MARTINUS INLAND RAIL

CONSTRUCTION ENVIRONMENTAL MANAGEMENT FRAMEWORK

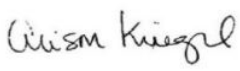
A2I | Albury to Illabo

CONTRACT NUMBER: 0052

PROJECT DOCUMENT NUMBER:

6-0052-210-PES-00-PJ-0001

Document Control

DOCUMENT TITLE:	Construction Environmental Management Framework		
DOCUMENT OWNER:	Chris Standing - Environment, Approvals and Sustainability Manager		
PREPARED BY:	Alison Kriegel	**TITLE:**	Environmental Approvals Lead – A2I
SIGNATURE:		**DATE:**	24 February 2025
REVIEWED BY:	Adrian Broger	**TITLE:**	Environmental Approvals Support – A2I
SIGNATURE:		**DATE:**	24 February 2025

Approved by

NAME	TITLE	SIGNATURE	DATE
Andy Williams	Project Director		24 February 2025

Revision History

REVISION	REVISION DATE	AMENDMENT	DATE TO CLIENT
A	22 July 2024	First issue for client and ER review	22 July 2024
B	4 September 2024	Second issue for client and ER review	4 September 2024
0	16 October 2024	Third issue for client and ER review	16 October 2024
1	14 November 2024	For ER endorsement	14 November 2024
2	18 November 2024	For ER Endorsement	18 November 2024
3	3 December 2024	For DPHI approval	3 December 2024
4	9 January 2025	For DPHI approval	14 January 2024
5	24 February 2025	For DPHI approval	24 February 2025

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

GLOSSARY

TERM	DEFINITION
AA	The Acoustics Advisor for the CSSI approved by the Planning Secretary.
Ancillary facility	A temporary facility for construction of the CSSI including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, a fixed material stockpile area and car parking facilities. Minor ancillary facilities are considered lunch sheds, office sheds and portable toilet facilities or similar.
ARTC	Australian Rail Track Corporation
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
Construction	Includes work required to construct the CSSI as defined in the Project Description described in the documents listed in Condition A1 including commissioning trials of equipment and temporary use of any part of the CSSI but excluding Low Impact Work which is carried out or completed prior to approval of the CEMP.
Consultation	To provide information and actively engage with and obtain and consider feedback from stakeholders during development of post approval documents. How the feedback has been considered and whether any changes have been made in response to this feedback is then documented and communicated back to stakeholders. Consultation should not be limited to one-way notification about the project. This definition must be used to inform the Communication Strategy required under Condition B1.
CSSI	The Critical State Significant Infrastructure, as described in Schedule 1, the carrying out of which is approved under the terms of this approval
dB	Decibels
Department	NSW Department of Planning, Housing and Infrastructure
EAD	Environmental Assessment Documentation
EIS	The Environmental Impact Statement referred to in Condition A1, submitted to the Planning Secretary seeking approval to carry out the development described in it, and including any additional information provided by the Proponent in support of the application for approval of the project.
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
ER	The Environmental Representative(s) for the CSSI approved by the Planning Secretary
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
Heavy Vehicle	Has the same meaning as in the Heavy Vehicle National Law (NSW)

TERM	DEFINITION
Heritage item	A place, building, work, relic, archaeological site, tree, movable object or precinct of heritage significance, that is listed under one or more of the following registers: the State Heritage Register under the *Heritage Act 1977* (NSW), a state agency heritage and conservation register under section 170 of the *Heritage Act 1977* (NSW), a Local Environmental Plan under the EP&A Act, the World, National or Commonwealth Heritage lists under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), and an "Aboriginal object" or "Aboriginal place" as defined in section 5 of the *National Parks and Wildlife Act 1974* (NSW).
Heritage NSW	Heritage NSW, NSW Department of Climate Change, Energy, the Environment and Water
ICNG	Interim Construction Noise Guideline (DECC, 2009)
Idling of locomotives	A stationary locomotive with engines running or operating.
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.
IRPL	Inland Rail Pty Ltd
LALC	Local Aboriginal Land Council
Local road	Any road that is not defined as a classified road under the *Roads Act 1993*
Low Impact Work	Includes: (a) survey work including carrying out general alignment survey, installing survey controls (including installation of global positioning systems (GPS)), installing repeater stations, carrying out surveys of existing and future utilities and building and road dilapidation surveys; (b) investigations including investigative drilling, contamination investigations and excavation; (c) site establishment work approved under a Site Establishment Management Plan; (d) use of minor ancillary facilities if the ER has determined the operational activities will have a minor impact on the environment and the community; (e) minor clearing and relocation of native vegetation, as identified in the documents listed in Condition A1; (f) installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and at-property treatments; (g) property acquisition adjustment work including installation of property fencing; (h) relocation and connection of utilities where the relocation or connection has been determined by the ER to have a minor impact to the environment and the community; (i) archaeological testing under the Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) or archaeological monitoring undertaken in association with (a) - (h) above to ensure that there is no impact on heritage items; (j) archaeological and cultural salvage undertaken in accordance with a methodology required by the conditions of this approval. (k) maintenance of existing buildings and structures required to facilitate the carrying out of the CSSI; and (l) other activities determined by the ER to have minor impact on the environment and the community, which may include but not be limited to construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access. Despite the above, the following works are not Low Impact Work: (i) where heritage items, or threatened species or their habitat, or threatened ecological communities (within the meaning of the Biodiversity Conservation Act 2016) are adversely affected or potentially adversely affected by any low impact work as defined in (a) to (n) above, that work is

TERM	DEFINITION
	construction, unless otherwise determined by the Planning Secretary in consultation with Heritage NSW, EHG or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation); and (ii) any night-time work that exceeds noise management levels as defined in the ICNG. The low impact work described in this definition becomes Construction with the approval of a CEMP. Where low impact work has already commenced, this is considered to remain as low impact work and is managed in accordance with the framework under which it commenced.
Minister	NSW Minister for Planning
Non-compliance	An occurrence, set of circumstances or development that is a breach of this approval.
Operation	The carrying out of the CSSI (whether in full or in part) upon the completion of construction, unless otherwise agreed by the Planning Secretary.
Planning Secretary	Planning Secretary of the Department (or nominee, whether nominated before or after the date on which this approval was granted).
Proponent	The person identified as such in Schedule 1 of this approval and any other person carrying out any part of the CSSI from time to time (i.e. Inland Rail).
Publicly available	To be made available on the website.
Rail Corridor	Land that is: (a) owned, leased, managed or controlled by a public authority for the purpose of a railway or rail infrastructure facilities, or zoned under an environmental planning instrument predominantly, or (b) solely for development for the purpose of a railway or rail infrastructure facilities.
RAPs	Registered Aboriginal Parties
Relevant council(s)	Albury City Council, Great Hume Shire Council, Lockhart Shire Council, Wagga Wagga City Council and Junee Shire Council.
Relevant roads authority	The same meaning as the roads authority defined in the *Roads Act 1993* (NSW).
Response to Submissions	The Proponent's response to issues raised in submissions received in relation to the application for approval for the CSSI under the EP&A Act.
Road Safety Audit	As defined by the Transport for NSW Roads & Traffic Authority Guidelines for Road Safety Audit Practices 2011.
SSI	The State Significant Infrastructure, as generally described in Schedule 1 of this approval, the carrying out of which is approved under the terms of this approval.
Sensitive land use(s)	Includes: residence, educational institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church), child care centres, passive recreation areas (including outdoor grounds used for teaching), commercial premises (including film and television studios, research facilities, entertainment spaces, temporary accommodation such as caravan parks and camping grounds, restaurants, office premises, and retail spaces), and others as identified by the Planning Secretary.

TERM	DEFINITION
SIMP	Social Impact Management Plan
Work	Any physical activity for the purpose of the CSSI including Construction and Low Impact Work but not including operational maintenance work.

1 INTRODUCTION

1.1 Project overview

Inland Rail is an approximate 1,600 kilometres (km) freight rail network that will connect Melbourne and Brisbane via regional Victoria, New South Wales (NSW) and Queensland. The Inland Rail route would involve using approximately 1,000 km of existing track (with enhancements and upgrades where necessary) and 600 km of new track, passing through 30 local government areas (LGAs). Inland Rail will accommodate double-stacked freight trains up to 1,800 metres (m) long and 6.5 m high.

The Australian Government has confirmed that Inland Rail is an important project to meet Australia's growing freight task, improve road safety and help decarbonise the economy. Inland Rail will enhance our national freight and supply chain capabilities, connecting existing freight routes through rail, roads and ports, and supporting Australian's growth. Inland Rail is being delivered by Australian Rail Track Corporation (ARTC) and Inland Rail Pty Ltd (IRPL).

Comprising 12 sections, a staged approach is being undertaken to deliver Inland Rail. Each of these projects can be delivered and operated independently with tie-in points to the existing railway. Work south of Parkes has been prioritised, which will enable Inland Rail to initially connect to existing rail networks between Melbourne, Sydney, Perth and Adelaide via Parkes and Narromine. The Parkes to Narromine and Narrabri to North Star Phase 1 sections are complete.

Works for the Inland Rail – Albury to Illabo project (the project) will enable enhancement works along 185 kilometres (km) of existing operational standard-gauge railway. Enhancement works such as those to structures and sections of track are required to provide the increased vertical and horizontal clearances required for double-stacked freight trains. Works will include track realignment, lowering and/or modification within the existing rail corridor, modification, removal or replacement of bridge structures (rail, road and/or pedestrian bridges), raising or replacing signal gantries, level-crossing modifications and other associated works.

Refer to Figure 1 for an overview of the project.

A detailed project description is provided in Appendix A of the Preferred Infrastructure Report (PIR).

1.2 Planning context

The Minister declared the project Critical State Significant Infrastructure (CSSI) under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). The project is subject to assessment and approval by the NSW Minister for Planning.

An environmental impact statement (EIS) was prepared to support ARTC's application for approval of the project in accordance with the requirements of the EP&A Act and the environmental assessment requirements (the SEARs) of the Secretary of the (then) NSW Department of Planning, Industry and Environment (now the Department of Planning, Housing and Infrastructure (DPHI)).

The EIS was placed on public exhibition from 17 August 2022 to 28 September 2022. During the exhibition period, interested stakeholders and members of the community were able to review the EIS online, participate in consultation and engagement activities held by ARTC, and make a written submission to the DPHI for consideration in its assessment of the project.

In accordance with section 5.17(6)(b) of the EP&A Act, on 13 April 2023 the Planning Secretary directed ARTC to submit a Preferred Infrastructure Report (PIR) that provided further assessment of traffic and transport, noise and vibration, and air quality impacts. The PIR was also prepared to consider changes to the exhibited proposal that have arisen because of these further assessments and related submissions. The PIR was placed on public exhibition and interested stakeholders and members of the community were able to review the PIR online, participate in consultation and engagement activities held by ARTC, and make a written submission to the DPHI for consideration in its assessment of the project.

FIGURE 1: PROJECT OVERVIEW (SOURCE: PREFERRED INFRASTRUCTURE REPORT)

1.3 Statutory context and approval

The project was assessed as part of the EIS, the Response to Submissions Report (EIS RtS), the PIR, and the PIR Response to Submissions Report (PIR RtS). Together these documents are referred to as the Environmental Approvals Documentation (EAD).

Approval for project under the EP&A Act was granted by the Minister for Planning on 8 October 2024.

1.4 Purpose of this Framework

The purpose of this Construction Environmental Management Framework (CEMF or this Framework) is to primarily satisfy the requirements of Minister's Condition of approval (CoA) C16 and C17.

This CEMF has been prepared to facilitate the preparation and approval of CEMPs, Sub-plans, and construction monitoring plans (CMPs) during the construction phase of the project.

This CEMF includes a guide to the general environmental, stakeholder and community management requirements which will be implemented during construction and provides a road map for environmental management documentation. In particular, the CEMF:

- Identifies the CEMPs, Sub-plans, and construction monitoring programs (CMPs) required for each stage of construction;
- Provides the proposed structure of these documents for each stage;
- Provides a risk assessment of the predicted level of environmental and social risk posed by each construction stage;
- Nominates the consultation and endorsement level for the listed plans for each construction stage.

Refer to Section 4 and Section 5 of this CEMF for information on how the CEMPs, Sub-plans and CMP's for the project will be structured.

CEMF requirements, and where they are addressed in this Framework, are listed in Table 1.

