# SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

APPENDIX A

| Desired Performance Outcome | Requirement | Where addressed in EIS |
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| **1. Environmental Impact Assessment Process**<br>**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). | Certification page |
| | 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. | Chapter 2 (Planning and assessment process) |
| | 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. | |
| **2. Environmental Impact Statement**<br>**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.** | 1. The EIS must include, but not necessarily be limited to, the following: | |
| | (a) executive summary; | Executive Summary |
| | (b) a description of the project, including all components and activities (including ancillary components and activities) required to construct and operate it; | Chapter 6 (Project description – operation)<br>Chapter 7 (Project description – construction) |
| | (c) a statement of the objective(s) of the project; | Chapter 3 (Strategic need and justification) |
| | (d) a summary of the strategic need for the project with regard to its critical State significance and relevant State Government policy; | Chapter 3 (Strategic need and justification) |

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| | (e) an analysis of any feasible alternatives to the project; | Chapter 4 (Project development and alternatives) |
| | (f) a description of feasible options within the project; | Chapter 4 (Project development and alternatives) |
| | (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; | Chapter 4 (Project development and alternatives) |
| | (h) potential opportunities for further network expansion and consideration of relationship to other Government public transport initiatives; a concise description of the general biophysical and socioeconomic 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; | Chapter 4 (Project development and alternatives)<br>Chapters 8 to 26 of the EIS |
| | (i) a demonstration of how the project design has been developed to avoid or minimise likely adverse impacts; | Chapter 6 (Project description – operation)<br>Chapter 7 (Project description – construction) |
| | (j) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome; | Chapter 28 (Environmental risk analysis)<br>Chapters 8 to 26 of the EIS |
| | (k) a statement of the outcome(s) the proponent will achieve for each key issue; | Chapters 8 to 26 of the EIS |
| | (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; | Chapter 27 (Consolidated environmental mitigation measures and performance outcomes) |
| | (m) 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 (for example WestConnex, Barangaroo, any approved construction in the relevant precincts); | Chapter 26 (Cumulative impacts) |
| | (n) statutory context of the project as a whole, including:<br>• how the project meets the provisions of the EP&A Act and EP&A Regulation;<br>• a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out; | Chapter 2 (Planning and assessment process) |

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| | (o) a chapter that synthesises the environmental impact assessment and provides:<br>• a succinct but full description of the project for which approval is sought;<br>• 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;<br>• a compilation of the impacts of the project that have not been avoided;<br>• 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;<br>• a compilation of the outcome(s) the proponent will achieve; and<br>• 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. | Appendix G (Synthesis of the Environmental Impact Statement) |
| | (p) 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. | Throughout the EIS |
| **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 CSSI 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 CSSI 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. | Chapters 8 to 26 of the EIS |

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| | 2. For each key issue the Proponent must: | Chapters 8 to 26 of the EIS |
| | (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). | |
| | 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. | Chapter 4 (Project development and alternatives)<br>Chapter 6 (Project description – operation) |
| **4. Consultation**<br>**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. | Chapter 5 (Stakeholder and community engagement) |
| | 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. | |
| **5. Biodiversity**<br>**The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity.**<br>**Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.** | 1. The Proponent must assess biodiversity impacts in accordance with the current guidelines including the Framework for Biodiversity Assessment (FBA). | Chapter 20 (Biodiversity) |

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| | 2. The Proponent must assess any impacts on biodiversity values not covered by the FBA as specified in s2.3. | |
| | 3. The Proponent must assess impacts on the following [EECs, threatened species and/or populations] and provide the information specified in s9.2 of the FBA. | |
| | 4. 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. Flooding**<br>**The project minimises adverse impacts on existing flooding characteristics.**<br>**Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.** | 1. The Proponent must assess and model (where required), taking into account any relevant Council-adopted flood model or latest flood data available from Councils, the impacts on flood behaviour during construction and operation for a full range of flood events up to the probable maximum flood (taking into account sea level rise and storm intensity due to climate change) including: | Chapter 21 (Flooding and hydrology) |
| | (a) any detrimental increases in the 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; | |
| | (d) compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land; | |
| | (e) downstream velocity and scour potential; | |
| | (f) impacts the development may have upon existing community emergency management arrangements for flooding. These matters must be discussed with the State Emergency Services and Council; and | |
| | (g) any impacts the development may have on the social and economic costs to the community as consequence of flooding. | |

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| **7. Heritage**<br>**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.**<br>**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: | Chapter 14 (Non-Aboriginal heritage)<br>Chapter 15 (Aboriginal heritage)<br>Chapter 26 (Cumulative impacts) |
| | (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; | Chapter 15 (Aboriginal heritage) |
| | (b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan; | Chapter 15 (Aboriginal heritage) |
| | (c) environmental heritage, as defined under the *Heritage Act 1977*; and | Chapter 14 (Non-Aboriginal heritage) |
| | (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; and | Chapter 14 (Non-Aboriginal heritage)<br>Chapter 15 (Aboriginal heritage) |
| | (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). | Chapter 14 (Non-Aboriginal heritage)<br>Chapter 15 (Aboriginal heritage) |
| | 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). | Chapter 15 (Aboriginal heritage) |
| | 4. Where impacts to Aboriginal objects and/or places are proposed, consultation must be undertaken with Aboriginal people in accordance with the current guidelines. | Chapter 15 (Aboriginal heritage) |

