Attachment 2

EES scoping requirements checklist

MARINUS LINK

Attachment 2

The following table has been prepared to outline where all requirements of the EES scoping requirements have been addressed in the EIS/EES documentation. Sections of the EES scoping requirements that set the context for the preparation of the EIS/EES, such as the project setting, have not been included in the table.

Table 2-1 Marinus Link EES scoping requirements and where they are addressed in the EIS/EES

Section	Requirement	Where addressed in the EIS/EES
1.Introduction General EES Requirements	In light of the potential for significant environmental effects, on 12 December 2021 the former Minister for Planning determined under the Environment Effects Act 1978 that Marinus Link Pty Ltd (the proponent) is to prepare an environment effects statement (EES) for the proposed Marinus Link project (the project). The purpose of the EES is to provide a sufficiently detailed description of the project, assess its potential effects on the environment1 and assess alternative project layouts, designs and approaches to avoid and mitigate effects. The EES will inform and seek feedback from the public and stakeholders. The Minister for Planning (the Minister) will issue an assessment of the project's environmental effects under the Environment Effects Act to conclude the EES process. The Minister's assessment will then inform statutory decision-makers for the project. While the scoping requirements are intended to cover all relevant matters, the EES will also need to address other issues that emerge during the EES investigations, especially potential impacts and environmental issues relevant to statutory decisions that will be informed by the assessment.	Whole EIS/EES
1.2 Ministers requirements for this EES	The former Minister for Planning decided that an EES is required for the project, due to its potential for significant effects, in relation to the Victorian jurisdiction. The Minister published procedures and requirements applicable to the preparation of the EES, in accordance with section 8B(5) of the Environment Effects Act (Appendix A). This included the core requirement for "The EES is to investigate and document the potential environmental effects (direct and/or indirect) of the proposed project, including for any relevant alternatives, as well as associated environmental avoidance, mitigation and management measures. In particular, the EES needs to address: • effects on biodiversity and ecological values within and near the project area including native vegetation, listed threatened communities and species (flora and fauna) under the Flora and Fauna Guarantee Act 1988 and Environment Protection and Biodiversity Conservation Act 1999, such as through clearance, degradation or fragmentation of habitat;	Volume 3, Chapter 2 – Marine Ecology Technical Appendix H: Marine ecology and resource use Volume 4: Chapter 11 – Terrestrial Ecology Technical Appendix V: Terrestrial ecology
	• effects on Aboriginal cultural heritage values;	Volume 3, Chapter 4 – Underwater cultural heritage Appendix I: Underwater cultural heritage and archaeology Volume 4, Chapter 13 – Aboriginal cultural heritage Technical Appendix J: Aboriginal and historical cultural heritage

Section	Requirement	Where addressed in the EIS/EES
	◢ effects on existing landscape values.	Volume 4, Chapter 7 – Landscape and visual Technical Appendix R: Landscape and visual
	◢ effects on freshwater and marine environments and related environmental values, including any changes to stream flows, water quality or sedimentation due to waterway crossings or installation of subsea cables;	Volume 3, Chapter 2 – Marine ecology Technical Appendix H: Marine ecology and resource use Volume 4, Chapter 4 – Groundwater Technical Appendix P: Groundwater Volume 4, Chapter 5 – Surface water Technical Appendix Q: Surface water
	◢ effects on the socioeconomic environment including land use, at local and regional scales;	Volume 1, Chapter 7 – Economics Technical Appendix A: Economics Volume 4, Chapter 15 – Land use and Planning Technical Appendix S: Land use and planning Volume 4, Chapter 16 – Social Technical Appendix U: Social
1.3 Commonwealth requirements	The project was also referred under the Commonwealth ***Environment Protection and Biodiversity Conservation Act 1999*** (EPBC Act) to the Commonwealth Minister for the Environment in October 2021.	Whole EIS/EES
	The project also requires assessment under the Tasmanian ***Environmental Management and Pollution Control Act 1994***.	Separate EIS documents have been prepared for the Heybridge converter station site and shore crossing in Tasmania

Section	Requirement	Where addressed in the EIS/EES
	The proponent is intending to combine its Victorian EES, Tasmanian EIS and Commonwealth EIS documentation as much as possible, in order to prepare a single package of assessment documents to address requirements under the Victorian, Tasmanian and Commonwealth legislation. This consolidated manner of examining matters and presenting information (across the jurisdictions) will assist stakeholders to access and engage with the project, its issues, potential impacts and mitigation, despite where they might reside or manifest and help to minimise duplication.	Whole EIS/EES
2.1 What is an EES?	An EES describes a project, it's rationale/benefit and its potential environmental effects. It should enable stakeholders and decision-makers to understand how the project is proposed to be implemented and the likely environmental effects of doing so. An EES has two main components: i. The EES main report – an integrated, plain English document that assesses the potential impacts of the project, examines avoidance, mitigation, or other measures to reduce the environmental effects and assesses residual effects. The main report draws on technical studies, data and statutory requirements and policy relevant to the environment and should clearly identify which components of the scope are being addressed throughout. ii. The EES technical reports- specialist studies, investigations and analyses that provide the basis for the EES main report. These reports will be exhibited in full, as appendices to the main report. Given the multi-jurisdictional nature of this project and the associated requirements, the EES main report and technical reports may be presented by the proponent in combination with other aspects to fulfill requirements under different jurisdictions together.	Whole EIS/EES
2.2Assessment and approvals process	The proponent is responsible for preparing an EES, including conducting technical studies and undertaking appropriate stakeholder consultation. DTP is responsible for managing the EES process. The EES process has the following steps: • preparation of a draft study program and draft schedule by the proponent; • preparation and exhibition of draft scoping requirements by DTP on behalf of the Minister with public comments received during the advertised exhibition period; • finalisation and issuing of scoping requirements by the Minister; • completion of the EES by the proponent; • review of the proponent's draft EES documentation by DTP and a technical reference group; • review of the EES by DTP to establish its adequacy for public exhibition; • exhibition of the proponent's EES and invitation for public comment; • appointment of an inquiry panel by the Minister to review the EES and public submissions received, conduct public hearings and provide a report to the Minister; and • preparation of an assessment of the project's environmental effects by the Minister for the consideration of statutory decision-makers.	Process completed to inform the development of the EIS/EES chapters and Technical Appendices

