

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

DETERMINATION OF DEVELOPMENT APPLICATION NO. 79-4-2005

(FILE NO. 9038539)

REDEVELOPMENT OF UPPER ENTRY AND CAR PARK TO TARONGA ZOO

I, the Minister for Planning, pursuant to Sections 80 (1) (a) and 80A of the *Environmental Planning & Assessment Act, 1979*, and clause 10 (1) of State Environmental Planning Policy No. 56 – Sydney Harbour Foreshores and Tributaries and clause 11 of Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, determine the development application referred to in the attached Schedule 1, by granting consent to the application subject to the conditions of consent in the attached Schedule 2.

The reasons for the imposition of conditions are:

- (1) To protect and improve the unique visual qualities of the Harbour, its foreshores and tributaries;
- (2) To conserve the heritage buildings and its unique Harbour setting;
- (3) To provide a high standard of design and architecture worthy of the heritage buildings, other heritage items in the vicinity and its unique Harbour setting;
- (4) To provide high quality landscaping and planting within the public and private domain;
- (5) To improve egress and pedestrian access through the private and public domain during and after construction;
- (6) To improve ingress, egress and parking for vehicles on the site during and after construction
- (7) Minimise the impact on adjoining residential amenity during and after construction
- (8) To minimise the impacts of development on the use of the Upper Entry precinct during construction;
- (9) To promote the orderly and ecologically sustainable use and development of this land.

Frank Sartor MP
Minister for Planning

Sydney,

2006

SCHEDULE 1

PART A—TABLE

Application made by:	Zoological Parks Board of NSW Taronga Zoo, Prince Albert Street, Mosman 2088
Application made to:	Minister for Planning
Development Application:	DA 79-4-2005
On land comprising:	Lot 22 DP 843294 Upper Entry, Taronga Zoo Park, Mosman 2088
Local Government Area	Mosman Municipal Council
For the carrying out of:	Redevelopment of Upper entry consisting of works to the inner and outer plaza A detailed description of the development consented to is described in Conditions A1, Part A, Schedule 2
Estimated Cost of Works	\$33 million
Type of development:	State Significant Development
S.119 Public inquiry held:	No
BCA building class:	5, 6, 7a and 9b
Determination made on:	14 October 2006
Determination:	Development consent is granted subject to the conditions in the attached Schedule 2.
Date of commencement of consent:	This development consent commences on the date identified in the formal notification letter accompanying the Determination.
Date consent is liable to lapse	This consent will lapse 5 years from the date of commencement of consent, unless: (1) a shorter period of time is specified by the Regulations or (2) a condition in Schedule 2, or (3) the development has physically commenced.

PART B—NOTES RELATING TO THE DETERMINATION OF DA NO. 79-4-2005

Responsibility for other approvals / agreements

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

Appeals

The Applicant has the right to appeal to the Land and Environment Court under Section 97 of the *Environmental Planning and Assessment Act, 1979*. The right to appeal is only valid, for a development application, within **12** months after the date on which the Applicant received this notice.

Appeals—Third Party

A third party right to appeal to this development consent is available under Section 123, subject to Section 101, of the *Environmental Planning and Assessment Act, 1979*.

Legal notices

Any advice or notice to the consent authority shall be served on the Director-General.

PART C—DEFINITIONS

In this consent,

Act means the *Environmental Planning and Assessment Act, 1979* (as amended).

Advisory Notes means advisory information relating to the approved development but do not form a part of this consent.

Applicant means Zoological Parks Board of NSW or any party acting upon this consent.

Approval Body has the same meaning as within Division 5 of Part 4 of the Act,

BCA means the Building Code of Australia.

Certifying Authority has the same meaning as Part 4A of the Act.

Council means Mosman Municipal Council.

DA No. 79-4-2005 means the development application and supporting documentation submitted by the Applicant on 8 April 2006.

Department means the Department of Planning or its successors.

Director-General means the Director-General of the Department.

Director Urban Assessments means the Director of Urban Assessment Branch, Office of Sustainable Developments Assessment and Approvals, Dept of Planning, or successor.

Heritage Superintendent means a qualified heritage consultant experience in the conservation of similar heritage buildings.

UEB means the Upper Entry Building subject of this Development Application

Minister means the Minister for Planning.

Regulations means the *Environmental Planning and Assessment Regulations, 2000* (as amended).

Subject Site has the same meaning as the land identified in Part A of this schedule.

Works Manager means a suitably qualified person engaged by the Crown to fulfil the requirements of Section 116G (2) of the *Environmental Planning and Assessment Act 1979*.

