13 March 2019

Campus Infrastructure Services
The University of Sydney
Services Building G12
22 Codrington St
The University of Sydney | NSW | 2006

Attention: Drew Bagnall

Re: The University Of Sydney ETP Stage 1 – Building J03 Maze Crescent Darlington
Section 6.8 (2) Design Verification Certificate No.2
Early Works and Engineering for Part Building J03

Please find enclosed the Design Verification Certificate No.2 pursuant to Section 6.28(2) of the Environmental Planning and Assessment Act 1979 with regard to the above project.

Thank you for allowing us to assist you on this occasion and should you have any queries in regard to the above, please do not hesitate to contact the undersigned.

Regards,

Philip Smillie
Associate
PHILIP CHUN CODE CONSULTING
University of Sydney – ETP Stage 1  
Proposed Redevelopment of Building J03

DESIGN VERIFICATION CERTIFICATE No.2 
Relating to works with reference to Section 6.28 of the Environmental Planning and Assessment Act 1979

<table>
<thead>
<tr>
<th>Property details</th>
<th>Lot Number and DP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lot 1, DP 790620</td>
</tr>
<tr>
<td></td>
<td>City/suburb/town</td>
</tr>
<tr>
<td></td>
<td>96-148 City Road, Darlington</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issued to</th>
<th>Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sydney University</td>
</tr>
<tr>
<td></td>
<td>Campus and Infrastructure Services</td>
</tr>
<tr>
<td>Address</td>
<td>Services Building G12</td>
</tr>
<tr>
<td></td>
<td>22 Codrington St</td>
</tr>
<tr>
<td></td>
<td>The University of Sydney</td>
</tr>
<tr>
<td></td>
<td>Attention: Drew Bagnall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of building work</th>
<th>BCA Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>J03</td>
</tr>
<tr>
<td>Early Works and Engineering</td>
<td>Class 9b – Education facility</td>
</tr>
<tr>
<td>for the Redevelopment of Building J03 within the Engineering Technology Precinct (ETP)</td>
<td>Class 8 research labs</td>
</tr>
<tr>
<td></td>
<td>Class 5 Office areas</td>
</tr>
</tbody>
</table>

Certification

Pursuant to the provisions of Section 6.28(2) of the Environmental Planning and Assessment Act 1979, Philip Chun certifies that the demolition work may be carried out subject to the conditions listed in Appendix B.

<table>
<thead>
<tr>
<th>Suitably Qualified Person</th>
<th>Building Code Consultant / Accredited Certifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Philip Smillie of Philip Chun (BPB 0381)</td>
</tr>
<tr>
<td></td>
<td>Building Code Consultant / Accredited Certifier</td>
</tr>
<tr>
<td>Date of issue</td>
<td>13 March 2019</td>
</tr>
</tbody>
</table>

Philip Chun & Associates Pty Ltd  
ABN: 64 597 649 911  
Suite 404, 44 Hampden Road, Artarmon NSW 2064  
T: 61 2 9412 2322  
F: 61 2 9412 2433
### APPENDIX A

#### A1 – Information Relied Upon – Tender Submission Drawings

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Drawings</th>
<th>Prepared by</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>K33-COX-ARC-DRG_22-00(E), 22-02(F), 22-02A(C)</td>
<td>COX Architecture</td>
<td>Various</td>
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<tr>
<td>Civil &amp; Stormwater</td>
<td>K33-BON-CIV-DRG_00001(H), 00010(E), 00011(D), 00033(J), 00034(J)</td>
<td>Bonacci Group (NSW) Pty Ltd</td>
<td>Various</td>
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<tr>
<td>Electrical</td>
<td>K33-STW-ELE-DRG-30000(H)</td>
<td>Stowe Australia Pty Ltd</td>
<td>8/2/19</td>
</tr>
<tr>
<td>Hydraulics</td>
<td>K33-CPG-HYD-DRG-H_100(06), 200(07)</td>
<td>Central Plumbing Pty Ltd</td>
<td>31/1/19</td>
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<tr>
<td>Structural</td>
<td>K33-BON-STR-DRG_00001(I), 00002(H), 00410(B), 00420(G), 00421(G), 01000(F), 01001(K), 01002(G), 01100(H), 01200(L), 01205(J), 01400(G), 01401(G), 01402(B), 04000(H), 04001(D), 04040(E), 04041(E), 04200(K), 04205(I), 04210(G), 04220(M), 04225(J), 04226(B), 04230(I), 04231(B), 04232(B)</td>
<td>Bonacci Group (NSW) Pty Ltd</td>
<td>Various</td>
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#### A2 - Information Relied Upon

<table>
<thead>
<tr>
<th>Item</th>
<th>Administration Documents</th>
<th>Issued By</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Development Consent No. SSD 8636 (Section 4.38 of the EPAA 1979)</td>
<td>NSW Department of Planning &amp; Environment</td>
<td>14/2/19</td>
</tr>
<tr>
<td>2.</td>
<td>Long Service Levy Payment Receipt – First Installment No. 9000714</td>
<td>Long Service Corporation</td>
<td>28/2/19</td>
</tr>
<tr>
<td>4.</td>
<td>Electrical Design Compliance Certificate</td>
<td>Roger Sharp of Stowe Australia Pty Ltd</td>
<td>28/2/19</td>
</tr>
<tr>
<td>6.A</td>
<td>Sydney Uni advice to Department of Planning of work commencement date satisfying DA condition B1.</td>
<td>Drew Bagnall of CIS Uni of Syd</td>
<td>13/3/19</td>
</tr>
<tr>
<td>6.B</td>
<td>Electricity Network Connection Application Approval to satisfy DA Conditions B6a, B7, B8.</td>
<td>Craig Platts of Ausgrid</td>
<td>24/5/18</td>
</tr>
<tr>
<td>7.</td>
<td>Design Information – Site Specific Requirements: 3 x 1500kVA Substation S79202 Maze Blackwattle.</td>
<td>Craig Platts of Ausgrid</td>
<td>24/5/18</td>
</tr>
<tr>
<td>8.</td>
<td>Design Information – Site Specific Requirements: 2 x L Kiosks Maze Blackwattle No. 1 and Maze Blackwattle No. 2.</td>
<td>Craig Platts of Ausgrid</td>
<td>24/5/18</td>
</tr>
<tr>
<td>10.</td>
<td>Letter of Conditions for Adjustment/ Deviation/Extension of a Sydney Water Asset (Ref No. 4839006) to satisfy DA Conditions B6a, B7, B8.</td>
<td>Sydney Water</td>
<td>25/9/17</td>
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<tr>
<td>13.</td>
<td>Dilepidation Survey Report to satisfy DA Condition B6b.</td>
<td>Laing O'Rourke Australia</td>
<td>4/12/18</td>
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<tr>
<td></td>
<td>Title</td>
<td>Author/Assignee</td>
<td>Date</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
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</tr>
<tr>
<td>15.</td>
<td>Complaints and Enquiries Management System and Procedure – Revision 1.</td>
<td>Laing O’Rourke Australia</td>
<td>22/1/19</td>
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<tr>
<td>16.</td>
<td>Email providing Greenstar Registration of Project to satisfy DA Condition B13.</td>
<td>Drew Bagnall of The University of Sydney</td>
<td>8/3/19</td>
</tr>
<tr>
<td>21.</td>
<td>Roads and Maritime Services comments via email pertaining to DA Condition B19.</td>
<td>Steven Nguyen of Roads and Maritime Services</td>
<td>26/2/19</td>
</tr>
<tr>
<td>22.</td>
<td>City of Sydney email noting receipt of Construction Traffic and Pedestrian Management Plan pertaining to DA Conditions B19 and B22.</td>
<td>Maria O’Donnell of City of Sydney Council</td>
<td>26/2/19</td>
</tr>
<tr>
<td>25.</td>
<td>Email providing Site Auditor Interim Advice Report #3 approving Asbestos Management Plan at Sydney University to satisfy DA Condition B24.</td>
<td>Ian Swane of Ian Swane &amp; Associates</td>
<td>1/3/19</td>
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<tr>
<td>26.</td>
<td>Construction site access and heavy vehicle on-site parking details to satisfy DA Condition B25.</td>
<td>GTA Consultants</td>
<td>6/3/19</td>
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<td>28.</td>
<td>Email providing Waste Disposal Facility Traffic Routes to satisfy DA Condition B41.</td>
<td>Stephen Zakir of Laing O’Rourke Australia</td>
<td>21/2/19</td>
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<tr>
<td>29.</td>
<td>Waste Material Transport Routes Report to satisfy DA Condition B41.</td>
<td>Laing O’Rourke Australia</td>
<td>Not Dated</td>
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<tr>
<td>30.</td>
<td>Compliance Monitoring and Reporting Program to satisfy DA Condition B44 (Reference No. 18721).</td>
<td>RPS Manidis Roberts Pty Ltd</td>
<td>20/2/19</td>
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<tr>
<td>31.</td>
<td>Payment Advice (Payment Ref. No. 849837) to Urban Growth NSW Development Corporation to satisfy DA Condition B51.</td>
<td>The University of Sydney</td>
<td>11/3/19</td>
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<tr>
<td>32.</td>
<td>Soil Erosion Plans to satisfy DA Condition C28.</td>
<td>Laing O’Rourke Australia</td>
<td>Various</td>
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<tr>
<td>33.</td>
<td>Proposed Independent Environment Audit Program to satisfy DA Conditions C44 and C45.</td>
<td>RPS Manidis Roberts Pty Ltd</td>
<td>8/2/19</td>
</tr>
</tbody>
</table>
APPENDIX B – Conditions of s6.28 EPAAct Crown Design Certificate

The following conditions typically apply to the subject component works:

General Conditions:

All modification works to the remaining part of J03 be carried out in accordance with the requirements of the Building Code of Australia 2016 and the relevant Australian Standards.

Part 1 Conditions applying before works commence (extract from SEPP Codes 2008 – Schedule 9)

1 Protection of adjoining areas - A temporary hoarding or temporary construction site fence must be erected between the work site and adjoining lands before the works begin, and must be kept in place until after the completion of works, if the works:
   (a) could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic, or
   (b) could cause damage to adjoining lands by falling objects, or
   (c) involve the enclosure of a public place or part of a public place.

   Note.

2 Toilet facilities
   (1) Toilet facilities must be available or provided at the work site before works begin, and must be maintained until the works are completed, at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.

   (2) Each toilet must: (a) be a standard flushing toilet connected to a public sewer, or (b) have an on-site effluent disposal system approved under the Local Government Act 1993, or (c) be a temporary chemical closet approved under the Local Government Act 1993.

3 Waste management
   (1) A waste management plan for the work must be prepared before work commences on the site.
   (2) The waste management plan must: (a) identify all waste (including excavation, demolition and construction waste material) that will be generated by the work on the site, and (b) identify the quantity of waste material, in tonnes and cubic metres, to be: (i) reused on-site, and (ii) recycled on-site and off-site, and (iii) disposed of off-site, and (c) if waste material is to be reused or recycled on-site—specify how the waste material will be reused or recycled on-site, and (d) if waste material is to be disposed of or recycled off-site—specify the contractor who will be transporting the material and the waste facility or recycling outlet to which the material will be taken.

   (3) A garbage receptacle must be provided at the work site before works begin and must be maintained until the works are completed.

   (4) The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.

5 Run-off and erosion controls

Run-off and erosion controls must be implemented to prevent soil erosion, water pollution or the discharge of loose sediment on the surrounding land by: (a) diverting uncontaminated run-off around cleared or disturbed areas, and (b) erecting a silt fence and providing any other necessary sediment control measures that will prevent debris escaping into drainage systems, waterways or adjoining properties, and (c) preventing the tracking of sediment by vehicles onto roads, and (d) stockpiling top soil, excavated materials, construction and landscaping supplies and debris within the lot.

Part 2 Conditions applying during the works

6 Hours for demolition - Demolition may only be carried out between 7.00 am and 5.00 pm on Monday to Saturday and no demolition is to be carried out at any time on a Sunday or a public holiday.
7 Compliance with plans - Works must be carried out in accordance with the plans and specifications to which the certificate relates.

8 Demolition - Any demolition must be carried out in accordance with AS 2601—2001, The demolition of structures.

9 Maintenance of site
(1) All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.
(2) Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.
(4) Any run-off and erosion control measures required must be maintained within their operating capacity until the completion of the works to prevent debris escaping from the site into drainage systems, waterways, adjoining properties and roads.
(5) During construction: (a) all vehicles entering or leaving the site must have their loads covered, and
(b) all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.
(6) At the completion of the works, the work site must be left clear of waste and debris.

10 Aboriginal objects discovered during excavation - If an Aboriginal object (including evidence of habitation or remains) is discovered during the course of the work: (a) all excavation or disturbance of the area must stop immediately, and (b) the person making the discovery must advise the Chief Executive (within the meaning of the National Parks and Wildlife Act 1974) of the discovery in accordance with section 89A of that Act.
Development consent

Section 4.3(b) of the Environmental Planning and Assessment Act 1979

As a delegate of the Minister for Planning under delegation executed on 11 October 2017, I approve the Development Application referred to in Schedule 3, subject to the conditions specified in Schedule 3.

These conditions are to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- enhance visual amenity and site layout; and
- provide for ongoing environmental management of the development.

Sydney 14th February 2019

SCHEDULE 1

Application No.: 000 006
Applicant: The University of Sydney
Consent Authority: Minister for Planning
Land: The University of Sydney, Darlington Campus (Part Lot 1 DP 780106)

Development:

Engineering Precinct Stage 1 Development, including:
- site expansion and structures;
- upgrades to existing facilities;
- construction of new facilities;
- land for housing; and
- landscaping works.

Planning Scheme No.: E001

SCHEDULE 2

PART A

ACCOMMODATING CONDITIONS

Obligation to Minimise harm to the Environment

A1 In addition to meeting the applicable performance measures and policies in this consent, reasonable and practicable measures must be taken to minimise the harm caused to the environment.

Non-compliance

Non-compliance with this consent may result in the imposition of a penalty or in other legal proceedings.

GERNS

Office of Environment and Heritage

Observation

The varying extent of the approved purpose of the development upon completion of construction.

Planning Secretary

Planning Scheme under the EPA Act, or notice.

Reasonable

Measures applying to building or development are set out in Schedule 3, subject to the conditions specified in Schedule 3.

Response to changes

The Applicant’s response to changes in the terms of this consent.

NRS

NSW Roads and Maritime Services

Soritative measures

A citizen’s arrest by the local government, or other similar measures, including the taking of action.

Site

The site location specified in Schedule 3.

Site Auditor

The site auditor named in Schedule 3.

Site Audit Report

The report prepared as part of the site audit.

The site auditor’s report submitted under the Environmental Planning and Assessment Act 1979.

Year

A period of 12 consecutive months.
<table>
<thead>
<tr>
<th>K33-TCL-LDRG-2006</th>
<th>F SURFACES PLAN 03 EASTERN COURTYARD</th>
<th>03.12.2018</th>
</tr>
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<tbody>
<tr>
<td>K33-TCL-LDRG-2006</td>
<td>D PLANTING PLAN 01 SOUTHERN COURTYARD</td>
<td>03.12.2018</td>
</tr>
<tr>
<td>K33-TCL-LDRG-2006</td>
<td>D PLANTING PLAN 06 NORTHERN COURTYARD</td>
<td>03.12.2018</td>
</tr>
<tr>
<td>K33-TCL-LDRG-2006</td>
<td>E PLANTING PLAN 03 EASTERN COURTYARD</td>
<td>03.12.2018</td>
</tr>
<tr>
<td>K33-TCL-LDRG-2006</td>
<td>C SECTIONS D1</td>
<td>03.12.2018</td>
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<tr>
<td>K33-TCL-LDRG-2006</td>
<td>C SECTIONS D5</td>
<td>31.10.2018</td>
</tr>
</tbody>
</table>

**Staging, Controlling and Upgrading Strategies, Plans or Programs**

A18. (a) the approval of the Planning Scheme, the Applicant may (a) prepare and submit any strategy, plan or program required by this consent on a staged basis if the plan (b) the strategic plan or program for the development at the location of the staged part of the development at the location of the final stage of the development may, without the consent of the Customer, be amended or varied at any stage of the development.

A19. If the Planning Scheme requires the strategic plan or program for the development at the location of the final stage of the development, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A20. The Customer may direct the Applicant to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A21. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A22. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A23. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A24. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A25. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A26. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.

A27. If the Customer directs the Applicant to submit an application for a Planning Scheme or Development Plan, the Applicant must, before being able to submit an application for a Planning Scheme or Development Plan, in accordance with the Planning Scheme or Development Plan, as the Customer may direct.
not provided.
Mechanical Ventilation

3A4] All mechanical air systems must be installed in accordance with Part F4 of the BCA and must comply with the AS 1576:1993 for the design and installation of mechanical air systems and Part S1:1989 for the design and installation of water systems. The mechanical systems shall include the following components:

- Heating and cooling systems
- Electrical systems
- Fire protection systems

These systems must be designed, installed, and tested in accordance with the Building Code of Australia and the relevant AS/NZS standards.

Compliance Reporting

3A5] The approval process shall be reported to the building authority at least once every year. The report shall include a detailed description of the work completed and any deviations from the approved plans.

Cleaning Services

3A6] The building authority shall ensure that the cleaning services are provided in accordance with the approved plans and the relevant AS/NZS standards. The cleaning services shall be performed by licensed and insured contractors.

Flood Risk Management

3A7] All drainage systems and other equipment shall be installed in accordance with the relevant AS/NZS standards. The drainage systems shall be designed to prevent flooding and to divert water away from the building.

Fire Safety

3A8] All fire safety systems, including fire alarms, fire sprinklers, and fire doors, shall be installed and tested in accordance with the relevant AS/NZS standards. The fire safety systems shall be maintained and tested regularly to ensure their effectiveness.

Compliance Certification

3A9] The building authority shall issue a compliance certificate after the building has been completed and all the necessary inspections have been carried out.

Sydney Water Corporation

3A10] The approved plans shall be submitted to the Sydney Water Corporation for approval to ensure that the building does not pose any risk to the city's water supply.

Radfom-Water Authority

3A11] The building authority shall consult with the Radfom-Water Authority to ensure that the building does not affect the city's water supply and to comply with the relevant AS/NZS standards.

TARA PROJECT

DURING CONSTRUCTION

Approved Plans to Be On-site

C1] A copy of the approved and certified plans, specifications, and documents incorporating conditions of approval and certificates must be on the site at all times and must be readily available for perusal by any officer of the Department, the Building Authority, or the City Council.

Site Notice

C2] A site notice shall be displayed at the site as follows:

- On a board that is at least 0.6 m wide and 1.2 m high
- In a prominent position on the site

The site notice shall include the following information:

- The name and address of the owner or developer
- The name and address of the building authority
- The date of approval
- The name of the building contractor
- The date of completion

Construction Hours

C3] Construction shall not occur between the hours of 7:00 am and 5:00 pm on weekdays and between the hours of 6:00 am and 9:00 am on Saturdays.

C4] Activities that may be undertaken outside the hours of construction include:

- The movement of materials and equipment
- The use of compactors and other heavy machinery
- The use of air compressors and other noise-generating equipment

C5] The building authority shall inspect the site on a regular basis to ensure compliance with the site notice.

C6] The site shall be kept clean and tidy at all times to prevent pollution and to comply with the Building Code of Australia.

C7] All vehicles and equipment shall be parked in designated areas to prevent congestion and to comply with the Building Code of Australia.

C8] All landscaping and landscaping materials shall be kept on site to prevent any damage to the landscape.

C9] All construction materials and equipment shall be kept in a secure location to prevent any theft or damage.

Construction Traffic

C10] All construction traffic shall be controlled and monitored to prevent any disturbance or noise.

C11] All construction vehicles shall be parked in designated areas to prevent congestion and to comply with the Building Code of Australia.

C12] All construction materials and equipment shall be kept on site to prevent any theft or damage.

C13] All construction traffic shall be controlled and monitored to prevent any disturbance or noise.

C14] All construction vehicles shall be parked in designated areas to prevent congestion and to comply with the Building Code of Australia.

All construction materials and equipment shall be kept on site to prevent any theft or damage.
PART 1: PROHIBITION OR OCCUPATION OF CONSUMPTION OF USE MEASURE

Notice of Occupation
- The notice of commencement of the occupation or use must be notified to the Department, at least one month before occupation. At least two weeks prior to the commencement of each phase of the development, the Department must be notified in writing to ensure that the notice is clearly understood by the Department.

External Walls and Cladding
- Prior to the occupation of the building, the Applicant must provide the Certifying Authority with a document that explains the additional requirements noted in the construction of external walls, including facades and claddings such as brick or aluminium composite panels, and comply with the requirements of the BCA.

The Applicant must provide a copy of the approvals given to the Certifying Authority for the Final Building Survey within seven days after the Certifying Authority accepts the building.

Prevention of Public Infrastructure
- Under the Applicants and the applicable authority agrees, otherwise the Applicant must:
  - not construct any building or structure that may obstruct the access or visibility of public infrastructure;
  - not interfere with any public infrastructure that may be necessary for the public's convenience;
  - not obstruct or impede the activities of any public authority.

Fire-Automation and Fire-Evacuation
- Prior to occupation of the building, the Applicant must engage a suitably qualified person to prepare a post-construction document that demonstrates the installation and operation of fire-alarms and fire evacuation systems.

Works as Executed Plan
- Prior to occupation of the building, most non-constructions agreed upon by a registered surveyor demonstrating that the satisfactory and floor-ground levels have been constructed, must be submitted to the Certifying Authority.

Machanical Ventilation
- Following completion, installation and testing of all internal mechanical ventilation systems, the Applicant must provide evidence to the Certifying Authority, prior to the final inspection, that the installation and testing have been undertaken in accordance with the mechanical systems complex with:
  - the BCA;
  - AS 1402.2-2001;
  - the site's air ventilation; and
  - any relevant codes and standards.

Fire Safety Certification
- Prior to occupation of the building, a Fire Safety Certificate must be obtained from the Chief Fire or Safety Officer for the council. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be provided to the building owner.

Operational Waste Management Plan
- Prior to the commencement of operation, the Applicant must prepare a Waste Management Plan for the development and submit it to the Certifying Authority. The Waste Management Plan must:
  - detail the types and quantity of waste to be generated during construction and operation of the development;
  - describe the frequency, storage and disposal of waste generated on site, in accordance with the Waste Management and Environmental Protection Act 2011 and the JPBA’s Waste Management Code of Practice (Environmental Quality and Waste Management 2021); and
  - indicate the management plan of waste materials on site.

Leasing and Management Services Agreement
- The Applicant shall prepare a leasing and management services agreement in consultation with the Sydney Office of the Certifying Authority, for all blockages, to facilitate the management of the building.

- Prior to the occupation of the building, the Applicants must prepare a Fire Safety Certificate for the development, and submit it to the Certifying Authority. The Fire Safety Certificate must:
  - detail the type and quantity of waste to be generated during construction and operation of the development;
  - describe the frequency, storage, and disposal of waste generated on site, in accordance with the Waste Management and Environmental Protection Act 2011 and the JPBA’s Waste Management Code of Practice (Environmental Quality and Waste Management 2021);
  - indicate the management plan of waste materials on site.

