

Development Consent

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

As delegate of the Minister for Planning under delegation dated 14 September 2011, I approve the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

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



Carolyn McNally
Secretary

Sydney

10 . 11 . 2014

SCHEDULE 1

Application No.:	SSD 5897
Applicant:	Lend Lease (Millers Point) Pty Limited
Approval Authority:	Minister for Planning
Land:	Part Lot 3 DP 876514 and Part Lot 5 DP 876514, Barangaroo
Development:	Remediation, land forming and excavation works

DEFINITIONS

Advisory Notes	Advisory information relating to the approved project but do not form a part of this approval.
Applicant	Lend Lease (Millers Point) Pty Limited, or anyone else entitled to act on this consent
BCA	Building Code of Australia
Certifying Authority	Has the same meaning as in section 4 and Part 4A of the EP& A Act.
Construction	Any works, including remediation, earth and building works
Council	City of Sydney Council
CPI	Consumer Price Index
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment, or its successors
Development	The development as described in the EIS and RTS
EIS	Environmental Impact Statement entitled ' <i>Block 4 Development Remediation Works, Bulk Excavation and Retention Wall System Construction, EPA Remediation Site 21122 'Block 4' (Stage 1B), Barangaroo South</i> ', prepared by JBA Urban Planning Consultants Pty Ltd and dated November 2013
EPA	Environment Protection Authority, or its successors.
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
Evening	The period from 6pm to 10pm
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Minister	Minister for Planning, or nominee
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH	Office of Environment & Heritage, or its successors
PCA	Principal Certifying Authority has the same meaning as in section 4 and Part 4A of the EP & A Act.
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
RAP	The Remedial Action Plan entitled <i>NSW EPA Declared Remediation Site 21122 and Block 4 (Stage 1b) Development Works, Barangaroo, Millers Point, NSW</i> , prepared by AECOM Australia Pty Limited and dated 24 July 2013.
Remediation	The remediation and excavation works as described in the EIS and RTS
RMS	Roads and Maritime Services
RTS	Response to Submissions report entitled ' <i>EPA Remediation Site 21122, Block 4 (Stage 1B), Barangaroo South 'Block 4' Development. Remediation Works, Bulk Excavation and Retention Wall System Construction</i> ', prepared by JBA Urban Planning Consultants Pty Ltd and dated June 2014
RTS Addendum	The Response to Submissions Addendum report entitled ' <i>Block 4 Remediation and Land Forming Works (SSD 5897) – Addendum to Response to Submissions Report</i> ', prepared by Lend Lease and dated 19 August 2014.
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build.
Statement of Commitments	The Applicant's Statement of Commitments in Schedule 3.
Secretary	The Secretary of the Department (or nominee)
Site	The land referred to in Schedule 1 of this consent.

SCHEDULE 2

PART A - ADMINISTRATIVE CONDITIONS

A1 DEVELOPMENT DESCRIPTION

Except as amended by this consent, development consent is granted for the following:

- remediation works including land within EPA Declaration Area (No. 21122) and adjacent areas;
- construction of a groundwater retention wall;
- bulk excavation within the groundwater retention wall;
- diversion and augmentation of stormwater infrastructure;
- erection of temporary enclosures for excavation and remediation works; and
- tree removal and management, demolition of existing structures on site and associated works.

A2 DEVELOPMENT IN ACCORDANCE WITH PLANS AND DOCUMENTATION

The development will be undertaken in accordance the following documents and plans:

Environmental Impact Statement entitled 'Block 4' Development Remediation Works, Bulk Excavation and Retention Wall System Construction, EPA Remediation Site 21122 'Block 4' (Stage 1B), Barangaroo South' and accompanying appendices, prepared by JBA Urban Planning Consultants Pty Ltd and dated November 2013.			
The Human Health and Ecological Risk Assessment entitled 'Human Health and Ecological Risk Assessment, Declaration Site (Development Works) Remediation Works Area – Barangaroo', prepared by AECOM Australia Pty Limited and dated 9 June 2011.			
The Human Health and Ecological Risk Assessment entitled 'Human Health and Ecological Risk Assessment, VMP Remediation Works (Addressing the NSW EPA Declaration 21122, Millers Point)', prepared by AECOM Australia Pty Limited, dated 25 October 2012.			
The Remedial Action Plan entitled 'Remedial Action Plan, NSW EPA Declared Remediation Site 21122 and Block 4 (Stage 1b) Development Works, Barangaroo, Millers Point, NSW', prepared by AECOM Australia Pty Limited and dated 24 July 2013.			
The Site Audit Report entitled 'Site Audit Report - Remedial Action Plan, Declaration Area and Block 4, Barangaroo', prepared by ENVIRON Australia Pty Ltd, dated July 2013.			
Site Audit Statements (No. GN 447A and No. GN 439B-3), approved by Mr. Graeme Nyland (EPA accredited Site Auditor) and dated 31 July 2013.			
Response to Submissions report entitled 'EPA Remediation Site 21122, Block 4 (Stage 1B), Barangaroo South 'Block 4' Development. Remediation Works, Bulk Excavation and Retention Wall System Construction' and accompanying appendices, prepared by JBA Urban Planning Consultants Pty Ltd and dated June 2013.			
Response to Submissions Addendum report entitled 'Block 4 Remediation and Land Forming Works (SSD 5897) – Addendum to Response to Submissions Report' and accompanying attachments, prepared by Lend Lease and dated 19 August 2014.			
Preliminary Hazards Analysis report entitled 'Remediation and Land forming Works Development Application SSD 5897-2013 Barangaroo Block 4, Hickson Road, Millers Point, NSW', prepared by AECOM and dated 25 February 2014.			
Site plans and sections prepared by Lend Lease Design, (Graham Jones, Principal Architect) and overview and staging plans prepared by ARUP.			
Drawing No.	Issue	Name of Plan	Date
Site Plans and Sections			
BB2_PA1_A000	A	Title Sheet	26/07/2013
BB2_PA1_A001	A	Aerial Location Plan	26/07/2013
BB2_PA1_A002	A	Site Survey	26/07/2013
BB2_PA1_A003	A	Locality / Context Plan	26/07/2013
BB2_PA1_A004	A	Demolition Plan	26/07/2013
BB2_PA1_A005	B	Permanent Retaining Wall Plan	14/05/2014
BB2_PA1_A006	A	Cross Section 1-1	26/07/2013
BB2_PA1_A007	A	Cross Section 2-2	26/07/2013
BB2_PA1_A008	A	Earthworks Drawing	26/07/2013
Overview and Staging Plans			
226463-CCT-SKT-0001	I	Overview Drawing Remediation Works and Staging	22/08/2013
226463-CCT-SKT-1001	G	Staging Plan – Stage 1	22/08/2013
226463-CCT-SKT-1002	G	Staging Plan – Stage 2	22/08/2013
226463-CCT-SKT-1003	G	Staging Plan – Stage 3	22/08/2013

226463-CCT-SKT-1004	G	Staging Plan – Stage 4	22/08/2013
226463-CCT-SKT-1005	G	Staging Plan – Stage 5	22/08/2013
226463-CCT-SKT-1006	G	Staging Plan – Stage 6	22/08/2013

except for:

- (a) any modifications which are 'Exempt and Complying Development' as identified in *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* or as may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA.
- (b) otherwise provided by the conditions of this consent.

A3 INCONSISTENCY BETWEEN DOCUMENTS

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, including the Applicant's Statement of Commitments, the conditions of this consent prevail.

A4 PRESCRIBED CONDITIONS

The Applicant shall comply with the prescribed conditions of consent under clause 98 of the *Environmental Planning and Assessment Regulation 2000* in relation to the requirements of the *Building Code of Australia* (BCA).

A5 LAPSING OF CONSENT

The development consent shall lapse 5 years after the determination date in Part A of Schedule 1, unless the construction works authorised by this development consent have been commenced.

A6 MEDIATION

Where this approval requires further consent/approval from Council or another authority, the parties shall not act unreasonably preventing an agreement from being reached. In the event that an agreement is unable to be reached within 3 months or a timeframe otherwise agreed to by the Secretary, the matter is to be referred to the Secretary for resolution. All areas of disagreement and the position of each party are to be clearly stated to facilitate a resolution.

End of Section

PART B – PRIOR TO ISSUE OF THE RELEVANT CONSTRUCTION CERTIFICATE

B1 COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA

Details shall be provided to the satisfaction of the Certifying Authority, with each application for a Construction Certificate, which demonstrate that the proposal complies with the prescribed conditions of approval under clause 98 of the *Environmental Planning and Assessment Regulation 2000* in relation to the requirements of the Building Code of Australia.