SCHEDULE 2

CONDITIONS OF CONSENT

DEVELOPMENT APPLICATION NO. 79-4-2005

PART A—ADMINISTRATIVE CONDITIONS

A1 Development Description

Development consent is granted only to carrying out the development described in detail below:

Inner plaza

- Conservation and maintenance of the heritage listed upper Entrance Building, including the removal of unsympathetic/instructive elements;
- Conservation and maintenance of the Northern Perimeter Wall;
- Demolition of the existing café, information booth, koala encounters exhibit, Tasmanian devil enclosure, former koala house, former reptile house, ashlar block wall and temporary shop in front of the Sky Safari exit;
- Construction of a new café with indoor and outdoor seating and a shop;
- Construction of a circulation Node, walkways and paths;
- Landscaping of the Inner Plaza, including tree retention and removal.

Outer Plaza

- A forecourt to the heritage Entrance Building;
- Conservation and maintenance of the Tram Shelter and occupation by offices for the Zoo Friends;
- A maximum 905 car parking spaces located within:
 - A three level car parking structure accessed from Bradleys Head Road,
 - A landscaped overflow parking area,
 - At grade staff parking located between the car parking structure and landscaped berm to Whiting Beach Road;
- Coach parking area, accessed from Whiting Beach Road;
- A new STA bus drop-off and turn around on the western side of Bradley's Head Road (including a waiting canopy and dedicated SRA toilet); and,
- Landscaping of the Outer Plaza, including tree retention and removal, and clear pedestrian circulation paths.

A2 Development in Accordance with Plans

The development shall be in accordance with development application number 79-4-2005 submitted by the Applicant on 8 April 2005, and in accordance with the following:

Statement of Environmental Effects entitled Development Application Statement of Environmental Effects to Department of Infrastructure, Planning and Natural Resources (DIPNR) prepared by Bligh Voller Nield, dated April 2005			
Architectural (or Design) Drawings prepared by Bligh Voller Nield			
Drawing No.	Revision	Name of Plan	Date
A-DA-U-07	B	Inner Plaza – General Arrangement Plan	24/03/05
A-DA-U-09	D	Heritage Entry Building Proposed	24/03/05
A-DA-U-D10	B	Facilities and Retail Buildings Plan	24/03/05
A-DA-U-11	B	Facilities and Retail Building Sections + Elevations	24/03/05
A-DA-U-13	D	Old Tram Pavilion Proposed	24/03/05
A-DA-U-14	B	Outer Plaza General Arrangement (for overflow parking)	24/03/05
OPP-A-A-001	A	Outer Plaza Precinct Key Plan	24/4/06
OPP-A-A-003	A	Outer Plaza Precinct Demolition Plan	24/4/06
OPP-A-A-101	A	Outer Plaza Precinct Boundaries and Staging Plans	24/4/06
OPP-A-D-001	A	Outer Plaza Precinct General Arrangement 1-4	24/4/06
OPP-A-D-002	A	Outer Plaza Precinct General Arrangement 2 of 4	24/4/06
OPP-A-D-003	A	Outer Plaza Precinct General Arrangement 3 of 4	24/4/06
OPP-A-D-004	A	Outer Plaza Precinct General Arrangement 4 of 4	24/4/06
OPP-A-Q-101	A	Outer Plaza Precinct Guard Kiosk Plan	24/4/06
OPP-A-Q-102	A	Outer Plaza Precinct Guard Kiosk – Roof Plan & RCP	24/4/06
OPP-A-Q-103	A	Outer Plaza Precinct Guard Kiosk – Elevations	24/4/06
OPP-A-Q-104	A	Outer Plaza Precinct Guard Kiosk - Sections	24/4/06
OPP-A-Q-201	A	Outer Plaza Precinct Paystation - Plan	24/4/06
OPP-A-Q-202	A	Outer Plaza Precinct Paystation – Roof Plan and RCP	24/4/06
OPP-A-Q-203	A	Outer Plaza Precinct Paystation – Elevations	24/4/06
OPP-A-Q-204	A	Outer Plaza Precinct Paystation – Sections	24/4/06
OPP-A-Q-205	A	Outer Plaza Precinct Awning, Signage and Capping Details	24/4/06
OPP-A-Q-301	A	Outer Plaza Precinct Bus Canopy – Plan, RCP, Roof	24/4/06
CPK-A-A001	A	Carpark Site Plan	24/4/06