TABLE 1: COA RELEVANT TO THIS FRAMEWORK

COA	REQUIREMENT	WHERE ADDRESSED
A14	Should a Construction Environmental Management Framework (CEMF) be submitted for approval under Condition C16, the Staging Report must be submitted with the CEMF, i.e. no later than one (1) month before the lodgement of any Construction Environmental Management Plan (CEMP), CEMP sub plan or Construction Monitoring Plan (CMP) to the Planning Secretary for approval.	Section 1.7
C2	The CEMP must provide: c) a program for ongoing analysis of the key environmental and social impact risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI. The initial risk assessment may be undertaken as part of the CEMF pursuant to Condition C16;…	Appendix C (Risk assessments)
C15	Construction must not commence until the relevant CEMP(s) and CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER, (as applicable and as identified in the CEMF approved under Condition C16). The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been endorsed by the ER and approved by the Planning Secretary or ER.	Section 1.5 Section 1.6 Section 1.7
C16	A Construction Environmental Management Framework (CEMF) may be prepared to facilitate the preparation and approval of construction	This CEMF Section 4 Section 5

COA	REQUIREMENT	WHERE ADDRESSED
	environmental management and monitoring plans required under Part C of this approval. The CEMF must: a) identify the Construction Environmental Management Plans (CEMPs), CEMP Sub-plans and Construction Monitoring Programs (CMP) required for each stage of construction consistent with the Staging Report prepared under Condition A9;	
	b) document the proposed structure of the CEMPs, CEMP Sub-plans and CMPs for the relevant stage of construction;	Section 5
	c) provide, by way of a Risk Matrix, an assessment of the predicted level of environmental and social risk, including the potential level of community concerns posed by each construction stage. This must use a process consistent with *AS/NZS ISO 31000: 2018; Risk Management – Guidelines*; and	Appendix A (Risk matrix) Appendix C (Risk assessments)
	d) nominate the consultation and endorsement level for the CEMPs, CEMP Sub-plans and CMPs required for each construction stage. The endorsement level being one of the following: i. Low Risk Stage – to be self endorsed and consultation with agency and council stakeholders is not mandatory, ii. Medium Risk Stage – to be endorsed by the ER and consultation with agency and council stakeholders required, and iii. High Risk Stage– to be endorsed by the Planning Secretary and consultation with agency and council stakeholders required.	Section 3.2 Section 4.3
	For a Low Risk Stage(s) the requirements of Part C of this approval do not apply. In these circumstances, a CEMP, CEMP sub-plan and CMP, may be substituted with an alternate process such as a Construction Method Statement or the like.	Section 3.2
	The CEMF must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the lodgement of any CEMP, CEMP sub plan or CMP.	Section 1.5 Section 1.6
	Note: The Planning Secretary may vary the CEMF in relation to the endorsement authority for the CEMPs, CEMP Sub-plans and CMPs.	
	The approved CEMF must be implemented for the duration of construction.	
C17	Where changes are proposed to the staging of construction, a revised CEMF must be prepared, endorsed by the ER and submitted to the Planning Secretary for approval no later than one (1) month prior to the proposed change in the staging.	Section 1.6

1.5 Submission and approval requirements

In accordance with CoA C16, the CEMF must be endorsed by the Environmental Representative (ER) and then submitted to the Planning Secretary (for approval) no later than one (1) month before the lodgement of any CEMP, CEMP Sub-plan, or Construction Monitoring Program (CMP).

In accordance with CoA C15, construction will not commence until the relevant CEMP(s) and CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER, (as applicable and as identified in this CEMF). The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER, will be implemented for the duration of construction. The approved CEMF, including any revisions made, will be implemented for the duration of construction.

1.6 Revision of this Framework

In accordance with CoA C17, where changes are proposed to the staging of construction, a revised CEMF will be prepared, endorsed by the ER, and submitted to the Planning Secretary for approval no later than one (1) month prior to the proposed change in the staging.

The approved CEMF, including any revisions, will be implemented for the duration of construction. For details on review of this CEMF, refer to Section 6.

1.7 Staging Report

In accordance with CoA A9, the Staging Report must be endorsed by the ER and then submitted to the Planning Secretary (for information) no later than one (1) month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one (1) month before the commencement of operation of the first of the proposed stages of operation), or as required by CoA C16. This notwithstanding, in accordance with CoA A14, when this CEMF is submitted for approval under CoA C16, a Staging Report must also be submitted with the CEMF. This concurrent submission must occur no later than one (1) month before the commencement of construction of the first of the proposed stages of construction.

Therefore, the project will submit the CEMF (for approval) and the Staging Report (for information) to the Planning Secretary concurrently.

In accordance with CoA C15, where the project is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been endorsed by the ER and approved by the Planning Secretary or ER.

The Staging Report, including any revisions, will be implemented for the duration of construction.

2 PROJECT STAGING

Construction will be staged to align with the delivery strategy for the project, and achieve project completion in the minimum, practically reasonable time, while effectively managing environmental and social impacts. To achieve this, the project will be constructed in two (2) stages – Stage A and Stage B. Stage A will be constructed in three (3) substages (A1, A2 and A3). This CEMF applies to both stages, including all substages under Stage A.

2.1 Project stages

This section outlines the project stages and describes work activities associated with each stage.

The project is divided geographically into four (4) precincts and 24 enhancement sites within these precincts. The precincts align with the Local Government Areas of Albury, Greater Hume-Lockhart, Wagga Wagga, and Junee. A summary of the precincts and enhancement sites are provided in Table 2. A figure reference is also provided to coincide with Figure 2 to Figure 5 in this Framework.

TABLE 2: PRECINTS AND ENHANCEMENT SITES

PRECINCT	ENHANCEMENT SITES	FIGURE REFERENCE
Albury	Murray River bridge	Figure 2
	Albury Station pedestrian bridge	
	Albury Yard clearances	
	Riverina Highway bridge	
	Billy Hughes bridge	
	Table Top Yard clearances	
Greater Hume-Lockhart	Culcairn pedestrian bridge	Figure 3
	Culcairn Yard clearances	
	Henty Yard clearances	
	Yerong Creek Yard clearances	
	The Rock Yard clearances	
Wagga Wagga	Uranquinty Yard clearances	Figure 4
	Pearson Street bridge	
	Cassidy Parade pedestrian bridge	
	Edmondson Street bridge	
	Wagga Wagga Station pedestrian bridge	
	Wagga Wagga Yard clearances	
	Bomen Yard clearances	
Junee	Harefield Yard clearances	Figure 5

PRECINCT	ENHANCEMENT SITES	FIGURE REFERENCE
	Kemp Street bridge	
	Junee Station pedestrian bridge	
	Junee Yard clearances	
	Olympic Highway underbridge	
	Junee to Illabo clearances	

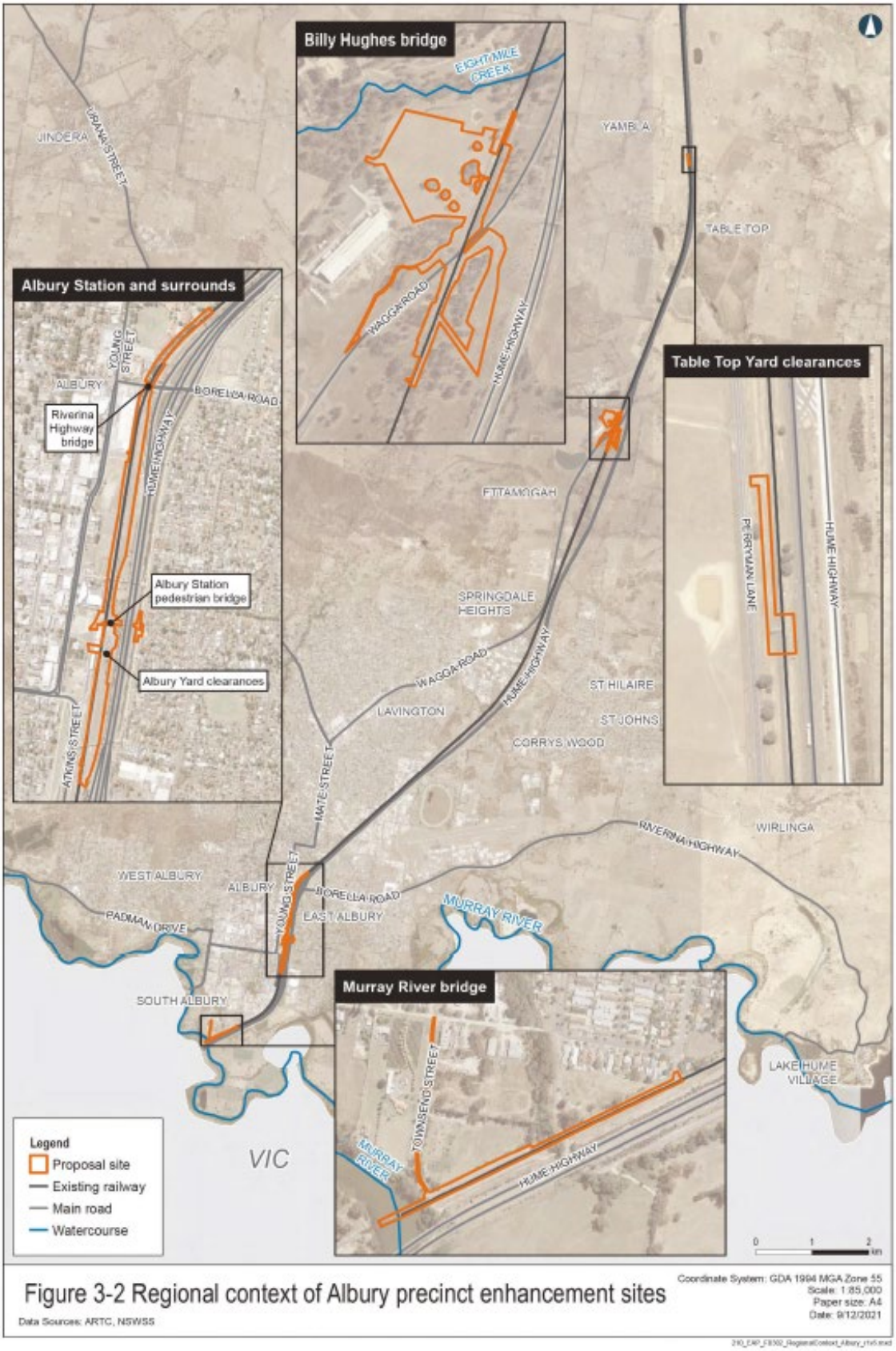


FIGURE 2: ALBURY PRECINCT ENHANCEMENT SITES (SOURCE: ENVIRONMENTAL IMPACT STATEMENT)

