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# INLAND RAIL COMMUNITY CONSULTA COMMITTEE Illabo to Stockinbingal

Date: 24 June 2021



# Acknowledgment of Country

Inland Rail acknowledges the Traditional Custodians of the land on which we work, and pay our respects to Elders past, present and emerging.



# **PRESENTATION OVERVIEW**

- + Project Update
- + Design/Technical Update Melvyn Maylin (Project Director)
- + Stakeholder and engagement update Heath Martin (Stakeholder Engagement Manager)
- + Environmental Impact Statement Update Angela Stewart (I2S Senior Environmental Advisor)
- + Questions



# ILLABO TO STOCKINBINGAL PROJECT UPDATE

**Rift** 

Melvyn Maylin

**Project Director** 

# **I2S PROJECT UPDATE**

#### Activity since February CCC meeting:

- 1. 70% Reference Design consultation completed
- 2. Updated alignment map provided to all impacted landowners
  - + Including: private access, stock underpasses and culverts
- 3. Continuing design development
- 4. 100% Reference Design consultation underway (1<sup>st</sup> June 2021)
  - + Review of previous comments
  - + Construction impact zone map
  - + Changes since 70%



# **CURRENT STATUS**

- + Reference design completed
- + Environmental Impact Statement at 95%
- + Consultation with MPs, Councils, Government Agencies, Landowners, Community and key stakeholders on the Reference Design

#### WHAT NEXT

Activity	Date
Stakeholder consultation on Reference Design	May 2021 – Jul 2021
Land acquisition processes	Second half 2021
Environmental Impact Statement (EIS) lodgement	Second half 2021
EIS approval	Second half 2022
Award Design and Construct (D&C) Contract	2023





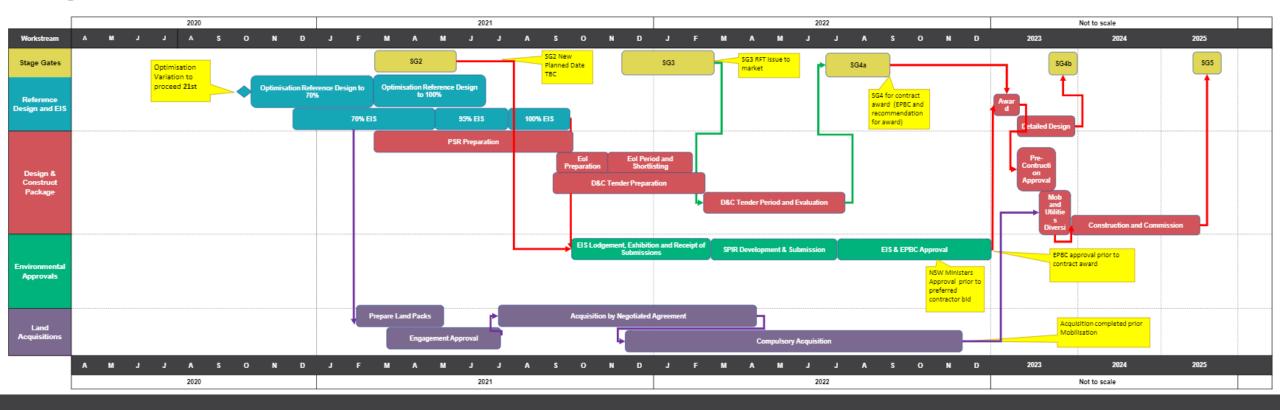
### ENVIRONMENTAL IMPACT STATEMENT (EIS) UPDATE

- + EIS is now at 95% completion
- + Draft EIS lodgement to Department of Planning, Infrastructure and Environment (DPIE) for review is expected Q3 2021
- Public exhibition is planned for late-2021 minimum 28 days public exhibition period where the public will be invited to view the plans and make formal submissions online to DPIE.



#### **12S HIGH LEVEL SCHEDULE**

#### **I2S High Level Schedule**





Design/Technical Update Melvyn Maylin Project Director

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Available on the website: https://www.youtube.com/watch?v=O9f5q2geHSc