CPK-A-A002	A	Carpark General Floor Plans	24/4/06
(unreferenced)	-	Carpark screen – new proposals – sections	21/08/06
(unreferenced)	-	Carpark screen – new proposals-elevations (sketch plans – façade cut-outs)	21/08/06
(unreferenced)	-	Carpark screen – new proposals – montages	21/08/06
CPK-A-D001	A	Floor plans with façade cut-outs (sketch plans)	24/04/06
CPK-A-D003	A	Floor plans with façade cut-outs (sketch plans)	24/04/05
Landscape Drawings prepared by Johnson Pilton Walker			
Drawing No.	Revision	Name of Plan	Date
OPP-L-K-01	003	Landscape Drawings Plan	21/04/06
OPP-L-VM-01	003	Vegetation Management Plan	21/04/06
OPP-L-GA-01	003	General Arrangement Sheet 1 of 4	21/04/06
OPP-L-GA-02	004	General Arrangement Sheet 2 of 4	21/04/06
OPP-L-GA-03	003	General Arrangement Sheet 3 of 4	21/04/06
OPP-L-GA-04	004	General Arrangement Sheet 4 of 4	21/04/06
OPP-L-PL-01	003	Planting Plan Sheet 1 of 4	21/04/06
OPP-L-PL-02	003	Planting Plan Sheet 2 of 4	21/04/06
OPP-L-PL-03	003	Planting Plan Sheet 3 of 4	21/04/06
OPP-L-PL-04	003	Planting Plan Sheet 4 of 4	21/04/06
OPP-L-IR-01	003	Irrigation Plan	21/04/06
OPP-L-SO-01	003	Setout Drawing Sheet 1 of 4	21/04/06
OPP-L-SO-02	003	Setout Drawing Sheet 2 of 4	21/04/06
OPP-L-SO-03	003	Setout Drawing Sheet 3 of 4	21/04/06
OPP-L-SO-04	003	Setout Drawing Sheet 4 of 4	21/04/06
OPP-L-SC-01	003	Landscape Sections	21/04/06
OPP-L-SC-02	003	Landscape Sections	21/04/06
OPP-L-SC-03	003	Landscape Sections	21/04/06
OPP-L-LD-01	003	Landscape Details	21/04/06
OPP-L-LD-02	003	Landscape Details	21/04/06
OPP-L-LD-03	003	Landscape Details	21/04/06
OPP-L-LD-04	003	Landscape Details	21/04/06
OPP-L-LD-05	003	Landscape Details	21/04/06
Survey Drawings prepared by Frank Mason, Degotardi Smith and Craig & Rhodes			
Drawing No.	Revision	Name of Plan	Date
A-DA-U-21	B	Upper Entry Survey	24/03/05

except for:

- (1) any modifications which are 'Exempt Development' as identified in the Mosman Local Environmental Plan, 1998 and the Mosman Development Control Plan – Exempt and Complying Development, 2002, or as may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA;
- (2) 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, the conditions of this consent prevail.

A4 *Prescribed Conditions*

The Applicant shall comply with the prescribed conditions of development consent under clause 98 of the Regulation.

PART B—PRIOR TO COMMENCEMENT OF WORKS

Design Details and Changes

B1 Design Modifications

In order to reduce the visual impact of the development, the following amendments shall be incorporated into the design:

- (1) Two sections are to be deleted from the multi storey building on the northern elevation facing Whiting Beach Road. They are to be the width of three standard car parking spaces, and 4m deep, for the full height of the structure;
- (2) The two sections are to be screened with timber poles in the same way as the remainder of the car park structure, to assist in visual screening of the structure and to facilitate the growing of vegetation. The poles can be a different shade to assist in the visual appearance of articulation.

Final floor plans, sections and coloured elevations shall be submitted to the Works Manager, and a copy provided to the Department of Planning, prior to the commencement of any works.

B2 Landscape Plan

A revised landscape plan shall be submitted to and approved by the Works Manager prior to the commencement of any works on site to incorporate the following:

- (1) Additional planting adjoining all four elevations to increase the screening of the structure from the street, public reserves and private residences
- (2) The two areas removed from the northern elevation of the car park structure are to be planted with native canopy trees to increase the screening of the structure.

B3 Transplanting and replacement landscaping

A qualified Arborist is to provide a report on the feasibility of transplanting the two fig species nominated for removal in the bus bay area, to both ends of the 'minibus drop and park' pedestrian island in the bus bay area.

The transplanting is take place in accordance with Arborist recommendations. However if it is demonstrated that transplantation is not feasible, at least one super advanced species of locally native tree species is to be planted at either end of the 'minibus drop and park' pedestrian island, and at least one super advanced locally native tree species in the eastern part of the site between the bus bay and entrance to the carpark, identified on the approved plans as 'proposed ground cover'.

The possibility of offering the fig trees to Council or the public shall also be addressed in the report.

The report shall be submitted to the Works Manager prior to the commencement of any works.

B4 Business Identification Sign

The proposed business identification sign for the north-eastern corner of the site is not approved as part of this application. Signage including way finding and directional signage shall be subject of a separate application.

B5 *Details of Materials, Colours and Finishes*

Final design details of the proposed external materials and finishes, including schedules and a sample board of materials and colours, shall be submitted to the Works Manager prior to the commencement of any works.

