



## Planning Secretary's Environmental Assessment Requirements

### Section 5.16 of the *Environmental Planning and Assessment Act 1979*

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| Application Number | SSI-10038                                    |
| Proposal           | Sydney Metro West – Concept and Stage 1      |
| Location           | Westmead to The Bays Precinct and Sydney CBD |
| Proponent          | Sydney Metro                                 |
| Date of Issue      | 11 December 2019                             |

#### Definitions

**Concept** means the Sydney Metro West concept as defined in the Scoping Report.

**Stage 1** means stage 1 project application as defined in the Scoping Report – major civil construction between Westmead and The Bays Precinct, including service facilities.

**Proposal** refers to both the Concept and Stage 1.

## 1. General SEARs

| Desired Performance Outcome   | Requirement   | Current Guidelines  |
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| <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 (EIS) must be prepared in accordance with Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the EP&amp;A Regulation).</li> <li>2. It is the Proponent's responsibility to determine whether the Proposal needs to be referred to the Commonwealth Department of the Environment and Energy (DoEE) for an approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). If DoEE 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 Proposal 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; and</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 Proposal are met.</li> </ol> | <p><a href="#">EPBC Act Environment Assessment Process</a><br/>(SEWPAC, 2010)</p> |
| <p><b>2. Environmental Impact Statement</b></p>   | <ol style="list-style-type: none"> <li>1. The EIS must include, but not necessarily be limited to, the following:</li> </ol>  |   |

| Desired Performance Outcome   | Requirement   | Current Guidelines |
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| <p>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 avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts.</p> | <ul style="list-style-type: none"> <li>- <u>General Information</u> <ul style="list-style-type: none"> <li>(a) executive summary;</li> <li>(b) a description of the Concept, including key components and activities including:               <ul style="list-style-type: none"> <li>- project overview;</li> <li>- station and ancillary facility locations and the proposed route (including use of plans);</li> </ul> </li> <li>(c) a description of the staged approach to obtaining approval for the project;</li> <li>(d) a description of Stage 1, including key components and activities (including ancillary components and activities) required to construct that stage;</li> <li>(e) a description of associated strategic investigations (such as Pymont and Rydalmere stations) that do not comprise part of the Concept;</li> </ul> </li> <li><u>Concept - Strategic Justification</u> <ul style="list-style-type: none"> <li>(f) a summary of the strategic need with regard to its critical State significance and relevant State Government policy;</li> <li>(g) a statement of the strategic objective(s), including:               <ul style="list-style-type: none"> <li>- how the Concept will integrate with the broader transport network (existing and proposed);</li> <li>- an analysis of any feasible alternatives;</li> <li>- a description of feasible options within the Concept (including station numbers and locations); and</li> </ul> </li> </ul> </li> </ul> |                    |



| Desired Performance Outcome | Requirement  | Current Guidelines |
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|                             | <ul style="list-style-type: none"> <li>- a description of how alternatives to and options within the Concept were analysed and optimised 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 Concept were selected;</li> </ul> <p><u>Statutory and Regulatory Context</u></p> <p>(h) statutory context of the Proposal (as a whole) including:</p> <ul style="list-style-type: none"> <li>- how it meets the provisions of the <i>Environmental Planning and Assessment Act 1979</i> (the EP&amp;A Act) and the EP&amp;A Regulation;</li> <li>- a list of any approvals that must be obtained under any other Act or law before the Proposal may lawfully be carried out;</li> <li>- identification of the existing environmental planning instruments and other current government strategic plans and policies relevant to the project and land subject to the Proposal (including State environmental planning policies, land use and infrastructure strategies and local strategic planning statements);</li> </ul> <p><u>Stage 1 – Environmental Impacts and Mitigation Measures</u></p> <p>(i) a concise description of different construction methods that were analysed and justification for preferred methods;</p> <p>(j) 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 Stage 1 do not need to be described;</p> <p>(k) demonstration of how the Stage 1 design has been developed to avoid or minimise likely adverse impacts;</p> |                    |