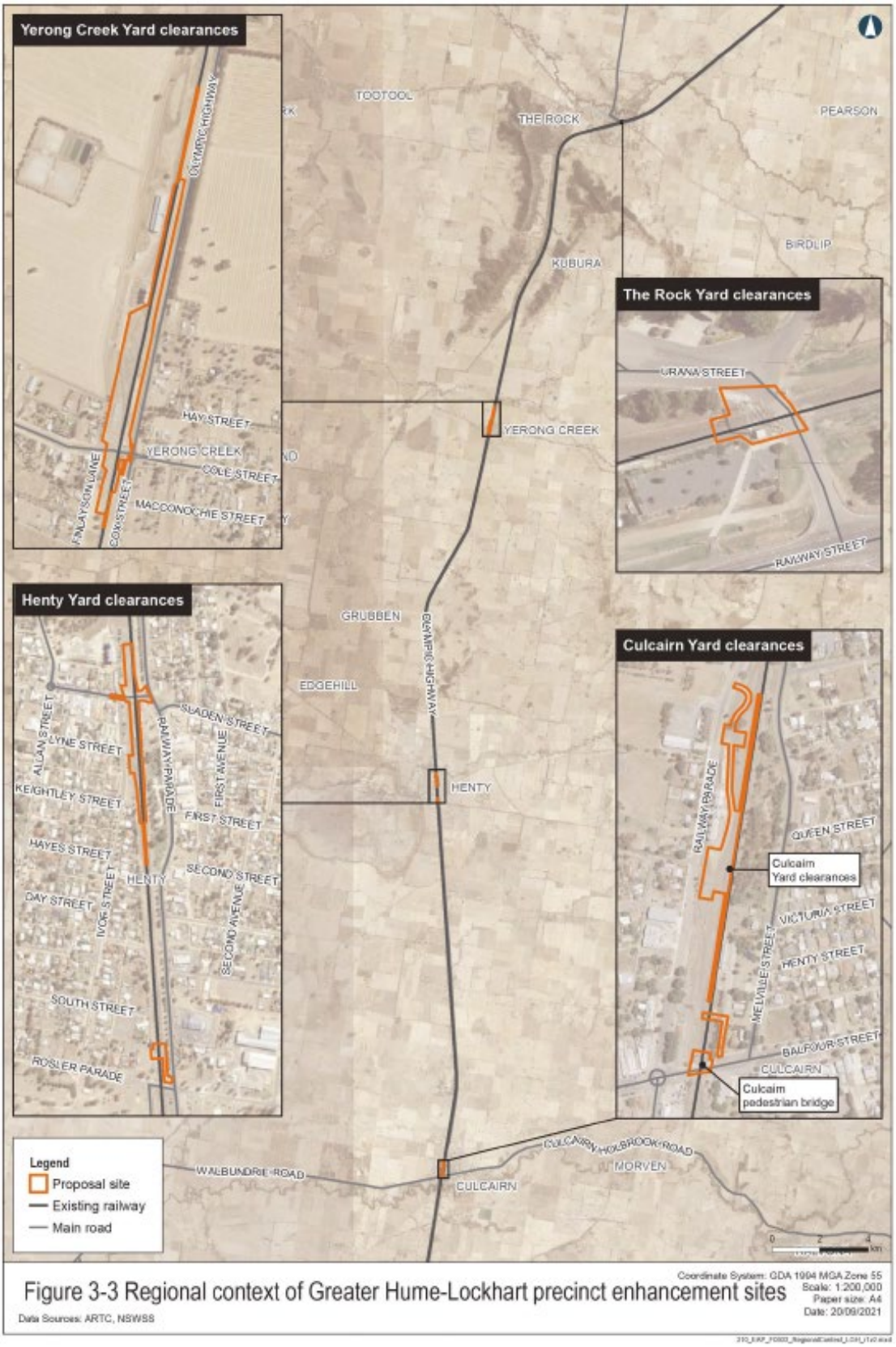


FIGURE 3: GREATER HUME-LOCKHART PRECINCT ENHANCEMENT SITES (SOURCE: ENVIRONMENTAL IMPACT STATEMENT)

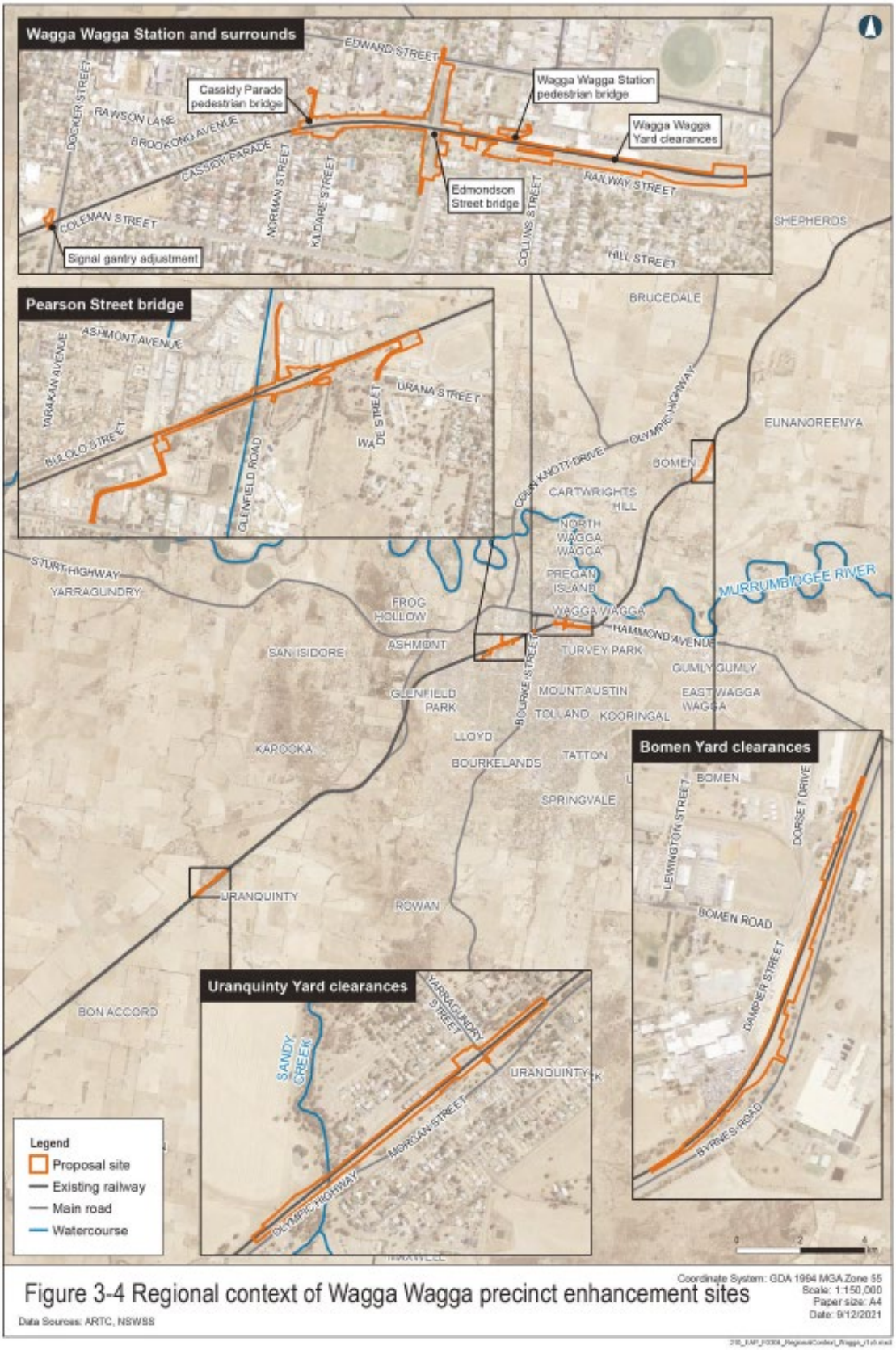


FIGURE 4: WAGGA WAGGA PRECINCT ENHANCEMENT SITES (SOURCE: ENVIRONMENTAL IMPACT STATEMENT)

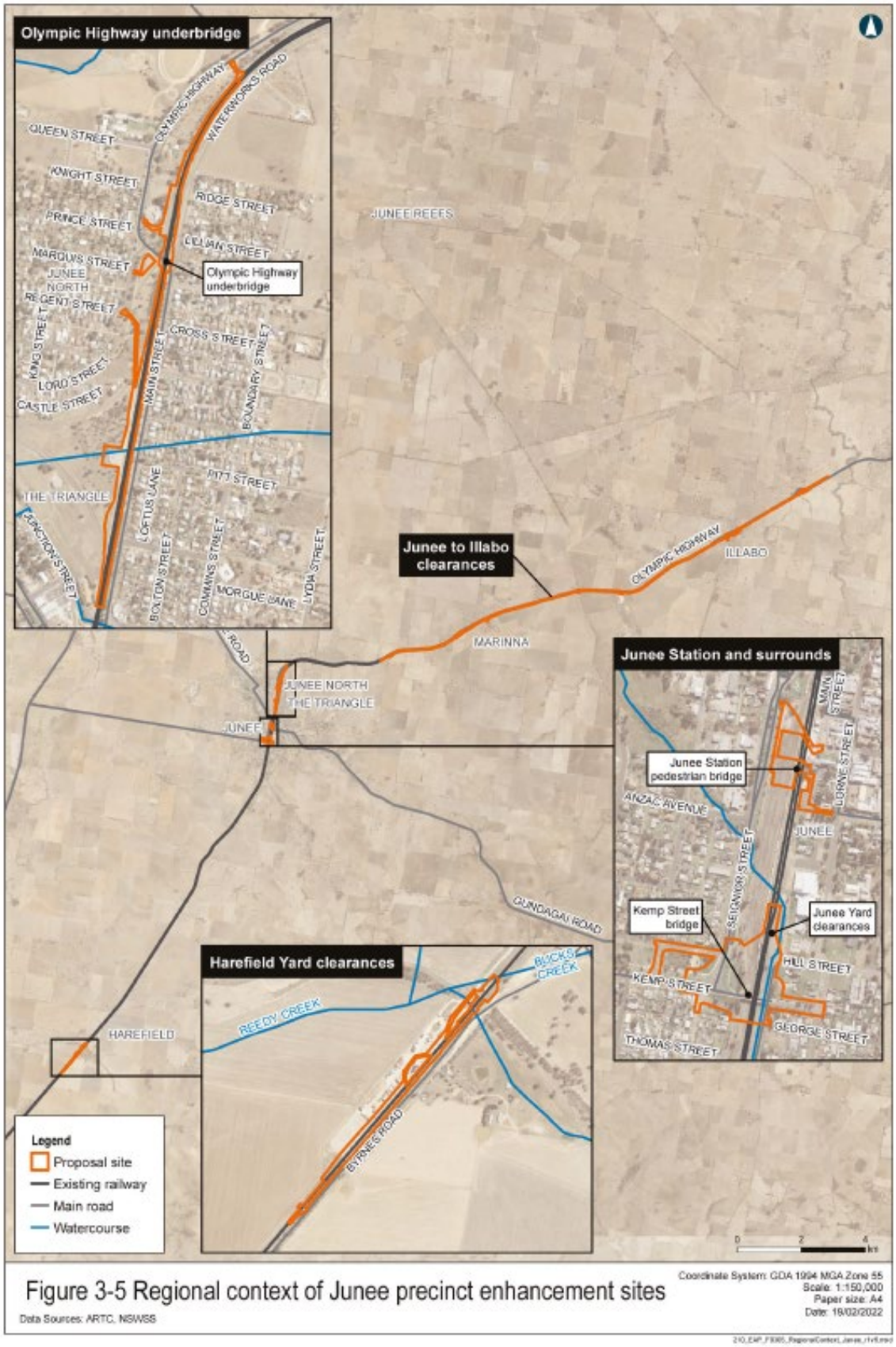


FIGURE 5: JUNEE PRECINCT ENHANCEMENT SITES (SOURCE: ENVIRONMENTAL IMPACT STATEMENT)

2.1.1 Pre-construction

There are a number of activities that can be carried out prior to construction. These activities include low impact works (including site establishment). CoA A9 to A14 and C16 do not require that these activities are described in the Staging Report or the CEMF, however, they have been added in this section for clarity. Low impact work is not considered further in this CEMF.

Low impact works are defined in Table 1 of the CoA as including:

a) Survey work including carrying out general alignment survey, installing survey controls (including installation of global positioning systems (GPS)), installing repeater stations, carrying out surveys of existing and future utilities and building and road dilapidation surveys
b) Investigations including investigative drilling, contamination investigations and excavation
c) Site establishment work approved under a Site Establishment Management Plan
d) Use of minor ancillary facilities if the ER has determined the operational activities will have a minor impact on the environment and the community
e) Minor clearing and relocation of native vegetation, as identified in the documents listed in Condition A1
f) Installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and at-property treatments
g) Property acquisition adjustment work including installation of property fencing
h) Relocation and connection of utilities where the relocation or connection has been determined by the ER to have a minor impact to the environment and the community
i) Archaeological testing under the Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) or archaeological monitoring undertaken in association with (a) - (h) above to ensure that there is no impact on heritage items
j) Archaeological and cultural salvage undertaken in accordance with a methodology required by the conditions of this approval
k) Maintenance of existing buildings and structures required to facilitate the carrying out of the CSSI, and
l) Other activities determined by the ER to have minor impact on the environment and the community, which may include but not be limited to construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.

Despite the above, the CoA notes that the following works are not considered to be low impact work:

- Where heritage items, or threatened species or their habitat, or threatened ecological communities (within the meaning of the *Biodiversity Conservation Act* 2016) are adversely affected or potentially adversely affected by any low impact work as defined in (a) to (n) above, that work is construction, unless otherwise determined by the Planning Secretary in consultation with Heritage NSW, EHG or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation), and
- Any night-time work that exceeds noise management levels as defined in the ICNG.

The low impact work defined in the CoA becomes Construction with the approval of a CEMP. Where low impact work has already commenced, this is considered to remain as low impact work and is managed in accordance with the framework under which it commenced.

