

PART

A



Introduction,
project background
and description

INLAND RAIL—NARROMINE TO NARRABRI
ENVIRONMENTAL IMPACT STATEMENT

PART A

Introduction, project background
and description

**INLAND
RAIL** 



CHAPTER A1 Introduction



Narromine to Narrabri
Environmental Impact Statement

ARTC

The Australian Government is delivering
Inland Rail through the Australian
Rail Track Corporation (ARTC), in
partnership with the private sector.

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A1. Introduction

A1.1 Inland Rail

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 will 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, involves:

- ▶ 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 NSW and south-east Queensland.

The Inland Rail program has been divided into 13 sections, 7 of which are located in NSW. Each of these projects can be delivered and operated independently with tie-in points on the existing railway.

Australian Rail Track Corporation Ltd (ARTC) ('the proponent') developed a 10-year program to deliver Inland Rail by 2025. ARTC was created after the Australian 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.

Further information on ARTC and Inland Rail can be found at artc.com.au and inlandrail.com.au.

A1.2 The proposal

The proponent is seeking approval to construct and operate the Narromine to Narrabri section of Inland Rail ('the proposal'). The proposal consists of about 306 km of new single-track standard-gauge railway with crossing loops. The proposal also includes changes to some roads, to facilitate construction and operation of the new section of railway, and ancillary infrastructure to support the proposal.

The proposal would be constructed to accommodate double-stacked freight trains up to 1,800 metres (m) long and 6.5 m high. It would include infrastructure to accommodate possible future augmentation and upgrades of the track, including a possible future requirement for 3,600-m long trains.

The land requirements for the proposal would include a new rail corridor with a minimum width of 40 m, with some variation to accommodate particular infrastructure and to cater for local topography. The corridor would be of sufficient width to accommodate the infrastructure currently proposed for construction, as well as possible future expansion of crossing loops for 3,600-m long trains. Clearing of the proposal site would occur to allow for construction and to maintain the safe operation of the railway.

A1.2.1 Location

The proposal would be located between the towns of Narromine and Narrabri in NSW. The proposal would link the Parkes to Narromine section of Inland Rail located in central west NSW with the Narrabri to North Star section of Inland Rail located in north-west NSW.

The location of the proposal is shown in Figure A1.1. Further information on the location, study area and proposal site is provided in chapter A2.

A1.2.2 Key design features

The key features of the proposal include:

Rail infrastructure

- ▶ A new 306-km long rail corridor between Narromine and Narrabri
- ▶ A single-track standard-gauge railway and track formation within the new rail corridor
- ▶ Seven crossing loops located at Burroway, Balladoran, Curban, Black Hollow/Quanda, Baradine, The Pilliga and Bohena Creek
- ▶ Bridges over rivers and other watercourses (including the Macquarie River, Castlereagh River and the Narrabri Creek/Namoi River system), floodplains and roads
- ▶ Level crossings
- ▶ New rail connections and possible future connections with existing ARTC and Country Regional Network rail lines, including a new 1.2-km long rail junction between the Parkes to Narromine section of Inland Rail and the existing Narromine to Cobar Line (the Narromine West connection).

Road infrastructure

- ▶ Road realignments at various locations, including realignment of the Pilliga Forest Way for a distance of 6.7 km
- ▶ Limited road closures.

The key features of the proposal are shown in Figure A1.2.

Ancillary infrastructure to support the proposal would include signalling and communications, drainage, signage and fencing, and services and utilities.

Further information on the proposal's key features is provided in chapter A7.

A1.2.3 Key construction infrastructure

The following key infrastructure is proposed to support construction of the proposal:

- ▶ Borrow pits:
 - ▶ Borrow pit A—Tantitha Road, Narromine
 - ▶ Borrow pit B—Tomingley Road, Narromine
 - ▶ Borrow pit C—Euromedah Road, Narromine
 - ▶ Borrow pit D—Perimeter Road, Narrabri.
- ▶ Three main compounds, which would include a range of facilities to support construction ('multi-function compounds'), located at:
 - ▶ Narromine South
 - ▶ Curban
 - ▶ Narrabri West.
- ▶ Temporary workforce accommodation for the construction workforce:
 - ▶ Within the Narromine South multi-function compound
 - ▶ Narromine North
 - ▶ Gilgandra
 - ▶ Baradine
 - ▶ Within the Narrabri West multi-function compound.

