Planning Secretary's Environmental Assessment Requirements

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

Application Number	SSI-9406
Proposal	Inland Rail – Illabo to Stockinbingal
Location	Land generally in a new north-south corridor, from the Main South rail line north-east of Illabo to the Parkes to Stockinbingal rail line to the west of Stockinbingal
Proponent	Australian Rail Track Corporation
Date of Issue	30 April 2021

1. General SEARs

Desired Performance Outcome	Requirement	Current Guidelines
1. Environmental Impact Assessment Process The process for assessment of the project is transparent, balanced, well focussed and legal.	1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). 2. The project will impact matters of national environmental significance (MNES) protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and will be assessed under an Accredited Assessment. The Proponent must assess impacts to MNES protected under the EPBC Act. The assessment must be in accordance with the requirements listed in Attachment A. 3. Where the project requires approval under the EPBC Act and is being assessed under the Bilateral Agreement (pursuant to Amending Agreement No.1) the EIS must address: (a) consideration of any Protected Matters that may be impacted by the development where the Commonwealth Minister has determined that the project is a Controlled Action; (b) identification and assessment of those Protected Matters that are likely to be significantly impacted; (c) details of how significant impacts to Protected Matters have been avoided, mitigated and, if necessary, offset; and (d) consideration of, and reference to, any relevant conservation advices, recovery plans and threat abatement plans. 4. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.	EPBC Act Environment Assessment Process (SEWPAC, 2010)
2. Environmental Impact Statement The project is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic	1. The EIS must include, but not necessarily be limited to, the following: (a) executive summary; (b) a description of the project, including key components and activities (including ancillary components and activities) required to construct and operate it including: - project overview; - site and route locations (including use of plans); - scope of works to construct the project, including key activities, description of	

impact, including its cumulative impacts.	methodologies, working hours, indicative plant and equipment to be used; - timing of key construction activities; - acquisition of privately owned, council and crown land; and - connections to adjacent Inland Rail sections; (c) a statement of the objective(s) of the project; (d) a summary of the strategic need for the project with regard to its critical State significance and relevant State Government policy; (e) an analysis of any feasible alternatives to the project; (f) a description of feasible options within the project; (g) a description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option. The description must contain sufficient detail to enable an understanding of why the preferred alternative to and options(s) within the project were selected; (h) a general description of different construction methods that were analysed and preferred methods; (i) a concise description of the general biophysical, social and economic environment that is likely to be impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described; (j) a description of the trains that will operate under the project; (k) a demonstration of how the project design has been developed to avoid or minimise likely adverse impacts; (l) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome;		

(m)a statement of the outcomes the Proponent will achieve for each key issue;

(n) measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures will be applied to each impact;

(o) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts;

(p) 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;

(q) statutory context of the project as a whole, including:

- how the project meets the provisions of the EP&A Act and EP&A Regulation; and
- a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out;

(r) a chapter that synthesises the environmental impact assessment and provides:

- a succinct but full description of the project 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 project;
- a compilation of the impacts of the project 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 proponent will achieve and how these will be monitored; and
- the reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable

	development and cumulative impacts; and (s) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software. 2. The EIS must only include data and analysis that is reasonably needed to make a decision on the project. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.	
3. Assessment of Key Issues* Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact. * Key issues are nominated by the Proponent in the CSSI project application and by the Department in the SEARs. Key issues need to be reviewed throughout the preparation of the EIS to ensure any new key issues that emerge are captured. The key issues identified in this document are not exhaustive but are key issues common to most CSSI projects.	1. The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the project 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. 2. For each key issue the Proponent must: (a) assess the issue (including modelling as relevant), and address and undertake the requirements specified in section 2; (b) 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; (c) describe the legislative and policy context, as far as it is relevant to the issue; (d) 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 project and cumulative impacts (parallel and sequential) with other projects; (e) demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies); (f) identify clear and quantifiable actions, outcomes and, where possible, performance criteria; (g) 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); (h) detail how residual impacts will be managed or offset, and the approach and effectiveness of these measures; and (i) measures to monitor the avoidance, minimisation and offsetting of impacts to ensure quantified outcomes and criteria are met. 3. Where multiple options to avoid or minimise impacts are available, they must be identified and considered, and the proposed measure justified taking into account the public interest.	
4.	1. The project must be informed by consultation, including with relevant local, State and	

Consultation The project is developed with meaningful and effective engagement during project design and delivery.	Commonwealth government agencies, infrastructure and service providers, special interest groups, local Aboriginal community groups, affected landowners, businesses and the community. The consultation process must be undertaken in accordance with the current guidelines. 2. The Proponent must document the consultation process and demonstrate how the project has responded to the inputs received. 3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution. 4. Where the Proponent establishes a Community Consultative Committee (CCC) for the project, the establishment and operation of the CCC must be in accordance with the Department's *Community Consultative Guidelines State Significant Projects (2019)*. The CCC must not be the only or primary method of engagement with the community on the project.	