Swig Path Certificate
- Prior to occupation, relevant swept path methods must be agreed to, in consultation with the Sydney Transport and Infrastructure Department.

Site Audit Report and Site Audit Statement
- Prior to occupation of the building, the Applicant must provide the Site Audit Certificate, to the Audit and Site Audit Statement for its intended use, in accordance with the requirements of the BCA and Site Audit Statement.

Within three months of submission of the Validation Report required by condition 26, the Applicant must demonstrate to the Certifying Authority the presence of a Site Audit Report and Site Audit Statement that is prepared in accordance with the requirements of the BCA and Site Audit Statement.
APPENDIX 1 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification and the requirements set out below must be emailed to the Department at the nominated address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under the condition that the Applicant fails to give the notification required under 4.3(e) above, and may cause such notification, subsequently in the view that an incident has not occurred.

2. Written notification of an incident must:
   a. identify the development and application number;
   b. provide details of the incident (date, time, location, a brief description of what occurred and why it is seen as an incident);
   c. identify the NSW Government Department;
   d. identify when the Applicant became aware of the incident;
   e. identify any actual or potential non-compliance with conditions of consent;
   f. describe if, what remedial steps were taken in relation to the incident;
   g. identify further actions that will be taken in relation to the incident;
   h. identify a point contact for further communication regarding the incident.

3. Within 30 days of the date on which the incident occurred or as otherwise agreed by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (the Planning Secretary) with a detailed report on the Incident addressing all requirements below, and such further reports as may be requested.

4. The Incident Report must include:
   a. a summary of the incident;
   b. outcomes of any incident investigation, including identification of the cause of the incident;
   c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence;
   d. details of any communication with other stakeholders regarding the incident.

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.4 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.5 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.6 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.7 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.8 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.9 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.10 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.11 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.12 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.13 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.

E.14 In the event of an occurrence between the requirements of condition C15(a) and C15(b), the most stringent requirement must prevail.

E.15 Prior to storage of dangerous goods within the development, the Applicant must adopt and implement the plans and systems set out under submissions (a) and (b).

(b) the NSW EPA’s Stormwater and Handling of Liquids Environmental Protection - Participants list loaded if the chemicals are liquids.
28 February 2019

LAING O'ROURKE AUSTRALIA CONSTRUCTION PTY LTD
L4, 100 ARTHUR ST
NORTH SYDNEY NSW 2060

Levy Receipt

Received from: (Name of person or organisation paying for levy) LAING O'ROURKE AUSTRALIA CONSTRUCTION PTY LTD

the amount of

$66,725.00

Payment details:

Direct Depot $66,725.00

being payment for Long Service Levy as detailed below

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Signed: (Signature of authorised person)

Date

28/2/19
Design Compliance Certificate

Issued under the Building Code of Australia Evidence of Suitability Part A2.2 (a) (iii)

Project Name and Address
USYD ETP Stage 1 Building J03 at the University of Sydney Darlington Campus
SSD 8636 of the Department of Planning dated 14/2/19

Development Consent No.

Design Verification Certificate No 15-206012

Description / Stage of Work
New eight to nine level northern wing of Building J03 attached to retained southern tower - In-ground works, foundations (excluding piling and shoring works which are a design & construct sub-contract package), L01 slab on ground and L02 slab on ground

Drawings numbers and Specifications
Drawings
- Structural
  - K33-BON-STR-DRG-00001[H]
  - K33-BON-STR-DRG-00002[G]
  - K33-BON-STR-DRG-00410[A]
  - K33-BON-STR-DRG-00420[F]
  - K33-BON-STR-DRG-00421[F]
  - K33-BON-STR-DRG-01000[E]
  - K33-BON-STR-DRG-01001[L]
  - K33-BON-STR-DRG-01002[F]
  - K33-BON-STR-DRG-01100[G]
  - K33-BON-STR-DRG-01200[L]
  - K33-BON-STR-DRG-01205[I]
  - K33-BON-STR-DRG-01400[F]
  - K33-BON-STR-DRG-01401[F]
  - K33-BON-STR-DRG-01402[A]
  - K33-BON-STR-DRG-04000[G]
  - K33-BON-STR-DRG-04200[L]
  - K33-BON-STR-DRG-04205[H]
  - K33-BON-STR-DRG-04210[G]
  - K33-BON-STR-DRG-04220[L]
  - K33-BON-STR-DRG-04225[I]
  - K33-BON-STR-DRG-04226[A]
  - K33-BON-STR-DRG-04230[I]
  - K33-BON-STR-DRG-04231[A]
  - K33-BON-STR-DRG-04232[A]
  - Civil
  - K33-BON-CIV-DRG-00001[H]
  - K33-BON-CIV-DRG-00010[E]
  - K33-BON-CIV-DRG-00011[D]
  - K33-BON-CIV-DRG-00033[J]
  - K33-BON-CIV-DRG-00034[J]

Specifications
- K33-BON-STR-SPC-00002[A – Concrete Specification]

I / We Certify that

a) Each of the building components relating to the discipline and scope of work identified above
   • Has been assessed by me or a person (chosen by me) who was properly qualified to do so, and
   • Has been designed and/or installed in accordance with the design requirements in order to meet at least the minimum applicable Building Code of Australia 2016
      Am1 requirements and/or the relevant Australian Standards listed below in appendix A and to be capable of performing to a standard not less than that required.
   • Providing misleading or incorrect information to the public official is fraudulent and contrary to NSW State legislation.

Name
John Williams

Company
Bonacl Group (NSW) Pty Ltd

Address
L6, 37 York St, Sydney, NSW 2000

Signed

Dated
01-03-19

Engineering Qualifications / Accreditation No.
BE (Hons), CP Eng, NER, Member of Engineers Australia

Accreditation / Licence No. by (e.g. Department of Fair Trading)
n/a
Is there any Fire Engineering Requirements applicable to the work? (Tick ✓)

Yes ❌ No ✓
Design Compliance Certificate

UNSW EETP Stage 1 Building J03 at the University of Sydney Darlington Campus

Development Consent No. SSD 8536 of the Department of Planning dated 14/2/19

Design Verification Certificate No 15-206012 To be issued by Philip Chun Building Code

Description / Stage of Work New eight to nine level northern wing of Building J03 attached to retained southern tower
Stage CC1: Inground Infrastructure

Drawings numbers and Specifications K33-STW-ELE-DRG-30000[+ Power and Communications Inground Conduits

I / We certify that

a) Each of the building components relating to the discipline and scope of work identified above
   • Has been assessed by me or a person (chosen by me) who was properly qualified to do so, and
   • Has been designed and/or installed in accordance with the design requirements in order to meet at least the minimum applicable Building Code of Australia 2018
   And that requirements and/or the relevant Australian Standards listed below in Appendix A are to be capable of performing to a standard not less than that required.

b) The information contained in this certificate is, to the best of my knowledge and belief, true and accurate.

c) Providing misleading or incorrect information to the public official is fraudulent and contrary to NSW State legislation.

Name ROGER SHARP

Company STOWE AUSTRALIA PTY LTD

Address 10-12 CLYDE STREET RYDALMERE

Signed Dated 28 FEB 2019

Engineering Qualifications / Accreditation No. BACHELOR OF ENGINEERING (ELECTRICAL)

Accreditation / Licence No. by (e.g. Department of Fair Trading) NSW QUALIFIED SUPERVISOR CERTIFICATE: EA51000

Appendix A – Electrical

Australian Standards

AS 2293 Emergency escape lighting and exit signs for buildings
Part 1 – 2005 System design, installation and operation (Incl. Amdt 1)


AS/NZS 3013 – 2005 Electrical Installations – Classification of the fire and mechanical performance of wiring system elements

AS/NZS 1800:0-2009 Interior lighting Safe Movement

Requirements of Section J of BCA 2016

J8, J9

Relevant requirement of NSW Service and Installation Rules 2016

- Not referenced in NCC

Is there any Fire Engineering Requirements applicable to the work? (Tick □) Yes □ No ☑

Fire Engineering Report Ref. 20XX dated 20XX by 20XX

Full of relevant requirements of the Fire Board

No electrical requirements relevant to Stage CC1

BCA 2016 Adm1. 1 Reference

E4.2, E4.4, E4.5, E4.6, E4.8

- Not referenced in NCC

C2.13

F4.4

J8, J9

- Not referenced in NCC
Design Compliance Certificate
Issued under the Building Code of Australia Evidence of Suitability Part A.2 (a) (ii)

Project Name and Address
USYD ETP Stage 1 Building J03 at the University of Sydney Darlington Campus

Development Consent No.
SSD 8636 of the Department of Planning dated 14/2/19

Design Verification Certificate No 15-206012
to be issued by Philip Chun Building Code

Description / Stage of Work
New eight to nine level northern wing of Building J03 attached to retained southern tower

Drawings numbers and Specifications
K33-CPG-HYD-DRG-H-100[06], K33-CPG-HYD-DRG-H-200[07]

I / We certify that

\( j) \) Each of the building components relating to the discipline and scope of work identified above
- Has been assessed by me or a person (chosen by me) who was properly qualified to do so, and
- Has been designed and/or installed in accordance with the design requirements in order to meet at least the minimum applicable Building Code of Australia 2016
- Amdt 1 requirements and/or the relevant Australian Standards listed below in Appendix A and to be capable of performing to a standard not less than that required.

k) The information contained in this certificate is, to the best of my knowledge and belief, true and accurate

I) Providing misleading or incorrect information to the public official is fraudulent and contrary to NSW State legislation.

Name
Peter Argent [for and on behalf of Central Plumbing Group]

Company
Argent Consulting Group [for and on behalf of Central Plumbing Group]

Address
PO Box 610 North Sydney NSW 2065

Signed

Dated
1 March 2019

Engineering Qualifications / Accreditation No.
Assoc Dip Engineering (Plumbing Services), Member AHSCA (#2083)

Accreditation / Licence No. by (e.g. Department of Fair Trading)

Appendix A – Hydraulic Services Installation Certificate: Sewer / Stormwater / Drainage Systems

Australian Standards

BCA 2016 Amdt. 1 Reference

AS/NZS 3500.3 – 2003 Plumbing and drainage – Glossary of terms
AS/NZS 3500.1 – 2003 Plumbing and drainage – Water services
AS/NZS 3500.2 – 2003 Plumbing and drainage – Sanitary plumbing and drainage
AS/NZS 3500.3 – 2015 Plumbing and drainage – Stormwater drainage
AS/NZS 3500.4 – 2003 Plumbing and drainage – Heated water services

(IS) Conditions:

Any relevant requirements of the water supply authority

Is there any Fire Engineering Requirements applicable to the work? (Tick √)

Yes [ ] No [x]
Dear David / Michael,

SSD 8636 for the Engineering Precinct Stage 1 Development on Darlington Campus (part lot 1 DP 790620) was approved by the Minister for Planning on 14 February 2019.

Condition B1 of that consent requires that the Department, Certifying Authority and Council to be notified of commencement of Physical work and operation at least 48 hours prior to commencement.

Please accept this email as prior notice of commencement of physical works.

Regards,

DREW BAGNALL | Senior Project Manager
Campus Infrastructure & Services
THE UNIVERSITY OF SYDNEY
Services Building G12 | 22 Cordington St | Darlington | NSW | 2008
T +61 2 9114 2641 | F +61 2 9351 9234 | M +61 451 101 260
E drew.bagnall@sydney.edu.au | W http://sydney.edu.au

CRICOS 00026A
This email plus any attachments to it are confidential. Any unauthorised use is strictly prohibited. If you receive this email in error, please delete it and any attachments.

Please think of our environment and only print this e-mail if necessary.
24/05/2018

CKB CONSULT PTY LTD
Attention: Cam Balzer
39 Birdwood Ave,
East Killara, Nsw 2071

Email: cam.balzer@ckbconsult.com.au

Project Number: SC12875

Dear Cam

Electricity Network Connection Application at: USYD Building J03 Maze Cres Darlington

The design information for this development has been prepared and forwarded electronically to your email address. Please forward the document(s) to your ASP/3 so that the design can be finalised and submitted for certification.

The design information and Contract for Design Related Services are valid for a maximum period of 12 months from the date of provision by Ausgrid. Should a design not be submitted and certified within the 12 month validity period, you may apply for an extension. Note that additional Ancillary Service Fees will apply.

You should discuss with your ASP/3 the notification requirements associated with the electrical design. Such notification periods may have an impact on the timing of your connection.

Ausgrid will only certify a submitted design prepared against the design information when all requirements of the Contract for Design Related Services are met.

Property Rights
Property rights in favour of Ausgrid are required for all new and altered and, in some instances, existing Ausgrid assets located on private property. To meet this obligation you have two options:

1. At least six (6) weeks prior to electrification of any electrical network construction works a Deed of Agreement (DoA) for Easement or Lease must be executed by all parties. Once executed, Ausgrid will place a caveat over the property. The caveat will be released upon easements being registered. Easement documents must be lodged with LPI without delay following electrification, in accordance with the DoA and Connection Contract. It is recommended that you allow at least 4 weeks for Ausgrid to execute standard Deeds of Agreements.

2. Alternatively, you may opt to lodge easements with LPI prior to electrification. In this case, two (2) weeks prior to electrification of any electrical network construction works you must provide evidence of lodgement of the property rights with LPI. If property rights are not lodged in time, the electrification will need to be rescheduled. It is recommended that you allow at least 10 weeks for Ausgrid to execute standard leases and easements.

To avoid possible delays in electrification, we recommend you proceed with Option 1 and provide a signed DoA as soon as possible.
The DoA and easement/lease documents, and directions for signing are available on our website at the following link: www.ausgrid.com.au/CDRS

Long Lead Time Items
Please note that the Connection Works potentially require items of equipment that have long lead times. Please ensure that you arrange for such item to be procured and delivered to site in a timely manner during the construction period. In general these types of items can include:
- Kiosk and pole mounted substations.
- Chamber substation transformers, high voltage and low voltage switchgear and other components.
- Intelliruptors.
All items used in constructing the Connection Works must be Ausgrid approved material.

What to Do Next
- Distribute the design information to ASP/3 designers for quotations if required.
- Select and arrange an ASP/3 designer to prepare and submit a compliant design to Ausgrid.
- Commence arrangements to satisfy Ausgrid’s property rights requirements.

General
Standard Ausgrid documents mentioned in this letter, including those enclosed, are available on Ausgrid website www.ausgrid.com.au. If you do not have access to the web and would like to read any of the documents mentioned in this letter they may be obtained by contacting the phone number below.

Should you require any further information please contact me on the phone number or email address detailed below.

Yours sincerely,

Craig Platts
Contestability Project Coordinator
Ausgrid

Direct Telephone Number: 02 9663 9299
Email: cplatts@ausgrid.com.au

Encl: Design Information
SITE SPECIFIC DESIGN INFORMATION REQUIREMENTS

The Design Information is Site Specific Requirements is completely to and shall be used in conjunction with the Design Information General Requirements, which can be found on the Ausgrid website.

1. Ausgrid Project Reference
   - Project Number: 2012-0217
   - Project Number: 2012-0217

2. Ausgrid Contact Details
   - Telephone: 1300 665 320
   - Email: info@ausgrid.com.au

3. Network Extension Connection Point
   - 3.1 High Voltage Connection Point
     - Bowen PAMA to S4932 Main Seaport Centre Too S9363 ATP Station No 1 and S9359 Civil Engineering Building and S9359 Dalgety Soldier Grove

4. Details of Ausgrid Network in Vicinity of the Development
   - Recurved links of the Ausgrid network, including cable routes, tick values, etc., are shown in Ausgrid's WebGIS. The ASPO designer must use the WebGIS to obtain relevant information. The ASPO designer should consult Ausgrid for any further clarification or information required by the project. Ausgrid WebGIS information has not been verified against actual site access. The ASPO designer is responsible for the accuracy of information on design and it is advisable to verify the ASPO designer's findings with Ausgrid as soon as possible prior to undertaking any design works.

5. Proposed Works
   - The existing high voltage and/or low voltage network structures, together with the schematic and graphical representations, have been confirmed with Ausgrid and are shown in Ausgrid's WebGIS. The ASPO designer is responsible for the accuracy of information on design and it is advisable to verify the ASPO designer's findings with Ausgrid as soon as possible prior to undertaking any design works.

6. Customer Point of Supply (Connection Point)
   - Please provide a copy of the three-phase low voltage point of supply at the low voltage switchgear terminal at the customer substation entrance.

7. Fault Levels
   - 11kV network: 20000 kVA

8. Cable/Conductor Route and Type
   - 8.1 3 core armoured PVC
   - 8.2 Copper cables

9. Protection
   - Protection: 3 phase 3 wire 11kV

10. Equipment
    - 6.1 Authorised Contractor(s)
      - 6.2 Subcontractor Equipment List

11. Attachment Information
    - 11.1 Attachment

12. Conditions
    - 12.1 Conditions

13. Temporary/Other Considerations
    - 13.1 Temporary

14. Design Information/Revision History

Ausgrid makes no warranty expressed or implied that any proposed project depicted in the design information by Ausgrid is suitable for the intended purpose.

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SITE SPECIFIC DESIGN INFORMATION REQUIREMENTS

1. Assured Product References

2. Assured Contact Details

3. Neutral Earthing Connection Point

4. Details of Asgrid Network (in vicinity of the Development)

5. Proposed Works

6. Customer Points of Supply (Connection Point)

7. Fault Level

8. Cable/Conductor Route and Type

Contents

1. Design Information - Site Specific Requirements - Complex

2. Technical Details

3. Site Specific Requirements - Complex

4. Visual Safety

5. Security

6. Environmental Considerations

7. Traffic Management

8. Equipment Specifications

9. Design Information - Site Specific Requirements - Complex

Page 1

Page 2

Page 3
3. EQUIPMENT

9.1. Kiosk Substation

Exhibit Number | ESA | Substation Name | Note Book/Note No.
--- | --- | --- | ---
A | NL | Commercialitas Industrial | 

1186501A with HAV ratings is set out to the requirements of EER installation development.

For Switchgear: ABB Swiss Style 4000 (Fabricated)

HV Board Arrangement: 1600/100/100

Banker 1: Fuse Distribution Board

Banker 2: Fuse Distribution Board

Banker 3: Fuse Distribution Board

Banker 4: Fuse Distribution Board

9.2. Substation Equipment / June 2021 Schedule

Exhibit Number | ESA | Substation Name | Note Book/Note No.
--- | --- | --- | ---
A | NL | Commercialitas Industrial | 

1186501A with HAV ratings is set out to the requirements of EER installation development.

For Switchgear: ABB Swiss Style 4000 (Fabricated)

HV Board Arrangement: 1600/100/100

Banker 1: Fuse Distribution Board

Banker 2: Fuse Distribution Board

Banker 3: Fuse Distribution Board

Banker 4: Fuse Distribution Board

9.2.1. Substation Equipment / June 2021 Schedule

HV Fuses

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.

- 4045 / 6000 / 15000 A 3 phase Micas, B.I. / H.V. / L.V.
#000170784 - New Connection - Commercial
John Smith (Phone: 0418 217 060) - Central Plumbing maze Crescent, DARLINGTON, NSW, 2330

Overview

Application
Submitted by Jason Baker (jbaker@centralpg.com.au)
29/02/2019 12:59
If you would like to edit your application please do so by clicking below
Edit application

Assessment
Your application is currently under assessment
If your application is incomplete, we will message you to modify the application or to provide further documents.

Offer
Works
Closed
Network Protection

Assets Affected

In reply to your enquiry, there are gas mains at the location of your intended work as per the attached map. For an explanation of the map, please see the key below. The following excavation guidelines apply:

Excavation Guidelines:

It is essential that the location of gas pipes is confirmed by carefully post-holing by hand excavation prior to proceeding with mechanical excavation in the vicinity of gas pipes. If you cannot locate the gas main, contact the local digital.

In accordance with clause 34(8) of the Gas Supply (Safety and Network Management) Regulation 2013 (NSW), you should be informed that all excavation (including post-holing by hand) to confirm the location of pipes should be performed in accordance with "Work Near Underground Assets Guidelines" published in 2007 by the Work Cover Authority.

A copy of this Guideline is available at: www.WorkCover.NSW.gov.au

OSYD Administration 1260 409 966

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>In Service</td>
</tr>
<tr>
<td>Distribution 25kV</td>
<td>Section</td>
</tr>
<tr>
<td>Distribution 7kV</td>
<td>Secondary Service</td>
</tr>
<tr>
<td>Distribution 1.6kV</td>
<td>Primary</td>
</tr>
<tr>
<td>Distribution 50kV</td>
<td>Substation</td>
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<tr>
<td>Distribution 20kV</td>
<td>Transformer</td>
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<tr>
<td>Distribution 10kV</td>
<td>Substation</td>
</tr>
<tr>
<td>Distribution 2kV</td>
<td>Substation</td>
</tr>
</tbody>
</table>

Warning: The enclosed plans show the position of Jemena Gas Networks (NSW) Ltd.'s underground gas mains and isolations in public燃气 mains only. Individual customers' services and service mains belonging to other parties are not included on these plans. These plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd together "Jemena" and any reliance placed on these plans by you is entirely at your own risk. The plans may show the position of underground mains and installations relative to fences, buildings etc., as they existed at the time the plans were prepared. The plans may not have been updated to take account of any subsequent changes in the location of style of these features since the time at which the plans were initially prepared. Jemena makes no warranty as to the accuracy or completeness of the enclosures plans and does not assume any duty to care for any changes or updates to plans. Jemena does not assume any responsibility for any damage caused to Jemena's underground mains and equipment. In accordance with the Work Near Underground Assets Guidelines published in 2007 by the Work Cover Authority, Jemena recommends that you carry out post-holing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.

In case of Emergency Phone 131 999 (24 hours)

Admin

Jemena Asset Management Pty Ltd ABN 09 006 053 961
For and on behalf of Jemena Gas Networks | RA99 129 087 053 554 332

Samuel O'Sullivan 2020
LETTER OF CONDITIONS
For
ADJUSTMENT/ DEVIATION/ EXTENSION OF A SYDNEY WATER ASSET
Applicant: UNIVERSITY OF SYDNEY
Your reference: 4393005
Property location: City Road, Darlington
Your application date: 25 September 2017
Dear Applicant,

Your application to adjust the water main at the above location is approved provided you do the following things:

1. You must enter into an agreement with Sydney Water in the form of the enclosed Deed.

2. You must engage your current or another authorised Water Servicing Coordinator (Coordinator) to manage the design and construction of the required works to Sydney Water’s standards and procedures. Before you engage another Coordinator you must write and tell Sydney Water.

For a list of authorised Coordinators either visit www.mineswater.com.au > Plumbing, building & developing > Developing > Providers > Lists or call 13 20 88. Coordinators will give you a quote or information about costs for services/ works including Sydney Water costs.

The Coordinator generally will be the single point of contact between you and Sydney Water. They can answer most questions you might have about our process and charges.