B2 STRUCTURAL DETAILS

(1) Prior to the issue of each Construction Certificate, the Applicant shall submit to the satisfaction of the Certifying Authority, structural drawings prepared and signed by a suitably qualified practising Structural Engineer that complies with:

- (a) the relevant clauses of the BCA;
- (b) the relevant development consent;
- (c) drawings and specifications comprising the Construction Certificate; and
- (d) the relevant Australian Standards listed in the BCA (Specification A1.3).

B3 REMEDIAL ACTION PLAN ADDENDUM

(1) If contaminated material is to be transported off-site for treatment, the Applicant must provide an addendum to the RAP, prior to the issue of the relevant Construction Certificate. The RAP addendum must:

- (a) be provided to the EPA for review and comment;
- (b) include a methodology for odour control for the transportation of untreated contaminated material off-site which:
 - o demonstrates that the transportation of untreated contaminated material off-site would meet the minimum odour control requirements specified in the Block 4 Preliminary Air Quality and Odour Control Plan prepared by Lend Lease (dated 13 August 2014) in the RTS Addendum;
 - o provides detailed design of the odour control measures to be implemented during vehicle loading and transport;
 - o includes a suitable air quality and odour monitoring program to be implemented for this activity; and
 - o is incorporated into the Air Quality and Odour Management Sub-Plan required under Condition B14.

The RAP addendum must be approved by an EPA-accredited site auditor prior to the issue of the relevant Construction Certificate.

B4 DETAILED DESIGN – REMEDIATION/EXCAVATION ENCLOSURES

Prior to the issue of the relevant Construction Certificate for excavation works, the Applicant shall submit final detailed design plans for each enclosure prepared by a suitably qualified and experienced person to the EPA for review and the Secretary for approval.

The information submitted must include detailed design plans of each enclosure including information on:

- final location and visual appearance including dimensions (bulk, height and scale), materials and finishes;
- stormwater, erosion and sediment management/control devices;
- nomination of all pollutant point source discharge parameters;
- ventilation arrangements and emissions performance specifications for pollution control equipment for all compounds of interest; and
- the proposed monitoring program/s for the emissions control systems, including arrangements for monitoring of activated carbon breakthrough.

The enclosures and associated air emissions control systems must operate under negative pressure, be designed in consultation with the EPA using best available control technology, comply with Environment Protection Licence number 13336 and meet any relevant requirements of the Protection of the Environment Operations (Clean Air) Regulation 2010.

Notes:

- a) A reference to enclosure is taken to be the excavation enclosure/s and/or remediation enclosure as described in the EIS.
- b) Condition B15 relates to works that would be undertaken outside an enclosure.

B5 FOOTWAY DESIGN

- (1) Detailed design and construction documentation of the relevant footways must be prepared by a suitably qualified practising professional Civil Engineer; and where Council is the relevant road authority, the documentation is to be in accordance with the Council's '*Development Specification for Civil Works*'.
- (2) The works are to be completed in accordance with the approved plan.

B6 PRE-CONSTRUCTION DILAPIDATION REPORTS

If not already undertaken, the Applicant is to engage a suitably qualified person to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all existing and adjoining buildings, infrastructure and roads. The report shall be submitted to the satisfaction of the Certifying Authority prior to the issue of the first Construction Certificate. A copy of the report is to be forwarded to the Secretary and Council.

B7 STORMWATER AND DRAINAGE

- (1) Prior to the issue of the relevant Construction Certificate, details of any proposed stormwater disposal and drainage from the development including a system of on-site stormwater detention (if required) and details of the provision and maintenance of overland flow paths must be submitted to the Certifying Authority. All details for the disposal of stormwater and drainage are to be implemented in the development.
- (2) Any proposed connection to the Council's or Sydney Water's underground drainage system will require the owner to enter into a Deed of Agreement, if required, with the Council or Sydney Water prior to the commencement of any relevant work within the public way.
- (3) The requirements of Sydney Water with regard to the on site detention of stormwater, if required, must be ascertained and complied with. Evidence of the approval of Sydney Water to the on-site detention, if required, must be submitted prior to the relevant Construction Certificate being issued.
- (4) Where relevant, an "Application for Approval of Stormwater Drainage Connections" must be submitted to the Council with the appropriate fee at the time of lodgement of the proposal for connection of stormwater to the Council's drainage system.

B8 SYDNEY WATER

Prior to the issue of the relevant Construction Certificate, a Notice of Requirements under Part 6, Division 9 of the *Sydney Water Act 1994* shall be obtained and a copy must be submitted to the Certifying Authority (Council or a private accredited certifier).

B9 OUTDOOR LIGHTING

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

B10 CONSTRUCTION FRAMEWORK ENVIRONMENTAL MANAGEMENT PLAN

- (1) Prior to the issue of the relevant Construction Certificate, the Applicant shall prepare an updated Construction Framework Environmental Management Plan (CFEMP) for Barangaroo South incorporating the development to be submitted to the EPA for review and submitted to the Certifying Authority. The CFEMP must:
 - (a) describe the relevant stages and phases of construction including work program outlining relevant timeframes for each stage/phase;
 - (b) describe all activities to be undertaken on the site during site establishment and construction of the development;
 - (c) clearly outline the stages/phases of construction that require ongoing environmental management monitoring and reporting;
 - (d) detail statutory and other obligations that the Applicant is required to fulfil during site establishment and construction, including approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - (e) include specific consideration of measures to address any requirements of the EPA during site establishment and construction;

- (f) describe the roles and responsibilities for all relevant employees involved in the site establishment and construction of the works;
 - (g) detail how the environmental performance of the site preparation and construction works will be monitored, and what actions will be taken to address identified potential environmental impacts;
 - (h) document and incorporate all sub environmental management plans (Sub-Plans), studies and monitoring programs required under this consent; and
 - (i) include arrangements for community consultation and complaints handling procedures during construction.
- (2) In the event of any inconsistency between the consent and the CFEMP, the consent shall prevail.
- (3) The CFEMP and any associated Sub-Plans should be revised:
- at each key stage of the works;
 - in response to future development consents;
 - in response to major changes in site conditions or work methods; and
 - in support of licence variations as necessary.
- (4) A copy of the final CFEMP is to be provided to the Secretary.

B11 NOISE AND VIBRATION MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, an updated Construction Noise and Vibration Management Sub-Plan for Barangaroo South prepared by a suitably qualified person shall be submitted to the EPA for review and submitted to the Certifying Authority.

The Sub-Plan must be consistent with and adopt all recommendations of the Construction Noise and Vibration Assessment (dated February 2014) in Appendix C of the RTS and the RTS Addendum. The Sub-Plan must include a suitable real-time noise monitoring program, early warning system and reactive management procedure to ensure corrective actions are implemented prior to exceedences of the relevant construction noise criteria identified in Condition D6. The Sub-Plan must set out the community consultation procedures to be implemented including a community liaison (e.g. early notification procedures), complaints and response mechanism for critical stages of the works.

The Sub-Plan must comply with Environment Protection Licence number 13336. A copy must be provided to the Secretary.

B12 NOISE MANAGEMENT - 'KU LANCE PRE-SCHOOL' CONSULTATION

Prior to the issue of the relevant Construction Certificate, the Applicant must consult with the 'KU Lance' pre-school located at 37 High Street, Millers Point and provide information to them on how to minimise construction noise impacts associated with the development during noise intensive works. The Applicant must confirm that the pre-school has operable windows on several sides of the building and/or air-conditioning to ensure that the building would be well ventilated in the event that some windows are required to be closed during works to achieve acceptable noise levels. The Applicant shall provide the pre-school with information on its complaint management procedure and 24 hour enquiry line telephone number.

The outcomes of the above must be documented in the Construction Noise and Vibration Management Sub-Plan required under Condition B11.

B13 AIR QUALITY VERIFICATION REPORT

- (1) Prior to the issue of the relevant Construction Certificate, an Air Quality Verification Report prepared by a suitably qualified person shall be submitted to the EPA for review and submitted to the Certifying Authority. The Report must:
- (a) be prepared by a suitably qualified and experienced expert in accordance with the EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (the Approved Methods);
 - (b) consider all key chemicals of potential concern in relation to the development (particularly contaminated areas and particulate matter);
 - (c) be based on the final design of the development including the enclosures (refer to Condition B4) and information such as point source arrangement and emission performance specifications for proposed controls;

- (d) nominate relevant emission concentration limits that reflect proper and efficient operation and are protective of the health and amenity of the surrounding environment; and
- (e) make recommendations for all necessary mitigation measures necessary to demonstrate compliance with the relevant impact assessment criteria as nominated in the Approved Methods.