Section	Requirement	Where addressed in the EIS/EES
2.2 Technical reference group	DTP has convened a technical reference group (TRG) of Victorian and Commonwealth government agencies, the Tasmanian EPA, Registered Aboriginal Parties, regional authorities and local councils for this EES process to advise DTP and the proponent on: • applicable policies, strategies and statutory provisions; • EES scoping requirements; • the design and adequacy of EES technical studies; • the proponent's public information and stakeholder consultation program for the EES process; • responses to issues arising from the EES investigations; • the technical adequacy and completeness of draft EES documentation; and • coordination of statutory processes.	TRG comments have informed the preparation of the EIS/EES chapters and all Technical Appendices. Volume 1, Chapter 5 – EIS/EES assessment framework Volume 1 Chapter 8 – Community and stakeholder engagement
2.2 EES Consultation	The proponent is responsible for informing and engaging the public and stakeholders during the EES process, to inform them about the project, the EES process and EES studies. The proponent's EES consultation should enable feedback to be inputted on the project and its potential environmental effects, as well as respond to issues raised. Stakeholders include potentially affected parties, Traditional Owner groups, any interested community organisations/groups and government bodies. The proponent is to undertake effective engagement that enables the public and stakeholders to understand where there are opportunities for engagement. The proponent needs to provide appropriate opportunities for input and feedback from different stakeholders on the project and EES investigations. The proponent is responsible for preparing and implementing an EES consultation plan that sets out the approach to engagement. This plan is reviewed and amended in consultation with DELWP and the TRG before it is published on the Planning website. The consultation plan will: • identify stakeholders; • characterise public and stakeholders' interests, concerns and consultation needs, local knowledge and inputs; • describe consultation methods and schedule; and • outline how public and stakeholder inputs will be recorded, considered and/or addressed in the • preparation of the EES.	Volume 1 Chapter 8 – Community and stakeholder engagement
2.2 Traditional Owner engagement	The EES should be developed with acknowledgement of and respect for Traditional Owners' care for and connection to Country. Through the EES, the proponent should seek to understand the direct and indirect ways in which the project could affect these interests. The proponent should support and enable culturally appropriate, informed and meaningful engagement with Traditional Owners, including by asking Traditional Owner groups about the engagement processes that would be suitable. The EES consultation plan should set out the mechanisms to be established by the proponent to support and enable Traditional Owner engagement and should outline how the views and expertise offered by Traditional Owners will be integrated into the EES.	Volume 1, Chapter 8 – Community and stakeholder engagement Volume 4, Chapter 13 – Aboriginal cultural heritage

Section	Requirement	Where addressed in the EIS/EES
2.2 Statutory approvals and the EES process	The project will require a range of approvals under Victorian legislation if it is to proceed. DELWP coordinates the EES process as closely as practicable with the approvals' procedures, consultation and public notice requirements. The key approvals required under Victorian legislation are a planning approval under the *Planning and Environment Act 1987*, two approved Cultural Heritage Management Plans under the *Aboriginal Heritage Act 2006*, a consent to use and develop marine and coastal Crown Land under the *Marine and Coastal Act 2018* and a lease/licence under the *Crown land (Reserves) Act 1978*. Other approvals may be required and will be determined throughout the course of the EES.	Volume 1, Chapter 4 – Legislative framework Volume 4, Chapter 15 – Land use and planning
3.1 General approach	Preparation of the EES should be consistent with a systems approach and a risk-based approach when identifying issues for assessment. The EES needs to put forward a sound rationale for the level of assessment and analysis undertaken for any environmental effect or combination of environmental effects arising from all components and stages of the project. The EES needs to provide an analysis of the significance of the potential effects of the project, with consideration of: • the potential effects on individual environmental assets – including considering magnitude, extent, duration and significance of change in the values of each asset; • the likelihood of adverse effects, including those caused indirectly as a result of proposed activities, and associated uncertainty of available predictions or estimates; • proposed avoidance or mitigation measures to reduce predicted effects; • likely residual effects and their significance assuming the proposed measures to avoid and mitigate environmental effects are implemented; and • proposed approach to managing and monitoring environmental performance and contingency planning.	Volume 5, Chapter 2 – Environmental Management Framework
3.2 Content and style	Together with the Minister's reasons for decision, the published procedures and requirements and the Ministerial Guidelines, the content of the EES and related investigations is to be guided by these scoping requirements. To facilitate decisions on required approvals, the EES should address statutory requirements associated with approvals that will be informed by the Minister's assessment, including decision-making under the Planning and Environment Act and other applicable legislation. The EES should also address any other significant issues that emerge during the investigations. Ultimately, it is the proponent's responsibility to ensure that adequate studies are undertaken and reported to support the assessment of environmental effects arising from the project and that it implements effective internal quality assurance for EES documentation. The EES should provide a clear, objective and well-integrated analysis of the potential effects of the proposed project, as well as relevant feasible alternatives, including proposed avoidance, mitigation and management measures. The EES main report should include:	Whole of EES/EIS Volume 1, Chapter 5 – EIS/EES assessment framework
	• an executive summary;	Executive summary
	• a description of the project, including its objectives, rationale, key elements, resource use, associated requirements for new infrastructure and use of existing infrastructure;	Volume 1, Chapter 1 – Introduction