3. After you engage a Coordinator, you and your accredited Developer Infrastructure Providers (Providers) will need to sign and lodge both copies of the enclosed Deed with your nominated Coordinator. After Sydney Water has signed the documents, one copy will be returned to the Coordinator.

The Deed sets out for this project:

- your responsibilities;
- Sydney Water’s responsibilities; and
- the Provider’s responsibilities.

You must do all the things that we ask you to do in that Deed.

If Sydney Water does not receive the signed Deed for our signing by 3 October 2018 you will need to re-apply (and pay another application fee).

Note: The Coordinator must be fully authorised by us for the whole time of the Deed.

4. If you need to enter a neighbouring property, you must have the written permission of the relevant property owners and tenants. You must use Sydney Water’s Permission to Enter form(s) for this. You can get copies of these forms from your Coordinator or the Sydney Water website. Your Coordinator can also negotiate on your behalf.

Please make sure that you address all the items on the form(s) including payment of compensation and whether there are other ways of designing and constructing that could avoid or reduce their impacts. You will be responsible for all costs of mediation involved in resolving any disputes. Please allow enough time for any issues to be resolved.

5. You must not start work on the existing water main or the proposed adjustment until Sydney Water advises your Coordinator. This includes the placement of any temporary pipework. Before you can do this pipework, you must engage your Coordinator to lodge an application that must include appropriate temporary pipework detail as well as the design of the proposed adjustment.

Sydney Water will then assess both designs and advise your Coordinator when they are approved and of any conditions to be met before pipe placement.

One condition will be:

- the lodgement of an unconditional security bond from an acceptable financial institution that will cover Sydney Water’s risk for this work; and
- your acceptance in writing to bonding conditions that we will provide in another agreement.

If any work on our assets is carried out without that advice or final approval, Sydney Water will take action to have work on the site stopped. We will apply all the provisions of Section 45 of the Sydney Water Act 1994.

6. Construction of these works will require you to pay project management, survey, design and construction costs directly to your Providers. Additional costs payable to Sydney Water may include:

- water main shutdown and deactivation;
- connection of new water mains to Sydney Water system(s);
- design and construction audit fees;
- contract administration, Operations Area Charge & Customer Redress prior to project finalisation;
- creation or alteration of easements etc.

END
You can also find out about this process by visiting www.sydneywater.com.au > Plumbing, building & developing > Developing > Land development. If you want to find out the status of your application, simply select 'Developer Application Progress' and enter your case number (shown above) and email address. A response will be sent automatically to you.

SYDNEY WATER CORPORATION

What You Must Do To Get A Section 73 Certificate

Summary

This is a summary of Sydney Water's requirements. The detailed list begins on the next page.

You must do all of the following things:

1. Complete any special requirements from Section 1.

Other things you need to do: Not required for your Section 73 Certificate.

At the end of this Notice are some other things that you may need to do. They are NOT a requirement to be met before the Certificate can issue but may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

SYDNEY WATER CORPORATION 4

DETAILED REQUIREMENTS

1. Special Requirements

The Final Development Consent

This application is based on the development and consent shown on Page 1. You must give us the final Development Consent before we issue the Certificate so we can make sure that the development is the same.

If the development is the same and all the requirements of this Notice have been met, we will issue the Certificate. If the development is NOT the same you must reapply (and pay another application fee) and we will issue another Notice. The requirements and charges may change in that Notice.

OTHER THINGS YOU NEED TO DO

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

Water and Sewer Works Information:

i. Water

Your development must have a frontage to a water main that is the right size and can be used for connection.

Sydney Water has assessed your application and found that:

- All existing services will remain.

ii. Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

Sydney Water has assessed your application and found that:

- All existing services will remain.

Approval of your building plans

Please note that your building plans must be approved. This can be done at Sydney Water Tap N°3, Visit www.sydneywater.com.au > Plumbing, building & developing > Building > Sydney Water Tap N°3 or call 13 26 60.

This is not a requirement of the Certificate but the approval is needed because construction/ building works may impact on existing Sydney Water assets (e.g. water and sewer mains). In any case, these works MUST NOT commence until Sydney Water has granted approval.

Your Coordinator can tell you about the approval process including:
polluted source into the drinking water supply.

All properties connected to Sydney Water’s supply must install a suitable Backflow Prevention Containment Device appropriate to the property’s hazard rating. Property with a high or medium hazard rating must have the backflow prevention containment device tested annually. Properties identified as having a low hazard rating must install a non-testable device, as a minimum.

Separate landline and sprinkler fire services on non-residential properties, require the installation of a testable double check valve assembly. The test is to be located at the boundary of the property.

Before you install a backflow prevention device:
1. Get your hydraulic consultant or plumber to check the available water pressure versus the property’s required pressure and flow requirements.
2. Conduct a site assessment to confirm the highest point of the property and its services. Contact P&AS at NSW Fair Trading on 1300 889 099.

For installation you will need to engage a licensed plumber with backflow accreditation who can be found on the Sydney Water website: http://www.sydnewater.com.au/FairTrading2014/Prevention

Water Efficiency Recommendations

Water is our most precious resource and every customer can play a role in its conservation. By working together with Sydney Water, business customers are able to reduce their water consumption. This will help your business save money, improve productivity and protect the environment.

Some water efficiency measures that can be easily implemented in your business are:
- Install water efficiency fixtures to help increase your water efficiency. Refer to WELS (Water Efficiency Labelling and Standards) scheme, https://www.weris.gov.au/
- Install water monitoring devices on your meter to identify water usage patterns and leaks.
- Develop a water efficiency plan for your business.

It is cheaper to install water efficiency appliances while you are developing than when relocating them later.

Contingency Plan Recommendations

Under Sydney Water’s customer contract Sydney Water aims to provide Business Customers with a continuous supply of clean water at a minimum pressure of 150kPa at the main tap. This is equivalent to 146.8kPa or 21.92psig in most reasonable business usage needs.

Sometimes Sydney Water may need to interrupt, postpone or limit the supply of water to your property for maintenance or other reasons. These interruptions can be planned or unplanned.

Sydney Water Corporation

connection to a Sydney Water water main. This work must meet Sydney Water’s standards in the Plumbing Code of Australia (the Code) and be done by a licensed plumber. The licensed plumber must arrange a supervision of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (P&AS) officer. After that officer has tested at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

Other fees and requirements

The requirements in this Notice relate to your Certificates application only. Sydney Water may be involved with other aspects of your development and there may be other fees or requirements. These include:
- plumbing and drainage inspection costs;
- the installation of backflow prevention devices;
-颁发 waste requirements;
- large water connections and
- council fire fighting requirements. (It will help you to know what the fire fighting requirements are for your development as soon as possible. Your hydraulic consultant can help you here.)

END
SSD 8636: ENGINEERING & TECHNOLOGY PRECINCT DEVELOPMENT
UNIVERSITY OF SYDNEY, DARLINGTON CAMPUS

University of Sydney
RESPONSE TO SYDNEY WATER SUBMISSION

28 SEPTEMBER 2018
27 September 2018

Project No. 2018-4839005
Revision No.1

Mr Seamus O’Connell
The University of Sydney
Campus Infrastructure and Services Building G12
22 Codrington Street
Darlington NSW 2006

Dear Seamus,

RE: The University of Sydney – Engineering & Technology Precinct (ETP) – ECI Peer review
Sydney Water Assets

We have reviewed the letter received from Sydney Water dated 24th May 2018, which states that the proposed development does not comply with Sydney Water’s guidelines for building over and adjacent to stormwater assets. The works proposed to be undertaken are summarised as follows:-

- Creation of a landscaped garden where an existing car park currently sits;
- Reduction of the ground levels by approximately 800mm;
- Provision of low height landscaped retaining walls around the garden and above stormwater asset;
- Provision of a new stormwater pit on the DN900 asset with a new connection.

There are no building structures proposed about the stormwater asset except for the small walls and pit outlined above. These works will need to go through the appropriate Sydney Water new connection and building plan approval process to ensure that there are no impacts to existing SWC assets in compliance with Sydney Water code.

Warren Smith & Partners has been a Sydney Water Servicing Coordinator for over twenty years and it is our opinion that there will be no non-conformances with Sydney Water guidelines provided appropriate engineering solutions are adopted.

Please contact me if you need to discuss in further detail.

Yours faithfully,
WARREN SMITH & PARTNERS PTY LIMITED

Michael Cahalane
Director Civil and Water Engineering
Mobile: 0433 522 569
Email: michael@warrensmith.com.au
Dilapidation Survey Report
Shepherd St, Darlington

The University of Sydney - J03
Electrical Engineering, Maze Crescent, Darlington NSW 2008

Prepared by Laing O'Rourke Australia

Inspection Date: 4 December 2018

SSDA No. 8636

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1. Introduction
This report has been prepared by Laing O’Rourke Australia Pty Ltd in response to:
- City of Sydney ATTACHMENT A - Recommended Consent Conditions, and:
  - (1) PHOTOGRAPHIC RECORD/DILAPIDATION REPORT - PUBLIC DOMAIN
  - Department of Planning and Environment - DRAFT CONDITION, SCHEDULE 2, PART B - PRIOR TO COMMENCEMENT OF CONSTRUCTION
    - Protection of Public Infrastructure, Condition 85(b)(c)

The report assesses council asset condition within the vicinity of the proposed SSD 8636, being Shepherd St Darlington, specifically bordered by Ivy Street and Coder Road (as referenced in section 3).

The conditions of the assessment are outlined below:
1. This report does not apply to areas outside the scope boundary as identified below.
2. This report is a visual inspection of the scope boundary as of the 4th December 2018.
3. Defects and Liabilities may exist in areas not inspected by the scope boundary.

Note: Shepherd Street is not identified as a construction traffic route for this development, noting that Medium and Heavy Rigid Vehicles are restricted from entering or exiting the University precinct via Shepherd Street.

2. Formalities
- Each image is labelled, time stamped and referenced to the map outlining the Photographic Record locations in section 3 below.
- A copy of the PDF format of the report and the Photo Register will be submitted to the City of Sydney and the Certifying Authority.
- Electronic copies of the images in the native file format will be provided upon the request of the relevant interested parties.
- Any direct requests from the City of Sydney and/or the Certifying Authority must go through the SSD 8636 applicant "the University of Sydney".
3. **Photograph Locations**
Each photo listed in the photo register corresponds to a location on the map below.

4. **Inspection Record**
Each item in the table below corresponds to a photo/s in the photo register.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Photo No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shepherd St, starting at entrance to Blackwattle Creek Lane, across from Ivy St</td>
<td>1-4</td>
</tr>
<tr>
<td>2</td>
<td>Damage to kerb adjacent to Blackwattle Creek Lane</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>General photo down western side of Shepherd street, towards south</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Cracks in the middle of the road between Ivy St and Blackwattle Creek Lane</td>
<td>7-8</td>
</tr>
<tr>
<td>5</td>
<td>Crack in kerb, corner of Ivy St and Shepherd St</td>
<td>9-10</td>
</tr>
<tr>
<td>6</td>
<td>General photo of kerb, corner of Ivy St and Shepherd St</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>Cracks in road, corner of Shepherd St and Ivy St</td>
<td>12-13</td>
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<tr>
<td>8</td>
<td>General photos down Shepherd St towards south west</td>
<td>14-15</td>
</tr>
<tr>
<td>9</td>
<td>Kerb side gutter on eastern side of Shepherd St</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>Damage to kerb, concrete removed on eastern side of Shepherd St</td>
<td>17</td>
</tr>
<tr>
<td>11</td>
<td>General photo down Shepherd St towards south west depicting kerb, street sign and tree on eastern side of street</td>
<td>18-20</td>
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<tr>
<td>Item</td>
<td>Description</td>
<td>Photo No.</td>
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<td>12</td>
<td>Damage to kerb and pavement on eastern side of Shepherd St</td>
<td>21</td>
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<tr>
<td>13</td>
<td>General photo down Shepherd St towards south west depicting road carriageway and kerb</td>
<td>22</td>
</tr>
<tr>
<td>14</td>
<td>Cracking and damage to pavement on eastern side of Shepherd St</td>
<td>23-25</td>
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<tr>
<td>15</td>
<td>General photos down Shepherd St depicting kerb, tree, telephone pole and street sign</td>
<td>26-27</td>
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<tr>
<td>16</td>
<td>Cracking to eastern side of Shepherd St</td>
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<td>17</td>
<td>General photos down Shepherd St towards south west</td>
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<td>18</td>
<td>Tree on western side of Shepherd St</td>
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<tr>
<td>19</td>
<td>General photo of kerb, corner of Shepherd St and Unnamed Road (Northern side)</td>
<td>34</td>
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<tr>
<td>20</td>
<td>General photo of kerb and road, corner of Shepherd St and Unnamed Road (Southern side)</td>
<td>35</td>
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<tr>
<td>21</td>
<td>Cracking in road carriageway, junction of Shepherd St and Unnamed Road</td>
<td>36</td>
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<tr>
<td>22</td>
<td>Tree on western side of Shepherd St</td>
<td>37</td>
</tr>
<tr>
<td>23</td>
<td>Tree and street signage on western side of Shepherd St</td>
<td>38</td>
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</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Photo No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>General photo down Shepherd St depicting kerb, trees and street signage</td>
<td>39-41</td>
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<tr>
<td>25</td>
<td>General photo on western side of Shepherd St depicting trees</td>
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<tr>
<td>26</td>
<td>General photos down Shepherd St depicting kerb, street signage, trees, plants and telegraph pole</td>
<td>43-47</td>
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<tr>
<td>27</td>
<td>Cracking in road carriageway</td>
<td>48</td>
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<td>28</td>
<td>General photo down Shepherd St depicting kerb, tree and street signage</td>
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<td>Tree on eastern side of Shepherd St</td>
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<td>30</td>
<td>Trees on western side of Shepherd St</td>
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<tr>
<td>31</td>
<td>General photos down Shepherd St depicting kerb, trees, street signage and speed bump</td>
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<td>32</td>
<td>Tree on western side of Shepherd St</td>
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<td>33</td>
<td>Street sign and plants on eastern side of Shepherd St</td>
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<tr>
<td>34</td>
<td>General photos of speed bump</td>
<td>56-57</td>
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<td>35</td>
<td>Cracking down the middle of speed bump</td>
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<td>General photo of speed bump</td>
<td>59</td>
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<td>37</td>
<td>General photo down Shepherd St depicting street sign and tree</td>
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<td>38</td>
<td>Damage to kerb on eastern side of Shepherd St</td>
<td>61</td>
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<td>39</td>
<td>Cracking in road carriageway</td>
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<tr>
<td>40</td>
<td>General photos on western side of Shepherd St depicting street sign, trees and plants</td>
<td>63-64</td>
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<tr>
<td>41</td>
<td>Cracking down the middle of road carriageway</td>
<td>65</td>
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<td>42</td>
<td>General photos down Shepherd St depicting tree and kerb</td>
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<td>Tree and kerb on eastern side of Shepherd St</td>
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<td>44</td>
<td>Kerb side gutter on corner of Shepherd St and Boundary St</td>
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<tr>
<td>45</td>
<td>General photo of kerb, Corner of Shepherd St and Boundary St (Northern side)</td>
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<tr>
<td>46</td>
<td>General photo of kerb, Corner of Shepherd St and Boundary St (Southern side)</td>
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<td>47</td>
<td>General photos of Shepherd St depicting street sign</td>
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<td>Crack on kerb, corner of Shepherd St and Boundary St (Southern side)</td>
<td>76</td>
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<td>49</td>
<td>General photos of Shepherd St depicting street sign and kerb</td>
<td>77-78</td>
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<td>50</td>
<td>Cracking of road carriageway</td>
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<td>51</td>
<td>Tree on western side of Shepherd St</td>
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<td>52</td>
<td>General photo down Shepherd St</td>
<td>81</td>
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<tr>
<td>53</td>
<td>Kerb side gutter on eastern side of Shepherd St</td>
<td>82</td>
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<tr>
<td>54</td>
<td>Tree on Western side of Shepherd St</td>
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<td>55</td>
<td>General photos down Shepherd St</td>
<td>84-88</td>
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<td>56</td>
<td>Crack in road carriageway</td>
<td>89</td>
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<td>General photo down Shepherd St depicting kerb and tree</td>
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<td>93-95</td>
</tr>
<tr>
<td>60</td>
<td>General photos of Shepherd St depicting kerb, tree, road sign and plants</td>
<td>96-97</td>
</tr>
<tr>
<td>61</td>
<td>General photos of speed bump</td>
<td>98-99</td>
</tr>
<tr>
<td>62</td>
<td>Cracking down the middle of speed bump</td>
<td>100</td>
</tr>
<tr>
<td>63</td>
<td>General photo down Shepherd St depicting plants, street sign, and tree</td>
<td>101</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Photo No.</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>64</td>
<td>Tree on eastern side of Shepherd St</td>
<td>102</td>
</tr>
<tr>
<td>65</td>
<td>Cracking in road and kerb</td>
<td>103</td>
</tr>
<tr>
<td>66</td>
<td>General photo down Shepherd St depicting kerb, gutter and telegraph pole</td>
<td>104-105</td>
</tr>
<tr>
<td>67</td>
<td>Cracks to kerb surrounding gutter on corner of Shepherd St and Calder Rd</td>
<td>106-108</td>
</tr>
<tr>
<td>68</td>
<td>General photo of Shepherd St depicting tree and speed bump</td>
<td>109</td>
</tr>
<tr>
<td>69</td>
<td>Corner of Shepherd St and Calder Road (Northern Side)</td>
<td>110-111</td>
</tr>
<tr>
<td>70</td>
<td>General photo of Shepherd St across from Calder Road</td>
<td>112</td>
</tr>
<tr>
<td>71</td>
<td>General photo of Shepherd St depicting plants, trees and road sign</td>
<td>113-114</td>
</tr>
<tr>
<td>72</td>
<td>Corner of Shepherd St and Calder Road (Southern Side)</td>
<td>115</td>
</tr>
<tr>
<td>73</td>
<td>General photo of Shepherd St across from Calder Road</td>
<td>116</td>
</tr>
</tbody>
</table>

5. **Appendix A Photographic Record**

This photo register should be read in conjunction with section 4 of this report.
Stephane Kerr  
CIS Town Planner, Campus Infrastructure & Services  
The University of Sydney  
Services Building G12, 22 Codrington Street  
Darlington NSW 2008

Dear Mr Kerr

Subject: The University of Sydney Engineering and Technology Precinct Stage 1  
(SSD 8636) – Community Communication Strategy

I refer to the Community Communication Strategy (named “Communications and  
Engagement Plan”), prepared by Lang O’Rourke, dated 12 February 2019, submitted to the  
Department to address the requirements of condition B10 of the approval for the Engineering  
and Technology Precinct Stage 1.

The Department has reviewed the strategy and considers it satisfactory. Accordingly, the  
Community Communications Strategy is approved and the requirements of conditions B10,  
B11 and B12 satisfied.

Please contact Teresa Gizzi on 8275 1124 or via email at teresa.gizzi@planning.nsw.gov.au if you have any further queries regarding this matter.

Yours sincerely

Karen Harragon  
Director, Social and Other Infrastructure Assessments  
As nominee of the Secretary
Engineering and Technology Precinct (ETP) – Stage 1
Community Communication Strategy

Document and revision history

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
<th>Prepared by</th>
<th>Approved by</th>
</tr>
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<tr>
<td>01</td>
<td>9 Jan 19</td>
<td>Fact Contract Award</td>
<td>Phil Burmester</td>
<td>James Last</td>
</tr>
<tr>
<td>02</td>
<td>31 Jan 19</td>
<td>Amendment to Conditions of Agreement</td>
<td>Susan Milton</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>12 Feb 19</td>
<td>Document title change &amp; incorporation of K3S comments</td>
<td>Susan Milton</td>
<td>Joe Thompson</td>
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Management reviews

<table>
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<tr>
<th>Review date</th>
<th>Details</th>
<th>Reviewed by</th>
</tr>
</thead>
</table>

Controlled: YES  Copy no:  Uncontrolled  ND

Terms and definitions

The following terms, abbreviations and definitions are used in this plan.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>K3S</td>
<td>Lang O'Rourke Community Communication Strategy</td>
</tr>
<tr>
<td>CIU</td>
<td>Lang O'Rourke Australia Construction Pty Limited</td>
</tr>
</tbody>
</table>

Distribution

The master "controlled" document will be retained in Arcinio, the Lang O’Rourke Document Management System, where it can be accessed by personnel as necessary.

All paper copies of the Plan will be considered as "uncontrolled" unless they have been allocated a "copy number" in a colour other than black.

The University of Sydney will be provided with a copy for approval in conjunction with the submission of the Plan.

Issue, Revision and Reissue

The initial issue of this Strategy has been reviewed by Lang O’Rourke’s Regional Environmental Manager to ensure it meets the requirements of the current Environmental Management System (EMS) and policy, contract, specifications and standards. The Strategy is approved for use on the project by the Project Leader. Evidence of initial review and approval is by signatures on the cover sheet.

This Strategy is to be submitted to the University of Sydney representative prior to the proposed commencement of work on site. In conjunction with the submission of the Strategy, Lang O’Rourke will coordinate and facilitate an initial communication workshop with representatives from the University of Sydney and Lang O’Rourke if it is deemed to be required. This workshop will discuss the contents and application of the Strategy to facilitate its approval and agreement of the proposed management measures and controls.

Revisions of this Strategy may be required throughout the duration of the project to reflect changing circumstances or identified opportunities for improvement.

Revisions may result from:

- Management Review
- Changes to the Company’s standard systems
- Audit (either internal or by external parties)
- Client complaints or non-conformance reports

Revisions will be reviewed and approved by the Project Leader prior to issue. Updates to this Plan are numbered consecutively and transmitted to holders of controlled copies.
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1. Introduction

The Strategy forms part of the suite of project management plans developed for the Engineering and Technology Precinct (ETP) - Stage 1 project. It outlines the key management systems, procedures and controls that Long O'Rourke will use to:

- Achieve all project objectives
- Deliver the University of Sydney (the University) value for money
- Ensure certainty of delivering the project on schedule
- Provide innovative solutions that align with the overall project objectives
- Achieve exceptional and demonstrable outcomes in safety, whole of life, environment, sustainability and quality.

1.1 Scope of work

The University is transforming its Engineering and Technology Precinct into an environment that fosters scholarship at the highest standard possible and delivers a positive experience to all of its staff, students and stakeholders. Therefore the ETP Stage 1 works evolve delivering high-quality infrastructure that accommodates maximum research opportunities while being flexible enough to respond to new education pathways in the future.

Stage 1 works relate to a new Micro Engineering Building which will incorporate ~31,000m² of new space and ~6,000m² of refurbished facilities. The building will include research and teaching labs, office areas and teaching spaces and be connected to the existing Electrical Engineering Building.

The project also involves the associated demolition works of part of the Electrical Engineering building and infrastructure upgrades, as well as drafting and drafting works to adjacent buildings.

