

Appendix A

Reference Tables - Secretary's Environmental Assessment Requirements and Environmental Planning and Assessment Regulation 2021

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Secretary's Environmental Assessment Requirements (SEARS)

Table 1 and Table 2 provide references to where the SEARs have been addressed in the Modification Report.

Table 1 General SEARs - Reference table

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
1. Modification Report The modification is described in sufficient detail to enable clear understanding that the modification 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 cumulative impacts.	 The Modification Report must include, but not necessarily be limited to, the following: an executive summary; A description of the existing project and the proposed modification, including key components and activities (including ancillary components and activities) required to construct and operate it including-	 a. Executive Summary chapter b. Chapter 2 (Approved project) and Chapter 4 (Proposed modification) c. Section 3.3.1 d. Sections 3.1 and 3.2 e. Sections 3.3 and 3.4 f. Sections 3.3 and 3.4 g. Sections 3.3 and 3.4 h. Section 3.4.3 and Chapter 4 (Proposed modification) i. Existing environment sections in Chapter 7 (Environmental assessment) j. Section 9.4 k. Section 7.1 (Traffic and transport), Section 7.2 (Noise and vibration), Section 7.4 (Hydrology and flooding), Section 7.5 (Surface water and
	c. an analysis of any loadistic alternatives to the modification,	

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
	 f. a description of feasible options within the modification.; g. a description of how alternatives to and options within the modification 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 modification were selected; h. concise description of different construction methods that were analysed and preferred methods; i. 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; j. a demonstration of how the modification design has been developed to avoid or minimise likely adverse impacts; k. the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome; l. a statement of and the quantification of outcomes and performance criteria the modification will achieve for each key issue; m. 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; n. consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts; o. an assessment of the relevant 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; 	groundwater) and Section 7.6 (Biodiversity); refer also Section 9.9 I. Section 9.9; refer also relevant assessment chapter for each environmental issue m. Mitigation measures tables in each assessment chapter in Chapter 7 (Environmental assessment), and Appendix B (Compilation of mitigation measures) n. Section 7.1.6, Section 7.3.6 and Section 9.7 o. Chapter 7.18 (Cumulative impacts) p. Chapter 5 (Statutory context) and Appendix A (Reference tables – SEARs and EP&A Regulation) q. Chapter 9 (Synthesis of the Modification Report and conclusion) r. Relevant plans, drawings and diagrams in electronic format to be submitted separately.

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
	 p. statutory context of the modification, including: how the project meets the provisions of the EP&A Act and EP&A Regulation; a list of any approvals that must be obtained under any other Act or law before the project may lawfully be 	
	carried out; q. a chapter that synthesises the environmental impact assessment and provides: - a succinct but full description of the modification for	
	 which approval is sought; 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 modification; 	
	 a compilation of the impacts of the modification that have not been avoided; a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction 	
	 and operation) or offset these impacts; a compilation of the outcome(s) and criteria the modification will achieve and how these will be monitored; and 	
	 the reasons justifying carrying out the modification as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts. 	
	 relevant plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software. 	

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
	2. The modification report must only include data and analysis that is reasonably needed to make a decision on the modification proposal. Relevant information must be succinctly summarised in the report and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.	Relevant information is included and summarised throughout the Modification Report and its appendices
2. 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 or with	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.	Chapter 7 (Environmental assessment) and appendices related to each key issue have been prepared accordingly
* Key issues are nominated by the Proponent in the SSI modification application and by the Department in the SEARs. Key issues need to be reviewed throughout the preparation of the Modification Report to ensure any new key issues that emerge are captured. The key issues identified in this document are not exhaustive but are key issues common to most SSI projects.	 For each key issue the Proponent must: assess the issue (including modelling as relevant), and address and undertake the requirements specified in section 2 – Key Issue SEARs, describe the biophysical, social and economic environment, as far as it is relevant to that issue, including substantiated baseline data that is reflective of current guidelines where relevant; describe the legislative and policy context, as far as it is relevant to the issue; 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), the impacts of concurrent activities within the proposal and cumulative impacts (parallel and sequential) with other projects; demonstrate how potential impacts have been avoided 	 a. Key issues in Chapter 7 (Environmental assessment) and associated appendices b. Existing environment section for each key issue in Chapter 7 (Environmental assessment) and associated technical reports in appendices. c. Legislation and policy context section for each key issue in Chapter 7 (Environmental assessment), and associated technical reports in appendices d. Chapter 7 (Environmental assessment) (and associated technical appendices), Section 7.18 (Cumulative impacts) e. Section 9.4, Chapter 3 (Need for the
	e. demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies);	modification and strategic context)