2.1.2 Construction Stage A

Construction in Stage A will comprise preparation activities for the rail possession (Substage A1), the rail possession activities themselves (Substage A2), and post-possession activities (Substage A3). Any pre-construction activities (refer Section 2.1.1) that have not commenced before the approval of the CEMP will be undertaken as construction.

Out of the 24 enhancement sites for the project, 13 are proposed to form part of Stage A. These 13 sites were chosen based on:

1. Which activities need to commence first to derisk the overall project program;
2. The expected level of impact for each activity and whether the risk for each of those impacts can be considered as medium;
3. The timing of detailed design for each enhancement site.

No construction works will occur at the follow enhancement sites as part of Stage A:

- Murray River Bridge;
- Albury Station pedestrian bridge;

- Albury Yard clearances;
- Riverina Highway bridge;
- Billy Hughes bridge;
- Culcairn pedestrian bridge;
- Culcairn Yard clearances;
- Uranquinty Yard clearances;
- Pearson Street bridge (with exception of short-term utility works);
- Cassidy Parade pedestrian bridge (with exception of short-term utility works);
- Edmondson Street bridge (with exception of short-term utility works);
- Wagga Wagga Station pedestrian bridge;
- Wagga Wagga Yard clearances;
- Bomen Yard clearances;
- Kemp Street bridge;
- Junee pedestrian bridge.

The EAD articulated that it is anticipated that construction of the project would impact the community in Wagga Wagga, in particular the demolition and reconstruction of the various bridges. By avoiding demolishing and reconstructing the bridges during Stage A, traffic related impacts to Wagga Wagga will be consolidated and condensed to Stage B.

In accordance with CoA E25, prior to the commencement of works, the project completed targeted surveys during July and August 2024 for Sloane's Froglet (*Crinia sloanei*) in all areas where that species was assumed present in the documents listed in CoA A1. The results of the targeted surveys were provided to DCCEEW and the Planning Secretary for information. No Sloane's Froglet were found during these targeted surveys and therefore impacts to Sloane's Froglet (*Crinia sloanei*) will be avoided during Stage A. This notwithstanding, in accordance with CoA E28, in all remaining areas that assumed the presence of Sloane's Froglet, erosion and sediment control measures and protection of riparian areas will be installed in accordance with CoA C10, E173 and E174 prior to work in these areas for Stage A.

Table 3 summarises the locations and the construction works that would take place during Stage A.

2.1.3 Construction Stage B

Construction in Stage B will see construction activities commencing in the Wagga Wagga Precinct, as well as at Uranquinty Creek and Billy Hughes Bridge. New construction activities such as culvert work, level crossing work and finishing work, will also occur. Construction in Stage B will also comprise a continuation of some activities started in Stage A.

Table 3 summarises the locations and the construction works that would take place during Stage B.

TABLE 3: CONSTRUCTION STAGE A AND STAGE B SUMMARY

ENHANCEMENT SITE	UTILITY / DRAINAGE	ANCILLARY / LAYDOWN[1]	CLEARING / GRUBBING	EARTHWORKS	GANTRY / SIGNALLING	BRIDGE DEMO/ RECONSTRUCTION / STATION	TRACKWORK	CULVERTS	CREEK CROSSING / WORKS OVER WATER	LEVEL CROSSINGS	FINISHING WORK
Stage A											
Murray River Bridge											
Albury Station pedestrian bridge											
Albury Yard clearances											
Riverina Highway bridge											
Billy Hughes bridge											
Table Top Yard clearances											
Culcairn pedestrian bridge											
Culcairn Yard clearances											
Henty Yard clearances											
Yerong Creek Yard clearances											
The Rock Yard											
Uranquinty Yard clearances											

[1] Establishment and operation of an ancillary facility and/or material/plant and equipment laydown, including access tracks as required

ENHANCEMENT SITE	UTILITY / DRAINAGE	ANCILLARY / LAYDOWN[1]	CLEARING / GRUBBING	EARTHWORKS	GANTRY / SIGNALLING	BRIDGE DEMO/ RECONSTRUCTION / STATION	TRACKWORK	CULVERTS	CREEK CROSSING / WORKS OVER WATER	LEVEL CROSSINGS	FINISHING WORK
Pearson Street bridge											
Cassidy Parade pedestrian bridge											
Edmondson Street bridge											
Wagga Wagga Station pedestrian bridge											
Wagga Wagga Yard clearances											
Bomen Yard clearances											
Harefield Yard clearances											
Kemp Street bridge											
Junee Station pedestrian bridge											
Junee Yard clearances											
Olympic Highway underbridge											
Junee to Illabo clearances								*			

ENHANCEMENT SITE	UTILITY / DRAINAGE	ANCILLARY / LAYDOWN[1]	CLEARING / GRUBBING	EARTHWORKS	GANTRY / SIGNALLING	BRIDGE DEMO/ RECONSTRUCTION / STATION	TRACKWORK	CULVERTS	CREEK CROSSING / WORKS OVER WATER	LEVEL CROSSINGS	FINISHING WORK
Stage B											
Murray River Bridge											
Albury Station pedestrian bridge											
Albury Yard clearances											
Riverina Highway bridge											
Billy Hughes bridge											
Table Top Yard clearances											
Culcairn pedestrian bridge											
Culcairn Yard clearances											
Henty Yard clearances											
Yerong Creek Yard clearances											
The Rock Yard											
Uranquinty Yard clearances											

ENHANCEMENT SITE	UTILITY / DRAINAGE	ANCILLARY / LAYDOWN[1]	CLEARING / GRUBBING	EARTHWORKS	GANTRY / SIGNALLING	BRIDGE DEMO/ RECONSTRUCTION / STATION	TRACKWORK	CULVERTS	CREEK CROSSING / WORKS OVER WATER	LEVEL CROSSINGS	FINISHING WORK
Pearson Street bridge											
Cassidy Parade pedestrian bridge											
Edmondson Street bridge											
Wagga Wagga Station pedestrian bridge											
Wagga Wagga Yard clearances											
Bomen Yard clearances											
Harefield Yard clearances											
Kemp Street bridge											
Junee Station pedestrian bridge											
Junee Yard clearances											
Olympic Highway underbridge											
Junee to Illabo clearances											

Legend

	Works to occur		Works to **not** occur		Work on possession

* Stage A culvert work at Junee to Illabo clearances is limited to minor works including extension of the headwall and modifications to the handrail.

2.2 Indicative timing

Construction will take approximately three (3) years. The project is expected to be operational by end of 2027. The indicative timing of project stages is shown in Table 4.

TABLE 4: INDICATIVE TIMING OF PROJECT CONSTRUCTION STAGES

STAGE	SUBSTAGE	INDICATIVE TIMING																			
		2025												2026				2027			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Stage A	Substage A1																				
	Substage A2																				
	Substage A3																				
Stage B																					

Legend

	Construction works

3 RISK ASSESSMENT

A risk-based approach has been used to determine the level of management tool which will be used on the project and to guide the implementation of environmental risks and mitigation measures. Through this approach the CEMF will streamline the CEMP and Sub-plans prepared to manage environmental impacts. This approach considers the following:

- Identification of activities to be undertaken during each construction stage (refer Table 3);
- Assessment of project-specific environmental risks and hazards associated with each construction stage (refer Appendix B and Appendix C);
- Determination of suitable mitigation measures proportionate to the extent of the risk identified to minimise the risk (refer Appendix C).

3.1 Risk framework

The project has established a proactive risk management approach to enhance performance outcomes and assist in constructive decision making. This supports the objectives of the project as well as decreases the potential for harm. By using a standardised risk management framework, the project will implement structured and integrated management systems that focus on desired outcomes. Consistently implemented, this will allow for risks to be identified, analysed, evaluated, and appropriately managed.

The purpose of the project risk management standard is to define and communicate the project's approach, process, and procedure in relation to risk management. The standard is applicable to all functions, operations and activities undertaken by the project.

The project risk assessment process includes:

- Step 1: Establish context;
- Step 2: Risk identification;
- Step 3: Risk analysis;
- Step 4: Risk evaluation;
- Step 5: Risk treatment;
- Step 6: Monitoring, review and reporting.

This framework is aligned with *AS/NZS ISO 31000: 2018; Risk Management – Principles and Guidelines*. Refer to Appendix A for the risk matrix and consequence table that forms part of the Risk Standard.

The risk assessment in Appendix C has been based on the environmental risk assessment undertaken for the EAD (Appendix E of the EIS). The EAD risk assessment has been amended to reflect the proposed project staging and a review of the proposed construction methodology was undertaken to reflect information that has been developed during detailed design since the development of the EAD. Additional consideration of feedback identified by DPHI during the risk identification process have also been incorporated into the assessment.

The risk assessment in Appendix C has only been undertaken for Stage A. A preliminary assessment of Stage B highlighted that there would be some high risk impacts for each environmental aspect, and therefore the Planning Secretary would be required to approve the required CEMP, Sub-plans and CMPs. As such, no detailed risk assessment has been undertaken for this CEMF.

3.2 Risk levels

In accordance with CoA C16(d), the consultation and endorsement level for the CEMP, Sub-plans and CMPs will be nominated based on the risk assessment. The endorsement level will be one of the following:

1. **Low risk stage** – To be self-endorsed and consultation with agency and council stakeholders is not mandatory;
2. **Medium risk stage** – To be endorsed by the ER and consultation with Government agency and council stakeholders required;
3. **High risk stage** – To be endorsed by the Planning Secretary and consultation with Government agency and council stakeholders required.

3.3 Risk analysis

Stage A (Low risk to **Medium risk).** Construction during Stage A has been assessed as having a combination of low and medium level risks (refer to Table C1 of Appendix C for further information).

Following feedback from DPHI during the risk identification process, the project was advised that the following environmental management documentation will be approved by the Planning Secretary for Stage A:

- Construction Environment Management Plan – Stage A;
- Construction Biodiversity Management Plan and the Biodiversity Monitoring Program – Stage A;
- Construction Traffic, Transport and Access Management Plan and the Traffic and Transport Monitoring Program – Stage A;

- Construction Noise and Vibration Management Plan and the Noise and Vibration Monitoring Program – Stage A.

The remaining Sub-plans and CMPs will be endorsed by the ER prior to Stage A construction commencing. It is noted that construction of Stage A cannot commence until all CEMP, Sub-plans and CMPs have been approved by the Planning Secretary and endorsed by the ER as required by this CEMF.

The Sub-plans and CMPs will be developed in consultation with Government agencies and council stakeholders.

Stage B (Medium risk to High risk). Construction during Stage B is considered to be high risk overall primarily given:

- The potential impact to fauna connectivity values at Uranquinty Creek and Billy Hughes Bridge;
- The direct non-Aboriginal heritage impacts to the Albury Yard;
- The traffic and transport impacts to the Wagga Wagga precinct (includes Uranquinty Yard clearances, Pearson Street bridge, Cassidy Parade pedestrian bridge, Edmondson Street bridge, Wagga Wagga Station pedestrian bridge, Wagga Wagga Yard clearances, and Bomen Yard clearances enhancement sites) as a result of demolishing and reconstructing the bridges;
- The traffic and transport and access impacts resulting from the construction and/or removal of any private or public level crossings.

All works for Stage B are to be undertaken under a CEMP, Sub-plans and CMPs (refer Section 4 and Section 5), developed in consultation with agency and council stakeholders, endorsed by ER and AA as required (refer Figure 6), and then approved by the Planning Secretary prior to the commencement of the stage.

4 ENVIRONMENTAL MANAGEMENT FRAMEWORK

4.1 Overall framework

This CEMF proposes two (2) construction stages – Stage A and Stage B.

As discussed in Section 2.1, construction in Stage A will comprise preparation activities for the rail possession (Substage A1), the rail possession activities themselves (Substage A2), and post-possession activities (Substage A3). No construction works will occur in Wagga Wagga, Uranquinty Creek, or Billy Hughes Bridge as part of Stage A, with the exception of some utility works within Wagga Wagga near Edmondson Bridge.

Construction in Stage B will see construction activities commencing in the Wagga Wagga Precinct, as well as at Uranquinty Creek and Billy Hughes Bridge. New construction activities such as culvert work, level crossing work and finishing work, will also occur. Construction in Stage B will also comprise a continuation of some activities started in Stage A.

Table 3 summarises the locations and the construction works that would take place during Stage A and Stage B.

