Project Approval

Section 75J of the Environmental Planning & Assessment Act 1979

As delegate of the Minister for Planning under delegation executed on 25 January 2010, I approve the project application referred to in schedule 1, subject to the conditions in schedules 2 and 3.

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.

Richard Pearson Deputy Director-General Development Assessment & Systems Performance Department of Planning

10th December Sydney 2010

	SCHEDULE 1
Application No.:	MP09_0200
Proponent:	Sydney Opera House Trust
Approval Authority:	Minister for Planning
Land:	2 Circular Quay and Macquarie Street, Bennelong Point, Sydney. Lot 4 DP 787933 and Lot 5 DP 775888
Project:	 Vehicle and Pedestrian Safety Project, including: Construction of an underground loading dock Alteration of lifts and stairs and construction of new lift services and corridors New opening in southern forecourt and construction of vehicle access ramp Removal of recessed vehicle access path and existing guardhouse, and construction of new guardhouse Forecourt improvement works, relocation of below ground services and modifications to the roof of the pedestrian tunnel to the existing adjoining car park.

DEFINITIONS

In this approval, the following definitions apply:

Advisory Notes	Advisory information relating to the approved project but do not form a part of this approval.
BCA	Building Code of Australia
Certifying Authority	Has the same meaning as Part 4A of the EP&A Act.
Construction	Any works, including earth and building works
Council	City of Sydney Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 1pm on Sundays and Public Holidays
DECCW	Department of Environment, Climate Change and Water or its successors
DEWHA	Department of Environment, Water, Heritage and the Arts or its successors
Department	Department of Planning or its successors
Director-General	Director General of the Department of Planning, or nominee
EA	Environmental Assessment titled Byrnes & Associates Pty Ltd, dated July
	2010
EP&A Act	Environmental Planning and Assessment Act 1979
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	
ngn	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
PPR	Preferred Project Report
Project	
rioject	The project described in Condition A1, Part A, Schedule 2 and the
	accompanying plans and documentation described in Schedule 2, Part A, and Condition A2
Proponent	and Condition A2.
POEO Act	Sydney Opera House Trust, or anyone else entitled to act on this Approval
	Protection of the Environment Operations Act 1997
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision,
reasible	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
DT 4	practical to build.
RTA Subject Office	Roads and Traffic Authority
Subject Site	Lot 4 DP 787933 and Lot 5 DP 775888
Statement of	The Proponent's Statement of Commitment in Schedule 3
Commitments	

SCHEDULE 2

CONDITIONS OF APPROVAL

MAJOR PROJECT APPLICATION NO. MP 09_0200

PART A—ADMINISTRATIVE CONDITIONS

A1. Development Description

• Vehicle and Pedestrian Safety Project (VAPS) – Sydney Opera House.

A2. Development in Accordance with Plans and Documents

The development shall be in accordance with the following plans, documentation and recommendations made therein:

A. Environmental Assessment Report (Volumes 1, 2 & 3) and Appendices prepared by Byrnes & Associates Pty Ltd on behalf of Sydney Opera House Trust, dated July 2010.

B. Submissions Report and Appendices prepared by Byrnes & Associates Pty Ltd on behalf of Sydney Opera House Trust, dated 25 October 2010

C. Archaeological Management Plan and Heritage Impact Assessment report prepared by GML in January 2010.

D. Statement of Commitments prepared by Byrnes & Associates Pty Ltd on behalf of Sydney Opera House Trust, dated 25 October 2010 contained in Schedule 3.

E. Architectural Drawings prepared by Johnson Pilton Walker Pty Ltd.

F Conservation Management Plan 2003 - (3rd edition 2003) by James Semple Kerr.

Drawing No.	Revision	Name of Plan	Date
EA-010	00	Locality Plan	2 June 2010
EA-050	00	Site Plan Existing	2 June 2010
EA-055	00	Site Plan Proposed	2 June 2010
EA-100	00	Basement 4 (Level -0.38')	2 June 2010
EA-130	00	Basement 1 (Level +/-001')	2 June 2010
EA-140	00	Ground (Level +012')	2 June 2010
EA-200	00	Basement 4 (Level -038') Reflected Ceiling Plan	2 June 2010
EA-300	00	Section X70_N	2 June 2010
EA-305	00	Section X48_N	2 June 2010
EA-310	00	Section X38_N	2 June 2010
EA-315	00	Section X30_N	2 June 2010
EA-320	00	Section X09_N	2 June 2010
EA-325	00	Section Y21_E	2 June 2010
EA-330	00	Section Y25_E	2 June 2010
EA-335	00	Section Y29_E	2 June 2010
EA-340	00	Section Y34_E & Proposed Vehicle Ramp	2 June 2010
EA-406	00	Vehicle Ramp Section B Proposed	2 June 2010
EA-415	00	Vehicle Ramp Section D	2 June 2010
EA-420	00	Vehicle Ramp Section E	2 June 2010

EA-440	00	Section JJ Vehicle Ramp and Pedestrian Tunnel	2 June 2010
EA-450	00	Delivery Dock_Elevation North	2 June 2010
EA-455	00	Delivery Dock_Elevation East	2 June 2010
EA-460	00	Delivery Dock_Elevation South	2 June 2010
EA-465	00	Delivery Dock_Elevation West	2 June 2010
EA-900	00	Existing Image 01 - From Macquarie St Roundabout	2 June 2010
EA-905	00	Proposed Image 01 - From Macquarie St Roundabout	2 June 2010
EA-910	00	Existing Image 02 – From Monumental Stairs	2 June 2010
EA-915	00	Proposed Image 02 - From Monumental Stairs	2 June 2010
EA-920	00	Existing Image 03 – From Monumental Stairs Detail	2 June 2010
EA-925	00	Proposed Image 03 – From Monumental Stairs Detail	2 June 2010

Except for:

- (1) any modifications which are 'Exempt and Complying Development' or as may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA; or
- (2) otherwise provided by the conditions of this approval.

