

### **MEETING MINUTES**

## Narromine to Narrabri Inland Rail Community **Consultative Committee**

#### NARRABRI SUB-COMMITTEE

DATE / TIME **LOCATION** 

30 March 2022 Narrabri Bowling Club, Narrabri 12.05 pm

**FACILITATOR MINUTE TAKER DISTRIBUTION** 

Michael Silver OAM Michael Silver OAM Narrabri Sub-committee

#### **ATTENDEES**

- Michael Silver (Independent Chair)
- Jane Judd (Community Member)
- Cindy Neil (Community Member)
- David Scilley (Community Member)
- Christina Deans (Community Member) [by video link]
- Leanne Ryan (Warrumbungle Shire Council)
- Cr Denis Todd (Warrumbungle Shire Council)
- Cr Greg Lamont (Narrabri Shire Council)
- Michelle Henry (Narrabri Shire Council)

- ▶ Erica Tudor (ARTC)
- Duncan Mitchell (ARTC)
- Matt Errington (ARTC)
- Akhter Hossain (JacobsGHD)
- Louise Johnson (ARTC)
- Richard Hamilton (ARTC)
- Dr Mark Jempson (Venant Solutions)

#### **APOLOGIES**

- Ted Hayman (Community Member)
- Russell Stewart (Community Member)
- Bruce Brierly (Community Member)
- Donna Ausling (Narrabri Shire Council)

#### **GUESTS**

- Alexander Deans (Community Member Gilgandra) [by
- ▶ Angela Doering (Department of Infrastructure, Transport, ▶ Paul Giess (ARTC) Regional Development and Communications)
- Cr John Clements (Narrabri Shire Council)
- Cr Robert Browning (Narrabri Shire Council)
- Colin Hill
- Drinda Luckensmeyer

- Mick Fallon (NSW Department of Planning Industry and Environment)
- Anna Howard (ARTC)
- Susan Kay (ARTC)
- ▶ Lachlan Beveridge (ARTC)
- Grace Farrer (ARTC)

#### **Discussions**

NO. DISCUSSIONS	
1. Welcome	The Chair welcomed all to the meeting particularly the new representatives from Narrabri Shire Council. Mr Silver also acknowledged the community observers in attendance, the representative of the Commonwealth Government agency and the ARTC staff.



	NO.	DISCUSSIONS				
2.	Acknowledgement of Country	The Chair acknowledged the Traditional Owners of the land on which the meeting is being held and recognised their continuing connection to land, waters, and culture, paying respects to their Elders past, present and emerging.				
3.	Declarations of Interest	<ul> <li>Michael Silver – Pecuniary interest – expenses of Independent Chair borne by ARTC.</li> <li>Cindy Neil – Non-Pecuniary interest – property located in Study area.</li> </ul>				
4.	Chair's Minute	. Annual Reports				
		The Chair advised that the Annual Reports of the CCC for 2019 and 2020 had not been submitted to the Department of Planning or to the Proponent.				
		Mr Silver acknowledged that this was an oversight of his and took full responsibility for the error. He apologised for this error and indicated that he would be having discussions with the Department of Planning and Environment (DPE) and the matter would be addressed in the coming week.				
5.	Minutes of Previous Meeting	It was noted that the minutes of the meeting of the N2N CCC Narrabri Sub-committee held on 8 December 2020 had been approved on 19 January 2021 and placed on the Proponent's website.				
6.	Business Arising	• Nil				
7.	Correspondence	• Nil				
8.	Previous Actions	8.1 That ARTC confirm the likely speed of the train at the proposed passive rail crossing adjacent to the Narrabri Water Treatment Plant.				
		<b>Response:</b> The level crossing south of the Narrabri water treatment plant will be an active level crossing. Train speeds would vary according to axle loads and range from 80 to 115 kilometres per hour.				
9.	NSW Department of Planning and Environment Presentation	Mr Mick Fallon of the NSW Department of Planning and Environment (DPE) provided a Process Update Presentation on the Narromine to Narrabri Inland Rail Proposal by video link. (Copy of the presentation attached to the minutes).				
		Mr Fallon provided an overview of the State Significant Infrastructure process noting the current status of the proposal.				
		He noted the Proponent is required to submit a Response to Submissions report and responses to additional information requested by the Department (Preferred Infrastructure Report) as well as advise any amendments (Amendment Report) it wishes to make to the proposal.				
		Mr Fallon indicated these reports will be reviewed by the Department and it will then decide whether to publish the documents on the Major Projects website or whether to seek further information. The Department may also decide to exhibit and seek public submissions on the Amendment Report and Preferred Infrastructure Report.				
		Mr Fallon advised that the DPE is aware many projects are prepared on a Reference Design to subsequent Detailed Design basis. In terms of assessment, the DPE needs to ensure that the predictions in the EIS are accurate, and the environmental and community impacts are fully understood prior to the DPE making a recommendation to the Minister. An approval will carry with it significant conditioning, provision of various Management Plans and requirements for the amelioration of flooding.				
		Once these reports are accepted by the Department will undertake the assessment. The assessment includes:				
		<ul><li>reviewing the design of the project</li><li>further community engagement</li></ul>				