The key construction infrastructure is shown in Figure A1.3.

Other construction infrastructure would include a number of smaller compounds of various sizes located along the proposal site, concrete batching plants, laydown areas, welding yards, a concrete pre-cast facility and groundwater bores for construction water supply.

Further information on the indicative construction methodology and the infrastructure required to support construction is provided in chapter A8.

A1.2.4 Operation

The proposal would form part of the rail network managed and maintained by ARTC. Train services would be provided by a variety of operators.

It is estimated that Inland Rail would be trafficked by an average of 10 trains per day (both directions) in 2025, increasing to about 14 trains per day (both directions) in 2040. This rail traffic would be in addition to the existing rail traffic using other lines that the proposal interacts with.

The trains would be a mix of grain, bulk freight and other general transport trains. Total annual freight tonnages would be about 10 million tonnes in 2025, increasing to about 17.5 million tonnes in 2040.

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

A1.2.5 Timing

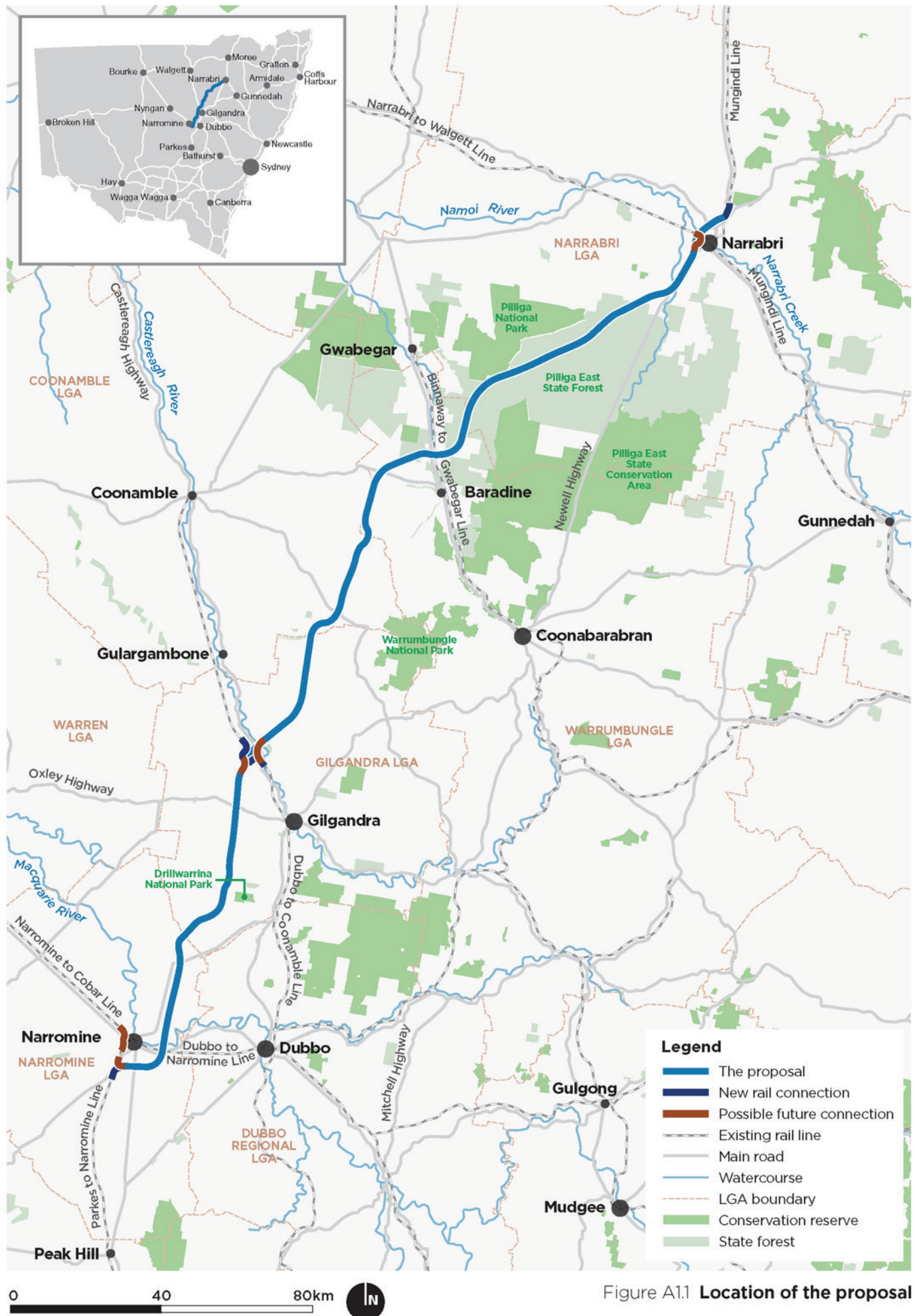
Subject to approval, the first phase of construction is anticipated to start in late 2021 and is expected to take about four years to complete. The proposal is expected to be operational, as part of Inland Rail as a whole, once all 13 sections are complete, which is estimated to be in 2025.