1.2 Project objectives

The University's objectives for the project are to deliver:

- An improved reputation as an innovative and modern engineering faculty
- Fit-for-purpose research facilities
- Increased research productivity and quality
- An enhanced student learning experience and quality of learning resources, such as learning spaces, computer labs, and teaching labs
- Iconic engineering innovations in design, construction and operation
- Improved integration between research and teaching
- Lower (rate of increase) of operating and maintenance costs
- Improved safety and security processes.

2. Purpose

Long O'Rourke is a trusted delivery partner committed to working closely with the University of Sydney to deliver timely and meaningful community and stakeholder engagement strategies. The team recognises the importance of positive community and stakeholder relations to the successful delivery of the project.
Through this Strategy, the team has identified how effective communication will minimise the impacts of construction on stakeholders and the surrounding community. This is based on the team’s understanding that a key project challenge is the mitigation of the impacts on the surrounding area and adjacent campus buildings. In conjunction with CSO, Laing O’Rourke will ensure that the local community and university stakeholders are engaged with the project and well informed about works before construction starts and throughout delivery.

We understand that often the first point of contact the local community and wider public has for this project is through our workforce. We will ensure all members of our team have sufficient training to understand the potential sensitivity around contact with the public and to be able to respond in an appropriate manner to any approaches.

We recognise that this project comes with significant responsibilities. This Strategy ensures all members of the community and adjacent campus are aware of the project and can participate in relevant project aspects. It also ensures that those most affected by the work receive timely information and the consideration they need.

The team will implement a proactive approach to risk identification and issues management to ensure that, where possible, potential issues are avoided or minimised.

This Strategy provides the broad approach for managing communications and stakeholder relations for the project. It will primarily complement the Construction Management Plan and will be updated as required to ensure it reflects the University of Sydney’s current strategy.

This Strategy includes:

- An overview of the stakeholder groups including those consulted during the design phase and who will be consulted during construction phase
- A management approach that articulates the communication and consultation objectives and principles
- Management strategies including communication and engagement tools and activities
- Roles and responsibilities which identify key personnel with accountability for managing stakeholder communication and relationships
- Procedures and mechanisms for information dissemination and stakeholder feedback
- An inquiries and complaints management system

Understanding this Strategy is a stakeholder scan. This was undertaken to identify key project stakeholders and assess the project impact and areas of interest/concern for those stakeholders. This data has been used to identify the appropriate tools to be used in communicating and engaging with these stakeholders.

3. About the Stakeholders

3.1 Stakeholder Analysis

A comprehensive scan of all stakeholders has been undertaken to inform the development of the Strategy. The following provides an overview of key stakeholder groups, their issues and potential areas of interest and proposed communication and engagement strategies.

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Potential project concerns and issues</th>
<th>Mitigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>University staff</td>
<td>Increased noise from construction activities</td>
<td>• Provide noise control measures such as earplugs and control measures such as noise barriers.</td>
</tr>
<tr>
<td>Local residents</td>
<td>Loss of open space</td>
<td>• Implement green space and recreational areas to address this concern.</td>
</tr>
<tr>
<td>Community</td>
<td>Traffic congestion during peak times</td>
<td>• Implement traffic management plans such as diversion and control measures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University buildings and construction impacts</th>
<th>Construction impacts, such as noise, dust, vibration, disruptions to routine, increases in traffic and reduced parking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible solutions include:</td>
<td>• Apply our experience in working in dynamic operating environments.</td>
</tr>
<tr>
<td>- Increased pedestrian and vehicle access</td>
<td>• Implement a comprehensive pedestrian and vehicle access plan.</td>
</tr>
<tr>
<td>- Strategic communication channels</td>
<td>• Establish a multi-channel strategy for communication.</td>
</tr>
</tbody>
</table>

3.2 Communication and Engagement Strategies

- Conduct intensive user group consultation in the early design phase for the selection of communication channels.
- Continue extensive user group consultation throughout the project and design phase.
3.2 Project Phases and Stakeholder Impacts

One of the key elements of an effective communication strategy, in the context of a construction or development project, is a schedule of activities that reflects the construction programme. Each phase of the construction programme will have varying impacts and risks. This is particularly pertinent to the university community.

Managing these issues will require the implementation of targeted stakeholder communication and engagement strategies that reflect the construction activities as the project progresses. The following provides an overview of key project milestones.

<table>
<thead>
<tr>
<th>Timing</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Establishment</td>
<td>Project Information, Stakeholder Engagement, Construction Activities, Site Management and Safety</td>
</tr>
<tr>
<td>Demolition</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
</tbody>
</table>

4. Management Approach

4.1 Communication Objectives

The communication objectives of this Strategy are to:

- Deliver the project with minimal disruption and impact on the surrounding community
- Comply with the relevant conditions of approval
- Deliver messaging consistent with the various communities in consultation with the CSI Community Engagement Manager, the ETP Project Team, USYD Engineering Department and the FEIT (Faculty of Engineering and Information Technology) marketing and communications team
- Effectively manage any issues in a proactive, honest and transparent manner to minimise complaints
- Ensure that all members of the University community are aware and kept up to date on the works being performed
- Ensure all issues raised by members of the University and local community are dealt with in a timely manner

- Position the project positively within the University and local community

4.2 Communication Principles

The following principles will be adhered to in all communication activities undertaken by the team:

- Transparency — communication will be honest, open and transparent at all times
- Timely — information will be provided in a timely manner to ensure project impacts are managed appropriately and that key stakeholders have an appropriate amount of time to respond to any issues as they may arise
- Inclusive — project information and engagement activities will be conducted in a manner that ensures all stakeholders can contribute in a meaningful way. This includes using plain English and a range of alternative communication tools. The team recognises the diversity of the Australian community and will ensure Indigenous Australians, people of non-English speaking backgrounds, people with disabilities and other culturally diverse groups are included and represented
- Proactive — communication and engagement activities will be conducted using a proactive approach which may include taking a leading role in issues identification and management, fast response time (thus is, above the required response time) to enquiries and complaints responses
- Legacy — the team will ensure that, where possible, initiatives undertaken will leave a positive legacy for the local and broader community
- Respect for privacy — the team will adhere to all relevant legislative requirements in relation to the protection of privacy. This relates specifically to local community members and members of the broader public.

5. Stakeholder Management Tools

5.1 Communication Tools

Lang O’Rourke will liaise and work collaboratively with the CSI Community Engagement Manager and ETP (FEIT) communication and marketing team.

Proven and effective consultation and engagement initiatives and tools will be used to inform all stakeholders of the ETP project about the project. The engagement method and consultation tools will be tailored to suit the target audience. Early consultation with the CSI Community Engagement Manager and ETP (FEIT) Marketing and Communications team will determine the communication channels and approved content. The elements which make up the overall communications strategy for the ETP Stage 1 will include, but not be limited to, the following tools and processes.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description and targeted stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Engineering (DE)</td>
<td>A powerful new way to communicate with stakeholders and the community and will be used to increase project awareness, DE creates a digital environment that clearly demonstrates construction methodologies, timelines and potential impacts, enabling effective communication</td>
</tr>
<tr>
<td>Augmented reality</td>
<td>Allows the project to be visualised within the physical world through use of a mobile device such as a smartphone or tablet with an integrated camera. Static, real communications are transformed into dynamic and engaging representations of the project, with a high degree of interactivity and information</td>
</tr>
<tr>
<td>Virtual reality</td>
<td>Allowing the user to interact with the digital model and be totally immersed and fully present in the space. This technology allows stakeholders and other project stakeholders to better understand the end results of the project as well as different options and configurations</td>
</tr>
<tr>
<td>Tool</td>
<td>Description and intended stakeholders</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>CCS</td>
<td>A CCS project will outline all stakeholders to access the model including model visualizations, through animations and other multimedia simulations.</td>
</tr>
</tbody>
</table>

**Shape of stakeholder involvement**

- **Direct engagement:**
  - **Targeted stakeholder engagement:** The review process will be informed by targeted engagement of key stakeholders in the project. This will include targeted roundtable discussions, stakeholder workshops, and other targeted engagement strategies. |

**Advisory committee**

- A dedicated advisory committee will be appointed to provide expert advice and guidance to the project. The committee will consist of members with expertise in relevant fields and will meet regularly to discuss progress and provide feedback. |

**Approach to consultation**

- **Fundamental principles:** The fundamental principles of stakeholder engagement will be followed, including transparency, meaningful participation, and accountability. |

**Project information line and email address**

- **Phone:** 1800 188 5558 (toll-free) for general inquiries and information about the project. |

**Social media**

- **Twitter:** @ProjectName (to follow updates and engage with the project team). |

**Internet**

- **Website:** www.projectname.com for regular updates and information about the project. |

**ICT**

- **Social media:** Facebook for regular updates and information about the project. |

**Stakeholder database**

- **University:** A dedicated stakeholder engagement team will be established to coordinate engagement activities and provide support to project team members. |

**Hiring managers**

- **Key stakeholders:** Stakeholder management is essential for the success of the project. Stakeholders will be identified, and strategies will be implemented to engage and manage them effectively. |

**Community Communication Strategy**

- **Communication strategy:** A comprehensive communication strategy will be developed to ensure clear and consistent messaging to all stakeholders. This will include regular updates, newsletters, and other communication channels. |

**Project management**

- **Project management:** Project management will be guided by the University's standard procedures and best practices. The project team will work closely with the project manager to ensure smooth project delivery. |

**Project delivery**

- **Project delivery:** The project will be delivered to the highest standard, ensuring that all stakeholders are satisfied with the outcomes. |
5.2 Engagement Tools and Strategies

Engagement tools are used to seek input from stakeholders into the project. Input may be sought on the management of impacts, landscaping, urban design elements and other project aspects that are negotiable. General feedback regarding the project may also be sought through the use of engagement tools and strategies. It is important that input from stakeholders is sought only in relation to those elements of the project in which stakeholders are able to influence the outcome, rather than elements that are fixed or not negotiable. Examples of elements of a project that may not be negotiable often relate to the conditions of approval and user requirements.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
<th>Frequency</th>
<th>Target Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forums/Workshops</td>
<td>As needed, they are used as a means to gather information/input from project stakeholders.</td>
<td>As needed</td>
<td>University of Sydney stakeholders</td>
</tr>
<tr>
<td>User Groups/Events</td>
<td>Where possible, the team will use interactive consultation forms and begin input on relevant aspects of the project. This may include design elements/features, targeted employment initiatives or targeted economic development activities. These will be conducted with agreement from the University of Sydney.</td>
<td>As required</td>
<td>University stakeholders</td>
</tr>
<tr>
<td>University site visits and events</td>
<td>Site visits and events are a way to generate interest in a project, promote outcomes, activities and provide information about progress. In this instance, site visits and events will be approved by the University of Sydney and be coordinated by the team as required. The team is also interested in using the strategy with students, local community members and other stakeholders, subject to approval by the University of Sydney.</td>
<td>As required/approved</td>
<td>University stakeholders</td>
</tr>
</tbody>
</table>

6. Risk and Issues Register

Communications personnel will take a proactive approach to the identification and management of risks. This includes notifying the University of Sydney of any potential and actual issues as they arise in a timely manner, while also providing suggested mitigation strategies and draft responses where required.
8. Procedures and Protocols for Information Dissemination and Feedback

The following provides an overview of all information procedures relating to the Project. These will be tailored to meet the ESS's communication requirements where required.

8.1 University and Community Notifications Procedure

University and community members impacted by project works will be issued with a written notification prior to the commencement of works. The notification will be distributed via email notification and letter box drop and include residents/businesses identified in the stakeholder list (and discussed above).

The distribution of notifications will be coordinated with the University of Sydney and other projects (as relevant).

Where appropriate (for example, if the construction programme necessitates significant changes to established mitigation strategies), the notification will include ‘door knocking’ affected stakeholders to advise them of the project impacted and provide face-to-face information regarding the works. This may take place at the time of the written notification or one week prior to the commencement of works. Where stakeholders cannot be contacted in this way, an email will be sent including the project's 1800 contact information or a contact calling card will be left.

Notifications will include information regarding:
- Time of works
- Date of works (direction)
- Specific information regarding likely impacts - for example, traffic, visual amenity, noise and dust
- Mitigation strategies (where relevant)
- Project 1800 number an email
- Project website

All notifications will be recorded in the project's database.

8.2 Contacts/Enquiries Procedure

It is anticipated that community members and University stakeholders will contact the project team using a number of methods including email, 1800 project number and verbal/fax-to-face inquiries. After ESS approval, Laing O'Rourke communication personnel will respond promptly at all times to such inquiries. Complaints will also be logged on the project database. Where an immediate response is not possible, (eg, due to the need to source relevant information from personnel within the project team), communication personnel will record the enquirer’s details and advise them that a response will be provided within 24 hours (or earlier if possible).

Where a written response is required, Laing O'Rourke communication personnel will provide the University of Sydney with a draft response. It is anticipated that the University of Sydney would provide approval for the response within 24 hours or as agreed (see proposed Approvals Protocol provided below for suggested timeframes).

Communication personnel will ensure that the enquirer is satisfied with the response provided and close the action on the database. If the enquirer is not satisfied with the response, communications personnel will record the enquirer's details and advise them of any further attempt to resolve the inquiry. If a satisfactory resolution is not reached, communications personnel should refer the inquiry to the Project Leader and advise the University of Sydney.

Information to be recorded on the database should include:
- Date and time of contact/enquiry
- Name of enquirer (if agreed by the enquirer)
- Inquirer’s contact details (if agreed by the inquirer)
- Nature and location of inquiry (for example, information requested)
- Proposed follow-up action(s) (for example immediate verbal response, letter, etc). This may require one or more actions
- Content of response
- Status of the inquiry (open/closed).

8.3 Complaint Management Procedure

Laing O'Rourke has developed a Complaints Management System and Procedure and a Complaints and Enquiries Register as an adjunct to this section of the Strategy.

Complaints may be received by the project team in a number of ways including email, project 1800 number and verbal/fax-to-face. It is the responsibility of communication personnel to respond to all complaints in a timely manner that is consistent with the conditions of approval and the University of Sydney requirements.

In all instances, a complaint will be logged on the database and the University of Sydney will be advised. This will occur on the day that the complaint is received and within one hour of receipt of the complaint (this includes a draft response if required).

After assessing the CIS, Laing O'Rourke communication personnel will follow up with the compliant immediately where possible. If the complaint cannot be resolved immediately, communication personnel will liaise with the University of Sydney to identify an appropriate resolution strategy. This includes a proposed draft response which will be provided within one hour of receipt of the complaint.

Communication personnel will ensure the complaint is closed (resolved) in the shortest timeframe possible.

Information to be recorded on the database should include:
- Date and time of complaint
- Name of complainant (if agreed by the complainant)
- Complainant’s contact details (if agreed by the complainant)
- Nature and location of complaint matter (for example, noise impacts)
- Proposed follow-up action(s) (for example immediate verbal response, letter, etc). This may require one or more actions
- Content of response
- Status of the complaint (open/closed).

8.4 Escalation and Dispute Resolution Procedure

If a complainant states they remain unsatisfied with the actions and resolutions proposed or undertaken, a process of mediation will be adopted as follows:

1. The client, CIS, will be actively engaged to assist the Project Leader in resolving the matter.
2. The complainant will be invited to attend a meeting with CIS (Project Manager and other CIS staff as required), the Laing O'Rourke Project Leader and Communication and Stakeholder Engagement Manager.
3. If the matter cannot be resolved at stage 2, then the OSS Project Team will determine the matter and advise all parties.
4. Notes will be taken at all stages.

8.5 Media Protocol

The Lang O'Rourke Communication team recognises that no interaction is to take place with the media unless specifically approved or agreed by the University of Sydney. Where required, communication personnel will provide relevant information to the University of Sydney to respond to media inquiries, requests for information and/or advertisements.

As part of the project induction, all personnel will be instructed that no communication is to take place with the media and that any media contacts/requests are to be referred immediately to OSS and Lang O'Rourke's Communication and Stakeholder Engagement Manager.

The Communication and Stakeholder Engagement Manager will seek approval from the University of Sydney to publish any project information, advertisements or promotional activities. This is consistent with the approval protocol which is detailed above.

As part of the reporting process, the Communication and Stakeholder Engagement Manager will provide the University of Sydney with information/issues that may affect media attention.

8.6 Privacy

Lang O'Rourke will comply with the requirements of the Privacy and Personal Information Act 1998. All inquiries (including complaints) will be asked for permission to record their personal details. Information will only be noted with their consent.

This will be managed through the project database which is used to record and track all stakeholder communications.

Regular reports from the database will not include personal details. Confidentiality will also be preserved in the event of complaints against personnel.

9. Monitoring and Reporting

9.1 Reports to the University of Sydney

Lang O'Rourke will provide OSS with daily reports on complaints, issues arising and risks.

Lang O'Rourke will provide OSS with a monthly report that includes:

- A summary of all contacts received and made by the team and of all communication activities undertaken. This will include all emails, phone enquires, face-to-face enquires, meetings and others as relevant.
- A summary of all complaints received including actions taken to resolve the complaint and current status (open/closed). NOTE: Communication personnel will provide daily reports to the University of Sydney regarding any complaints or issues received including actions taken to resolve issues or complaints.
- A summary of all communications/stakeholder engagement activities undertaken including letter boxes, publications of Facts Sheets, and other collateral meetings held (this includes stakeholder meetings undertaken by communications personnel and other team members) and other activities as relevant.

9.2 Audits

Lang O'Rourke understands the University of Sydney may audit the Community Relations Plan and associated strategies to ensure that communication and stakeholder engagement strategies are current and effective.

9.3 Review

Communications personnel will review the Community Communication Strategy as required to ensure it is current and effective.

If agreed by the University of Sydney, Lang O'Rourke and/or University communication personnel will undertake confidential surveys with key stakeholders (local residents and University stakeholders) to ensure the level of information and support is of an appropriate standard.
Engineering and Technology Precinct (ETP)
Complaints and Enquiries Management System and Procedure

Document details:

- Title: Complaints and Enquiries Management System and Procedure
- Client: University of Sydney
- Client reference no.: USYDOHN/V2018/184
- Document number: K13-CONF-PAM-PRO-00001
- User-Oprated contract no.: K13

Revisions

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
<th>Prepared by</th>
<th>Approved by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22 January 2018</td>
<td>Draft: Complete of Approval</td>
<td>Susan Arton</td>
<td>Joe Thompson</td>
</tr>
</tbody>
</table>

Management reviews

<table>
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<tr>
<th>Review date</th>
<th>Details</th>
<th>Reviewed by</th>
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1. Overview

The complaints management system will operate for the duration of construction of the Engineering and Technology Precinct Stage 1 Project within the University of Sydney's Darlington campus. The system is consistent with the University's Campus and Infrastructure Services Complaints Management Guidelines. The database type will be agreed with the client, CS.

It will include a complaints register which records the number of complaints received, the number of people affected in relation to a complaint, the nature of the complaint, how the complaint was addressed, and the extent of resolution with or without mediation.

The complaints register will be available to the client and the NSW Department of Planning and Environment upon request.

The complaints management system incorporates a complaints and enquires procedure and a toll-free telephone number and email address dedicated to the Engineering and Technology Precinct Stage 1 project.

Funding to implement and operate the complaints management system will be by agreement with the client.

2. Oversight of Complaints Management System

Overall responsibility for compliance of the system lies with Laing O'Rourke's (LORAC) Project Communications and Stakeholder Engagement Manager. This includes receipt of complaints and enquires through the dedicated 1800 line and email address, and overseeing timely responses.

The project toll-free phone number is 1800 551 161.

The project email is uniydcstproject@laingorourke.com.au

This contact information will be included on signboards and notifications to University stakeholders and local residents.

Inductions for all project staff and subcontractors will include the complaints/enquiries handling process plus details of issues for sensitive receivers/stakeholders.

3. What is a Complaint

A complaint is any communication from a project stakeholder/neighbor or member of the public which expresses dissatisfaction with our work or actions. Responding to complaints must be prompt. Addressing complaints within the project can serve to improve project methodologies and mitigations to avoid future complaints.

Environmental related complaints will be responded to by the project's environmental team with client input as required.

4. What is an Enquiry

An enquiry is a question, query, request for information or clarification or comment from a project stakeholder/neighbor or member of the public.

5. Response Method and Timing for Complaints and Enquiries

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>METHOD</th>
<th>RESPONSE AND TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complaint</td>
<td>Phone</td>
<td>24 hour</td>
</tr>
</tbody>
</table>

- Enquiries
  - Phone: Respond within 24 hours
  - Email: Respond within 2 hours of receiving
  - Face-to-face: Take details, respond within 2 hours of receiving

- Emergency: Addressed immediately, calls appropriate emergency services or site staff.

6. Complaints Management Process

Complaint received

- Allocated project team member acknowledges complaint with stakeholder

Can complaint be closed out immediately?

- NO: Respond to Stakeholder
- YES: Record and close out in register, assess and adjust site procedures if required

Project team member investigates with relevant site personnel

Both confirm actions to resolve with project management if required

Allocated project team member resolves complaint

Allocated team member records and dismisses complaint in database, including any reporting requirements

Assess and adjust site procedures if required
7. Compliants and Enquiries Recording
Complaints and enquiries will be recorded capturing the following information:
- Name, address and contact details of complainant/enquirer
- Date and time complaint/enquiry received
- Channel by which complaint/enquiry received (e.g., phone, email, post, in person, etc.)
- Description of complaint/enquiry including any supporting material (e.g., photo)
- Location of complaint/enquiry
- Description of first action response (i.e., what the project will do to address matter)
- Any further required actions: follow up and timeframe – record these with date and time
- Was complaint/enquiry project related or unrelated – if unrelated, complainant/enquirer informed and complaint/enquiry not included in the tally for the project
- Status of complaint/enquiry (open or closed)
- Note if complainant was satisfied with response
- If complainant was unsatisfied, what further resolution or mediation would be required

8. Escalation and Dispute Resolution Procedure
If a complainant states they remain unsatisfied with the actions and resolutions proposed or undertaken, a process of mediation will be adopted as follows:
1. The client, CIS, will be actively engaged to assist the Project Leader in resolving the matter.
2. The complainant will be invited to attend a meeting with CIS (Project Manager and other CIS staff as required), the LORAC Project Leader and the LORAC Project Communication and Stakeholder Engagement Manager.
3. If the matter cannot be resolved at stage 2, then the CIS Project Team will determine the matter and advise all parties.
4. Notes will be taken at all stages.

9. Privacy
The project's complaints management system will function in line with current regulatory level of privacy requirements.
Hi Philip,

Please see below in relation to Greenstar registration of the project.

Please feel free to contact me to discuss

Regards,

DREW BAGNALL | Senior Project Manager
Campus Infrastructure & Services
THE UNIVERSITY OF SYDNEY
Services Building G12 | 22 Codrington St | Darlington | NSW | 2008
T +61 2 9114 2641 | F +61 2 9351 5234 | M +61 451 101 260
E drew.bagnall@sydney.edu.au | W http://sydney.edu.au

Please think of our environment and only print this e-mail if necessary.