4.2 Streamlining CEMP and Sub-plans

The project is employing a streamlined process for the development of CEMPs, Sub-plans, and CMPs, based on the environmental and social risks for each construction stage. Depending on the scope and scale of works for each stage, the risk assessment will determine environmental management documentation requirements, for example whether a standalone Sub-plan is needed to manage a risk or if a procedure or chapter as part of the CEMP is sufficient.

Table 5 summarises the environmental management documentation requirements for each stage. This assessment considered each stage's scope of work, environmental and social risk (refer to Appendix B), relevant mitigation measures and whether additional environmental management documentation will be required to ensure their effective implementation. The assessment concludes:

- Whether risks are not applicable to the stage ('N/A');
- Residual risk levels of 'low' will be addressed in a CEMP (if the stage has an over risk of medium) or work method statement (or similar) (if the stage has an over risk of low);
- Residual risk levels of 'medium' will be addressed in the CEMP Sub-plan;
- Residual risk levels of 'high' or 'very high' will be addressed in a stand-alone 'CEMP sub-plan' and CMP.

A summary of the documentation applicable for each stage of construction can be found in Table 5 and in Figure 6.

TABLE 5: APPLICABLE CEMP DOCUMENTATION FOR ENVIRONMENTAL MANAGEMENT FOR EACH STAGE

ASPECT / RISK	STAGE A	STAGE B	SOURCE OF REQUIREMENT
Construction environmental management plan			
General environmental management risk	CEMP	CEMP	CoA C1
Sub-plans and CMPs			
Traffic, transport, and access	Sub-plan and CMP	Sub-plan and CMP	CoA C6(a)
Soil, water, salinity, air quality and groundwater (referred to as soil and water)	Sub-plan and Surface Water CMP	Sub-plan and Surface Water CMP	CoA C6 (b), C6 (h) and C6 (k)
Noise and vibration	Sub-plan and CMP	Sub-plan and CMP	CoA C6(c)
Biodiversity	Sub-plan and CMP	Sub-plan and CMP	CoA C6 (d)
Aboriginal heritage and non-Aboriginal heritage	Sub-plan	Sub-plan	CoA C6 (e) and C6 (f)
Flood and bushfire emergency	Sub-plan	Sub-plan	CoA C6 (g)

ASPECT / RISK	STAGE A	STAGE B	SOURCE OF REQUIREMENT
Waste, contamination and hazardous materials	Sub-plan	Sub-plan	CoA C6 (i) and C6 (j)
Social impact (not staged)	Sub-plan	Sub-plan	CoA C6 (l)
Maritime traffic	N/A	Sub-plan	UMM TT8

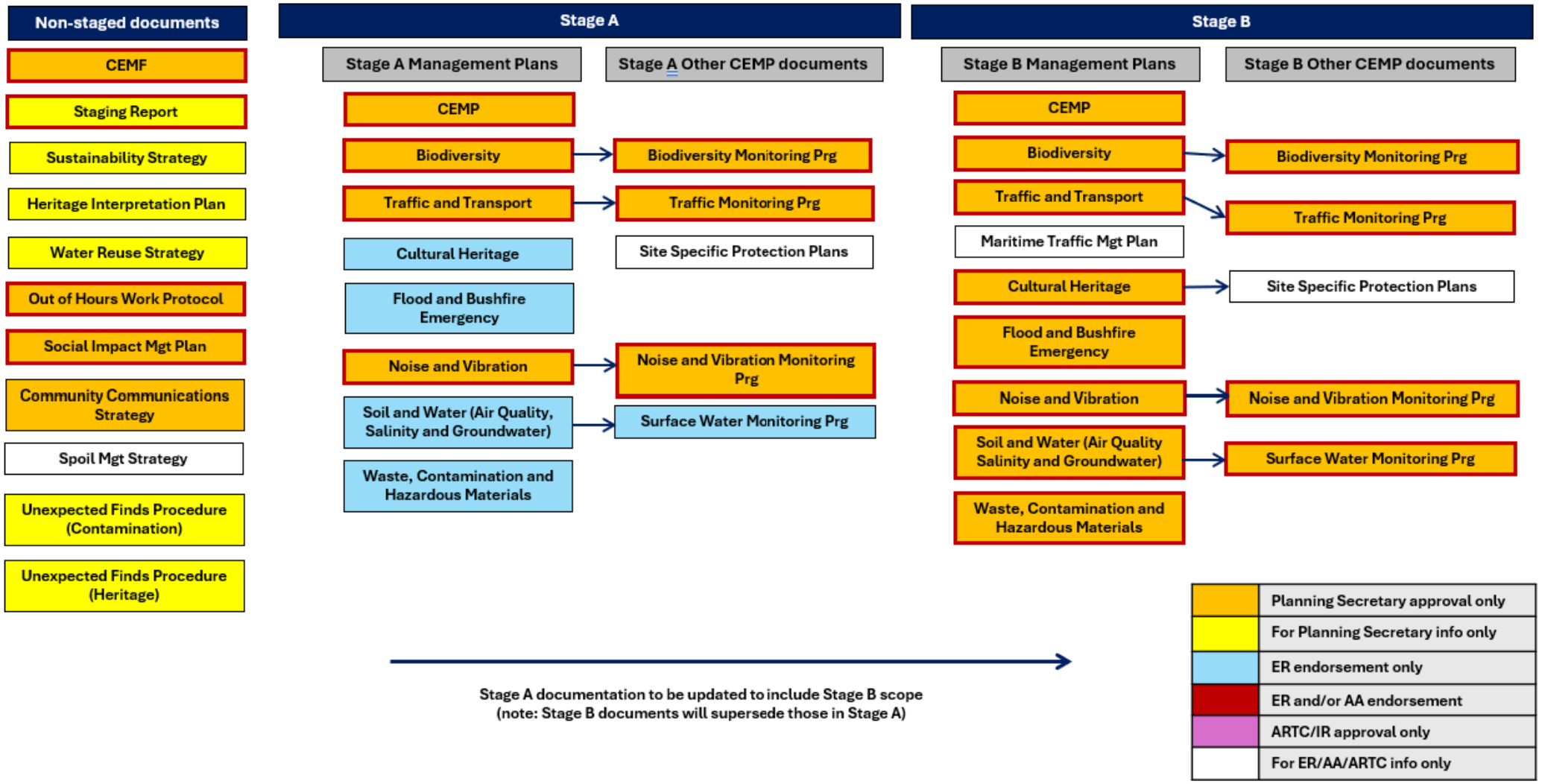


FIGURE 6: KEY ENVIRONMENTAL DOCUMENTATION OVERVIEW

4.3 Consultation and endorsement

In accordance with CoA C16(d), where the risk of a stage is ‘medium’, the Sub-plan and/or CMP’s must be developed in consultation with relevant Government agency and council stakeholders and with the ER’s endorsement prior to the commencement of the stage.

Where the risk of the stage is ‘high’ or ‘very high’, the environmental management documentation must be developed in consultation with the relevant Government agency and council stakeholders, and approval will be sought from the Planning Secretary prior to the commencement of the stage.

Table 6 and Table 7 show the review, consultation, endorsement, and approval requirements for each stage.

TABLE 6: CEMF REVIEWS, CONSULTATION, ENDORSEMENT, AND APPROVALS FOR STAGE A

MANAGEMENT DOCUMENTATION	IRPL REVIEW	GOVERNMENT AGENCY / STAKEHOLDER CONSULTATION	ER REVIEW AND ENDORSEMENT ONLY	ER REVIEW AND ENDORSEMENT (FOR DOCUMENTS REQUIRING PLANNING SECRETARY APPROVAL)	AA REVIEW AND ENDORSEMENT	PLANNING SECRETARY REVIEW AND APPROVAL
Construction Environmental Management Plan						
CEMP – CoA C1	✓	×	×	✓	×	✓
CEMP Sub-plans						
Flood and bushfire emergency – CoA C6 (g)	✓	✓	✓	×	×	×
Traffic, transport, and access – CoA C6 (a)	✓	✓	×	✓	×	✓
Aboriginal heritage and non-Aboriginal heritage – CoA C6 (e) and (f)	✓	✓	✓	×	✓	×
Noise and vibration – C6 (c)	✓	✓	×	✓	✓	✓
Biodiversity – CoA C6 (d)	✓	✓	×	✓	×	✓
Soil, water, salinity, air quality and groundwater – CoA C6 (b), (h) and (k) (referred to as soil and water)	✓	×	✓	×	×	×
Waste, contamination and hazardous materials – CoA C6 (i) and (j)	✓	×	✓	×	×	×
Social impact (not staged) – CoA C6 (l)	✓	✓	×	×	×	✓
Construction Environmental Monitoring Programs						
Traffic and transport – C26 (a)	✓	✓	×	✓	×	✓
Noise and vibration – C26 (b)	✓	✓	×	✓	✓	✓
Biodiversity – C26 (c)	✓	✓	×	✓	×	✓

MANAGEMENT DOCUMENTATION	IRPL REVIEW	GOVERNMENT AGENCY / STAKEHOLDER CONSULTATION	ER REVIEW AND ENDORSEMENT ONLY	ER REVIEW AND ENDORSEMENT (FOR DOCUMENTS REQUIRING PLANNING SECRETARY APPROVAL)	AA REVIEW AND ENDORSEMENT	PLANNING SECRETARY REVIEW AND APPROVAL
Surface water – C26 (d)	✓	✓	✓	×	×	×
Procedures, strategies, and protocols						
Out of Hours Work Protocol (not staged) – CoA E72	✓	✓	×	×	×	✓
Unexpected Finds Protocol (not staged) – Heritage – CoA E66	✓	✓	×	×	×	×
Unexpected Finds Protocol (not staged) – Contamination – CoA E128	✓	×	×	×	×	×

Legend

✓	Applies to management documentation	×	Does not apply to management documentation

TABLE 7: CEMF REVIEWS, CONSULTATION, ENDORSEMENT, AND APPROVALS FOR STAGE B

MANAGEMENT DOCUMENTATION	IRPL REVIEW	GOVERNMENT AGENCY / STAKEHOLDER CONSULTATION	ER REVIEW AND APPROVAL	ER REVIEW AND ENDORSEMENT ONLY	AA REVIEW AND ENDORSEMENT	PLANNING SECRETARY REVIEW AND APPROVAL
Construction Environmental Management Plan						
CEMP – CoA C1	✓	×	×	✓	×	✓
CEMP Sub-plans						
Flood and bushfire emergency – CoA C6 (g)	✓	✓	×	✓	×	✓
Traffic, transport, and access – CoA C6 (a)	✓	✓	×	✓	×	✓
Marine traffic – UMM TT8	✓	✓	×	×	×	×
Aboriginal heritage and non-Aboriginal heritage – CoA C6 (e) and (f)	✓	✓	×	✓	✓	✓
Noise and vibration – C6 (c)	✓	✓	×	✓	✓	✓
Biodiversity – CoA C6 (d)	✓	✓	×	✓	×	✓
Soil, water, salinity, air quality and groundwater – CoA C6 (b), (h) and (k) (referred to as soil and water)	✓	✓	×	✓	×	✓
Waste, contamination and hazardous materials – CoA C6 (i) and (j)	✓	✓	×	✓	×	✓
Social impact (not staged) – CoA C6 (l)	×	×	×	×	×	×

MANAGEMENT DOCUMENTATION	IRPL REVIEW	GOVERNMENT AGENCY / STAKEHOLDER CONSULTATION	ER REVIEW AND APPROVAL	ER REVIEW AND ENDORSEMENT ONLY	AA REVIEW AND ENDORSEMENT	PLANNING SECRETARY REVIEW AND APPROVAL
Construction Environmental Monitoring Programs						
Traffic and transport – C26 (a)	✓	✓	×	✓	×	✓
Noise and vibration – C26 (b)	✓	✓	×	✓	✓	✓
Biodiversity – C26 (c)	✓	✓	×	✓	✓	✓
Surface water – C26 (d)	✓	✓	×	✓	×	✓
Procedures, strategies, and protocols						
Out of Hours Work Protocol (not staged) – CoA E72	✓	✓	×	✓	✓	✓
Unexpected Finds Protocol (not staged) – Heritage – CoA E66	✓	✓	×	✓	×	×
Unexpected Finds Protocol (not staged) – Contamination – CoA E128	✓	×	×	×	×	×

Legend

✓	Applies to management documentation	×	Does not apply to management documentation

5 CEMP, SUB-PLAN AND CMP STRUCTURE

As required by CoA C16(b), the proposed structure of the CEMPs, Sub-plans and CMPs are detailed in the relevant section below. This outline acts as a guide for the general construction management measures to be considered in each document.