| Desired Performance Outcome | Requirement   | Current Guidelines |
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|                             | <p>(l) identification and assessment of key issues as provided in the 'Key Issues SEARs';</p> <p>(m) a statement of and quantification (where appropriate) of outcomes and performance criteria Stage 1 will commit to target for each key issue;</p> <p>(n) 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>(o) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts; and</p> <p>(p) an assessment of the relevant cumulative impacts 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, Parramatta Light Rail Stage 1 and approved construction in the relevant precincts);</p> <p><u>Impact Assessment</u></p> <p>(q) a chapter that synthesises the environmental impact assessment and provides:</p> <ul style="list-style-type: none"> <li>o a succinct but full description of the Proposal for which approval is sought;</li> <li>o a description of any uncertainties that still exist around the footprint, construction methodologies for Stage 1 and how these will be resolved in subsequent-approval stages;</li> <li>o a compilation of the impacts that have not been avoided;</li> <li>o for Stage 1, a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during</li> </ul> |                    |

| Desired Performance Outcome  | Requirement   | Current Guidelines |
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|  | <p>construction or during latter stages) or offset these impacts;</p> <ul style="list-style-type: none"> <li>o a compilation of the performance outcome(s) and criteria the Proponent target and how these will be monitored; and</li> <li>o the reasons justifying carrying out Stage 1 as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts; and</li> </ul> <p>(r) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software.</p> <p>2. The EIS(s) 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><b>3. Assessment of Key Issues*</b></p> <p>Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact.</p> <p>* Key issues are nominated by the Proponent in the 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</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 for the concept or project and sufficient to ensure that the impacts can be understood and assessed</p> <p>- <u>Concept Key Issues</u></p> <p>2. For each <b>Concept</b> key issue, to the extent it relates to the nature of the concept, the Proponent must:</p> <ul style="list-style-type: none"> <li>(a) describe the overarching biophysical and socio-economic environment, as far as it is relevant to that issue;</li> <li>(b) describe the policy context, as far as it is available and relevant to the issue;</li> <li>(c) address the listed matters in the 'Key Issues SEARs';</li> </ul>                      |                    |

| Desired Performance Outcome   | Requirement   | Current Guidelines |
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| <p>not exhaustive but are key issues common to most SSI projects.</p> | <ul style="list-style-type: none"> <li>(d) describe how potential negative impacts have been avoided (through strategic design);</li> <li>(e) identify how potential negative impacts that have not been avoided (through strategic design) will be minimised or managed;</li> <li>(f) identification of potential positive impacts or benefits; and</li> <li>(g) outline further detailed assessment required to be carried out in subsequent stages (except Stage1).</li> </ul> <p>- <u>Stage 1 Key Issues</u></p> <p>3. For each <b>Stage 1</b> 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 context, as far as it is relevant to the issue;</li> <li>(c) address the listed matters in the 'Key Issues SEARs';</li> <li>(d) identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence (including realistic worst case scenario) of the impact (comprehensive risk assessment), the impacts of concurrent activities and cumulative impacts (parallel and sequential) with other projects;</li> <li>(e) demonstrate how potential impacts have been avoided (through design or construction methodologies);</li> <li>(f) 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);</li> <li>(g) detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures; and</li> <li>(h) measures to monitor the avoidance, minimisation and offsetting of impacts to ensure performance outcomes and criteria are met.</li> </ul> |                    |



| Desired Performance Outcome  | Requirement   | Current Guidelines |
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|  | <ol style="list-style-type: none"><li>4. 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.</li><li>5. The assessment of each key issue must have consideration (as relevant) to the listed guidelines.</li></ol>   |                    |
| <p>4.<br/><b>Consultation</b><br/>The project is developed with meaningful and effective engagement.</p> | <ol style="list-style-type: none"><li>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 and ancillary facility.</li><li>2. The Proponent must document the consultation process and demonstrate how the Proposal has responded to the inputs received.</li><li>3. The Proponent must describe the timing and type of community consultation undertaken, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.</li></ol> |                    |