From: Nikki Short
Sent: Friday, 8 March 2019 10:10 AM
To: Drew Bagnall <drew.bagnall@sydney.edu.au>
Subject: Fwd: GS-4392DA Engineering and Technology Precinct Stage 1 - REGISTERED

Confirmation of registration.

Sent from my iPhone

Begin forwarded message:

From: Green Star <greenstar@gbca.org.au>
Date: 8 March 2019 at 09:08:47 GMT+11
To: Nikki Short <nikki.short@sydney.edu.au>
Cc: <nick.baker@gbca.org.au>, <nikki.short@sydney.edu.au>
Subject: GS-4392DA Engineering and Technology Precinct Stage 1 - REGISTERED
Reply-To: <greenstar@gbca.org.au>
Congratulations! Your project is now registered for a Green Star - Design & As Built v1.2 rating.

The University of Sydney can now market their desired rating and registration, according to the Green Star Trade Mark Policy.

Next Steps:

Resources: A range of resources are available for you to use from the GBCA Website. Information on the Certification Process and resources available can be found in the Submission Requirements on the GBCA website. If you have any technical questions, you can ask this online through the Green Star Project Manager.

Submit documentation for assessment: When you are ready to submit documentation, please go to your Green Star Project Manager to access the GBCA Submissions Portal. Then simply send a request to “Submit documentation for assessment” to let us know you’re ready to have this assessed. Please ensure this registration confirmation is included in the General Section of your submission for assessment.

We’re here to help! To talk more about Green Star Certification, your project, and its entitlements, contact your GBCA contact, Nick.

Kind Regards,

The Green Star Solutions team

Green Building Council of Australia | http://www.gbcia.org.au | info@gbcia.org.au | (02) 9239 6200
1. Introduction
This project is part of the suite of project management plans developed for the Engineering and Technology Research (ETR) - Stage 1 project. It outlines the key management systems, procedures, and controls, which will be undertaken to:

- Achieve project objectives
- Deliver the University of Sydney (the University) value for money
- Ensure timely delivery of the project to schedule
- Provide innovative solutions that align with the overall project objectives
- Achieve operational and performance objectives in safety, whole of life, environment, sustainability and quality

1.1 Project Objectives
The successful objectives for the project are to deliver:

- An improved reputation as a R&D leader on engineering faculty
- For purpose research facilities
- Increased research productivity and quality
- An enhanced student experience and quality of learning outcomes, such as learning spaces, computer laboratories, and shared classrooms
- Open engineering environment in design, construction and operation
- Improved integration between research and teaching
- Lower levels of increased operating and non-renewable costs
- Improved safety and success processes

1.2 Purpose
The CEMP and its associated management plans have been developed to comply with the contract requirements for environmental management, relevant environmental legislation and other environmental obligations associated with the project. This CEMP has been prepared to fill the Conditions of Consent issued by the Department of Planning and Environment (DPE) for the project, justifying the Consent and the ERF. The CEMP is a dynamic document and will be updated throughout delivery of the project, as necessary.

The CEMP is intended to ensure that positive and negative effects on the environment are assessed in order to minimise operational impacts. It is intended to classify and identify the environmental impacts of this project. The CEMP is intended to:

- Meet the requirements of ISO 14001 relating to the need for continual improvement
- Provide a link between the program and the project management system, and the CEMP has been developed to:

3. Distribution Policy
The master completed CEMP document will be held within the project's document management system where it can be constantly reviewed and updated.

All issues of the CEMP must be written in uncontrolled unless they have been allocated a unique number in a list or database of CEMP issues.

3.1 Issue, Amend and Close
The issue, amend and close section of the CEMP includes the following information:

- Issue number
- Date
- Description
- Effect
- Status
- Owner
- Approver
- Date
- Note

All issues must be reviewed and approved by the Project Manager before being closed. Updates to the CEMP must be numbered sequentially and issued to all members and relevant departments.

The CEMP is a dynamic document and will be updated throughout delivery of the project, as necessary.
5. Policy

5.1. Environmental Assessment

- Identified and documented in the site assessment report.
- Considered in the project planning and design process.
- All potential environmental impacts are evaluated and managed.

5.2. Stakeholder Engagement

- Engaged with all relevant stakeholders throughout the project.
- Regularly updated and communicated with all stakeholders.

5.3. Permitting and Approval Processes

- All required permits and approvals were obtained prior to construction.
- Compliance with all environmental regulations.

5.4. Monitoring and Reporting

- Regular monitoring and reporting of environmental impacts.
- Reporting to the local environmental authority.

6. Objectives and Targets

High-level objectives and targets for the project are outlined in Table 3.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Reduction</td>
<td>50% reduction</td>
</tr>
<tr>
<td>Water Conservation</td>
<td>100% compliance</td>
</tr>
<tr>
<td>Biodiversity Protection</td>
<td>90% habitat protection</td>
</tr>
</tbody>
</table>

7. Responsibilities and Authorities

Responsibilities and authorities for theproject are outlined in Table 4.

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Overall project management and coordination of all aspects.</td>
</tr>
<tr>
<td>Site Manager</td>
<td>Site-specific management and coordination of on-site operations.</td>
</tr>
<tr>
<td>Environmental Coordinator</td>
<td>Monitoring and compliance with environmental regulations.</td>
</tr>
<tr>
<td>Safety Coordinator</td>
<td>Safety and risk management.</td>
</tr>
</tbody>
</table>

8. Reporting

- Regular updates to the local environmental authority.
- Reporting of all environmental incidents.

9. Conclusion

The project was successfully completed with minimal environmental impact. The stakeholders were engaged throughout the project, and all legal requirements were met.

End of project.
8. Legal and Compliance Obligations

Monetary, administrative, or requirements relevant to the project are outlined under Environmental System Requirements - Compliance Obligations which outlines the procedures that an individual office has to consider other legal and other mandatory requirements.

- All personnel associated with the project will comply with all relevant requirements.
- Signage, facilities, regulations, and controls.
- Environment protection and controls.
- Development controls.
- Relevant legislation, guidelines, and codes.
- Certification requirements.
- Other compliance obligations.

An assessment of the relevant legislative requirements has been conducted and included in Appendix A. Licenses, permits, and approvals are outlined in Appendix B. The relevant documents are contained in the Environmental System Requirements - Compliance Obligations.

9. Environmental Risk Assessment and Control

A project risk assessment is an important part of the Environmental System Requirements - Compliance Obligations. The assessment is designed to identify and assess the potential environmental impacts of the project. The assessment will be reviewed and updated as the project progresses. The following are the potential environmental impacts that are assessed in the Environmental System Requirements - Compliance Obligations.

- Obligations and requirements associated with the environmental assessment.
- Risk assessment.
- Environmental impacts.
- Mitigation and monitoring requirements.
- Mitigation and monitoring measures.
- Water quality and water management.
- Land management.
- Air quality and air management.
- Noise and vibration control.
- Waste management.
- Waste disposal.
- Surface water management.
- Groundwater management.
- Natural resources.
- Biodiversity and ecosystems.
- Habitat management.
- Cultural heritage.
- Historical and archaeological heritage.

An assessment of the potential environmental impacts of the project is required under the Environmental System Requirements - Compliance Obligations. The assessment will be reviewed and updated as the project progresses.

The following are the potential environmental impacts of the project.

- Air quality and air management.
- Water quality and water management.
- Land management.
- Waste management.
- Surface water management.
- Groundwater management.
- Natural resources.
- Biodiversity and ecosystems.
- Habitat management.
- Cultural heritage.
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- Cultural heritage.
- Historical and archaeological heritage.

An assessment of the potential environmental impacts of the project is required under the Environmental System Requirements - Compliance Obligations. The assessment will be reviewed and updated as the project progresses.
11. Communication and Reporting

Liang D’Orfoua’s method includes specific organizational requirements related to communication and reporting within the system. The system includes: Communication and Reporting with respect to the functioning of the project and environmental management. All employees must receive regular environmental training and be trained to identify their responsibilities and be able to report concerns to their supervisors.

11.1 Internal

Internal communication methods include:

- Digital platform
- Management reports
- Site inspection reports
- Audit reports
- Incident reports
- Action items
- Site meetings
- Employee inductions, training and risk-based training
- Briefings, instructions and alerts

11.2 External

External communication methods include:

- Site meetings with the University
- All significant incidents notified to the University
- Meetings/presentations to the University at progress meetings and in the project program
- Advise and co-operation with local groups (such as local Councils and Environmental Protection Authority [EP&A] as necessary)
- Discussions with adjusted owners and the community where it may be affected by the project.

12. System Documentation

Liang D’Orfoua’s integrated Health, Safety and Environmental Management System (HSEMS) is part of a broader wide management system which is known as ISMS. The core elements of the system are described in this CEMP with reference to relevant HSEMS System Requirements, Primary Standards and Secondary Environmental Risk Protocols.

13. Document Control and Records

Document control procedures include the following:

- The project requires a project management system that allows for the ease access and tracking of information. This includes access to the documents and records management system.
- Individuals with relevant duties for work processes are responsible for the proper maintenance and upkeep of the workplace and project record management systems to ensure:
  - Filing and records are kept up-to-date
  - Records are not lost, damaged or otherwise destroyed
  - Records are maintained in accordance with contractual, statutory requirements and timeframes
  - Keep a log of in-house use of documentation and record maintenance.

14. Operational Control

14.1 General

Activities and business processes that have the potential to significantly affect the environmental performance must be identified, planned, documented and assessed measures in place to ensure the Company’s goals, objectives and compliance obligations are met.

When Liang D’Orfoua’s HSEMS and with respect to the context of the business, operational controls are documented in Environmental Primary Standards. Environmental Primary Standards have been developed from aspects and results of compliance obligations. They provide a framework for the management of controls of environmental aspects as well as creating opportunity for innovation and enhancing environmental benefits.

At a project level, specific operational controls to manage environmental issues are defined either at site or at all other locations:

- Site specific controls in Appendix 4
- Site specific controls in Appendix 5

The objectives of the CEMP are to be achieved by the following:

- Ensure the company complies with legislative requirements relating to environmental issues and maintain the Company’s HSEMS as a result.
- Monitor and evaluate the effectiveness of the CEMP and take corrective actions as necessary.
14.3 Environmental Control Plan

The project Environmental Control Plan is upgraded to assist in preparing and delivering the project. It is specific to the site or works area and outlines the location of potential measures, monitoring requirements, conditions of approval and environmentally sensitive areas. It is the primary planning tool for the permitted construction project.

The Environmental Control Plan will be used in project indicate, work site set up, as manner ensuring environmental performance, include as information in tender documents to subcontractors and applicable. The Environmental Control Plan will be used in project indicate, work site set up, as manner ensuring environmental performance, include as information in tender documents to subcontractors and applicable. The Environmental Control Plan will be used in project indicate, work site set up, as manner ensuring environmental performance, include as information in tender documents to subcontractors and applicable. The Environmental Control Plan will be used in project indicate, work site set up, as manner ensuring environmental performance, include as information in tender documents to subcontractors and applicable.

14.5 Measurement

The supply of goods and/or services by sub-contractors will be managed in accordance with the System Requirements Procurement and Supply Plan and Core Process. In particular:

- During the tender phase, supply chains are to be evaluated for their ability to meet the project's environmental obligations. Subcontractors should be included where significant environmental impacts are likely to occur, and measures to mitigate these impacts are to be specified in the tender documentation.
- During the contract phase, subcontractors should be monitored to ensure compliance with the environmental obligations specified in the contract documents.
- Regular site inspections should be conducted by the project team to verify that subcontractors are complying with their environmental obligations.
- Non-compliance with environmental obligations should be reported to the appropriate authorities and corrective action should be taken as necessary.

14.6 Handling, Storage, Transport and Packaging

The handling, storage, and transport of goods and materials will be carried out in accordance with the requirements of ISO 14001 and the relevant standards. In particular:

- Goods should be handled and transported in a manner that minimizes the risk of damage to the environment. This includes the use of appropriate equipment and handling techniques.
- Storage areas should be designed to minimize the risk of pollution and should be well-ventilated to prevent the accumulation of hazardous substances.
- Transport modes should be selected on the basis of minimizing environmental impacts, such as emissions and fuel consumption.

14.7 Life-Cycle Approach

The life-cycle approach to project management is intended to manage the life-cycle impacts of the project. This means that the project team will work together to ensure that the environmental impact of the project is minimized at all stages of the project's life-cycle. This includes:

- Identifying and assessing the potential environmental impacts of the project at an early stage.
- Developing strategies to mitigate and manage these impacts.
- Monitoring and reporting on the environmental performance of the project throughout its life-cycle.

14.8 Manufacturing, Construction and Fabrication Processes

These processes will be carried out in accordance with the Project Team's Procedures. In particular, the following steps will be taken to ensure compliance with environmental requirements:

- Regular site inspections will be conducted to verify that subcontractors are complying with their environmental obligations.
- Non-compliance with environmental obligations should be reported to the appropriate authorities and corrective action should be taken as necessary.

14.9 Environmental Control Plan

The Environmental Control Plan is intended to manage the potential environmental impacts of the project. This includes:

- Identifying and assessing the potential environmental impacts of the project at an early stage.
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- Monitoring and reporting on the environmental performance of the project throughout its life-cycle.

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These processes will be carried out in accordance with the Project Team's Procedures. In particular, the following steps will be taken to ensure compliance with environmental requirements:

- Regular site inspections will be conducted to verify that subcontractors are complying with their environmental obligations.
- Non-compliance with environmental obligations should be reported to the appropriate authorities and corrective action should be taken as necessary.
15. Emergency Preparedness and Response

The types of environmental emergencies that could occur on the site are outlined in Appendix B. The University is aware of these risks and has implemented the following measures to minimize the impact of an emergency:

15.1 Site Specific Planning

The site-specific planning aims to ensure that all work is planned and coordinated to ensure the minimal impact of any possible environmental damage. Suitable mitigation plans are put in place for activities likely to cause significant environmental impacts. These plans are reviewed and updated annually.

15.2 Monitoring and Reporting

Any activities that are likely to cause significant environmental impacts will be subject to monitoring and reporting as follows:

15.3 Environmental Impact Assessment

The EIA for the project will be prepared in accordance with the requirements of the Planning and Environment Protection Act 1997.

15.4 Environmental Management Plan

An Environmental Management Plan (EMP) will be prepared for the project, which will outline the environmental controls and procedures to be implemented during the project.

15.5 Emergency Response Plan

A detailed Emergency Response Plan will be prepared, which will outline the procedures to be followed in the event of an environmental emergency.
16.2.2 Corrective Actions

Corrective actions are indicated by a tick mark. The nominated timeframe is indicated by the CAT register, which is shown in Table 16.16.

<table>
<thead>
<tr>
<th>Action</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Amend the specimen to include the new clause.</td>
<td>Project Completion 10/08/2019</td>
</tr>
<tr>
<td>2. Amend the specimen to include the new clause.</td>
<td>Project Completion 10/08/2019</td>
</tr>
</tbody>
</table>

Refer to the Project Execution Plan (PnP) in the annex to this document for further details.

16.3 Monthly Environmental Reporting

The monthly environmental reporting requires the submission of a report to the Environmental Management Plan (EMP) at the end of each month. This report should include:

- An overview of the project's environmental performance for the previous month
- A summary of any significant incidents or non-compliance
- An update on any corrective actions taken
- A summary of any regulatory requirements
- A summary of any upcoming activities

The report should be submitted within 10 working days of the month end.

16.3.1 Monthly Project Environmental Self-Assessment

On a monthly basis, the project team assesses the performance and impact of the project on the surrounding environment. This assessment includes:

- A review of the environmental impacts identified in the EMP
- An evaluation of the effectiveness of the mitigation measures
- An assessment of the project's compliance with environmental regulations
- A review of any changes in environmental legislation

This assessment should be reported to the EMP manager within 7 days of the end of each month.
13. Incidents, Complaints, Consultative and Preparatory Actions

The management, investigation, reporting and resolution processes for environmental matters, including specific events or occurrences, which are described in this policy, are being implemented in accordance with the System of Environmental Management and Reporting. All incidents, potential incidents and complaints must be reported as they occur, as soon as possible, to the Environmental Manager or to the Head of Office. In the event, an incident or potential incident is reported, it will be investigated by the Project Manager or the Head of Office. The findings of the investigation will be communicated to the Project Manager so that appropriate action can be taken.

Incident reporting and investigation from the outside site will be recorded in a register which can be accessed on the Environmental Information System (EIS) database. All incidents will be logged in a register within 24 hours of occurrence. For Class 1 and Class 2 incidents, an investigation must be made to determine the extent of the damage. Incidents involving failure in environmental equipment will have an EIS form attached. The register will be updated to reflect the potential causes associated with the incident.

The Environmental Incident – Australia Hub, HSE General Manager and Head of Legal will be notified by telephone as soon as possible, and a written report will be submitted to the OIC as soon as the investigation is completed and identified to determine the potential causes associated with the incident.

Where a Class 1 or Class 2 incident occurs, the Environmental Incident – Australia Hub, HSE General Manager and Head of Legal will be notified by telephone as soon as possible, and a written report will be submitted to the OIC as soon as the investigation is completed and identified to determine the potential causes associated with the incident.

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Table 1: Environmental Incidents

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Environmental incidents causing direct or indirect long-term damage to the environment</td>
<td>Notify Environmental Manager and Head of Legal</td>
</tr>
<tr>
<td>Class 2</td>
<td>Environmental incidents causing short-term damage to the environment</td>
<td>Notify Environmental Manager and Head of Legal</td>
</tr>
<tr>
<td>Class 3</td>
<td>Environmental incidents that result in short-term damage to the environment</td>
<td>Notify Environmental Manager and Head of Legal</td>
</tr>
</tbody>
</table>

Table 2: Environmental Incidents

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Serious environmental incidents</td>
<td>Notify Environmental Manager and Head of Legal</td>
</tr>
<tr>
<td>Class 2</td>
<td>Significant environmental incidents</td>
<td>Notify Environmental Manager and Head of Legal</td>
</tr>
<tr>
<td>Class 3</td>
<td>Minor environmental incidents</td>
<td>Notify Environmental Manager</td>
</tr>
</tbody>
</table>

The classification is determined by the Environmental Manager in consultation with the Project Manager (in charge) of the project. Environmental incidents will be assessed and classified by the Environmental Manager, Head of Legal and Head of Environmental Management.

13.2 Incident Reporting

Environmental incidents and complaints are to be reported to the Environmental Manager, Head of Legal and Head of Environmental Management. All incidents involving failure in environmental equipment will have an EIS form attached. The register will be updated to reflect the potential causes associated with the incident.

The Environmental Manager – Australia Hub, HSE General Manager and Head of Legal will be notified by telephone as soon as possible, and a written report will be submitted to the OIC as soon as the investigation is completed and identified to determine the potential causes associated with the incident.

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Appendix 1: Class 1 incident management flowchart

- Incident Response Team
- Activates Plan
- Notifies the environmental team
- Environmental Team
- Evaluates the incident
- Identifies the level of severity
- Notifies the appropriate authorities

Appendix 2: Legal and other requirements

Relevant legal and other requirements are shown in Table 1. They can be accessed at [ISAT's website](https://example.com) or [CEMP's website](https://example.com).

Table 1: Relevant Legal and Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1226 of OSHA</td>
<td>Requires the control and correction of hazardous substances or toxic substances in the workplace.</td>
</tr>
<tr>
<td>California Environmental Protection Agency (CEPA)</td>
<td>Requires the control and correction of hazardous substances or toxic substances in the workplace.</td>
</tr>
<tr>
<td>California Department of Public Health (CDPH)</td>
<td>Requires the control and correction of hazardous substances or toxic substances in the workplace.</td>
</tr>
</tbody>
</table>

Appendix 3: Management Review

The Project Manager will ensure the status and accuracy of the CEMP to ensure it meets current University and Long Beach requirements, as well as all relevant environmental standards. The CEMP will be reviewed as and when required during the course of the contract, with following steps in place:

1. University requirements for changes (particularly major changes)
2. Changes to Long Beach's standards
3. Opportunities for improvements or deficiencies in the plan are identified
4. Following up on any of the items in the environmental standards checklist and non-compliances

The management review may be undertaken as and when required.
### Table 1: Environmental Protection Act

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>The purpose of this section is to establish a framework for the prevention and control of pollution of the environment.</td>
</tr>
<tr>
<td>11</td>
<td>Requires the establishment of a pollution control authority to administer the Act.</td>
</tr>
</tbody>
</table>

### Table 2: Permits and Licences

<table>
<thead>
<tr>
<th>Type of Permit/Licence</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution Control</td>
<td>To control the discharge of pollutants</td>
</tr>
<tr>
<td>Waste Management</td>
<td>To manage waste in an environmentally sound manner</td>
</tr>
</tbody>
</table>

### Table 3: Enforcement Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fines</td>
<td>Monetary penalties for non-compliance</td>
</tr>
<tr>
<td>Suspension</td>
<td>Temporary stoppage of operations</td>
</tr>
<tr>
<td>Revocation</td>
<td>Permanent closure of facilities</td>
</tr>
</tbody>
</table>

### Table 4: Monitoring and Reporting

<table>
<thead>
<tr>
<th>Activity</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution</td>
<td>Regular monitoring of emissions and discharges</td>
</tr>
<tr>
<td>Waste</td>
<td>Mandatory reporting of waste management practices</td>
</tr>
</tbody>
</table>

### Appendix: Risk Assessment

All environmental issues have been assessed in accordance with Table 4 below:

<table>
<thead>
<tr>
<th>Risk Assessment</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>5 (Red)</td>
</tr>
<tr>
<td>Medium</td>
<td>3 (Orange)</td>
</tr>
<tr>
<td>Low</td>
<td>1 (Green)</td>
</tr>
</tbody>
</table>

Environmental issues which have an annual risk rating of high or very high will require the development and implementation of CEMPs. Issues which have an annual risk rating of medium will require the development and implementation of an action plan for follow-up.

The risk matrix is scored according to the following criteria:

- **Red (5)**: High risk, urgent action required
- **Orange (3)**: Medium risk, requires attention
- **Green (1)**: Low risk, no action required

Issues that require urgent action are subject to continuous monitoring and regular reviews to ensure compliance with relevant environmental laws and regulations.
<table>
<thead>
<tr>
<th>Table Title</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Header 1</td>
<td>Data 1</td>
<td>Data 2</td>
<td>Data 3</td>
<td>Data 4</td>
</tr>
<tr>
<td>Header 2</td>
<td>Data 5</td>
<td>Data 6</td>
<td>Data 7</td>
<td>Data 8</td>
</tr>
<tr>
<td>Header 3</td>
<td>Data 9</td>
<td>Data 10</td>
<td>Data 11</td>
<td>Data 12</td>
</tr>
</tbody>
</table>

**Diagram Description**

- Diagram Title: Engineering and Technology Process (ETP) - Stage 1
- Diagram Details: Various technical components and processes involved in the ETP stage, including mechanical, electrical, and chemical engineering aspects.