Section	Requirement	Where addressed in the EIS/EES
		Volume 1 Chapter 2 – Project rationale Volume 1, Chapter 6 – Project description
	• a description of the proponent and its environmental performance credentials, including experience in developing and operating projects and its health, safety and environmental policies;	Volume 1, Chapter 1 – Introduction
	• a description of the approvals required for the project to proceed, and their relationship to relevant laws, policies, strategies, guidelines and standards;	Volume 1, Chapter 4 – Legislative framework
	• a description of feasible alternatives capable of substantially meeting the project's objectives that may offer environmental or other benefits including the basis for any nomination of a preferred alternative;	Volume 1, Chapter 3 – Route selection and project alternatives
	• a description of the scope, timing and method for studies or surveys used to provide information on the values of the project areas, as well as any records and other data from local sources gathered and considered as appropriate; • descriptions of the existing and the predicted future environment (such as projected climate change scenarios), where this is relevant to the assessment of potential effects; • appropriately detailed assessments of potential effects of the project (and feasible alternatives) on environmental assets and values, relative to the "no project" scenario, together with an estimation of likelihood and degree of uncertainty associated with predictions; clear, active measures for avoiding, minimising, managing and monitoring effects of the project; • predictions of residual effects of the project assuming implementation of proposed environmental management measures and/or performance requirements; • any proposed offset measures where avoidance and other mitigation measures will not adequately address effects on environmental values; • assessment of cumulative impacts with other existing and proposed developments in the region;	Whole EIS/EES
	• documentation of the process and results of the consultation undertaken by the proponent during the preparation of the EES, including the issues raised by stakeholders, including Traditional Owners, and the public and the proponent's responses to these issues, in the context of the EES studies and the associated consideration of mitigation measures;	Volume 1, Chapter 8 – Community and stakeholder engagement; Volume 4, Chapter 13 – Aboriginal cultural heritage
	• evaluation of the implications of legislation and policy for the project and feasible alternatives;	Volume 1, Chapter 4 – Legislative framework; Volume 5, Chapter 1 – Conclusion by jurisdiction

Section	Requirement	Where addressed in the EIS/EES
	• evaluation against the principles and objectives of ecologically sustainable development; and	Volume 5, Chapter 1 – Conclusion by jurisdiction
	• conclusions on the significance of impacts on local, regional and state matters.	Volume 1, Chapter 7 – Economics Technical Appendix B: Economics Volume 1, Chapter 10 – Electromagnetic fields Technical Appendix A: Electromagnetic fields Volume 3, Chapters 2 to 5 Volume 4, Chapters 2 to 17 Volume 5, Chapter 1 – Conclusion by jurisdiction
	The EES should also include an outline of a program for community consultation, stakeholder engagement and communications for the construction and operational phases of the project, including opportunities for stakeholders to engage with the proponent to seek responses to issues that might arise. The EES should also outline an approach to furthering Traditional Owner engagement and partnerships during project implementation including, as appropriate, in the management of Country.	Volume 1, Chapter 8 – Community and stakeholder engagement; Volume 4, Chapter 13 – Aboriginal cultural heritage Volume 5, Chapter 2 – Environmental Management Framework
	The proponent may choose to prepare a website with interactive functionality to provide an alternative way of accessing EES information, which may complement the conventional EES main report and technical reports. Such an approach should be discussed with DTP Impact Assessment Unit, DCCEEW and Tasmanian EPA and if integrated with the EES documentation, the digital information should be provided to the TRG for review.	EIS/EES is available on the MLPL website
	The proponent must also prepare a concise, graphical-based non-technical summary document (hard copy A4, no more than 25 pages) for free distribution to interested parties. The EES summary document should include details of the EES exhibition, public submission process and availability of the EES documentation and any digital information.	Project summary report

Section	Requirement	Where addressed in the EIS/EES
3.3 Project description and rationale	The EES is to describe the project in sufficient detail both to allow an understanding of all components, processes and development stages, and to enable assessment of their likely potential environmental effects. The project description should canvass the following: • an overview of the proponent's environmental performance and track record, including experience in delivering similar projects, organisation health, safety, environmental and community engagement policies, ability to build trusted relationships with stakeholders and Traditional Owner groups and whether the proponent has been subject to any past or present proceedings under a Commonwealth, state or territory law for the protection of the environment or the conservation and sustainable use of natural resources;	Volume 1, Chapter 1 – Introduction Volume 1, Chapter 6 – Project description
	• contextual information on the project, including the proponent's objectives and rationale, their relationship to statutory policies, plans and strategies, including the basis for selecting the proposed project locations and implications of the project not proceeding;	Volume 1, Chapter 1 – Introduction Volume 1, Chapters 2 – Project rationale Volume 1, Chapter 3 – Route selection and project alternatives Volume 1, Chapter 4 – Legislative Framework
	• the project areas and vicinity, supported by plans and maps that show: – the location of relevant sensitive receivers; – the extent of Crown and private land, existing and planned land uses and waterways; and – the general layout of the proposed infrastructure, areas of disturbance, including access tracks, containment banks, laydown areas and quarries/borrow pits, proposed exclusion and buffer zones.	Volume 1, Chapter 1 – Introduction Volume 1, Chapter 6 – Project description Attachment 6: Map Book
	• the proposed operational life of the project;	Volume 1, Chapter 6 – Project description
	• other necessary works directly associated with the project, such as road upgrades and/or connections, and infrastructure and services relocation, including visitor facilities;	Volume 1, Chapter 6 – Project description Volume 4, Chapter 8 – Traffic and transport Technical Appendix W: Traffic and transport