## 2. Key SEARs

| Key Issue  |   |   |
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| Desired Performance Outcome  |   |   |
| Stage  | Requirement<br>(specific assessment requirements in addition to the general requirement above)  | Additional Guidelines   |
| <b>1. Place and Design</b><br>Healthy, responsive, integrated, equitable and resilient places.<br>An increase in tree plantings and tree canopy.<br>Minimise adverse impacts on the visual amenity of the built and natural environment (including public open space). |   |   |
| <b>Concept</b>   | <ol style="list-style-type: none"> <li>1. Outline a design process that is informed, collaborative and iterative (including the use of design review panels and consultation with community and other stakeholders).</li> <li>2. Design principles and outcomes for each station and facility that are reflective of the design objectives in Better Placed.</li> <li>3. Design principles and outcomes should include how crowd management and operational efficiency can be achieved for major events.</li> </ol> | Better Placed – An integrated design policy for built environment of New South Wales (Government Architect NSW, 2017)<br><br>NSW State Design Review Panel Pilot Program (Government Architect, 2018)<br><br>Sydney Green Grid – Spatial Framework and Project Opportunities (Tyrrell Studio and Office of the Government Architect 2017)<br><br>Greener Places – Establishing an urban Green Infrastructure policy for New South Wales (Government Architect NSW – Draft for discussion, |

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|   |  | 2017)   |
| <b>Stage 1</b>  | <ol style="list-style-type: none"> <li>1. Visual and related amenity impacts of construction including on streetscapes, key sites and buildings (including existing landscape works, greenspace and tree canopy).</li> <li>2. Open space and tree impacts, including:             <ol style="list-style-type: none"> <li>(a) estimating the number of trees to be cleared that will not be covered by a biodiversity offset strategy; and</li> <li>(b) for areas where trees are to be cleared before construction, investigate means to increase the number of trees and canopy within proximity of the impacted areas by providing additional planting before construction.</li> </ol> </li> </ol> | <p>AS4282-1997 Control of the obtrusive effects of outdoor lighting</p> <p>AS4970-2009 Protection of trees on development sites</p> |
| <p><b>2. 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> |  |   |
| <b>Stage 1</b>  | <ol style="list-style-type: none"> <li>1. Relevant commitments made in Section 9.17.2 of the Scoping Report.</li> <li>2. Spoil generation and reuse, including:             <ol 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) illegal dumping.</li> </ol> </li> </ol>  |   |
| <p><b>3. Social and Economic (including property, land use and business impacts)</b></p>  |  |   |

Minimise adverse social and economic impacts and capitalise on opportunities available to affected communities.

Minimise impacts to property and business, including maintaining appropriate access to properties and community facilities, and minimises displacement of existing land use activities, dwellings and infrastructure.

Minimise impacts on and achieves appropriate integration with adjoining land uses.

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| <p><b>Concept</b></p> | <p><u>Economic</u></p> <ol style="list-style-type: none"> <li>1. Commitments made in Section 7.11.3 of the Scoping Report, and strategic economic impacts.</li> </ol> <p><u>Social</u></p> <ol style="list-style-type: none"> <li>2. Commitments made in Section 7.10.3 of the Scoping Report, and how the community would experience the Proposal at a strategic level (from environmental, amenity and social changes).</li> </ol> <p>- <u>Property and Land Use</u></p> <ol style="list-style-type: none"> <li>3. Commitments made in Section 7.5.3 of the Scoping Report, and land use change potentially influenced by the Proposal.</li> </ol>            |   |
| <p><b>Stage 1</b></p> | <p><u>Economic</u></p> <ol style="list-style-type: none"> <li>1. Affected properties, businesses, recreational users and land and water users, including property acquisitions/adjustments, access, amenity and relevant statutory rights.</li> </ol> <p><u>Social</u></p> <ol style="list-style-type: none"> <li>2. Commitments made in Section 9.10.2 of the Scoping Report; and</li> <li>3. address impacts to different aspects of people’s lives set out in the SIA Guideline.</li> </ol> <p>- <u>Property and Land Use</u></p> <ol style="list-style-type: none"> <li>4. Commitments made in Section 9.5.2 of the Scoping Report; and land use</li> </ol> | <p>Social Impact Assessment Guideline (the SIA Guideline) for State significant mining, petroleum production and extractive industry development (DPE, 2017).</p> |