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| **8. Noise and Vibration – Amenity**<br>**Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity.**<br>**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.** | 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 sensitive receivers including commercial premises, and include consideration of sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise). | Chapter 10 (Construction noise and vibration)<br>Chapter 11 (Operational noise and vibration) |
| | 2. If blasting is required, the relevant requirements of *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC 1990) are to be assessed. | Chapter 10 (Construction noise and vibration) |
| **9. Noise and Vibration – Structural**<br>**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.**<br>**Increases in noise emissions and vibration affecting environmental heritage as defined in the *Heritage Act 1977* during operation of the project are effectively managed.** | 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). | Chapter 10 (Construction noise and vibration)<br>Chapter 11 (Operational noise and vibration)<br>Chapter 14 (Non-Aboriginal heritage)<br>Chapter 15 (Aboriginal heritage) |
| | 2. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required. | Chapter 10 (Construction noise and vibration) |
| **10. Socio-economic, Land Use and Property**<br>**The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities.**<br>**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.** | 1. The Proponent must assess social and economic impacts in accordance with the current guidelines. | Chapter 13 (Business impacts)<br>Chapter 19 (Social impacts and community infrastructure)<br>Chapter 3 (Strategic need and justification) |
| | 2. The Proponent must assess impacts from construction and operation on potentially affected properties, approved development applications, businesses, public open space, recreational users and land and water users (for example, recreational and commercial fishers, oyster farmers), including property acquisitions/ adjustments, access, amenity and relevant statutory rights. | Chapter 12 (Land use and property)<br>Chapter 13 (Business impacts)<br>Chapter 19 (Social impacts and community infrastructure)<br>Chapter 8 (Construction traffic and transport)<br>Chapter 26 (Cumulative impacts) |

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| | 3. Assess the likely risks of the project to public safety, paying particular attention to subsidence risks, bushfire risks and the handling and use of dangerous goods. | Chapter 23 (Hazard and risk)<br>Chapter 8 (Construction traffic and transport)<br>Chapter 9 (Operational traffic and transport)<br>Chapter 17 (Groundwater and geology)<br>Chapter 19 (Social impacts and community infrastructure) |
| **11. Soils**<br>**The environmental values of land, including soils, subsoils and landforms, are protected.**<br>**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. | Chapter 18 (Soils, contamination and water quality) |
| | 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 soil erosion and sediment transport consistent with the practices and principles in the current guidelines. | |
| **12. Sustainability**<br>**The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources.**<br>**Conservation of natural resources is maximised.** | 1. The Proponent must assess the project against the current guidelines including targets and strategies to improve Government efficiency in use of water, energy and transport. | Chapter 25 (Sustainability) |

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| **13. Transport and Traffic**<br>**Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts.**<br>**The safety of transport system customers is maintained.**<br>**Impacts on network capacity and the level of service are effectively managed.**<br>**Works are compatible with existing infrastructure and future transport corridors.** | 1.The Proponent must assess construction transport and traffic (vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to: | Chapter 8 (Construction traffic and transport) |
| | (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) the capacity of or need to upgrade roads proposed as construction vehicle routes including Bedwin Road; | |
| | (d) changes to existing local and regional road networks including access to and around the proposed Chatswood tunnelling site; | |
| | (e) construction worker parking; | |
| | (f) 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), including access to the Overseas Passenger Terminal for deliveries and passenger coaches; | |
| | (g) details of how construction and scheduling of works are to be coordinated in regard to public events; cumulative traffic impacts resulting from concurrent work on Westconnex, Barangaroo, Sydney Light Rail and other key construction projects in the Sydney CBD; | Chapter 26 (Cumulative impacts) |
| | (h) alternatives to road transport of construction spoil; | |
| | (i) access constraints and impacts on public transport, pedestrian access and cyclists; | |
| | (j) the need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project; | |
| | (k) assess the likely risks of the project to public safety, paying particular attention to pedestrian safety and users of Sydney Harbour; and | |
| | (l) impacts to water based traffic and shipping channels on users of Sydney Harbour with particular reference to the channel between Blues Point and Millers Point for passage to and from White Bay, Glebe Island and Gore Cove. | |