A copy must be provided to the Secretary.

B14 AIR QUALITY AND ODOUR MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, an updated Air Quality and Odour Management Sub-Plan for Barangaroo South prepared by a suitably qualified person shall be submitted to the EPA for review and submitted to the Certifying Authority.

The Sub-Plan must be consistent with and adopt all recommendations of the Air Quality Impact Assessment (dated 18 February 2014) in Appendix B of the RTS, the Preliminary Air Quality and Odour Control Plan (dated 13 August 2014) in the RTS Addendum and the Air Quality Verification Report required under Condition B13 of this consent. The Sub-Plan must include a suitable real-time air monitoring program and comply with Environment Protection Licence number 13336. A copy must be provided to the Secretary.

B15 DETAILED DESIGN – ODOUR CONTROL FOR EXTERNAL REMEDIATION WORKS

- (1) Prior to the issue of the relevant Construction Certificate, the Applicant must provide a detailed methodology for odour control during the retention wall construction to the EPA for review and comment. The methodology must:
 - (a) demonstrate that the retention wall construction works would meet the minimum requirements specified in the Block 4 Preliminary Air Quality and Odour Control Plan prepared by Lend Lease (dated 13 August 2014) in the RTS Addendum;
 - (b) provide detailed design of the odour control measures to be implemented during the retention wall construction;
 - (c) include a suitable air quality and odour monitoring program to be implemented for this activity; and
 - (d) be incorporated into the Air Quality and Odour Management Sub-Plan required under Condition B14.

B16 TRAFFIC MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, a Traffic Management Sub-Plan prepared by a suitably qualified person for the development shall be submitted to the Barangaroo Delivery Authority and Transport for NSW for review and submitted to the Certifying Authority.

The Sub-Plan must include a Green Travel Plan for workers and detail the measures that would be implemented to: minimise the impact of the development on the safety and capacity of the surrounding road network; minimise truck movements to and from the site as far as practicable during the PM peak period; and ensure compliance with Condition D13 of this consent. A copy must be provided to the Secretary.

B17 HEALTH MANAGEMENT SUB-PLAN

- (1) Prior to the issue of the relevant Construction Certificate, a Health Management Sub-Plan prepared by a suitably qualified person for the development shall be submitted to NSW Health and WorkCover NSW for review and submitted to the Certifying Authority. The Sub-Plan must:
 - (a) ensure the development complies with the relevant requirements of the *Work, Health and Safety Regulation 2011*;
 - (b) detail all pollutant management measures and controls to be implemented during construction to minimise potential impacts on health for nearby sensitive receivers and workers on or adjacent to the site including engineering controls, safe work practices, safe work methods statements, hygiene and decontamination procedures and personal protective equipment requirements;
 - (c) be consistent with and adopt all recommendations of the Health Impact Assessment prepared by AECOM (dated 1 October 2013) in Appendix M of the EIS;
 - (d) ensure an induction process is in place for site workers and visitors regarding the safe work practices and methods to be followed to minimise the potential for human exposure to pollutants; and

- (e) include a suitable occupational health monitoring program that ensures potential and identified exceedences of the adopted health impact assessment criteria are linked to appropriate corrective work actions and the implementation of additional controls.

A copy must be provided to the Secretary.

B18 WATER AND STORMWATER MANAGEMENT SUB PLAN

Prior to the issue of the relevant Construction Certificate, an updated Water and Stormwater Management Sub-Plan for Barangaroo South prepared by a suitably qualified person shall be submitted to the EPA for review and submitted to the Certifying Authority.

The Sub-Plan must ensure that effluents/liquid waste streams associated with the development that are directed to the site Wastewater Treatment Plant (WTP) would be sufficiently treated to ensure:

- (a) compliance with the relevant concentration limits required by Environment Protection Licence No. 13336 prior to discharge to Sydney Harbour; and/or
- (b) compliance with the relevant requirements of an executed Trade Waste Agreement with Sydney Water Corporation prior to discharge to sewer.

The Sub-Plan shall include a suitable short period intensive monitoring program to characterise key pollutants in liquid waste inflows to and discharges from the WTP associated with the development to ensure this waste is treated to an acceptable level. A copy must be provided to the Secretary.

B19 EROSION AND SEDIMENT CONTROL

Soil erosion and sediment control measures shall be designed in accordance with the document *Managing Urban Stormwater – Soils & Construction Volume 1 (2004)* by Landcom. Details are to be submitted to the satisfaction of the Certifying Authority prior to the issue of the relevant Construction Certificate.

B20 SPOIL AND WASTE MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, an updated Spoil and Waste Management Sub-Plan for Barangaroo South prepared by a suitably qualified person shall be submitted to the EPA for review and submitted to the Certifying Authority.

The Sub-Plan must be consistent with and adopt all recommendations of the Waste Management Plan prepared by AECOM (dated 1 October 2014) in Appendix Y of the EIS. The Sub-Plan must ensure that the development complies with the requirements of Condition D27(4) of this consent. The Sub-Plan must comply with Environment Protection Licence number 13336. A copy must be provided to the Secretary.

B21 ACID SULPHATE SOILS MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, an updated Acid Sulphate Soil Management Sub-Plan for Barangaroo South shall be prepared by a suitably qualified person in accordance with the *Acid Sulphate Soil Assessment Guidelines* (Acid Sulphate Soil Management Advisory Committee, 1998) and submitted to the Certifying Authority.

B22 ASBESTOS MANAGEMENT SUB-PLAN

(1) Prior to the issue of the relevant Construction Certificate, an Asbestos Management Sub-Plan prepared by a suitably qualified person for the development shall be submitted to the EPA and WorkCover NSW for review and submitted to the Certifying Authority. The Sub-Plan must:

- (a) be consistent with Safe Work Australia's codes of practice *How to Safely Remove Asbestos 2011* and *How to Manage and Control Asbestos in the Workplace 2011*;
- (b) identify any known or potential areas of concern on site for asbestos containing materials;
- (c) outline the procedures for identification, handling, disposal and/or re-use of asbestos containing materials;
- (d) ensure that all asbestos would be handled and disposed of by a suitably licensed asbestos removalist in accordance with the relevant guidelines and legislation;
- (e) ensure an induction process is in place for site workers and visitors regarding the identification of asbestos and the formal procedures to be followed in the event that asbestos is identified on site;
- (f) ensure that the development would comply with the requirements of Condition D27 of this consent;
- (g) include a suitable airborne asbestos fibre monitoring program for all asbestos removal works areas; and

- (h) outline the procedures for soil validation and inspection following the completion of asbestos removal works and issuing of asbestos clearance certificates.

A copy must be provided to the Secretary.

B23 HERITAGE MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, a Heritage Management Sub-Plan prepared by a suitably qualified person for the development shall be submitted to the Certifying Authority. The Sub-Plan must be consistent with and adopt all recommendations of the non-Indigenous Heritage Impact Statement prepared by Casey and Lowe (dated August 2013) in Appendix S of the EIS (particularly with regards to the development and implementation of an archaeological monitoring program) and the Indigenous Heritage Impact Statement prepared by Comber Consultants (dated August 2013) in Appendix T of the EIS. A copy must be provided to the Secretary.

B24 TREE MANAGEMENT SUB-PLAN

Prior to the issue of the relevant Construction Certificate, an updated Tree Management Sub-Plan for Barangaroo South prepared by a suitably qualified person shall be submitted to Council for review and submitted to the Certifying Authority. The Sub-Plan must be consistent with and adopt all recommendations of the Arboricultural Impact Assessment prepared by Tree Wise Men Australia (dated September 2013) in Appendix U of the EIS. A copy must be provided to the Secretary.

HAZARDS AND RISK

B25 FIRE SAFETY STUDY AND FINAL HAZARDS ANALYSIS

If ex-situ chemical oxidation treatment methods are proposed to be used for excavated soil (i.e. requiring Dangerous Goods storage), prior to the issue of the relevant Construction Certificate, the Applicant shall prepare the studies set out under subsections (a) to (b) (the pre-construction studies). Construction, other than of preliminary works that are outside the scope of the hazard studies, shall not commence until study recommendations have been considered and, where appropriate, acted upon. The Applicant shall submit the studies to Secretary no later than one month prior to the commencement of construction of the proposed development (other than preliminary works), or within such further period as the Secretary may agree.