A3. Inconsistency Between Documents

In the event of any inconsistency between conditions of this approval and the drawings/documents referred to above, the conditions of this approval prevail.

A4. Lapsing of Approval

The project approval will lapse 5 years after the approval date in Part A of Schedule 1 of this project approval unless the development has been substantially commenced.

A5. Compliance with Relevant Legislation and Australian Standards

The proponent shall comply with all relevant Australian Standards and Codes (including Building Code of Australia) and obtain all necessary approvals required by State and Commonwealth legislation in undertaking the project described in Condition A1, Part A, Schedule 2 of this approval.

A6. Prescribed Conditions

The proponent shall comply with the prescribed conditions of approval under clause 98 of the Environmental Planning and Assessment Regulation 2000 in relation to the requirements of the BCA.

PART B-PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

B1 Structural Details

Prior to the issue of a Construction Certificate, the proponent shall submitted to the satisfaction of the Certifying Authority, structural drawings prepared and signed by a suitably qualified practising Structural Engineer that comply with:

- (a) The relevant clauses of the BCA;
- (b) The relevant project approval;
- (c) Drawings and specifications comprising the Construction Certificate; and
- (d) Relevant Australian Standards listed in the BCA.

B2 Stormwater and Drainage Works

Prior to the issue of a Construction, the proponent shall submit to satisfaction of Sydney Water all details of the proposed Vehicle and Safety Pedestrian Project. An "Application for Approval of Stormwater Drainage Connections" (if applicable) must also be submitted to the Council for connection of stormwater to the Council's drainage system.

B3 Sydney Water

Prior to the issue of a 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.

B4 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, or its latest version. Details are to be submitted to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate.

B5 Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) detailing construction vehicle routes, number of trucks, hours of operation and access arrangements shall be prepared by a certified practitioner and undertaken in accordance with the RTA's Traffic Control at Worksites Manual. The CTMP shall be submitted to Council and RTA for review and consideration. The CTMP is to be submitted to the Director General for approval.

B6 Traffic Management

- 1. The layout of the proposed vehicle accessible areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) should be in accordance with AS 2890.2 0 2002 for heavy vehicle usage.
- 2. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS.

B7 Operational Protocol

The Proponent is to establish an 'Operational Protocol' for the purposes of future major events within the curtilage of the Sydney Opera House, The Royal Botanic Gardens and East Circular Quay, during the construction phase. The Operational Protocol will include all stakeholders involved in the management of major events and functions at the locations to ensure that future major events do not adversely impact on the construction of the project. The Operational Protocol is to be submitted to the Certifying Authority and the Director General.

B8 Structural Peer Review

The Proponent is required to engage a suitably qualified structural engineer to carry out a peer view of the design resolution, construction documentation and construction phases prepared by the contracted Structural Engineering firm. The peer review is to confirm capacity and specifically ensure structural stability of the existing building is maintained.

PART C-PRIOR TO THE COMMENCEMENT OF WORKS

C1 Construction Environmental Management Plan

Prior to the commencement of works, a Construction Environmental Management Plan shall be submitted to and approved by the Certifying Authority. The Plan shall address, but not be limited to, the following matters:

- (a) Techniques and methods to be utilised for the construction of the stormwater drain.
- (b) Hours of work.
- (c) Contact details of site manager.
- (d) Environmental health and safety matters.
- (e) Noise and vibration management.
- (f) Waste management.
- (g) Predicted traffic volumes, types and routes.
- (h) Ingress and egress of vehicles to the site.
- (i) Loading and unloading, including construction zones,
- (j) The location of site shed/s and materials storage to minimise disruption to surrounding land uses and to ensure that the public thoroughfare around the site is not impeded.

The Applicant shall submit a copy of the approved plan to the Department and Council.

C2 Stakeholder Engagement Plan

The Proponent must prepare a 'Stakeholder Engagement Plan' prior to the commencement of works. The purpose of the Plan is to identify an integrated approach in managing communications of the project prior, during and immediately following construction. The Plan is to consider a range of stakeholders, including but not limited to public authorities, local residents, Sydney Opera House users and general public.

The Stakeholder Engagement Plan is to be submitted to the Director General for approval. The Proponent is to submit a copy of the approved Plan to the Certifying Authority and Council.

C3 Waste Management Plan

Prior to the commencement of works, a Waste Management Plan shall be prepared by a suitably qualified person and submitted to and approved by the Certifying Authority. A copy of the Plan shall be submitted to the Department and Council.