B6 *Reflectivity*

The visible light reflectivity from building materials used on the facades of the buildings shall not exceed 20% and shall be designed so as not to result in glare that causes any nuisance or interference to any person or place. A report demonstrating compliance with these requirements is to be submitted to works manager to the commencement of any works.

B7 *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 Works Manager prior to the commencement of any works.

B8 *Disabled Access*

Access and facilities for people with disabilities shall be provided in accordance with the BCA. Prior to the commencement of works, details shall be submitted to the satisfactory of the Works Manager.

Remediation / Demolition / Earthworks

B9 *Erosion and Sedimentation 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 Works Manager prior to the commencement of any works.

B10 *Stormwater Runoff*

Stormwater run-off from the subject site onto Bradleys Head Road, as a result of the proposed development is not to exceed the existing level of run off from the site.

B11 *Pre-Construction Dilapidation Reports*

The Applicant is to engage a qualified structural engineer 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 works manager to the commencement of any works.

A copy of the report is to be forwarded to the Director and Council.

Traffic & Parking

B12 *Works within the road reserve*

The applicant is advised that no road work is to proceed within the Bradleys Head Road reserve without the specific approval of the RTA. The Developer may be required to enter into a Works Authorisation Deed (WAD). Plan assessment, administrated and inspection fees will also apply. A performance bond to the value of the roadworks within the road reserve will also be required.

Note: If a Works Authorisation Deed is required, it will need to be executed prior to the RTA's assessment of the Civil Design

B13 Car Park Signage

Conceptual plans and details of the proposed car park VMS signage are to be submitted to the RTA for review/comment/approval prior to commencement of work.

B14 Traffic Control Devices

In order to ensure that vehicles exit the site in a safe manner, suitable traffic control devices eg, signage, speed hump, line marking, traffic signals, etc shall be installed and shall be clearly visible at the upper threshold of the driveway. Details of the type, location and operation of the device are to be submitted to the satisfaction of the Works Manager prior to the commencement of any works.

B15 Bus/Coach Drop Off and Pick Up

The proposed bus/coach drop off and pick up shall be generally in accordance with Drawing No. A-DA-U-15, Revision B, Dated 24/03/05

B16 Number of Car Spaces

The maximum number of car spaces to be provided for the development shall comply with the table below. Details confirming the parking numbers shall be submitted to the satisfaction of the Works Manager prior to the commencement of any works.

Car parking allocation	Number (maximum)
Total spaces	905
Visitor Spaces (Multi storey car park – including disabled spaces)	675
Visitor Spaces (Overflow parking – including disabled spaces)	177
Staff-only spaces	53
Coach spaces	12

B17 Car Park and Service Vehicle Layout

- (1) The layout of the car parking areas associated with the subject development (including driveways, turning paths, grades, aisles widths, sight distance requirements, and parking bay dimensions) shall be in accordance with AS 2890.1-2004 and AS 2890.2 – 2002 where applicable. All parking spaces are to be linemarked.
- (2) To minimise the potential for queuing onto and within Bradleys Head Road the car park entry off Bradleys Head Road must be modified/widened to ensure that it accommodates two (2) entry lanes as far as physically possible within the site.

B18 Coach Parking Layout

In order to minimise internal vehicular conflicts within the coach parking area, the RTA recommends that the circulation around the coach parking area be reversed from an anti-clockwise to a clockwise circulation. Details shall be submitted to the satisfaction of the Works Manager prior to the commencement of any works

Health

B19 Mechanical Ventilation

All mechanical ventilation systems shall be installed in accordance with Part F4.5 of the Building Code of Australia and shall comply with Australian Standards AS1668.2 and AS3666 *Microbial Control of Air Handling and Water Systems of Building*, to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection.

B20 Plan stamping by Sydney Water

The relevant approved plan, which shows the building footprint, must be submitted to a Sydney Water Quick Check agent or Customer Centre to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met prior to the commencement of works.

For Quick Check agent details please refer to the web site www.sydneywater.com.au. See Your Business then Building & Developing then Building & Renovating or telephone 13 20 92.

B21 Design of Food Premises

The fitout of the food premises shall be carried out in accordance with *The National Code for the Construction and Fitout of Food Premises*. Details of compliance with the relevant provisions of the Code shall be prepared by a suitably qualified person and submitted to the satisfaction of the Works Manager prior to the commencement of any works.

Waste Management

B22 Storage and Handling of Waste

The design and management of facilities for the storage and handling of waste must comply with the requirements of the Mosman Business Centres DCP. Details are to be submitted to the Works Manager to the commencement of any works.