(a) **FIRE SAFETY STUDY**

A fit for purpose Fire Safety Study for the proposed development. This study shall cover the relevant aspects of the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines'* and the New South Wales Government's *'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'*. The study shall meet the requirements of Fire and Rescue NSW.

(b) **FINAL HAZARD ANALYSIS**

A Final Hazard Analysis (FHA) of the proposed development, consistent with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*. The FHA shall include updated and detailed information on the types of Dangerous Goods (DG), their quantities, and storage locations on site. A site layout plan showing the location of all DG depots shall be included in the report. An update on the implementation status of the Preliminary Hazards Analysis report (refer to Condition A2) recommendations should also be incorporated in the FHA. As the proposal is located in the Sydney central business district, and due to the unavailability of DG transportation details at the time of preparation of the PHA, a DG transportation screening (as per the Department of Planning's *Applying SEPP 33 2008*) shall form part of the FHA. If the proposal is found to be potentially hazardous with respect to transportation, a route evaluation should be completed in accordance with the *Department's Hazardous Industry Planning Advisory Paper No.11, 'Route Selection'*, and included in the FHA report. Suitable routes identified in the evaluation shall be used, except where departures are necessary for local deliveries or emergencies.

Note: The above studies/plans shall be undertaken by the Applicant and submitted to the Secretary for review, without a requirement for formal approval.

B26 COMPLIANCE REPORT

Prior to the issue of each Construction Certificate, the Applicant, or any party acting upon this consent, shall submit to the Certifying Authority a report addressing compliance with all relevant conditions of this Part.

End of Section.

PART C – PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS

GENERAL

C1 ENVIRONMENTAL PROTECTION LICENCE

Prior to the commencement of works, the Applicant must ensure that the existing Environmental Protection Licence (EPL) issued to the Barangaroo Delivery Authority is varied, where required, to reflect and permit the works conducted on site. All works undertaken on site must be done in a manner which ensures compliance with EPL conditions at all times.

C2 NOTICE TO BE GIVEN PRIOR TO WORKS

The PCA and Council shall be given written notice, at least 48 hours prior to the commencement of excavation, shoring or underpinning works on the site.

C3 CONTACT TELEPHONE NUMBER

Prior to the commencement of the works, the Applicant shall forward to Council a 24 hour telephone number to be operated for the duration of the construction works.

C4 COMPLIANCE REPORT

Prior to the commencement of works, the Applicant, or any party acting upon this consent, shall submit to the PCA a report addressing compliance with all relevant conditions of this Part.

C5 HOARDING

- (1) A separate application under section 138 of the *Roads Act 1993* is to be made to the relevant road authority to erect a hoarding and/or scaffolding in a public road (if required) and such application is to include:
 - (a) architectural, construction and structural details of the design as well as proposed artwork
 - (b) structural certification prepared and signed by an appropriately qualified practising structural engineer.
- (2) Evidence of the issue of a Structural Works Inspection Certificate and structural certification will be required prior to the commencement of construction works on site.

C6 BARRICADE PERMIT

Where construction/building works require the use of a public place including a road or footpath, approval under section 138 of the *Roads Act 1993* for a Barricade Permit is to be obtained prior to the commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of the relevant road authority.

C7 GEOTECHNICAL REPORTS

- (1) Prior to the commencement of any drilling/piling works on site, the Applicant shall submit to the PCA, the results of a detailed geotechnical investigation on the site. The report is to address such matters as:
 - (a) appropriate drilling methods and techniques
 - (b) vibration management and monitoring
 - (c) dilapidation survey
 - (d) support and retention of excavated faces
 - (e) hydrogeological considerations.
- (2) The recommendations of the report are to be implemented during the course of the works.

C8 APPROVAL OF REMEDIATION/EXCAVATION ENCLOSURES

Prior to the commencement of works, the Applicant must ensure that it has obtained the Secretary's approval for each enclosure associated with the development in accordance with Condition B4. No remediation works (other than those associated with the retention wall construction works) shall commence until these approvals have been obtained.

HAZARDS AND RISK

C9 *EMERGENCY PLAN*

Prior to the commencement of construction works, the Applicant shall develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the proposed development. This plan shall also include detailed procedures for the safety of all people outside of the development who may be at risk from the project. The plan shall be consistent with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'*.

The Applicant shall submit to the Secretary documentation describing the Emergency Plan no later than one month prior to the commencement of construction of the proposed development (other than preliminary works), or within such further period as the Secretary may agree.

Note: The above studies/plans shall be undertaken by the Applicant and submitted to the Secretary for review, without a requirement for formal approval.

End of Section.

PART D - DURING CONSTRUCTION

GENERAL

D1 HOURS OF WORK

- (1) The hours of construction, including the delivery of materials to and from the site, shall be restricted as follows:
- (a) between 7am and 6pm, Mondays to Fridays inclusive;
 - (b) between 7am and 5pm, Saturdays; and
 - (c) no work on Sundays and public holidays.
- (2) Works outside these hours are not permitted except as explicitly specified below or in other conditions and include:
- (a) the delivery of materials which is required outside these hours as requested by Police or other authorities for safety reasons;
 - (b) emergency work to avoid the loss of lives, damage to property and/or to prevent environmental harm;
 - (c) operation of the enclosures required under Condition D11 of this consent to ensure odour is effectively controlled outside the approved hours of construction, including operation of the ventilation and air emissions control systems;
 - (d) operation of the Wastewater Treatment Plant require under Condition D21 of this consent, including dewatering to prevent flooding, treatment systems and discharge; and
 - (e) other works expressly approved by the Secretary.

D2 CONSTRUCTION FRAMEWORK ENVIRONMENTAL MANAGEMENT PLAN

- (1) The Applicant must undertake all works in accordance with the requirements of the Construction Framework Environmental Management Plan approved under Condition B10. The CFEMP must document and incorporate all Sub-Plans required under this consent.

REMEDIAL ACTION

D3 REMEDIAL ACTION PLAN (RAP) AND HUMAN HEALTH ECOLOGICAL RISK ASSESSMENTS (HHERA)

- (1) All remediation works are to be undertaken in accordance with the following approved Remedial Action Plan (RAP), Human Health Ecological Risk Assessments (HHERAs) and accompanying documents:
- (a) *'Human Health and Ecological Risk Assessment, Declaration Site (Development Works) Remediation Works Area – Barangaroo'*, prepared by AECOM Australia Pty Limited and dated 9 June 2011;
 - (b) *'Human Health and Ecological Risk Assessment, VMP Remediation Works (Addressing the NSW EPA Declaration 21122, Millers Point)'*, prepared by AECOM Australia Pty Limited and dated 25 October 2012;
 - (c) *'Remedial Action Plan, NSW EPA Declared Remediation Site 21122 and Block 4 (Stage 1b) Development Works, Barangaroo, Millers Point, NSW'*, prepared by AECOM Australia Pty Limited and dated 24 July 2013;
 - (d) *'Site Audit Report - Remedial Action Plan, Declaration Area and Block 4, Barangaroo'*, prepared by ENVIRON Australia Pty Ltd and dated July 2013; and
 - (e) *Site Audit Statements (No. GN 447A and No. GN 439B-3)*, approved by Mr. Graeme Nyland (EPA accredited Site Auditor) and dated 31 July 2013.
- (2) If contaminated material is to be transported off-site for treatment, all remediation works are to be undertaken in accordance with the RAP, as modified by the RAP addendum approved in accordance with Condition B3.

NOISE AND VIBRATION

D4 NOISE AND VIBRATION MANAGEMENT SUB-PLAN

The Applicant must undertake all works in accordance with the requirements of the Construction Noise and Vibration Management Sub-Plan approved under Condition B11. This Plan must be consistent with all of the relevant requirements of the Environment Protection Licence number 13336.

D5 RESTRICTED HOURS OF WORK – HIGH NOISE IMPACT ACTIVITIES

- (1) The Applicant must ensure that any work generating high noise impact (e.g. rock hammering) must only be undertaken:

- (a) between the hours of 8:00am and 6:00pm Monday to Friday;
- (b) between the hours of 8:00am and 1:00pm Saturday; and
- (c) in continuous blocks of no more than 3 hours, with at least a 1 hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers.

For the purposes of this condition 'continuous' includes any period during which there is less than a 1 hour respite between ceasing and recommencing any of the work the subject of this condition.

D6 CONSTRUCTION NOISE CRITERIA

The Applicant must ensure that noise generated by the development does not exceed 75 dB(A) _{L_{Aeq}(15 minute)} at any affected sensitive receiver during the day.