It is noted that regardless of whether the CEMPs, Sub-plans and CMP's have been developed for Stage A or Stage B, the structure will be the same. What differs is the specific existing environment information, as well as specific management and mitigation measures that will be relevant to the scope of the stage.

5.1 Construction environment management

The project CEMP, required by CoA C1, for both Stage A and Stage B will provide a centralised mechanism through which construction-related environmental impacts and management measures are documented. It will comprise a main CEMP document, issue-specific Sub-plans and CMPs, and procedures.

The CEMP for both Stage A and Stage B will be prepared in accordance with Environmental Management Plan Guideline for Infrastructure Projects (Department of Planning, Industry and Environment (DPIE), 2020c).

The CEMP for both Stage A and Stage B will provide the system and procedures to ensure that environmental impacts are minimised, and that legislative and approval requirements are fulfilled. As a minimum, it will include:

- The environmental policy, objectives, and performance targets for construction;
- Description of activities to be undertaken during construction;
- Reference to relevant statutory and other obligations, including consents, licences, approvals, permits, and voluntary agreements required;
- Issue-specific sub plans that detail how construction activities will be managed and monitored to avoid or minimise impacts, including the type, location, and timing of environmental controls;
- Processes for managing non-conformances, including identifying and implementing corrective and preventative actions to rectify the non-conformance and prevent recurrence;
- Processes for demonstrating compliance with the commitments made in the EAD and relevant consents, licences, approvals, permits and voluntary agreements;
- Responsibilities for planning, implementing, maintaining, and monitoring environmental controls including the responsibilities of sub-contractors;
- Procedures for the control of environmental records;
- A compliance tracking and auditing program.

5.2 CEMP sub-plans

Sub-plans for both Stage A and Stage B will detail how:

- Environmental performance outcomes will be achieved;
- Mitigation measures will be implemented;
- Issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through Specific, Measurable, Achievable, Realistic and Timely (SMART) principles.

The Stage A Sub-plans comprise:

- Traffic, transport, and access – CoA C6 (a)
- Soil, water, salinity, air quality and groundwater – CoA C6 (b), (h) and (k)
- Noise and vibration – C6 (c)
- Biodiversity – CoA C6 (d)
- Aboriginal heritage and non-Aboriginal heritage – CoA C6 (e) and (f)
- Flood and bushfire emergency – CoA C6 (g)
- Waste, contamination and hazardous materials – CoA C6 (i) and (j)
- Social impact (not staged) – CoA C6 (l).

The Stage B Sub-plans comprise:

- Traffic, transport, and access – CoA C6 (a)
- Soil, water, salinity, air quality and groundwater – CoA C6 (b), (h) and (k)
- Noise and vibration – C6 (c)
- Biodiversity – CoA C6 (d)
- Aboriginal heritage and non-Aboriginal heritage – CoA C6 (e) and (f)
- Flood and bushfire emergency – CoA C6 (g)
- Waste, contamination and hazardous materials – CoA C6 (i) and (j)

- Social impact (not staged) – CoA C6 (l);
- Marine traffic – UMM TT8.

5.3 Construction monitoring programs

CMPs are issue-specific such as for monitoring biodiversity and noise and vibration. The CMPs also comprises hold and observance points to facilitate decision making and maintain compliance during construction.

Each CMP will have consideration of SMART principles and provide in accordance with CoA C26:

- Details of baseline data available;
- Details of baseline data to be obtained and when;
- Details of monitoring to be undertaken;
- The parameters of the project to be monitored;
- The frequency of monitoring to be undertaken;
- The location of monitoring;
- The reporting of monitoring and analysis of results against relevant criteria;
- Details of the methods that will be used to analyse the monitoring data;
- Procedures to identify and implement additional mitigation measures where the results of the monitoring indicate unacceptable project impacts;
- Any consultation to be undertaken in relation to the monitoring programs.

The CMPs for both Stage A and Stage comprise:

- Traffic and transport – C26 (a)
- Noise and vibration – C26 (b)
- Biodiversity – C26 (c)
- Surface water – C26 (d).

6 REVIEW

This CEMF details the environmental and social risks associated with Stage A and Stage B of construction for the project and speaks to project staging outlined the Staging Report.

To appropriately manage each aspect of risk, and to allow for changes to project design and/or the introduction of new stages or stages of work, it is essential that consistent and frequent monitoring and review of this management framework is undertaken. Should the delivery strategy change as the project progresses, or if additional stages or stages of construction are identified in the Staging Report, changes will be reflected in this CEMF.

This CEMF will be reviewed on an annual basis at minimum.

In accordance with CoA C17, where changes are proposed to the staging of construction, a revised CEMF will be prepared, endorsed by the ER, and submitted to the Planning Secretary for approval no later than one (1) month prior to the proposed change in the staging. The approved CEMF, including any revisions made, will be implemented for the duration of construction.

The CEMP and Sub-plans are to be reviewed and updated as required, including in response to audit findings, compliance monitoring results, and incidents and inspections that identify corrective and preventative actions. This will include an annual review as part of the project's continual improvement process.

APPENDIX A

Risk matrix

TABLE A1: LIKELIHOOD CRITERIA AND RISK MATRIX (SOURCE: EAD)

Likelihood	Consequence				
	Not significant	**Minor**	**Moderate**	**Major**	**Extreme**
Almost certain	Medium	Medium	High	Very high	Very high
Likely	Low	Medium	High	Very high	Very high
Possible	Low	Low	Medium	High	High
Unlikely	Low	Low	Low	Medium	Medium
Rare	Low	Low	Low	Low	Medium

TABLE A2: LIKELIHOOD DEFINITIONS (SOURCE: EAD)

Likelihood	Description	Frequency of occurrence	Percentile
Almost certain	Is expected to occur in most circumstances	Once per month	>90%
Likely	Will probably occur in most circumstances	Between once a month and once a year	60–90%
Possible	Might occur at some time	Between once a year and once in five years	30–<60%
Unlikely	Could occur at some time	Between once in 5 years and once in 20 years	10–<30%
Rare	May occur in exceptional circumstances	Once in more than 20 years	<10%

TABLE A3: CONSEQUENCE DEFINITIONS (SOURCE: EAD)

Consequence level	Definition
Extreme	▸ Multiple but localised fatalities occur ▸ Widespread long term or permanent environmental damage—remediation required ▸ Prosecution of the company and/or its office holders ▸ More than 5 days track closure ▸ More than 5% of project budget (i.e. more than $500 million in $10 billion) ▸ More than 10% of project budget (e.g. more than $10 million in $100 million) ▸ Corporate loss of shareholder and/or customer support (tangible business impact greater than 3 years) ▸ Influences schedule more than 10% of program-approved schedule period ▸ Influences schedule more than 20% of project-approved schedule period.
Major	▸ Single fatality occurs ▸ Considerable environmental damage—requiring remediation ▸ Prohibition notice or fine(s) ▸ More than 48 hours to 5 days track closure ▸ More than 1.5% to 5% of project budget (i.e. more than $150 million to $500 million in $10 billion) ▸ More than 2.5% to 10% of project budget (e.g. $2.5 million to $10 million in $100 million) ▸ Strategic intervention required (more than 18 months to 3 years) ▸ Influences schedule more than 5% to 10% of project-approved schedule period ▸ Influences schedule more than 10% to 20% of project-approved schedule period.
Moderate	▸ Serious injury occurs ▸ Localised/clustered environmental damage—requiring remediation ▸ Improvement notice or threatened action ▸ More than 24 hours to 48 hours track closure ▸ More than 0.5% to 1.5% of project budget (i.e. more than $50 million to $150 million in $10 billion) ▸ More than 0.5% to 2.5% of project budget (e.g. more than $500,000 to $2.5 million in $100 million) ▸ Tactical (business unit/divisional) intervention required (more than 3 months to 18 months) ▸ Influences schedule more than 2.5% to 5% of project-approved schedule period ▸ Influences schedule more than 5% to 10% of project-approved schedule period.
Minor	▸ Lost time injury (LTI) results OR medical treatment required ▸ Isolated environmental damage—minimal ARTC remediation required ▸ Notice to produce information ▸ >6 hours to 24 hours track closure ▸ More than 0.05% to 0.5% of project budget (i.e. more than $5 million to $50 million in $10 billion ▸ More than 0.1% to 0.5% of project budget (e.g. more than $100,000 to $500,000 in $100 million) ▸ Management intervention required (more than 7 days to 3 months) ▸ Influences schedule more than 1% to 2.5% of project-approved schedule period ▸ Influences schedule more than 2% to 5% of project-approved schedule period.
Not significant	▸ No medical treatment required ▸ Contained environmental damage—fully recoverable (no cost or ARTC action required) ▸ Minimal or no regulatory involvement ▸ Up to 6 hours track closure ▸ Up to 0.05% of project budget (i.e. to $5 million in $10 billion) ▸ Up to 0.1% of project budget (e.g. to $100,000 in $100 million) ▸ Isolated event able to be resolved (up to 7 days) ▸ Influences schedule up to 1% of project-approved schedule period ▸ Influences schedule up to 2% of project-approved schedule period.

APPENDIX B

Risk context

TABLE B1: RISK CONTEXT FOR ALL CONSTRUCTION STAGES (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)

ASPECT	POTENTIAL IMPACTS / RISKS (UNMITIGATED)	APPLICABLE STAGE
Flood and bushfire emergency	Potential impacts on construction activities due to flooding.	Stage A and Stage B
	Potential risks to construction by bushfire, or bushfire risks due to construction activity in bushfire prone areas.	Stage A and Stage B
	Impact to regional or local water supply due to construction water demands.	Stage A and Stage B
	Sedimentation and changes to geomorphology in watercourses	Stage A and Stage B
Traffic, transport, and access	Impact of construction work on existing rail freight operations outside of scheduled possession windows.	Stage B
	Increase to road use as a result of cumulative infrastructure projects in the vicinity of the project.	Stage A and Stage B
	Potential temporary reduced safety and amenity for traffic, pedestrians and cyclists due to construction activities and due to potential conflicts with construction vehicles.	Stage A and Stage B
	Impacts to condition of roads due to construction traffic.	Stage A and Stage B
	Impacts on access to private properties.	Stage B
	Impacts to emergency services due to road network delays or access restrictions caused by temporary changes to the road network	Stage A and Stage B
	Increase in parking demand from construction workforce particularly during rail possessions.	Stage A and Stage B
	Potential temporary deterioration of traffic performance on surrounding road network to an unacceptable level of service, due to construction vehicles and temporary road or lane closures.	Stage A and Stage B
	Reduced pedestrian and cyclist access due diversion associated with road and pedestrian bridges replacements.	Stage B
	Loss of parking due to temporary land requirements or adjustments to on-street parking by construction work.	Stage A and Stage B
	Impacts to bus routes and services as a result of increased road use and diversions due to road bridge replacement.	Stage B
Aboriginal heritage and non-Aboriginal heritage	Potential direct and indirect impacts on listed heritage items and known areas of archaeological potential.	Stage A and Stage B
	Disturbance of unknown heritage items (e.g. archaeological items) during construction.	Stage A and Stage B
	Impacts on areas predicted to have archaeological potential.	Stage B

ASPECT	POTENTIAL IMPACTS / RISKS (UNMITIGATED)	APPLICABLE STAGE
	Impacts on unrecorded Aboriginal sites and/or areas of archaeological sensitivity or cultural value.	Stage B
Noise and vibration	Potential exceedances of airborne noise management levels from construction activities within and outside standard construction hours.	Stage A and Stage B
	Construction traffic or traffic detours resulting in an increase in traffic noise greater than 2 dB.	Stage A and Stage B
	Potential exceedances of human comfort vibration levels during construction and work within safe working distances to structures.	Stage A and Stage B
Biodiversity	Clearing of native vegetation resulting in loss of fauna habitat....	Stage A and Stage B
	Clearing of native vegetation resulting in loss of fauna habitat, habitat fragmentation and loss of connectivity.	Stage B
	Direct impacts on listed endangered terrestrial ecological populations and communities.	Stage A and Stage B
	Impacts on potential habitat for listed threatened fauna species.	Stage A and Stage B
	Increased impacts from pest plants and animals during construction from movement of vehicles, machinery and materials in and out of site.	Stage A and Stage B
	Indirect impacts on fauna species due to increased dust, sedimentation, and erosion, noise, light and contamination pollution.	Stage A and Stage B
	Native fauna mortality from vehicle strikes from construction vehicles.	Stage A and Stage B
	Potential impacts on groundwater dependent ecosystems.	Stage B
	Potential impacts on aquatic ecology and threatened species, including as a result of construction on rail bridges/culverts and the temporary waterway crossing at Uranquinty.	Stage B
	Potential impacts on protected and sensitive lands, which includes waterfront land and Key Fish Habitat.	Stage B
	Erosion and sediment transport downstream due to works in watercourses.	Stage B