Section	Requirement	Where addressed in the EIS/EES
	◢ predictions of energy use and greenhouse gas emissions associated with the project;	Volume 1, Chapter 6 – Project description Volume 1, Chapter 9 – Sustainability, climate change and greenhouse gas emissions Technical Appendix D: Greenhouse gas
	◢ risks associated with projected climate change and resilience to these risks including consideration of the *Climate Change Act 2017*'s principles of risk management and standards for risk assessment e.g. AS/NZS ISO 31000:2009;	Volume 1, Chapter 9 – Sustainability, climate change and greenhouse gas emissions Technical Appendix C: Climate change
	◢ description of the project's components (supported by visuals and diagrams), including: – applicable standards and adopted specifications for infrastructure; – location, footprint, layout and access arrangements during construction and operation; – clearing or lopping of native vegetation for construction or operation; – design and expected construction staging and scheduling; – proposed construction methods and materials, and extent of areas to be disturbed during construction; – solid waste, wastewater and hazardous material generation and management during construction and operation; – rehabilitation of site works areas; – proposed tenure arrangements to provide for access for maintenance or other operational purposes; – lighting, safety, security, and noise requirements during construction and operation; – hours of construction work, workforce requirements and a description of the expected duration of project components, including which components are temporary and which are permanent; – approach to incorporate sustainability principles and practices into project development and delivery; and – operational requirements including maintenance activities and decommissioning.	Volume 1, Chapter 6 – Project description Volume 1, Chapter 9 – Sustainability, climate change and greenhouse gas emissions Volume 4, Chapter 11 – Terrestrial ecology Attachment 6: Map Book
3.4 Project alternatives and development	The EES is to document the development process for the project, including methods for the identification and evaluation of alternatives, and the basis for selecting the preferred alternative(s) examined in detail within the EES4. The EES needs to describe the process for identification and evaluation of project alternatives, including: ◢ alternatives considered in the project development and design process; ◢ methods and environmental criteria for identifying and comparing alternatives, and for selecting preferred alternatives;	Volume 1, Chapter 3 – Route selection and project alternatives Volume 1, Chapter 6 – Project description Volume 1, Chapter 8 – Community and stakeholder engagement

Section	Requirement	Where addressed in the EIS/EES
	• assessment and comparison of the technical feasibility and environmental implications of alternatives including alternative construction methods and the basis for selecting the preferred project layout and design, particularly where alignments are located in proximity to environmentally sensitive areas; and • how information gathered during the EES process, including from consultation with stakeholders and Traditional Owner groups, was used to consider alternatives and refine the project. The EES is to document the assessment of likely environmental effects of feasible alternatives, particularly where these offer a potential to avoid and/or minimise significant environmental effects whilst meeting the objectives of the project. In doing so, the assessment of environmental effects of relevant feasible alternatives (e.g. alignments, refinements and designs) needs to address the matters set out in section 4 of these scoping requirements, as appropriate. Key aspects of the project for which the EES will need to demonstrate consideration, and where relevant assessment, of feasible alternatives, include (but is not limited to): • potential corridors and alignments for the onshore and offshore cable route, including criteria for excluding corridors and alignments from further consideration; • siting of the proposed shore crossing at Waratah Bay; • siting the transition, converter and switching stations, and any implications for the preferred cable route; and • selection of construction methods and proposed technology (including where cable trenching and drilling is proposed). The depth of investigation of alternatives should be proportionate to their potential to avoid or minimise potentially significant adverse effects and to meet project objectives.	
3.5 Applicable legislation, policies and strategies	In addition to the *Environment Effects Act*, the EES will need to identify relevant legislation, policies, guidelines and standards, and assess their specific requirements or implications for the project, particularly in relation to required approvals. The proponent will also need to identify and address any other relevant policies, strategies, subordinate legislation and related management or planning processes, including Traditional Owner Country Plans, that are relevant to the assessment of potential effects of the project.	Volume 1, Chapter 4 – Legislative framework Volume 1, Chapter 5 – EIS/EES assessment framework All EIS/EES Technical appendices
3.6 Evaluation objectives	Evaluation objectives are provided in Section 4 for each of the topics to be addressed in the EES. The evaluation objectives identify desired outcomes in the context of key legislative and statutory policies, as well as the principles and objectives of ecologically sustainable development, environment protection, net community benefit and healing Country. In accordance with the Ministerial Guidelines, they provide a framework to guide an integrated assessment of environmental effects and for evaluating the overall implications of the project.	Volume 3, Chapters 2 to 5 Volume 4, Chapters 2 to 17 Volume 5, Chapter 1 – Conclusion by jurisdiction
3.7 Environmental	Competent management of environmental performance during design, project construction and operation is required to meet statutory requirements, achieve environmental outcomes, protect environmental values and sustain stakeholder confidence. Hence, the proposed environmental management framework (EMF) in the EES should describe a transparent	Volume 5, Chapter 2 – Environmental management framework

Section	Requirement	Where addressed in the EIS/EES
management framework	governance framework with clear accountabilities for complying with approvals and managing and monitoring the environmental effects and risks associated with the design, construction and operational phases. The EMF will identify management plans to be developed for the project and describe their scope and timing of preparation. The entities responsible for development of, approval of, implementation of and review of environmental management plans should be specified. The EMF should reference or address the source baseline environmental conditions against which the evaluation of the residual environmental effects of the project will occur, as well as the efficacy of applied environmental management and contingency measures. The framework should include: • regulatory context and required approvals and consents, including any anticipated requirements for related environmental management plans, whether for project phases or elements; • environmental management system to be adopted; • organisational responsibilities and accountabilities for environmental management; • an approach to environmental risk assessment and management, and register of environmental risks to be maintained during project implementation; • environmental performance requirements and management measures proposed in the EES to address specific issues, including commitments to mitigate adverse effects and enhance environmental outcomes; • arrangements for management of, and access to, baseline and monitoring data, to ensure transparency and accountability and to contribute to the improvement of environmental knowledge; • a proposed monitoring program including monitoring objectives, indicators and requirements (e.g. parameters, standards, methods, locations and frequency), and justification for any aspects where monitoring is not proposed; • responsibilities and arrangements for engagement with stakeholders and communication of project information; • complaints recording and resolution; • environmental incident management; • auditing and public reporting of performance, including compliance with relevant statutory conditions and standards; and • review of the effectiveness of mitigation measures and continuous improvement. Commitments in the EES to avoid and mitigate adverse effects and achieve environmental outcomes should be clearly described in the EMF. The EMF should describe proposed objectives, indicators and monitoring requirements, where relevant, for the range of potential environmental effects identified though the EES. A change management process is also to be included.	
4. Assessment of specific environmental effects	Preparation of the EES and the necessary investigation of effects should be proportional to the environmental risks posed by the project, as outlined in the Ministerial Guidelines (p. 14). The Minister's decision requiring an EES (Appendix A) articulates the primary matters/potentially significant effects that need to be examined in the EES. A systems and risk based approach should be adopted during the design of EES studies, so that a greater level of effort is directed at investigating and managing those matters that pose relatively higher risk of adverse effects as outlined in the Ministerial	Whole EES/EIS

