



## Secretary's Environmental Assessment Requirements

<b>Application Number</b>	SSI-19238057
<b>Project</b>	Sydney Metro West
<b>Proposal</b>	Sydney Metro West – major civil construction between The Bays and Sydney CBD
<b>Location</b>	The Bays Precinct to Sydney CBD
<b>Proponent</b>	Sydney Metro
<b>Date of Issue</b>	7 July 2021

## 1. General Standard SEARs

Desired Performance Outcome	Requirement	Current Guidelines (as relevant)
<p><b>1. Environmental Impact Assessment Process</b></p> <p>The process for assessment of the proposal is transparent, balanced, well focussed and legal.</p>	<ol style="list-style-type: none"> <li>1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation).</li> <li>2. It is the Proponent’s responsibility to determine whether the project needs to be referred to the Commonwealth Department of Agriculture, Water and the Environment (DAWE) for an approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). If DAWE has determined that an approval is required under the EPBC Act, supplementary environmental assessment requirements may need to be issued to ensure a streamlined assessment under an Accredited Assessment can be achieved.</li> <li>3. Where the project requires approval under the EPBC Act and is being assessed under the Bilateral Agreement the EIS should address:               <ol style="list-style-type: none"> <li>(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.</li> <li>(b) Identification and assessment of those Protected Matters that are likely to be significantly impacted.</li> <li>(c) Details of how significant impacts to Protected Matters have been avoided, mitigated and, if necessary, offset.</li> <li>(d) Consideration of, and reference to, any relevant conservation advices, recovery plans and threat abatement plans.</li> </ol> </li> <li>4. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.</li> </ol>	<p><a href="#">EPBC Act Environment Assessment Process</a> (SEWPAC, 2010)</p>
<p><b>2. Environmental Impact Statement</b></p> <p>The proposal is described in sufficient detail to enable clear understanding that</p>	<ol style="list-style-type: none"> <li>1. The EIS must include, but not necessarily be limited to, the following:               <ol style="list-style-type: none"> <li>(a) executive summary;</li> </ol> </li> </ol>	

**Desired Performance Outcome**

the proposal has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the proposal, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts.

- (b) a description of the Sydney Metro West scheme and the staged approach to obtaining approval for the Sydney Metro West scheme;
- (c) a description of the proposal, including key components and activities (including ancillary components and activities) required to construct it including-
  - station locations, the proposed route (including use of plans) and location of stub tunnels for future extensions
  - scope of works to construct the proposal, including key activities, description of methodologies, working hours, indicative plant and equipment to be used
  - timing of key construction activities
  - acquisition of privately owned, council and Crown land
- (d) a description of feasible options within the proposal;
- (e) a description of how alternatives to and options within the proposal 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 proposal were selected;
- (f) a concise description of different construction methods that were analysed and preferred methods;
- (g) a concise description of the general biophysical and socio-economic environment that is likely to be impacted by the proposal (including offsite impacts). Elements of the environment that are not likely

Desired Performance Outcome	Requirement
	<p>to be affected by the proposal do not need to be described;</p> <p>(h) a demonstration of how the proposal design has been developed to avoid or minimise likely adverse impacts;</p> <p>(i) the identification and assessment of key issues as provided in the ‘Assessment of Key Issues’ performance outcome;</p> <p>(j) a statement of and the quantification of outcomes and performance criteria the proposal will achieve for each key issue;</p> <p>(k) 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;</p> <p>(l) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts;</p> <p>(m) an assessment of the relevant cumulative impacts of the proposal taking into account other State Significant projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed (such as WestConnex, Western Harbour Tunnel, Sydney Metro West (Major civil construction between Westmead and The Bays, SSI-10038), and approved construction in the relevant precincts);</p> <p>(n) statutory context of the proposal, including:</p> <ul style="list-style-type: none"> <li>- how the proposal meets the provisions of the EP&amp;A Act and EP&amp;A Regulation;</li> <li>- a list of any approvals that must be obtained under any other Act or law before the proposal</li> </ul>