ASPECT	POTENTIAL IMPACTS / RISKS (UNMITIGATED)	APPLICABLE STAGE
Soil, water, salinity, air quality and groundwater	Impacts on water quality from contamination from spills and leaks during construction.	Stage A and Stage B
	Lead-based paint flakes entering the waterway during works on the Murray River bridge.	Stage B
	Potential exposure of acid sulfate soils during construction resulting in off-site discharge of acidic water.	Stage A and Stage B
	Potential exposure of soil salinity/saline soils/saline groundwater during construction resulting in off-site discharge of saline water resulting in exceedances of water quality trigger levels.	Stage B
	Contamination from construction activities, including accidental spills and leaks, impacting groundwater quality.	Stage A and Stage B
	Degradation of groundwater water quality through changes to groundwater flow paths.	Stage B
	Construction work resulting an increased risk to nearby groundwater bores, groundwater dependent ecosystems and watercourse base flow due to groundwater drawdown and/or changes to quality and quantity.	Stage B
	Changes to soil moisture content causing compression or settlement.	Stage B
	Potential temporary impacts to local air quality due to emissions from vehicles or plant during construction, and the increase in vehicle movements during construction	Stage A and Stage B
	Potential temporary impacts on local air quality due to dust generation (from exposed soil/stockpiles, excavation and vehicle movements)	Stage A and Stage B
	Odours/emissions from disturbance of contaminated soils or other sources such as asphalt laying during road modification works	Stage A and Stage B
	Potential air quality impacts due to fugitive emissions (e.g. VOCs) from fuel/chemicals storage and handling	Stage A and Stage B
Waste, contamination, and hazardous materials	Disturbance of contaminated soils, and subsequent mobilisation resulting impacts at adjacent receptors.	Stage A and Stage B
	Disturbance of hazardous materials during construction work, including demolition of buildings and structures, resulting in exposure to workers and other receptors.	Stage B

ASPECT	POTENTIAL IMPACTS / RISKS (UNMITIGATED)	APPLICABLE STAGE
	Contamination of soils due to spills and leaks.	Stage A and Stage B
	Exposure of acid sulfate soils and subsequent mobilisation of acidic discharges.	Stage A and Stage B
	Exposure of saline soils resulting in increased soil salinity.	Stage A and Stage B
	Erosion as a result of the disturbance of soils, particularly in soil landscapes characterised by dispersive soils.	Stage A and Stage B
	Generation of excess spoil that cannot be reused on site (unsuitable for reuse or insufficient space) and needs to be disposed of.	Stage B
	Increased resource demand on local and regional resources resulting in a resource becoming in short supply.	Stage B
Social	Potential temporary changes to the way of life for residents close to the enhancement sites.	Stage A and Stage B
	Temporary impacts on amenity for residents, visitors, businesses and other sensitive receivers, as a result of noise, dust, air and visual impacts during construction.	Stage A and Stage B
	Temporary impacts to, or temporary loss of, community facilities/open space due to construction activities and/or changes to access during construction.	Stage A and Stage B
	Increased demand for access to community facilities, services and networks such as sport and recreation, health and emergency services during the construction of the project.	Stage A and Stage B
	Pressure on housing and short-term accommodation market for construction workforce.	Stage B
	Changes to connectivity and access in and around the project.	Stage B

APPENDIX C

Risk assessments

TABLE C1: RISK ASSESSMENTS FOR STAGE A

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
Flood and bushfire emergency	Potential impacts on construction activities due to flooding.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium	Consultation with stakeholders CEMP Flood and Bushfire Emergency Management Sub-plan Ongoing training and awareness campaigns	Minor	Unlikely	Low
	Potential risks to construction by bushfire, or bushfire risks due to construction activity in bushfire prone areas.	Possible/ Moderate = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium		Moderate	Unlikely	Low
	Impact to regional or local water supply due to construction water demands.	Unlikely/ Moderate = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Minor	Unlikely	Low
	Sedimentation and changes to geomorphology in watercourses	Possible/ Minor = Low	None applicable – risk already low (refer standard controls)	Minor	Possible	Low		Minor	Unlikely	Low
Traffic, transport, and access	Increase to road use as a result of cumulative infrastructure projects in the vicinity of the project.	Minor/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Minor	Unlikely	Low	Ongoing consultation with stakeholders, including emergency services providers CEMP Traffic and Transport Management Sub-plan Road dilapidation surveys and restoration of any roads that are damaged by the project Detours would be in place where required	Minor	Unlikely	Low
	Potential temporary reduced safety and amenity for traffic, pedestrians and cyclists due to construction activities and due to potential conflicts with construction vehicles.	Moderate/ Likely = High	The scope of works and anticipated construction vehicles movements under Stage A are substantially reduced compared to the project as assessed in the EAD. Therefore, potential reduced safety or amenity for traffic due to potential conflicts with construction vehicles is lower than the approved project. <u>Active Transport</u>	Moderate	Likely	High		Moderate	Possible	Medium

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
			There are no impacts to active transport in the vicinity of Table Top Yard enhancement site. Provision of active transport infrastructure in the vicinity of the Greater Hume–Lockhart precinct enhancement sites is minimal and, given the surrounding land uses, the demand for cycling and pedestrian travel in the area is likely to be low. Potential impacts to active transport at other Wagga Wagga enhancement sites are expected to be minor and short term during Stage A as detours have been identified to maintain connectivity and public transport services are available. Detours would be isolated to the out of hours shifts required at Edmondson Street and access would be reinstated at the end of each shift. Provision for active transport in the vicinity of the Harefield and Junee to Illabo Yard clearances enhancement sites is minimal, and given the surrounding land uses the demand for cycling and pedestrian travel in the area is likely to be low. At all other sites during Stage A detours would be in place where required. In some instances cyclists would be required to travel on-road via the diversion route.							
	Impacts to condition of roads due to construction traffic.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium		Moderate	Possible	Medium
	Impacts to emergency services due to road network delays or access restrictions caused by temporary changes to the road network.	Possible/ Major = High	No construction work for demolishing and/or rebuilding of bridge structures would occur during Stage A within the Wagga Wagga precinct. The only activities in the Wagga Wagga precinct during Stage A would be utility works at the Edmondson Street bridge, Cassidy and Pearson enhancement sites. Around three (3) road closures are anticipated at the Edmondson Street bridge during out of hours shifts. It is anticipated that these road closures will occur over approximately three (3) out of hours shifts to meet ROL requirements. During these short term closures (night time only), alternative access routes are available for emergency services as noted in the EIS. The road will be reopened at the end of each shift. Provisions for priority emergency services vehicles to travel through the construction impact zone will be provided.	Moderate	Possible	Medium		Moderate	Possible	Medium

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
	Increase in parking demand from construction workforce particularly during rail possessions	Minor/ Almost certain = Medium	There is only one (1) rail possession scheduled during Stage A. Parking for workforce will predominantly be within the rail corridor or within ancillary facilities.	Minor	Possible	Low		Minor	Unlikely	Low
	Potential temporary deterioration of traffic performance on surrounding road network to an unacceptable level of service, due to construction vehicles and temporary road or lane closures	Moderate/ Almost certain = High	During Stage A intersection performance within all precincts is not expected to significantly deteriorate. All modelled intersections are expected to continue to operate with stable flow conditions and an acceptable Level of Service (LoS), respectively, typically with no change to the existing LoS. No construction work for demolishing and/or rebuilding of bridge structures would occur during Stage A within the Wagga Wagga precinct. The only activities in the Wagga Wagga precinct during Stage A would be utility works at the Edmondson Street bridge, Cassidy and Pearson enhancement sites. Road closures that would require detours would only be required at Edmondson Street enhancement site and would be carried out over approximately three (3) out of hours shifts when road occupancy licenses can be awarded. The road would be reopened at the end of each shift.	Moderate	Unlikely	Low		Moderate	Possible	Medium
	Loss of parking due to temporary land requirements or adjustments to on-street parking by construction work.	Minor/Almost certain = Medium	Temporary land requirements or adjustments to on-street parking during Stage A would be minor in comparison to the impact assessed in the EAD. These impacts are predominantly associated with utilities works in Wagga Wagga and would be short term.	Minor	Almost Certain	Medium		Not significant	Almost certain	Medium
Aboriginal heritage and non-Aboriginal heritage	Potential direct and indirect impacts on listed heritage items and known areas of archaeological potential	Major/ Almost certain = Very high	No works as part of Stage A that would cause direct impacts to known heritage items. No work within minimum working distances of heritage items or where structural impacts to buildings are possible.	Moderate	Possible	Medium	Consultation with stakeholders CEMP Cultural Heritage Management Sub-plan Unexpected Finds Procedure Vibration monitoring Exclusion zones Sensitive Area Plans (SAPs)	Minor	Unlikely	Low
	Disturbance of unknown heritage items (e.g. archaeological items) during construction	Moderate/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Moderate	Unlikely	Low
Noise and vibration	Potential exceedances of airborne noise management levels (NMLs) from	Major/ Almost certain = Very high	Construction work for Stage A is limited to 45 per cent of the overall enhancement sites (11 out of 24). This includes some short-term utility work (approximately	Minor	Likely	Medium	Ongoing consultation with community to determine respite and other mitigation measures	Minor	Likely	Medium

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
	construction activities within and outside standard construction hours.		six (6) weeks of work during standard construction hours) in Wagga Wagga for Stage A. Approximately 95 per cent of Stage A construction work will occur within standard construction hours. Exceptions to that are where the one (1) rail possession is required, or where other unavoidable out of hours work is required (i.e. where road occupancy licenses (ROL) and/or utility cutovers are required). For the utility work at the Edmondson Street bridge, approximately three (3) out of hours shifts required where access to certain areas is restricted by ROL requirements). All other utility work is expected to be undertaken during standard construction hours.				Consultation with EPA CEMP Noise and Vibration Management Sub-plan and Monitoring Program (including noise and vibration monitoring) Implementation of EPL Development and implementation of CNVIS			
	Construction traffic or traffic detours resulting in an increase in traffic noise greater than 2 dB.	Minor/ Almost certain = Medium	None applicable – risk already medium (refer standard controls)	Minor	Almost certain	Medium		Moderate	Unlikely	Low
	Potential exceedances of human comfort vibration levels during construction or work within safe working distances to structures (i.e. buildings)	Moderate/ Almost certain = High	No exceedance of criteria in Standard BS 6472-1992 Evaluation of human exposure to vibration in buildings (1-80Hz) predicted. Exceedances of Standard BS 6472-1992 Evaluation of human exposure to vibration in buildings (1-80Hz) only to occur where agreement is reached with receiver. Work within safe working distances to structures may occur.	Moderate	Possible	Medium		Moderate	Unlikely	Low
Biodiversity	Clearing of native vegetation resulting in loss of fauna habitat, habitat fragmentation and loss of connectivity	Moderate/ Almost certain = High	Sloane's Froglet surveys were undertaken by the project in July and August 2024 in accordance with CoA E25. No species were found during these seasonal surveys. Clearing will be limited to supporting the activities associated with the rail possession in March 2025 Impacts to TEC during Stage A will be limited to that detailed in Appendix D. **All** biodiversity offsets nominated in the CoA will be retired prior to Stage A commencing.	Minor	Almost certain	Medium	CEMP Biodiversity Management Sub-plan and monitoring program Hygiene controls, vegetation clearing and fauna handling management procedures In all areas that assumed the presence of Sloane's Froglet, erosion and sediment control measures and protection of riparian areas will be installed at the nearest construction boundary. Maintain clear delineation of clearing works and retained vegetation	Minor	Likely	Medium
	Direct impacts on listed endangered terrestrial ecological populations and communities.	Moderate/ Almost certain = High		Minor	Likely	Medium		Minor	Likely	Medium
	Impacts on potential habitat for listed threatened fauna species.	Moderate/ Almost certain = High		Minor	Likely	Medium		Minor	Likely	Medium