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
	 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); g. detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures; and h. measures to monitor the avoidance, minimisation and offsetting of impacts to ensure quantified outcomes and criteria are met. 	and Chapter 4 (Proposed modification) f. Minimisation of impacts through the implementation of environmental mitigation measures is outlined in Section 7.1 (Traffic and transport) to Section 7.18 (Cumulative impacts). The effectiveness of these proposed measures is provided in Chapter 9 (Synthesis of the Modification Report and conclusion) (Sections 9.6 to 9.9)
		g. Residual impacts would be managed or offset through the implementation of mitigation measures outlined in Section 7.1 (Traffic and transport) to Section 7.18 (Cumulative impacts) and compiled in Appendix B (Compilation of mitigation measures); Residual impacts are identified and further addressed in Section 9.8.
		h. Mitigation measures outlined in Section 7.1 (Traffic and transport) to Section 7.18 (Cumulative impacts) and compiled in Appendix B (Compilation of mitigation measures).
	 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. 	3. Chapter 3 ((Need for the modification and strategic context); Section 9.4; Section 7.2.2 and Appendix E (Noise and Vibration Impact Assessment)

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
3. Key Appendices	 The Modification Report must include the following appendices: SEARs table, identifying the sections and subsections where the SEARs have been addressed in the Modification Report and in the specialist assessment reports; assess the issue (including modelling as relevant), and address and undertake the requirements specified in section 5 – Key Issue SEARs, 	a) Appendix A (Reference tables – SEARs and EP&A Regulation) b) Appendix A (Reference tables – SEARs and EP&A Regulation), Table 3; further statutory context is provided in Chapter 5 (Statutory context)
	 b. a statutory compliance table, identifying where the relevant statutory requirements have been addressed in the Modification Report; c. a community engagement table, identifying where the issues raised by the community during engagement have been addressed in the Modification Report; d. a table of the proposed mitigation measures for the project (excluding any mitigation measures that are built into the physical layout and design of the project and captured in the project description); and e. any supporting information, including any detailed technical reports prepared by specialists. 	Chapter 5 (Statutory context) c) Appendix C (Summary of stakeholder consultation) d) Appendix B (Compilation of Mitigation measures) e) Supporting information, including relevant detailed technical reports prepared by specialists is found in Appendix D to Appendix N.
Consultation The modification is developed with meaningful and effective	The project 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.	1. Chapter 6 (Consultation)
engagement during project design and delivery.	The consultation process must be documented and include information on how the modification has responded to the inputs received.	Chapter 6 (Consultation) and Appendix C (Summary of stakeholder consultation)

Desired performance Outcome	Secretary's Environmental Assessment Requirement	Where addressed in the report
	3. The timing and type of community consultation proposed during the design and delivery of the modification must be described, including the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	Chapter 6 (Consultation) and Appendix C (Summary of stakeholder consultation)

Table 2 Key issue SEARs - Reference table

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
1. Transport, Traffic and Movement	1. Construction transport and traffic (vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to:	Traffic management and access is discussed in Section 4.3.17
Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts.	a. a considered approach to route identification and scheduling of construction vehicle movements; b. the indicative number, frequency and size of construction related vehicles (passenger, commercial and heavy	Traffic impacts are discussed in Section 7.1.5 Refer also to Section 1.2 of Appendix D
The safety of transport system customers is maintained.	vehicles, including spoil management movements), including the indicative number and route of heavy vehicle movements outside of standard construction hours;	(Traffic and transport assessment) for where these SEARs are addressed in the technical report
Impacts on network capacity and the level of service are effectively managed.	 c. construction worker parking, including the location and capacity of proposed parking facilities; d. the nature of existing traffic (types and number of 	
Works are compatible with existing infrastructure and future transport corridors.	movements) on construction access routes (including consideration of peak traffic times and sensitive road users, pedestrian and cyclist activities and on-street parking arrangements);	
The project is well-designed and enhances the environment where it is located, including improved accessibility and connectivity for communities and public spaces.	e. access constraints and impacts on public transport (infrastructure and services), pedestrians and cyclists;	
The project contributes to greener places through the enhancement and provision of green infrastructure.	 impacts to on-street parking, including to residents and businesses. 	
	Operational traffic related impacts of the project, including:	Section 7.1.5
	including: a. forecast travel demand and traffic volumes for the project and the surrounding road, cycle and public transport network;	Refer also to Section 1.2 of Appendix D (Traffic and transport assessment) for where these SEARs are addressed in the technical report
	 b. travel time analysis; c. performance of key interchanges and intersections by undertaking a level of service analysis at key locations; 	toominga. Toport