Note:

- To identify the receiver locations refer to the Construction Noise and Vibration Assessment in the RTS (Appendix C); and
- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

D7 VIBRATION CRITERIA

- (1) Vibration caused by construction at any residence or structure outside the subject site must be limited to:
 - (a) for structural damage vibration to buildings (excluding heritage buildings), *British Standard BS 7385 Part 2-1993 Evaluation and Measurement for Vibration in Buildings*;
 - (b) for structural damage vibration to heritage buildings, *German Standard DIN 4150 Part 3 Structural Vibration in Buildings Effects on Structure*; and
 - (c) for human exposure to vibration, the evaluation criteria presented in *British Standard BS 6841-1 Guide to Evaluate Human Exposure to Vibration in Buildings (1Hz to 80 Hz)* for low probability of adverse comment.
- (2) These limits apply unless otherwise approved in the Construction Noise and Vibration Management Plan Sub-Plan.

D8 VIBRATION MANAGEMENT

- (1) Vibratory compactors must not be used closer than 30m from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above.
- (2) The Applicant must undertake trial testing of vibration intensive equipment that is identified as having the potential to exceed the vibration criteria identified in Condition D7 to ensure it is not exceeded at any residence or structure outside the subject site.

D9 AIR QUALITY AND ODOUR MANAGEMENT SUB PLAN

The Applicant must undertake all works in accordance with the requirements of the Air Quality and Odour Management Sub-Plan approved under Condition B14. This Plan must be consistent with all of the relevant requirements of the Environment Protection Licence number 13336.

D10 AIR MITIGATION - CONTINGENCY MEASURES

The Applicant must implement additional air controls in consultation with the EPA to the satisfaction of the Secretary if the development is found to be causing unacceptable air and/or odour impacts to sensitive receivers.

D11 REMEDIATION/EXCAVATION ENCLOSURES

Unless otherwise agreed in writing by the EPA, the Applicant must ensure that all remediation works (other than those associated with the retention wall construction works) are undertaken in an enclosure approved by the Secretary in accordance with Condition B4.

D12 DUST CONTROL MEASURES

- (1) Adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood during construction. In particular, the following measures should be adopted:
 - (a) physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust emissions;

- (b) earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed;
- (c) all materials shall be stored or stockpiled at suitable locations;
- (d) the surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs;
- (e) all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust or other material;
- (f) all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays;
- (g) gates shall be closed between vehicle movements and shall be fitted with shade cloth; and
- (h) cleaning of footpaths and roadways shall be carried out regularly.

D13 CONSTRUCTION TRAFFIC MANAGEMENT SUB-PLAN

(1) The Applicant must undertake all works in accordance with the requirements of the Traffic Management Sub-Plan approved under Condition B16, except where modified below.

- (a) under the current legislation the use of lengthy vehicles in the CBD is prohibited within certain time frames. All lengthy vehicles must comply with this regulation as stipulated in the NSW Road Rules. A map indicating the prohibited area and definitions of lengthy vehicles are included in the Road Rules;
- (b) personnel using stop/slow signage are not permitted in Hickson Road or Sussex Street on weekdays between the hours of 7am and 9am and 4pm and 7pm. However, personnel using stop/slow signage will be permitted on Hickson Road, north of the intersection of Hickson Road and Napoleon Street, when it is required to ensure safe truck access at designated site access points, provided that vehicle queue lengths generated as a result of the traffic control do not exceed more than six vehicles in either direction;
- (c) truck movements should be staged and coordinated to prevent trucks circling CBD streets whilst awaiting access to the site. There should be holding areas outside the CBD on the fringes or sufficient space within the site to store trucks and heavy vehicles;
- (d) to minimise impacts on public transport, trucks should avoid where possible the use of York Street to access the development site between 6am and 10am and 2pm and 8pm Monday to Friday;
- (e) truck movements to and from the site associated with the development must be minimised as far as practicable during the PM peak period;
- (f) where possible, trucks must avoid driving over areas of the site that have already been excavated, validated or re-instated to prevent cross contamination;
- (g) unless otherwise agreed in writing by the EPA, all loading of trucks with contaminated material (excluding material associated with the retention wall construction works) must be undertaken in an enclosure approved by the Secretary in accordance with Condition B4 of this consent;
- (h) all trucks associated with the development must have their loads covered to ensure trucks do not track material onto the public road network; and
- (i) all trucks must be decontaminated in the wheel wash areas before exiting the site.

HEALTH AND SAFETY

D14 HEALTH MANAGEMENT SUB-PLAN

The Applicant must undertake all works in accordance with the requirements of the Health Management Sub-Plan approved under Condition B17.

D15 WORK, HEALTH AND SAFETY REQUIREMENTS

The Applicant must ensure that all works are carried out in accordance with the relevant requirements of the *Work, Health and Safety Regulation 2011*.

SOIL AND WATER

D16 WATER AND STORMWATER MANAGEMENT

The Applicant must undertake all works in accordance with the requirements of the Water and Stormwater Management Sub-Plan approved under Condition B18.

D17 EROSION AND SEDIMENT CONTROL

All erosion and sediment control measures, as designed in accordance with Condition B4 and B19, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

D18 STOCKPILE MANAGEMENT

(1) The Applicant must ensure that:

- (a) unless otherwise agreed in writing by the EPA, all excavated contaminated material is stockpiled within an enclosure approved by the Secretary in accordance with Condition B4 of this consent;
- (b) stockpiles of excavated material do not exceed 4 metres in height;
- (c) stockpiles of excavated material are constructed and maintained to prevent cross contamination; and
- (d) suitable erosion and sediment controls are in place for stockpiles.

D19 DISPOSAL OF SEEPAGE AND RAINWATER

Any seepage or rainwater collected on-site during construction shall be managed in accordance with the Water and Stormwater Management Sub-Plan prepared under Condition B18.

D20 WATER QUALITY

(1) All works should be undertaken in a manner that ensures the protection of the water quality objectives and environmental values for Sydney Harbour estuarine waters in accordance with the following guideline documents:

- (a) *NSW Water Quality Objectives*; and
- (b) *The Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)* for the environmental values under the ANZECC guidelines.

D21 CONTAMINATED AND TREATED WATER

(1) Any effluents/liquid waste streams associated with the development that are directed to the site Wastewater Treatment Plant (WTP) are sufficiently treated to ensure:

- (a) compliance with the relevant concentration limits required by Environment Protection Licence No. 13336 prior to discharge to Sydney Harbour; and/or
- (b) compliance with the relevant requirements of an executed Trade Waste Agreement with Sydney Water Corporation prior to discharge to sewer.

(2) No contaminated or treated site waters (surface, collected groundwater or contaminated construction waters) are permitted to be discharged into Sydney Harbour unless in accordance with the conditions attached to Environment Protection Licence No. 13336, unless otherwise agreed to in writing by the EPA.

(3) No contaminated or treated site waters (surface, collected groundwater or contaminated construction waters) are permitted to be discharged to sewer unless in accordance with the conditions of an executed Trade Waste Agreement with Sydney Water Corporation.

D22 BUNDING

The Applicant shall store all chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant *Australian Standards*, EPL requirements and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participants Handbook*.

WASTE

D23 SPOIL AND WASTE MANAGEMENT SUB-PLAN

The Applicant must undertake all works in accordance with the requirements of the Spoil and Waste Management Sub-Plan approved under Condition B20.

D24 ACID SULPHATE SOILS MANAGEMENT SUB-PLAN

The Applicant must undertake all works in accordance with the requirements of the Acid Sulphate Soils Management Sub-Plan approved under Condition B21.

D25 WASTE CLASSIFICATION AND DISPOSAL

- (1) The Applicant must ensure that all waste generated by the development is classified and disposed of in accordance with the EPA's *Waste Classification Guidelines 2009*.
- (2) The Applicant must ensure that all waste generated by the development is treated and/or disposed of at a facility that has sufficient capacity to and may lawfully accept that waste.

D26 GASWORKS WASTE IMMOBILISATION/TREATMENT

The Applicant must ensure that the chemical treatment and/or fixation of gas works waste that has been classified as restricted or hazardous waste is managed in accordance with the EPA's *Specific Immobilisation Approval – EPA Waste Classification Guidelines Part 2: Immobilisation of Waste 2008*, or is transported to a facility suitably licenced to receive, treat and dispose of the gas works waste under other EPA immobilisation or treatment permits.