---

**Table Legend**

- Table Column Descriptions:
  - Column 1: Description of the first column
  - Column 2: Description of the second column
  - Column 3: Description of the third column
  - Column 4: Description of the fourth column

---

**Diagram Legend**

- Diagram Components:
  - Component 1: Description of component 1
  - Component 2: Description of component 2
  - Component 3: Description of component 3
  - Component 4: Description of component 4
Appendix F: Environmental control plan

This is a progressive plan and will be regularly updated to reflect the current stage of the project.
Step 4 - Conduct baseline incident analysis
- List the elements involved (e.g., people, equipment, and processes [whether conditions, procedures, policies, and equipment in the incident])
- List the examiners and contributing factors for the items above

Step 5 - Identify the corrective and preventative actions
- Change to equipment, hole, or design or maintenance
- Improve environmental control measures
- Implement additional resources
- Change to work methods, procedures, or practices
- Change or installation training
- Address organizational issues

Step 6 - Implement the corrective and preventative actions outlined above
- Outline recommendations and accountable roles
- Obtain written approval for the corrective and preventative actions (e.g. regulatory authority or university requirement)
- Provide personnel with completion dates for the approved actions
- Document actions implemented and close out

Note: where a class 3 incident has occurred the EHS Manager will initiate the investigation and delineate responsibilities. An external consultant may be engaged. All actions are to be notified in accordance with the legislative requirements within MAB or the applicable state.

Appendix 3: EMP Flowchart

Appendix 1: Staff acknowledgement register

<table>
<thead>
<tr>
<th>Staff Acknowledgement Register</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Role</td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td></td>
</tr>
<tr>
<td>Date of acknowledgment</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 12: Relevant Management Plans

The following documents listed in the table below were used/referred to by this CEMP:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Dated</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Traffic and Pedestrian Management Plan</td>
<td>14/02/2019</td>
<td>GTA Consulting</td>
</tr>
<tr>
<td>Construction Noise and Vibration Management Plan</td>
<td>10/03/2019</td>
<td>Reardon</td>
</tr>
<tr>
<td>Construction Waste Management Plan</td>
<td>18/03/2019</td>
<td>Long C'Rooy</td>
</tr>
<tr>
<td>Construction Soil and Water Management Plan</td>
<td>20/02/2019</td>
<td>Long C’Rooke</td>
</tr>
<tr>
<td>Asbestos Works Management Plan</td>
<td>1/03/2012</td>
<td>Douglas Partners</td>
</tr>
<tr>
<td>Community Communication Strategy Management Plan</td>
<td>10/03/2019</td>
<td>Long C’Rooke</td>
</tr>
<tr>
<td>Compliance and Enquiries Management System and Procedure</td>
<td>22/05/2019</td>
<td>Long C’Rooke</td>
</tr>
<tr>
<td>Aboriginal Heritage Impact Assessment</td>
<td>24/02/2016</td>
<td>Archaeological &amp; Heritage Management Solutions</td>
</tr>
<tr>
<td>Aboriginal Cultural Heritage Management Plan</td>
<td>17/05/2018</td>
<td>Grad</td>
</tr>
<tr>
<td>Arboural Impact Assessment Tree Protection Specification</td>
<td>5/12/2018</td>
<td>Tree Q</td>
</tr>
<tr>
<td>Traffic management (also refer to Project specific Construction Traffic and Pedestrian Management Plan submitted under Condition B19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(CoR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Comply with traffic management standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No visible cueing in streets surrounding the site.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal, contractual and other requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Planning consent conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Protection of the Environment Operations Act 1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Roads Act 1993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Road and Maritime Services (RMS) Traffic Control at Work sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Roads (General) Regulation 2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Local Government Act 1993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Heavy Vehicle Law 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Development Consent SSD 8636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site-specific planning/approval conditions/licence conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A detailed heavy vehicle access route map through the Council area to arterial roads. Provision is to be made to ensure through traffic is maintained at all times.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Works Transport Management Plan for service, delivery and garbage vehicles accessing the site will be submitted and approved in writing by Sydney City Council traffic committee prior to the issue of any construction certificate and will include details of a management strategy for the operation of the truck hoist to minimise queuing of delivery vehicles/trucks in the local road network. Prior to the issue of a construction certificate, a Works Traffic Management Plan prepared by a suitably qualified person will be submitted to and approved by the Principal Certifying Authority.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls (means and resources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A Works Traffic Management Plan will be developed detailing the route to the site, times of activity, types of machinery, signage, traffic control measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• An approved Traffic Control Plan is required for any activity on/or immediately adjacent to public roads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The Works Traffic Management Plan will detail the monitoring and inspection requirements and roles included in the CoR for consignment, dispatching, loading and unloading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• There will be no cueing of vehicles on any roads adjacent to the site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• There will be no construction parking in non-approved zones or parking areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure pedestrian access ways are clearly defined and maintained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Regular checks are to be undertaken to ensure all equipment and vehicles are in good working order and are operated correctly. Checking should include:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Defective silencing equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rattling components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Construction Manager is responsible for ensuring traffic management plans and traffic control plans are developed, approved and implemented.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timeframe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of site works.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and reporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-T-8-1222 to be used to document complaints.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily inspection, checks and regular maintenance to be completed for traffic control measures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous/contaminated material (also refer to Project specific Asbestos Works Management Plan submitted under Condition B24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To comply with contractual and legislative requirements and ensure that hazardous/contaminated material from construction activities does not cause an environmental nuisance/harm and is disposed of in accordance with legislative requirements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No environmental incidences involving contaminated/hazardous materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No pollution events of the surrounding environmental and waterways by contaminated material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• All off-site movement of any found contaminated material will be tracked.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal, contractual and other requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Contract specification clause</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dangerous Goods Safety Management Act 2001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dangerous Goods Safety Management Regulation 2001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hazardous/contaminated material (also refer to Project specific Asbestos Works Management Plan submitted under Condition B24)

- AS/NZS 1940: 2004 - The Storage and Handling of Flammable and Combustible Liquids
- Development Consent SSD 8636

If previously unidentified contamination (asbestos or contamination other than asbestos such as material visibly different to surrounding material, fibrous in nature, exhibits hydrocarbon odours or other unexpected characteristics, unknown containers, piping, underground storage tanks, or similar structures) is discovered, the following unexpected finds procedure is to be implemented:

- Immediately cease work and contact the Site Manager and Project Leader (Project Leader to contact the client representative)
- Demarcate the 'unexpected/suspected contamination' to prevent access and install appropriate environmental and safety controls.
- A suitably qualified contamination specialist to assess and prepare a report detailing the degree, nature and extent of contamination and if contamination is to be reported in accordance with relevant environmental and safety legislation, regulations and guidelines (including advice on whether there is a Duty to Report under section 60 of the Contaminated Land Management Act 1997, and notify the EPA in accordance with the EPA's Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (2005)
- Works may only recommence upon receipt of clearance / validation report from a suitably qualified occupational hygienist/ contamination specialist (as relevant to contamination discovered) that the remediation activities have been undertaken in accordance with the investigation report and remediation methodology.
- Prior to disposal of asbestos and contaminated material offsite, the material should be tested against the Waste Classification Guidelines and disposed as per classification status, using an EPA licensed transporter and to an EPA licensed waste facility that can accept the waste. The disposal location and results of testing must be submitted to the Planning Secretary, prior to its removal from site. Refer to “Waste ERP”, for further waste assessment, classification, tracking, disposal and record keeping requirements.

The management, removal, handling and disposal of any asbestos or asbestos containing materials would be undertaken by an appropriately qualified/licensed Occupational Hygienist and removalist and in accordance with applicable notifications/ permits and safety legislation/regulations, Codes of Practice for the Safe Removal and Management and Control of Asbestos in Work Places. Refer Appendix 14. If substance is assessed as not presenting an unacceptable risk to human health, the Foreman will remove the controls and continue work. In addition, the following controls will be incorporated:

- Manage any contaminated material as per legislative/EPA requirements including the testing and assessment at the direction of the University’s representative
- Protect the environment by implementing control measures to divert surface runoff away from the potentially contaminated ground
- Capture and manage any surface runoff contaminated by exposure to contaminated ground
- Environmental awareness training relating to the identification and management of acid sulphate soils to be provided to all site personnel involved in earthworks, excavation or drainage construction activities.
- The Client’s Representative shall be notified upon discovery of suspected ASS or PASS.
- Implementation of a specific runoff control plan to prevent acid runoff from contaminating site areas and watercourses.
- Suspected ASS/PASS stockpiles to be covered with plastic overwrap. DO NOT re-use/recycle, dispose or illegally dump contaminated materials on-site or off-site; to be disposed to a lawful waste facility such as a
Hazardous/contaminated material (also refer to Project specific Asbestos Works Management Plan submitted under Condition B24)

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>Site Manager, Project Manager and O’Hare staff to ensure all targets are met.</th>
</tr>
</thead>
</table>
| Timeframe        | - Contaminated material: Duration of any contaminated material removal  
                    - Hazardous material: Duration of site works. |
| Monitoring and   | Receipts for the disposal of any found hazardous material will be filed on site by the WHSEE Manager. |
| reporting        | The finding of any contaminated material on site will be reported monthly by the WHSEE Manager using ET-6-0908. |

Trade waste

<table>
<thead>
<tr>
<th>Objective</th>
<th>To comply with contractual and legislative requirements and ensure that trade waste from construction activities does not cause an environmental nuisance/harm.</th>
</tr>
</thead>
</table>
| Legal, contractual and other requirements | - Contract specification clause  
                                              - Sydney Water Act 1994  
                                              - Sydney Water Catchment Management Act 1993.  
                                              - Development Consent SSD 8636 |
| Responsibilities | The Project Manager will ensure a permit has been obtained prior to discharging trade waste.  
                    The PER will ensure all relevant subcontractors undertake toolbox talks in relation to washout legislation and use. |
| Timeframe       | At all times when there is site connection to sewage facilities. |
| Monitoring and reporting | - Visually monitored daily by the PER  
                              - Inspection report F1227 detailing any trade waste issues will be completed by the PER |
Dust and air quality

Reporting

- Complaints to be recorded on form Environmental Incident and Complaint Report (E-T-8-1222 Environmental Incident and Complaint Report).

Waste (also refer to Project Specific Construction Waste Management Plan submitted under Condition B21)

Objective

To comply with contractual and legislative requirements and ensure that waste from construction activities does not have the potential to escape from the site and cause an environmental nuisance/harm.

Targets

- No incidences where waste is stored in a position where it has the potential to move off site
- All off site movements of waste will be tracked
- The principles of the waste management hierarchy will be adopted, where practicable
- Target to reuse or recycle 85% by weight of construction waste
- Waste will be minimised wherever possible

Legal, contractual and other requirements

- Contract Specification Clause
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Waste) Regulation 2005
- Local Government Act 1993
- Local Government (General) Regulation 2005
- Safework NSW code of practice, How to manage and control asbestos in the workplace
- Safework NSW code of practice How to safely remove asbestos.
- Development Consent SSD 8636

Site-specific planning/approval conditions/licence conditions

A Waste Management Plan is to be submitted with the relevant construction certificate or licence to undertake the work. The plan should include, but not be limited to:

- The estimated volume of waste and type, method of disposal for the construction and operation phases of the development
- The allocated locations for on-site waste storage and segregation of hazardous materials and recycling area
- Administrative arrangements for waste and recycling management during the construction process.

An appropriate area will be provided within the premises for the storage of garbage bins and recycling containers and all waste and recyclable material generated by the premises. The following requirements will be met:

- All internal walls of the storage area to be rendered to a smooth surface, covered at the floor/wall intersection, graded and appropriately drained with a tap in close proximity to facilitate cleaning
- Include provision for the separation and storage in appropriate categories of material suitable for recycling
- The storage area will be adequately screened from the street, with the entrance to the enclosures no more than 2m from the street boundary of the property

- If a storage facility is to be provided at another suitable location within the building, a complementary garbage bin holding bay will be provided no more than 2m from the street boundary of the property
- Garbage enclosures serving residential units are not to be located within areas designated for non-residential uses
- Garbage enclosures serving non-residential uses are not to be located within areas designated for dining purposes
- The Principal Certifying Authority must ensure that the building plans and specifications submitted by Laing O’Rourke, referenced in and accompanying the issued construction certificate, fully satisfy the requirements of this condition.

NOTE: Laing O’Rourke may wish to discuss bin storage requirements and location with Council prior to finalisation of the required detail, and obtain a copy of Council’s Waste Handling Guide for reference purposes.

All hazardous materials will be removed from the site and disposed 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. Details demonstrating compliance with the relevant legislative requirements, particularly the method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the Principal Certifying Authority (Philip Chung, as appointed by the University) prior to the removal of any hazardous materials.
### Waste (also refer to Project Specific Construction Waste Management Plan submitted under Condition B21)

- Licensed waste contractors will be used to remove waste
- All waste is to be disposed of at a lawful facility. A lawful facility includes one that has the appropriate Development Consent, Environment Protection Licence or is complying with EPA approved conditions and requirements
- Use a licensed contractor to remove waste from site and apply Laing O'Rourke asbestos removal permit where applicable
- Waste must be classified prior to disposal – refer to NSW EPA Waste Classification Guidelines
- All spoil material removed from the site will be classified as per the NSW EPA Waste Classification Guidelines. Only a suitable licensed or approved facility or approved site may receive the waste
- Records of the quantity and final location of the spoil material will be retained
- Use skip bins and ensure there are an adequate number of bins on site to hold all waste generated
- Use designated concrete wash outs/trays – lined/contained
- Provide bins to enable waste segregation
- Provide recycling services (for example, paper, concrete, steel, cardboard, timber)
- Ensure housekeeping is maintained and waste is disposed of to the appropriate bin
- Retain waste disposal permits and figures on the amount of waste that has been removed from site.
- Material identified as contaminated must be disposed off-site, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from site.

### Timeframe

Duration of site works.

### Water quality, site drainage and erosion and sediment control (also refer to Project specific Construction Soil and Water Management Plan submitted under Condition B22)

**Objective**
To comply with contractual and legislative requirements and ensure that water discharged off-site from construction and erosion and sediment control (ESC) activities does not cause environmental nuisance/harm.

**Targets**
- No sediment impacts to the surrounding environment and waterways as a result of the works
- Prevent water quality impacts off-site as a result of erosion and sedimentation

**Legal, contractual and other requirements**
- Planning consent conditions
- Protection of the Environment Operations Act 1997
- Water Management Act 2000
- Development Consent SSD 8636.
Hi Steven,

Thank you for sending through the Construction Traffic Management Plan (CPTMP) for SSD 8636 - The University of Sydney - Engineering & Technology Precinct Project Stage 1.

Several construction projects, including the Sydney Light Rail Project are likely to occur at the same time as this development within the CBD. The cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and bus operations in the CBD, and the safety of pedestrians and cyclists within the CBD particularly during commuter peak periods.

The CPTMP has been referred to the SCO for review and we will respond with conditional or formal approval by COB Tuesday 12 March.

Regards

Ben Colmer
Precinct Manager
Sydney Coordination Office
Transport Coordination
Transport for NSW

M 0466 533 469
Level 43, 680 George Street, Sydney NSW 2000

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 반드시 enviromental. Please don't print this e-mail unless really necessary.
Philip Smillie

From: NGUYEN Steven <Stevie.nguyen@rms.nsw.gov.au>
Sent: Tuesday, 26 February 2019 9:29 PM
To: Zakir, Steven
Cc: CARRUTHERS Mark J; Thompson, Joe; Hay, Luke; Willis, Keith; BAILLIE David
Subject: RE: SSD 8636 – University of Sydney - Engineering and Technology Precinct Stage 1

Hi Steven,

After reviewing the CTMP for Ultimo ETP Stage 1, RMS sees the following concerns below.

The speed path assessments indicate that the heavy vehicles are required to utilise the entire width of roadway (and kerb) on Maze Crescent to complete the turn from Botany Avenue. As such, RMS does not currently propose TCM.

RMS highly recommends for another Authorised Traffic Controller to be positioned on the south-eastern side of Botany Avenue, in the intersection with Maze Crescent, to coordinate the movement of heavy vehicles along this road. The Traffic Controller is to:

1. Guide pedestrians away from the kerb as the heavy vehicles are approaching the intersection
2. Hold traffic travelling in westbound along Maze Crescent at an adequate distance away from the intersection until the turning movement has been completed.

If you have any questions, please do not hesitate to contact me.

Kind regards,

Stevie Nguyen
Traffic Engineering Officer
Sydney CBD & East Precinct
Network & Safety Services
M: 0435 915 417
www.rms.nsw.gov.au
Every journey matters

Roads & Maritime Services

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From: Zakir, Steven (mahtazsakir@xplornet.com.au)
Sent: Monday, 25 February 2019 3:47 PM
To: NGUYEN Steven
Cc: CARRUTHERS Mark J; Thompson, Joe; Hay, Luke; Willis, Keith
Subject: RE: SSD 8636 – University of Sydney - Engineering and Technology Precinct Stage 1

Hi Steven,

Further to support condition B41, please see attached our Construction Traffic and Pedestrian Management Plan to satisfy the condition below B19.

---

For the Orange Recycling (18 Pine Road, Yennora) and Bingo Recycling Centre (35 MacKellar Avenue, Deerella) routes, RMS recommends the approved routes highlighted in the Restricted Access Vehicle (RAV) map be used by the heavy vehicles. Please see the link for reference: https://www.rms.nsw.gov.au/business/industry/hrwve/vehicle/maps/rv_restricted_access_vehicle_map/

For the One Steel Recycling (75 Stephen Road, Botany) route, it should be noted that there is a 11T limit imposed to heavy vehicles at the access to Oxley Street (via the intersection with Wentworth Avenue). Council with Bayside Council is recommended for the use of this route.

No objections raised for the other proposed truck routes.

Kind regards,

Stevie Nguyen
Traffic Engineering Officer
Sydney CBD & East Precinct
Network & Safety Services
M: 0435 915 417
www.rms.nsw.gov.au
Every journey matters

Roads & Maritime Services

---

From: Zakir, Steven (mahtazsakir@xplornet.com.au)
Sent: Friday, 22 February 2019 1:07 PM
To: NGUYEN Steven
Cc: CARRUTHERS Mark J
Subject: RE: SSD 8636 – University of Sydney - Engineering and Technology Precinct Stage 1

Hi Steven,

Please see before response in reply to your queries, I trust this meets your required expectations.

Regards,

Stevie

---

From: NGUYEN Steven [mailto:Stevie.nguyen@rms.nsw.gov.au]
Sent: Friday, 22 February 2019 11:35 AM
To: Zakir, Steven
Cc: CARRUTHERS Mark J
Subject: RE: SSD 8636 – University of Sydney - Engineering and Technology Precinct Stage 1

Hi Steven,

The RMS requests that you provide the following information to assist in the reviewing and approval process for the proposed routes to be used by waste removal trucks:

- The sizes and types of heavy vehicles to be used,
  - 10.5m Truck & Dog trailer (6 or 7 axle)
  - 12.5m Rigid Tipper (3 axle)
  - 18m Semi-trailer (5 or 6 axle)
  - 12.5m Rigid Twin-axle (4 axle)
- The number and frequency of heavy vehicles to be used each day, and
  - During Bulk Excavation (B&E)
    - 20 loads per day for 13 days
    - Up to 25 loads per day for 10 days
  - During general construction phase (mainlyior):
    - 2-3 loads per day for 12 months
- General Waste Removal (Rigid 1 or 4 axle Tipper or Hook bin trucks)
  - 2-3 loads per week for 1 months
- The approximate times that the heavy vehicles will be travelling along the proposed routes:
  - Mon-Fri 0500 – 1700
  - Sat 0700 – 2100

Kind regards,

Stevie

---

From: Zakir, Steven (mahtazsakir@xplornet.com.au)
Sent: Thursday, 21 February 2019 9:44 AM
To: NGUYEN Steven
Cc: CARRUTHERS Mark J; Thompson, Joe; Hay, Luke; Willis, Keith
Subject: SSD 8636 – University of Sydney - Engineering and Technology Precinct Stage 1

Hi Mark,

I was directed to you by the RMS Transport Management Centre in relation to the below Development Consent Condition. I have attached our proposed waste disposal facility traffic routes for your review and acceptance. This will be conditionality for the duration of the project I refer to attached summary program.

Can you please respond to this email accepting that the condition has been satisfiedly received by the RMS or alternatively outline the protocol or procedure we must undertake to get approval.

It would be appreciated if you could respond by your earliest convenience.
Regards,

Steven Zelt
Site Engineer
University of Sydney
Engineering & Technology Precinct (EWP) Project

Laving O’Flacke Australia
103 Electrical Engineering Building, Macleay Crescent, Darlington 2008
Tel: 0437 915 417

From: Zakir, Steven
Sent: Thursday, 21 February 2019 9:15 AM
To: Anthony, Keith; Jones, Brad; Ridgeway, Sean; Ignatiev, Sergey

Subject: SSU 04-36 - University of Sydney - Engineering and Technology Precinct Stage 1

Hi Anthony,

We have received a condition of consent from the Department of Planning and Environment which states the below:

Construction Waste Management

841. The Applicant must notify the RMS Traffic Management Contransporting waste material from the site, prior to commence site.

Please find attached waste material truck routes proposed for SSU 04-36. It is priority for me to receive the job ref no. or an email confirmation receipt from yourself acknowledging the submission of proposed routes for the PCA’s record prior to:

1. Garage Recycling – 16 Pine Rd Rydalmere
2. Bingo Recycling Centre – 39 Millerton St Bankstown
3. Bingo Recycling Centre – 18 Malabar Ave Arncliffe
4. Bingo Recyclers – 53-55 Dock St Auburn
5. One Steel Recycling – 35-57 Riverside Rd Chipping Norton
6. One Steel Recycling – 23 David Rd Westmead
7. State Resource Recovery Centre – 1726 Elizabeth Drive Kogarah
8. Concrete Recyclers – 14 Thunderbird St Arncliffe

We will need to apply for the duration of the project, see attached summary of program of construction works.

Please give me a call if you need clarification on anything.

Regards,

Steven Zelt
Site Engineer
University of Sydney
Engineering & Technology Precinct (EWP) Project

Laving O’Flacke Australia
103 Electrical Engineering Building, Macleay Crescent, Darlington 2008
Philip Smillie

From: Maria O'Donnell <MODonnell@cityofsydney.nsw.gov.au>
Sent: Tuesday, 26 February 2019 10:14 AM
To: Zakiy, Steven; Tony Ly
Cc: Willis, Kelvin; Luke; Thompson, Joe; Ashford, Jannaya
Subject: B19 and B22 - The University of Sydney - Engineering & Technology Precinct Project - Stage 1 Development Consent Condition

Hi Steven,

The information has been received for both Conditions B22 and B19 and is under review.

I will do my best to ensure a quick turnaround but I cannot guarantee that a response will be provided within 48 hours.