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|   | <p>compatibility (including potential restrictions on future development, both above-ground and sub-surface);</p> <ol style="list-style-type: none"> <li>5. permanent and temporary property acquisition, including easement acquisition; and temporary or permanent leasing arrangements;</li> <li>6. temporary loss of public open space; and</li> <li>7. disruption to utilities and services.</li> </ol>  |   |
| <p><b>4. Noise and Vibration</b></p> <p>Ensure the compatibility of the Concept with the adjoining noise environment.</p> <p>Minimise adverse impacts on acoustic amenity of the surrounding community by effectively managing construction noise and vibration (including airborne noise, ground-borne noise and blasting).</p> <p>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 and environmental heritage.</p> |   |   |
| <p><b>Concept</b></p>   | <ol style="list-style-type: none"> <li>1. Commitments made in Section 7.2.4 of the Scoping Report; and the compatibility of the Concept with the adjoining noise environment.</li> </ol>  |   |
| <p><b>Stage 1</b></p>   | <ol style="list-style-type: none"> <li>1. Commitments made in Section 9.2.2 of the Scoping Report.</li> <li>2. The assessment of construction noise and vibration must address:             <ol style="list-style-type: none"> <li>(a) the nature of construction activities and related noise characteristics;</li> <li>(b) the intensity and duration of noise (both air and ground borne) and vibration impacts. This must include consideration of 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,</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 (DECCW, 2009) <a href="#">NSW Road Noise Policy (DECCW, 2011)</a></p> <p>German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures</p> |

during the construction period;

- (d) the nature of the impact and the sensitivity of receivers and level of impact including for out of hours works;
- (e) 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 construction activities (such as traffic management);
- (f) noise impacts of out-of-hours works (including utility works associated with the SSI 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 and justification for these activities in terms of the *Interim Construction Noise Guideline* (DECCW, 2009);
- (g) sleep disturbance (including the number of noise-awakening events);
- (h) a cumulative noise and vibration assessment inclusive of impacts from Stage 1, including concurrent construction activities within Stage 1 and the construction of other relevant development in the vicinity of Stage 1;
- (i) details and analysis of the predicted effectiveness of mitigation measures to adequately manage identified impacts, including impacts as identified in (h);
- (j) any potential residual noise and vibration impacts following application of mitigation measures; and
- (k) a description of how receiver feedback received would be taken into account in the design of mitigation measures, including any tailored mitigation, management and communication strategies for sensitive receivers.

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|   | <ol style="list-style-type: none"> <li>3. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage).</li> <li>4. Blast impacts (if required) can comply with current guidelines.</li> </ol>   |   |
| <p><b>5. Transport and Traffic</b></p> <p>Minimise adverse transport and traffic impacts and optimise transport and traffic functioning.</p> <p>Minimise and manage impacts to network connectivity, safety and efficiency of the transport system during construction.</p> |   |   |
| <p><b>Concept</b></p>   | <ol style="list-style-type: none"> <li>1. Commitments made in Section 7.1.3 of the Scoping Report.</li> </ol>   |   |
| <p><b>Stage 1</b></p>   | <ol style="list-style-type: none"> <li>1. Commitments made in Section 9.1.2 of the Scoping Report.</li> <li>2. Transport and traffic (vehicle, pedestrian and cyclists) impacts of construction, including, but not necessarily limited to:             <ol style="list-style-type: none"> <li>(a) a considered approach to route identification and scheduling of construction vehicle movements;</li> <li>(b) the indicative daily number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements) across the construction schedule;</li> <li>(c) 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);</li> <li>(d) construction worker parking;</li> <li>(e) access constraints and impacts on public transport (infrastructure and services), pedestrians and cyclists and property; and</li> <li>(f) the need to close, divert or otherwise reconfigure elements of the</li> </ol> </li> </ol> | <p>Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2007)</p> <p>Guide to Traffic Generating Developments Version 2.2 (RTA, 2002)</p> <p>Cycling Aspects of Austroads Guides (Austroads, 2014)</p> |

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|   | <p>road, pedestrian and cycle network associated with construction of the project 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><b>6. Aboriginal Heritage</b></p> <p>The long-term protection, conservation and/or management of the heritage significance of Aboriginal objects and places.</p> |  |  |
| <p><b>Concept</b></p>   | <p>1. Commitments made in Section 7.4.3 of the Scoping Report.</p>   |  |
| <p><b>Stage 1</b></p>   | <p>1. Direct and/or indirect impacts (including cumulative impacts) associated with construction to the heritage significance of:</p> <p>(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; and</p> <p>(b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan.</p> <p>2. 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>3. The assessment must consider requirements for:</p> <p>(a) <i>in-situ</i> conservation of items and or/areas;</p> <p>(b) the need for further archaeological testing and/or detailed archaeological investigations; and</p> <p>(c) measures to avoid, minimise and/or mitigate potential impacts.</p> | <p>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011)</p> <p>Aboriginal Cultural Heritage Consultation requirements for proponents (DECCW, 2010)</p> <p>Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010)</p> <p>NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998)</p> <p>Criteria for the assessment of excavation directors (NSW Heritage Council, 2011)</p> |

