

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD-10456
Project Name	Taronga Zoo - Upper Australia Precinct
Location	Taronga Zoo, Bradleys Head Road, Mosman (Lot 22 in DP 843294)
Applicant	Taronga Conservation Society Australia
Date of Issue	22/05/2020
General Requirements	<p>The environmental impact statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).</p> <p>Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.</p> <p>Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include:</p> <ul style="list-style-type: none"> - adequate baseline data; - consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and - measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment. <p>The EIS must also be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV; - an estimate of jobs that will be created during the construction and operational phases of the proposed development; and - certification that the information provided is accurate at the date of preparation.
Key issues	<p>The EIS must address the following specific matters:</p> <ol style="list-style-type: none"> 1. Statutory and Strategic Context <ul style="list-style-type: none"> o Address all relevant Environmental Planning Instruments, plans, policies and guidelines, including (but not limited to) those outlined in Appendix A.

2. Built Form, Urban Design and Visual Impacts

- o The EIS must address the height, bulk and scale of the proposed development within the context of the locality. The EIS must also address design quality with specific consideration of the use of colours, materials, finishes, landscaping and public domain.
- o The EIS should consider the visual impact of the proposed development from Sydney Harbour as well as other vantage points on land such as Curraghbeena Point and Cremorne Point (as relevant).

3. Heritage

- o A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the site and adjacent areas and is to identify the following:
 - All heritage items (state and local) within the vicinity of the site including built heritage, landscapes and archaeology, detailed mapping of these items, and assessment of why the items and site(s) are of heritage significance.
 - Compliance with the relevant Conservation Management Plan
 - Compliance with the Taronga Zoo Conservation Strategy, prepared by GML, dated 2002.
 - The impacts of the proposal on heritage item(s) including visual impacts, required BCA and DDA works, new fixtures, fittings and finishes, any modified services.
 - The attempts to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage items.
 - Justification for any changes to the heritage fabric or landscape elements including any options analysis.
- o If the SOHI identifies impact on potential historical archaeology, an historical archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines Archaeological Assessment (1996) and Assessing Significance for Historical Archaeological Sites and Relics (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage program.
- o Address Aboriginal cultural heritage impacts of the proposal, including:
 - identify and describe the Aboriginal cultural heritage values that exist across the whole area that would be affected by the development and

document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).

- consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
- Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. Note that due diligence is not an appropriate assessment, an ACHAR is required.

4. Traffic, Parking and Access

- o Detailed assessment of the existing and future key intersections providing access to the site, supported by appropriate modelling and analysis to include:
 - Whiting Beach Rd at Prince Albert St.
 - Whiting Beach Rd at Bradleys Head Rd.
- o Measures to mitigate impacts of the proposed development on the capacity and operation of existing and future traffic, public transport, pedestrian and bicycle networks, including any required upgrades.
- o Preparation of a Green Travel Plan (GTP) in consultation with TfNSW.
- o Details of existing and proposed vehicle access arrangements, including parking, pedestrian safety management, loading dock and servicing management with consideration of precinct wide shared loading docks and/or remote or off-site loading zone hub facilities, ensuring all servicing and loading occurs on-site and does not rely on kerbside controls.
- o An assessment of pedestrian and cyclist safety with consideration of the relationship with design, access and operation of the development.
- o The preparation of a preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
 - Assessment of cumulative impacts associated with other construction activities (if any).
 - An assessment of road safety at key intersection and critical locations subject to heavy vehicle construction traffic movements and high

pedestrian activity.

- Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process.
 - Details of anticipated peak hour and daily construction vehicle movements to and from the site.
 - Details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle.
 - Details of temporary cycling and pedestrian arrangement during construction.
 - Measures to mitigate the impacts of construction activities on other road users.
- o The parking and traffic impacts of the proposed development should take into account the impacts associated with the construction of the proposed exhibit and associated facilities. This should include the potential overlap of other construction projects being undertaken at the zoo at the same time, if applicable.