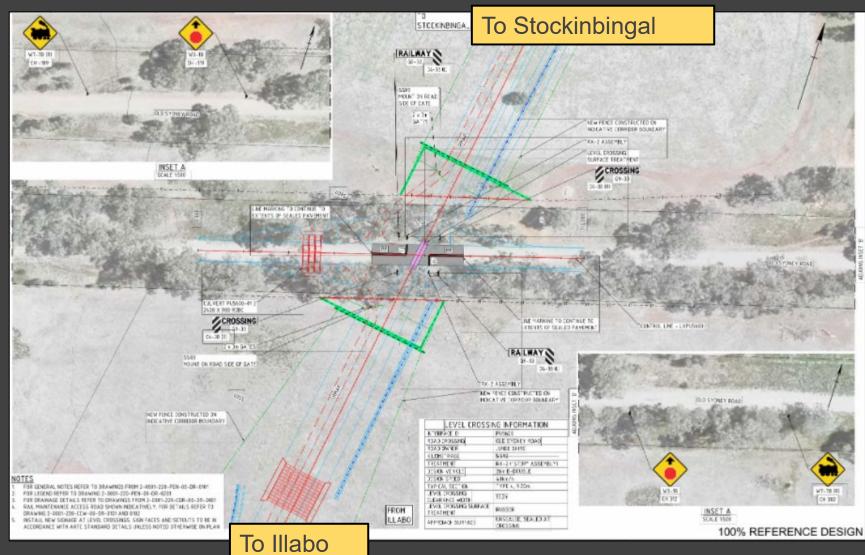
### **PROJECT CHANGES SINCE 70%**



- + Reduced earthworks (cut and fill):
  - + Shorter construction duration
  - + Fewer environmental impacts
  - + Improved visual amenity
  - + Smaller footprint
  - + Better budget outcomes
- + Rationalised location of Rail Maintenance Access Road (RMAR) to align with Rural Fire Services (RFS) requirements
  - + RMAR on east side from Ironbong Road to Old Cootamundra Road
- + Moved the crossing loop to the eastern side of the alignment
- + Rationalied culverts, bridges and longitudinal drainage throughout the entire alignment to align with latest flood modelling results
- + Finalised all stock underpass locations based on flood modelling and stakeholder considerations

### OLD SYDNEY ROAD LEVEL CROSSING





- + Passive level crossing
  - + Stop signs
  - + RX-2 assembly
- + Road sealed 15 metres back from stop line
- RMAR on west side accessed from Old Sydney Road
- + Clearance width: 13.2 metres

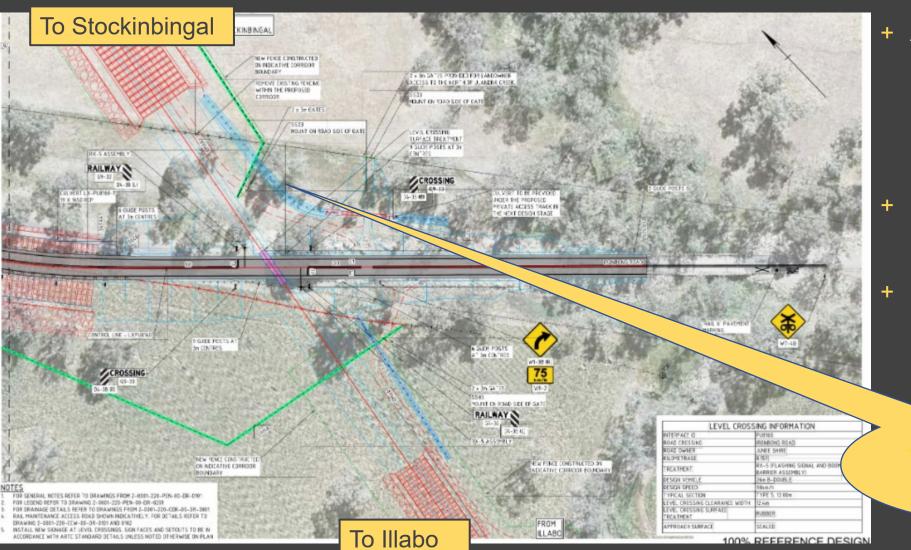


#### OLD SYDNEY ROAD VISUALISATION



### **IRONBONG ROAD LEVEL CROSSING**





- + Activated level crossing
  - + Lights
  - + Boom gates
  - + Bells
  - + RX-5 assembly
- Clearance width 12.4 metres
- + Culvert system:
  - + 25 x 2.4m x 1.2m RCBC
  - + 13 x 1.2m RCP
  - + 23 x 1.2m RCP

RMAR on east side of alignment

#### **IRONBONG ROAD REALIGNMENT**





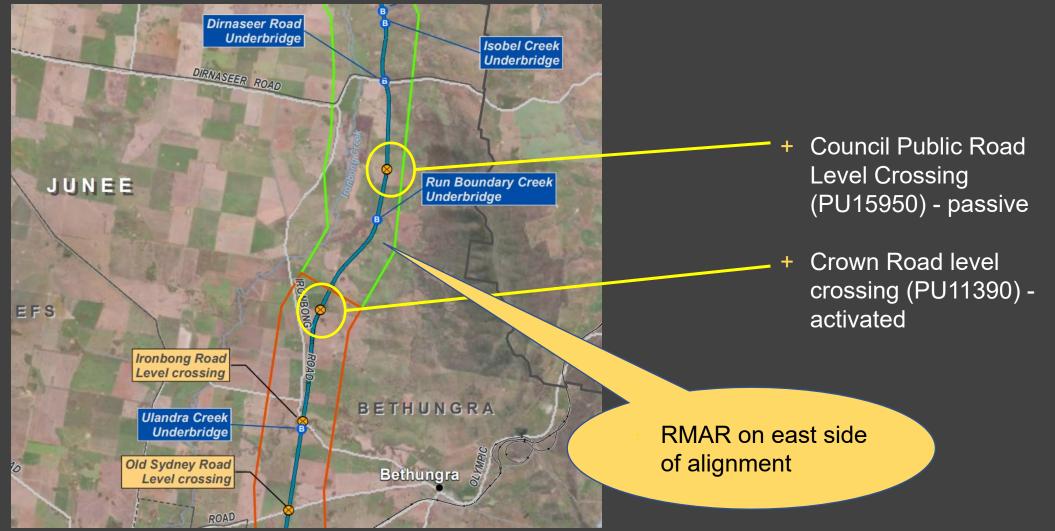
- Road realignment with road markings
- + 80 km/h design speed
- + 75 km/h advisory speed



