of the Environment Operations Act 1997* or exceed approved noise limits for the Subject Site.

- C13. The Applicant must ensure all construction related vehicles do not arrive at the project site or in surrounding residential and health precincts outside approved hours of work.

Vibration Criteria

- C14. Vibration caused by construction at any residence or structure outside the Subject Site must be limited to:
- a) for structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
 - b) for human exposure to vibration, the evaluation criteria presented in British Standard BS 6472 – Guide to Evaluate Human Exposure to Vibration in Buildings (1 Hz to 80 Hz) for low probability of adverse comment.
- C15. Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above.
- C16. These limits apply unless otherwise outlined in the CNVMP.

Work Cover Requirements

- C17. To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant WorkCover requirements.

Hoarding Requirements

- C18. The following hoarding requirements must be complied with:
- a) no third party advertising is permitted to be displayed on the subject hoarding/fencing; and
 - b) the construction site manager shall be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.

Installation of Graphics and Artwork on Scaffolding (Building Construction Wraps)

- C19.
- a) Where scaffolding is to be installed to undertake the proposed development an approved graphic / artwork installation must be provided on the scaffolding system to shield the development from the public place and to minimise adverse visual impacts on the locality.
 - b) The graphic installation must be printed, installed and maintained in accordance with Council's Guidelines for Hoardings and Scaffolding. Details of the proposed graphic must be submitted to and approved by Council prior to the installation of any scaffolding.

No obstruction of public footpath

- C20. The public footpath adjacent to City Road (outside of any construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under and circumstances.

Impact of Below Ground (sub-surface) Works – Non-Aboriginal Relics

- C21. If any unexpected archaeological relics are uncovered during the course of the work, then all works must cease immediately in that area and the OEH Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the OEH Heritage Division.

Discovery of Aboriginal Heritage

- C22. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by OEH and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and OEH to develop and implement management strategies for all projects/sites.
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D PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

Sustainable Travel Plan

- D1. Prior to the final occupation of the LEES 1 building, the Applicant's is to submit to the Secretary for approval a revised draft Sustainable Transport and Mobility Plan (STAMP), prepared by a suitably qualified person in consultation with Council. The STAMP is to be updated to address and include the following:
- a) measures and initiatives to promote and encourage cycling, walking, public transport, carpooling, and car sharing (including provision of car share parking spaces) as alternative transport modes;
 - b) a way finding and access guide strategy, including details of proposed signage to active transport infrastructure, including bicycle parking and end-of-trip facilities, and public transport;
 - c) the location, quantity and accessibility details of all campus bicycle parking and end-of-trip facilities, measures to address current campus deficiencies of bicycle parking and end-of-trip facilities and details of the timing of their implementation; and
 - d) Include methods to monitor the effectiveness and uptake of sustainable measures.

Loading Dock Management Plan

- D2. Prior to the commencement of use of the building:
- a) the Applicant must prepare a loading dock management plan (LDMP) in consultation with Council and Roads and Maritime Services to ensure that the operation of the loading dock does not adversely impact on pedestrians and vehicles; and
 - b) submit a copy of the LDMP to the Certifying Authority, Council and RMS.

Public Art

- D3. High quality public art is to be installed in accordance with condition B8 and the University of Sydney's *Public Arts Strategy* and *Wingara Mura-Bunga Barrabugu Strategy* and to the satisfaction of the Certifying Authority prior to the issue of to the commencement of use of the building.

Physical Model

- D4. Prior to occupation or commencement of use, an accurate 1:500 scale model of the development as constructed must also be submitted to Council for placement in the City Model at Town Hall House and the City Exhibition Space.

Note:

- a) The models must be constructed in accordance with the Model Specifications available online at

www.cityofsydney.nsw.gov.au/Development/DevelopmentApplicationGuide/PreparingandLodgingaDA.asp. Council's model maker must be consulted prior to construction of the model for Town Hall House. The Manager of Customs House must be consulted prior to the construction of the model for City Exhibition Space.

- b) The models are to comply with all of the conditions of the development consent.
- c) The models must be amended to reflect any further modifications to the approval that affect the external appearance of the building.

Submission of Electronic CAD Model

D5.

