Secretary's Environmental Assessment Requirements

Section 115Y of the *Environmental Planning and Assessment Act 1979*

Application Number	SSI 7734
Proposal Name	Eden Breakwater Wharf Extension
Location	Port of Eden, Weecoon Street, Eden
Applicant	Department of Primary Industry Skill and Regional Development
Date of Issue	26 July 2016

1. General Standard SEARs

Desired Performance Outcome	Requirement	Current Guidelines[1]
1. Environmental Impact Assessment Process The process for assessment of the proposal is transparent, balanced, well focussed and legal.	1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). 2. It is the Proponent's responsibility to determine whether the project needs to be referred to the Commonwealth Department of the Environment for an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Proponent must contact the Commonwealth Department of the Environment immediately if it is determined that an approval is required under the EPBC Act, as supplementary environmental assessment requirements may need to be issued to ensure a streamlined assessment under the Bilateral agreement can be achieved. 3. Where the project requires approval under the EPBC Act and is being assessed under the Bilateral Agreement the EIS should address: (a) Consideration of any Protected Matters that may be impacted by the development where the Commonwealth Minister has determined that the proposal is a Controlled Action. (b) Identification and assessment of those Protected Matters that are likely to be significantly impacted. (c) Details of how significant impacts to Protected Matters have been avoided, mitigated and, if necessary, offset. (d) Consideration of, and reference to, any relevant conservation advices, recovery plans and threat abatement plans. 4. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.	EPBC Act Environment Assessment Process (SEWPAC, 2010)
2. Environmental Impact Statement The project is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to	1. The EIS must include, but not necessarily be limited to, the following: (a) executive summary; (b) a description of the project, including all components and activities (including ancillary components and activities) required to construct and operate it; (c) a statement of the objective(s) of the project; (d) a summary of the strategic need for the project with regard to its critical State significance and relevant State Government policy;	

[1] Guidelines listed are the current list of guidelines that may be applicable to a SSI project. It is the Proponents responsibility to identify, and justify, which guidelines have been applied to a specific project.

Desired Performance Outcome	Requirement	Current Guidelines[1]
avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts.	(e) an analysis of any feasible alternatives to the project.[2]; (f) a description of feasible options within the project.[3]; (g) a description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option. The description must contain sufficient detail to enable an understanding of why the preferred alternative to and options(s) within the project were selected; (h) a concise description of the general biophysical and socio-economic environment that is likely to be impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described; (i) a demonstration of how the project design has been developed to avoid or minimise likely adverse impacts; (j) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome; (k) a statement of the outcome(s) the proponent will achieve for each key issue; (l) measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures will be applied to each impact; (m) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts;[4] (n) an assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed; (o) statutory context of the project as a whole, including: – how the project meets the provisions of the EP&A Act and EP&A Regulation; – a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out; (p) a chapter that synthesises the environmental impact assessment and provides: – a succinct but full description of the project for which approval is sought;	

[2] Alternatives to a project are different projects which would achieve the same project objective(s) including the consequences of not carrying out the project. For example, alternatives to a road project may be a rail project in the same area and alternate routes for the road.

[3] Options within the project are variations of the same project. For example, options within a road project could be design of an intersection; the location or design of a bridge; locations for a vent stack.

[4] Measures proposed to avoid or minimise one impact may cause an unintended impact on another issue. Therefore these impacts and their interactions need to be analysed and resolved where possible.

Desired Performance Outcome	Requirement	Current Guidelines[1]
	– a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these will be resolved in the next stages of the project; – a compilation of the impacts of the project that have not been avoided; – a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction and operation) or offset these impacts; – a compilation of the outcome(s) the proponent will achieve; and – the reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts. (q) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software. 2. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.	