C4 Notice of Commencement

At least 48 hours prior to the commencement of any development (including demolition, excavation, shoring or underpinning works), a notice of commencement of building or subdivision work form and appointment of the principal certifying authority form shall be submitted to Council.

C5 Site Notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, PCA and structural engineer
- be durable and weatherproof
- display 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
- be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

C6 Notification of Builders Details

Prior to the commencement of any development or excavation works, the PCA shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

C7 Geotechnical Report

Prior to the commencement of any excavation works on site, the proponent shall submit to the PCA, the results of a detailed geotechnical investigation on the site. The report is to address such matters as:

- appropriate excavation methods and techniques
- vibration management and monitoring
- dilapidation survey
- support and retention of excavates faces
- hydrogeological considerations

The recommendations of the report are to be implemented during the course of the works.

C8 Barricade Permit

Where construction works require the use of a public place including a road or footpath, owned and maintained by the City of Sydney, approval under section 138 of the *Roads Act 1993* is to be obtained from Council prior to the commencement of work.

C9 Heritage Conservation

- In the event that unexpected historical archaeological evidence was to be encountered during site works, works should cease and the Heritage Branch, Department of Planning should be notified immediately. Further assessment and/or approval may be required before works could recommence;
- The proponent must ensure that a final excavation report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the completion of the field based archaeological activity unless an extension of time or other variation is approved by the Heritage Council of NSW in accordance with section 65A of the 'Heritage Act, 1977';
- 3. In the event that unexpected Aboriginal archaeological evidence were to be encountered during site works, works should cease and the DECCW should be notified immediately. Further assessment and/or approval may be required before works could recommence;
- 4. A copy of the Archaeological report should be sent to the metropolitan Local Aboriginal Land Council for their information; and
- 5. Detailed drawings must be submitted and approved by the Director, Heritage Branch, Department of Planning prior to work commencing on site to ensure removal of original fabric is minimised and new work is detailed in a sympathetic manner;

C10 Section 60 of the Heritage Act 1977

An application under section 60 of the NSW Heritage Act must be submitted and approved by the NSW Heritage Council prior to work commencing.

C11 Complaints Management System

The proponent must prepare and implement a Construction Complaints Management System before construction commences and maintain the System for the duration of construction. The System shall include the following:

- A direct telephone number on which complaints and enquiries about the project may be registered.
- A postal address to which written complaints and enquiries may be sent
- An email address to which electronic complaints and enquiries may be transmitted

The telephone number, postal address and email address shall be included on the Site Notice prior to the commencement of construction. A record of complaints received and responses shall be maintained for the duration of construction.

PART D—DURING CONSTRUCTION

D1 Hours of Construction

- (a). All <u>external</u> building work shall be restricted to within the hours of 7.00 am to 6.00 pm between Monday to Friday, and 8.00 am to 1.00 pm on Saturdays. No work is to be carried out on Sundays and/or Public Holidays.
- (b). Notwithstanding (a) above, works may be undertaken <u>outside</u> these hours, subject to notification to the Director General where:
- 1. Construction work to internal areas of the proposal;
- 2. Construction of the portion of the entry tunnel works which are over the car park pedestrian link;
- 3. Works in the vehicle concourse;
- 4. The delivery of materials is required outside these hours by the Police or other authorities;
- 5. It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm;
- 6. The work is approved through the Construction Noise and Vibration Management Plan; and
- 7. Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

Measures shall be undertaken to mitigate against adverse noise and amenity impacts to residential premises and to comply with the standards detailed in condition D6.

D2 General Heritage Requirements

- (a) The proposed works are to be carried out in a manner that minimises demolition, alterations, and new penetrations/fixings to significant fabric.
- (b) All existing elements and finishes of the Sydney Opera House building must be protected from damage during the course of the works.

D3 Appearance

All temporary hoardings and barricading are to be designed and constructed to minimise their visual and physical impact on the affected area and on visitors and occupants of the Sydney Opera House.

D4 Approved Plans to be on Site

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

D5 Safety and Security

The proponent shall ensure all appropriate safety and security measures are implemented for the duration of the works.

D6 Noise

All work, including demolition, excavation and building work must comply with the 'City of Sydney Code of Practice for Construction Hours/Noise within the Central Business District 1992' and the Australian Standard 2436:1981 'Guide to Noise Control on Construction, Maintenance and Demolition Sites', except as permitted by condition D1 of this consent.

D7 Public Way

The public way owned and maintained by the City of Sydney, must not be obstructed and the roadway and footway is to be clear at all times.

D8 Covering of Loads

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

D9 Erosion and Sediment Control

- 1. Construction must be carried out in a manner that minimises the potential for materials, including construction and demolition debris, sediments and other pollutants to entering Sydney Harbour and waterway. In the event that material enters Sydney Harbour and waterway, it must be removed immediately.
- 2. The erosion, sediment and pollution management system is to be effectively maintained at or above design capacity during construction and until such time as all the ground disturbed has been stabilised and rehabilitated so that it no longer acts as a source of sediment.
- 3. Any material that is to be stockpiled on site is to be stabilised and covered to prevent erosion or dispersal of the material into the adjacent waterway.