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	 d. wider transport interactions (local and regional roads, cycling, public and freight transport); e. 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; f. impacts on cyclists and pedestrian access and safety; and g. an explanation of the scope of the modelled area, including justification of the nominated boundaries. Note: The Traffic assessment must include consideration of changes to traffic volumes that would occur as a result of current and future strategic land use changes and road projects/upgrades within the road catchment which feeds into the project alignment. 	
	 Identify Movement (accessibility and connectivity) principles, outcomes and actions for the project that facilitate improvements to movement, including in relation to: how the project considers the relationship between movement and place [including any issues and opportunities identified]; how the project contributes to more walking, cycling and public transport use including journey time comparisons for public and active transport for general traffic journey time improvements made, and the matters set out in the Healthy Urban Development Checklist TC1 and TC2 (NSW Health, 2009); how any walking, cycling or public transport improvements provided by the project integrates with wider active and public transport networks; and opportunities for refinements and improvements to the existing pedestrian and cycle routes adjacent to and 	Section 7.1.5 Current active travel movements across and adjacent to the Westlink M7 corridor would be maintained, however the proposed modification does not directly improve active travel linkages and connections within the wider network surrounding the study area. Refer also to Section 1.2 of Appendix D (Traffic and transport assessment) for where these SEARs are addressed in the technical report.

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	across the M7 Motorway corridor, including in response to land use changes/development since the opening of the M7 Motorway (including access between key community focal points such as public transport nodes, public open space and community facilities).	
2. Noise and Vibration - Amenity	1. The Proponent must assess construction and operational	Section 7.2.5
Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity, and adverse	noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines and policies, including how the measures in the guidelines will be implemented and their effect on reducing the level and impact of noise and vibration.	Refer also to Section 1.4 of Appendix E (Noise and vibration assessment) for where these SEARs are addressed in the technical report.
impacts on the structural integrity of buildings and items including Aboriginal	The assessment must take into consideration and address the redistribution of traffic (including on local feeder roads), operational plant and equipment, and the	
Increases in noise emissions and vibration affecting nearby properties and	characteristics of noise and vibration. It must consider the impacts to sensitive receivers, including sleep disturbance.	
other sensitive receivers during operation of the project are effectively managed to	2. The assessment of construction noise and vibration must	Section 7.2.5
protect the amenity and well-being of the community.	be undertaken in accordance with the Interim Construction Noise Guideline (DECC 2009) (ICNG) relevant guidelines, and must:	Section 4 of Appendix E (Noise and vibration assessment)
Increases in noise emissions and	a. describe the nature of construction activities and related	Section 7.2.5
vibration affecting environmental heritage as defined in the Heritage Act 1977 during operation of the project are	noise characteristics (including annoying activities described in the ICNG) using typical and worst-case scenarios and identify high noise generating activities;	Section 4.1 of Appendix E (Noise and vibration assessment)
effectively managed.	b. detail the intensity and duration of noise (both air and	Section 7.2.5
	ground borne) and vibration impacts. This must include consideration of high noise generating activities and extended construction impacts associated with ancillary facilities (and the like) and construction fatigue;	Section 4.2.2 of Appendix E (Noise and vibration assessment)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	c. identify the nature and location of sensitive receivers;	Sections 7.2.3 and 7.2.4
		Section 2.2 of Appendix E (Noise and vibration assessment)
	d. describe the nature and level of the impact and the	Section 7.2.5
	sensitivity of receivers, including for out of hours works (NOTE: subjective and qualitative language must not be used to describe or group noise impacts. E.g. terms such as "negligible" and "low" should be avoided);	Sections 4.2.2 and 4.2.3 of Appendix E (Noise and vibration assessment)
	e. identify factors that may influence the timing and duration	Section 7.2.5
	of noisy and vibration generating construction activities;	Sections 4.2.2 and 4.2.3 of Appendix E (Noise and vibration assessment)
	f. identify and document the potential for works outside	Section 7.2.5
	standard construction hours (including utility works and works associated with the proposed development including those undertaken under another assessment and approval pathway, including but not limited to: - justification for the activity(ies) in terms of the ICNG. - location of the activity(ies) - predicted noise and vibration levels, and exceedances - number of potentially affected receivers, and - timing and duration of the activity(ies).	Sections 4.2 and 4.2.2 of Appendix E (Noise and vibration assessment)
	g. include a cumulative noise and vibration assessment	Section 7.18 (Cumulative assessment)
	inclusive of impacts from the project (including concurrent project construction activities) and the construction of other relevant development in the vicinity of the project;	Section 4.2.4 of Appendix E (Noise and vibration assessment)
	h. assess the potential for sleep disturbance (including the	Section 7.2.5 Section 4.2.5 of Appendix E (Noise and vibration assessment)
	number of noise-awakening events);	