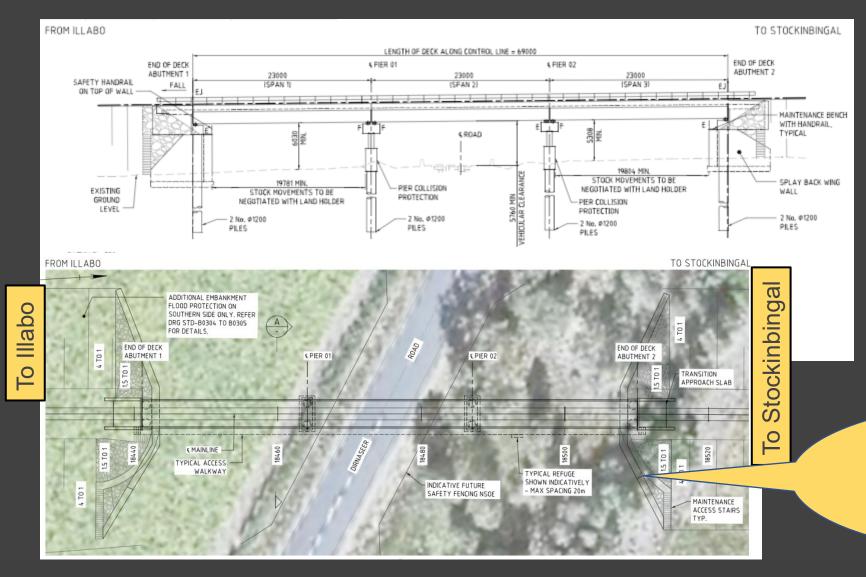
#### **IRONBONG ROAD VISUALISATION**



#### **CROWN AND PUBLIC LEVEL CROSSING**



### **DIRNASEER ROAD**



#### 

- + 3 x 23m spans
- + Vertical clearance:
  - + South side (private): 6.3m
  - + Road: 5.76m
  - + North side (private): 5.3m
- + Length of deck: 69m

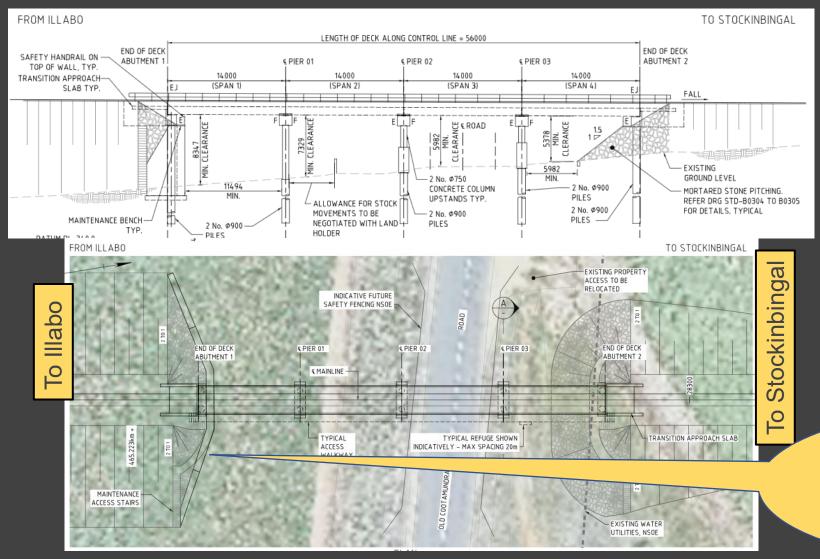
- 5.5 meters vertical clearance under bridge's
- Abutments shortened to allow access for landowners