D10 Aboriginal Heritage

If any human remains are located in, on or under the land, the proponent must:

- 1. Immediately cease all work at the particular location;
- 2. Immediately notify the NSW Police;
- 3. Notify the Department of Environmental, Climate Change and Water as soon as practicable and provide any available details of the remains and their location; and
- 4. Not further disturb these remains; and
- 5. Not recommence any work at the particular location unless authorised in writing by the Department of Environmental, Climate Change and Water.

D11 Traffic Control

- 1. The proposed turning areas within the loading dock are to be kept clear of any obstacles, including parked vehicles, at all times, except during outside broadcasts;
- 2. All vehicles are to enter and leave the site in a forward direction;
- 3. All vehicles are to wholly contained on site before being required to stop;
- 4. All loading and unloading shall occur onsite; and
- 5. All works/regulatory signposting associated with the proposed development are to be at no cost to the RTA.

PART E – PRIOR TO THE COMMENCEMENT OF USE

E1 Structural Inspection Certificate

A Structural Inspection Certificate must be submitted to the satisfaction of the Certifying Authority prior to the use of the stormwater drain. A copy of the Certificate with an electronic set of final drawings shall be submitted to the Department and Council after:

- 1 The site has been periodically inspected and the Certifying Authority is satisfied that the Structural Works are deemed to comply with the final Design Drawings.
- 2 The drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

E2 Section 73 Compliance Certificate

A Section 73 Certificate under the Sydney Water Act 1994 must be obtained. The Section 73 Certificate must be submitted to the PCA prior to the commencement of use.

ADVISORY NOTES

AN1 Heritage Council Requirements

- 1. The proponent is advised that a section 60 application under the Heritage Act 1977 must be lodged with the Heritage Branch of the Department of Planning as per the terms of the Bilateral Agreement prior to the commencement of any works on site.
- In accordance with Policy 56.1 of the Current CMP, specialist heritage conservation advice should continue to be sought during the design development and documentation stages for the VAPS project and continue through to completion of the project to ensure the broader as well as detailed conservation objectives are achieved.
- 3. It is important that the ramp is maintained in an inconspicuous state as much as possible by avoiding large signs etc. This approval does not include any signage on the ramp. It is, however, anticipated that some directional signage may be required for safe operation of the access ramp. Separate approval is required for any signage that may be required for its operation to ensure it does not become an intrusive element within the setting of the Opera House.
- 4. Suitable clauses should be included in all contractor and subcontractor contracts to ensure that onsite personnel are aware of the heritage issues associated with the site and the role of the archaeologists on site.
- 5. In accordance with Policy 1.5 of the Current CMP, the quality and detail described in the concept drawings and documents should not be diminished during the detailed design or construction process. In order to achieve this, the documentation and the construction process should be reviewed at regular and/or significant points along the projects' implementation program to ensure these are maintained, and if possible enhanced. Unless prevented by extenuating circumstance, key personnel from the original architects and designers of the project should be part of this quality control and checking process, and their recommendations properly considered and included in the implementation;
- 6. In accordance with Policy 6.4 of the Current CMP, the location of hoardings and site & construction facilities required to carry out the works, should be located as unobtrusively as possible and should only be erected for a stated limited time to minimise impacts on the setting and accessibility of the Sydney Opera House. Hoardings should be erected to contain all aspects of the proposed excavation and construction works;
- 7. The Sydney Opera House Trust should advise the public via appropriate signage or other means, of the purpose of the works and their time frame;
- 8. Construction activities and the movement of trucks carrying excavated material or delivering new materials should be carefully planned, considered and managed and monitored to ensure their impact on patrons, visitors and surrounding areas is minimised and acceptable;
- 9. The program of archaeological investigation outlined in the archaeological report should be adopted as part of the mitigation strategy for these works to address the potentially adverse impacts that these works would have on the archaeological significance of the site. The proposed program of archaeological investigation includes:
 - Potential cut and cover excavation for loading dock construction archaeological testing of this area prior to bulk excavation, followed by further archaeological investigation (open area excavation or monitoring, if required);
 - b) Cut and cover excavation for vehicular tunnel exposure and recording of sections of Bennelong storm water channel (original section and later diversion) prior to removal of these elements, followed by monitoring of the initial stages of all excavation works;
- 10. Archaeological monitoring of proposed development works should occur in accordance with the archaeological Management plan submitted as part of the application. It would be appropriate for the Aboriginal stakeholder representatives to participate in the monitoring;
- 11. In the event that any archaeological remains were to be exposed during site works, they should be appropriately documented according to the procedures outlines in the Archaeology Report;

- 12. Subsurface disturbance should be limited to those area identified in the documentation of the proposed works so as to avoid disturbance of other potential archaeological remains at this site;
- 13. Opportunities to interpret any evidence discovered during the proposed forecourt works shall be considered as part of a holistic approach to interpreting the site;
- 14. An online resource should be established to provide information about the proposed works before they commence, in anticipation of public interest in visible onsite works;
- 15. Any artifacts recovered from the site during site works and a full set of archaeological investigation reports should be included in the Sydney Opera Houses' moveable heritage collection;
- 16. Sydney Water should be consulted in relation to any preservation requirements, including the retention and storage of any fabric or artifacts recovered from the Sydney Water Asset (Bennelong Storm Water Channel);

AN2 Requirements of Public Authorities for Connection to Services

The proponent shall comply with the requirements of any public authorities (e.g. Energy Australia, 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 proponent.