2. Key Issue SEARs

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
1. Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. he Offsets and/or supplementary measures are assured which are equivalent to any residual impacts of project construction and operation.	1. Biodiversity impacts in accordance with s7.9 of the *Biodiversity Conservation Act 2016* (BC Act), the Biodiversity Assessment Method (BAM), and be documented in a Biodiversity Development Assessment Report (BDAR). 2. The BDAR must document the application of the avoid, minimise and offset framework in accordance with the BAM. 3. 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. 4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment as per Appendix K of the BAM. 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 2020 under s6.10 of the BC Act. 6. The BDAR must include details of the measures proposed to address offset obligations in accordance with the BAM and the EPBC Act, as follows: a) The total number and classes of biodiversity credits required to be retired for the development/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 to the Biodiversity Conservation Fund.	Biodiversity Assessment Method (DPIE 2020) BAM Accredited Assessor Resources (includes all current BAM survey guidelines) Biodiversity Assessment Method 2020 Operational Manual Stage 1 (DPIE 2020) Biodiversity Assessment Method Operational Manual Stage 2 (OEH, 2019) Significant Impact Guidelines 1.1 Matters of National Environmental Significance (DEWHA, 2013) Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013 (DPI, 2013) Threatened Species Survey and Assessment Guidelines Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) Aquatic Ecology in Environmental Impact Assessment – EIA Guideline (Marcus Lincoln Smith 2003) Freshwater threatened species distribution maps ()

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	7. Impacts on biodiversity values not covered by the BAM. 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). 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 Biodiversity Conservation Act 1999* (EPBC Act).	
2. Protected and Sensitive Lands The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands. The project is designed, constructed and operated to avoid or minimise future exposure to coastal hazards and processes.	1. Assess the impacts of the project on environmentally sensitive land and processes (and the impact of processes on the project) including, but not limited to: (a) protected areas (including land and water) managed by DPIE BCD and/or DPI Fisheries under the *National Parks and Wildlife Act 1974* and the *Marine Estate Management Act 2014*; (b) Key Fish Habitat as mapped and defined in accordance with the FM Act; (c) waterfront land as defined in the *Water Management Act 2000;* (d) land or waters identified as Critical Habitat under the BC Act, FM Act or EPBC Act; and (e) biobank sites, private conservation lands and other lands identified as offsets.	Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010) Revocation, Re-categorisation and Road Adjustment Policy (OEH, 2012) Guidelines for controlled activities on waterfront land (DPI 2012) Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013 (DPI, 2013) Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003)
3. Transport and Traffic Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained.	1. Construction transport and traffic (vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to: (a) the likely construction access routes (including haul routes) and the scheduling of construction vehicle movements; (b) the indicative number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements and track machines); (c) construction worker parking; (d) the nature of existing traffic (types and number of movements) on	Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2007) Guide to Traffic Generating Developments Version 2.2 (RTA, 2002) Cycling Aspects of Austroads Guides (Austroads, 2014) NSW Bicycle Guidelines v 1.2 (RTA, 2005) Planning Guidelines for Walking and Cycling

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Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	construction access routes (including consideration of peak traffic times, movement of livestock, agricultural machinery, farm vehicles and other farm infrastructure) and assessment of traffic impacts on these routes including identifying traffic management measures to mitigate any issues; (e) provisions proposed to ensure safe access and egress to/from the classified road network; (f) the nature of any train paths (types and number of movements) and potential impact to these train paths due to additional track possession requirements; and (g) the need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project and the duration of these changes. 2. Operational transport impacts of the project for both road and rail, including: (a) forecast travel demand and traffic volumes for the project (road and rail); (b) travel time analysis; (c) performance of key intersections and level crossings by undertaking a level of service analysis at key locations; (d) wider transport interactions (local and regional roads, cycling, movement of livestock or farm vehicles, intermodal hubs. public and freight transport and the broader NSW rail network); and (e) identification of traffic and transport measures to mitigate any impacts. The assessment must include the modelling of the operational impact of the project. 3. Assess the feasibility of level crossings (existing and proposed) and justify the safety and operational impacts and/or benefits of the proposed crossing type, taking into account the NSW Government's Construction of New Level Crossings Policy. 4. In the assessment of level crossings, the EIS must: (a) provide a safety assessment for each level crossing. The safety	(DIPNR, 2004) Construction of New Level Crossing Policy (TfNSW, 201) Future Transport Strategy 2056 (TfNSW, 2018) NSW Draft Freight and Ports Plan (TfNSW, 2018-2023) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) Australian Level Crossing Assessment Model (ALCAM, 2016) Railway Crossing Safety Series 2011, Plan: Establishing a Railway Crossing Safety Management Plan (RTA, 2011) Austroads (2016). Safe System Assessment Framework