D27 ASBESTOS WASTE MANAGEMENT

- (1) The Applicant must undertake all works in accordance with the requirements of the Asbestos Management Sub-Plan approved under Condition B22.
- (2) All excavation works involving the removal and disposal of asbestos must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with Safe Work Australia's *NOHSC: Code of Practice for the Safe Removal of Asbestos 2005*.
- (3) An asbestos clearance certificate (or certificates) prepared by a suitably licenced asbestos removalist shall be provided to the Department and the Principal Certifying Authority upon completion of all asbestos removal works. The Applicant shall ensure that the asbestos removal works comply with the relevant requirements of the *Work, Health and Safety Regulation 2011*.
- (4) The Applicant must ensure that any asbestos contained in excavated material that is proposed for re-use on site meets the requirements of the EPA and the fill validation requirements outlined in the report prepared by Associate Professor Tim Driscoll entitled *The Use of Asbestos-Contaminated Soils on Barangaroo, Final Report, Report to the Environment Protection Authority 2013*.

HERITAGE**D28 HERITAGE MANAGEMENT**

The Applicant must undertake all works in accordance with the requirements of the Heritage Management Sub-Plan approved under Condition B23.

D29 IMPACTS OF BELOW GROUND (SUB SURFACE) WORKS – NON-ABORIGINAL OBJECTS

If during the course of construction the Applicant becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the *Heritage Act 1977*. Relevant works shall not recommence until written authorisation from the Heritage Council of NSW is received by the Applicant.

D30 IMPACTS OF BELOW GROUND (SUB SURFACE) WORKS – ABORIGINAL OBJECTS

If during the course of construction the Applicant becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the Office of Environment and Heritage informed in accordance with section 89A of the *National Parks and Wildlife Act 1974*. Relevant works shall not recommence until written authorisation from Office of Environment and Heritage is received by the Applicant.

D31 TREE REMOVAL AND MANAGEMENT

The Applicant must undertake all works in accordance with the requirements of the Tree Management Sub-Plan approved under Condition B24.

HAZARDS AND RISK

D32 GENERAL

The Applicant must in general, carry out the development in line with the information contained in the Preliminary Hazards Analysis (refer to Condition A2 of this consent), including the implementation of the recommendations raised within the report, where applicable. In the case of a Preliminary Hazards Analysis report recommendation being considered but not implemented, then adequate justification should be provided in the Final Hazards Analysis (if required, refer to Condition B25 of this consent).

Note: The above studies/plans shall be undertaken by the Applicant and submitted to the Secretary for review, without a requirement for formal approval.

VISUAL AMENITY

D33 EXTERNAL LIGHTING

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

OTHER

D34 APPROVED PLANS TO BE ON SITE

A copy of the approved and certified plans, specifications and documents incorporating conditions of consent and certification shall be kept on the site at all times and shall be readily available for perusal by any officer of the department, the relevant authority or the PCA.

D35 SITE NOTICE

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

D36 CONTACT TELEPHONE NUMBER

The Applicant shall ensure that the 24 hour contact telephone number is continually attended by a person with authority over the works for the duration of the development.

D37 COMPLIANCE REPORT

The Applicant, or any party acting upon this consent, shall, for the duration of the construction period, submit to the department a three monthly report addressing compliance with all relevant conditions of this Part.

End of Section.

PART E - POST CONSTRUCTION

REMEDATION

E1 SITE VALIDATION

- (1) Within 6 months of the completion of the remediation works on site, and prior to the issue of any Occupation Certificate, the Applicant shall submit a detailed Site Audit Summary report and Site Audit Statement and Validation Report to the EPA, the Secretary, the Certifying Authority, and the Council. The validation and audit process may occur progressively to the satisfaction of the site auditor.
- (2) The site audit must be prepared in accordance with the *Contaminated Land Management Act 1997* and completed by a site auditor accredited by the EPA to issue site audit statements. The site audit must verify that the land is suitable for the proposed uses.
- (3) The site auditor must also verify that any excavated material re-used on site or disposed off-site, has been appropriately classified, validated, managed and the relevant approvals obtained in accordance with the relevant legislation and any relevant approved materials management plan/s.
- (4) On completion of remediation works, the relevant requirements of Clauses 17 and 18 of *SEPP 55 - Remediation of Land*, being notification to the Council, shall be complied with.

E2 REMOVAL OF REMEDIATION/EXCAVATION ENCLOSURES

Unless otherwise approved in writing by the Secretary, the Applicant must ensure that all enclosures approved by the Secretary in accordance with Condition B4 of this consent are dismantled and removed from the site within 3 months of the completion of the remediation excavation works.

HAZARDS AND RISK

E3 HAZARD AUDIT

Three months after the commencement of construction works and six months thereafter until the completion of the works, the Applicant shall carry out a brief Hazard and Safety Audit of the proposed development, generally in line with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'*.

The audit shall be carried out by a qualified person or team, independent of the development.

Note: The above studies/plans shall be undertaken by the Applicant and submitted to the Secretary for review, without a requirement for formal approval.

E4 FURTHER REQUIREMENTS

The Applicant shall comply with all reasonable requirements of Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Condition B26, Condition D37 and Condition E3 inclusive, within such time as the Secretary may agree.

End of Section.

ADVISORY NOTES

AN1 SYDNEY WATER

An application shall be made to Sydney Water for a Certificate under Part 6, Division 9, Section 73 of the *Sydney Water Act, 1994* (Compliance Certificate). Evidence that a Compliance Certificate has been applied for (i.e. Notice of Requirements) shall be produced to the satisfaction of the PCA prior to the issue of a Construction Certificate. The Section 73 Certificate shall be submitted to the PCA prior to the occupation of the development.

AN2 COMPLIANCE CERTIFICATE

- (1) Prior to issuing a subdivision certificate, a Compliance Certificate shall be provided to the approval authority showing that the development has met with the detailed requirements of the relevant water supply authority for the region that the subject site is located within.
- (2) The developer shall obtain the Compliance Certificate from the relevant local water supply authority and produce this to the satisfaction of:
 - (a) the certifying authority before release of the relevant Construction Certificate;
 - (b) the approval authority before the release of the relevant subdivision certificate; and
 - (c) the PCA prior to occupation.

AN3 REQUIREMENTS OF PUBLIC AUTHORITIES

The Applicant shall comply with the requirements of any public authorities (e.g. Ausgrid, Sydney Water, Telstra Australia, AGL, etc) in regard to the connection to, relocation and/or adjustment of the services affected by the construction of the proposed structure. Any costs in the relocation, adjustment or support of services shall be the responsibility of the Applicant. Details of compliance with the requirements of any relevant public authorities are to be submitted to the satisfaction of the PCA prior to the issue of the Construction Certificate.

AN4 COMPLIANCE WITH BCA

The Applicant is advised to consult with the PCA about any modifications needed to comply with the BCA prior to submitting the application for a Construction Certificate.

AN5 STRUCTURAL CAPABILITY FOR STRUCTURES

The structural capabilities of an existing structure will need to meet the requirements of the BCA and may require engaging a structural engineer.

AN6 USE OF MOBILE CRANES

- (1) The Applicant shall obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters shall be complied with to the satisfaction of the PCA:
 - (a) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from Council:
 - (i) at least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions; and
 - (ii) at least 4 weeks prior to the works for full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.
 - (b) The use of mobile cranes must comply with the approved hours of construction and shall not be delivered to the site prior to 7 am without the prior approval of the relevant authority.

AN7 MOVEMENT OF TRUCKS

The Applicant shall notify Roads and Maritime Services Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the site, prior to the commencement of the removal of any waste material from the site.

AN8 CONSTRUCTION INSPECTIONS

- (1) Compliance certificate/s shall be issued by the PCA and submitted to Council in accordance with the mandatory inspection requirements of the *Building Legislation Amendment—Quality of Construction Act, 2002* for each stage of construction, such as the following:
 - (a) foundations;
 - (b) footings;
 - (c) damp proof courses and waterproofing installation;

- (d) structural concrete, including placing of reinforcement and formwork prior to pouring;
- (e) structural beam and column framing;
- (f) timber wall and roof framing; and
- (g) stormwater disposal.

- (2) Any Compliance Certificate issued for the above stages of construction shall certify that all relevant ancillary or dependent work has been undertaken in accordance with the Building Code of Australia and any other conditions of approval.

AN9 ROADS ACT 1993

- (1) A separate approval under Section 138 of the *Roads Act, 1993* is required to undertake any of the following:

- (a) erect a structure or carry out a work in, on or over a public road;
- (b) dig up or disturb the surface of a public road;
- (c) remove or interfere with a structure, work or tree on a public road;
- (d) pump water into a public road from any land adjoining the road; and
- (e) connect a road (whether public or private) to a classified road.