AN3 Application for Hoardings and Scaffolding

A separate application shall be made to Council for approval under Section 68 of the Local Government Act, 1993, to erect a hoarding or scaffolding in a public place (if applicable) owned and maintained by the City of Sydney. Such an application shall include:

- (1) Architectural, construction and structural details of the design in accordance with Council's policies.
- (2) Structural certification prepared and signed by a suitably qualified practising structural engineer.

AN4 Use of Mobile Cranes

The proponent 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:

- (1) 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:
 - (a) At least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and
 - (b) 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.
- (2) The use of mobile cranes must comply with the approved hours of construction and shall not be in use prior to 7.00am without the prior approval of Council.

AN5 Roads Act, 1993

A separate application shall be made to Council for approval under Section 138 of the Roads Act, 1993 to undertake any of the following:

- (1) erect a structure or carry out a work in, on or over a public road, or
- (2) dig up or disturb the surface of a public road, or
- (3) remove or interfere with a structure, work or tree on a public road, or

- (4) pump water into a public road from any land adjoining the road, or
- (5) connect a road (whether public or private) to a classified road.

AN6 Road repairs necessitated by excavation and construction works

Section 102(1) of the Roads Act states "A person who causes damage to a public road is liable to pay to the appropriate roads authority the cost incurred by that authority in making good the damage."

Council will notify when road repairs are needed, and if they are not carried out within 48 hours, then Council will proceed with the repairs, and will invoice the proponent, owner and relevant contractor for the balance.

AN7 Temporary Structures

An approval under Section 68 of the Local Government Act 1993 must be obtained from the Council for the erection of the temporary structures (if applicable). The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.

Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under Section 68 of the Local Government Act 1993 to certify the structural adequacy of the design of the temporary structures.

AN8 Excavation – Historical Relics

Should any historical relics be unexpectedly discovered then all excavations or disturbance to the area is to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 146 of the Heritage Act, 1977.

AN9 Movement of Trucks Transporting Waste Material

The proponent shall notify the RTA's 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.

SCHEDULE 3

STATEMENT OF COMMITMENTS MAJOR PROJECT APPLICATION NO. MP 09_0200 VEHICLE AND PEDESTRIAN SAFETY PROJECT

3.1 Final Commitments for Detailed Design Work Phase

EA Issue	Commitments
Design - Consistency	The quality and detail described in the concept drawings and documents will not be diminished during the detailed design or construction process. In order to achieve this, the documentation and construction process will be reviewed at regular and/or significant points along the project's implementation program to ensure these are maintained, and if possible enhanced. Key personnel from the original architects and designers of the project will invited to be part of this quality control and checking process, and their recommendations properly considered and included in the implementation.
Design - Heritage	Specialist heritage conservation advice will continue to be sought during the design development and documentation stages for the VAPS Project and continue through to completion of the project to ensure the broader as well as detailed conservation objectives are achieved.
	All materials and finishes visible from within the Forecourt or any other publically accessible area will be in accordance with Utzon's palette of natural materials used elsewhere on the site and in accordance with the details set out in the Architect's Statement. Areas that are not visible to the public will also be finished in accordance with the details set out in the Architect's Statement unless an alternative solution is approved by the Specialist Heritage Architect or Jan Utzon and confirmed as appropriate in heritage terms.
Design – Structural	A detailed structural design and structural engineer's report will be prepared for approval prior to commencement of works
Design - Lighting	Detailed design investigation will be carried out during the design development phase to ensure lighting will complement and enhance the special features of the place and will be consistent with Utzon Design Principles, the lighting policies specified in the CMP 2003 and the Utzon endorsed 2007 Lighting Masterplan. The design of lighting within the entrance to the access tunnel will be carefully resolved in terms of form, locations and illumination levels to ensure achievement of a sympathetic and high quality result.
Archaeological Investigation	 The program of archaeological investigation outlined in the Archaeological report will be adopted as part of the mitigative strategy for these works to address the potentially adverse impacts that these works would have on the archaeological significance of the site. The proposed program of archaeological investigation includes: Potential cut-and-cover excavation for loading dock construction—archaeological testing of this area prior to bulk excavation, followed by further archaeological investigation (open area excavation or monitoring, if required). Cut-and-cover excavation for vehicular tunnel—exposure and recording of sections of Bennelong stormwater channel (original section and later diversion) prior to removal of these elements, followed by monitoring of the initial stages of all excavation works
Geotechnical Investigation and Design	Further geotechnical investigation will be carried out to address the key issues of stress relief related ground movements and rock mass permeability, including the presence of the GPO Fault Zone using inclined boreholes and in accordance with the recommendations of the <i>Report on Preliminary Geotechnical Investigation and</i>

Waste Classification Assessment Proposed Vehicle and Pedestrian Safety (VAPS) Project Sydney Opera House Bennelong Point by Douglas Partners dated February 2010.

The results of the Geotechnical Investigation are to inform the final design of the project including the final precise location of the access ramp relative to the Tarpeian Wall.