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	assessment is to be consistent with ALCAM, and any Interface Agreements and related Safety Management Plans; (b) demonstrate how the risks identified in the So Far As Is Reasonably Practical (SFAIRP) process will be reduced in consultation with the relevant road authority and TfNSW. (c) assess potential short-stacking impacts; (d) confirm road approaches to level crossings are fit for purpose, safe and designed and constructed in accordance with Austroads Guide to Road Design; and account any rationalisation of private and public level crossings in line with the NSW Government's *Level Crossing Closure Policy*.	
4. Flooding, Hydrology and Geomorphology The project minimises changes to the existing flood regime's impacts on property, public safety and the environment resulting from alteration of the water flow characteristics of watercourses and overland flowpaths. Where feasible, the project includes remedial measures to mitigate any adverse water flow impacts or flood safety risks caused by the existing rail infrastructure within the project area. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding,	1. Description of topographic and hydrological conditions of the site and surrounding area, including: (a) Assessment of the existing hydrology and flooding characteristics of all watercourses within and adjacent to the project area. This includes locating and assessing flowpaths emanating from existing culverts, pipes and bridges under the rail formation, or from overtopping of the existing formation in flood events. (b) Description of the existing and proposed topography in all areas that could be potentially affected by floodwaters. This includes the spatial location, and the horizontal and vertical dimensions of all spoil mounds. (c) Carrying out of investigations to assess the propensity for scour, erosion and geomorphological changes to occur within any watercourses or overland flowpaths affected by the project. 2. Design parameters and features, including: (a) Description and justification of quantitative flood management objectives for flooding, hydrological and geomorphological changes resulting from the project. These objectives are to consider land use and include afflux, velocity, extent, duration, hazard and scour potential.	NSW Government's Floodplain Development Manual (Department of Natural Resources, 2005) PS 07-003 New guideline and changes to section 117 direction and EP&A Regulation on flood prone land Practical Consideration of Climate Change - Flood risk management guideline (DECC, 2007) Floodplain Management Plans: https://www.industry.nsw.gov.au/water/plans-programs/healthyfloodplains-project/plans Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation Australian Disaster Resilience Handbook 7 – Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia. (AIDR, 2017)

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flooding hazards, or flooding induced by infrastructure failure.	(b) Description and justification of the proposed flood planning level (FPL) for the project including the annual exceedance probabilities (AEPs) of the floods which will overtop the formation and rail. When establishing the appropriate FPL, consider any impacts on adjacent infrastructure and any alteration works required to improve flood immunity of affected infrastructure. (c) Description of the location and size of all existing and proposed pipes, culverts and bridges, and the locations and AEPs of floods that overtop the existing formation and rail. (d) Preliminary engineering designs of the velocity dispersal velocity attenuation and other velocity mitigation works that are proposed to avoid adverse scouring on the land downstream of the project area, adjacent to locations where pipes, culverts or bridges are proposed or where the rail formation may be overtopped. (e) At locations along the rail route, identification of the width of land between the toe of the formation and the downstream boundary of the project area, that is available for the construction of these mitigation works. Where there is insufficient width of project land available for these works, clear identification of the extent of additional land beyond the project boundary area that may be required, including the locations where easements over land or acquisition of land may be required. 3. Operational phase impacts of the project on flood behaviour for a full range of flood events up to and including the PMF (including consideration of the impacts of climate change and differing storm durations), including: (a) utilisation of 2D hydrologic and hydraulic models that are consistent with ARR and current best practice and utilise topographic and infrastructure data that is of sufficient spatial coverage and accuracy to ensure the resultant models can accurately assess existing and proposed water flow characteristics; (b) Identification of allowance for blockage of all cross-drainage structures to be made in accordance with ARR; (c) having these models independently peer-reviewed with the review findings published in the EIS;	*Australian Rainfall and Runoff* (Commonwealth of Australia, Geoscience Australia, 2019) (ARR) *Floodplain Risk Management Guide - Incorporating [2016] Australian Rainfall and Runoff in studies* (OEH, 2019) AS/NZS 3100:2018 Risk Management – Principles and Guidelines

