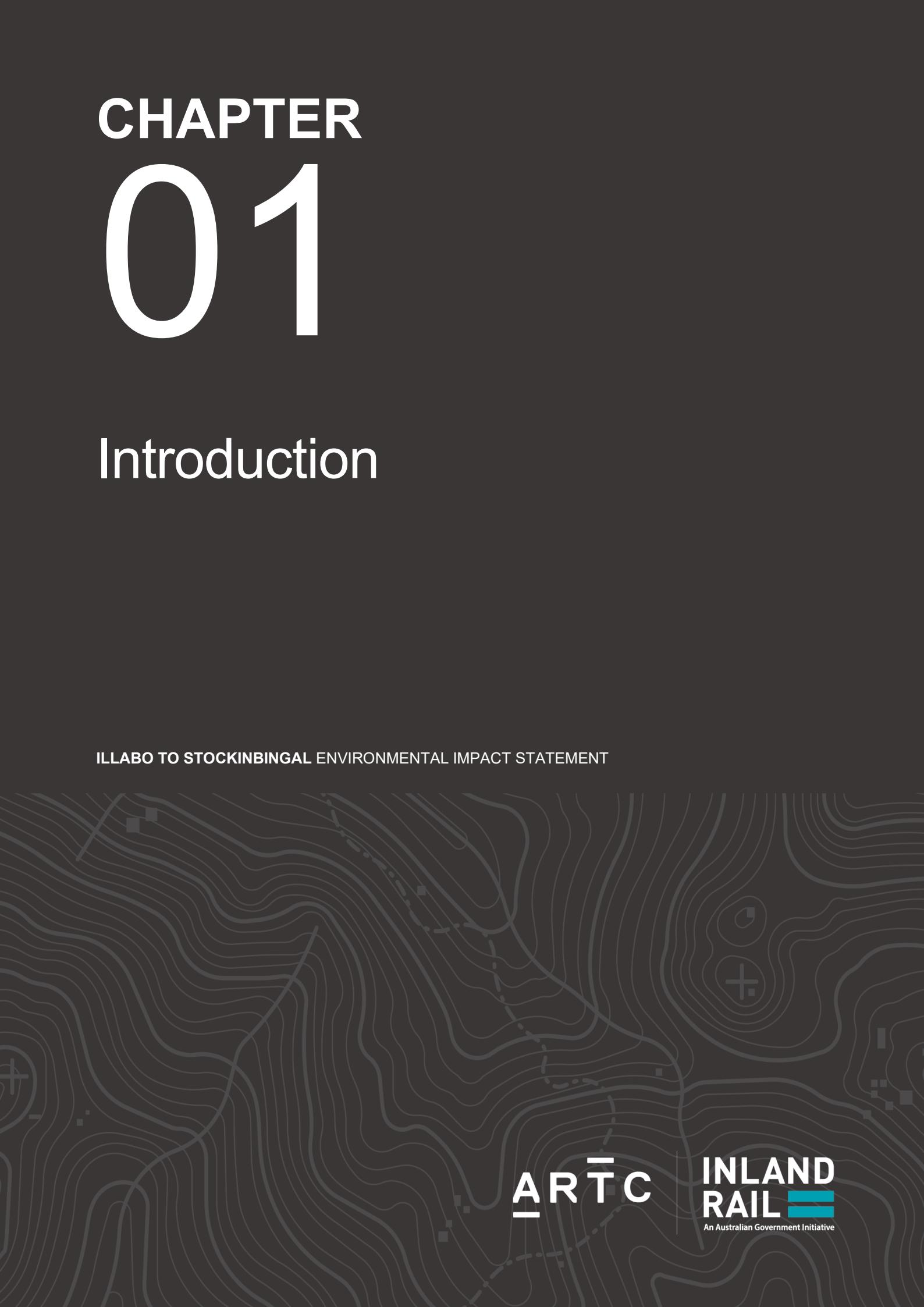


# CHAPTER 01

## Introduction

ILLABO TO STOCKINBINGAL ENVIRONMENTAL IMPACT STATEMENT

A dark gray background featuring a light gray topographic map with contour lines and small elevation markers.