#### DIRNASEER ROAD VISUALISATION





### OLD COOTAMUNDRA ROAD UNDERBRIDGE



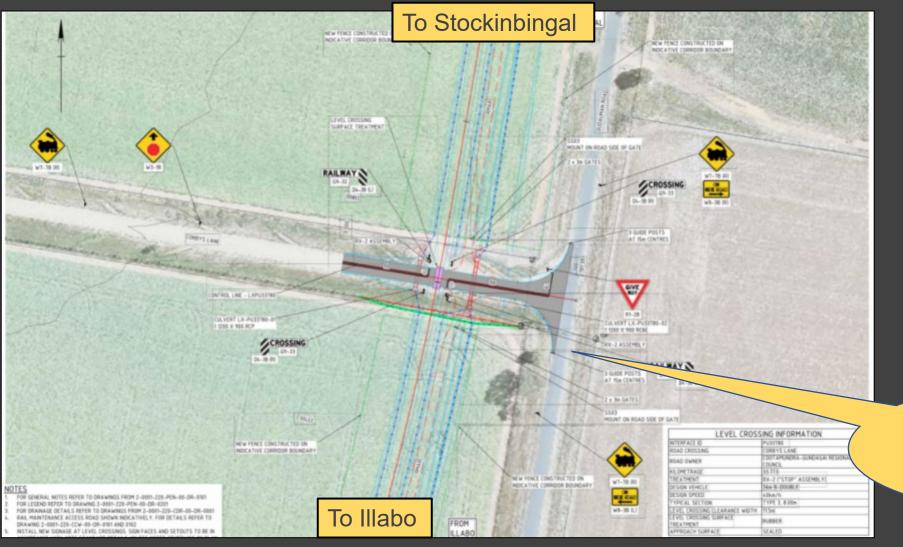
- + 4 x 14m spans
- + Vertical clearance:
  - + South side (private): 8.3m
  - + Road: 5.9m
- + Length of deck: 56m

- 5.5 meters vertical clearance under bridge's
- Abutment shortened to allow access for landowners

### OLD COOTAMUNDRA ROAD VISUALISATION



### CORBYS LANE LEVEL CROSSING



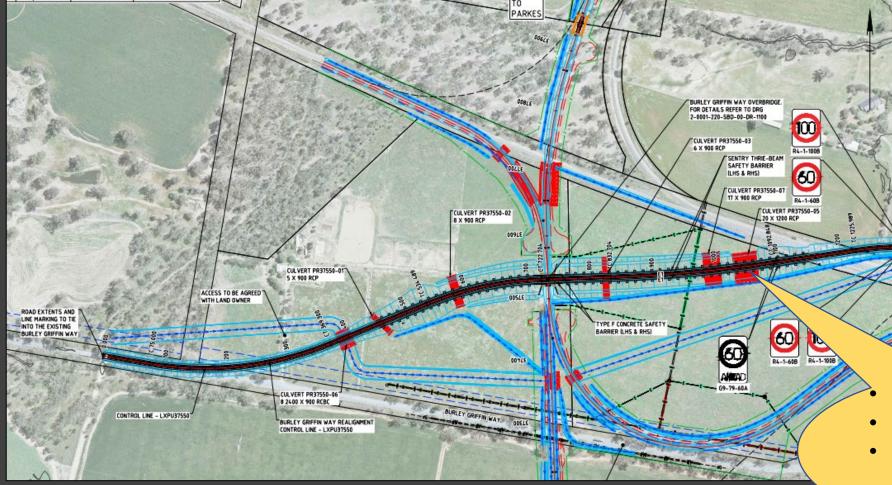
- + Council public road
- Passive level crossing (RX-2 assembly)
- + 15m road seal to the west
- + RMAR on east side of track
- Clearance width: 11.5 m

# Road sealed to Dudauman Road

#### CORBYS LANE VISUALISATION



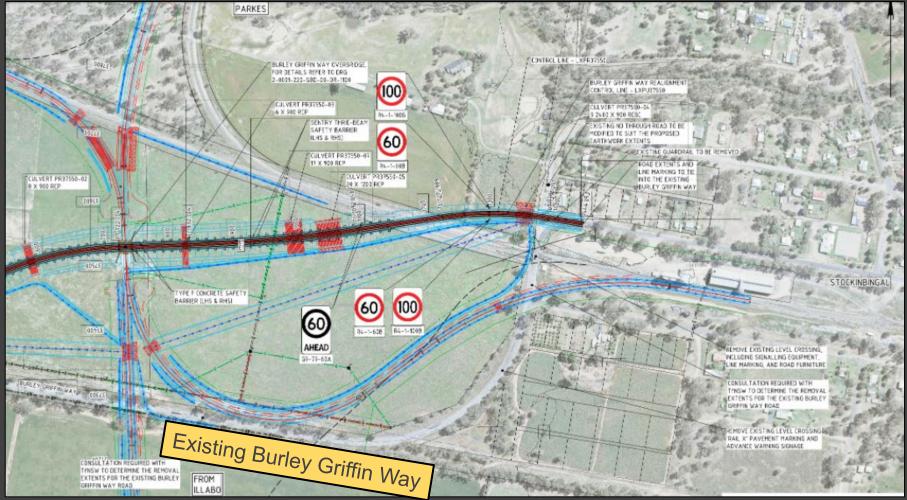
### **BURLEY GRIFFIN WAY – SHEET 1**



- Tie-in before existing bridge on Burley Griffin Way
- + Link into existing CRN Line (Lake Cargelligo)

- At grade rail solution
- Connection to CRN
- Increased road speed design
- Avoid scar tree