Section	Requirement	Where addressed in the EIS/EES
	Guidelines (p. 14). For those effects that can be demonstrated to have lower levels of risk of environment effects, the EES should describe and analyse these impacts at a level of detail commensurate with their level of environmental risk. The matters to be investigated and documented within the EES are presented below, grouped by investigation theme. Each theme is presented with an evaluation objective. The following structure sets out how the EES should document its assessment of effects for each evaluation objective. 1. Identify key issues and risks that the project poses to the achievement of the evaluation objective. 2. Characterise the existing environment and identify relevant environmental values to underpin impact assessments, having regard to the systems and risk-based approach. 3. Identify the potential effects of the project on the environment (pre-mitigation) considering aspects such as magnitude, extent, duration, likelihood and significance. 4. Present design refinement and mitigation measures that could eliminate, substantially reduce and/or mitigate the potential effects. All design and mitigation measures must apply the mitigation hierarchy with justification of why higher order measures cannot be applied. a. Avoidance: measures taken to avoid creating adverse effects from the outset, such as careful spatial or temporal placement of infrastructure or disturbance. b. Minimisation: measures taken to reduce the duration, intensity and extent of impacts that cannot be completely avoided. c. Rehabilitation/restoration: measures taken to stabilise or restore an area after disturbance to achieve previous, improved or future land uses such as ecosystems following exposure to impacts that cannot be completely avoided or minimised. d. Offsets: measures taken to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy. 5. Assess the likely residual effects of the project on the environment and evaluate their significance taking into account the likely effectiveness of the design and mitigation measures. 6. Propose an approach to performance that should include criteria, monitoring and evaluation of the measures implemented to check that predicted outcomes are being achieved during project implementation as well as contingency approaches if they are needed. The description and assessment of effects must consider the potential of the project to impact on nearby environmental values beyond the immediate project area, including areas downstream. In addition, the cumulative effects of the project in combination with other existing and planned activities in the broader area/region should be assessed for all significant adverse effects and considered in design of mitigation measures and monitoring programs.	
4.1 Biodiversity and ecological values	Evaluation objective Avoid, and where avoidance is not possible, minimise adverse effects on terrestrial, aquatic and marine biodiversity and ecology, including native vegetation, listed threatened species and ecological communities, other protected species and habitat for these species, and to address offset requirements consistent with state policies.	Volume 1, Chapter 10 – Electromagnetic fields Technical Appendix A: Electromagnetic fields

Section	Requirement	Where addressed in the EIS/EES
	Key issues • Loss or degradation of native vegetation or other habitat values due to construction or operational maintenance requirements. • Direct or indirect loss, disturbance and/or degradation of listed or other protected species and nearby habitat that may support listed or other protected flora, fauna or ecological communities. • Potential initiation or exacerbation of listed potentially threatening processes under the FFG Act. • Potential impacts on habitats within protected areas, such as national parks, state parks or other conservation reserves. • Potential impacts on planted vegetation established through environmental programs. • Potential for indirect effects on biodiversity values including those effects associated with changes in coastal processes, noise, vibration, electromagnetic fields, heat, vessel movements and water quality. • Potential cumulative effects on listed threatened flora and fauna species, and their habitats, from the project in combination with other projects. • The availability of suitable offsets for the loss of native vegetation and habitat for listed threatened species under the FFG Act. Existing environment • Characterise the type, distribution and condition of biodiversity values within a suitable study area, comprising the project site and its environs, including native vegetation, terrestrial, aquatic and marine habitat and habitat corridors, linkages or known migratory pathways that could be impacted by the project. • Identify planted or recovered vegetation established through environmental programs. • Describe the biodiversity values that could be directly or indirectly affected by the project, including: – native vegetation and any ecological communities listed under the FFG Act; and – presence of, or suitable habitats for, protected flora and fauna species, in particular species listed under the FFG Act. • Describe any existing threats to biodiversity values, including: – historical or ongoing disturbance or alteration of habitat conditions (e.g. habitat fragmentation, severance of wildlife corridors or habitat linkages, changes to water quantity or quality, fire hazards, etc.); – potentially threatening processes listed under the FFG Act; and – the presence of any declared weeds, pathogens and pest animals within and in the vicinity of the project area. • Describe any trends observed in existing biodiversity values, including historical or ongoing increases or declines in populations or communities, including their reasons where known. • Inform characterisation of the existing environment by relevant databases, literature (and published data), community observations including citizen science and information from residents and landholders in or adjacent to the area of interest), appropriate targeted and/or seasonal surveys and modelling of the potential and actual presence of threatened species and communities consistent with Department of Energy, Environment and Climate Action (DEECA) (formerly DELWP) survey guidelines, conservation advices and threatened species recovery plans or action statements. Where surveys do not identify a listed species or community, but past records and/or habitat analysis	Volume 3, Chapter 2 – Marine ecology Technical Appendix G: Benthic ecology Technical Appendix H: Marine ecology and resource use Volume 4, Chapter 11 – Terrestrial ecology Technical Appendix V: Terrestrial ecology Volume 5, Chapter 2 – Environmental management framework Attachment 5: Offset strategy

Section	Requirement	Where addressed in the EIS/EES

suggest that it may occur, a precautionary approach to the further investigation and assessment of its occurrence should be applied.