Demolition Works

B24 Statement of Compliance with Australian Standards

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

Excavation Works

B25 Notice to be Given Prior to Excavation

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

B26 Site Notice

A site notice(s) shall be prominently displayed on the work site fence for the purposes of informing the public of project details including, but not limited to, the details of the Builder, Works Manager and Structural Engineer. The notice(s) is to satisfy all but not be limited to the following requirements:

- (1) Minimum dimensions of the notice are to measure 420 mm x 594 mm (A2) with any text on the notice to be a minimum of 30 point type size;
- (2) The notice is to be durable and weatherproof and is to be displayed throughout the works period;
- (3) 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
- (4) 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.

B27 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.

B28 Toilet Facilities

To provide reasonable worker amenity, toilet facilities shall be provided at or in the vicinity of the work site for the duration of site work activities.

Structural Works

B29 Structural Details

Prior to the commencement of construction, the Applicant shall submit to the satisfaction of the Works Manager structural drawings prepared and signed by a suitably qualified practising Structural Engineer that comply with:

- (1) the relevant clauses of the BCA,
- (2) the relevant development consent,
- (3) drawings and specifications, and
- (4) the relevant Australian Standards listed in the BCA (Specification A1.3).

Construction Management

B30 Construction Management Plan

Prior to the commencement of any works on the site, a Construction Management Plan shall be submitted to and approved by the Works Manager. The Plan shall address, but not be limited to, the following matters where relevant:

- (1) hours of work,
- (2) contact details of site manager,
- (3) traffic and pedestrian management (see also B25 below),
- (4) noise and vibration management (see also B26 below),
- (5) waste management (see also B27 below),
- (6) erosion and sediment control,

- (7) flora and fauna management, and
- (8) heritage management

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

B31 Traffic & Pedestrian Management Plan

Prior to the commencement of any works on the site, a Traffic and Pedestrian Management Plan prepared by a suitably qualified person shall be submitted to and approved by the Works Manager. The Plan shall address, but not be limited to, the following matters:

- (1) ingress and egress of vehicles to the site,
- (2) loading and unloading, including construction zones,
- (3) pedestrian and traffic management methods including detail of how the Upper Entry precinct will remain operational during construction, safe pedestrian access routes and safe bus stops, and

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

B32 Noise and Vibration Management Plan

Prior to the commencement of any works on the site, a Noise and Vibration Management Plan prepared by a suitably qualified person shall be submitted to and approved by the Works Manager. The Plan shall address, but not be limited to, the following matters:

- (1) Identification of the specific activities that will be carried out and associated noise sources,
- (2) Identification of all potentially affected sensitive receivers including residences, schools, and properties containing noise sensitive equipment,
- (3) The construction noise objective specified in the conditions of this consent,
- (4) The construction vibration criteria specified in the conditions of this consent,
- (5) Determination of appropriate noise and vibration objectives for each identified sensitive receiver,
- (6) Noise and vibration monitoring, reporting and response procedures,
- (7) Assessment of potential noise and vibration from the proposed construction activities including noise from construction vehicles and any traffic diversions,
- (8) Description of specific mitigation treatments, management methods and procedures that will be implemented to control noise and vibration during construction
- (9) Justification of any proposed activities outside the construction hours specified in the conditions of this consent.
- (10) Construction timetabling to minimise noise impacts including time and duration restrictions, respite periods, and frequency,
- (11) Procedures for notifying residents of construction activities that are likely to affect their amenity through noise and vibration,
- (12) Contingency plans to be implemented in the event of non-compliances and/or noise complaints,

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

B33 Construction Waste Management Plan

Prior to the commencement of works, the Applicant shall submit to the satisfaction of the Works Manager, a Waste Management Plan prepared by a suitably qualified person with the criteria for demolition, construction and ongoing waste management in Mosman Council's Business Centres Development Control Plan. The Waste Management Plan shall include the following details:

- (1) The reuse and recycling of building materials;
- (2) On-site storage and separation of demolition and construction waste materials;
- (3) Transportation of construction waste off-site; and
- (4) Monitoring and management of demolition and construction waste including records of all waste leaving the site.

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

B34 Removal of Hazardous Materials

All hazardous materials shall be removed from the site and shall be disposed of at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works. Details demonstrating compliance with the relevant legislative requirements, particularly method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the Works Manager prior to the removal of any hazardous materials.

B35 Site Audit

Prior to the commencement of building works, a Site Audit conducted by a suitably qualified person shall be undertaken to ascertain that all identified hazardous materials have been removed from the site and shall be submitted to the Works Manager

B36 Asbestos Materials

Where asbestos materials is removed or disturbed, all work must be carried out by a person licensed under Chapter 10 of the Occupational Health and Safety Regulation, 2001, and outlined in the 'Work Cover's Code of Practice "Your Guide to Working with Asbestos", March 2003.

The removal shall be undertaken in accordance with the requirements of clause 29 of the Protection of the Environmental Operations (Waste) Regulation, 1996, and disposal shall be to a facility recommended by the NSW Environment Protection Authority. Under no circumstances shall any such material be re-used or sold.