Geotechnical
Investigation
andThe geotechnical investigation above will inform the final design of ground water
discharge and treatment. Where necessary the design will include further
treatment beyond gross pollutant traps and will ensure all water discharged from
the pump out pits complies with accepted standards

3.2 Final Commitments in relation to Consultation & Further Approvals

EA Issue	Commitments
Generally	Immediate neighbours and key stakeholders, including the City of Sydney, will be consulted with upon resolution of the final design and prior to finalising the Detailed Construction Management Plan. The final construction management plan will take into account any concerns from neighbours and stakeholders relating to amenity and operational impacts and timing of any major events on adjoining sites.
Sydney Water Requirements	The proponent will engage a Water Servicing Co-ordinator and will liaise with Sydney Water, obtain any necessary approvals, including Section 73 Certificates before commencing work on the site.
Heritage Requirements	Sydney Water will be consulted in relation to any preservation requirements, including the retention and storage of any fabric or artefacts recovered from the Sydney Water asset (Bennelong stormwater channel).
	Detailed Drawings will be submitted to and approved by the Director of the Heritage Branch of the Department of Planning prior to work commencing on the site.
	An application under section 60 of the NSW Heritage Act will be submitted and approved by the NSW Heritage Council prior to work commencing on the site.
	Separate approval will be sought for any directional signage associated with the safe operation of the access ramp to the new loading dock that is visible from public spaces prior to its erection.
Infrastructure Impacts	Where upgrading of services is required, the appropriate approvals will be sought from service providers.
SOH Carpark Requirements	Impacts to the structure of the adjoining carpark will be further investigated during the detailed design phase and the extent and methodology for dealing with any clashes will be the subject of further consultation with the State Property Authority and Recap before finalising. Hoarding types and locations will be determined as part of the detailed Construction Management Plan and will be also be discussed with the State Property Authority and Recap before finalising.
Archaeology and Aboriginal Assessment Requirements for Consultation	An online resource will be established to provide information about the proposed works before they commence, in anticipation of public interest in visible on-site works
Local Residents	Local Residents will be informed of Construction Works before they commence and will be provided with the Site Manager's contact details as a point of contact for concerns that may arise during the construction phase. Refer also to commitments in the following section.

3.3 Final Commitments for the Construction Phase

Construction Management Commitments will be in the form of a Detailed Construction Environmental Management Plan. This plan will include commitments known at this stage as set out in the table as well as further commitments based on additional detail and investigations that will be carried out during the detailed design phase.

Detailed Construction Environmental Management Plan

A construction environmental management plan will be prepared and implemented. The plan will outline environmental management practices and procedures to be followed during site preparation and construction. The plan will cover the environmental protection practices, resources and sequence of activities required to comply with relevant environmental legislation, conditions of any applicable licence, approvals and permits. The plan will be prepared in accordance with Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) and include:

General	A description of activities to be undertaken on the site during the site
	preparation and construction stages of the project.
	 Statutory approvals and other obligations that would be fulfilled during site preparation and construction.
Heritage	The location of hoardings and site and construction facilities required to carry out
nentage	the works, will be located as unobtrusively as possible and will only be erected for
	a stated limited time to minimise impacts on the setting and accessibility of the
	Sydney Opera House. Hoardings will be erected to contain all aspects of the
	_proposed excavation and construction works.
	The Sydney Opera House Trust will advise the public via appropriate signage or
	other means, of the purpose of the works and their timeframe.
	Once the detailed design is complete, the Contractor engaged is to develop a
	detailed safe work method statement which addresses the various activities to be
	undertaken during the construction phase, and ensures the safety of the site's
	existing heritage fabric.
Archaeology	Archaeological monitoring of proposed development works will occur in
and Aboriginal	accordance with the Archaeological Management Plan submitted as part of the
Values	application. It would be appropriate for Aboriginal stakeholder representatives to
	participate in the monitoring.
	In the event that unexpected historical archaeological evidence were to be
	encountered during site works, works will cease and the Heritage Branch,
	Department of Planning will be notified immediately. Further assessment and/or
	approval may be required before works could recommence.
	In the event that any archaeological remains were to be exposed during site
	works, they will be appropriately documented according to the procedures
	outlined in the Archaeology Report.
	Suitable clauses will be included in all contractor and subcontractor contracts to
	ensure that on-site personnel are aware of the heritage issues associated with the
	site and the role of the archaeologist(s) on site.
	Subsurface disturbance will be limited to those areas identified in the
	documentation of the proposed works so as to avoid disturbance of other potential
	archaeological remains at this site.
	In the event that unexpected Aboriginal archaeological evidence were to be
	encountered during site works, works will cease and the Department of
	Environment, Climate Change and Water (DECCW) will be notified immediately.
	Further assessment and/or approval may be required before works could
	recommence.
	In the event that Aboriginal cultural material is identified and collected, it may be
	appropriate for such material to be retained, interpreted and displayed on site.
	Further consultation with Aboriginal stakeholders would be required to determine
	the appropriate management of such material. The Metropolitan Local Aboriginal
	Land Council will be advised of any Aboriginal Objects located on the site and
	invited to apply for a Care Agreement with the Department of Environment,
	Climate Change and Water to enable them to keep the objects.