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	i. provide details and analysis of the predicted effectiveness	Section 7.2.5
	of temporary or permanent mitigation measures to adequately manage identified impacts,	Section 6.2.6 of Appendix E (Noise and vibration assessment)
	i. describe any potential residual noise and vibration	Section 7.2.5
	impacts following application of mitigation measures.	Section 6.2.5 and 6.2.6 of Appendix E (Noise and vibration assessment)
		Residual risk of noise impacts are also identified in Section 9.8.3
	k. include 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 mitigation measures, including any tailored mitigation, management and communication strategies for sensitive receivers.	Consultation would be considered in mitigation as described in Sections 4.2.2, 6.1.2 and 6.2.6 of Appendix E (Noise and vibration assessment) (and summarised in Section 7.2.5 and 7.2.6 of the Modification Report.
	3. The assessment of construction traffic and operational traffic noise must be undertaken in accordance with the NSW Road Noise Policy (DECCW) include:	
	 justification for the model used in accordance with the Road Noise Policy Appendix B4 and B5; 	Section 5.1.1 of Appendix E (Noise and vibration assessment)
	b. consideration of how the potential for maximum noise	Section 7.2.5
	levels to cause sleep disturbance has informed the mitigation measures;	Section 5.1.1 of Appendix E (Noise and vibration assessment)
	c. consideration of the effects of road gradient on road	Section 7.2.5
	emissions and speed of vehicles.	Section 5.1.1 of Appendix E (Noise and vibration assessment)
	 consider meteorological conditions by noting any wind or temperature inversion conditions that are characteristic of 	Section 7.2.5

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	the area and discuss the effects on traffic noise from the project according to the NSW Road Noise Policy	Section 5.1.1 of Appendix E (Noise and vibration assessment)
	Note: Consideration of changes to traffic volumes as a result of recent strategic and project land use changes in the project's road catchment must be considered in the noise assessment.	
	4. The process for community engagement should be	Section 7.2.5
	included or referenced in the noise and vibration assessment as part of the mitigation strategy and assessment.	Section 6.1.2 of Appendix E (Noise and vibration assessment)
3. Flooding The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.	 A flood impact and risk assessment (FIRA) must be undertaken by a qualified flooding engineer. As a minimum the FIRA should consider: existing base case scenario, including developing a hydrologic and hydraulic model that is compatible with existing flood information developed by Liverpool, Fairfield and Blacktown Councils' flood studies and floodplain risk management studies and plans; existing flood behaviour and flood constraints and risks on the site and its surrounding areas for the full range of events including 5% AEP, 1% AEP, PMF and 0.5% AEP or 0.2% AEP; 	Section 7.4.4, Section 7.4.5; and Appendix G (Surface water and flooding assessment) (refer Section 1.2.1 for where these SEARs are addressed in the technical report).
	 c. changes in post development flood behaviour, impacts of flooding on existing community and on the development for the full range of events including 5% AEP, 1% AEP, PMF and 0.5% AEP or 0.2% AEP. This should address impacts on flood behaviour and on emergency response management of the site and surrounding areas; d. impacts of climate change on both existing and post development flood behaviour due to increase in rainfall intensities; and 	