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
	Increased impacts from pest plants and animals during construction from movement of vehicles, machinery and materials in and out of site.	Minor/ Possible = Low	None applicable – risk already low (refer standard controls)	Minor	Possible	Low		Minor	Possible	Low
	Indirect impacts on fauna species due to increased dust, sedimentation, and erosion, noise, light and contamination pollution.	Minor/ Possible = Low	None applicable – risk already low (refer standard controls)	Minor	Possible	Low		Minor	Possible	Low
	Native fauna mortality from vehicle strikes from construction vehicles.	Minor/ Possible = Low	None applicable – risk already low (refer standard controls)	Minor	Possible	Low		Minor	Possible	Low
Soil, water, salinity, air quality and groundwater	Impacts on water quality from contamination from spills and leaks during construction.	Major/ Unlikely = Medium	None applicable – risk already medium (refer standard controls)	Major	Unlikely	Medium	CEMP Construction Soil and Water Management Sub-plan and monitoring programs Erosion and sediment controls	Major	Unlikely	Medium
	Potential exposure of acid sulfate soils during construction resulting in off-site discharge of acidic water.	Moderate/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Moderate	Unlikely	Low
	Contamination from construction activities, including accidental spills and leaks, impacting groundwater quality.	Moderate/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Moderate	Unlikely	Low
	Potential temporary impacts to local air quality due to emissions from vehicles or plant during construction, and the increase in vehicle	Minor/ Likely = Medium	Whilst air quality impacts due to emissions from vehicles or plant during construction may occur, these would be of a reduced scale when compared to the EAD.	Minor	Unlikely	Low	CEMP Construction Soil and Water Management Sub-plan and monitoring programs Erosion and sediment controls	Minor	Unlikely	Low

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
	movements during construction						Standard air quality mitigation measures			
	Potential temporary impacts on local air quality due to dust generation (from exposed soil/stockpiles, excavation and vehicle movements)	Moderate/ Likely = High	The Stage A scope involves a limited amount of stockpiling, excavation and vehicle movements.	Moderate	Unlikely	Low		Minor	Unlikely	Low
	Odours/emissions from disturbance of contaminated soils or other sources such as asphalt laying during road modification works	Minor/ Possible = Low	The Stage A scope involves a limited amount of disturbance to contaminated soils or asphalting works.	Minor	Unlikely	Low		Minor	Rare	Low
	Potential air quality impacts due to fugitive emissions (e.g. VOCs) from fuel/chemicals storage and handling	Minor/ Possible = Low	The scale of fuel/chemical storage and handling for Stage A is reduced compared to the impact assessed in the EAD.	Minor	Unlikely	Low		Minor	Unlikely	Low
Waste, contamination, and hazardous materials	Disturbance of contaminated soils, and subsequent mobilisation resulting impacts at adjacent receptors.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium	CEMP Waste, Contamination and Hazardous Materials Management Sub-plan Unexpected contaminated land finds procedure Erosion and sediment controls EPA Waste Classification guidelines and procedures	Moderate	Possible	Medium
	Contamination of soils due to spills and leaks.	Moderate/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Moderate	Unlikely	Low
	Exposure of acid sulfate soils and subsequent mobilisation of acidic discharges.	Moderate/ Unlikely = Low	None applicable – risk already low (refer standard controls)	Moderate	Unlikely	Low		Moderate	Unlikely	Low
	Exposure of saline soils resulting in increased soil salinity.	Moderate/ Likely = High	No construction work will occur at high risk salinity sites (Riverina Highway bridge) during Stage A Four (4) enhancement sites for Stage A are mapped as having a “moderate” land salinity hazard (Table Top Yard clearances, Henty Yard clearances, Yerong	Moderate	Possible	Medium		Moderate	Possible	Medium

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	RISK RATING FROM EAD	STAGE A JUSTIFICATION STATEMENTS (I.E. WHY RISK CAN BE ACCOMMODATED WITHIN STAGE)	STAGE A UNMITIGATED RISK LEVEL			STAGE A STANDARD CONTROLS	STAGE A RESIDUAL RISK LEVEL		
				CONSEQUENCE	LIKELIHOOD	INITIAL RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
			Creek Yard clearances, and The Rock Yard clearances).							
	Erosion as a result of the disturbance of soils, particularly in soil landscapes characterised by dispersive soils.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium		Moderate	Possible	Medium
Social	Potential temporary changes to the way of life for residents close to the enhancement sites.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium	Social Impact Management Plan Complaints management system Community Complaints Mediator Review and continuous improvement processes in CEMP and Sub-plans	Moderate	Possible	Medium
	Temporary impacts on amenity for residents, visitors, businesses and other sensitive receivers, as a result of noise, dust, air and visual impacts during construction.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium		Moderate	Possible	Medium
	Temporary impacts to, or temporary loss of, community facilities/open space due to construction activities and/or changes to access during construction.	Moderate/ Possible = Medium	None applicable – risk already medium (refer standard controls)	Moderate	Possible	Medium		Moderate	Possible	Medium
	Increased demand for access to community facilities, services and networks such as sport and recreation, health and emergency services during the construction of the project.	Minor/ Possible = Low	None applicable – risk already low (refer standard controls)	Minor	Possible	Low		Minor	Possible	Low

TABLE C2: APPROVAL PATHWAY FOR EACH RISK – STAGE A

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	STAGE A RESIDUAL RISK LEVEL			APPROVAL PATHWAY
		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING	
Flood and bushfire emergency	Potential impacts on construction activities due to flooding.	Minor	Unlikely	Low	Construction Flood and Bushfire Emergency Management Plan – Stage A for ER endorsement only
	Potential risks to construction by bushfire, or bushfire risks due to construction activity in bushfire prone areas.	Moderate	Unlikely	Low	
	Impact to regional or local water supply due to construction water demands.	Minor	Unlikely	Low	
	Sedimentation and changes to geomorphology in watercourses	Minor	Unlikely	Low	
Traffic, transport, and access	Increase to road use as a result of cumulative infrastructure projects in the vicinity of the project.	Minor	Unlikely	Low	Construction Traffic, Transport and Access Management Plan (including CMP) for ER endorsement and Planning Secretary approval
	Potential temporary reduced safety and amenity for traffic, pedestrians and cyclists due to construction activities and due to potential conflicts with construction vehicles.	Moderate	Possible	Medium	
	Impacts to condition of roads due to construction traffic.	Moderate	Possible	Medium	
	Impacts to emergency services due to road network delays or access restrictions caused by temporary changes to the road network.	Moderate	Possible	Medium	
	Increase in parking demand from construction workforce particularly during rail possessions	Minor	Unlikely	Low	
	Potential temporary deterioration of traffic performance on surrounding road network to an unacceptable level of service, due to construction vehicles and temporary road or lane closures	Moderate	Possible	Medium	
Aboriginal heritage and non-Aboriginal heritage	Potential direct and indirect impacts on listed heritage items and known areas of archaeological potential	Minor	Unlikely	Low	Construction Cultural Heritage Management Plan – Stage A for ER endorsement only
	Disturbance of unknown heritage items (e.g. archaeological items) during construction	Moderate	Unlikely	Low	
Noise and vibration	Potential exceedances of airborne noise management levels (NMLs) from construction activities within and outside standard construction hours.	Minor	Likely	Medium	Construction Noise and Vibration Management Plan (including CMP) for ER and AA endorsement and Planning Secretary approval
	Construction traffic or traffic detours resulting in an increase in traffic noise greater than 2 dB.	Moderate	Unlikely	Low	
	Potential exceedances of human comfort vibration levels during construction or work within safe working distances to structures (i.e. buildings)	Moderate	Unlikely	Low	
Biodiversity	Clearing of native vegetation resulting in loss of fauna habitat, habitat fragmentation and loss of connectivity	Minor	Likely	Medium	

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	STAGE A RESIDUAL RISK LEVEL			APPROVAL PATHWAY
		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING	
	Direct impacts on listed endangered terrestrial ecological populations and communities.	Minor	Likely	Medium	Construction Biodiversity Management Plan (including CMP) for ER endorsement and Planning Secretary approval
	Impacts on potential habitat for listed threatened fauna species.	Minor	Likely	Medium	
	Increased impacts from pest plants and animals during construction from movement of vehicles, machinery and materials in and out of site.	Minor	Possible	Low	
	Indirect impacts on fauna species due to increased dust, sedimentation, and erosion, noise, light and contamination pollution.	Minor	Possible	Low	
	Native fauna mortality from vehicle strikes from construction vehicles.	Minor	Possible	Low	
Soil, water, salinity, air quality and groundwater	Impacts on water quality from contamination from spills and leaks during construction.	Major	Unlikely	Medium	Construction Soil and Water Management Plan (including CMP) – Stage A for ER endorsement only
	Potential exposure of acid sulfate soils during construction resulting in off-site discharge of acidic water.	Moderate	Unlikely	Low	
	Contamination from construction activities, including accidental spills and leaks, impacting groundwater quality.	Moderate	Unlikely	Low	
	Potential temporary impacts to local air quality due to emissions from vehicles or plant during construction, and the increase in vehicle movements during construction	Minor	Unlikely	Low	
	Potential temporary impacts on local air quality due to dust generation (from exposed soil/stockpiles, excavation and vehicle movements)	Minor	Unlikely	Low	
	Odours/emissions from disturbance of contaminated soils or other sources such as asphalt laying during road modification works	Minor	Rare	Low	
	Potential air quality impacts due to fugitive emissions (e.g. VOCs) from fuel/chemicals storage and handling	Minor	Unlikely	Low	
Waste, contamination, and hazardous materials	Disturbance of contaminated soils, and subsequent mobilisation resulting impacts at adjacent receptors.	Moderate	Possible	Medium	Construction Waste, Contamination and Hazardous Materials Management Plan – Stage A for ER endorsement only
	Contamination of soils due to spills and leaks.	Moderate	Unlikely	Low	
	Exposure of acid sulfate soils and subsequent mobilisation of acidic discharges.	Moderate	Unlikely	Low	
	Exposure of saline soils resulting in increased soil salinity.	Moderate	Possible	Medium	
	Erosion as a result of the disturbance of soils, particularly in soil landscapes characterised by dispersive soils.	Moderate	Possible	Medium	
Social	Potential temporary changes to the way of life for residents close to the enhancement sites.	Moderate	Possible	Medium	Social Impact Management Plan (not staged) – for ER endorsement and Planning Secretary approval
	Temporary impacts on amenity for residents, visitors, businesses and other sensitive receivers, as a result of noise, dust, air and visual impacts during construction.	Moderate	Possible	Medium	

ASPECT	APPLICABLE RISKS (BASED ON: APPENDIX E OF THE EIS, EIS RTS, PIR AND PIR RTS)	STAGE A RESIDUAL RISK LEVEL			APPROVAL PATHWAY
		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING	
	Temporary impacts to, or temporary loss of, community facilities/open space due to construction activities and/or changes to access during construction.	Moderate	Possible	Medium	
	Increased demand for access to community facilities, services and networks such as sport and recreation, health and emergency services during the construction of the project.	Minor	Possible	Low	

APPENDIX D

Biodiversity supplementary information

TABLE D1: PLANT COMMUNITY TYPES CLEARING LIMITS

Name of Plant Community Type/ID	Area of impact (ha) per CoA E20	Expected area of impact Stage A
277 – Moderate – Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	0.5	0.50
277 – Poor - Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	1.3	1.25
277 – Derived - Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	2.34	2.34
277 – Native plantings - Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	0.26	0.26
277 – Non-native - Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	30.5	30.5
5 - River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South- Western Slopes Bioregion and the eastern Riverina Bioregion	0.04	0.02
Total	**34.78**	**34.81**

TABLE D2: CLEARING LIMITS FOR THREATENED FAUNA SPECIES

Fauna Species	Area of impact (ha) per CoA E20	Expected area of impact Stage A
Lower Slopes IBRA Subregion		
Sloane's Froglet (*Crinia sloanei*)	0.03	0.02
Squirrel Glider (*Petaurus norfolcensis*)	0.16	0.07
Superb Parrot (*Polytelis swainsonii*)	0.16	0.07
Inland Slopes IBRA Subregion		
Sloane's Froglet (*Crinia sloanei*)	0.23	0.19
Key's Matchstick Grasshopper (*Keyacris scurra*)	0.21	0
Squirrel Glider (*Petaurus norfolcensis*)	1.82	0.9
Superb Parrot (*Polytelis swainsonii*)	1.82	0.9
Total	**4.43**	**2.15**