Desired Performance Outcome	Requirement
	<p>may lawfully be carried out;</p> <ul style="list-style-type: none"> <li>- identification of the environmental planning instruments and government strategic plans and policies relevant to the proposal and land subject to the proposal (including State environmental planning policies, land use and infrastructure strategies and local strategic planning statements);</li> </ul> <p>(o) a chapter that synthesises the environmental impact assessment and provides:</p> <ul style="list-style-type: none"> <li>- a succinct but full description of the proposal for which approval is sought;</li> <li>- a description of any uncertainties that still exist around the construction footprint, construction methodologies and how these will be resolved in the following project application(s);</li> <li>- a compilation of the impacts of the proposal that have not been avoided;</li> <li>- a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction or during latter stage(s) of the proposal) or offset these impacts;</li> <li>- a compilation of the outcome(s) and criteria the proposal will achieve and how these will be monitored; and</li> <li>- the reasons justifying carrying out the proposal as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts;</li> </ul>

Desired Performance Outcome	Requirement
	<p>(p) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software.</p> <p>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.</p> <p>3. The EIS must include a single consolidated crosscheck table in an appendix which identifies where SEARs are addressed in the EIS and technical papers.</p>
<p><b>3. Assessment of Key Issues*</b></p> <p>Key issue impacts are assessed objectively and thoroughly to provide confidence that the proposal will be constructed within acceptable levels of impact.</p> <p>* Key issues are nominated by the Proponent in the CSSI 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 CSSI projects.</p>	<p>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.</p> <p>2. For each key issue the Proponent must:</p> <ul style="list-style-type: none"> <li>(a) describe the biophysical and socio-economic environment, as far as it is relevant to that issue, including substantiated baseline data that is reflective of current guidelines where relevant;</li> <li>(b) describe the legislative and policy context, as far as it is relevant to the issue;</li> <li>(c) identify, describe, quantify (if possible) and assess (including modelling as relevant) the impacts associated with the issue, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), the impacts of concurrent activities within the proposal, cumulative impacts (parallel and sequential) with other projects and address and undertake the requirements specified in section 5;</li> <li>(d) demonstrate how potential impacts have been avoided (through design, or construction methodologies);</li> <li>(e) detail how likely impacts that have not been avoided through design will be minimised, and the</li> </ul>

Desired Performance Outcome	Requirement	Current Guidelines (as relevant)
	<p>predicted effectiveness of these measures (against performance criteria where relevant);</p> <p>(f) detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures; and</p> <p>(g) measures to monitor the avoidance, minimisation and offsetting of impacts to ensure quantified outcomes and criteria are met.</p> <p>3. Where multiple 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.</p> <p>4. The assessment of each key issue must consider (as relevant) the listed guidelines.</p>	
<p>4.</p> <p><b>Consultation</b></p> <p>The proposal is developed with meaningful and effective engagement.</p>	<p>1. The proposal must be informed by consultation, including with relevant local, State and Commonwealth government agencies, infrastructure and service providers, special interest groups, affected landowners, businesses and the community with specific consultation for each station precinct.</p> <p>2. The consultation process must be documented and include information on how the proposal has responded to the inputs received.</p> <p>3. The timing and type of community consultation undertaken or proposed must be described, including the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.</p>	