**ARTC** | **INLAND RAIL**   
An Australian Government Initiative

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# 1. Introduction

This Environmental Impact Statement (EIS) relates to the Illabo to Stockinbingal (I2S) section of the Inland Rail program (the proposal).

## 1.1 The proponent

The proposal would be carried out by the Australian Rail Track Corporation Limited (ARTC) (the proponent). ARTC was created after the Australian Government and state governments agreed in 1997 to the formation of a ‘one-stop shop’ for all operators seeking access to the national interstate rail network. Across its network, ARTC is responsible for:

- ▶ selling access to train operators
- ▶ developing new business
- ▶ capital investment in the corridors
- ▶ managing the network
- ▶ infrastructure maintenance.

The key details of the proponent are provided in Table 1-1.

**TABLE 1-1: PROPOSER DETAILS**

### Proposer details

Name	Australian Rail Track Corporation Limited
Address	Level 15, 60 Carrington Street, Sydney NSW 2000
ABN	75 081 455 754

Further information on ARTC and Inland Rail can be found at [artc.com.au](http://artc.com.au) and [inlandrail.com.au](http://inlandrail.com.au).

## 1.2 Overview

The Australian Government has committed to delivering a significant piece of national transport infrastructure by constructing a high-performance and direct interstate freight rail corridor between Melbourne and Brisbane, via central-west New South Wales (NSW) and Toowoomba in Queensland. Inland Rail is a major national program that would enhance Australia’s existing national rail network and serve the interstate freight market.

The Inland Rail route, which is about 1,700 kilometres (km) long, would involve:

- ▶ using the existing interstate rail line through Victoria and southern NSW
- ▶ upgrading about 400 km of existing track, mainly in western NSW
- ▶ providing about 600 km of new track in northern NSW and south-east Queensland.

Inland Rail has been divided into 13 projects, seven of which are located in NSW. Each of these projects can be delivered and operated independently with tie-in points on the existing railway. An overview of Inland Rail is shown in Figure 1-1.

ARTC has developed a program to deliver Inland Rail by 2027.