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(d) assessing any changes to the potential flood affectation, scouring or geomorphological changes to other properties, assets and infrastructure, over a full range of flood durations and flood frequencies against the proposed quantitative flood management objectives; (e) assessing changes in upstream and downstream flowpaths (location, discharges and velocities, including overland flow); (f) where the existing rail infrastructure has an adverse flood impact on property or people, the flood assessment must consider the extent to which the project alleviates or exacerbates these existing impacts; (g) assessing impacts of extreme floods up to the probable maximum flood (PMF) including consideration of flood risks to people and property resulting from failure of the formation or washouts of ballast. (h) assessing the consistency (or inconsistency) with the applicable Council or DPIE Water floodplain management plans. The requirements of these plans must be discussed with DPIE Water and the relevant Council; (i) assessing whether each component of the project is compatible with the flood hazard of the land and the hydraulic functions of flow conveyance, floodway and flood storage; (j) assessing impacts on farm dams, agricultural infrastructure, crops and activities associated with altered hydrology including volumetric changes in water flows; (k) assessing any impacts that the project may have upon existing community emergency management arrangements for flooding. These matters must be discussed with the State Emergency Service and applicable Council; and (l) evaluating any social and economic impacts that the project may have on the community as a consequence of changes to flooding and hydrology including dividing or fragmentation of property and changes to property management which could lead to the loss of viability. 4. Construction impacts of the project including:	

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	(a) typical construction methodology and programming that may affect flood impacts; (b) structures and plant located on the floodplain during construction; (c) land uses and infrastructure in the vicinity of the project susceptible to flood impacts that may arise during the construction phase; (d) acceptable impacts having regard to the nature and duration of various construction activities within the floodplain, and the probabilities of a range of flood events occurring over the duration of the construction period; and (e) measures to mitigate risks of construction impacts occurring. 5. In the event that operational impacts do not comply with the nominated quantitative flood management objectives, provide measures to ensure the project's detailed design complies with the quantitative objectives. Alternatively: (a) demonstrate that design changes to meet objectives at a given project location are not practicable; and (b) describe how broad flooding objectives will still be met at a given location; and (c) detail procedures to ensure that the flood performance is acceptable to affected parties.	
5. Water – Hydrology Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where	1. Describe (and map) the existing hydrological regime for any surface and groundwater resource (including reliance by users and for ecological purposes) likely to be impacted by the project, including stream orders, as per the BAM. 2. Prepare a conceptual water balance for ground and surface water including the proposed intake and discharge locations, volume, frequency and duration, sources, security and licensing requirements. 3. Surface and groundwater hydrology impacts of the construction and operation of the project and any ancillary facilities (both built elements and discharges) on surface and groundwater hydrology in	Biodiversity Assessment Method (DPIE, 2020) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) NSW Aquifer Interference Policy (DPI, 2012) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) Risk assessment Guidelines for Groundwater Dependent Ecosystems (Office of Water, 2012)

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values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	accordance with the current guidelines, including: (a) natural processes within rivers, wetlands, estuaries, marine waters and floodplains that affect the health of the fluvial, riparian, estuarine or marine system and landscape health (such as modified discharge volumes, durations and velocities), aquatic connectivity and access to habitat for spawning and refuge; (b) impacts from any permanent and temporary interruption of groundwater flow, including the extent of drawdown, barriers to flows, implications for groundwater dependent surface flows, ecosystems and species, groundwater users and the potential for settlement; (c) changes to environmental water availability and flows, both regulated/licensed and unregulated/rules-based sources; (d) direct or indirect increases in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; (e) minimising the effects of proposed stormwater and wastewater management during construction and operation on natural hydrological attributes (such as volumes, flow rates, management methods and re-use options) and on the conveyance capacity of existing stormwater systems where discharges are proposed through such systems; and (f) water take (direct or passive) from all surface and groundwater sources with estimates of annual volumes during construction and operation, including an assessment of the availability of water where water entitlement is required to be purchased. 4. Identification of any requirements for baseline monitoring of hydrological attributes.	Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018) Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions (OEH and EPA, 2017) Relevant water sharing plans at https://www.mdba.gov.au/publications/all-publications
6. Water – Quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards	1. Water quality impacts, including: (a) stating the ambient NSW Water Quality Objectives (NSW WQO) and environmental values for the receiving waters relevant to the project, including the indicators and associated trigger values or criteria for the identified environmental values; (b) identifying and estimating the quality and quantity of pollutants	NSW Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/ Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006) Australian and New Zealand Guidelines for Fresh and