Likely effects

- Assess the direct and indirect effects of the project including transport route upgrades and other ancillary activities, on native vegetation, listed ecological communities, and listed threatened and other protected flora species.
- Assess the direct and indirect effects of the project on listed threatened and other protected fauna species under the FFG Act and their habitats.
- Assess indirect loss of vegetation or habitat quality that may support any listed species or other protected fauna, resulting from changes to the local hydrology and marine processes, edge effects, habitat fragmentation, loss of connectivity, changed shipping activities or other disturbance impacts arising from construction or operation, above and below water, including from noise, vibration, changes in electromagnetic fields and lighting.
- Assess the direct and indirect effects of the project during construction and operation on biodiversity values, including:
  - disturbance or alteration of habitat conditions (e.g., habitat fragmentation, severance of wildlife corridors or habitat linkages, displacement due to avoidance of project infrastructure, changes to water quantity or quality, fire hazards etc.);
  - disturbance through noise, vibration, electromagnetic fields and heat;
  - disturbance through changed shipping activities due to the project;
  - direct removal of individuals or destruction of habitat;
  - threats of mortality of listed threatened or other protected fauna (including site and species specific risk-factors); and
  - the presence and potential spread of any declared weeds, pathogens and pest animals within and in the vicinity of the project area.
- Assess the potential effects on listed threatened or other protected fauna species.
- Assess the potential impacts on habitat connectivity of listed or other protected species, both onshore and offshore, including migratory species.
- Assess the potential cumulative effects on listed threatened or other protected fauna species, and their habitats, from the project in combination with other projects that might have similar types of impacts.

Mitigation measures

- Identify and describe potential alternatives, proposed design options and mitigation measures and their expected effectiveness in avoiding or reducing significant effects on any flora, fauna and ecological communities listed on the FFG Act or other protected species or protected area estate. Identify avoidance and/or mitigation measure that will be adopted.
- Identify staging or timing options for works that could help to avoid or minimise adverse effects on seasonal values (e.g., migratory species, breeding behaviour).

Section	Requirement	Where addressed in the EIS/EES
	• Describe the application of the three-step approach to avoiding the removal of native vegetation, minimising impacts from removal of native vegetation that cannot be avoided and providing offsets to compensate for the biodiversity impact from the removal of native vegetation. • Include an offset strategy and draft plan that sets out how the state offset requirements will be satisfied and includes evidence of the offsets proposed to be secured. Describe how the offset/s will be secured, managed and monitored, including management actions, responsibility, timing, performance measures and the specific environmental outcomes to be achieved. Performance • Describe the approach to monitoring and evaluating the measures implemented to mitigate impacts on biodiversity, ecology and related environmental values and contingencies.	
4.2 Marine and catchment values	Evaluation objectives Avoid and, where avoidance is not possible, minimise adverse effects on land and water (including groundwater, surface water, waterway, wetland, and marine) quality, movement and availability. Key issues • The potential for adverse effects on freshwater, coastal and marine ecosystems, including changes to marine and coastal processes as a result of construction, operation and decommissioning of infrastructure. • The potential for adverse effects on the functions, and environmental values of surface water environments, such as interception or diversion of flows or changed water quality or flow regimes. • The potential for adverse effects on the functions and values of groundwater due to the project's shore crossing, cable trenching or other construction activities. • The potential for adverse effects from disturbance of the seabed. • The potential for adverse effects on nearby and downstream water environments due to changed flow regimes, floodplain storage, run-off rates, water quality changes, or other waterway conditions, including in the context of climate change projections. • The potential for disturbance of contaminated, saline, dispersive or acid sulphate soils. • Potential effects to environmental values through spills, disturbance of contaminated materials or the introduction of or spread of invasive species. Existing environment • Describe marine, estuarine, intertidal and freshwater waters and their environmental values that could be affected by the project, such as from changed water quality, or water movement. • Characterise the area's hydrodynamics and coastal processes. • Characterise the local groundwater quality and behaviour, including the environmental values and any groundwater dependent ecosystems that might be affected by the project.	Volume 3, Chapter 2 – Marine ecology Volume 3, Chapter 3 – Marine resource use Technical appendix H: Marine ecology and resource use Volume 4, Chapter 2 – Geomorphology and geology Technical Appendix O: Geomorphology and geology Volume 4, Chapter 3 – Contaminated land and acid sulfate soils Technical Appendix N: Contaminated land and acid sulfate soils Volume 4, Chapter 4 – Groundwater Technical Appendix P: Groundwater Volume 4, Chapter 5 – Surface water

Section	Requirement	Where addressed in the EIS/EES
	• Characterise geology, geomorphology, landforms and soils in the project area and identify potential locations where dispersive, acid sulphate, saline or potentially contaminated soils, or soils with other special characteristics that could be disturbed by the project. Likely effects • Identify and evaluate potential effects of the project on groundwater, waterway, wetland, and marine waters, including with appropriate consideration of climate change scenarios and cumulative effects. • Identify and assess potential effects of the project on soil stability, erosion and the exposure and disposal of contaminated or hazardous soils (e.g., acid sulphate soils). • Identify potential effects resulting from the generation, storage, treatment, transport and disposal of solid and liquid wastes, including soil. • Apply a systems-based assessment where appropriate, for example, integrated marine water quality, hydrodynamics, marine ecology and resource use studies. Mitigation • Identify and evaluate aspects of project works and operations, and proposed design refinement options or measures, that could avoid or minimise significant effects on groundwater, waterway, wetland, estuarine, intertidal and marine waters. • Describe further potential and proposed design options and measures that could avoid or minimise significant effects on groundwater, waterway, wetland, and marine waters during the project's construction and operation, including response measures for environmental incidents. • Describe potential and proposed design options and measures that could avoid or minimise significant effects on soil and land stability and rehabilitation. • Describe available options for the management of the various categories of solid and liquid wastes generated by the project including in relation to the waste hierarchy, that is avoidance, reuse, and then treatment and disposal. Performance • Describe the framework for monitoring and evaluating the measures implemented to mitigate impacts on water, soils and landforms and contingencies.	Technical Appendix Q: Surface water Volume 1, Chapter 11 – Terrestrial ecology Technical Appendix V: Terrestrial ecology Volume 5, Chapter 2 – Environmental management framework
4.3 Cultural heritage	Evaluation objectives Protect, avoid and where avoidance is not possible, minimise adverse effects on historic heritage values, and tangible and intangible Aboriginal cultural heritage values, in partnership with Traditional Owners. Key issues • Recognition and respect for Traditional Owners' connection to Country. • Potential for adverse effects on Aboriginal cultural heritage values including underwater Aboriginal cultural heritage, tangible and intangible, both known and unknown.	Volume 1, Chapter 8 – Community and stakeholder engagement Volume 3, Chapter 4 – Underwater cultural heritage Technical Appendix I: Underwater cultural heritage and archaeology