Heritage

B37 Heritage Superintendent

The applicant is to appoint a *Heritage Superintendent* to direct works associated with heritage components of the site. The NSW Heritage Office and the Department is to be advised of name and qualifications the nominated Heritage Superintendent 3 days prior to the commencement of works on site.

B38 Archival Record

No works shall commence until an archival record of existing buildings on the site has been prepared and submitted to the Heritage Office. This shall include measured drawings and an archival photographic record before any work commences. This archival record shall be prepared in accordance with the NSW Heritage Council guidelines. The original copy of the archival record shall be deposited with the NSW Heritage Office. Additional copies shall be made and deposited with the NSW State library and the Zoological Parks Board of NSW.

B39 Doors of Upper Entrance Building

New doors inserted into northern façade of the Upper Entrance building shall have a glazing pattern that is compatible with the structure and glass pane size of the original windows. The affected semi-circular window on the east side of the northern faced (former waiting room) must be removed for safe keeping and future reinstatement rather than cut up for the proposed new doorway.

B40 Historical Management Zones

The upper entrance precinct is included in the Historical Management Zones B (areas of original Zoo path layout), C (areas where subsurface evidence of previous European activity has potential to remain) and D (no potential for subsurface archaeology to remain) of the archaeological Zoning Plan. A Section 140 permit under the Heritage Act 1977 will need to be required for these works.

B41 Works on National Park land

No works are to encroach into the National Park without development consent.

Compliance***B42 Compliance Report***

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

PART C—DURING CONSTRUCTION

Site Maintenance

C1 Erosion and Sediment Control

All erosion and sediment control measures, as designed in accordance with Condition B7, 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.

C2 Disposal of Seepage and Stormwater

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

Structural Works

C3 Setting Out of Structures

The buildings shall be set out by a registered surveyor to verify the correct position of each structure in relation to property boundaries and the approved alignment levels. The registered surveyor shall submit a plan to the Works Manager certifying that structural works are in accordance with the approved development application.

Construction Management

C4 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 Department, Council or the Works Manager.

C5 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.

C6 Protection of Trees – Street Trees

All street trees shall be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction, shall be replaced, to the satisfaction of Council.

C7 Protection of Trees – On-site Trees

All trees on the site that are not approved for removal are to be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during construction. Trees that are protected under Mosman Council's Tree Preservation Order 2003 shall be retained except where the Council's prior written consent has been obtained, trees stand within the envelope of approved buildings or within the building alignment of approved permanent paved vehicular access roads and parking areas.

C8 *Dust Control Measures*

Adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood during construction. In particular, the following measures must be adopted:

- (1) 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,
- (2) 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,
- (3) All materials shall be stored or stockpiled at the best locations,
- (4) The surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs,
- (5) 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,
- (6) All equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays,
- (7) Gates shall be closed between vehicle movements and shall be fitted with shade cloth, and
- (8) Cleaning of footpaths and roadways shall be carried out regularly.

C9 *Safety Fencing*

For the duration of works, safety fences and visual barriers (such as hoarding) are to be erected around the perimeter of the site at a minimum height of 1.8 metres. The fences should be constructed prior to the commencement of works and are to remain in place until such time that the works are completed. The safety fence is to be constructed in cyclone wire and erected to prevent the access of unauthorised persons.

Noise and Vibration

C10 *Hours of Work*

The hours of construction, including the delivery of materials to and from the site, shall be restricted as follows:

- (1) between 7:00 am and 6:00 pm, Mondays to Fridays inclusive;
- (2) between 8:00 am and 1:00 pm, Saturdays;
- (3) no work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- (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.

C11 Construction Noise Objective

The construction noise objective for the Project is to manage noise from construction activities (as measured by a L_{A10} (15minute) descriptor) so it does not exceed the background L_{A90} noise level by:

- (1) For the first four weeks of the construction period, not more than 20dB(A);
- (2) From the 5th week to the 26th week (inclusive) of the construction period, not more than 10dB(A); and
- (3) For construction periods greater than 26 weeks, not more than 5dB(A).

Background noise levels are those identified in the Statement of Environmental Effects or otherwise identified in the approved Construction Noise and Vibration Management Plan. The Applicant shall implement all feasible noise mitigation and management measures with the aim of achieving the construction noise objective.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed in accordance with the approved Construction Noise and Vibration Management Plan.

If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the NSW Industrial Noise Policy), 5dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise objective.

C12 Construction Noise Management

The Applicant shall:

- (1) schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved in the Construction Noise and Vibration Management Plan:
 - (a) 9.00 am to 12.00 pm, Monday to Friday;
 - (b) 2.00 pm to 6.00 pm Monday to Friday; and
 - (c) 9.00 am to 1.00 pm, Saturday
- (2) ensure that wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where approved in the Construction Noise and Vibration Management Plan.