	Opportunities to interpret any evidence discovered during the proposed forecourt
	works will be considered as part of a holistic approach to interpreting the site.
	If any human remains are located in, or under the land, the proponent will
	 Not further disturb the remains;
	 Immediately cease all work at the particular location;
	 Immediately notify the NSW Police;
	 Notify the Department of Planning as soon as practicable and provide details
	of the remains and their location; and
	Not recommence work at the particular location unless authorised in writing
Tunffin	by the Department of Planning.
Traffic	 As part of the Construction Management Plan, a Construction Traffic Management Plan (CTMP) will be prepared and approved prior to construction works to address the potential impacts identified in the EA and Sydney Opera House Vehicle and Pedestrian Safety Project Environmental Assessment Traffic Report by Halcrow. The CTMP is to set out a plan to manage construction activities such that the potential traffic implications are mitigated or appropriately managed and is to include: Details of proposed works Timing of proposed works; Hours of construction activities; Number of construction vehicles, particularly heavy vehicles to be used; Mitigation and management measures including use of construction vehicle on site management system, construction vehicle access arrangements and
	circulation; and
	Contact details for on site construction personnel. The CTMP shall be assessed in accordance with DTA with the second seco
	The CTMP shall be prepared in accordance with RTA guidelines and will be submitted to the Department of Planning, the RTA and the City of Culture for
	submitted to the Department of Planning, the RTA and the City of Sydney for review prior to commencement of works.
	The CTMP is to also include the specific recommendations of the Sydney Opera
	House Vehicle and Pedestrian Safety Project Environmental Assessment Traffic Report by Halcrow, including for example:
	 Vehicle access to and from the site will be generally restricted to the existing access routes to and from the site.
	 Heavy construction vehicles be restricted from accessing the site via
	Macquarie Street during peak arrival and departure periods for events / performances at the Sydney Opera House.
	 Hours of operation for construction vehicle movements be managed so that
	the impacts of construction vehicle noise on amenity can be mitigated for sensitive times.
	 Construction vehicle access arrangements will be designed such that all
	construction vehicles can enter and exit the site in a forward direction
	All works and regulatory signposting associated with the proposed development
	will be at no cost to the RTA.
Noise Vibration	& Construction work is to comply with the recommendations of Sydney Opera House Vehicle and Pedestrian Safety Operational and Construction Noise
	Assessment by Acoustic Studio The Contractor is to undertake noise monitoring at nominated affected
	occupancies
	Noise and vibration levels are generally to comply with the requirements of The
	City of Sydney's "Construction Hours / Noise within the Central Business District –
	Code of Practice", 1992.
	All construction is to be carried out between the hours of 7am to 6pm Monday to
	Friday and 8am to 1pm Saturdays, with the exception of the following activities:
	 Construction work to internal areas of the proposal;
	 Construction of the portion of the entry tunnel works which are over the car
	park pedestrian link; and
	 Works in the vehicle concourse.
	 Works in the vehicle concourse. Where necessary, acoustic screening for out of hours construction works will be
	 Works in the vehicle concourse. Where necessary, acoustic screening for out of hours construction works will be put in place to mitigate the noise impacts for the closest affected residential
	 Works in the vehicle concourse. Where necessary, acoustic screening for out of hours construction works will be put in place to mitigate the noise impacts for the closest affected residential receivers and ensure compliance with the requirements of The City of Sydney's
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	 Works in the vehicle concourse. Where necessary, acoustic screening for out of hours construction works will be put in place to mitigate the noise impacts for the closest affected residential receivers and ensure compliance with the requirements of The City of Sydney's "Construction Hours / Noise within the Central Business District – Code of Practice", 1992.
	 Works in the vehicle concourse. Where necessary, acoustic screening for out of hours construction works will be put in place to mitigate the noise impacts for the closest affected residential receivers and ensure compliance with the requirements of The City of Sydney's "Construction Hours / Noise within the Central Business District – Code of

House and the surrounding residential receivers outside of the standard daytime construction hours.

Where an item of equipment exceeds ether the noise criteria or the equipment noise level limits set out in the Sydney Opera House Vehicle and Pedestrian Safety Operational and Construction Noise Assessment by Acoustic Studio, a number of noise controls measures and construction best practices will be applied where possible to minimise the noise impacts on the neighbourhood.

Recommended noise control measures that may be found to be appropriate to the proposal include:

- Schedule noisy construction activities to occur outside of the most sensitive times of the day for each nominated receiver.
- Consider implementing equipment-specific screening or other noise control measures recommended in Appendix E of AS2436.
- Limit the number of trucks on site at the commencement of site activities to the minimum required by the loading facilities on site.
- Provide exit ramps to the street and all internal haul roads at the lowest grade practicable.
- During the demolition of the concrete elements, consider using concrete crushing jaws to minimise the use of rockbreakers.
- Removed rock by a "ripper" attached to a large dozer wherever practical.
- When loading trucks, adopt best practice noise management strategies to avoid materials being thrown into dump trucks.
- Avoid unnecessary idling of trucks and equipment.
- Locate concrete mixers as far from noise-sensitive receivers as possible.
 - Ensure that any miscellaneous equipment (extraction fans, etc) not specifically identified in this plan incorporates silencing equipment as required to meet the noise criteria

Construction is to be managed so that vibration levels arising from demolition, excavation, and construction activities do not exceed the limits for human comfort as set out in Table 11 to the Acoustic Studio Report

The CMP is to include the following measures as set out in Section 6.4 of the Acoustic Studio Report