### BURLEY GRIFFIN WAY – SHEET 2



- + 100 km/h posted speed
- Removal of existing level crossing
- Removal of two sharp bends in road (safety)
- Construction doesn't impact existing Burley Griffin Way
- + Culverts:
- 5 x 900 RCP
- ► 8 x 900 RCP
- + 6 X 900 RCP
- + 17 X 900 RCP
- + 20 X 1200 RCP

#### BURLEY GRIFFIN WAY – VISUALISATION







# Stakeholder Engagement Update Heath Martin

**Efet** 

# 

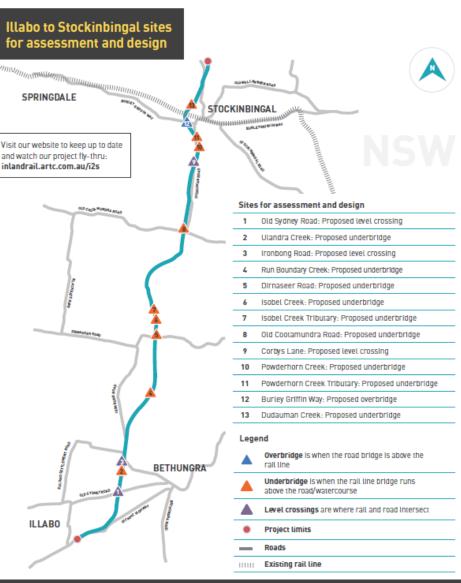
### **REFERENCE DESIGN ENGAGEMENT**

#### PURPOSE

- + To gain feedback on the reference design including feedback on:
  - + Private access, stock underpasses, culverts, bridges and level crossings
  - + Feedback can be fed into detailed design

#### WHO IS BEING CONSULTED?

- + Landowners
- + Councils (Junee, Cootamundra-Gundagai and Temora) and Councillors
- + Community
- Local Emergency Management Committee (LEMC)
- + Key stakeholders including:
  - + Local Aboriginal Land Councils (LALCs)
  - + Crown Lands
  - + Transport for NSW



### STAKEHOLDER ENGAGEMENT UPDATE



Completed engagement activities since February 2021

- + CCC held in February at Junee
- + Completed 70% Reference Design engagement
- + Monthly engagement meetings with TfNSW
- Progressed Master Inland Rail Development Agreements (MIRDA) with both I2S councils
- Ongoing discussions with some landowners about Biodiversity Offsets

#### Main concerns:

- + Access
- + Acquisition and compensation
- + Noise and vibration operation and construction
- + Biosecurity

#### How we have listened

Changes to design based on stakeholder feedback:

- RMAR now on eastern side for fire access to the Bethungra ranges based on comments from Junee Council and Rural Fire Service (RFS)
- + Vertical clearance under bridges 5.5 metres as requested by Council, NSW Farmers and RFS
- + Clearances at level crossings are larger than standard at request of landowners to allow access for large machinery
- + Private level crossing locations
- + Bridge spans with shortened abutments and stock underpasses on private land to provide access
- + Avoided scar tree

### STAKEHOLDER ENGAGEMENT UPDATE



#### + Consulting on final reference design

- + MPs, Councils and Councillors, landowners, government agencies, community and special interest groups
- + Councils and TfNSW have been provided the final reference design drawings for review
- + Landowners were provided individual maps and offered face to face meetings (meetings ongoing)
- + Community information sessions in Junee, Illabo, Bethungra, Stockinbingal, Temora and Cootamundra
- + Information sessions have been advertised in paper, radio and social media
- + Social PinPoint and I2S fly through are online



+ Existing rail infrastructure in Stockinbingal

### ENGAGEMENT AND CONSULTATION NEXT STEPS

#### Indicative timing:

- + Continued landowner meetings until end of June
- + Continued community information sessions and meeting with special interest groups
  - + Friday 25 June, Meagher & Co Building, Temora
  - + Friday 25 June & Saturday 26 June, Cootamundra Library
- + Second half of 2021: Continue EIS engagement (noise and hydrology)
- + Second half 2021: Begin land acquisition process
- + Late 2021: exhibition of EIS. Consult on EIS exhibition and how to make submissions.
- + Ongoing scheduled Community Consultative Committee (CCC) meetings





Inland Rail at the Cooatmundra Show, 2019



# Environmental Impact Statement Update Angela Stewart

Senior Environmental Advisor



### **I2S PROJECT APPROVAL PROCESS**

#### NSW

- Planning approval required under *Environmental Planning and Assessment Act* 1979
- + State Significant Infrastructure (SSI 18\_9406)
- + It has been declared Critical State Significant Infrastructure on 3 March 2021
- + An EIS is required to be prepared to assess the project
- + Approval by the NSW Minister for Planning and Public Spaces

#### Commonwealth

- + Controlled action under Commonwealth *Environment Protection Biodiversity Conservation Act* 1999 (EPBC Referral 2018/8233)
- + Bilateral assessment with the NSW EIS process
- + Approval by Australian Minister for the Environment