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	 e. proposed temporary management actions to mitigate impacts of flooding during construction on the community, personnel, machinery, and construction sites. Note: flood behaviour includes flood volume, extent, depth, level, velocity, duration, rate of rise, flood function and hazard. 	
	The assessment must include maps of all features relevant to flooding as described in the Floodplain Development Manual, including flood prone and the flood planning area.	Section 7.4.4, Section 7.4.5; and Appendix G (Surface water and flooding assessment) (refer Section 1.2.1 for where these SEARs are addressed in the technical report).
Heritage – Aboriginal Cultural Heritage The design, construction and operation of the project facilitates, to the greatest	 The Proponent must provide an assessment of Aboriginal cultural heritage, prepared in accordance with relevant sections of the current guidelines, identifying, describing and assessing potential impacts to Aboriginal cultural heritage sites or values associated with the modification. 	Refer to Section 7.7.2 and Section 7.7.5
extent possible, the long term protection, conservation and management of the heritage significance of Aboriginal objects and places. The design, construction and operation	2. The Proponent must provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing and selecting options and mitigation measures (including the final proposed measures), in accordance with relevant sections of	Current assessment has been undertaken in accordance with Stage 2 of the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) (NSW RMS, 2011b).
of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of Aboriginal objects and places.	current guidelines.	Refer to Section 7.7.2 for overview of consultation with Aboriginal stakeholders. Refer to Section 7.7.6 for mitigation measures.

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
5. Soils and contamination	1. Verify the risk of acid sulfate soils (Class 1, 2, 3 or 4 on	Section 7.11.4
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	the Acid Sulfate Soil Risk Map) within, and in the area likely to be impacted by, the project.	Section 4.2.4 in Appendix L (Contamination assessment report)
		Refer also to Section 1.2.1 of Appendix L (Contamination assessment report) for where these SEARs are addressed in the technical report.
are minimised, including disturbance to acid sulfate soils and site contamination.	2. The impact of the project on acid sulfate soils (including	Sections 7.11.4 and 7.11.5
	impacts of acidic runoff offsite) in accordance with the current guidelines.	Sections 5.2 and 6.2 in Appendix L (Contamination assessment report)
	3. The likelihood of land contamination and identify if	Sections 7.11.4 and 7.11.5
	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.	Sections 4.19 and 5.1 in Appendix L (Contamination assessment report)
	4. Identify whether soil salinity is likely to be an issue and if	Sections 7.11.4 and 7.11.5
	so, determine the presence, extent and severity of soil salinity within the project area, and assess the impacts of the project on soil salinity and how it may affect groundwater resources and hydrology.	Sections 4.2.3, 5.3 and 6.3 in Appendix L (Contamination assessment report)
	 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. 	Section 7.11.5Sections 5.5 and 6.4 in Appendix L (Contamination assessment report)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
6. Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity	 Prepare a Biodiversity Development Assessment Report (BDAR) that assess biodiversity impacts in accordance with s7.9 of the <i>Biodiversity Conservation Act 2016</i> (BC Act) and the Biodiversity Assessment Method (BAM). 	A BDAR was prepared by Niche (2022) in accordance with s7.0 of the BC Act and is included as Appendix H (Biodiversity development assessment report), and summarised in Section 7.6 (Biodiversity).
Offsets and/or supplementary measures are assured which are equivalent to any residual impacts of project construction and operation.	2. The BDAR must document the application of the avoid, minimise and offset framework in accordance with the BAM.	The avoid, minimise and offset framework is documented in Section 3.1 of Appendix H (Biodiversity development assessment report).
	 The BDAR must include information in the form detailed in s6.12 of the BC Act, cl6.8 of the Biodiversity Conservation Regulation 2017 and the BAM, including details of the measures proposed to address the offset obligation as follows: a. the total number and classes of biodiversity credits required to be retired for the developments/project; b. the number of classes of like-for-like biodiversity credits proposed to be retired; c. the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; d. any proposal to fund a biodiversity conservation action; e. any proposal to make a payment into the Biodiversity Conservation Fund; and f. any stage retirement of credits based on when the development is carried out that would impact on biodiversity values. Note: If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.	Biodiversity credits required for the proposed modification are detailed in Section 7.6.6 and further detailed in Section 3.3 and Section 4 of Appendix H (Biodiversity development assessment report).