## 7. Non-Aboriginal Heritage

The long-term protection, conservation and/or management of the heritage significance of items of environmental heritage.

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| <b>Concept</b> | 1. Commitments made in Section 7.3.3 of the Scoping Report.   |   |
| <b>Stage 1</b> | <p>1. Potential direct and/or indirect impacts (including cumulative impacts) to the heritage significance of:</p> <ul style="list-style-type: none"> <li>(a) environmental heritage, as defined under the <i>Heritage Act 1977</i>; and</li> <li>(b) items listed on National and World Heritage lists; and</li> <li>(c) heritage items and conservation areas identified in environmental planning instruments applicable to the project area.</li> </ul> <p>2. 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 significance assessment, a statement of heritage impact for all heritage items and a historical archaeological assessment;</li> <li>(b) consider any relevant conservation management plan;</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 (as relevant) and whether these are temporary or permanent</li> <li>(d) outline measures to avoid and minimise those impacts during construction in accordance with 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</li> </ul> | <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>Statements of Heritage Impact (NSW Heritage Office, 2001)</p> <p>The Australia ICOMOS Burra Charter</p> <p>NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998)</p> <p>Criteria for the assessment of excavation directors (NSW Heritage Council, 2011)</p> |



Council's Excavation Director criteria).

### 8. Contamination and 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.

Land must be (or be made) suitable for intended future use

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| <b>Concept</b> | 1. Commitments made in Section 7.8.3 and 7.9.3 of the Scoping Report.   |   |
| <b>Stage 1</b> | <ol style="list-style-type: none"> <li>1. Commitments made in Section 9.8.2 of the Scoping Report.</li> <li>2. The risk of contamination 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.</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>Guidelines for Consultants Reporting on Contaminated Sites (OEH, reprinted 2011)</p> <p>Guidelines for the NSW Site Auditor Scheme (DEC, 2006)</p> <p>Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015)</p> <p>National Environmental Protection (Assessment of Site Contamination) Measure (1999, as amended 2013)</p> <p>Other guidelines made or approved under section</p> |

**9. Water – Hydrology and Flooding**

Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised.

Minimise adverse impacts on existing flooding characteristics.

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| <b>Concept</b> | 1. Commitments made in Section 7.12.3 of the Scoping Report, including potential scale of impacts and where the Proposal will need to respond to the existing hydrological environment.   |   |
| <b>Stage 1</b> | <ol style="list-style-type: none"> <li>1. The existing hydrological regime for any surface and groundwater resource (including mapping, the reliance by users, and for ecological purposes) likely to be impacted, including stream orders.</li> <li>2. A water balance for ground and surface water including the proposed intake and discharge locations, volume, frequency and duration.</li> <li>3. Requirements for baseline monitoring of hydrological attributes.</li> <li>4. The impact on surface and groundwater hydrology in accordance with the current guidelines, including:               <ol style="list-style-type: none"> <li>(a) natural processes within rivers, wetlands, estuaries, marine waters and floodplains;</li> <li>(b) impacts from any permanent and temporary interruption of groundwater flow;</li> <li>(c) stormwater and wastewater management on natural hydrological attributes and the conveyance capacity of existing stormwater systems where discharges are proposed through such systems or details of alternative disposal options; and</li> <li>(d) water take (direct or passive) from all surface and groundwater</li> </ol> </li> </ol> | <p>NSW Aquifer Interference Policy (DPI, 2012)</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>Risk assessment Guidelines for Groundwater Dependent Ecosystems (Office of Water, 2012)</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> <p><a href="#">Practical Consideration of Climate Change - Flood risk management guideline (DECC, 2007)</a></p> |

sources with estimates of annual volumes during construction.