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| | 2. The Proponent must assess the operational transport impacts of the project, including:<br>(m) forecast travel demand and traffic volumes for the project and the surrounding road, cycle and public transport network;<br>(n) travel time analysis;<br>(o) performance of interchanges and intersections by undertaking a coordinated level of service analysis at locations affected by stations;<br>(p) wider transport interactions (local and regional roads, permanent loss of parking, the need for kiss and ride facilities, cycling, public and freight transport);<br>(q) induced traffic and operational implications for public transport (particularly with respect to strategic bus corridors and bus routes) and consideration of opportunities to improve public transport;<br>(r) impacts to pedestrian access in and around stations and connecting streets, capacity of streets at peak pedestrian times, including phasing of traffic lights, intersection crossing times and connectivity between stations<br>(s) assess the benefits to each station and the general vicinity of walking and cycling catchments and the provision of infrastructure to support sustainable transport options.<br>(t) impacts on cyclists and pedestrian access and safety; and<br>(u) opportunities to integrate cycling and pedestrian elements with surrounding networks and in the project. | Chapter 9 (Operational traffic and transport) |
| **14.Urban design**<br>**The project design complements the visual amenity, character and quality of the surrounding environment.**<br>**The project contributes to the accessibility and connectivity of communities.** | 1. The Proponent must:<br>(a) identify the urban design and landscaping aspects of the project and its components;<br>(b) include consideration of urban design principles adopted by each council or within each station precinct;<br>(c) assess the impact of the project on the urban, rural and natural fabric;<br>(d) explore the use of Crime Prevention Through Environmental Design (CPTED) principles during the design development process, including natural surveillance, lighting, walkways, signage and landscape; and<br>(e) identify urban design strategies and opportunities to enhance healthy, cohesive and inclusive communities. | Chapter 6 (Project description – operation)<br>Chapter 16 (Landscape character and visual amenity) |

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| **15. Visual Amenity**<br>**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: | Chapter 16 (Landscape character and visual amenity) |
| | (a) views and vistas; | |
| | (b) streetscapes, key sites and buildings; | |
| | (c) 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. | |
| **16. Waste**<br>**All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.** | 1. The Proponent must assess predicted waste generated from the project during construction and operation, including: | Chapter 24 (Waste management) |
| | a) classification of the waste in accordance with the current guidelines; | |
| | b) estimates / details of the quantity of bulk earthworks and spoil balance to be generated during construction of the project; | |
| | c) handling of waste including measures to facilitate segregation and prevent cross contamination; | |
| | d) management of waste including indicative location and volume of stockpiles; | |
| | e) waste minimisation and reuse; | |
| | f) lawful disposal or recycling locations for each type of waste using a hierarchy which prioritises higher value end use; and | |
| | g) contingencies for the above, including managing unexpected waste volumes. | |
| | 2. The Proponent must assess potential environmental impacts from the excavation, handling, storage on site and transport of the waste particularly with relation to sediment/ leachate control, noise and dust. | |

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| **17. Water – Hydrology**<br>**Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised.**<br>**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).**<br>**Sustainable use of water resources.** | 1. The Proponent must describe (and map) the existing hydrological regime for any surface and groundwater resource (including reliance by users and for ecological purposes) likely to be impacted by the project, including stream orders, as per the FBA. | Chapter 17 (Groundwater and geology) |
| | 2. 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: | Chapter 17 (Groundwater and geology) |
| | (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; | Chapter 20 (Biodiversity)<br>Chapter 18 (Soils, contamination and water quality) |
| | (b) impacts from any permanent and temporary interruption of groundwater flow, including the extent of drawdown, barriers to flows, implications for groundwater dependent surface flows, ecosystems and species, groundwater users and the potential for settlement; | Chapter 20 (Biodiversity)<br>Chapter 17 (Groundwater and geology) |
| | (c) changes to environmental water availability and flows, both regulated/licensed and unregulated/rules-based sources; | Chapter 18 (Soils, contamination and water quality) |
| | (d) direct or indirect increases in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; | Chapter 21 (Flooding and hydrology)<br>Chapter 18 (Soils, contamination and water quality) |
| | (e) minimising the effects of proposed stormwater and wastewater management during construction and operation 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; and | Chapter 21 (Flooding and hydrology) |
| | (f) water take (direct or passive) from all surface and groundwater sources with estimates of annual volumes during construction and operation. | Chapter 17 (Groundwater and geology)<br>Chapter 25 (Sustainability) |
| | 3. The Proponent must identify any requirements for baseline monitoring of hydrological attributes. | Chapter 21 (Flooding and hydrology) |

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| **18. Water – Quality**<br>**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: | Chapter 18 (Soils, contamination and water quality) |
| | (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 all pollutants that may be introduced into the water cycle 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:<br>• where the NSW WQOs for receiving waters are currently being met they will continue to be protected; and<br>• 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; and | |
| | (i) identify proposed monitoring locations, monitoring frequency and indicators of surface and groundwater quality. | |
| **19. Utilities**<br>**The project is designed, construction and operated to minimise impacts to utilities and provision of such to the public.** | 1. The Proponent must consider: | Chapter 7 (Project description – construction) |
| | (a) the impact of the project on the integrity of trunk assets and the need to augment or relocate; | |
| | (b) opportunities to support initiatives adopted by Councils and utilities providers; and | |
| | (c) how access to assets will be maintained during construction. | |

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