- a) Prior to the commencement of use of the building, an accurate 1:1 electronic CAD model of the completed development must be submitted to Council for the electronic Visualisation City Model.
- b) The data required to be submitted within the surveyed location must include and identify:
 - i) building design above and below ground in accordance with the development consent;
 - ii) all underground services and utilities, underground structures and basements, known archaeological structures and artefacts;
 - iii) a current two points on the site boundary clearly marked to show their Northing and Easting MGA (Map Grid of Australia) coordinates, which must be based on Established Marks registered in the Department of Lands and Property Information's SCIMS Database with a Horizontal Position Equal to or better than Class C.

The data is to be submitted as a DGN or DWG file on a Compact Disc. All modelling is to be referenced to the Map Grid of Australia (MGA) spatially located in the Initial Data Extraction file.

- c) The electronic model must be constructed in accordance with the City's 3D CAD electronic model specification. The specification is available online at <http://www.cityofsydney.nsw.gov.au/development/application-guide/application-process/model-requirements> Council's Modelling staff should be consulted prior to creation of the model. The data is to comply with all of the conditions of the Development Consent.

Noise Control – Plant and Machinery

- D6. Prior to the occupation of the building, the Applicant shall submit a worst-case quantitative assessment of the night time background noise level in accordance with the *Industrial Noise Policy* to the satisfaction of the Certifying Authority that demonstrates noise associated with the operation of any plant, machinery or other equipment on the Subject Site does not exceed 5 dB(A) above the background noise level when measured at the boundary of the sensitive receiver.

Public Domain Works

- D7. Prior to the occupation of the building, the Applicant shall submit to the Council works-as-executed plans of any public domain works. Prior to occupation of the building, the Applicant must submit documentation to the Certifying Authority demonstrating that the works have been completed to Council's satisfaction.

Damage to Stone Kerbs

- D8. Any damaged stone kerbs must be replaced and any removed stone kerbs must be reinstated to the satisfaction of Council prior to the commencement of use of each stage of the construction unless works have commenced on the next stage.

Ecologically Sustainable Development

- D9. Prior to the occupation of the development, the Applicant shall submit details to the Certifying Authority demonstrating that the subject building has achieved a minimum Silver rating in accordance with The University of Sydney's *Sustainability Framework* scheme.

Mechanical Ventilation

- D10. Following completion, installation and testing of all the mechanical ventilation systems, the Applicant must provide evidence to the satisfaction of the Certifying Authority, prior to commencement of use of each stage of the building, that the installation and performance of the mechanical systems complies with:
- a) the BCA;
 - b) Australian Standard AS1668 and other relevant codes;
 - c) the development consent and any relevant modifications; and
 - d) any dispensation granted by the New South Wales Fire Brigade.

Road Damage

- D11. The cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development is to be met in full by the Applicant prior to commencement of use of each stage of the building.

Compliance Certificate

- D12. A section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained from Sydney Water Corporation.

The Section 73 Certificate must be submitted to the Certifying Authority prior to commencement of use of each stage of the building.

Post-construction Dilapidation Report

- D13. Prior to commencement of use of the building:
- a) The Applicant must engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.
 - b) The report is to be submitted to the Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Certifying Authority must:
 - i) compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
 - ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
 - c) A copy of this report is to be forwarded to the Council.

Fire Safety Certification

- D14. Prior to commencement of use of each stage of the building, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.

Structural Inspection Certificate

D15. A Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifying Authority prior to commencement of use of each stage of the building. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:

- a) the site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings; and
- b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

Signage

D16. Wayfinding signage for pedestrians and cyclists must be installed prior to commencement of use of the building.

E POST OCCUPATION

Sustainable Travel Plan

E1. The strategies and initiatives identified in the STAMP, as required by condition D1 of this consent, must be implemented and the plan updated annually to reflect any changes to sustainable transport measures.

Loading and Unloading

E2. All loading and unloading of service vehicles in connection with the use of the premises shall be carried out wholly within the subject site at all times.

Noise Control – Plant and Machinery

E3. Noise associated with the operation of any plant, machinery or other equipment on the Subject Site, must not exceed 5 dB(A) above the rating background noise level when measured at the boundary of the sensitive receiver.

E4. The Applicant must carry out a noise monitoring program for a minimum period of one week where valid data is collected following the commencement of use of the development. The monitoring program must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Secretary within two months of commencement use of the development to verify that operational noise levels do not exceed the recommended noise levels for mechanical plant identified in *University of Sydney F07 Carslaw Building Extension (LEES 1 Project)* prepared by Acoustic Studio, dated 16 March 2016.