Section	Requirement	Where addressed in the EIS/EES
	• Potential for adverse effects on historic cultural heritage values including underwater cultural heritage and archaeology, both known and unknown. Existing environment • Review land use history, previous studies and relevant registers to identify areas with known or potential Aboriginal cultural heritage value (including underwater Aboriginal cultural heritage, tangible and/or intangible). • Informed by meaningful engagement with Registered Aboriginal Parties and Traditional Owner groups, identify and characterise Aboriginal cultural heritage sites, areas of sensitivity, cultural landscapes, or other intangible cultural heritage. • Review land and sea use history, previous studies, relevant registers and available seafloor survey data to identify and document known, potential and previously unidentified places, sites, objects and/or artifacts of historic cultural heritage significance potentially impacted by the project, including any areas of significant archaeological potential or value on land and underwater, in accordance with Heritage Victoria guidelines. Likely effects • Assess the potential effects on Aboriginal cultural heritage. • Assess the potential effects on sites and places of historic cultural heritage significance (including underwater heritage and archaeology) including mapping site extents in relation to proposed works. Assessments are to be undertaken in accordance with the Heritage Act 2017, the Commonwealth *Underwater Cultural Heritage Act 2018*, Heritage Victoria's Guidelines for Conducting Archaeological Surveys (2020) or updates and other guidance documents. Mitigation • Describe any plan(s) or partnerships with Traditional Owners, including any opportunities to respond to Country Plans and to protect intangible cultural heritage. • Describe and evaluate proposed design, management or site protection measures that could avoid or mitigate potential adverse effects on known or unknown Aboriginal or historical cultural heritage values. • Describe management and contingency measures, in accordance with the requirements for a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006*, and including: an Archaeology Management Plan that addresses requirements of the Heritage Act and Commonwealth *Underwater Cultural Heritage Act*; a survey of all areas of proposed works to identify currently unrecorded sites; recommendations for any required site avoidance, mitigation or site investigation processes; and the development of an Unexpected Finds Protocol, conducted by a qualified and experienced historical archaeologist for the land components and maritime archaeologist for the coastal and underwater components. Performance • Describe the framework for monitoring and evaluating the measures implemented to mitigate Aboriginal cultural heritage and historic heritage effects and contingencies.	Volume 4, Chapter 13 – Aboriginal cultural heritage Technical Appendix J: Aboriginal and historical cultural heritage Volume 5, Chapter 2 – Environmental management framework

Section	Requirement	Where addressed in the EIS/EES
	• Describe the approach to supporting ongoing Traditional Owner participation in project development and implementation.	
4.4 Agriculture, land use and socioeconomic	Evaluation objectives Avoid and, where avoidance is not possible, minimise adverse effects on agriculture, forestry and other land uses, social fabric of communities, and local infrastructure, businesses and tourism. Key issues • Potential interaction with and interruption to agricultural and forestry activities and infrastructure such as stock lanes, irrigation, water supply, access, fencing, electricity supply and drainage. • Loss of productive land either due to loss of access or via soil disturbance, easements, construction traffic and poor reinstatement of land after construction. • Potential disruption to existing and/or proposed land uses, with associated economic and social effects, including cumulative effects. • Potential effects on social cohesion resulting from disruption of existing networks or effects on community services or facilities and recreational activities. • Potential economic and social effects from the project, such as through disruption of business, industry (including agriculture, forestry and fisheries) or tourism. • Biosecurity issues relating to the transfer of plant and animal diseases and weed seeds between properties e.g., Phytothera cinnamomi, Johne's disease. • Engagement with landowners and land managers. • Disruption to commercial and recreational users of the marine environment. • Potential economic and social benefits from the project. Existing environment • Describe the project area and its environs in terms of land use (existing and proposed), residences, zoning and overlays, public and private land, including any land subject to native title and Indigenous Land Use Agreements, properties affected and infrastructure that supports current and strategic patterns of economic and social activity. • Describe agricultural and primary production enterprises and practices (for instance use of large-scale equipment, prevalence of specialised production in the area, any key harvest and processing times). • Describe the local community and social setting, including community services and facilities, recreational activities, businesses and industry within the area, such as agriculture, forestry, shipping and fisheries. • Describe regional planning and economic development strategies. • Characterise tourism and recreational use of the project area and its surroundings, including water bodies, national parks and reserves. • Describe relevant commercial and recreational uses of the marine environment. Likely effects	Volume 4, Chapter 6 – Agriculture and forestry Technical Appendix K: Agriculture and forestry Volume 4, Chapter 16 – Social Technical Appendix U: Social Volume 1, Chapter 7 – Economics Technical appendix B: Economics Volume 4, Chapter 15 – Land use and planning Technical Appendix S: Land use and planning Volume 3, Chapter 3 – Marine resources Technical appendix H: Marine ecology and resource use Volume 5, Chapter 2 – Environmental management framework