Kind regards,

Maria O’Donnell
Specialist Planner
Planning Assessment

The City of Sydney
Sydney 2000

Telephone: +61 2 9258 5854
dt-brown@cityofsydney.nsw.gov.au

From: Zakiy, Steven
To: Tony Ly
Cc: Maria O’Donnell; Kelvin Willis; Luke; Thompson, Joe
Subject: B19 and B22 - The University of Sydney - Engineering & Technology Precinct Project - Stage 1 Development Consent Condition

Hi Tony,

Please see attached, Construction Traffic & Pedestrian Management Plan requiring consultation with City of Sydney council. As per the condition below B19:

B19. The Construction Traffic and Pedestrian Management Sub-plain following:

(a) be prepared by a suitably qualified and experienced person;
(b) be prepared in consultation with Council, RMS and the SLP;
(c) detail the measures that are to be implemented to ensure the construction in consideration of potential impacts on the general public;
(d) detail heavy vehicle routes, access and parking arrangements;
(e) include a Driver Code of Conduct to:

(i) minimise the impacts of earthworks and construction;
(ii) minimise conflicts with other road users;
(iii) minimise road traffic noise; and
(iv) ensure truck drivers use specified routes;
(f) include a program to monitor the effectiveness of these measures;
(g) if necessary, detail procedures for notifying residents and potential disruptions to routes.

Due to the tight nature of the construction program, we would appreciate a quick response (within 48 hours) to inform any changes required before submitting to the PCA.

I would like to note, our traffic engineers have made contact with the Construction Regulation Unit and seek your final agreement on the matter (refer to the attached email). We would like to emphasise that we are still complying with the City of Sydney's Annex A.

If you have any other questions, please feel free to give me a call.

Regards,

Steven Zakiy
Site Engineer
University of Sydney
Engineering & Technology Precinct (ETP) Project

Leong O'Rourke Australia
303 Edwards Engineering Building, Moonee Ponds, 3030
M: 0437 905 417

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INTRODUCTION

1.1 Background & Purpose

The University of Sydney Engineering & Technology Precinct (USYD) is a complex of buildings and facilities that house a variety of engineering and technology programs. The purpose of this project is to create a comprehensive traffic management plan for the area, ensuring safe and efficient movement of people and goods. The plan will address traffic congestion, pedestrian safety, and vehicle access to the campus.

1.2 Scope of the Project

The project will cover the entire Engineering & Technology Precinct, including all roads, pedestrian pathways, and parking areas. It will provide recommendations for traffic calming measures, parking strategies, and public transportation improvements.

1.3 Activity Requirements

The activity requirements for the project include:

- Traffic data collection
- Pedestrian flow analysis
- Parking capacity assessment
- Public transportation coordination

1.4 Conclusion

In conclusion, the University of Sydney Engineering & Technology Precinct Traffic Management Plan is designed to enhance the safety and efficiency of traffic and pedestrian movement within the campus. It will be a comprehensive guide for future planning and development.
4. CONSTRUCTION TRAFFIC MANAGEMENT

CONSTRUCTION TRAFFIC MANAGEMENT

CONSTRUCTION TRAFFIC MANAGEMENT

A CITY OF SYDNEY CTMP STANDARD REQUIREMENTS

A1. Overview

A2. Plan Review

A3. Preliminary Transportation Plan

A4. Traffic Management Plan

A5. Traffic Control Measures

A6. Traffic Signage

A7. Traffic Lighting

A8. Traffic Management Software

A9. Traffic Management Systems

A10. Traffic Monitoring

A11. Traffic Analysis

A12. Traffic Forecasting

A13. Traffic Simulation

A14. Traffic Simulation Software

A15. Traffic Management Strategy

A16. Traffic Management Policy

A17. Traffic Management Regulations

A18. Traffic Management Standards


A20. Traffic Management Case Studies

A21. Traffic Management Training

A22. Traffic Management Certification

A23. Traffic Management Research

A24. Traffic Management Conference

A25. Traffic Management Congress

A26. Traffic Management Awards

A27. Traffic Management Symposium

A28. Traffic Management Expo

A29. Traffic Management Journal

A30. Traffic Management Newsletter

APPENDICES

The City of Sydney

Standard Requirements for Construction Traffic Management Plan

The applicant contractor undertake to follow the requirements of this specification during the demolition, excavation and construction works at the University of Sydney, Engineering and Technology Projects.

1. General

2. Safety

3. Traffic Management

4. Access

5. Traffic Control

6. Traffic Signage

7. Traffic Lighting

8. Traffic Management Software

9. Traffic Management Systems

10. Traffic Monitoring

11. Traffic Analysis

12. Traffic Forecasting

13. Traffic Simulation

14. Traffic Simulation Software

15. Traffic Management Strategy

16. Traffic Management Policy

17. Traffic Management Regulations

18. Traffic Management Standards


20. Traffic Management Case Studies

21. Traffic Management Training

22. Traffic Management Certification

23. Traffic Management Research

24. Traffic Management Conference

25. Traffic Management Congress

26. Traffic Management Awards

27. Traffic Management Symposium

28. Traffic Management Expo

29. Traffic Management Journal

30. Traffic Management Newsletter
From: Ian Swane <ianswane@bigpond.com>
To: Steven Zakli
Cc: Peter Wells, Keith Hoy, Luke
Subject: Site Auditor Internship Advice Report #03 for draft Asbestos Management Plan at Sydney University (Site Audit 284)
Attachments: site-audit-advice.pdf

Hi Steven,

I have completed my review of the revised AMP and consider it is appropriate. Please find attached my Einstein advice report #3 that documents the outcome of my review.

Best regards
Ian

Dr Ian C Swane (CPENG, CEnvP)
EPA Site Auditor NSW, WA, NT
Ian Swane & Associates (mob: 0418 867 112)

From Zakli, Steven ruzakli@leungkirke.com.au
Sent: Friday, 1 March 2019 12:46 PM
To: Ian Swane ianswane@bigpond.com
Cc: Peter Wells, Keith Hoy, Luke
Subject: Re: Site Auditor Internship Advice Report #03 for draft Asbestos Management Plan at Sydney University (Site Audit 284)

Hi Ian,

Upon your review, Douglas Partners have made and reviewed the revised AMP which is to be considered appropriate by the accredited site auditor.

For the purpose of making your review efficient, I have asked to track changes to the report.

Please review and simply respond to this email of your acceptance of the AMP as “appropriate”.

Could you please respond no later than 2pm to provide adequate time for submission to the PCA.

Thank you.

Regards,
Steven Zakli

From: Steven Zakli, Site Engineer
To: Paula Maurici, Environmental Scientist
Sent: Tuesday, 20 February 2019 2:42 AM
Cc: Paula Maurici, Environmental Scientist
Subject: Re: Site Auditor Internship Advice Report #03 for draft Asbestos Management Plan at Sydney University (Site Audit 284)

Hi Paula & Team,

Please review the comments as reviewed by the accredited site auditor (Ian Swane).

I will need a revised (final) AMP that addresses the below points by COR today, to ensure Ian is satisfied and provides his letter of acceptance of the AMP as required by the condition.

If there are any questions, please feel free to contact Ian or me direct.  

Regards,
Steven Zakli
Site Engineer
University of Sydney
Engineering & Technology Precinct (ETP) Project

From: Paula Maurici, Environmental Scientist
To: Zakli, Steven <ruzakli@leungkirke.com.au>
Sent: Monday, 19 February 2019 7:44 AM
Cc: Paula Maurici, Environmental Scientist
Subject: Re: Site Auditor Internship Advice Report #03 for draft Asbestos Management Plan at Sydney University (Site Audit 284)

Hi Paula & Team,

Please review the comments as reviewed by the accredited site auditor (Ian Swane).

I will need a revised (final) AMP that addresses the below points by COR today, to ensure Ian is satisfied and provides his letter of acceptance of the AMP as required by the condition.

If there are any questions, please feel free to contact Ian or me direct.

Regards,
Paula Maurici
Environmental Scientist

From: Paula Maurici, Environmental Scientist
To: Paula Maurici, Environmental Scientist
Sent: Monday, 19 February 2019 7:46 AM
Cc: Paula Maurici, Environmental Scientist
Subject: Re: Site Auditor Internship Advice Report #03 for draft Asbestos Management Plan at Sydney University (Site Audit 284)

Hi Paula & Team,

Please review the comments as reviewed by the accredited site auditor (Ian Swane).

I will need a revised (final) AMP that addresses the below points by COR today, to ensure Ian is satisfied and provides his letter of acceptance of the AMP as required by the condition.

If there are any questions, please feel free to contact Ian or me direct.

Regards,
Paula Maurici
Environmental Scientist
5. Section 9 Remediation Strategy:
   a. Add a new task 9.1 in the proposed remediation strategy: The grid-based inspection of the observed areas of the Site, the remeasurement of all accessible bodies by skimming and clearance certification by an Occupational Hygienist that the ground surface is free of visible asbestos.
   b. Add a new Task 9.2 in the proposed remediation strategy. Test sampling and in-situ waste classification of 14 across proposed excavation areas within the new location zone.
   c. Edit the old task 9.2 (new task 9.3) to include the removal of all asbestos buried services from the site.
   d. Mention that detailed procedures covering the remediation of asbestos contamination at the Site are provided in Section 9.

6. Section 9 Remediation Acceptance Criteria:
   a. Include a new first dot point involving "Historic impacted soil covered by vegetation developments".
   b. In my opinion, the most conservative land-use option is building "grandpa" rather than NEMHA "high-risk residential". The second highest category for contamination is 0.02% rather than 0.00%.

7. Section 9 Environmental Consultant:
   a. The EC is to provide advice and audit compliance with implementing the AMP.
   b. Add the removal of all visible asbestos before the EC is to be notified of the Site Audit of continued non-compliance by contractors with this AMP.

8. Section 7.6 Occupational Hygienist: Add a new dot point at the end of this section that requires OEH to notify the EC of continued non-compliance by contractors with the AMP.

9. Section 9 Excavation and Asbestos Works: Revise this section to describe Work Procedures for Asbestos Remediation Works. The use of this terminology is consistent with relevant NSW requirements for an AMP.

10. New Section 9.3 "Task 2: asbestos Clearance of Ground Surface".
   a. Add a new Section 9.3 that involves the EC conducting a grid-based asbestos inspection across the Site prior to the commencement of excavation works. All near-surface asbestos must be removed and disposed to a suitable licensed landfill. The asbestos clearance inspection must be undertaken in accordance with NEMHA (2013) Schedule 62 procedures using a low probing space not exceeding 5m. An asbestos clearance certificate must be issued by the EC when all visible asbestos had been removed from the Site.

11. New Section 9.3 "Task 2: Test sampling and in-situ waste classification". Add a new Section 9.3 that involves the EC investigating the fill layer across proposed excavation areas within the near basement zone. Test pits should be excavated through the fill layer at a maximum 20 m spacing, which represents the maximum spacing required by the NSW EPA (1995) Sampling Design Guidelines. More sampling localities should be used to test the highest probability of asbestos contamination. The results of the test pit investigation should be used to define the areas of asbestos contamination and to prepare waste classification for different fill materials.

12. Section 8 Reassessment Area – Asbestos Program in Soil (2013):
   a. Change the Title of this section to: "Reassessment of Asbestos Contaminated Fill and Asbestos Buried Services".
   b. Apply the procedures listed in this section to all areas of the Site where the fill is known to be contaminated. These areas should include the areas identified by the test pit investigation in Task 2.
   c. Add additional procedures for the removal of asbestos-buried services from the site.
   d. Require all areas of known asbestos contamination to be excavated and removed from the Site together with asbestos buried services prior to the commencement of any other earthworks. Achieving the removal of all asbestos contaminated fill and pipelines from the excavation area should be verified by the EC prior to commencement of any other earthworks.
   e. Require all asbestos contaminated fill to be loaded directly into lined trucks or into sealed bins to avoid disturbing asbestos contaminated fill on-site.
   f. Require all asbestos contaminated soil to be transported from cradle-to-grave by the EC.
   g. Require the remediation of asbestos contaminated soil to be fully documented by the EC and included in their validation report.

13. Section 9.2 Unexpected Finds (asbestos):
   a. Revise this section "Excavation of other fill". The AMP should not refer to "expected finds" of asbestos contamination at the Site. Since it is expected that additional asbestos contamination will be found, the AMP should refer to "prevalent unknown asbestos contamination. Findings of additional asbestos".
   b. This section should advise that there is potential for asbestos contamination to be present in fill at any part of the Site.
   c. Following the removal of all known asbestos contaminated fill from the Site, require all asbestos to be selectively excavated and removed from the Site in designated areas prior to remining the excavation area of natural soil.
   d. Require all excavated fill to be transported from cradle-to-grave by the EC.
   e. Require the remediation of all additional asbestos to be fully documented by the EC and included in their validation report.

14. Section 9.3 Incident Response: Revise this section on "Incasent and Emergency Procedures". The use of this terminology is consistent with relevant NSW requirements for an AMP. Advise that emergency need to be managed in accordance with an Emergency Response Plan, as described in Sections 10.1, 10.2 and 10.3.

15. Section 10 Induction: Change the phrase "unspecified fill" to "Fill of additional asbestos".

16. Section 11.3 Environmental Consultant: Change the phrase "unspecified fill" to "fill of additional asbestos".

Regards
Ian C Swaine
EPA Site Auditor NSW, Veil, NH
Swaine & Associates (mob: 0418 867 112)

Asbestos Works Management Plan

B24. Prior to the commencement of construction, the Applicant must include stringent requirements for controlling dust emission and asbestos contamination. The Asbestos Works Management Plan is to be accredited site auditor.

As discussed, if you could review and provide feedback (if required) by COB tomorrow, in order for Long O'Rourke to submit a final AMP to the PCA on Friday, 12/03/2019.

Please let me know if you have any questions.

Regards,
Steven Zalik
Site Manager
University of Sydney
Engineering & Technology Projects (ETP) Project

Long O'Rourke Australia

JSC Electrical Engineering Building, Macquarie Park, Sydney, Australia

Ms: 0427 915 147

From: Steven Zalik
To: The Zalik, Steven
Subject: RE: University of Sydney – ETP stage 1

Steven

All files from your two emails successfully received.

Thanks, Ian

From: Zalik, Steven
To: The Zalik, Steven
Subject: RE: University of Sydney – ETP stage 1

Ian,

As promised the remainder of the documents remain. Just in addition to what you thought you’ve requested. I have attached the latest RAP that was submitted with the fill. However, as stated before the latest RAP would be the November 2018 version.

https://uropspace.sharefile.com/s/1-da34dd09f43b

Let me know if you can’t access the share file.

Regards,
Steven Zalik
Site Engineer

University of Sydney
Engineering & Technology Projects (ETP) Project

Long O'Rourke Australia

JSC Electrical Engineering Building, Macquarie Park, Sydney, Australia

Ms: 0427 915 147

From: Zalik, Steven
To: Xuewen (new email)
Subject: RE: University of Sydney – ETP stage 1

Ian,

I had previously sent you two documents (Please confirm if you have received this):
- Fact Book on Supplementary Cardiac Catheterisation (November 2018)
- Revised Remediation Action Plan (November 2018)

[Details of the email follow]

From: Zalik, Steven
To: Xuewen (new email)
Subject: RE: University of Sydney – ETP stage 1

Ian,

The documents requested earlier is in accordance of the memo allow on size limit. Can you send to you.

Regards,
Steven Zalik
Site Manager
University of Sydney
Engineering & Technology Projects (ETP) Project

Long O'Rourke Australia

JSC Electrical Engineering Building, Macquarie Park, Sydney, Australia

Ms: 0427 915 147

From: Xuewen
To: Zalik, Steven
Sent: Wednesday, 25 February 2019 7:10 PM

The final written report has been approved

From: Zalik, Steven
To: Ian
Sent: Wednesday, 26 February 2019 6:31 PM

Hi Ian,

I had previously sent you two documents (Please confirm if you have received this):
- Fact Book on Supplementary Cardiac Catheterisation (November 2018)
- Revised Remediation Action Plan (November 2018)

I have attached in this email the following:
- Summary Construction Program (RAP works) will be conducted as part of bulk excavation stage – Just note that this program was based on 28/02/2019 SDDA approval, we now received SDDA 24/02/2019, as the dates are adjusted accordingly with the commencement of bulk excavation works 08/03/2019 until the end of March 2019 week of month. I will confirm this with you upon the receipt of O&M from the PCA
- Final signed ISO 14001 Draft agreement

Ian, do you have Access? Can I only see a 2018 ISM reference?

The document requested earlier is in accordance of the memo allow on size limit. Can you send to you.
A copy of the Assetta Project Management Plan (APMP)
A copy of the project schedule covering the period of the remediation and earthworks so I can plan my site inspection at the end of this week.

Thanks

Regards

Teresa Olam
Barker Government Manager

LANG UNBATCH
Phone: 02 72003597
Email: info@langunbatch.com.au
Website: www.langunbatch.com

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The taxpayers’ interests have been served for yesterday and today, 2019. To view this document and others, visit www.pnc.gov.au.
3.5. Construction Site Access

The site access arrangements are shown in Figure 3.1 and comprise one-way circulation through the site, including entry via the western access (Gate 2) and egress via the eastern access (Gate 1). As shown, all construction vehicles will enter and exit the site in a forward direction.

Figure 3.1: Construction site access locations

Construction vehicle access to the site will include 12.5m Heavy Rigid Vehicles and up to 19m articulated vehicles. Vehicles and their trailers are required to be less than 4.5m in height given the height restriction along Maze Crescent. Swept paths of the largest vehicle to access the site are included in Appendix C.

Accredited traffic controllers will be positioned at all site accesses to manage pedestrian and through traffic movements when construction vehicles are entering/leaving the site.

Queueing or marshalling of construction vehicles will not be permitted on the road network, being the public road network and private USYD Darlington Campus road network, with call-up and ‘truck tracking’ procedures to be put in place to manage arrivals.

3.6. Construction Parking, Material Handling and Loading Zones

As indicated in the proposed logistics plan provided by Laing O’Rourke shown in Figure 3.2, all construction vehicles will be loaded/unloaded within the project boundaries, with up to three designed heavy vehicle parking zones nominated. Delivery Area 1 and 2 will be accessed from Gate 1 on Blackwattle Creek Lane, with the exit at Gate 2 onto the same laneway. Delivery Area 3 will have ingress and egress from Gate 3 on Maze Crescent. As illustrated in Figure 3.1 and Appendix C, sufficient manoeuvring area has been provided within the site to ensure construction vehicles can enter from Gate 1 and exit at Gate 2 in a forward direction.

All construction traffic logistics will be managed via Voyageur, Laing O’Rourke traffic management system. Non-scheduled deliveries will be rejected and are not permitted to park outside the project site boundaries.

All construction materials will be stored within the site boundaries including material, plant and spoil bin storage areas.
3.7. On-Street Works Zone

No on-street works zones are proposed. This includes along the University of Sydney Darlington Campus private roads, where no reliance on on-street or kerbside parking for truck layover will be permitted.

3.8. Road Closure

No road closures are proposed. If required, Laing O’Rourke will apply to Traffic Management Centre for a Road Occupancy License, in consultation with Transport for NSW’s Sydney Coordination Office and City of Sydney Council.
Hi Mark,

I was directed to you by the RMS Transport Management Centre in relation to the below Development Consent Condition. I have attached our proposed waste disposal facility traffic routes for your review and acceptance. This will be conditioned for the duration of the project (refer to attached summary program).

Can you please respond to this email accepting that the condition has been satisfactorily received by the RMS or alternatively outline the protocol or procedure we must undertake to get approval.

It would be appreciated if you could respond at your earliest convenience.

Regards,

Steven Zakir
Site Engineer
University of Sydney
Engineering & Technology Precinct (ETP) Project

Loing O’Rourke Australia
J03 Electrical Engineering Building, Maze Crescent, Darlington 2008
M: 0437 915 417

From: Zakir, Steven
Sent: Thursday, 21 February 2019 9:25 AM
To: ‘Anthony.Denlay@tmc.transport.nsw.gov.au’
Cc: Willis, Keith; Jones, Brad (Building GP NSW)
Subject: SSD 8636 - University of Sydney - Engineering and Technology Precinct Stage 1
Importance: High

Hi Anthony,

We have received a condition of consent from the Department of Planning and Environment which states the below:

**Construction Waste Management**

B41. The Applicant must notify the RMS Traffic Management Centre transporting waste material from the site, prior to commence site.

Please find attached waste material truck routes proposed for SSD 8636, it is priority for me to obtain the job ref no. or an email confirmation receipt from yourself acknowledging the submission of proposed routes for the PCA’s record prior to CC1:

1. Orange Recycling – 18 Pine Rd Yennora
2. Bingo Recycling Centre – 38 McPherson St Banksmeadow
3. Bingo Recycling Centre – 10 Mclachlan Ave Artarmon
4. Bingo Recyclers – 3-5 Duck St Auburn
5. One Steel Recycling – 79 Stephen Road Botany
7. One Steel Recycling – 23 David Rd Wetherill Park
8. Suez Resource Recovery Centre – 1725 Elizabeth Drive Kemps Creek
9. Concrete Recyclers – 14 Thackery St Camellia

We will need to apply for the duration of the project, see attached summary program of construction works.

Please give me a call if you need clarification on anything.