Should the noise monitoring program identify any exceedance of the recommended noise levels referred to above, the Applicant is required to implement appropriate noise attenuation measures so that operational noise levels do not exceed the recommended noise levels or provide attenuation measures at the affected noise sensitive receivers.

Waste Classification

E5. The Applicant shall ensure any waste generated on the site is classified in accordance with the EPA's *Waste Classification Guidelines* (DECCW, 2009), or any superseding document and disposed of to a facility that may lawfully accept the waste.

Waste Management

E6. For the life of the development, the Applicant shall:

- a) monitor the amount of waste generated by the development;
- b) investigate ways to minimise waste generated by the development; and
- c) implement reasonable and feasible measures to minimise waste generated by the development.

Storage of Hazardous or Toxic Material

E7. Any hazardous or toxic materials must be stored in accordance with WorkCover requirements and all tanks, drums and containers of toxic and hazardous materials shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be of sufficient size to contain 110 per cent of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.

Public Footpath to be Unobstructed

E8. The public footpath must not be obstructed by any materials, vehicles, refuse, skips or the like under any circumstances.

External Lighting

E9. External Lighting shall comply with *AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting*. Upon installation of lighting, but before it is finally commissioned, the Applicant shall submit to the consent authority evidence from an independent qualified practitioner demonstrating compliance in accordance with this condition.

Fire Safety Certification

E10. The owner must submit to Council an Annual Fire Safety Statement, each 12 months after the final Safety Certificate is issued. The certificate must be on, or to the effect of, Council's Fire Safety Statement.

ADVISORY NOTES

Appeals

AN1 The Applicant has the right to appeal to the Land and Environment Court in the manner set out in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000* (as amended).

Long Service Levy

AN2 For work costing \$25,000 or more, a Long Service Levy shall be paid. For further information please contact the Long Service Payments Corporation on their Helpline 13 1441.

Other Approvals and Permits

AN3 The Applicant must apply to the relevant authority for all necessary permits including crane permits, road opening permits, hoarding or scaffolding permits, footpath occupation permits and/or any other approvals under Section 68 (Approvals) of the *Local Government Act 1993* or *Section 138 of the Roads Act 1993*.

Responsibility for other consents/agreements

AN4 The Applicant is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

Use of Mobile Cranes

AN5 The Applicant must obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters must be complied with:

- a) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on-site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from Council:
 - i) At least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and
 - ii) At least four weeks prior to the works for full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.
- b) The use of mobile cranes must comply with the approved hours of construction and must not be delivered to the site prior to 7.30 am without the prior approval of Council.

Temporary Structures

AN6

- a) An approval under State Environmental Planning Policy (Temporary Structures) 2007 must be obtained from the Council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the BCA.
- b) Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under State Environmental Planning Policy (Temporary Structures) 2007 to certify the structural adequacy of the design of the temporary structures.

Disability Discrimination Act

AN7 This application has been assessed in accordance with the *Environmental Planning and Assessment Act 1979*. No guarantee is given that the proposal complies with the *Disability Discrimination Act 1992*. The Applicant/owner is responsible to ensure compliance with this and other anti-discrimination legislation. The *Disability Discrimination Act 1992* covers disabilities not catered for in the minimum standards called up in the BCA which references AS 1428.1 - *Design for Access and Mobility*. AS1428 Parts 2, 3 & 4 provides the most comprehensive technical guidance under the *Disability Discrimination Act 1992* currently available in Australia.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

AN8

- a) The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance; or Commonwealth land, without an approval from the Commonwealth Minister for Environment and Energy.
- b) This application has been assessed in accordance with the *New South Wales Environmental Planning & Assessment Act, 1979*. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the Applicant's responsibility to consult the Department of the Environment and Energy to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this

matter. There are severe penalties for non-compliance with the Commonwealth Act.

Asbestos Removal

AN9 All excavation and demolition works involving the removal and disposal of asbestos must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with NOHSC: "Code of Practice for the Safe Removal of Asbestos".

Site contamination issues during construction

AN10 Should any new information come to light during demolition or construction works which has the potential to alter previous conclusions about site contamination then the Applicant must be immediately notified and works must cease. Works must not recommence on site until the consultation is made with the Department.