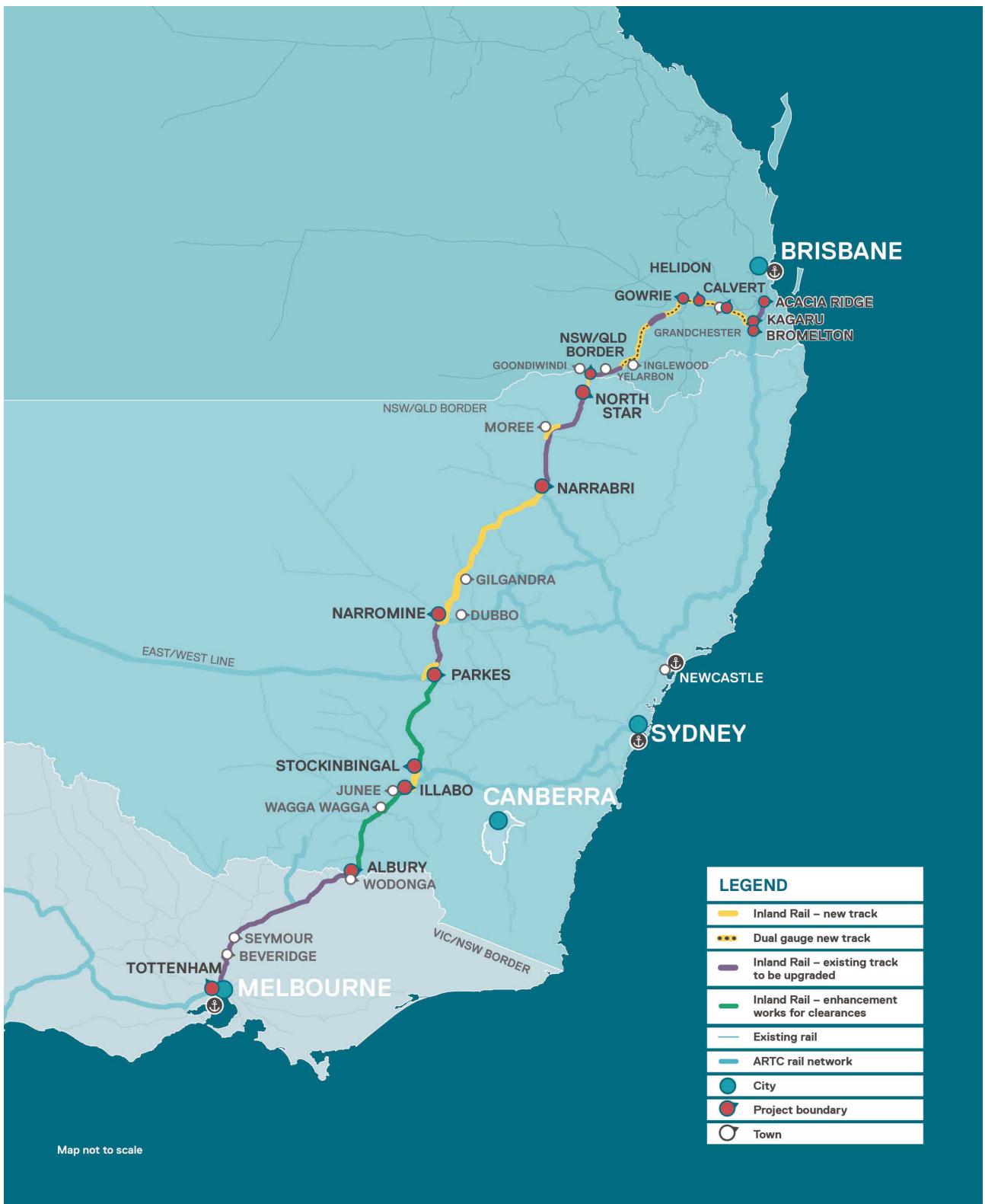


FIGURE 1-1: PROPOSED ALIGNMENT FOR INLAND RAIL

## **1.3 The proposal**

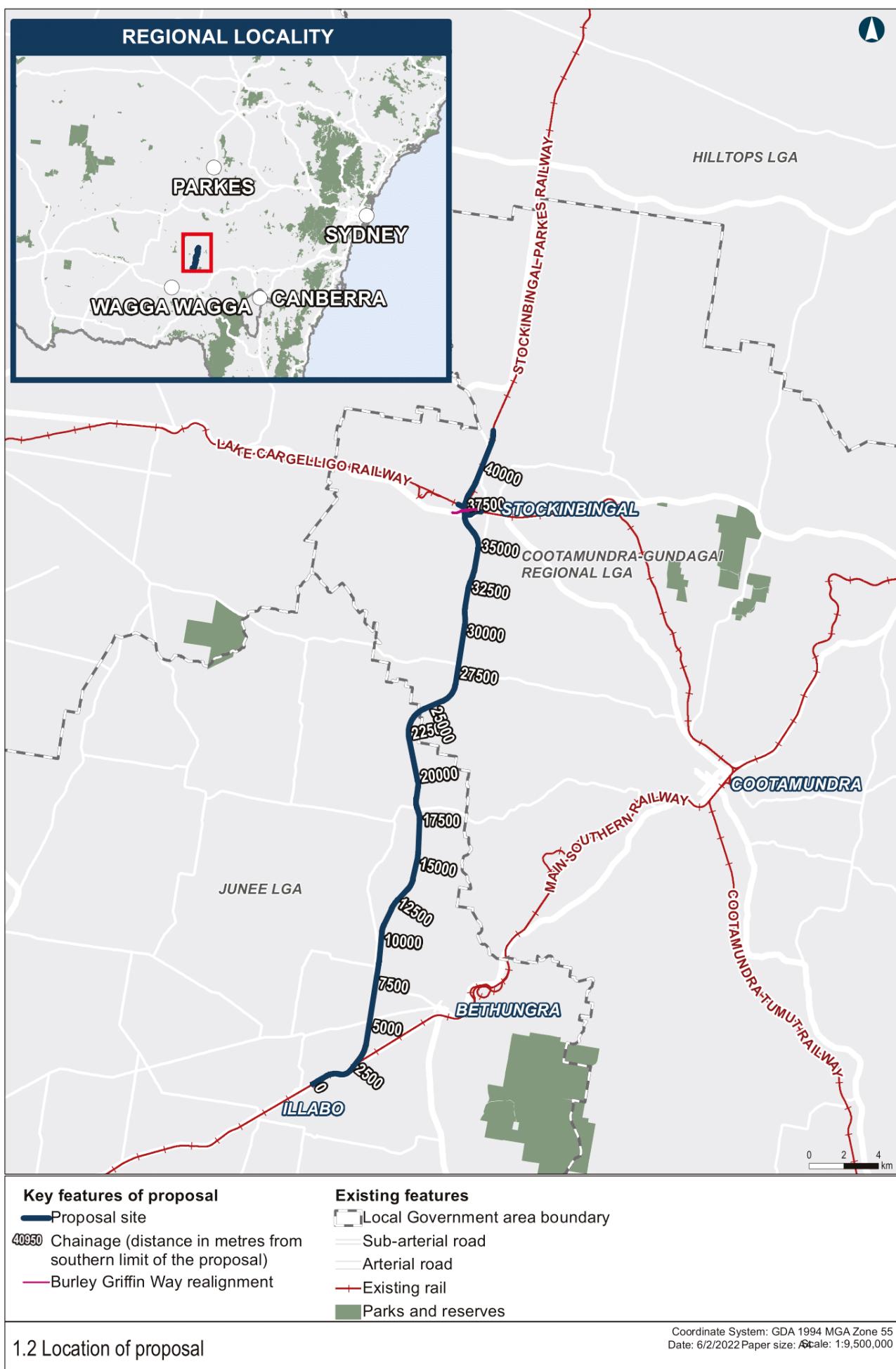
The proponent is seeking approval to construct and operate the proposal, which includes a new rail line and associated facilities to accommodate double-stacked freight trains up to 1,800 metres (m) long and 6.5 m high. The proposal is Critical State Significant Infrastructure (CSSI) and is subject to approval by the NSW Minister for Planning under Division 5.2, Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act).

The corridor will be of sufficient width to accommodate future possible upgrades of the track, including a future possible requirement to accommodate trains up to 3,600 m in length, which would be subject to separate assessment.

### **1.3.1 Location**

The proposal is a new rail corridor that would connect Illabo to Stockinbingal in NSW. The alignment branches out from the existing rail line north-east of Illabo and travels north to join the Stockinbingal–Parkes Line west of Stockinbingal. The proposal passes through agricultural and rural properties in the Riverina region of NSW and generally follows the existing cadastral boundaries and roads between the towns of Illabo and Stockinbingal. The location of the proposal is shown in Figure 1-2.

Chapter 2: General biophysical and cultural environment provides further information on the location of the proposal, and a description of the proposal site for the purposes of the EIS.



### **1.3.2 Key features**

The key features of the proposal, which would be confirmed during detailed design, include:

- ▶ a total extent of about 42.5 km, including about 39 km of new, single-track, standard gauge railway between Illabo and Stockinbingal, including:
  - ▶ eight new bridges at watercourses and two road overbridges and one grade separated (road over rail at Burley Griffin Way)
  - ▶ a combination of track vertical alignments on existing ground level, on embankments and in cuttings
  - ▶ one crossing loop and associated maintenance siding
  - ▶ construction of new level crossings and alterations of existing level crossings (at public roads and private accesses)
  - ▶ stock crossings to allow for the movement of livestock and vehicles across the rail line
  - ▶ one major drainage diversion to collect and transport stormwater away from the rail line
  - ▶ installation and upgrade of about 88 new and existing cross drainage culverts below the rail formation and about 27 longitudinal drainage culverts below level crossings
  - ▶ removal of redundant sections of track along the existing Stockinbingal–Parkes Line and Lake Cargelligo Line at Stockinbingal
- ▶ upgrades of about 3 km of existing track for the tie-in works to the existing Main South Line at Illabo while retaining the Stockinbingal–Parkes Line at Stockinbingal
- ▶ construction of about 1.7 km of new track to maintain the existing connection of the Lake Cargelligo Line either side of the proposal
- ▶ realignment of a 1.4 km section of the Burley Griffin Way to provide a road-over-rail bridge at Stockinbingal.
- ▶ realignment of Ironbong Road to allow for safe sight lines at the new active level crossing.

Key features of the proposal are shown in Figure 1-3.

Infrastructure associated with the operation of the rail corridor would also be installed, including permanent access maintenance roads, signalling and communications, signage, fencing and services and utilities.

The construction of the proposal would also require:

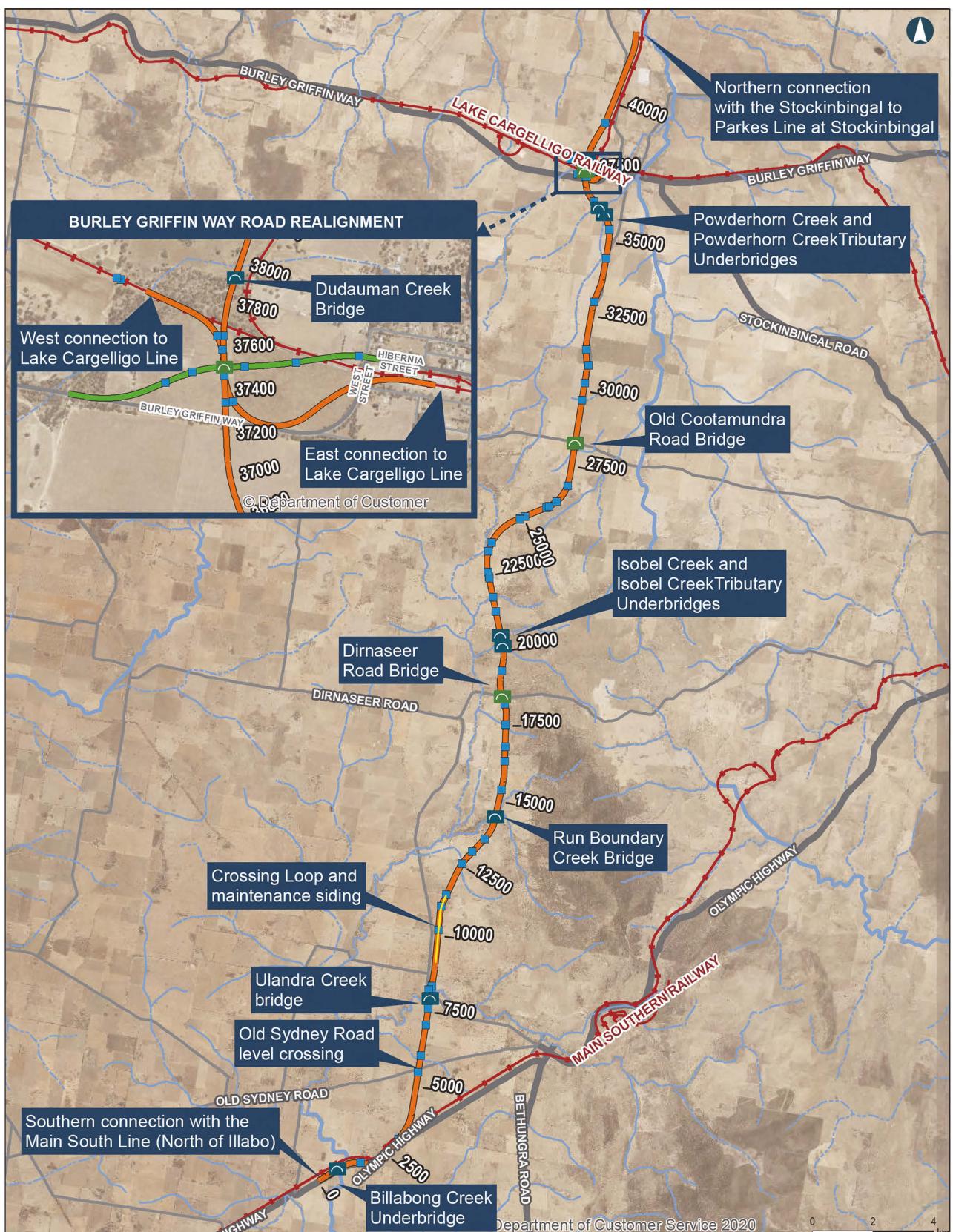
- ▶ temporary access tracks
- ▶ temporary changes to the road network, including realignment of Burley Griffin Way immediately west of Stockinbingal
- ▶ a workforce accommodation camp for up to 450 workers in proximity to Stockinbingal (as detailed in Appendix I: Workforce accommodation camp assessment)
- ▶ construction compounds, laydown areas and other areas needed to facilitate construction works.