Desired Performance Outcome	Requirement	Current Guidelines[1]
3. Assessment of Key Issues* Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact. * Key issues are nominated by the Proponent in the SSI project application and by the Department in the SEARs. Key issues need to be reviewed throughout the preparation of the EIS to ensure any new key issues that emerge are captured. The key issues identified in this document are not exhaustive but are key issues common to most SSI projects.	1. The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the proposal location and the surrounding environment. The level of assessment must be commensurate to the degree of impact and sufficient to ensure that the Department and other government agencies are able to understand and assess impacts. 2. For each key issue the Proponent must: (a) describe the biophysical and socio-economic environment, as far as it is relevant to that issue; (b) describe the legislative and policy context, as far as it is relevant to the issue; (c) identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), and the cumulative impacts; (d) demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies); (e) detail how likely impacts that have not been avoided through design will be minimised, and the predicted effectiveness of these measures (against performance criteria where relevant); and (f) detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures. 3. Where multiple reasonable and feasible options to avoid or minimise impacts are available, they must be identified and considered and the proposed measure justified taking into account the public interest.	
4. Consultation The project is developed with meaningful and effective engagement during project design and delivery.	1. The project must be informed by consultation, including with relevant government agencies, infrastructure and service providers, special interest groups, affected landowners, businesses and the community. The consultation process must be undertaken in accordance with the current guidelines. 2. The Proponent must document the consultation process, and demonstrate how the project has responded to the inputs received. 3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013)