## 5. Key Issue Standard SEARs (in alphabetical order)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
<p><b>1. Business</b></p> <p>The proposal minimises impacts to business function and property including maintenance of appropriate access to businesses.</p>	<p>1. Impacts to potentially affected businesses, including property acquisitions/adjustments, access, amenity and relevant statutory rights. Identify management measures to minimise impacts to businesses as a result of the proposal.</p>	
<p><b>2. Design, Place and Movement</b></p> <p>The proposal minimises adverse impacts on accessibility and connectivity for communities and public spaces.</p> <p>The proposal contributes to greener places by facilitating the enhancement and provision of green infrastructure.</p> <p>The proposal minimises adverse impacts on the visual amenity of the built and natural environment (including public open space).</p>	<p>1. Visual, access, connectivity and related amenity impacts of construction including on streetscapes, key sites and buildings (including existing landscape works, greenspace and tree canopy).</p> <p>2. Open space and tree impacts, including:</p> <p>(a) estimating the number of trees to be cleared that will not be covered by a biodiversity offset strategy; and</p> <p>(b) for areas where trees are to be cleared, investigate means to increase the number of trees and canopy within proximity of the impacted areas by providing additional planting before construction.</p>	<p><a href="#">Better Placed – An integrated design policy for built environment of New South Wales (Government Architect NSW, 2017)</a></p> <p><a href="#">Designing with Country (Government Architect NSW, 2020)</a></p> <p><a href="#">Connecting with Country (Government Architect NSW, 2020)</a></p> <p><a href="#">Aligning Movement and Place – Outline for understanding places in relation to movement infrastructure (Government Architect of NSW, 2019)</a></p> <p><a href="#">Practitioner's Guide to Movement and Place (NSW Government 2020)</a></p> <p><a href="#">Healthy Urban Development Checklist (NSW Health,</a></p>



Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
		<p><a href="#">2009</a>), section 10</p> <p><a href="#">Creating Walkable Neighbourhoods</a> (Active Living NSW, 2018)</p> <p><a href="#">Sydney Green Grid – Spatial Framework and Project Opportunities</a> (Tyrrell Studio and Office of the Government Architect 2017)</p> <p><a href="#">Greener Places – Establishing an urban Green Infrastructure policy for New South Wales</a> (NSW Government, 2020)</p> <p>AS4282-1997 Control of the obtrusive effects of outdoor lighting</p> <p>AS4970-2009 Protection of trees on development sites</p> <p><a href="#">Walking Space Guide: Towards Pedestrian Safety and Comfort</a> (TfNSW, 2020)</p> <p>Road User Space Allocation Policy (TfNSW, 2021)</p> <p>Cycleway design toolbox: Designing for cycling and micromobility (TfNSW, 2020)</p> <p><a href="#">Sydney Streets design code</a> (City of Sydney, 2013)</p>
<p><b>3. Flooding</b></p> <p>The proposal minimises adverse impacts on existing flooding characteristics.</p> <p>Construction of the proposal avoids or</p>	<p><b>1. Flood management objectives</b> must be clearly identified and justified to address the characteristics of the environment and relevant legislative, management and guidance requirements.</p> <p><b>2. Flood behaviour during construction</b> including:</p>	<p>NSW Government's Floodplain Development Manual (Department of Natural Resources, 2005)</p> <p><a href="#">PS 07-003 New guideline and changes to section 117 direction and EP&amp;A Regulation on flood prone land</a></p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
<p>minimises the risk of, and adverse impacts from, infrastructure flooding or flooding hazards.</p>	<ul style="list-style-type: none"> <li>(a) potential flood affectation of other properties, assets and infrastructure;</li> <li>(b) consistency (or inconsistency) with applicable Council floodplain risk management plans;</li> <li>(c) compatibility with the flood hazard of the land; and</li> <li>(d) compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land.</li> </ul> <p>3. Identify measures to achieve the flood management objectives.</p>	<p><a href="#">Practical Consideration of Climate Change - Flood risk management guideline (DECC, 2007)</a></p>
<p><b>4. Heritage</b></p> <p>The design and construction of the proposal, 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.</p> <p>The design and construction of the proposal avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.</p>	<ul style="list-style-type: none"> <li>1. Direct and/or indirect impacts to the <b>heritage significance</b> of: <ul style="list-style-type: none"> <li>(a) Aboriginal places, objects and cultural heritage values, as defined under the <i>National Parks and Wildlife Act 1974</i> and in accordance with the principles and methods of assessment identified in the current guidelines;</li> <li>(b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan;</li> <li>(c) environmental heritage, as defined under the <i>Heritage Act 1977</i>;</li> <li>(d) historical and/or maritime archaeology (including reclaimed land and foreshore areas);</li> <li>(e) items uncovered during investigation for the proposal that are found to have heritage significance;</li> <li>(f) items listed on the State, National and World Heritage lists; and</li> <li>(g) heritage items and conservation areas identified in environmental planning instruments applicable to the proposal area.</li> </ul> </li> <li>2. The historical and/or maritime archaeology impacts (including reclaimed land and foreshore areas) should be addressed through an</li> </ul>	<p><i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW</i> (OEH, 2011)</p> <p><i>Aboriginal Cultural Heritage Consultation requirements for proponents</i> (DECCW, 2010)</p> <p><i>Due diligence code of practice for archaeological investigation of Aboriginal objects in NSW</i> (DECCW, 2010)</p> <p>NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998)</p> <p><a href="#">Aboriginal site recording form</a></p> <p><a href="#">Aboriginal site impact recording form</a></p> <p><a href="#">Aboriginal Heritage Information Management System site registration form</a></p> <p><a href="#">Care agreement application form</a></p> <p><a href="#">Criteria for assessing Excavation Directors (NSW)</a></p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>archaeological assessment by suitability qualified archaeologist.</p> <p>3. Where impacts to State or locally significant heritage items are identified, the assessment must:</p> <ul style="list-style-type: none"> <li>(a) include a heritage significance assessment for all heritage items, a statement of heritage impact for all heritage items and a historical archaeological assessment;</li> <li>(b) consider conservation policies of relevant conservation management plans;</li> <li>(c) 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, drainage infrastructure, contamination remediation and site compounds (as relevant) and whether these are permanent or temporary impacts or structures</li> <li>(d) outline measures to avoid and minimise those impacts during construction in accordance with the current guidelines; and</li> <li>(e) be undertaken by a suitably qualified heritage consultant(s) and/or historical archaeologist (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council’s Excavation Director criteria).