5. Flood behaviour for a range of flood events up to the probable maximum flood (taking into account sea level rise and storm intensity due to climate change) including:
  - (a) potential flood affectation of other properties, assets and infrastructure;
  - (b) consistency (or inconsistency) with applicable Council floodplain risk management plans;
  - (c) compatibility with the flood hazard of the land; and
  - (d) compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land.

## 10. Water – Quality

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).

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| <b>Concept</b> | <ol style="list-style-type: none"> <li>1. Identify the ambient NSW Water Quality Objectives (NSW WQO) and environmental values for the receiving waters relevant to the Proposal, including the indicators and associated trigger values or criteria for the identified environmental values.</li> </ol>  | <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>  |
| <b>Stage 1</b> | <ol style="list-style-type: none"> <li>1. Surface and groundwater quality impacts including:           <ol 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</li> </ol> </li> </ol> | <p>Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ ARMCANZ, 2000)</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.</p> |

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|   | <p>measures will be designed to cope with; and</p> <p>(c) assessing the significance of any identified impacts including consideration of the relevant ambient water quality outcomes.</p> <p>2. Demonstrating how Stage 1 will, to the extent that the project can influence, ensure that:</p> <p>(a) where the NSW WQOs for receiving waters are currently being met, they will continue to be protected; and</p> <p>(b) where the NSW WQOs are not currently being met, activities will work toward their achievement over time; and</p> <p>(c) justify, if required, why the WQOs cannot be maintained or achieved over time.</p> | <p>Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)</p>   |
| <p><b>11. Biodiversity</b></p> <p>The avoidance and minimisation of impacts to terrestrial and aquatic biodiversity.</p> <p>Offsets and/or supplementary measures are assured which are equivalent to any residual impacts.</p> |   |   |
| <p><b>Concept</b></p>   | <p>1. Commitments made in Section 7.13.3 of the Scoping Report.</p>   |   |
| <p><b>Stage 1</b></p>   | <p>1. Biodiversity impacts in accordance with section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (BC Act), the Biodiversity Assessment Method (BAM), and be documented in a Biodiversity Development Assessment Report (BDAR).</p> <p>2. Impacts on biodiversity values not covered by the BAM. This includes a threatened aquatic species assessment (Part 7A <i>Fisheries Management Act 1994</i>) to address whether there are likely to be any significant impact on listed threatened species, populations or ecological</p>   | <p>Biodiversity Assessment Method (OEH, 2017)</p> <p><a href="#">Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013</a> (DPI, 2013)</p> <p><a href="#">Threatened Species Survey and Assessment Guidelines</a></p> <p>Aquatic Ecology in Environmental Impact Assessment – EIA Guideline (Marcus Lincoln Smith)</p> |

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|  | <p>communities listed under the <i>Fisheries Management Act 1994</i> (FM Act).</p> <p>3. If the project, or any component of the project, would be classified as a Key Threatening Process (KTP) in accordance with the listings in the BC Act, FM Act and the <i>Environmental Protection and the Biodiversity Conservation Act 2000</i> (EPBC Act).</p> | 2003)  |
| <p><b>12. Sustainability</b></p> <p>Operating costs are reduced.</p> <p>Effective and efficient use of resources.</p> <p>Conservation of natural resources is maximised.</p> |   |  |
| <p><b>Concept and Stage 1</b></p>  | <p>1. The sustainability of the Proposal in accordance with (as relevant) Green Star or the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability Rating Tool (or equivalent) and commit to an appropriate target rating.</p>   | <p>Green Star, Green Building Council of Australia Infrastructure Sustainability Rating Tool Scorecard relating to energy and carbon for large infrastructure projects, ISCA</p> |
| <p><b>13. Other Issues</b></p>   |   |  |
| <p><b>Concept</b></p>  | <p>1. Air quality, greenhouse gas and energy, climate change adaptation, waste management and resource use, hazard and risk assessments should be undertaken in accordance with the commitments in Section 7 of the Scoping Report.</p>   |  |
| <p><b>Stage 1</b></p>  | <p>1. Air quality, greenhouse gas and energy, climate change adaptation, waste management and resource use, hazard and risk assessments should be undertaken in accordance with the commitments in Section 9 of the Scoping Report.</p>   |  |