2. Key Issue Standard SEARs

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
1. Water - Quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	1. The Proponent must: (a) state the ambient NSW Water Quality Objectives (NSW WQO) and environmental values for the receiving waters relevant to the project, including the indicators and associated trigger values or criteria for the identified environmental values; (b) identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point and describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment; (c) identify the rainfall event that the water quality protection measures will be designed to cope with; (d) assess the significance of any identified impacts including consideration of the relevant ambient water quality outcomes; (e) demonstrate how construction and operation of the project will, to the extent that the project can influence, ensure that: – where the NSW WQOs for receiving waters are currently being met they will continue to be protected; and – where the NSW WQOs are not currently being met, activities will work toward their achievement over time; (f) justify, if required, why the WQOs cannot be maintained or achieved over time; (g) demonstrate that all practical measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented; (h) identify sensitive receiving environments (which may include estuarine and marine waters downstream) and develop a strategy to avoid or minimise impacts on these environments;	NSW Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/ Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006) Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ ARMCANZ, 2000) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(i) identify proposed monitoring locations, monitoring frequency and indicators of surface and groundwater quality; (j) consider turbidity curtains around the immediate dredging site that contain the plume strictly within the dredged area to limit the impacts on the surrounding water quality and environs; (k) provide a water quality monitoring plan which also identifies the thresholds which would result in ceasing activities; and (l) Consider the impact of sediment plumes associated with the operation of the facility on water quality (ie proximity of propellers to the substrate).	
2. Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	1. The Proponent must assess terrestrial and aquatic biodiversity impacts in accordance with the current guidelines including the Framework for Biodiversity Assessment (FBA). 2. The Proponent must assess any impacts on biodiversity values not covered by s2.3 of the FBA. 3. The Proponent must assess construction and operational impacts on the following: a. Southern Right Whale; b. Humpback Whale; c. Blue Whale; d. Killer Whale; e. Bottlenose Dolphin; f. Common Dolphin; g. Australian Fur Seal; h. Fairy Penguins; i. Leatherback Turtles; and j. Phytoplankton and provide the information specified in s9.2 of the FBA. 4. The EIS should include methods to ethically remove/deter seals from the end of Breakwater wharf and exclude them from the construction area.	NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013 (DPI, 2013) Threatened Species Survey and Assessment Guidelines NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Aquatic Ecology in Environmental Impact Assessment – EIA Guideline (Marcus Lincoln Smith 2003)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	5. The Proponent must identify whether the project as a whole, or any component of the project, would be classified as a Key Threatening Process (KTP) in accordance with the listings in the *Threatened Species Conservation Act 1997* (TSC Act), *Fisheries Management Act 1994* (FM Act) and *Environmental Protection and Biodiversity Conservation Act 2000* (EPBC Act). 6. The EIS must include consideration of noise and cumulative habitat sterilisation on Marine Fauna. 7. The Proponent must consider the risk of introducing exotic marine species, in particular the translocation or dispersal of introduced European Fan Worm *(Sabella Spallanzanii)* to areas where they do not currently occur. 8. The Proponent must consider the impacts of dredging operations upon nearby aquatic habitats, particularly nearshore rocky reefs and sea grass beds.	
3. Air Quality The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	1. The Proponent must undertake an Air Quality Impact Assessment (AQIA) for construction and operation of the project in accordance with the current guidelines. 2. The Proponent must ensure the AQIA also includes the following: (a) demonstrated ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation (2010)*; and (b) a cumulative local and regional air quality impact assessment.	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DEC, 2005) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2005) Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
4. Noise and Vibration - Amenity Construction noise and vibration (including	1. The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to	Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	sensitive receivers including small businesses, and include consideration of sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise). 2. The Proponent must demonstrate that dredging and pile driving impacts are capable of complying with the current guidelines. OEH recommends that the project adopts the comprehensive mitigation measures detailed in the 'South Australian Underwater Piling Noise Guidelines', including the use of adopting safety zones that include observation and shut-down zones, that are sized based on the likely noise levels produced by the piling activity. 3. The EIS will need to describe the potential impacts of noise plant working within the project footprint, for the following species: a. Southern Right Whale; b. Humpback Whale; c. Blue Whale; d. Killer Whale; e. Bottlenose Dolphin; f. Common Dolphin; g. Australian Fur Seal; h. Fairy Penguins; and i. Leatherback Turtles. 4. The EIS also needs to include a review of whether or not the side scan sonar survey has the potential to affect the marine species listed above.	Assessing Vibration: a technical guideline (DEC, 2006) Interim Construction Noise Guideline (DECCW, 2009) NSW Industrial Noise Policy (EPA, 2000) Construction Noise Strategy (TfNSW, 2012) NSW Road Noise Policy (DECCW, 2011) Environmental Noise Management Manual (RMS 2001) Noise Mitigation Guideline (RMS, 2015) Noise Criteria Guideline (RMS, 2015) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) South Australian Underwater Piling Noise Guidelines
5. Noise and Vibration - Structural Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings and items including Aboriginal places	1. The Proponent must assess construction and operation noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage). 2. The Proponent must demonstrate that blast impacts are capable of	German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
and environmental heritage. Increases in noise emissions and vibration affecting environmental heritage as defined in the *Heritage Act 1977* during operation of the project are effectively managed.	complying with the current guidelines, if blasting is required.	
6. Health and Safety The project avoids or minimises any adverse health impacts arising from the project. The project avoids, to the greatest extent possible, risk to public safety.	1. The Proponent must assess the potential health impacts of the project, in accordance with the current guidelines. 2. The assessment must: (a) describe the current known health status of the affected population; (b) assess health risks associated with exposure to environmental hazards; (c) assess the effect of the project on other relevant determinants of health such as the level of physical activity and access to social infrastructure; (d) assess opportunities for health improvement; (e) assess the distribution of the health risks and benefits; and (f) discuss how, in the broader social and economic context of the project, the project will minimise negative health impacts while maximising the health benefits. 3. The Proponent must assess the likely risks of the project to public safety, paying particular attention to algal blooms.	Environmental Health Risk Assessment, Guidelines for assessing human health risks from environmental hazards, Commonwealth of Australia (enHealth, 2012) Methodology for Valuing the Health Impacts of Changes in Particle Emissions (EPA, 2013) Health Impact Assessment: A practical guide (NSW Health, 2007) Health Impact Assessment Guidelines, Commonwealth Department of Health and Aged Care (enHealth, 2001) SEPP No. 33 - Hazardous and Offensive Development
7. Socio-economic, Land Use and Property The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities.	1. The Proponent must assess social and economic impacts in accordance with the current guidelines. 2. The Proponent must assess impacts from construction and operation on potentially affected properties, businesses, recreational users and land and water users (for example, tourism, recreational and commercial fishers, mussel and oyster farmers), including property	Environmental Planning and Impact Assessment Practice Note: Socio-economic Assessment (RMS, 2013)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	acquisitions/adjustments, access, amenity and relevant statutory rights.	
8. Protected and Sensitive Lands The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands. The project is designed, constructed and operated to avoid or minimise future exposure to coastal hazards and processes.	1. The Proponent must assess the impacts of the project on environmentally sensitive land and processes (and the impact of processes on the project) including, but not limited to: (a) land defined as a "sensitive coastal environment" under the State Environmental Planning Policy No. 71 – Coastal Protection[5]; (b) land to which State Environmental Planning Policy No.14 – Coastal Wetlands applies; (c) land to which State Environmental Planning Policy No.26 – Littoral Rainforest applies; (d) coastal hazards identified in studies completed by local councils or state agencies (including risk mitigation strategies that reduce coastal hazards exposure and funding of such strategies); (e) coastal processes (including disruptions to wave direction, dune stability, sediment movement etc.) associated with adopted risk mitigation actions; (f) safe public access to coastal areas, beaches, headlands and foreshores; (g) protected areas (including land and water) managed by OEH and/or DPI Fisheries under the *National Parks and Wildlife Act 1974* and the *Marine Estate Management Act 2014*;	Planning Circular PS14-003: Coastal hazard notations on section 149 planning certificates (DPE, 2014) Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010) Revocation, Re-categorisation and Road Adjustment Policy (OEH, 2012) Guidelines for controlled activities on waterfront land (DPI 2012)

[5] Reference to State Environmental Planning Policies is not a requirement for compliance with the policies; they are used here to define sensitive land only.