A1.2.6 Approval requirements

The proposal is State significant infrastructure and is subject to approval by the NSW Minister for Planning and Public Spaces under the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). The proposal is also determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and requires approval from the Australian Minister for the Environment.

ARTC has requested that the proposal be declared as critical State significant infrastructure by the Minister for Planning and Public Spaces under section 5.13 of the EP&A Act.

Further information on the approval requirements is provided in chapter A3.



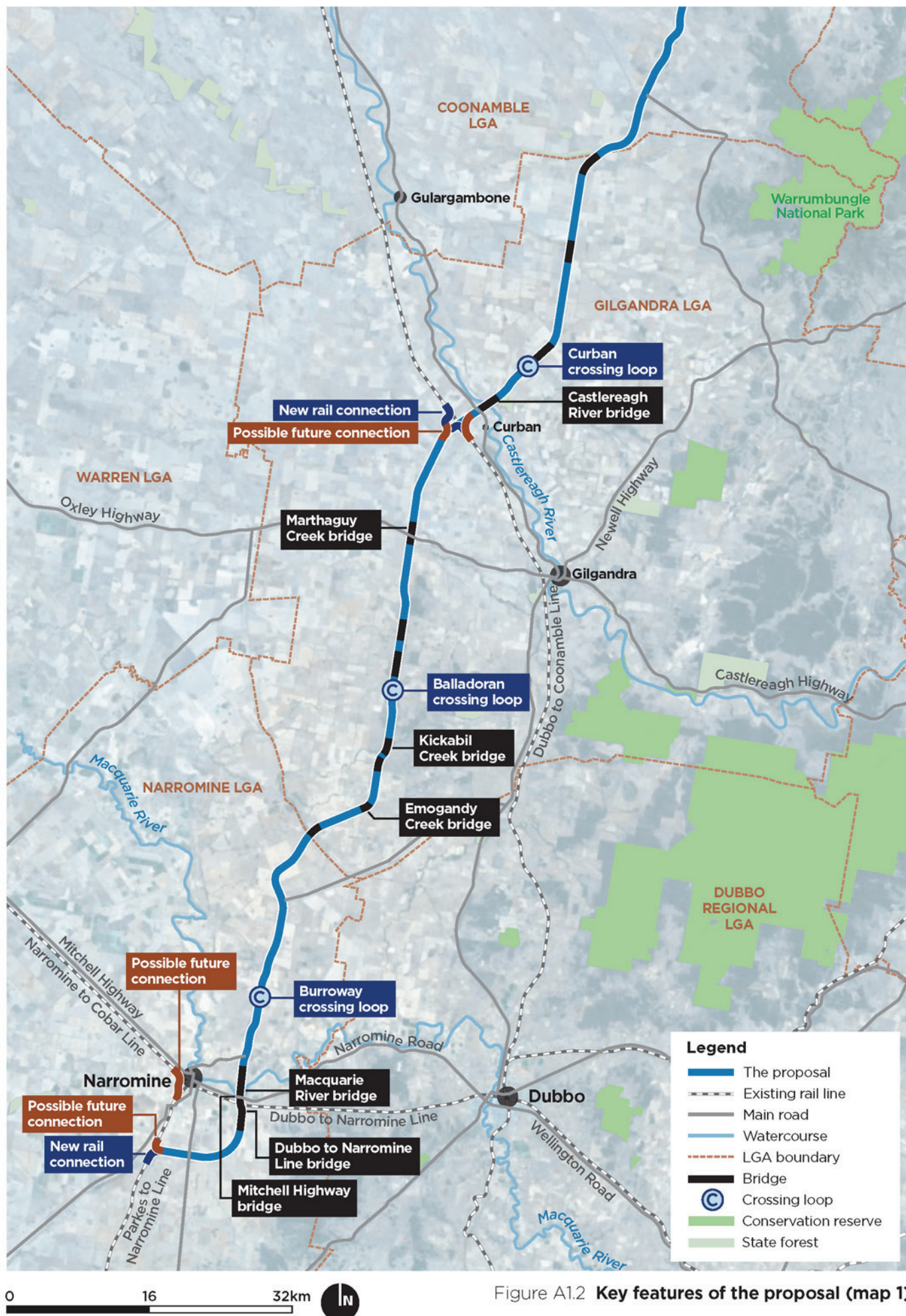


Figure A1.2 Key features of the proposal (map 1)