5. Noise

- o Identify and provide a quantitative assessment of the noise generating sources and activities during operation together with designs for feasible and reasonable noise impact avoidance and mitigation.
- o Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land, including the scheduling of intra-day 'respite periods' from noise-generating construction activities that may impact on adjoining properties.
- o Construction impacts should include an assessment of on-site and off-site traffic noise impacts and vibration impacts.
- o Noise and vibration impacts must be assessed in accordance with the relevant guidelines identified in **Attachment A**.

6. Ecologically Sustainable Development (ESD)

The EIS shall:

- o Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design, construction and ongoing operation of the development.
- o Demonstrate how the proposed development responds to sustainable building principles and best practice, and improves environmental performance through energy efficient design, technology and opportunities for renewable energy.
- o Provide an integrated water management plan that considers water, wastewater and stormwater, including an assessment of water demand, alternative water supply, proposed end uses of potable and non-potable

water, water sensitive urban design and water conservation measures.

7. Building Code of Australia

- o Prepare a BCA and access report demonstrating compliance with the Building Code of Australia.

8. Water, Drainage and Stormwater

- o Prepare a Stormwater and Drainage Assessment to assess the impacts of the proposal on surface and groundwater hydrology and quality including the waters of Sydney Harbour and Little Sirius Cove.
- o Identify appropriate water quality management measures focussing on the management of the impacts from the proposed works.
- o Prepare a Water Management Plan. This should include stormwater and wastewater management, including any re-use and disposal requirements, details of any proposed alternative water supply, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures.
- o The EIS shall also provide details of the proposed effluent collection, treatment and disposal related to the operation of the exhibit, and any associated implications for the sewerage treatments systems at the site and the Environmental Protection Licence No.1677.

9. Water and Soils

- o Prepare a stormwater management report demonstrating how stormwater would be appropriately managed in accordance with Council requirements.
- o Provide an assessment of impacts of surface water and groundwater, including any impacts on acid sulfate soils, background conditions for any water resource likely to be affected, and impacts on hydrology.
- o Provide a water quality assessment report to address the impacts on water pollution.
- o Provide consideration of water sensitive urban design measures.
- o Assess flooding impacts in accordance with the Floodplain Development Manual.
- o Assess the risks arising from the disturbance and excavation of land and disposal of soil, including disturbance to acid sulfate soils in accordance with the relevant guidelines identified in **Attachment A**.

10. Social & Economic impacts

- o The EIS must include an assessment of the social and economic impacts of the development, including consideration of any increase in demand for community infrastructure and services.

11. Waste Management

- o Prepare a Waste Management Plan to identify, quantify and classify the likely waste streams to be generated during construction and operation of the development and describe the measures to be implemented to minimise, manage, reuse, recycle and safely dispose of this waste with reference to relevant policies and guidelines.
- o Identifying appropriate servicing arrangements (including but not limited to, waste management, loading zones and mechanical plant) for the site.

12. Utilities

- o Detail the existing infrastructure on site and identify possible impacts on any such infrastructure from the proposal.
- o Detail measures to mitigate the impacts of the proposal on any infrastructure items, including proposed relocation/augmentation.
- o Provide details of water supply, consideration of water sensitive urban design and water conservation measures.

13. Construction Impacts

- o Address potential construction impacts during the demolition, site preparation and construction phases of the development, including, traffic, access, noise and vibration, air quality, erosion and sediment control, water quality, waste management and transportation of waste, management and disposal of hazardous materials (including asbestos and lead-based paint), management and disposal of concrete waste and rinse water, and other cumulative environmental impacts. This shall include consideration of potential construction impacts on adjacent exhibits and visitors to the zoo.
- o Air quality impacts must be assessed in accordance with the relevant guidelines identified in **Attachment A**.
- o Contamination must be assessed in accordance with the relevant guidelines identified in **Attachment A**.

14. Biodiversity

- o Assess any biodiversity impacts associated with the proposal in accordance with the requirements of the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report, where required.

15. Landscaping and tree removal

- o The EIS must include a landscaping plan that:
 - Assesses the arboricultural significance of trees potentially affected by the proposal.
 - Clearly identifies the trees to be retained, removed or protected.
 - Nominates landscaping themes and planting species.
 - Considers proposals to mitigate adverse project impacts and in particular canopy loss.