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment required by the BAM and as detailed in various guidelines, practice notes, updates and other advice issued by the Environment and Heritage Group of DPE (EHG) to BAM accredited assessors (see: https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiv ersity-offsets-scheme/accredited-assessors/assessor-resources).	Digital spatial data will be provided to the Department of Planning and Environment (DPE).
	5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the BC Act.	The BDAR was prepared by a relevant accredited person (refer Appendix H (Biodiversity development assessment report)).
	The BDAR must include details of the measures proposed to address offset obligations.	Measures proposed to address offset obligations are detailed in Section 7.6.6 and further detailed in Section 3.3 and Section 4 in Appendix H (Biodiversity development assessment report). Mitigation measures to reduce identified impacts are detailed in Section 7.6.6.
	7. Impacts on biodiversity values not covered by the BAM must be assessed. This includes a threatened aquatic species assessment (Part 7A Fisheries Management Act 1994) to address whether there are likely to be any significant impact on listed threatened species, populations or ecological communities listed under the Fisheries Management Act 1994 (FM Act).	Biodiversity values not covered by the BAM have been assessed in Appendix H (Biodiversity development assessment report).
	8. Identify whether 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 Environment Protection and the Biodiversity Conservation Act 2000 (EPBC Act).	KTPs in relation to the proposed modification are addressed in Section 7.6.5.

Requirement (specific assessment requirements in **Key Issue and Desired Performance** Where addressed in the report **Outcome** addition to the general requirement above) 7. Water - Quality and Hydrology Refer to Section 7.5.2 for details An assessment of water quality impacts, including: stating the ambient NSW Water Quality Objectives (NSW regarding the NSW WQOs Pollutants that may be introduced are The project is designed, constructed and WQO) and environmental values for the receiving waters operated to protect the NSW Water relevant to the project, including the indicators and identified and discussed in Section Quality Objectives where they are associated trigger values or criteria for the identified 7.5.5 currently being achieved, and contribute environmental values in accordance with the Australian & Identifying and estimating the quality towards achievement of the Water New Zealand Guidelines for Fresh & Marine Water and quantity of pollutants that may be Quality Objectives over time where they Quality and or local objectives, criteria or targets introduced is detailed in Section 7.5.5 are currently not being achieved, endorsed by the NSW government; and guidelines for acceptable levels including downstream of the project to identifying and estimating the quality and quantity of for the environment are detailed in the extent of the project impact including pollutants that may be introduced into the water cycle by Section 7.5.2. Potential risks to human estuarine and marine waters (if source and discharge point and describe the nature and health and the environment are degree of impact that any discharge(s) may have on the summarised in Section 7.5.5 applicable). receiving environment, including consideration of all d. Section 7.5.5 Assess the impacts of the development pollutants that pose a risk of non-trivial harm to human Section 7.5.5 provides the on hydrology and waterway health and health and the environment: assessment of impacts during develop measures to avoid and mitigate identifying the rainfall event that the water quality construction and operation against the protection measures will be designed to cope with: NSW WQOs. Further measures to these impacts. d. the significance of any identified impacts including meet or improve the NSW WQOs are consideration of the relevant ambient water quality incorporated into detailed design, as per Section 7.5.6 outcomes: e. demonstrating how construction and operation of the Section 7.5.4 discusses the existing project will, to the extent that the project can influence, water quality, which does not currently ensure that: meet the NSW WQOs based on the where the NSW WQOs for receiving waters are ANZG 2018 and ANZECC 2000 currently being met, they will continue to be guidelines. Section 7.5.6 addresses protected: and how the WQOs would be improved where the NSW WQOs are not currently being met, over time. activities will work toward their achievement over Section 7.5.4 discusses the capacity time: of the existing stormwater quality controls to minimise water pollution justifying, if required, why the WQOs cannot be maintained or achieved over time; and protect human health and the demonstrating that all practical measures to avoid or environment. Further mitigation minimise water pollution and protect human health and measures are proposed in Section