C13 Vibration Criteria

Vibration caused by construction at any residence or structure outside the subject site must be limited to:

- (1) for structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
- (2) for human exposure to vibration, the evaluation criteria presented in British Standard BS 6472- Guide to Evaluate Human Exposure to Vibration in Buildings (1Hz to 80 Hz) for low probability of adverse comment.

These limits apply unless otherwise approved in the Construction Noise and Vibration Management Plan.

C14 Vibration Management

Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above.

Heritage

C15 Heritage Superintendent

Works on heritage components of the site shall be superintended by a consultant(s) experienced in the conservation of similar heritage buildings.

C16 Use of Experienced Tradesmen

Works on heritage components of the site shall be carried out by suitably qualified tradesmen with practical experience in the conservation and restoration of similar heritage buildings.

C17 Impact of Below Ground (Sub-surface) Works – Non-Aboriginal Relics

If any archaeological relics are uncovered during the course of the work, then all works shall cease immediately in that area and the NSW Heritage Office contacted. Depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the NSW *Heritage Act 1977* may be required before further works can continue in that area.

C18 Impact of Below Ground (Sub-surface) Works – Aboriginal Relics

If any Aboriginal archaeological relics are exposed during construction works, the Applicant shall immediately notify the National Parks and Wildlife Service and obtain any necessary approvals to continue the work. The Applicant shall comply with any request made by the NPWS to cease work for the purposes of archaeological recording.

C19 Use of existing sandstone

Any sandstone excavated during construction work is to be reused elsewhere within the Taronga Zoo site.

Compliance

C20 Compliance Report

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

PART D—PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

Engineering

D1 Fire Safety Certificate

A Fire Safety Certificate shall be furnished to the Works Manager for all the Essential Fire or Other Safety Measures forming part of this approval prior to issue of any Occupation Certificate. A copy of the Fire Safety certificate must be submitted to the consent authority and Council. .

D2 Annual Fire Safety Statement

An Annual Fire Safety Statement must be provided to Council and the NSW Fire Brigade commencing within 12 months after the date on which the consent authority initial Fire Safety Certificate is received.

D3 Mechanical Ventilation

Following completion, installation and testing of all the mechanical ventilation systems, the Applicant shall provide evidence to the satisfaction of the Works Manager, prior to the issue of any Occupation Certificate, that the installation and performance of the mechanical systems complies with:

- (1) The Building Code of Australia;
- (2) Australian Standard AS1668 and other relevant codes;
- (3) The development consent and any relevant modifications; and,
- (4) Any dispensation granted by the New South Wales Fire Brigade.

D4 Records of Inspections Undertaken

In accordance with 162B of the Environmental Planning and Assessment Regulation, 2000, the Works Manager responsible for the critical stage inspections must make a record of each inspection as soon as practicable after it has been carried out. The Works Manager is to forward a copy of all records to Council.

The records must include details of:

- (1) The Development Consent reference;
- (2) The address of the property at which the inspection was carried out;
- (3) The type of inspection;
- (4) The date on which it was carried out;
- (5) The name of the certifying authority by whom the inspection was carried out; and
- (6) Whether or not the inspection was satisfactory in the opinion of the certifying authority who carried it out.

D4 Structural Inspection Certificate

A Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Works Manager prior to the issue of any Occupation Certificate and/or use of the premises. A copy of the Certificate with an electronic set of final drawings (contact consent authority for specific electronic format) shall be submitted to the consent authority and Council.

D5 *Pavement Arrows*

The proposed right turn bay in Bradleys Head Road opposite the bus/coach drop off and pick up area must provide right turn pavement arrows in accordance with RTA guidelines.

D6 *Kerbside Signposting*

Appropriate kerbside signposting (Bus Zone / No Stopping etc) is to be provided in the bus bay and along Bradleys Head Road opposite the bus bay area.

D7 *Redundant Driveways*

Any redundant driveways along the Bradleys Head Road frontage of the subject site are to be removed and kerb and gutter (Type SA) reinstated to match existing).

D8 *Road Damage*

The cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the subject site as a result of construction works associated with the approved development, is to be met in full by the Applicant.

Second Dilapidation Report

D9 *Post-construction Dilapidation Report*

- (1) The Applicant shall engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of the construction works. This report to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.
- (2) The report is to be submitted to the Works Manager. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Works Manager must:
 - (a) compare the post-construction dilapidation report with the pre-construction dilapidation report required by Condition B9, and
 - (b) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
- (3) A copy of this report is to be forwarded to the Director and Council.