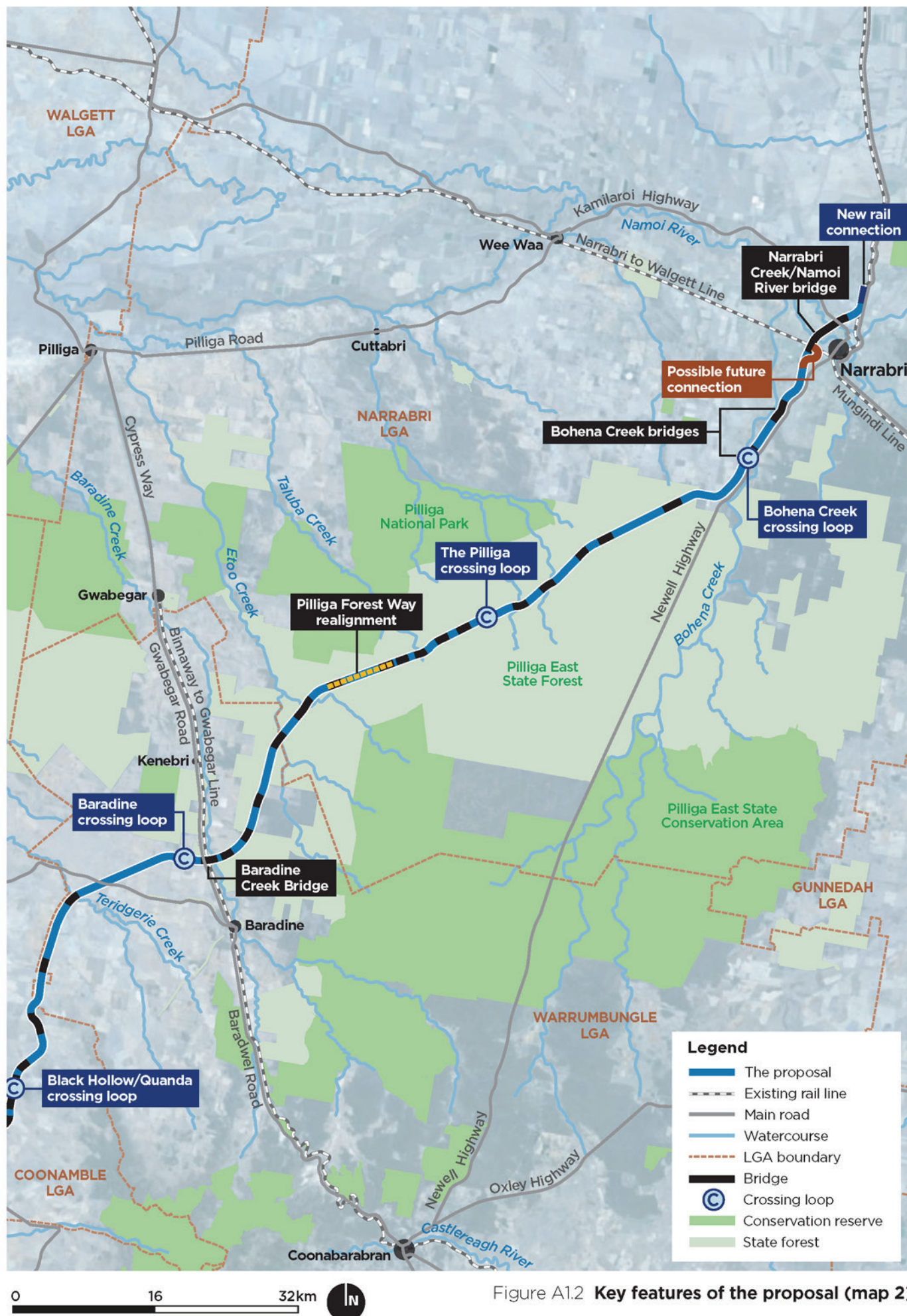


Figure A1.2 Key features of the proposal (map 2)