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achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	that may be introduced into the water cycle by source and discharge point and describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment; (c) identifying the rainfall event that the water quality protection measures will be designed to cope with; (d) the significance of any identified impacts including consideration of the relevant ambient water quality outcomes; (e) demonstrating how construction and operation of the project will, to the extent that the project can influence, ensure that: - where the NSW WQOs for receiving waters are currently being met they will continue to be protected; and - where the NSW WQOs are not currently being met, activities will work toward their achievement over time; (f) justifying, if required, why the WQOs cannot be maintained or achieved over time; (g) demonstrating that all practical measures to avoid or minimise water pollution and protect human health and 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.	Marine Water Quality (ANZG, 2018) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018)
7. Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	1. Assess whether the land is likely to be contaminated and identify if remediation of the land is required, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses. Where assessment and/or remediation is required, the Proponent must document how the assessment and/or remediation would be undertaken in accordance with current guidelines. 2. Assess whether salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the project area.	Managing Land Contamination: Planning Guidelines SEPP 55 –Remediation of Land, (DUAP & EPA, 1998) Guidelines for Consultants Reporting on Contaminated Sites (OEH, reprinted 2011) Guidelines for the NSW Site Auditor Scheme (DEC, 2006) Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997

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	3. Assess the impacts of the project on soil salinity and how it may affect groundwater resources and hydrology. 4. Assess the impacts on soil and land resources (including erosion risk or hazard). Particular attention must be given to soil erosion and sediment transport consistent with the practices and principles in the current guidelines.	(EPA, 2015) Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets (http://www.environment.nsw.gov.au/salinity/solutions/urban.htm) which includes *Site Investigations for Urban* Salinity (DLWC, 2002) Landslide risk management guidelines presented in Australian Geomechanics Society (2007) Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) Other guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997*
8. Heritage The design, construction and operation of the project facilitates, to the greatest extent practicable, the long-term protection, conservation and management of the heritage and cultural significance of items of environmental heritage and Aboriginal objects and places. The design, construction and operation of the project avoids or minimises impacts, to the greatest extent practicable, on the	1. Direct and/or indirect impacts (including cumulative impacts) to the significance of: (a) Aboriginal places, objects and cultural heritage values, as defined under the *National Parks and Wildlife Act 1974* and in accordance with the principles and methods of assessment identified in the current guidelines; (b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan; (c) environmental heritage, as defined under the *Heritage Act 1977*; and (d) items listed on the State, National and World Heritage lists; (e) heritage items, areas of cultural significance and conservation areas identified in environmental planning instruments applicable to the project area; and	Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) Aboriginal Cultural Heritage Consultation requirements for proponents (DECCW, 2010) Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998) Aboriginal site recording form Aboriginal site impact recording form Aboriginal Heritage Information Management System

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heritage significance of environmental heritage and Aboriginal objects and places	(f) heritage items in relevant Section 170 Heritage and Conservation Registers. 2. Where impacts to heritage items are identified, the assessment must: (a) include a significance assessment, a statement of heritage impact for all heritage items and a historical archaeological assessment; (b) assess the consistency of the project against conservation policies of any relevant conservation management plan; (c) consider impacts to the item of significance caused by, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, curtilage, subsidence and architectural noise treatment, drainage infrastructure, contamination remediation and site compounds (as relevant); (d) outline measures to avoid and minimise those impacts during construction and operation in accordance with the current guidelines; and (e) be undertaken by a suitably qualified heritage consultant(s), cultural consultant(s) and/or historical archaeologist (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria). 3. Where archaeological investigations of Aboriginal objects are proposed these must be conducted by a suitably qualified archaeologist, in accordance with section 1.6 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). 4. Impacts to Aboriginal objects and/or places must be assessed and documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR). Consultation must be undertaken with Aboriginal people in accordance with the Aboriginal Cultural Heritage Consultation	site registration form Care agreement application form Criteria for the assessment of excavation directors (NSW Heritage Council, 2011) NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1996) Assessing Heritage Significance (NSW Heritage Office, 2001) The Australia ICOMOS Burra Charter