PART E—POST COMMENCEMENT OF USE

Fire Safety

E1 Annual Fire Safety Certification

The owner of the building shall certify to Council every year that the essential services installed in the building for the purpose of fire safety have been inspected and at the time of inspection are capable of operating to the required minimum standard. This purpose of this condition is to ensure that there is adequate safety of persons in the building in the event of fire and for the prevention of fire, the suppression of fire and the prevention of spread of fire.

Traffic and Parking

E2 Loading and Unloading

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

Noise

E3 Hours of Operation – Car Park Structure

The hours of operation of the multi-storey carpark shall be restricted to the following hours:

For standard Zoo operations	8.30am – 6:00 Monday to Sunday.
For Taronga Centre functions	Carpark to be closed by 2:00am
For ANZ Lecture Theatre functions	Carpark to be closed by 1:00am
For Twilight Concert series	Carpark to be closed by 11:30pm
For New Years Eve events	Carpark to be closed by 2:00am

Use of the top level of the car park structure is not permitted for functions or activities held at the Zoo which commence after, or continue after the standard Zoo closing times

E4 Security

The multi-storey car park is to be properly secured when closed so as to prevent unauthorised persons from accessing this structure. Measures should address “Crime Prevention through Environmental Design” Principles.

E5 Paid Parking

Paid parking within the development site is to be in accordance with the RTA's Pay Parking Guidelines

E6 Parking – Fees

On site parking at the Zoo is not to be free at any time without development consent.

E7 Signage

Proposed signage that can be seen from a public road must not have and/or use:

- Flashing lights

- Electronically changeable messages
- Animated display, moving parts or simulated movement
- Complies displays that hold a drivers attention beyond “glance appreciation”
- Displays resembling traffic signs or signals
- A method and level of illumination that distracts or dazzles

E8 Noise Control – Plant and Machinery

Noise associated with the operation of any plant, machinery or other equipment on the site, shall not exceed 5dB(A) above the background noise level when measured at the boundary of the site.

Hazardous Materials

E9 Storage of Hazardous or Toxic Material

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

Public Access

E10 Public Way to be Unobstructed

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

ADVISORY NOTES

AN1 Requirements of Public Authorities for Connection to Services

The Applicant 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 Applicant. Details of compliance with the requirements of any relevant public authorities are to be submitted to the satisfaction of the Works Manager prior to the commencement of any works.

AN2 Compliance with Building Code of Australia

The Applicant is advised to consult with the Works Manager about any modifications needed to comply with the BCA prior to the commencement of any works.

AN3 Structural Capability for Existing Structures

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

AN4 Application for Hoardings and Scaffolding

A separate application may be required under Section 68 of the Local Government Act, 1993, to erect a hoarding or scaffolding in a public place.

AN5 *Use of Mobile Cranes*

The Applicant shall obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to commencement of works.

AN6 *Signposting*

All works / regulatory signposting associated with the proposed development shall be at no cost to the RTA.

AN7 *Movement of Trucks Transporting Waste Material*

The Applicant shall notify the Roads and Traffic Authority'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.

AN8 *Construction Inspections*

Compliance certificate/s shall be issued by the Principal Certifying Authority 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:

- (1) Foundations,
- (2) Footings,
- (3) Damp proof courses and waterproofing installation,
- (4) Structural concrete, including placing of reinforcement and formwork prior to pouring,
- (5) Structural beam and column framing,
- (6) Timber wall and roof framing, and
- (7) Stormwater disposal.

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 consent.

AN9 *Noise Generation*

Any noise generated during the construction of the development shall not exceed limits specified in any relevant noise management policy prepared pursuant to the *Protection of the Environment Operations Act, 1997* or exceed approved noise limits for the site.

AN10 *Noise Generation*

Any noise generated during the construction of the development shall not exceed the limits specified in any relevant noise management policy prepared pursuant to the *Protection of the Environment Operations Act 1997*, or exceed approved noise limits for the site.

AN11 *Stormwater drainage works or effluent systems*

Details of works that involve any of the following:

- (1) water supply, sewerage and stormwater drainage work
- (2) management of waste

as defined by Section 68 of the Local Government Act, 1993 will not be issued until prior separate approval to do so has been granted by Council under Section 68 of that Act. Applications for these works must be submitted on Council's standard Section 68 application form accompanied by the required attachments and the prescribed fees.

AN12 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. The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.

AN13 Public Transport

To further promote public awareness of the benefits of public transport, consideration should also be given to facilitating real time public transport information systems, or improving the existing ones located at Taronga Zoo

AN14 Disability Discrimination Act

This application has been assessed in accordance with the Environmental Planning and Assessment Act 1979. No guarantee is given that the proposal complies with the Disability Discrimination Act 1992. The applicant/owner is responsible to ensure compliance with this and other anti-discrimination legislation.

AN15 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the proponents responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of consent as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.