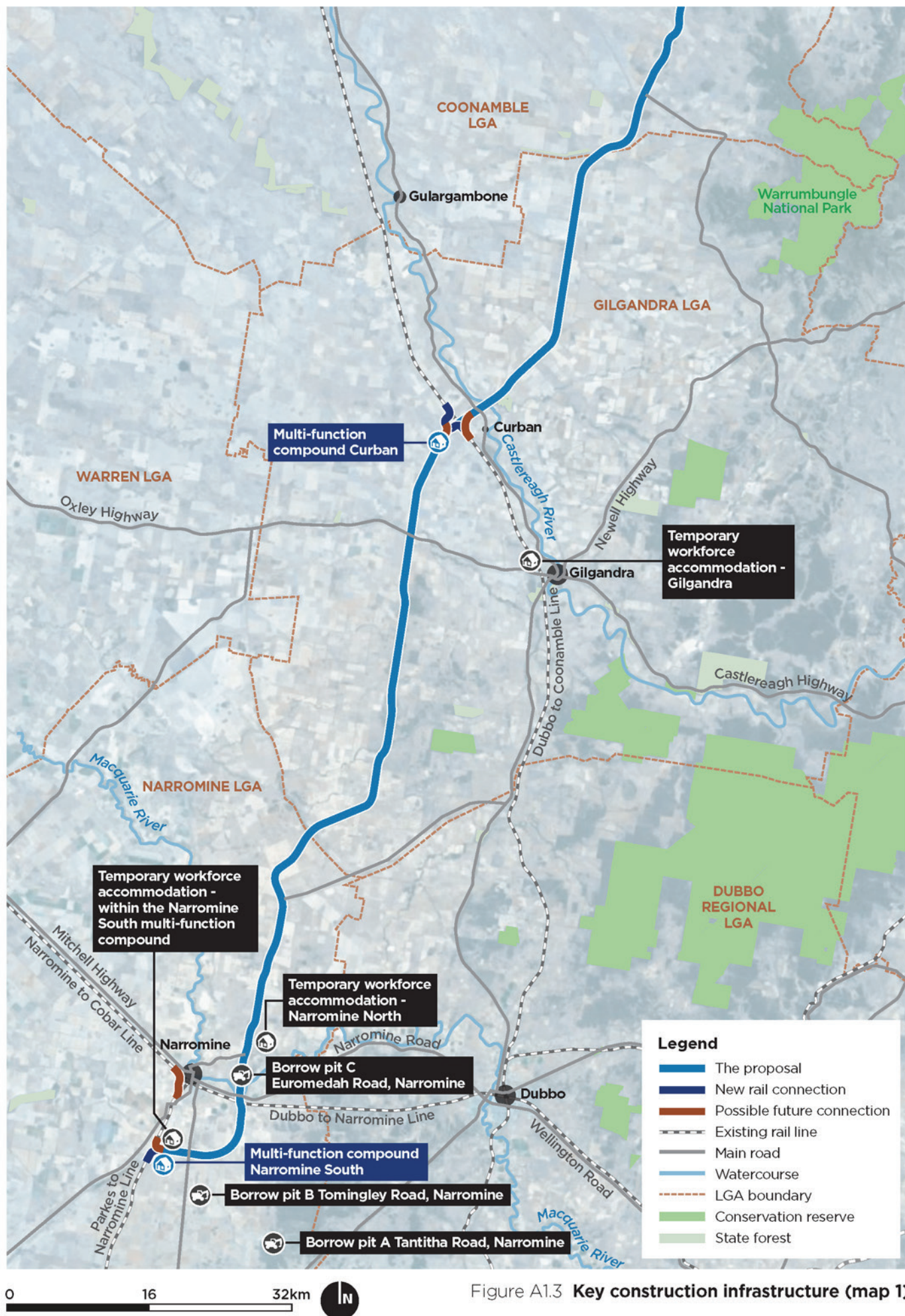


Figure A1.3 Key construction infrastructure (map 1)