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(h) Key Fish Habitat as mapped and defined in accordance with the *Fisheries Management Act 1994* (FM Act); (i) waterfront land as defined in the *Water Management Act 2000;* (j) land or waters identified as Critical Habitat under the TSC Act, FM Act or EPBC Act; and (k) biobank sites, private conservation lands and other lands identified as offsets.	
9. Water - Hydrology Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	1. The Proponent must describe (and map) the existing hydrological regime (including reliance by users and for ecological purposes) likely to be impacted by the project. 2. The Proponent must prepare a detailed wave and hydrodynamic / sediment transport model capturing the 50 and 100 year ARI events to determine if the dredging could have any longer term beach erosion impacts. A report summarising the modelling, the parameters / data used to build and calibrate the models, and an analysis of what they show in the context of possible impacts on the beaches (including Snug Cove, Cattle Bay and Cocora Beach) should be included in the EIS. 3. The Proponent must assess (and model if appropriate) the impact of the construction and operation of the project and any ancillary facilities (both built elements and discharges) on surface and groundwater hydrology in accordance with the current guidelines, including: (a) natural processes within rivers, wetlands, estuaries, marine waters and floodplains that affect the health of the fluvial, riparian, estuarine or marine system and landscape health (such as modified discharge volumes, durations and velocities), aquatic connectivity and access to habitat for spawning and refuge. 4. The Proponent must identify any requirements for baseline monitoring of hydrological attributes.	Framework for Biodiversity Assessment – Appendix 2 (OEH, 2014) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) NSW Aquifer Interference Policy (DPI, 2012) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Risk assessment Guidelines for Groundwater Dependent Ecosystems (Office of Water, 2012) Coastal Processes and Hazards Definition Study (Bega Valley Shire Council 2015)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
10. Heritage The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	1. The Proponent must identify and assess any direct and/or indirect impacts (including cumulative impacts) to the heritage significance of: (a) Aboriginal places and objects, as defined under the *National Parks and Wildlife Act 1974* and in accordance with the principles and methods of assessment identified in the current guidelines; (b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan; (c) environmental heritage, as defined under the *Heritage Act 1977*; and (d) items listed on the National and World Heritage lists. 2. Where impacts to State or locally significant heritage items are identified, the assessment must: (a) include a statement of heritage impact for all heritage items (including significance assessment); (b) consider impacts to the item of significance caused by, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, curtilage, subsidence and architectural noise treatment (as relevant); (c) outline measures to avoid and minimise those impacts in accordance with the current guidelines; (d) be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria); and (e) where potential archaeological impacts have been identified, develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.	Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) Aboriginal Cultural Heritage Consultation requirements for proponents (DECCW, 2010) Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998) Aboriginal site recording form Aboriginal site impact recording form Aboriginal Heritage Information Management System site registration form Care agreement application form Criteria for the assessment of excavation directors (NSW Heritage Council, 2011) NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994) Assessing Heritage Significance (NSW Heritage Office, 2001) The Australia ICOMOS Burra Charter