- A preliminary assessment to determine whether the existence of significant vibration levels justifies a more detailed investigation: and
- Where necessary, a detailed investigation;
- The use of vibration surveys;
- Vibration monitoring;
- Non-compliance reporting
- Control measures;
- Site Specific Vibration Management Considerations

	- Site Specific Vibration Management Considerations
Acid Sulfate Soils	Materials are to be inspected following excavation by a qualified environmental consultant in accordance with the recommendations of <i>Report on Preliminary Acid Sulphate Soil Assessment Vehicle and Pedestrian Safety (VAPS) Project Sydney Opera House Bennelong Point</i> by Douglas Partners. If the materials are inconsistent with those observed during the preliminary investigation or if signs of acid sulfate soils are detected then additional assessment will be conducted to confirm the presence/absence of potential or actual acid sulfate soils.
Contamination	Filling excavation works be monitored by an experienced environmental consultant in accordance with the recommendations of <i>Report on Preliminary Contamination Assessment Vehicle and Pedestrian Safety (VAPS) Project Sydney Opera House Bennelong Point</i> by Douglas Partners. Furthermore, it is recommended that a Construction Environmental Management Plan be prepared and implemented to control segregation of materials, final waste classification, and management "unexpected finds"
Waste Management	A fully detailed Waste Management Plan will be developed by the Contractor engaged to undertake the project prior to construction and will be consistent with the Waste Avoidance and Resource Recovery Act 2001 and the 'Waste Classification Guidelines'. The plan will be consistent with the advice in the Environmental Assessment Construction Management Plan prepared by Savills Project Management and Identify requirements for waste avoidance, reduction, reuse and recycling.

- Provide procedures for handling, stockpiling, and reuse of wastes.
- Identify disposal sites and relevant testing as well as transport options.
 - Set out procedures for obtaining the required approvals for offsite

	management of spoil.
Air Quality	A dust management plan will be prepared by the Contractor engaged to undertake the works prior to commencing construction. The plan will include measures such as:
	 Areas with the capacity to cause dust will be dampened to suppress dust emissions.
	 Materials transported in trucks will be appropriately covered to reduce dust generation.
	 Vehicle movement controls will be installed, particularly entrance and exit from construction work sites.
	 Construction activities that generate high dust levels would be avoided during high wind periods.
	 Rehabilitation of disturbed surfaces will be undertaken as soon as possible. All construction plant and machinery will be fitted with emission control devices complying with Australian Standards and would be regularly maintained.
Water Quality	Measures to monitor and minimise soil erosion and the discharge of sediments and other pollutants will be incorporated into the detailed Construction Management Plan for authorisation prior to commencement of work
Safety	Appropriate hoardings, access gates and signage will be utilised during the construction period to provide a clear delineation between public and construction spaces, and ensure public safety. Works will be appropriately managed and scheduled during performance times.
	Prior to commencing construction the Contractor engaged to undertake the works in conjunction with the SOH will prepare a fully detailed works staging strategy, which addresses public access and ensure safety.
	Temporary diverted vehicle access paths will be clearly delineated and managed to minimise pedestrian and vehicle conflict.
	All hoardings and access paths will be arranged so that pedestrian and emergency vehicle access to the Royal Botanic Gardens will be retained.
Communication and Complaints	The contractor is to establish a communications and complaints protocol for dealing with complaints
	The contractor is to establish a communications register for recording incoming complaints

3.4 Final Commitments for the Operational Phase

Traffic Requirements	At all times vehicle movements in the Loading Dock Area will be managed by appropriately qualified personnel. Articulated vehicles arriving at the site entrance will be managed by the guard who is to walk out of the guard house to stop the vehicle at the point where the vehicle is clear of the Macquarie Street roundabout	
Future Aboriginal	 The proposal will comply with RTA operational conditions and recommendations set out in their letter of 16 September 2010 including: Turning areas within the loading dock will be kept clear of any obstacles including parked vehicles at all times; All vehicles will enter and leave the site in a forward direction; All vehicles will be wholly contained on the site before being required to stop; All loading and unloading will occur on the site. The Sydney Opera House Trust will develop a protocol for ongoing Aborigina stakeholder consultation and engagement as part of the long-term management or the site of the long-	
Values Commitments	The Sydney Opera House Trust will develop an interpretation strategy that outlines an approach to the recognition and interpretation of the Aboriginal cultural values and Aboriginality associated with the Sydney Opera House site. Aboriginal people	

	are the rightful interpreters of Aboriginal cultural heritage. Any proposed interpretation of Aboriginal cultural heritage at the Sydney Opera House will involve identified Aboriginal Stakeholders
	As part of the current revision of the Sydney Opera House Conservation Management Plan, further consideration and assessment of Aboriginal cultural values with regard to the aforementioned recommendations will be considered.
	Any future revision of the Management Plan for the Sydney Opera House will reflect the updated Conservation Management Plan, particularly any revised policies regarding Aboriginal cultural significance
Archaeological Reporting	A Final Excavation report by the nominated Excavation Director, to publication standard, will be prepared within 1 year of the completion of the field based archaeological activity. A copy of the report will be sent to the Local Aboriginal Land Council for their information. A copy will also be submitted to the City of Sydney Archives.
	Where appropriate, any artefacts recovered from the site during site works, as well as a full set of investigation report will be included in the Sydney Opera House's moveable heritage collection.