AN10 ASBESTOS REMOVAL

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

AN11 ROAD CLOSURE

A temporary road closure permit is to be obtained from the relevant road authority prior to the closure of any roads.

End of Section.

SCHEDULE 3 APPLICANT'S STATEMENT OF COMMITMENTS

The following are the commitments made by Lend Lease (Millers Point) Pty Ltd to manage and minimise potential impacts arising from the development.

Subject	Commitments
Contamination	- The Block 4 remediation and landforming works the subject of this SSD DA will be carried out in accordance with the Remedial Action Plan provided in Appendix E. - At the completion of the Block 4 VMP Remediation Works (i.e. to address the EPA Declaration), a Section A Site Audit Statement will be obtained from a NSW EPA Accredited Site Auditor, to confirm successful completion of works to address the EPA Declaration at Block 4. - At the completion of Block 4 Development Remediation Works, a Section A Site Audit Statement will be obtained from a NSW EPA Accredited Site Auditor, to confirm successful completion of works to render the Block 4 area suitable for the proposed use. - Remediation may be undertaken progressively in stages across the Site, with separate Site Audit Statements prepared for each area as relevant.
Health Risk Management	Source controls for remediation activities will include measures to control emission of particulates and controls for emission of gases from exposed contaminated soils and water, including: - Enclosure (where practicable) of remediation excavation and treatment activities and filtration of exhaust streams to manage pollutants of potential concern that may be produced/released during the soil excavation and remediation processes. - Prompt removal, covering and managing of heavily contaminated materials that have been exposed and are identified to have caused the emissions. - Dust suppression, including sweeping and wetting of exposed surfaces including haul roads. - Excavation and treatment of materials with temporary remediation and soil treatment enclosures, with filtration of exhaust streams. - Odours from volatilisation will be monitored and a soil vapour extraction system will be put in place. - Managing groundwater removal and drawdown, where practicable, such that material excavated is retained in a moist state. - Minimising haul road lengths, implementing of site speed limits and covering haul loads. - Solid perimeter hoarding adjacent to sensitive receptors. - Surface stabilisation to minimise dust generation, and covering surfaces where appropriate. - Prompt removal, covering and managing of heavily contaminated materials that have been exposed. The following source controls will be implemented for contaminated water: - Installation of ground water control and retention walls as practicable around the excavation area to minimise the infiltration of groundwater from the remediation area into the less contaminated excavation area (at Block 4). - Treatment of contaminated surface water to enable safe discharge in accordance with site regulatory requirements. - Use of surface bunds and drainage diversions to divert clean water away from contaminated areas. - Silt fences to prevent cross-contamination between disturbed areas and undisturbed areas.
Acid Sulfate Soils	The ASSMP includes a range of management measures that will be followed to handle, treat and dispose of ASS if required, including: - PASS materials will be kept separate from non-PASS materials at all times. - Water collected from PASS treatment/storage areas will be directed to the water treatment plant and treated to a prescribed discharge water quality. - A truck wash down area will be constructed so that truck wash down water can be collected for treatment. - Treated water will only be discharged in accordance with the relevant criteria in the EPL or any future Sydney Water Corporation's Trade Waste Agreement. A water quality monitoring program will be implemented. - Neutralisation of the ASS will be undertaken on or off-site by application of calcium carbonate (Aglime) in a designated bunded treatment area and thoroughly mixed with the soil. The treatment area is to be provided with a guard layer of neutralising agent (i.e. Aglime). - During treatment soil pH will be measured regularly as a measure of the effectiveness of neutralisation. - Treated materials will be monitored regularly at a rate of one sample per 500 m³. - Treated material will be reused or disposed of in accordance with its classification under the Waste Classification Guidelines. The ASSMP will be updated following confirmation of the responsible contractor.
Water	- Clean stormwater will be diverted away from the Site. - All contaminated water (including stormwater collected in disturbed contaminated areas, and groundwater from disturbed contaminated areas) will be collected for treatment on-site prior to discharge. No contaminated or treated water will be discharged into Sydney Harbour or any sewers without being compliant with EPL 13336 or any future Sydney Water Corporation's Trade Waste Agreement (as may be applicable, in each case). - Water from hardstand work areas will be managed in accordance with Volume 1 of Managing Urban Stormwater: Soils and Construction, Landcom, 2004 (the Blue Book); - Erosion and sediment controls will be applied in accordance with Appendix O. - A Water Quality Monitoring Program will be put in place to ensure the remediation works are not having an adverse impact on water quality conditions in the Harbour. - A Groundwater Monitoring Plan will be prepared and implemented to measure the effectiveness of the remedial works that have been undertaken (specifically source removal and subsequent groundwater quality improvement) with respect to groundwater quality migrating from the Declaration Area boundary and the associated risk to aquatic ecosystems (i.e. ultimately groundwater migrating to Darling Harbour).
Air Quality	An Air Quality Management Plan will be prepared prior to commencement of works, and issued to the NSW EPA for comment. The AQMP will include mitigation measures and work practices to be implemented at the Site to minimise pollutant emissions including: Undertake all soil excavation and treatment within Odour Control Enclosures with appropriate emissions control, to the extent practical. Design details of the odour control enclosures and emissions control will be provided to the NSW EPA for comment, prior to implementation.

Subject	Commitments
	- Continue the dust, VOC and meteorological monitoring program, extend the program to include additional sites along Hickson Road close to the remediation activities. - Use mains power where available and suitable. - Turn vehicle engines off while parked on site. - Confine vehicular access to designated access roads. - Appropriately tune, modify or maintain equipment, plant and machinery to minimise visible smoke and emissions. - Maintain the Odour Control Enclosures to their design specifications. - Undertake regular checking and maintenance of air filtration systems. - Implement site speed limits. - Vent generator emissions through the Odour Control Enclosure stacks. - Minimise haul road lengths. - Reduce exposed areas as much as practical. - Cover loads during transport. - Undertake good housekeeping practices to minimise dust on hardstand areas. - Immediately clean up spills. - Maintain the complaints management system. - Adjust work practices (as required) based on wind observations and real time monitoring results. - Use water sprays and/or surfactants wherever and whenever necessary. - Erect windbreak barriers at the site boundary. - Water exposed surfaces and roads.
	- All monitoring of vent stacks will be undertaken in accordance with the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2005b). - Final design details in relation to odour and emissions control will be addressed in consultation with the EPA during the preparation of the Air Quality and Odour Management Sub-Plan required by the Air Quality Impact Assessment for the development, and amendment of the existing Environmental Protection Licence 13336.
	Implement the reactive management plan, based on a three-stage approach for PM₁₀ and VOCs,: - Investigate: Identification of the likely reasons for the elevated pollutant concentration and formulation of a contingency response for the action stage; - Action: Implementation of the measures formulated in the investigative stage and review of their effectiveness; and - Stop Work: All works should stop at this stage until the measured pollutant levels are below the action level to avoid an exceedance of the
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	pollutant criterion. Trigger levels have been established for PM₁₀ and VOCs and are provided in Appendix P.
Noise and Vibration	A Construction Noise and Vibration Management Plan has been prepared by Lend Lease for the Barangaroo South Site in its entirety. This plan would be updated to take into account of the project specific noise and vibration management measures as follows: - Where practicable, installing attenuators on the exhaust fans, filtration and air handling plant associated with the odour control enclosures within Block 4 remediation area and the remediation treatment enclosure by "stepping down" the plant settings out of construction hours where able. - Localised treatment such as barriers, shrouds and the like around fixed plant such as pumps, crusher, screens, generators and groundwater extraction plant and by "stepping down" the plant settings out of construction hours where able. The detailed design of acoustic treatments will be undertaken during the detailed design phase. - Audit plant to select equipment that generates the lowest practical commercially available noise levels. A review of the soil treatment area is recommended at detailed design and selection stage. - Plan the construction activities so that respite is provide to residences when noise activities occur. This is particularly important during extended Saturday hours (7.00am – 5.00pm). - Continue to implement an effective complaints and community consultation program, which informs the construction manager about appropriate mitigation measures to protect the acoustic amenity of surrounding residences; - Conduct trial vibration testing of vibration levels prior to use where proposed equipment is identified as having the potential to exceed the human comfort criteria.
Traffic	The following traffic management measures will be implemented in general accordance with the Construction Traffic Management Plan in Appendix R: - In accordance with existing restrictions for Barangaroo South, trucks would not be able to use be York Street between 2pm and 8pm, or York Street or Clarence Street in the AM peak between 6am and 10am. - Appropriate holding areas which can be accessed easily from the major arterial routes will be identified off-site outside the CBD area, with trucks to be called up when needed via an on-site central logistics centre. Once called, there will be room for trucks to be queued on-site, with no queuing on CBD roads to occur as a result of the remediation works. - Any truck queuing will occur within on site and all vehicles will enter the Site in a forwards direction. The gatehouse will be centred on the access road to prevent trucks parking along the kerbside to enquire about directions on site. - The site traffic control recommendations for each worksite gate entry or exit point (including all appropriate signage) will be determined by means of a Traffic Site Control Plan to be prepared by an RMS accredited contractor closer to construction commencement. Entries will be clearly signposted for the benefit of all approaching site traffic, in particular emergency services vehicles.