	<p>16. Bushfire and Safety</p> <ul style="list-style-type: none"> o Demonstrate compliance with the relevant provisions of <i>Planning for Bushfire Protection (PBP) 2006</i> and detail any bushfire management and/or mitigation measures. o Prepare an assessment on the emergency planning and management measures required to facilitate an emergency services response and the other obligations imposed by clause 43 of the Work Health and Safety Regulation 2000. <p>17. Staging</p> <ul style="list-style-type: none"> o Provide an outline of any proposed staging of the works, if proposed. <p>18. Developer contributions</p> <ul style="list-style-type: none"> o Outline the scope of developer contributions required.
Plans and Documents	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> - High quality files of maps and figures of the subject site and proposal - A clear and concise summary - Architectural drawings (to a usable scale at A3) - Architectural design statement - Landscape drawings (to a usable scale at A3) - Landscape design statement - Site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings - Site analysis plan - Shadow diagrams - ESD statement - Geotechnical and structural report - Contamination assessment - Schedule of materials and finishes - Cost estimate/QS report.
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, local cultural organisations and affected landowners.</p>

	<p>In particular you must consult with:</p> <ul style="list-style-type: none"> - Mosman Council - Environment Protection Authority - Transport for NSW - NSW Environment, Energy and Science Group - Heritage Council of NSW - NSW Rural Fire Service - NSW Department of Primary Industries; and - NSW Aboriginal Land Council. <p>The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>
<p>Further consultation after 2 years</p>	<p>If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS.</p>
<p>References</p>	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.</p>

ATTACHMENT A

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.shop.nsw.gov.au/index.jsp>

<http://www.australia.gov.au/publications>

<http://www.epa.nsw.gov.au/>

<http://www.environment.nsw.gov.au/>

<http://www.dpi.nsw.gov.au/>

Policies, Plans and Guidelines	
Statutory policies and plans	<ul style="list-style-type: none"> · <i>Environmental Planning and Assessment Act 1979</i> · <i>Exhibited Animals Protection Act 1986</i> · State Environmental Planning Policy (State & Regional Development) 2011 · State Environmental Planning Policy (Infrastructure) 2007 · State Environmental Planning Policy No.55 – Remediation of Land · State Environmental Planning Policy No 64 - Advertising and Signage · State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 · State Environmental Planning Policy (Coastal Management) 2018 · Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 · Draft State Environmental Planning Policy (Environment) · Mosman Local Environmental Plan 2012.
Strategic plans	<ul style="list-style-type: none"> · A Plan for Growing Sydney 2014 · Draft North District Plan 2016 · Zoo 2000 – ‘The View to the Future’ Master Plan · Taronga Zoo Centenary Master Plan 2015 · Mosman Development Control Plan 2012 · North District Plan 2018 · Mosman Local Strategic Planning Statement 2020.
Guidelines	<ul style="list-style-type: none"> · Interim Construction Noise Guideline (DECC, 2009) · NSW Heritage Manual · Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) · Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 · Aboriginal Heritage Management Strategy 2018-2021 · Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW 2010 · Crime Prevention Through Environmental Design Principles · NSW and ACT Government Regional Climate Modelling (NARClIM) · OEH (2015) Urban Green Cover in NSW Technical Guidelines · Heritage Division, Office of Environment and Heritage Guidelines Archaeological Assessment (1996) · Assessing Significance for Historical Archaeological Sites and Relics (2009) · Australian Guidelines for Water Recycling: Managing Health and Environmental Risks

(phase 1) 2006

- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA).
- Managing Land Contamination: Planning Guidelines SEPP 55 –Remediation of Land, (DUAP & EPA, 1998)
- Contaminated Land Guidelines: Consultants Reporting on Contaminated Sites (EPA, 2020)
- Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015)
- Other guidelines made or approved under section 105 of the Contaminated Land Management Act 1997
- Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom)
- Acid Sulfate Soils Assessment Guidelines (DoP, 2008)
- Acid Sulfate Soils Manual (Acid Sulfate Soils Management Advisory Committee, 1998)
- Noise Policy for Industry (EPA, 2017)
- Assessing Vibration: A Technical Guideline (DEC, 2006).