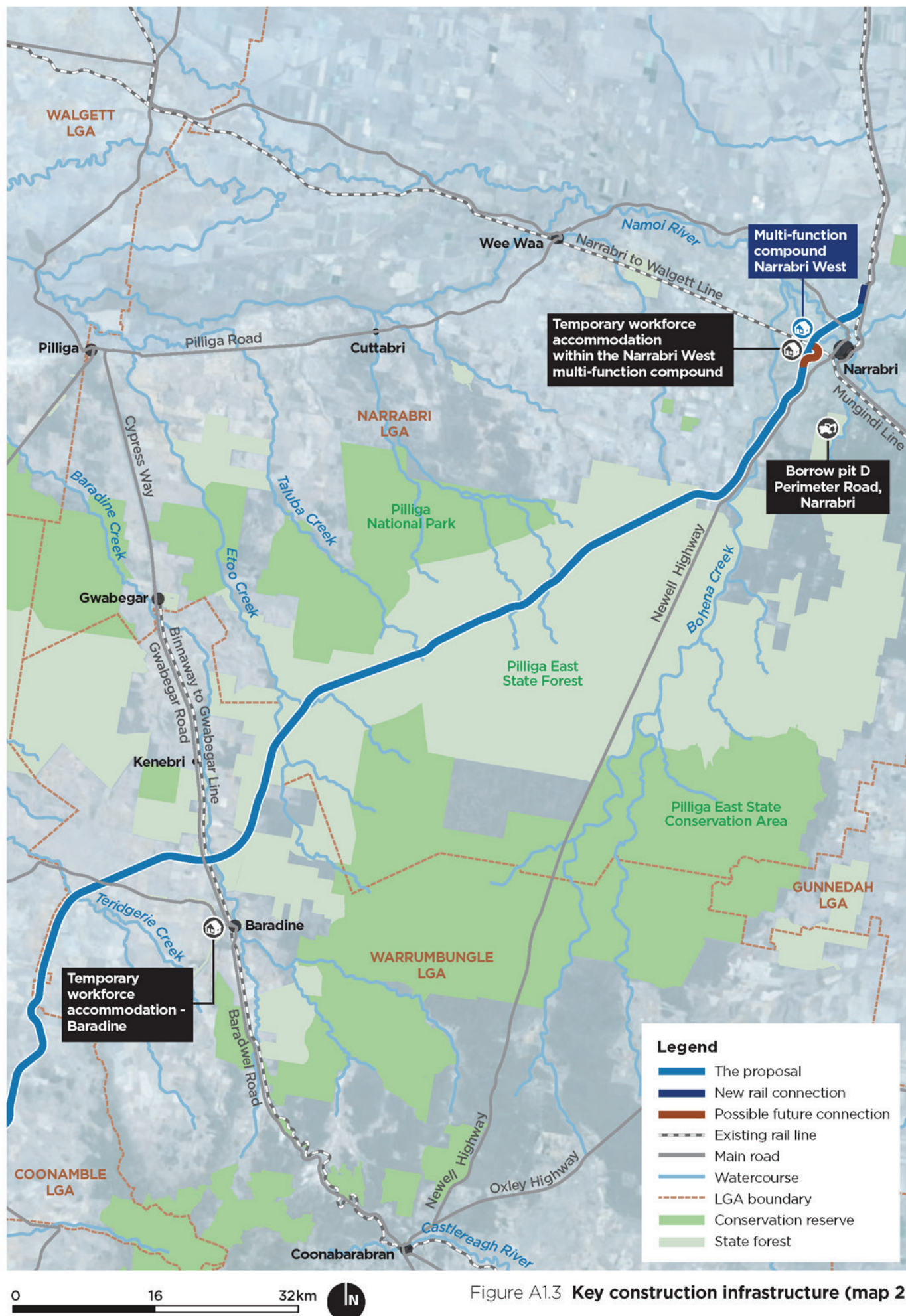


Figure A1.3 Key construction infrastructure (map 2)