</li> </ul> <p>4. Where archaeological investigations are proposed these must be conducted by a suitably qualified archaeologist, in accordance with section 1.6 of the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW 2010).</p>	<p><a href="#">Heritage Council, 2019</a></p> <p>NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994)</p> <p>Assessing Heritage Significance (NSW Heritage Office, 2001)</p> <p>The Australia ICOMOS Burra Charter 2013</p> <p>Assessing Significance for Historical Archaeological Sites and ‘Relics’ (Heritage Branch, Department of Planning, 2009)</p> <p>Archaeological Assessment (Heritage Office and Department of Urban Affairs and Planning, 1996)</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>5. Where impacts to Aboriginal objects and/or places are proposed, consultation must be undertaken with Aboriginal people in accordance with the current guidelines.</p>	
<p><b>5. Noise and Vibration</b></p> <p>Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity, and adverse impacts on the structural integrity of buildings and items including Aboriginal places and environmental heritage.</p>	<ol style="list-style-type: none"> <li>1. <b>Construction noise and vibration</b> impacts in accordance with relevant NSW noise and vibration guidelines.</li> <li>2. The assessment must clearly differentiate between tunnel activities, and the tunnel support or ancillary activities in the assessment and describe their impacts and proposed hours of work.</li> <li>3. The assessment of <b>construction noise and vibration</b> must address:               <ol style="list-style-type: none"> <li>(a) the nature of construction activities and related noise characteristics using typical and worst-case scenarios;</li> <li>(b) the intensity and duration of noise (both air and ground borne) and vibration impacts. This must include consideration of the construction program, high noise generating activities and extended construction impacts associated with ancillary facilities (and the like) and construction fatigue;</li> <li>(c) the identification and nature of receivers, existing and proposed, during the construction period;</li> <li>(d) the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage).</li> <li>(e) the nature of the impact and the sensitivity of receivers and level of impact including for out of hours work;</li> <li>(f) the need to balance timely conclusion of noise and vibration-generating works with periods of receiver respite, and other factors that may influence the timing and duration of</li> </ol> </li> </ol>	<p>Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)</p> <p>Assessing Vibration: a technical guideline (DEC, 2006)</p> <p>Interim Construction Noise Guideline (DECC, 2009)</p> <p><a href="#">Noise Policy for Industry (EPA, 2017)</a></p> <p>Construction Noise Strategy (TfNSW, 2012)</p> <p>Sydney Metro Construction Noise and Vibration Standard (2021)</p> <p><a href="#">Rail Infrastructure Noise Guideline (EPA, 2013)</a></p> <p><a href="#">NSW Road Noise Policy (DECCW, 2011)</a></p> <p><a href="#">Environmental Noise Management Manual (RMS 2001)</a></p> <p>Development Near Rail Corridors and Busy Roads – Interim guideline (DoP, 2008)</p> <p>Noise Mitigation Guideline (RMS, 2015)</p> <p>Noise Criteria Guideline (RMS, 2015) Transport for NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017)</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>construction activities (such as traffic management);</p> <p>(g) a statement of the proposed hours of construction. Justification must be provided where these are not consistent with standard construction hours stated in the <i>Interim Construction Noise Guideline</i>;</p> <p>(h) noise impacts of out-of-hours works (including utility works and works associated with the proposal including those undertaken under another assessment pathway), possible locations where out-of-hours works would be undertaken, the activities that would be undertaken, the estimated duration of those activities, the relevant stage the activities are proposed and justification for these activities;</p> <p>(i) assessment of construction traffic noise on public roads must include consideration of gradient, construction vehicle type, acceleration and deceleration and potential annoyance;</p> <p>(j) sleep disturbance (including the number of noise-awakening events);</p> <p>(k) a cumulative noise and vibration assessment inclusive of impacts from the proposal, including concurrent construction activities within the proposal, the Sydney Metro West scheme and the construction of other relevant development in the vicinity of the proposal when considering mitigation;</p> <p>(l) qualitative assessment of the predicted effectiveness of management and mitigation measures to manage identified, including impacts as identified in (h); and</p> <p>(m) any potential residual noise and vibration impacts following application of mitigation measures; and</p> <p>(n) a description of how receiver feedback received during the preparation of the EIS has been taken into account (and would be taken into account post exhibition of the EIS) in the design of</p>	<p>German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>mitigation measures, including any tailored mitigation, management and communication strategies for sensitive receivers.</p> <p>4. The process for community engagement should be included or referenced in the noise and vibration assessment as part of the mitigation strategy and assessment.</p> <p>5. If <b>blasting</b> is required, demonstration that blast impacts can comply with current guidelines.</p>	