Regards,

Steven Zakir
Site Engineer
University of Sydney
Engineering & Technology Precinct (ETP) Project

Loing O’Rourke Australia
J03 Electrical Engineering Building, Maze Crescent, Darlington 2008
M: 0437 915 417
1. Orange Recycling - 18 Pine Rd Yennora

Route taken:
- Mace Crees
- Buxton Ave
- City Road
- Paramatta Road (Great Western Highway)
- Western Motorway (M4)
- Burnett St
- Kenyon Rd
- Sherwood Rd
- Woodpark Rd
- Fairfield Rd
- Dursley Rd
- Pine Rd

Directions:
Head west on Mace Cres towards Buxton Ave
Turn right onto Buxton Ave
Follow Great Western Hwy and M4 to Burnett St in Maryland. Take the Burnett St exit from M4

2. Bingo Recycling Centre

2.1 Bingo Recycling Centre - 35 McPherson St Bankstown

Route taken:
- Mace Cres
- Buxton Ave
- City Rd
- Cleveland St
- South Dowling St
- South Cross Dr
- Wentworth Ave
- Denison St
- Beauchamp Rd
- McPherson St

Directions:
Head west on Mace Cres towards Buxton Ave
Turn right onto Buxton Ave
Turn right at the 1st cross street onto City Rd/Princes Hwy/A36
Turn right onto Cleveland St
Turn right onto S Dowling St
Take the slip road onto M1
Exit onto Wentworth Ave towards Miranda
Turn right onto Denison St
Turn right onto Beauchamp Rd
Turn right onto McPherson St

2.2 Bingo Recycling Centre - 10 McIachlan Ave Artarmon

Route taken:
- Mace Cres
- Buxton Ave
- City Rd
- Broadway
- Warrane St
- Fig St
- Upper Fig St
- Western Distributor
- Bradfield Hwy
3. One Steel Recycling

3.1 One Steel Recycling – F 79 Stephen Road Botany

Route taken:
- Maze Gres
- Bulfin Ave
- City Rd
- Cleveland St
- South Dowling St
- Southern Cross Drive
- Wexford Ave
- Page St
- Stephen Rd

Directions:
Head west on Maze Gres towards Bulfin Ave
Turn right onto Bulfin Ave
Turn right at the 1st cross street onto City Rd/Wexford Hwy/A36
Turn right onto Cleveland St
Turn right onto S Dowling St
Take the slip road onto M4 Exits area Wexford Ave towards M4 WestConnex
Turn right onto Page St
Continue straight to stay on Page St
Continue straight onto Stephen Rd

2.3 Bingo Recyclers – 3-5 Duck St Auburn

Route taken:
- Maze Gres
- Bulfin Ave
- City Rd
- Princes Highway
- Botany St
- M1
- Moncton Driv
- Newbold Rd
3.3 One Steel Recycling – 23 Davis Rd Welthill Park

Route taken:
- Maple Cres
- Bulfin Ave city road

4. Suez Resource Recovery Centre – 1725 Elizabeth Drive Kemps Creek

Route taken:
- Maple Cres
- Bulfin Ave
- City Rd
- King St
- Princess Hwy
- W Botany St
- M5
- M7
- Elizabeth Dr

Directions:
Head west on M5 towards Bulfin Ave
Turn right onto Bulfin Ave
Turn left at the 1st cross street onto City Rd/Princes Hwy/A36
Sight left onto M5 via the slip road to Liverpool/Comoares
Merge onto M5 via the slip road to Liverpool/Comoares
Merge onto M7 towards Blackburn/Newcastle
Take the Elizabeth Dr exit towards Westlodge/Cobramote
Turn left onto Elizabeth Dr

5. Concrete Recyclers – 14 Thackera St Camellia

Route taken:
- Maple Cres
- Bulfin Ave
- City Rd
- Princes Road (Great Western Highway)
- Western Motorway [W]
- James Rowe Dr
- Grand Ave
- Thackera St

Directions:
Head south-west on M5 towards Bulfin Ave
Turn right onto Bulfin Ave
Turn right at the 1st cross street onto City Rd/Princes Hwy/A36
Turn left onto Broadway/Great Western Hwy/A36
Turn right onto Western Motorway/W4
Keep right at the top end and continue on M4
Take the James Rowe Dr exit towards Granville/WPrinces
Turn right onto James Rowe Dr
Turn right onto Grand Ave
Turn left onto Thackera St
Our ref: 18721

Date: 20 February 2019

Steven Zakir
Site Engineer
University of Sydney
Engineering & Technology Precinct (ETP) Project

Laing O'Rourke Australia
J03 Electrical Engineering Building, Maze Crescent, Darlington 2008

Dear Steven,

University of Sydney Engineering Precinct Stage 1 Development, SSD 8636, Condition B44 Compliance Monitoring and Reporting Program.

Please find below the Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2018) to be submitted to the Department of Planning and Environment for the project, noting the proposed construction program is from March 2019 to July 2020. Also noting reporting is required for the duration of construction, at intervals no greater than 26 weeks from the date of commencement of construction.

<table>
<thead>
<tr>
<th>Date*</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2019</td>
<td>Prior to the beginning of the construction works and therefore will determine whether relevant management plans and procedures are being implemented.</td>
</tr>
<tr>
<td>Pre-Construction Compliance Report</td>
<td>Prior to construction commencing of the CC1 Substructure — In ground services, bulk excavation, piling, pile cap, footing and temporary works (i.e. Tower crane), which is when the noise assessment is required, and sediment controls must be installed and maintained as excavation works would be occurring.</td>
</tr>
<tr>
<td>July 2019</td>
<td>Within 26 weeks from the date of commencement of construction.</td>
</tr>
<tr>
<td>Construction Compliance Report 1</td>
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<tr>
<td>December 2019</td>
<td>Within 26 weeks from the previous compliance report.</td>
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<tr>
<td>Construction Compliance Report 2</td>
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</tr>
<tr>
<td>May 2020</td>
<td>Within 26 weeks from the previous compliance report.</td>
</tr>
<tr>
<td>Construction Compliance Report 3</td>
<td></td>
</tr>
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</table>
Our ref: 18721

Pre-Operational Compliance Report

Construction Completion is scheduled for July 2020, a report will be completed post completion.

September 2020

This report will provide an assessment of the final phase of the project (i.e. to completion), including identification of compliance with construction completion conditions and compliance with any ongoing operational monitoring and reporting requirements.

Operation Compliance Report 2021- Ongoing (potentially annually in accordance with Condition B47)

Reporting required for the duration of operation. At intervals, no greater than 52 weeks from the date of commencement of operation. This requirement would be the asset owner's responsibility – Sydney University.

Condition B47 states: Notwithstanding the requirements of the Compliance Reporting Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational compliance reports to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an operational compliance report has demonstrated operational compliance.

Post Decommissioning Compliance Report

Report to be submitted to the Planning Secretary within 12 weeks of completion of decommissioning. This requirement would be the asset owner's responsibility – Sydney University.

*These timings are based on the current construction program but might be adjusted if delays are evident.

This compliance reporting program has been prepared for the Engineering and Technology Precinct, Sydney University, and has been compiled in accordance with the Compliance Reporting Post Approval Requirements (Department 2018), which can be submitted to the Secretary for information in accordance with SSD 8636. Noting Condition B46: The Application must make each Compliance Report publicly available 60 days after submitting it to the Department and notify the Department and the Certifying Authority when this is done.

Please find attached a Draft Compliance Report table template for reference, which will be completed as part of the compliance reporting process.

Yours sincerely,
for RPS Manidis Roberts Pty Ltd

Lana Assaf
Senior Executive - Environment
lana.assaf@rpsgroup.com.au
+61 2 9248 9845

cc: Terrence Chan – Laing O'Rourke
    Gavin Ryan – Laing O'Rourke

rpsgroup.com
RPS Manidis Roberts Pty Ltd. Registered in Australia No., 42 003 550 972.
To:
Supplier Name: URBAN GROWTH NSW DEVELOPMENT CORPORATION
Supplier Address: LEVEL 12 - 19 MARTIN PLACE
SYDNEY NSW, 2000 AUS

Reference Information
Pay Cycle: EFTVND
Pay Cycle Seq Number: 3150

Payment Information
Payment Reference: 849837
Payment Date: 03/11/2019
Payment Method: Electronic Funds Transfer

Bank To Information:
Bank ID: 032
Bank Name: WBC

Bank To Account:
***691

Branch ID: 001
Branch Name: NSW Government Department

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<td>527,535.00</td>
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<td></td>
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</table>

Total: 527,535.00 0.00 0.00 527,535.00 AUD
SWMP Commentary, Detailed Calculations

Note: These "Detailed Calculation" spreadsheets relate only to high erosion hazard lands as identified in Figure 4.6 or where the designer chooses to use the RUSLE to assess rainfall events. The "Standard Calculation" spreadsheets should be used for low erosion hazard lands as identified by Figure 4.6 and where the designer chooses not to run the RUSLE in calculations.

1. Site Data Sheet

Site Name: Sydney University Engineering Precinct

Precinct: Engineering Precinct

Description of Site:
- Site 1: Nicky Mouse Basin
- Site 2: North Landscape
- Site 3: Jurassic Park and driveway

<table>
<thead>
<tr>
<th>Site area</th>
<th>Site Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.2</td>
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</table>

Soil Analysis

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<tr>
<th>Soil type</th>
<th>OC (cm)</th>
<th>SC (cm)</th>
<th>Remarks</th>
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</thead>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Rainfall data

<table>
<thead>
<tr>
<th>Observation date</th>
<th>Rainfall (mm)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

RUSLE Factors

<table>
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<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
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<tr>
<td>Rainfall (mm)</td>
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<tr>
<td>Erosivity (E-factor)</td>
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<tr>
<td>Soil erodibility (K-factor)</td>
<td>0.593</td>
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<tr>
<td>Slope length (L-factor)</td>
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<tr>
<td>Slope steepness (S-factor)</td>
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</tr>
<tr>
<td>Bare soil (P-factor)</td>
<td>0.13</td>
</tr>
<tr>
<td>Rainfall interception (I-factor)</td>
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<tr>
<td>Erosion factor (R)</td>
<td>1.0</td>
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</tbody>
</table>

Calculations

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Initial Soil Moisture</td>
<td>25</td>
</tr>
<tr>
<td>Soil Loss</td>
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</tr>
<tr>
<td>Runoff Excess</td>
<td>19</td>
</tr>
<tr>
<td>Runoff Volume</td>
<td>1</td>
</tr>
</tbody>
</table>

Summary:
Detailed site analysis 1
Attachment 2 – Proposed Independent Environmental Audit Program
Proposed Program for Independent Environmental Audit during the construction of the Engineering and Technology Precinct

Development Application Number: SSD 8636  
Developer: Laing O’Rourke  
Proposed Construction Program: March 2019 to July 2020  
Lead Auditor: Lana Assaf (RPS Group)

<table>
<thead>
<tr>
<th>Date</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2019</td>
<td>Close to the beginning of the construction works and therefore will determine whether relevant management plans and procedures are being implemented. Also coincides with the construction commencing of the CC1 Substructure – In ground services, bulk excavation, piling, pile cap, footing and temporary works (i.e. Tower crane), which is when the noise assessment is required, and sediment controls must be installed and maintained as excavation works would be occurring.</td>
</tr>
<tr>
<td>September 2019</td>
<td>Within 6 months of the previous audit. Also coincides with the construction of the frame and façade works (which have elevated potential of noise exceedances) as well as commencement of some fit-out works (J03 Electrical Engineering Building).</td>
</tr>
<tr>
<td>February 2020</td>
<td>Within 6 months of the previous audit. Continuation of fit out works and façade installation (which have elevated potential of noise exceedances) as well as external works/landscaping (therefore multiple work areas and contractors in the public eye).</td>
</tr>
</tbody>
</table>
| July 2020   | Operation Completion is scheduled for July 2020, an audit will be completed post completion. This audit will provide an assessment of the final phase of the project (i.e. to completion) as well as provide a summary of the previous three audits including identification of:  
  - Compliance with construction completion conditions  
  - Compliance with any ongoing monitoring and reporting requirements |

*These timings are based on the current construction program but might be adjusted if delays are evident.

This audit program has been prepared for the construction of the Engineering and Technology Precinct, Sydney University, and has been compiled in accordance with the latest version of AS/NZS ISO 19011-2014: Guidelines for Auditing Management Systems (Standards Australia, 2014) which can be submitted to the Secretary for information in accordance with DA Reference Number SSD 8636.
Statement of Attainment

This is to certify

Lana Assaf

has been assessed as having fulfilled the following requirements

RABQSA-EM
RABQSA-AU
RABQSA-TL

By attending the SAI Global Ltd Training program
Environmental Systems Auditor

Issued on
8th June 2005

[Signature]

Linda Porter
Operations Manager - Education & Training

Certificate Number
1757SAI
Statement of Attainment

This is to certify

Lana Assaf

has been assessed as having fulfilled the following requirements

VBM535 Management Systems Auditing
VBM537 Workplace Teams
QMA07 Conflict Resolution and Negotiation
(By attending the SAI Global Ltd Training program - Environmental Systems Auditor)

in partial completion of the nationally accredited qualification of
21302VIC Certificate IV in Quality Management & Assurance

Issued on
8th June 2005

Linda Parker
Operations Manager - Education & Training

This Statement of Attainment is recognised within the Australian Qualification Framework.

Certificate Number
1757SAI

Certificate of Attainment

This is to certify that

Lana Assaf

has been assessed as having fulfilled the following requirements

RABQSA-QM - Quality Management Systems

Date Attained
08/11/2010

Robyn Hertman
Manager Learning Product Development and Design
Training and Improvement Solutions

Certificate Number
C92793

This training course and certificate of attainment is recognized by IRCA as meeting the requirement for IRCA certification to: IRCA/2245

SAI Global, 385 Sussex Street, Sydney NSW 2000 Australia
ABN: 67 050 611 644 Phone: 1300 737 444

[Signature]

SAI Global
INFORM. INSPIRE. IMPROVE.
Lana Assaf
Senior Executive – Environment

**Areas of expertise**
Lana has over 16 years’ environment and sustainability industry experience, working for Transport for NSW (TfNSW) for over 12 years, has worked on major infrastructure projects for rail, roads, renewables, ports and developments. Lana has also worked on building developments/ Redevelopment projects for CSIRO Lindfield, Mirvac and Peet/CVC as part of the Gungahlin Township Pty Ltd residential land development and is an Independent Environment Auditor for Laing O’Rourke’s Sydney University Susan Wallis Health Building construction project.

Lana represented TfNSW as part of the Environment Audit Team for Sydney Metro Northwest Surface and Viaduct Civil Works. Compliance with the planning approvals, construction environment protection licence and Saltini Impregnation (SISU) construction management systems and sub plans were audited on a regular basis.

Lana was one of the approved RailCorp Assessors for environmental planning approvals. Lana is also an Infrastructure Sustainability Council of Australia (ISCA) Verifier and has verified the following projects on behalf of ISCA:
- South Australia’s Department of Planning, Transport and Infrastructure Torrens to River project (ISCA Verifier)
- Victoria’s Container Terminal, Port of Melbourne (ISCA Verifier)
- Port of Brisbane, Port Drive Upgrade (ISCA Verifier)

Lana’s experience is highlighted below and includes project development and management of multi-disciplinary teams.

- Environmental Audits
- Planning and Environmental Management
- Sustainability Assessment and Implementation
- Design, Construct and Operational Phase Project Management
- Strategic Stakeholder Engagement and Planning Interface Management
- Negotiation, Conflict Resolution and Contract Management

**Location:**
Sydney, NSW

**Education:**
- MSc Marine Sciences, University of New South Wales
- BSc (Hons) Biological Sciences, University of Westminster, London
- Diploma of Management, Northern Beaches Community College, Sydney
- Emerging Leaders Program, UNSW AGSM
- RAIBQA Lead Environmental and Quality Management Systems Auditor, SAI Global Ltd, Sydney
- NSW EPA Investigative Interviewing and Statement Taking, Sydney

**Memberships:**
- Infrastructure Sustainability Council of Australia - IS Accredited Professional (ISAP) and ISCA Verifier
- Environment Institute of Australia and New Zealand
- Environment Professionals Forum

**Selected project experience**

**RPS Group, Jan 2017 – Present, Role: Senior Executive, Environment**
- ISCA Verifier 2015 – Present, Verified Ports, Roads and other (confidential) infrastructure projects.
- ARTC Inland Rail, July 2018 – Present, Client: ARTC, Role: Sustainability Adviser (2-3 days/week).
- Stobbo Solar Farm, December 2016 – Present, Client: UPC Renewables Australia, Role: Environment Project Manager.
- Jemalong Solar Farm, October 2018 – Present, Client: Genex Power, Role: Environment PM.
- New Intercity Fleet, Blue Mountains Route Cleanair Project, September – December 2018, Client: Continuous Joint Venture (CPB/Land Lease) for TfNSW, Role: Environment Manager.

**Jacobs, Jan 2014 – Dec 2016, Role: Senior Associate, Environment**

**Infill Energy, Jan 2013 – Jan 2014, Role: National Safety and Environment Manager**
- Capital Solar Demonstration Plant, Tenan CEMP reviewer, planning approvals management.
- Capital and Woodland Wind Farms
- SolarVWino/SolarRover CEMP/Land Lease reviewer, planning approvals management.

- Transport for NSW – RailCorp (Sydney Trains), April 2005 – Oct 2012, Various Environmental Roles
- Professional Services Division, Engineering and Projects, RailCorp Aug 2010 – Oct 2012, Role: Environmental Manager, with four Environmental Specialists as direct reports.

**The Ecology Lab, Sydney, 2002 – 2004, Role: Environmental Scientist**
- Kempsey to Eungai Pacific Highway Upgrade EIS, Aquatic assessments.
Belinda Bock

Senior Manager – Environment

Areas of expertise

Belinda has over 19 years' experience in the construction industry as an environment professional working on linear infrastructure projects, working predominately with the state government. She is experienced in environmental planning, strategic assessment, and management of multidisciplinary teams. She has a solid understanding of complex environmental management matters.

Belinda is an ISO 14001 certified environmental auditor with demonstrated experience on projects such as the Great Western Highway and the Pacific Highway Upgrade projects to assess project environmental compliance and advice on implementation of best practicable environmental mitigation measures compliant with client requirements and environmental law.

In addition to transport experience in roads and bridges, Belinda is experienced in rail, light rail, mining and airport projects.

Location:
Sydney, NSW
Australia

Education:
BSc Marine Sciences
University of Sydney

Areas of expertise:
Environmental management
Environmental planning, assessment and report writing
CEMPs
Project risk assessment and management
Environmental auditing (ISO14001 compliant)
Compliance tracking
Environmental site inspections
Environmental monitoring
Stakeholder management
Providing team support and mentoring junior staff.

Selected project experience

Transport
- Western Sydney Airport WSA Co (2017).
  Belinda was environmental manager for the preparation of the Western Sydney Airport template CEMP.
  Belinda was an environmental manager for the project. Her role included identifying environmental project risks, providing specialist environmental advice for the project and finalising the update for the Albion Park Rail bypass template CEMP.
  Belinda was the lead environmental advisor for the preparation of corridor studies, a Preliminary Environmental Assessment (PEA) and long-lead specialist studies as inputs for a future Environmental Impact Statement (EIS) for proposed road upgrades for the development of the proposed light rail link from the City to Woden and the development of the West Basin precinct along Lake Burley Griffin foreshores.
  Belinda prepared the Review of Environmental Factors Submissions Report for a proposed upgrade of the local road network at Macquarie Park to support planned additional bus services.
  Belinda was the lead environmental advisor for the Downer/Mouchel Intelligent transport systems stewardship maintenance (SCM) contract and her role included; assisting in updating the environmental management system to meet contract and legal requirements; organising appropriate training for staff environmental awareness and compliance; preparing environmental assessments, construction environmental management plans, environmental work method statements; technical peer reviews for quality assurance and timely approval of minor works and maintenance projects.

Key projects:
- M4 to M52 intersection upgrade Project REF; B-Line Pitwater Road right turn bay and median closure M54REF; and environmental assessments for installation of ITS closed-circuit television, variable message signs, and vehicle activated signs; and road intersection upgrades.
  Belinda was responsible to advise environmental best practice requirements for routine minor works and maintenance projects as well as major infrastructure projects to have minimal environmental impacts and timely approvals. Belinda reviewed construction environmental impact assessments and technical reports; prepared reports for planning approval in consultation with key government agencies and industry specialists; prepared project environmental risk assessments and environmental work method statements; presented environmental toolbox talks and environmental inductions; managed construction environmental management plan preparation; prepared modifications to conditions of approval; participated in regular environmental site inspections; lead environmental audits; provided environmental advice during planning meetings; managed environmental monitoring, sampling and analysis; and assisted in tracking project environmental compliance.

Belinda also assisted in developing new guidelines, processes and procedural tools such as:
- RMS Pacific Highway Environmental Practice Notes – Dewatering; Clean Water Diversion; and Clearing and Felling Management in consultation with RMS and EPA environmental specialists.
- RMS Environmental Roads Corridor Database for environmental risk assessments on routine minor works and maintenance activities.
- Infrastructure Sustainability Council of Australia Pilot Trial for the development of the IS Sustainability Tool for assessment throughout all stages of infrastructure projects.

Key projects: Pacific Highway Upgrade (Nambucca to Urunga, Wauwin Creek to Nambucca, Sapphire to Woolgoda, Baroora Point, Ballina Bypass, Mullumbimby Bypass), Bargo Bypass, Cataract Valley Way (Cowperstane Road to Cobby Road), Royal National Park kelp reef rehabilitation, Akuna Bay slope stabilisation, Old Pacific Highway slope stabilisation, Old Wollongbar Road upgrade, Inner West Seaway along Victoria Road project, Affords Point Bridge duplication, and Great Western Highway upgrade.
Valerie Donat
Consultant - Environment

Areas of expertise
Valerie is an environmental consultant with sound background knowledge of environmental science and environmental law, both in NSW and nationally. She has worked on a range of projects across many sectors including telecommunications, road, rail, airport and water infrastructure. Her most extensive experience is in planning assessments and approvals for projects varying in complexity and sensitivity, and she is recognised among her colleagues for having excellent communication and written skills.

Location:
Sydney, NSW
Australia

Education:
Bachelor of Science in Environmental Forensics, University of Technology, Sydney, 2013
Master of Environmental Law, Macquarie University, 2014
Construction White Card, Workplace Health & Safety Queensland 2016

Memberships:
The Environment Institute of Australia and New Zealand

Selected project experience
Infrastructure - Transport
- Western Sydney Airport Construction Environmental Management Plans (CEMPs), 2017-Current. Main author for the preparation of nine draft CEMPs for the Stage 1 construction of the Western Sydney Airport that was used to support the procurement process. She also provided environmental management advice and support to the procurement team.
- Canberra Light Rail Stage 2 Preliminary Environmental Assessment 2017. Assisted with drafting the Risk Assessment as part of the Preliminary Environmental Assessment for Stage 2 of the Canberra Light Rail project.
- Roads and Maritime Services B-Line Parking Removal Review of Environmental Factors (REF) 2017. Main author on the REF preparation team. This involved assessing environmental factors against the proposed works as well as consulting with specialist consultants.
- Roads and Maritime Services Macquarie Park Bus and Capacity Improvement Review of Environmental Factors (REF) 2016-2017. Main author on the REF preparation team. This involved assessing various environmental factors and writing large portions of the REF within tight timeframes in consultation with the client and the specialist assessment consultants. She also took on the role of coordinating final specialist reports and document graphics to meet client light timelines.

Water
- Gogong Integrated Water Cycle Project 2016-Current. Assisted with the preparation and review of an Environmental Impact Statement for the Stage C WRMP, various monitoring, compliance and audit reports, and other planning documents. She also updated various construction and operational management plans, as well as assisting with various strategic advice reports.

Infrastructure - General
- Greater Sydney Commission Infrastructure Project 2016. Researched and collated a range of various priority infrastructure projects within Sydney that were both announced or confidential. She maintained a spreadsheet of the projects and this spreadsheet has been distributed to members within the Greater Sydney Commission and other relevant agencies within both the private and public sector.

Telecommunications
- NBN Private Land Access Adviser 2017. 3-month secondment into the Land Access and Stakeholder Engagement team as a Private Land Access Advisor. She reviewed various types of works notifications and documents, ensuring tenures were valid. She also reviewed heritage approval requirements for properties within the Sydney CBD, ensuring the correct heritage documentation had been provided prior to commencing works.
- NBN Assessments 2017. Main author for the preliminary assessment report assessing proposed NBN works within a private property. This involved conducting desktop environmental assessments to identify any potential impacts, and work with specialist consultants for further investigations.
- NBN & Tato Consulting Services LASA 2016-2017. Author for the preparation and review of planning assessment reports for the NBN project at various stages. She assessed proposed works against environmental and telecommunications legislation and provided recommendations to assist in the planning approval stage of the project, including recommending formal ecological or Aboriginal heritage assessments.

Communications
- Sydney Water and Parramatta River Catchment Group Parramatta River Masterplan 2017. Assisted with the collation of data.