The following ancillary facilities could also be required for construction of the proposal:

- ▶ mobile batch plant
- ▶ construction water supply and storage
- ▶ substantial environmental impact mitigation measures.

The land requirements for the proposal vary in width between about 40 m and 130 m to cater for large embankments and cuttings to respond to local topography and incorporate ancillary infrastructure, such as a crossing loop and associated maintenance siding. The proposal site is of sufficient width to accommodate the infrastructure currently proposed for construction, as well as future expansion, including a possible future requirement for 3,600 m trains (subject to future assessment).

Proposal construction would be a single-track, standard gauge railway, with one crossing loop to accommodate double-stacked freight trains up to 1,800 m long and up to 6.5 m high. Clearing vegetation within the corridor would allow for construction and to maintain the safe operation of the railway.



#### Key features of proposal

- New track/track upgrade
- 40950 Chainage (distance in metres from southern limit of the proposal)
- Burley Griffin Way Road realignment
- Crossing Loop & Maintenance Siding

- Bridge (watercourse crossing)
- Bridge (road crossing)
- Culvert

#### Existing features

- Sub-arterial road
- Arterial road
- Existing rail
- Major watercourse
- Minor watercourse

Coordinate System: GDA 1994 MGA Zone 55  
Date: 11/10/2021 Paper size: A4 Scale: 1:25,000

### 1.3 Key features of the proposal

### **1.3.3 Construction timing**

Subject to approval of the proposal, construction of the proposal is planned to start in mid-2024 and is expected to take about 24 months. Construction is currently expected to be completed in mid-2026.

### **1.3.4 Operation**

The proposal is expected to be operational, as part of Inland Rail as a whole, once all 13 sections are complete, which is estimated to be in 2027. Prior to that, other regional train movements may occur on the I2S section once complete.

The proposal would form part of the rail network managed and maintained by ARTC. Train services would be provided by a variety of operators. Based on current demand forecasting, it is estimated the I2S section of Inland Rail would be trafficked by an average of 6 trains per day (both directions) from the commencement of operations in late 2026, increasing to about 11 trains per day (both directions) in 2040. The new rail line would be a faster, more efficient route that bypasses the steep and windy section of track called the Bethungra Spiral and would enable the use of double-stacked trains (up to 6.5 m high) along its entire length.

Train speeds would vary according to axle loads and range from 80–115 km per hour.

The trains would be diesel powered, and would be a mix of grain, intermodal (freight), and other general transport trains. The EIS assesses the operational impacts of the use of the proposal as part of Inland Rail in Chapters 10 to 26. If business and market demands require increased capacity, consultation with relevant agencies would be undertaken, and approvals sought as required.