# **EIS PROCESS**

#### Key steps are:

- + Application lodgment followed by DPIE's issue of SEARs
- + EIS preparation involving:
  - + Range of technical studies
  - + links with the reference design
  - + Assessment report
- + Public exhibition and receipt of submissions
- + Response to submissions including clarification of issues raised
- + Negotiation of an approval with DPIE
- + Approval by the relevant Ministers
- + Subsequent preparation of management plans aligned



### ASSESSMENT APPROACH AND METHODOLOGY

#### Impact scoping

- + Key issues identified in the Scoping Report
- + Environment risk assessment
- + Secretary's Environmental Assessment Requirements (SEARs)

#### Impact assessment

- Informed by relevant NSW guidelines, legislative requirements and ARTC's Inland Rail Environmental Assessment Procedure
- + Undertaken by specialist issue-specific consultants
- + Define the existing environment/baseline
- + Assess potential impacts and their significance
- Prepare detailed specialist technical reports
  Management and mitigation
- + Informed by specialist reports and best-practice Prepare EIS documentation





### **NOISE AND VIBRATION**

### **OVERVIEW**

#### Assessment approach

- + Noise and vibration is assessed in accordance with the relevant legislative guidelines (Interim Construction Noise Guideline, Rail Infrastructure Noise Guideline)
- + How noise is perceived is personal and can depend on environmental factors
- + What is heard will depend on type of work/activity, distance to the source of noise and level of background noise (changes depending on time of day)
- + Assessments are conservative and the worst-case assumptions are used in this assessment

#### How noise is measured

- + Measured and assessed in decibels
- Noise management levels (NMLs) used to assess whether sensitive receivers will be impacted

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### AVOIDANCE OF IMPACTS

+ A number of route options were considered for the proposal

- + Options were refined based on environmental and community considerations
- + Selection of the alignment was modified to reduce proximity to sensitive receivers
- + As a result large sections not near receivers
- + Some impact is unavoidable



### **NOISE SOURCES**

- + During construction, noise could affect houses, schools, open space, places of worship and childcare centres.
- + Compound sites, earthmoving equipment, cranes, specialised rail construction machinery, bridge piling rigs and general traffic / deliveries will generate noise.
- + Different activities will occur across the construction period, with different noise effects.
- + Noise may be localised to activities or specific times.

- + Noise from rail activities come from:
- + Locomotives: when passing by or idling at a signal
- Movement of rail wagons: as trains slow down wagons bunch up and bump one another, as trains speed up wagons stretch apart
- + Wheel squeal: on bends, the steel wheels rub against the track
- + Horns: horns are sounded on approaches to level crossings as an extra warning
- Track issues: irregularities in track alignment or wear can generate noise



#### **NOISE AND VIBRATION - METHODOLOGY**

- + Identifying sensitive receivers
- + Undertaking noise monitoring
- + Developing impact scenarios
- + Undertaking noise and vibration modelling
- + Identifying affected properties
- + Comparing the results to criteria/management levels
- + Identifying measures to mitigate potential impacts



### CONSTRUCTION NOISE AND VIBRATION - METHODOLOGY

#### Criteria

- + Criteria is based on existing noise environments and are a measure of noise against that existing background level.
- Interim Construction Noise Guidelines (ICNG) are standard working hours issued by the NSW Environment Protection Authority (EPA).
- + ICNG standard hours are:
  - + Monday to Friday: 7am to 6pm
  - + Saturday: 8am to 1pm
  - + Sunday: no work
  - + Public holidays: no work

#### Proposal working hours

The following primary proposal construction hours are proposed:

- + Monday to Friday: 6am to 6pm
- + Saturday: 6am to 6pm
- + Sundays: 6am to 6pm
- + Public holidays: no work

No work every alternate week on Sundays and between the hours of 1pm and 6pm Saturday.

+ Out of hours work for discrete activities

### CONSTRUCTION NOISE ASSESSMENT



- + Under the Noise Management Levels (NML) criteria, exceedances for residential receivers are expected for almost all scenarios.
- + Impacts are expected to be transient due to the progressive nature of the construction works.
- + Site Establishment & Finishing and Landscaping highly affect the residents within Stockinbingal due to the relatively high number of residential dwellings and close proximity to the works site.
  - + Five residents are highly noise affected from Site Establishment.
  - + Two residents are highly noise affected from Finishing and Landscaping.
- + For the rest of the works, the worst-case receiver within Stockinbingal shows levels typically <10dB above standard hours NMLs

+ No exceedances of NMLs are predicted for commercial, educational, active and passive recreation receivers

### CONSTRUCTION VIBRATION ASSESSMENT

#### **Construction Activities**

- + Impacted properties adjacent to some construction works potentially occur within minimum working distances are associated with the tie-in to the existing rail line at the eastern end of Stockinbingal.
- + Aboriginal heritage receivers include the scarred trees identified located near Ironbong Road and to the north-west of Stockinbingal.
- Where works occur within minimum working distances, mitigations such as smaller machines, dilapidation surveys and vibration monitoring, will be considered