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	requirements for proponents (DECCW, 2010). The ACHAR must: (a) document the outcomes of consultation with Aboriginal people and outline measures proposed to mitigate impacts, and document the significance of cultural heritage values for Aboriginal people who have a cultural association with the land; (b) identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the project; (c) document the outcomes of the archaeological surface survey and test excavation to inform the need for targeted test excavations; (d) assess and document impacts on Aboriginal cultural heritage values and demonstrate attempts to avoid impacts upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to the AHIMS Register; and (e) outline procedures to be followed if Aboriginal objects, burials or skeletal material are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.	
9. Noise and Vibration Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the	1. Construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. 2. The assessment of construction noise and vibration must address: (a) the nature of construction activities and related noise characteristics; (b) the intensity and duration of noise (both air and ground borne) and vibration impacts. This must include consideration of extended construction impacts associated with ancillary facilities (and the like) and construction fatigue;	Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990) Assessing Vibration: a technical guideline (DEC, 2006) Interim Construction Noise Guideline (DECCW, 2009) Noise Policy for Industry (EPA, 2017) Construction Noise and Vibration Strategy (TfNSW,

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
project are effectively managed to protect the amenity and well-being of the community. Increases in noise emissions and vibration affecting environmental heritage as defined in the *Heritage Act 1977* during operation of the project are effectively managed.	(c) the identification and nature of receivers, existing and proposed, during the construction period; (d) the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage). (e) the nature of the impact and the sensitivity of receivers, including but not limited to residential (permanent and short term), tourist and commercial uses, both existing and proposed, and level of impact including for out of hours works; (f) the need to balance timely conclusion of noise and vibration-generating works with periods of receiver respite, and other factors that may influence the timing and duration of construction activities (such as traffic management); (g) noise impacts of out-of-hours works (including utility works and works associated with the SSI including those undertaken under another assessment pathway), possible locations where out-of-hours works would be undertaken, the activities that would be undertaken, the estimated duration of those activities and justification for these activities in terms of the *Interim Construction Noise Guideline* (DECC, 2009); (h) sleep disturbance (including the number of noise-awakening events); (i) details and analysis of the predicted effectiveness of mitigation measures to adequately manage identified impacts, including impacts as identified in (h), (j) any potential residual noise and vibration impacts following application of mitigation measures; and (k) a description of how receiver feedback received 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,	2018) Rail Infrastructure Noise Guideline (EPA, 2013) NSW Road Noise Policy (DECCW, 2011) Development Near Rail Corridors and Busy Roads – Interim guideline (DoP, 2008) Noise Mitigation Guideline (RMS, 2015) Noise Criteria Guideline (RMS, 2015) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures (2016)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	management and communication strategies for sensitive receivers. 3. If blasting is required, demonstration that blast impacts can comply with current guidelines.	
10. Economic, Land Use and Agriculture The project minimises adverse economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business including agricultural enterprises and accommodation and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	1. Economic impacts in accordance with the current guidelines. 2. Economic impacts from construction and operation on potentially affected properties, businesses, recreational users and land and water users, including property acquisitions/adjustments, access, amenity and relevant statutory rights. 3. Opportunities and processes to prioritise local industry participation practices to source construction goods and services, including training and employment targets within communities along or near the rail alignment. 4. Agricultural land use impacts in accordance with the current guidelines including: (a) current and potential Biophysical Strategic Agricultural Land and Class 1, 2 and 3 Agricultural land Classes, including land capability and agricultural productivity; (b) division or fragmentation of property and changes to property management which could lead to the loss of viability; (c) property access and the efficient and safe crossing of the rail corridor by machinery and livestock (d) impacts to changes in water regimes; (e) connectivity of property infrastructure severed by the rail corridor; and (f) livestock exclusion/management to minimise harm and losses. 5. Biosecurity risks and management measures relating to the potential for spread of pests, diseases or weeds along the length of the project alignment, in accordance with the 'general biosecurity duty' under the	Environmental Planning and Impact Assessment Practice Note: Socio-economic Assessment (RMS, 2013) New England North West Regional Plan 2036 (DPE, 2017) Infrastructure Proposals on Rural Land, Primefact 1063, second edition (DPI, 2013) NSW Invasive Species Plan 2018-202 (DPI, 2018) Land Use Conflict Risk Assessment (LUCRA) Guide (DPI, 2011) NSW Infrastructure Skills Legacy Program NSW Aboriginal Participation in Construction Policy 2018