While maintenance activities are part of the operational activity, they would be undertaken as controlled by the State Environmental Planning Policy (Transport and Infrastructure) 2021 and the operational Environmental Protection Licence (EPL). Maintenance would include standard activities such as minor maintenance works, including bridge and culvert inspections, rail grinding and track tamping, through to major maintenance, such as reconditioning of track and topping up of ballast as required.

Further information on the construction and operation of the proposal is provided in Chapter 7: Proposal description—operation and Chapter 8: Proposal description—construction.

### **1.3.5 Related development**

As described in section 1.1, the proposal forms part of a broader Inland Rail program. The adjoining sections of the Inland Rail program that are subject to separate planning approval processes are:

- ▶ Albury to Illabo (A2I). This project would carry out enhancement works to structures and sections of track along 185 km of the existing operational standard-gauge railway between Albury and Illabo to accommodate double-stacked freight trains up to 1,800 m long and 6.5 m high. Subject to planning approval, construction is expected to commence in late 2023.
- ▶ Stockinbingal to Parkes (S2P). This staged project involves enhancement works (which do not constitute a complete upgrade of the track alignment) of 170.3 km of railway between Stockinbingal and Parkes to accommodate double-stacked freight trains up to 1,800 m long and 6.5 m high. Subject to planning approval, construction works for the crossing loop at Daroobalgie and track lowering at Wyndham Avenue road bridge are expected to commence in mid-2023, while construction works for the Lachlan River bridge and horizontal clearances enhancements are expected to commence in early 2024.

A number of utility works (adjustment, relocation and/or protection of existing utilities) would also be carried out to accommodate the proposal and would be subject to separate approvals. These works would be completed prior to the start of construction of the proposal (refer to Chapter 8: Construction of the proposal).

## **1.4 Objectives of the proposal and Inland Rail**

The objectives of the proposal are to:

- ▶ provide rail infrastructure that meets the Inland Rail specifications, to enable trains using the Inland Rail corridor to travel between Illabo and Stockinbingal, connecting with other sections of Inland Rail to the north and south
- ▶ improve reliability and travel times—reduction in total distance travelled by 23 km by avoiding the Bethungra Spiral.

The objectives of Inland Rail are to:

- ▶ provide a rail link between Melbourne and Brisbane that is interoperable with train operations to Perth, Adelaide, and other locations on the standard gauge rail network, to serve future rail freight demand, and stimulate growth for inter-capital and regional and bulk rail freight
- ▶ increase productivity that would benefit consumers through lower freight transport costs
- ▶ provide a step-change improvement in rail service quality in the Melbourne to Brisbane corridor and deliver a freight rail service that is competitive with road
- ▶ improve road safety, ease congestion, and reduce environmental impacts by moving freight from road to rail
- ▶ bypass bottlenecks within the existing metropolitan rail networks, and free up train paths for other services along the coastal route
- ▶ act as an enabler for regional economic development along the Inland Rail corridor.

## 1.5 EIS purpose and structure

This EIS supports an application for approval of the proposal under Division 5.2, Part 5 of the EP&A Act. It addresses the requirements of Part 8 Division 5 of the Environmental Planning and Assessment Regulation 2021 and the environmental assessment requirements of the Secretary of the (then) NSW Department of Planning, Industry and Environment (DPIE) (now the Department of Planning and Environment (DPE)) (refer to Appendix A: Secretary's Environmental Assessment Requirements (the SEARs) and summary of agency requirements).

The proposal is also a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and requires approval from the Australian Government Minister for the Environment. The EPBC Act requirements are included as section A.2 of Attachment A.

This EIS considers the Rapid Assessment Framework, a requirement under the Environmental Planning and Assessment Amendment (Major Projects) Regulation 2021. The Rapid Assessment Framework includes a series of guidelines, in particular the *State Significant Infrastructure Guidelines* (DPIE, 2021a). Where the EIS fulfills the requirements of the Rapid Assessment Framework is included as section A.4 of Appendix A.