### **OPERATION NOISE AND VIBRATION - METHODOLOGY**

- + Identifying operation noise sources and scenarios
- + Undertaking noise modelling
- Comparing the results to criteria/management levels for 2026 (when operation commences) and 2040 (when at capacity)
- + Identifying measures to mitigate potential exceedances

#### Operation

+ About 6 trains/day in 2026 increasing to 11 trains/day in 2040

#### Criteria

- + Rail Infrastructure Noise Guideline (EPA, 2013)
- + NSW Road Noise Policy (DECCW, 2011)
- + Noise Criteria Guideline (RMS, 2015)
- + Vibration and sleep disturbance also considered
- + Residential rail noise between 55 dBA (night) and 60 dBA (day)
- Non-residential rail noise between 35 dBA (hospital ward) and 65 dBA (open space)



### NOISE AND VIBRATION – APPROACH TO MITIGATION

#### Construction noise

- A construction noise and vibration plan would be prepared by the construction contractor and approved by DPIE before starting works. This plan will detail processes responsibilities and measures to manage noise and vibration
- + Assessment is conservative shows the worst case
- As part of the plans development further work would be undertaken to confirm noise impacts based on a more detailed understanding of construction methods
- + A range of measures would be used to reduce construction noise

#### **Operational noise**

- + The track has been designed to minimise noise
- + Once design finalised an operational noise and vibration review would be undertaken to confirm noise and vibration predictions
- + This would include feasible and reasonable mitigation measures
- + At this stage noise walls are not considered feasible
- + Feasible mitigation measures could include at property treatments
- + To validate the predicted noise levels, monitoring would be undertaken after the commencement of operation of Inland Rail as a whole

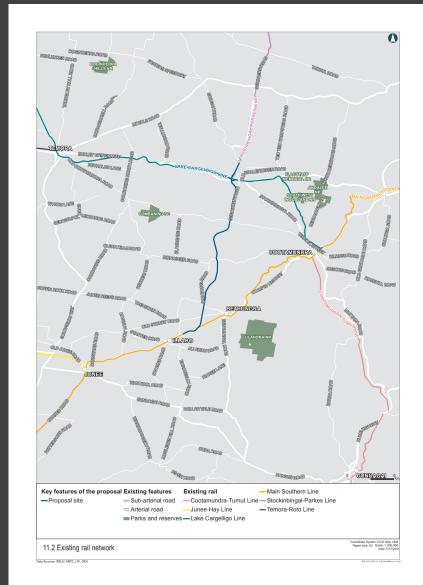


### TRAFFIC AND TRANSPORT

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### EXISTING ENVIRONMENT

- + Two major roads/highways:
  - + Burley Griffin Way
  - + Olympic Highway
- + Network of local roads
- + Livestock Highway
- + 12 sealed and 2 unsealed local roads cross the proposal site
- + Olympic Highway is the busiest road
- Other transport facilities
- + Three existing level crossings are located near the existing rail connections
- + Three rail lines cross the proposal site, the Main South Line, the Lake Cargelligo Line and the Stockinbingal-Parkes Line
- + Each rail line is generally used for freight; the Main South Line also operates a passenger service but neither the Illabo or Stockinbingal stations currently service passengers





### AVOIDANCE OF IMPACTS

- + Haul roads would be constructed within the proposal site to minimise construction movements on the public road network.
- + Construction access routes to the proposal site have been developed to minimise the impact to major town centres.

#### Methodology

- + Assessed the potential impacts of construction
- + Assessed the potential impacts on the road network during operation
- + Assessed potential travel time impacts at new level crossings





### **KEY CONSTRUCTION IMPACTS**

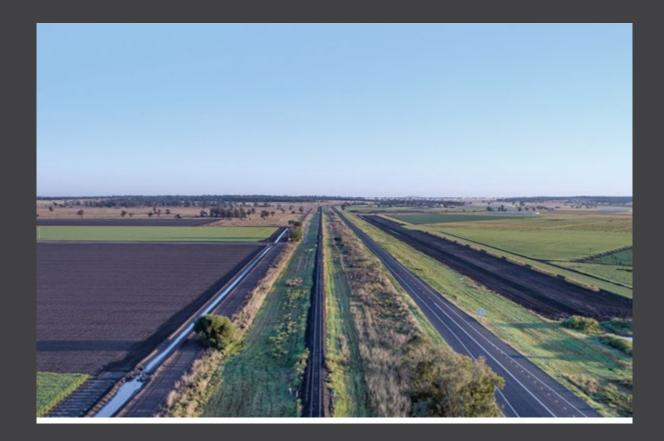
- Construction would generate additional vehicle movements. However, there would be no significant change to the level of performance of key roads
- + Installing bridge girders over public roads would require temporary closures, and road diversions to be put in place
- Works on existing roads may cause minor disruptions to local traffic including buses and temporary access restrictions
- + Works to existing rail lines would be undertaken during scheduled possession periods