A1.3 Objectives of Inland Rail and the proposal

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/bulk rail freight
- ▶ Improve connectivity to the National Land Transport Network and the Country Regional Network
- ▶ Provide an increase in productivity that will 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.

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 Narromine and Narrabri, connecting with other sections of Inland Rail to the north and south
- ▶ Minimise the potential for environmental and community impacts during construction and operation as far as practicable.

A1.4 EIS purpose and structure

This EIS supports the application for approval of the proposal under Part 5, Division 5.2 of the EP&A Act. It addresses the environmental assessment requirements of the Secretary of the Department of Planning, Industry and Environment (the SEARs). The EIS was prepared based on the draft SEARs, which were finalised on 9 September 2020 (refer to Appendix A). The EIS also addresses the EIS form and content requirements of schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) (refer to Appendix B).

The main EIS is structured in five parts, as follows:

- ▶ **Part A Introduction, proposal background and description—including:**
 - ▶ An introduction to the environmental assessment (chapter A1)
 - ▶ A description of the proposal site and the general environment within which the proposal would be located (chapter A2)
 - ▶ An overview of the statutory context and approval requirements (chapter A3)
 - ▶ A summary of the consultation that has occurred to date, and the consultation proposed during public exhibition, detailed design and delivery (chapter A4)
 - ▶ An overview of the strategic context and need for the proposal (chapter A5)
 - ▶ A summary of the alternatives to the proposal as a whole, and the options considered during development of the design (chapter A6)
 - ▶ A description of the design features and how the proposal would operate (chapter A7)
 - ▶ A description of the indicative construction process and activities (chapter A8)
 - ▶ A description of the impact assessment approach and methodology (chapter A9).
- ▶ **Part B Impact assessment—proposal infrastructure**
 - ▶ Provides the results of the assessment of environmental issues identified by the SEARs for the main rail alignment and associated infrastructure (particularly the proposed road infrastructure), including (in chapters B2 to B14):
 - Information on the existing environment
 - A summary of the potential impacts associated with constructing and operating the proposed rail and road infrastructure
 - Approach to mitigating and managing the identified impacts.

► **Part C Impact assessment—key construction infrastructure**

- Provides the results of the assessment of environmental issues identified by the SEARs for the main construction infrastructure (borrow pits, multi-function compounds and temporary workforce accommodation), including (in chapters C1 to C3):
 - Information on the existing environment
 - A summary of the potential impacts associated with establishing and using this infrastructure during construction of the proposal
 - Approach to mitigating and managing the identified impacts.

► **Part D EIS synthesis and conclusion—including:**

- An assessment of the potential for cumulative impacts (chapter D1)
- The approach to managing waste and resources for the overall proposal (chapter D2)
- The approach to managing sustainability and climate change for the overall proposal (chapter D3)
- A consolidated summary of the key potential impacts, a description of the proposed approach to environmental management and a compilation of the mitigation measures (chapter D4)
- Conclusion and justification for the proposal, including a succinct description of the proposal for which approval is sought and the reasons justifying carrying out the proposal (chapter D5).

► **Part E Map book**

The map book provides detailed mapping information for the proposal site (described in chapter A2) and proposal features, including:

- Environmental baseline—these maps display a range of environmental data and existing environmental information, including topography, biodiversity, heritage, watercourses, sensitive receivers and community infrastructure
- Construction phase—these maps show the land required during construction (the construction footprint), access requirements, and infrastructure required to construct the proposal, including the key construction infrastructure and other construction features (such as compounds and work areas)
- The proposal (design features)—these maps show the permanent operational footprint, design features and infrastructure proposed.

Other volumes provide supporting technical reports, which provide detailed assessments of the potential impacts of the proposal as they relate to the key environmental issues defined by the SEARs.