The structure and content of the main EIS is outlined in Table 1-2.

**TABLE 1-2: PURPOSE AND STRUCTURE OF THE EIS**

<b>Chapter</b>	<b>Description</b>
<b>Part A</b>	
Chapter 1	<b>Introduction</b> Provides a background to the proposal and an overview of the key features of the proposal. The chapter also outlines the overall structure and content of the EIS.
Chapter 2	<b>General biophysical and cultural environment</b> Provides a description of the general biophysical and socio-economic environment within which the proposal would be located, including the regional setting and a description of the proposal site.
Chapter 3	<b>Statutory context</b> Provides an overview of the statutory context for the proposal and the approval requirements.
Chapter 4	<b>Engagement</b> Provides a summary of the engagement that occurred during the development of the proposal and environmental assessment process, how it was incorporated into the design and planning, and the engagement proposed during public exhibition, detailed design, and delivery.
<b>Part B</b>	
Chapter 5	<b>Strategic context and need</b> Provides an overview of the strategic context and need for the proposal.
Chapter 6	<b>Alternatives and proposal options</b> Provides a summary of the alternatives to the proposal as a whole and the options considered during development of the concept design and construction methodology for the proposal, including the approach to avoiding or minimising impacts and the selection of the preferred option.

<b>Chapter</b>	<b>Description</b>
Chapter 7	<b>Proposal description—operation</b> Provides a description of the proposal features and operation, including the approach to avoiding or minimising impacts, design features and infrastructure proposed, operation, maintenance, and other related information.
Chapter 8	<b>Proposal description—construction</b> Provides an indicative description of the likely construction process and activities.
Chapter 9	<b>Assessment approach and methodology</b> Provides a description of the overall approach and methodology used to undertake the EIS for the proposal.
<b>Part C</b>	
Chapters 10 to 26	<b>Assessment of impacts</b> Describes the results of the assessment of key environmental issues identified by the SEARs, including information on the existing environment, potential construction and operation impacts, and the proposed approach to mitigation and management.
<b>Part D</b>	
Chapter 27	<b>Approach to environmental management and mitigation</b> Provides a consolidated summary of the key potential impacts, a description of the proposed approach to environmental management, and a compilation of the mitigation measures and desired performance outcomes for the proposal.
Chapter 28	<b>Justification of the proposal</b> Provides a summary of and justification for the proposal, having regard to biophysical, economic and social considerations.
Chapter 29	<b>References</b> Provides a list of references used to inform the EIS.
<b>Appendices</b>	
Appendix A	Secretary's Environmental Assessment requirements and summary of agency requirements
Appendix B	Statutory compliance
Appendix C	Engagement Report
Appendix D	Preliminary land requirements
Appendix E	Outline Construction Environmental Management Plan
Appendix F	Utilities management framework
Appendix G	Environmental risk assessment
Appendix H	Construction noise and vibration framework
Appendix I	Workforce accommodation camp assessment
<b>Technical papers</b>	
Technical Paper 1	Biodiversity Development Assessment Report
Technical Paper 2	Aquatic Biodiversity Assessment
Technical Paper 3	Traffic, Transport and Access Impact Assessment
Technical Paper 4	Hydrology and Flooding Impact Assessment
Technical Paper 5	Water Quality Impact Assessment
Technical Paper 6	Groundwater Impact Assessment
Technical Paper 7	Aboriginal Cultural Heritage Assessment Report
Technical Paper 8	Construction Noise and Vibration Impact
Technical Paper 9	Operational Noise and Vibration Assessment (Rail) Report
Technical Paper 10	Operational Noise and Vibration Impact Assessment (Non-rail)
Technical Paper 11	Social Impact Assessment
Technical Paper 12	Economic Impact Assessment
Technical Paper 13	Landscape Character and Visual Impact Assessment
Technical Paper 14	Contaminated Land Assessment
Technical Paper 15	Air Quality Assessment