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	Preparation and implementation of a Green Travel Plan to provide travel information and advice to construction workers about public transport, walking and cycling routes to the Site and providing information about public transport availability and fare costs compared with on and off street parking costs.
European Heritage	An archaeological methodology will be developed to allow for some limited recording of the remains to be removed by ex-situ remediation, bulk earthworks and stormwater diversion works. The detailed framework for archaeological methodology and recording will be established following some initial sampling trenches to determine the extent to which the potential archaeological remains within the site may survive and be accessible for archaeological investigation and recording. The preliminary framework for archaeological recording as a result of detailed sampling trenches is as follows: - Where contamination is at depth and the upper layers are uncontaminated, the upper layers could potentially be archaeologically excavated, with restriction as required for OHS management of works. - Where the archaeology is completely covered with contamination and therefore inaccessible for normal archaeological recording methodologies, other alternative techniques may be tested to determine if recording is possible. Then it may be possible to record some major gasworks features but only if they offer a research outcome. - It is likely that opportunities may be extremely limited in what can be recorded. In the end there may be no ability to record remains prior to the ex-situ remediation. Archaeological sampling/testing will examine the potential for archaeological evidence associated with Henry Bass' shipyard and other potential archaeology to the south of the gasworks site but within the Block 4 remediation area.
Indigenous Heritage	If, during the course of the remediation project, any unexpected Aboriginal "objects", artefacts or sites are uncovered, work must cease in the vicinity of that object, artefact or site and further advice sought from the consultant and the Metropolitan Local Aboriginal Land Council.
Arboriculture	Carry out the remediation in accordance with the Tree Management Plan. Tree protection measures include: - Appointment of an arborist to oversee the works, observe/monitor all works within the Tree Protection Zones of trees to be retained, oversee the removal of trees to be removed, and to monitor the condition and protection of trees to be retained. - The extent to which root spread of Trees 19-25 has been confined by the existing boundary wall is to be established prior to the commencement of works. - Where possible, ensure that the TPZ is fenced for protection (and clearly signed as Tree Protection Fencing). Install trunk, branch and ground protection where fencing cannot be installed. - Prevent stockpiling, storage or preparation of materials, parking of machinery and machinery trenching in the TPZ for a tree to be retained. Any trenching in the TPZ should be by hand excavation, or directional boring (trenchless) and under the specific instructions of the on-site project
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	arborist - Selection of piling equipment that is as short as possible so as to minimise the need for overhead crown pruning. - Any trenching within the Structural Root Zone should be undertaken by hand and under the specific instructions of the on-site project arborist. - Retain the existing road and footpath pavements intact where possible within the TPZ to minimise impacts to the underlying roots from works. - All traffic diversions to include adequate root zone protections. - All crown pruning works to be approved and monitored by the on-site project arborist and are to be undertaken by a suitably qualified arborist (AQF Level 3 Certificate) in compliance with AS 4373-007 Pruning of Amenity Trees.
Infrastructure	- Complete a flood assessment as part of detailed design and application to Sydney Water for approval of stormwater diversion. - Obtain required approval from Sydney Water prior to commencing stormwater diversion works. - Further assessment of the potential for damage to utilities during will be carried out during the detailed design phase, and dilapidations surveys will be carried out prior to commencing excavation.
Visual Amenity	- Night time lighting will be consistent with Australian Standard AS1680, Lighting and the Visual Environment. 2.4m hoarding will be provided around the site boundary.
Hazards	If on-site soil treatment is undertaken using ex-situ chemical oxidation, risks at the proposed facility will be maintained in the As Low As Reasonably Practicable (ALARP) range, through implementation of the recommendations in the Preliminary Hazard Analysis, as follows: - An Emergency Response Plan (ERP) be developed for the Site which would include a range of incidents at the DG storage area. It is recommended that the ERP be incident based, using the range of incidents identified in this study. - The bulk bag sodium persulphate product will be stored in a shipping container, minimising the potential for overheating of the product from direct sunlight impact. To prevent excessive heat build-up occurring, it is recommended that a ventilation system be installed on the container holding the bulk bags of sodium persulphate. - The sodium persulphate and hydrogen peroxide tanks are to be located in direct sunlight, hence, there is a potential for the tanks to heat and the product within to degrade. To minimise the potential for heating from direct sunlight and subsequent decomposition at higher temperature it is recommended that tanks be manufactured from a white or opaque plastic. - Include the potential for a spill of Hydrogen Peroxide leading to decomposition and oxygen generation as an incident in the site ERP. - Include the potential for release and ignition of VeruSOL causing fire as an incident in the site ERP. - Install a spill kit adjacent to the water treatment plant that can be deployed in the event of a spill, preventing spread of the release, and include a spill response in the ERP. - A separation distance of 10 m from the petrol storage and existing and approved waste water treatment plant DGs is recommended. - The plastic container within the peroxide IBC should be manufactured from a white or opaque plastic to minimise the potential for heating from

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	direct sunlight. - Install a spill kit adjacent to the petrol storage area and that response to a petrol spill be included in the ERP. - Based on the heat radiation analysis, it was identified that to ensure that there is no potential for heat radiation above the acceptable limit of 4.7kW/m² at site boundary the S-ESCO DG storage areas (if applicable) should not be located closer than 14 m to the site boundary. The petrol store in the existing and approved water treatment plant should be located no closer than 10 m of the site boundary.
ESD	In order to maximise the sustainability and ESD benefits of the project the following key initiatives will be implemented: - Minimise the excavation of material, and maximise the re-use of materials (that meets the re-use acceptance criteria) where possible. This will minimise the need for off-site disposal of waste and minimise the need for imported materials, as well as minimising energy use for transportation. - Waste management plans to be developed to reduce waste from remediation. Provide centralised recycling areas in all construction (remediation) site buildings and waste bins for remediation worker use which provide for waste separation where appropriate. - Consider the use of Biodiesel/Diesel Fuel Mix, however this will be subject to the selection of remediation related plant and equipment. - Provide site workers with public transport options during their induction. - Reuse of treated extracted groundwater for dust suppression and wash down to reduce potable supply use where appropriate. - Fit pollution control measures on remediation equipment (including diesels oxidation catalysts and diesel particulate matter filters) where practicable. - Minimise the impacts to the local community by maximising internal haul routes within the Barangaroo site where possible.
Waste Management	The management of wastes will be in accordance with the Waste Management Plan provided in Appendix Y. The WMP includes that: - The on-site waste management system to be established at the Site will aim to maximise waste avoidance through reuse on-site or at off-site locations under a waste exemption approved by the EPA and/or the Barangaroo Site, where possible - Materials separation and segregation will be promoted on the Site, to facilitate reuse and recycling as a priority of the waste management system. - All wastes generated as a result of the project will be classified in accordance with the EPA Waste Classification Guidelines. - Details of waste types, volumes and destinations will be recorded on Waste Management Forms, including a Monthly Recycling and Waste Management Statistics form. This information will be collated for record keeping and appropriate communication to any relevant authorities, where required. Wastes to be disposed (or recycled) off-site will be transported to a facility (for disposal or recycling) that can lawfully receive the waste. Storage and
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	handling of such wastes will be subject to the following measures: - Liquid wastes will be stored in appropriate containers in bunded areas until they can be appropriately disposed of. Bunded areas will have the capacity to hold 110% of the volume of the largest container. - Hazardous wastes (comprising small quantities of printer cartridges and e-waste) will be managed in accordance with the requirements of the Environmentally Hazardous Chemicals Act 1985. - Any on-site treatment of soil (classified as hazardous waste) would be undertaken using stabilisation or chemical oxidation and in accordance with applicable NSW EPA guidelines and approvals. Any off-site treatment of hazardous waste would be undertaken at facilities licensed to accept and treat the waste. - All other recyclables and non-recyclables will be stored in appropriate receptacles in appropriate locations and covered where required.