Section	Requirement	Where addressed in the EIS/EES
	• Assess potential long and short-term effects from the project on existing and potential public infrastructure and land uses, including agricultural land use and associated businesses, taking into account interruption to agricultural practices, loss of productive land, biosecurity, water supply, access, drainage, and any other issues identified through the assessments. • Assess potential social impacts from the project, including through interference with current use of private and public land and community services and facilities in the area. • Assess potential economic effects of the project, considering direct and indirect consequences on employment, local and regional economy and industries in the area, including agriculture, forestry, shipping and fisheries. • Assess potential impacts from workforce requirements such as additional demand on housing and public services in the area. • Assess potential impact on tourism and tourist attractions within the project area and surrounding natural reserves. Mitigation • Demonstrate whether the project is consistent with relevant planning scheme provisions and other relevant policies. • Outline measures to minimise potential adverse effects of the project and enhance benefits to the community, businesses, industry and land uses. • Describe approach to engaging with individual landowners during design, construction and operation to minimise disruption to landowner activities. Performance • Describe the framework for monitoring and evaluating the measures implemented to mitigate agriculture, socioeconomic and land use effects and contingencies.	
4.5 Amenity, health, safety and transport	Evaluation objectives Avoid and, where avoidance is not possible, minimise adverse effects on community amenity, health and safety, with regard to noise, vibration, air quality including dust, the transport network, greenhouse gas emissions, fire risk and electromagnetic fields. Key issues • Potential for adverse effects resulting from project-related noise, vibration, dust and electromagnetic fields at sensitive receivers during construction and operation. • Managing transport disruptions for residents, businesses and travellers. • Potential damage to local and regional road surfaces along transport routes and increased risk to road safety on transport routes. • Implications of the project for fire risk, including from any changes to fire management activities and fire ignition risks arising from the project Existing environment	Volume 1, Chapter 9 – Sustainability, climate change and greenhouse gas emissions Technical Appendix D: Greenhouse gas Volume 1, Chapter 10 – Electromagnetic fields Technical appendix A: Electromagnetic fields Volume 4, Chapter 8 – Traffic and transport

Section	Requirement	Where addressed in the EIS/EES
	• Describe the existing approved or planned transport network in and around the project, including proposed construction transport route options, in terms of capacity, condition, accessibility and potentially sensitive users. • Characterise background air quality and ambient noise near the project in established residential, farming, commercial and open space areas and at other sensitive land use and high amenity locations. • Identify sensitive receptors that could be affected by noise, dust or electromagnetic fields. • Characterise the fire risks and existing fire management activities in the project area and its surrounds. Likely effects • Assess effects of construction activities on the transport network, including on safety, amenity and accessibility. • Assess effects from road upgrades and/or connections, and infrastructure and services relocation. • Predict likely air pollutant concentrations using an air quality assessment approach in accordance with Victorian Environment Protection Act and its regulations and associated publications. • Predict greenhouse gas emissions associated with the project. • Assess potential effects on noise, vibration and air quality amenity at sensitive receivers, considering Victorian Environment Protection Act and its regulations and associated publications. • Assess the risk of the project causing a fire that affects land and assets. • Assess the implications of the project for fire risk management or bushfire suppression activities. • Identify potential effects of electromagnetic fields from the project on sensitive receptors. Mitigation • Outline any required transport infrastructure works or upgrades required to address adverse impacts of the project construction and operation, including impacts on accessibility (e.g., access road construction and upgrades). • Describe and evaluate the proposed transport management and safety principles to address changed traffic conditions. • Describe and propose siting, design, mitigation and management measures to control air pollutants from construction activities. • Describe approaches and measures to minimise greenhouse gas emissions associated with the project. • Describe and evaluate both potential and proposed design responses and/or other mitigation measures (e.g., staging/scheduling of works) that could minimise noise and vibration. • Describe and assess potential measures for avoiding, mitigating or managing impacts of electromagnetic fields, including on human health. • Identify measures for avoiding, managing and minimising fire risks arising from the project, having regard to planning and other policy provisions. Performance criteria • Describe the framework for monitoring and evaluating the measures implemented to mitigate environmental amenity, transport and safety effects and contingencies	Technical Appendix W: Traffic and transport Volume 4, Chapter 9 – Air Quality Technical Appendix L: Air quality Volume 4, Chapter 10 – Noise and vibration Technical Appendix T: Noise and vibration Volume 4, Chapter 12 – Bushfire Technical Appendix M: Bushfire Volume 4, Chapter 15 – Land use and planning Technical Appendix S: Land use and planning Volume 5, Chapter 2 – Environmental management framework

Section	Requirement	Where addressed in the EIS/EES
4.6 Landscape and visual	Evaluation objectives Avoid and, where avoidance is not possible, minimise potential adverse effects on landscape and visual amenity. Key issues • Potential effects on significant landscape values and landforms in the vicinity of the project, especially national parks, state parks or other reserves and areas identified for their landscape values, such as within South Gippsland and Latrobe Shire planning schemes and cultural landscapes that may have tangible or intangible cultural values. • Potential for nearby residents or communities to experience significant effects to visual amenity from project infrastructure. Existing environment • Characterise the landscape character, features and values of the project area and its environs. • Identify public and private view sheds to and from the project and characterise visual values of the area, including dark skies. • Identify viewsheds in which the project site is visible, including from nearby residences (where permitted), public lookouts, tourist attractions, roads and key vantage points. • Identify existing built features within the landscape and their contribution to the existing landscape and visual setting relevant to the project. Likely effects • Assess the landscape and visual effects of the project, including on public and private views. Use photomontages and other visual techniques to support the assessment. • Assess the potential for cumulative impacts in the context of existing built infrastructure, as well as proposed or approved developments. Mitigation • Outline and evaluate any potential design and siting options that could avoid and minimise potential effects on landscape and visual amenity of neighbouring residences and communities and additional management strategies that may further minimise potential effects. Performance • Describe the framework for monitoring and evaluating the measures implemented to mitigate landscape and visual effects and contingencies.	Volume 4, Chapter 7 – Landscape and visual Technical Appendix R: Landscape and visual Volume 5, Chapter 2 – Environmental management framework