<p><b>6. Social</b></p> <p>The proposal provides socially sustainable outcomes.</p> <p>The proposal maximises the social and economic welfare of the community.</p> <p>The proposal delivers better development outcomes by minimising negative social impacts and enhancing positive social impacts on affected communities.</p>	<p>1. Potential <b>social impacts of the proposal</b>, in accordance with the DPIE Social Impact Assessment Guideline, including but not limited to:</p> <p>(a) Consideration of the principles of Section 1.2 of the Guideline;</p> <p>(b) Consideration of Satisfying the Review Questions in Appendix C of the Guideline;</p> <p>(c) Considering the social impacts that the project may have on people's:</p> <ul style="list-style-type: none"> <li>- way of life;</li> <li>- community;</li> <li>- access to and use of infrastructure, services, and facilities;</li> <li>- culture;</li> <li>- health and wellbeing;</li> <li>- surroundings;</li> <li>- livelihoods; and</li> <li>- decision-making systems.</li> </ul> <p>(d) the distributive equity of impacts and benefits, i.e. the ways in which different social groups, may experience the project, paying particular attention to vulnerable groups;</p>	<p>Social Impact Assessment Guideline, State significant projects (DPIE, 2021)</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>(e) assessing positive, negative, and cumulative social impacts.</p> <p>2. Identify management, mitigation and monitoring measures to minimise negative social impacts and identify potential opportunities for positive social outcomes.</p>	
<p><b>7. Soils and Contamination</b></p> <p>The environmental values of land, including soils, subsoils and landforms, are protected.</p> <p>Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.</p>	<ol style="list-style-type: none"> <li>1. The likelihood of encountering <b>acid sulfate soils</b> (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Risk Map) (including impacts of acidic runoff offsite) within, and in the area in accordance with the current guidelines and measures to manage where relevant.</li> <li>2. The likelihood of <b>land contamination</b> 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 EIS must document how the assessment and/or remediation would be undertaken in accordance with current guidelines.</li> <li>3. Identify whether soil salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the proposal's area, and assess the impacts of the proposal on soil salinity and how it may affect groundwater resources and hydrology.</li> </ol>	<p>Acid Sulfate Soils Assessment Guidelines (DoP, 2008)</p> <p>Acid Sulfate Soils Manual (Acid Sulfate Soils Management Advisory Committee, 1998)</p> <p>Managing Land Contamination: Planning Guidelines SEPP 55 –Remediation of Land, (DUAP &amp; EPA, 1998)</p> <p>Contaminated Land Guidelines: Consultants Reporting on Contaminated Sites (EPA, 2020)</p> <p>Guidelines for the NSW Site Auditor Scheme (3<sup>rd</sup> Edition) (EPA, 2017)</p> <p>Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015)</p> <p>Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets (<a href="http://www.environment.nsw.gov.au/salinity/solutions/urban.htm">http://www.environment.nsw.gov.au/salinity/solutions/urban.htm</a>) which includes <i>Site Investigations for Urban Salinity</i> (DLWC, 2002)</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
		<p>Landslide risk management guidelines presented in Australian Geomechanics Society (2007)</p> <p>Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)</p> <p>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)</p> <p>Other guidelines made or approved under section 105 of the <i>Contaminated Land Management Act 1997</i></p>
<p><b>8. Spoil</b></p> <p>Spoil generated during the construction is effectively stored, handled, treated (if necessary), reused, and/or disposed of lawfully and in a manner that protects environmental values.</p>	<p>1. Spoil generation and reuse, including:</p> <ul style="list-style-type: none"> <li>(a) type and quantity;</li> <li>(b) onsite storage (including capacity to minimise amenity impacts);</li> <li>(c) reuse potential and disposal sites;</li> <li>(d) transport and handling options (including traffic, distance, road safety and related amenity and environmental impacts); and</li> <li>(e) measures to prevent illegal dumping.</li> </ul>	
<p><b>9. Transport and Traffic</b></p> <p>Network connectivity, safety and efficiency of the transport system in the vicinity of the</p>	<p>1. <b>Construction transport and traffic (vehicle, pedestrian and cyclists) impacts</b>, including, but not necessarily limited to:</p> <ul style="list-style-type: none"> <li>(a) a considered approach to route identification and scheduling of</li> </ul>	<p>Guide to Traffic Management – Part 3 Transport Study and Analysis Methods (Austroads, 2020)</p> <p>Guide to Traffic Generating Developments Version 2.2</p>



Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
<p>proposal are managed to minimise impacts.</p> <p>The safety of transport system customers is maintained, with a focus on vulnerable road users (people walking and cycling).</p> <p>Access and connectivity for people walking and cycling or using public transport is maintained or improved relative to the existing situation.</p> <p>Impacts on road network capacity and the level of service are acceptable and effectively managed.</p> <p>Works are compatible with existing infrastructure and future transport corridors.</p>	<p>construction vehicle movements;</p> <p>(b) the indicative number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements) across the construction schedule;</p> <p>(c) construction worker parking and management;</p> <p>(d) the nature of current traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users (such as emergency vehicles and school buses) and parking arrangements);</p> <p>(e) access constraints and impacts on public transport (infrastructure and services), pedestrians and cyclists and property; and</p> <p>(f) the need to close, divert or otherwise reconfigure elements of the road, pedestrian and cycle network associated with construction of the proposal and the duration of these changes; and</p> <p>(g) impacts to on-street parking, loading, servicing and pick up, including to residents and businesses.</p>	<p>(RTA, 2002)</p> <p>Cycling Aspects of Austroads Guides (Austroads, 2014)</p> <p><a href="#">NSW Bicycle Guidelines v 1.2 (RTA, 2005)</a></p> <p>Planning Guidelines for Walking and Cycling (DIPNR, 2004)</p> <p><a href="#">Transport for NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017)</a></p>
<p><b>10. Water - Hydrology</b></p> <p>Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised.</p> <p>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</p>	<ol style="list-style-type: none"> <li>Describe (and map) the <b>existing hydrological regime</b> for any surface and groundwater resource (including reliance by users and for ecological purposes) likely to be impacted by the proposal, including stream orders, as per the Framework for Biodiversity Assessment (FBA).</li> <li>Provide a <b>water balance</b> for ground and surface water including the proposed intake and discharge locations, volume, frequency and duration.</li> <li><b>Surface and groundwater hydrology impacts</b> of the proposal in accordance with the current guidelines, including:</li> </ol>	<p>Framework for Biodiversity Assessment – Appendix 2 (OEH, 2014)</p> <p>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)</p> <p>NSW Aquifer Interference Policy (DPI, 2012)</p> <p><a href="#">Transport for NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017)</a></p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
<p>are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.</p>	<ul style="list-style-type: none"> <li>(a) impacts from any permanent and temporary interruption of groundwater flow, including the extent of drawdown, barriers to flows, implications for groundwater dependent surface flows, groundwater users and the potential for settlement; and</li> <li>(b) minimising the effects of proposed stormwater and wastewater management during construction on natural hydrological attributes (such as volumes, flow rates, management methods and re-use options) and on the conveyance capacity of existing stormwater systems where discharges are proposed through such systems.</li> </ul> <p>4. Identify any requirements for <b>baseline monitoring</b> of hydrological attributes.</p>	<p>Risk assessment Guidelines for Groundwater Dependent Ecosystems (Office of Water, 2012)</p> <p>Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018)</p> <p>Relevant Water Sharing Plans <a href="https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans">https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans</a></p>
<p><b>11. Water – Quality</b></p> <p>The project is designed, constructed and operated to protect the NSW Water Quality Objectives (WQOs) 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).</p>	<p>1. Surface and groundwater quality impacts including:</p> <ul style="list-style-type: none"> <li>(a) identifying and estimating the discharge water quality 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;</li> <li>(b) identifying the rainfall event that the water quality protection measures will be designed to comply with; and</li> <li>(c) assessing the significance of identified impacts including consideration of the relevant ambient water quality outcomes.</li> </ul> <p>2. Demonstrating how the project will ensure that:</p> <ul style="list-style-type: none"> <li>(a) where the NSW WQOs for receiving waters are currently being met, they will continue to be protected; and</li> <li>(b) where the NSW WQOs are not currently being met, activities will</li> </ul>	<p>NSW Water Quality and River Flow Objectives at <a href="http://www.environment.nsw.gov.au/ieo/">http://www.environment.nsw.gov.au/ieo/</a></p> <p>Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006)</p> <p>Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018)</p> <p>Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008)</p> <p>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)</p>

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines (as relevant)
	<p>work toward their enhancement over time; and</p> <p>(c) justify, if required, why the WQOs cannot be maintained or achieved over time.</p>	
<p><b>12. Other</b></p>	<p>1. An assessment of the following issues must be undertaken in accordance with the commitments in Section 6 of <i>Sydney Metro West Scoping Report – Major civil construction work between The Bays and Sydney CBD</i> (Sydney Metro, May 2021):</p> <ul style="list-style-type: none"> <li>(a) Air quality;</li> <li>(b) Biodiversity;</li> <li>(c) Climate change adaption;</li> <li>(d) Greenhouse gas and energy;</li> <li>(e) Hazard and risk;</li> <li>(f) Waste management and resource use; and</li> <li>(g) Cumulative impacts.</li> </ul>	