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	Biosecurity Act 2015. 6. Economic impact of temporary accommodation for construction workers on communities near the project site. 7. The temporary and permanent interface with road reserves, Crown Land and Travelling Stock Routes and the use and management of these landholdings affected by the proposal.	
11. Social The project minimises adverse social impacts and capitalises on opportunities potentially available to affected communities.	1. Potential social impacts of the project from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project. 2. How potential environmental changes in the locality may affect people's (including, but not limited to): (a) community; (b) access to accommodation and housing; (c) access to and use of infrastructure, services, and facilities; (d) culture; (e) health and wellbeing; surroundings; (f) personal and property rights; (g) decision-making systems; and (h) fears and aspirations, as relevant and considering how different groups may be disproportionately affected. 3. Social actions and outcomes that address both negative and positive social impacts.	Draft Social Impact Assessment Guideline (DPIE, 2020) Social Impact Assessment Guideline (DPE, 2017) Social Impact Assessment Scoping Tool (DPE, 2017)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
12. Visual Amenity The project minimises adverse impacts on the visual amenity of the built and natural environment (including public open space) and capitalises on opportunities to improve visual amenity.	1. Assess the visual impact of the project (including spoil mounds, formation, bridges, viaducts and overpasses) and any ancillary infrastructure on: (a) views and vistas; (b) streetscapes, key sites and buildings; (c) heritage items including Aboriginal places and environmental heritage; and (d) the local community. 2. Provide artist impressions and perspective drawings of the project to illustrate how the project has responded to the visual impact through urban design and landscaping.	AS4282-1997 Control of the obtrusive effects of outdoor lighting Bridge Aesthetics: Design guidelines to improve the appearance of bridges in NSW (RMS, 2012) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) Technical guideline for Urban Green Cover in NSW (OEH, 2015)
13. Waste All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.	1. Assess predicted waste generated from the project during construction and operation, including: a) classification of the waste in accordance with the current guidelines; b) estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance; c) handling of waste including measures to facilitate segregation and prevent cross contamination; d) management of waste including estimated location and volume of stockpiles; e) waste minimisation and reuse; f) lawful disposal or recycling locations for each type of waste; and g) contingencies for the above, including managing unexpected waste volumes. 2. Assess potential environmental impacts from the excavation, handling, storage on site and transport of the waste particularly with relation to sediment/leachate control, noise and dust.	NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA 2014) *Waste Classification Guidelines – Part 1: Classification of Waste* (EPA 2014) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)
14. Climate Change and Sustainability The project reduces the NSW Government's operating costs and ensures the effective	1. Sustainability of the project in accordance with the Infrastructure Sustainability Council of Australia (ISCA) *Infrastructure Sustainability Rating Tool* and recommend an appropriate target rating for the project. 2. Sustainability of the project against the current guidelines including	Australian Government's Climate Change Impacts and Risk Management – A Guide for Business and Government (2006) ISO 31000:2018 Risk management – Guidelines

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
and efficient use of resources. Conservation of natural resources is maximised. The project is designed, constructed and operated to be resilient to the future impacts of climate change.	targets and strategies to improve Government efficiency in use of water, energy and transport. 3. The risk and vulnerability of the project to climate change in accordance with the current guidelines. 4. Climate change risks must be quantified with reference to the NSW Government's climate projections at 10km resolution (or lesser resolution if 10km projections are not available) or equivalent projection tool (such as the Climate Futures Tool from CSIRO and BoM (attenuated for project region)) and incorporate specific adaptation actions in the design.	AS 5334-2013 Climate change adaptation for settlements and infrastructure – A risk based approach Infrastructure Sustainability Rating Tool Scorecard relating to energy and carbon for large infrastructure projects, ISCA NSW Infrastructure Skills Legacy Programs' training and employment targets (DOI, 2017) Infrastructure Sustainability Rating Tool Scorecard relating to energy and carbon for large infrastructure projects, ISCA Technical Guide for Climate Change Adaptation for the State Road Network (RMS, in draft) Practical Consideration of Climate Change – Floodplain Risk Management Guideline (DECC, 2007)

ATTACHMENT A – EPBC Act Requirements

Inland Rail - Illabo to Stockinbingal (EPBC 2018/8233, SSI 18_9406)

The proposed action is being assessed for the purposes of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) under Part 5 Division 5.2 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). This document is intended to assist NSW Department of Planning and Environment (NSW DPE) to manage the environmental impact assessment process. It is not legally binding and does not replace the requirements of the EPBC Act.