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
	the environment from harm are investigated and implemented; h. identifying 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. identifying proposed monitoring locations, monitoring frequency and indicators of surface and groundwater quality	 7.5.6 to further minimise identified impacts. h. Section 7.5.4 identifies sensitive receiving environments, while Section 7.5.6 details measures to avoid impacts to them. Further details are found in Section 5.3 of Appendix G (Surface water and flooding assessment). i. Section 7.5.6 details a monitoring plan to be implemented.
	 An assessment of the impact of the development on hydrology, including: a detailed and consolidated site water balance, including quantity, quality and source; effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas; effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems; impacts to natural process and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches); changes to environmental water availability; mitigation measures for the management of stormwater and wastewater during both construction and operation (including volumes, flow rates, management methods and re-use options); and proposed surface and groundwater monitoring activities and methodologies. 	 Chapter 7.5 (Surface water and groundwater) provides an assessment of construction and operational related impacts of the proposed modification on surface water hydrology. Section 4.1.6 and Section 6.1.5 of Appendix G (Surface water and flooding assessment) describe the methodology to assess impact of the proposed modification on the quantity and quality of surface water runoff and the water demand and likely sources during the construction of the proposed modification. Section 7.5.5 contains a discussion of the potential effects to surface water quantity and geomorphology including the effects to downstream receiving waterways. Appendix Appendix H (Biodiversity development assessment report) contains an assessment of impacts to aquatic

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
		ecosystems, including groundwater dependent ecosystems. d. Section 7.5.5 presents the impacts on the natural process and functions within receiving waterways downstream of the Westlink M7. Appendix H (Biodiversity development assessment report) contains an assessment of impact to natural processes and functions within downstream rivers, wetlands, estuaries, marine waters and floodplain areas in terms of nutrient flow, aquatic connectivity and access to habitat for spawning and refuge. e. Appendix G (Surface water and flooding assessment) includes an assessment of the proposed modification on environmental water availability. f. Section 7.5.6 details the construction and operational related impacts of the proposed modification on stormwater runoff. Management of wastewater is dealt with Section 7.16 (Waste). g. Section 7.5.2 describes the surface water monitoring that has been undertaken to support the surface water assessment. Section 9 Appendix G (Surface water and flooding assessment) outlines the proposed monitoring of surface water quality that would be undertaken prior
		to, throughout and following the

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Where addressed in the report
		construction of the proposed modification.
8. Other Issues	 An assessment of the following issues must be undertaken in accordance with the commitments in Attachment 2 of the M7 Motorway (SSI 663) – Project Modification letter submitted 9 May 2022 (via Major Projects Portal): Air Quality Climate Change Risk Landscape Character, Visual Impact and Urban Design (including green infrastructure designs, actions and outcomes for the project and how the project will achieve a net increase in tree numbers and canopy within proximity of the impacted area). Non-Aboriginal Heritage Social Sustainability Waste 	Refer to Sections 7.3 (Air quality), 7.14 (Climate change), 7.10 (Landscape character, visual impact and urban design), 7.8 (Non-Aboriginal heritage), 7.12 (Social), 7.13 (Sustainability) and 7.16 (Waste).

Environmental Planning and Assessment Regulation 2021 requirements

The requirements for a modification report under clause 180(1) of the *Environmental Planning and Assessment Regulation 2021*, and how they have been addressed, are provided in Table 3.

Table 3 Requirements under Section 180(1) of the EP&A Regulation

EP&A Regulation requirement	How addressed
Clause 180 (1) A modification request must:	
Be in the approved form	The document has been prepared in accordance with the EP&A Act and the SEARs issued for the proposed modification.
Contain details of the modification	Chapter 4 (Proposed modification) of the Modification Report describes the proposed modification. Chapter 8 (Conditions of approval) contains a description of the proposed changes to the existing conditions of approval.
Be prepared having regard to the State Significant Infrastructure Guidelines	The Modification Report has been prepared with regard to the <i>State Significant Infrastructure Guidelines</i> (DPIE, 2021).
Be submitted on the NSW planning portal	The modification report has been submitted via the NSW planning portal. Further details of public exhibition and how to make a submission are provided in Chapter 6 (Consultation) of the Modification Report.