### **KEY OPERATION IMPACTS**

- + The main traffic impact during operation would be impacts on travel time due to the presence of a level crossing
- Delays at the level crossings Old Sydney Road, Ironbong Road, Corbys Lane and 3 unnamed roads would be max 131 seconds in peak but queue length would have minimal change due to traffic
- An existing active level crossing on Dudauman Street, approximately 70 metres south of Burley Griffin Way (Hibernia Street), would continue to create similar delays to the network





### **APPROACH TO MITIGATION**

#### Construction

- + A traffic, transport and access management plan would be prepared in consultation with local councils, Transport for NSW and public transport/bus operators.
- The plan would detail processes, relevant requirements and responsibilities to minimise potential traffic, transport and access impacts during construction
- + Consultation with relevant stakeholders would be undertaken regularly

#### Operation

- Input would be sought from relevant stakeholders during detailed design
- Road safety audits would be undertaken where changes to the road network are required including for level crossings
- The design of road infrastructure, including level crossings would be undertaken in accordance with relevant standards and guidelines





### LANDUSE AND PROPERTY



#### OVERVIEW

- + The land use and property assessment has been prepared to examine the potential impacts on land uses, particularly agriculture, taking into consideration regional impacts.
- + ARTC has conducted one-on-one discussions with affected landholders, with the consultation including an agricultural consultant to understand key issues and concerns which have informed design development, the EIS and the proposed mitigation measures.
- + The assessments were undertaken by technical specialists with expertise in agricultural economics and land use planning, and were prepared in accordance with *Guideline for agricultural impact statements at the exploration stage* (DPIE, 2015).



#### AVOIDANCE OF IMPACTS

- +Incorporation of stakeholder and community feedback into corridor options assessment
- + Short list options developed with reference to cadastre and property boundaries and property accesses, where possible
- + Avoidance of private occupied dwellings and farm buildings where possible



### AGRICULTURAL ASSESSMENT METHODOLOGY

- + Guideline for agricultural impact statements at the exploration stage (DPIE, 2015)
- + Agricultural impact statement technical notes (NSW Department of Primary Industries (DPI, 2013)
- +Infrastructure proposals on rural land (DPI, 2013)
- +Land use conflict risk assessment guide (DPI, 2011)

#### Key tasks

- + Review of regulatory framework
- + Reviewing and mapping existing land uses
- + Field assessment
- + Scoping of potential impacts agricultural and other



### LAND-USE ASSESSMENT METHODOLOGY

- + Review of cadastre, lot and DP and property ownership information
- + Identification of properties located within the proposal site
- + Consultation with relevant State agencies including Riverina Local Land Services (LLS) and NSW Department of Primary Industries (DPI).
- + Review of ARTC led consultation with property owners to understand property usage and operation
- + Consideration of the potential for impacts on property using GIS analysis
- + Providing measures to mitigate and manage the impacts



#### EXISTING ENVIRONMENT

- + Agricultural related land uses dominate the study area.
- + 94 per cent of the surrounding properties are used for livestock and cropping enterprises.
- + Travelling stock reserves are located in the general areas of:
  - + Stockinbingal
  - + Stockinbingal Road
  - + Old Cootamundra Road
  - + Dirnaseer Road
  - + Illabo
- + Livestock Highway is on Old Cootamundra Road and Dudauman Road.
- + Crown land occurs in the form of road reserves and other reserves.



#### KEY IMPACTS – PROPERTY

- + 26 private landowners would be subject to acquisition, totalling approximately 446 hectares
- + Total acquisition of Crown/Council and TfNSW roads would be approximately 11.8 hectares
- + Total acquisition of Crown land (excluding roads is approximately 0.74 hectares
- + Permanent reduction of cropping land accounts for about 196 hectares
- + Temporary occupation of private and public land (including roads and Crown land) is also required for construction

### **KEY IMPACTS - CONSTRUCTION**



#### TSRs and livestock highway

- +None of the 4 TSRs are impacted by the rail alignment.
- + No construction impacts are expected on travelling stock reserves which are fenced camping or overnight stock watering areas.
- + Construction related impacts to roads and travelling stock routes would be temporary and able to be managed to avoid or minimise impacts.
- + A livestock highway (not a TSR) includes Old Cootamundra Road and Dudauman Road, both of which are impacted by the proposal. Old Cootamundra Road is crossed by the proposal and would include a public level crossing. Dudauman Road travels parallel with the rail corridor for approximately 6.5 km
- + The livestock highway also currently crosses the existing Stockinbingal-Parkes Line on Grogan Road.

#### Mining

+No impacts on 4 active exploration licences



### APPROACH TO MITIGATION AND MANAGEMENT

#### Approach

- Minimising the construction and operation footprints as far as possible
- + Managing the acquisition process in accordance with relevant requirements
- + Minimising the potential for direct impacts on properties, in particular agricultural operations and infrastructure

#### Property-specific responses

- + Determined in consultation with individual landholders
- + Measures to minimise property impacts, including on agricultural operations
- Specific requirements to ensure that operations, including the movement of livestock and farm machinery are able to be maintained as efficiently as possible
- + Measures to manage severance impacts where practicable
- + Required adjustments to affected structures including appropriate access solutions





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







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# THANK YOU