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	3. Where archaeological investigations of Aboriginal objects are proposed these must be conducted by a suitably qualified archaeologist, in accordance with section 1.6 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). 4. Where impacts to Aboriginal objects and/or places are proposed, consultation must be undertaken with Aboriginal people in accordance with the current guidelines.	
11. Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	1. The Proponent must verify the risk of acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Risk Map) within, and in the area likely to be impacted by, the project. 2. The Proponent must assess the impact of the project on acid sulfate soils (including impacts of acidic runoff offsite) in accordance with the current guidelines. 3. The Proponent must assess whether the land is likely to be contaminated and identify if remediation of the land is required, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses. Where assessment and/or remediation is required, the Proponent must document how the assessment and/or remediation would be undertaken in accordance with current guidelines. 4. The Proponent must assess whether salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the project area. 5. The Proponent must assess the impacts of the project on soil salinity and how it may affect groundwater resources and hydrology. 6. The Proponent must assess the impacts on soil and land resources (including erosion risk or hazard). Particular attention must be given to	Acid Sulfate Soils Assessment Guidelines (DoP, 2008) Acid Sulfate Soils Manual (Acid Sulfate Soils Management Advisory Committee, 1998) Managing Land Contamination: Planning Guidelines SEPP 55 –Remediation of Land, (DUAP & EPA, 1998) Guidelines for Consultants Reporting on Contaminated Sites (OEH, reprinted 2011) Guidelines for the NSW Site Auditor Scheme (DEC, 2006) Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015) Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets (http://www.environment.nsw.gov.au/salinity/solutions/urban.htm) which includes *Site Investigations for Urban* Salinity (DLWC, 2002) Landslide risk management guidelines presented in Australian Geomechanics Society (2007) Soil and Landscape Issues in Environmental Impact

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	soil erosion and sediment transport consistent with the practices and principles in the current guidelines.	Assessment (DLWC 2000) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) Other guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997*
12. Transport and Traffic Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	1. The Proponent must assess construction transport and traffic (maritime, vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to: (a) a considered approach to route identification and scheduling of transport movements; (b) the number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements); (c) construction worker parking; (d) the nature of existing traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users and parking arrangements); (e) access constraints and impacts on public transport, pedestrians and cyclists; and (f) the need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project. 2. The Proponent must assess (and model) the operational transport impacts (including maritime) of the project, including: (a) forecast travel demand and traffic volumes for the project and the surrounding road, cycle and public transport network; (b) travel time analysis;	Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2007) Guide to Traffic Generating Developments Version 2.2 (RTA, 2002) Cycling Aspects of Austroads Guides (Austroads, 2014) NSW Bicycle Guidelines v 1.2 (RTA, 2005) Planning Guidelines for Walking and Cycling (DIPNR, 2004) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013)

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	(c) performance of key interchanges and intersections by undertaking a level of service analysis at key locations; (d) wider transport interactions (local and regional roads, maritime navigation, cycling, public and freight transport); (e) impacts on cyclists and pedestrian access and safety; and (f) opportunities to integrate cycling and pedestrian elements with surrounding networks and in the project.	
13. Visual Amenity The project minimises adverse impacts on the visual amenity of the built and natural environment (including public open space) and capitalises on opportunities to improve visual amenity.	1. The Proponent must assess the visual impact of the project and any ancillary infrastructure on: (a) views and vistas; (b) streetscapes, key sites and buildings; (c) heritage items including Aboriginal places and environmental heritage; and (d) the local community. 2. The Proponent must provide artist impressions and perspective drawings of the project to illustrate how the project has responded to the visual impact through urban design and landscaping.	AS4282-1997 Control of the obtrusive effects of outdoor lighting Beyond the Pavement: urban design policy, procedures and design principles (RMS, 2014) Bridge Aesthetics: Design guidelines to improve the appearance of bridges in NSW (RMS, 2012) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Technical guideline for Urban Green Cover in NSW (OEH, 2015)
14. Waste and Chemicals The project appropriately manages liquid and non-liquid waste generated, handled, processed or disposed of on-site.	1. The Proponent must assess the potential construction and operational impacts of both liquid and non-liquid waste generated, and how it would be handled, processed or disposed of on or off-site.	*Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (NSW EPA 1999).
15. Climate Change Risk The project is designed, constructed and operated to be resilient to the future impacts	1. The Proponent must assess the risk and vulnerability of the project to climate change in accordance with the current guidelines. 2. The Proponent must quantify specific climate change risks with reference to the NSW Government's climate projections at 10km resolution (or	Australian Government's Climate Change Impacts and Risk Management – A Guide for Business and Government (2006) AS/NZS 3100:2009 Risk Management – Principles and

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of climate change.	lesser resolution if 10km projections are not available) and incorporate specific adaptation actions in the design.	Guidelines Technical Guide for Climate Change Adaptation for the State Road Network (RMS, in draft)
16. Environmentally Sensitive Design The project is designed, constructed and operated taking into account Environmentally Sensitive Design principles.	1. The Proponent must demonstrate how the design, construction and operation of the project incorporates objectives and mechanisms for achieving Environmentally Sensitive Design.	