Proposed Action

To construct a rail line between Illabo and Stockinbingal, spanning approximately 37 km of new rail, as part of the Inland Rail Programme.

Matters of National Environmental Significance

The EPBC Act controlling provisions for the proposed action are:

- listed threatened species and communities (sections 18 and 18A)

All matters of national environmental significance (MNES) protected under the triggered controlling provisions are potentially relevant. The Department considers that the proposed action will have a significant impact on the following:

· White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland – Critically Endangered

· Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia – Endangered

· Regent Honeyeater (*Anthochaera phrygia*) - Critically Endangered

· Swift Parrot (*Lathamus discolor*) – Critically Endangered

· Superb Parrot (*Polytelis swainsonii*) – Vulnerable

The Department further considers that the proposed action may have a significant impact on the following:

· *Austrostipa wakoolica* – Endangered

· Tarengo Leek Orchid (*Prasophyllum petilum*) – Endangered

· Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) (*Dasyurus maculatus maculatus* (SE mainland population)) - Endangered

· Grey-headed Flying-fox (*Pteropus poliocephalus*) – Vulnerable

· Painted Honeyeater (*Grantiella picta*) – Vulnerable

· Corben's Long-eared Bat, South-eastern Long-eared Bat (*Nyctophilus corbeni*) – Vulnerable

· Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) – Vulnerable

· Crimson Spider-orchid, Maroon Spider-orchid (*Caladenia concolor*) – Vulnerable

· Yass Daisy (*Ammobium craspedioides*) – Vulnerable

- Pink-tailed Worm-lizard (*Aprasia parapulchella*) – Vulnerable

Note that this may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under this controlling provision are assessed for the Commonwealth decision-maker's consideration.

Key Issues

- The proponent submitted a referral based on preliminary desktop and rapid assessments, and identified the action was a controlled action due to potential significant impacts to the Regent Honeyeater, Swift Parrot and Superb Parrot as well as White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, and Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia ecological communities. The Department has identified a longer list of species that may be impacted, for which the referral does not contain sufficient information to determine significance, as no detailed flora and fauna surveys have been completed. Consequently, the Department recommends engagement in Stage 2, before the draft EIS is exhibited, to consider the assessments of significance and determine which species are relevant to assessment of the action for EPBC Act purposes.

General Assessment Requirements

The EIS must address the matters outlined in Schedule 4 of the EPBC Regulations and the matters outlined below in relation to the controlling provisions.

1. For each of the EPBC Act-listed species and ecological communities impacted by the proposed action, the EIS must provide:

    a. Survey results, including details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Commonwealth guidelines and policy statements.

    b. A description of the habitat and habits (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans, threat abatement plans and wildlife conservation plans; and

    c. Maps displaying the above information (specific to EPBC matters) overlaid with the proposed action

Note - It is acceptable, where possible, to use the mapping and assessment of Plant Community Types (PCTs) and the species surveys prescribed by the BAM as the basis for identifying EPBC Act-listed species and communities. The EIS must clearly identify which PCTs are considered to align with habitat for the relevant EPBC Act-listed species or community, and provided individual maps for each species or community.

2. The EIS must describe the nature, geographic extent, magnitude, timing and duration of any likely direct, indirect and consequential impacts on any relevant EPBC Act-listed species and communities. It must clearly identify the location and quantify the extent of all impact areas to each relevant EPBC Act-listed species or community.

3. For each of the EPBC Act-listed species and communities that are likely to be impacted by the development, the EIS must provide information on proposed avoidance and mitigation measures to deal with the impacts of the action, and a description of the predicted effectiveness and outcomes that the avoidance and mitigation measures will achieve.

4. The EIS must identify each EPBC Act-listed species and community likely to be significantly impacted by the proposed action. Where a significant impact is likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit, how offsets will be secured, and timing of protection.

Note - A number of offsets options under the NSW *Biodiversity Conservation Act 2016* will be acceptable for EPBC Act approval purposes. It is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action i.e. 'like for like'. Like-for-like includes protection of native vegetation that is the same EEC or habitat being impacted, or funding to provide a direct benefit to the matter being impacted i.e. threat abatement, breeding and propagation programs or other relevant conservation measures.