NO.	DISCUSSIONS	
	<ul> <li>seeking advice from government agencies and independent experts         <ul> <li>requesting additional information from the proponent</li> <li>assessing the economic, environmental, and social impacts of the project against relevant standards and criteria</li> <li>evaluating the merits of the project as a whole</li> <li>preparing recommended conditions of approval</li> </ul> </li> <li>The Minister for Planning is the determining authority.</li> </ul>	
	<ul> <li>Cindy Neil enquired who will determine the hours of work during construction and deal with any noise issues. Mr Fallon advised the DPE will be guided by the Environmental Protection Authority (EPA). But 'what's logical and makes sense' also needs to be considered. Construction hours in remote areas will have less stringent constraints compared to more populated locations. The Proponent will nominate the hours of construction — they should talk to residents on the hours of work, consider any issues and manage and mitigate any complaints or concerns. The DPE compliance teams will arbitrate any disputes. Mr Errington advised the hours of construction are detailed in the EIS.</li> <li>Cr Greg Lamont enquired whether the DPE has looked at the route going through Narrabri. Mr Fallon advised that the route has been inspected on a couple of occasions. He noted that the DPE hydrologist had been on site before Christmas 2021 to familiarise himself with the locality. Cr Lamont questioned Mr Fallon whether the DPE was aware of the community's concern with the proposed alignment and the potential implications on flooding. Mr Fallon indicated the DPE does have some concern with aspects of the route alignment, noting that the alignment has been selected by the Proponent based on various criteria to affect the best business outcome. He indicated the DPE will review the proposed route alignment, analyse the justification for its selection and assess the potential impacts of that route. Mr Fallon advised that a hydrology working group has been formed to review and evaluate the data, flood modelling and extent of impacts. Council's flood models are also being examined with the view to ensuring any flooding impacts are minimised.</li> <li>Ms Neil asked whether the November 2021 flood event will be taken into consideration. Akhter Hossain advised that the most recent flood is yet to be assessed. Presently analysing flood information from Council's flood consultant with the Inland Rail flood model being calibrated against C</li></ul>	
10. Proponent's	The Chair thanked Mr Fallon for his presentation.  Duncan Mitchell, Matthew Errington, Akhter Hossain, and Louise Johnson presented the	
Report	proponent's report. (Copy of the presentation attached to the minutes).	
	10.1 N2N Project Update	
	<ul> <li>Duncan Mitchell stepped the Sub-committee through the Project Update highlighting the key project features. He noted that it will involve a massive earth works campaign</li> <li>Mr Mitchell briefly outlined the project history noting the Environmental Impact Statement (EIS) had been exhibited from late 2020 with work over the last 12</li> </ul>	



NO.	DISCUSSIONS		
	<ul> <li>months focussed on responding to the DPE's request for additional information and the preparation of the Preferred Infrastructure Report (PIR)</li> <li>Mr Mitchell advised that the procurement process is underway with a delivery partner engaged who Inland Rail are collaboratively working with to establish a tender price to achieve the best value for money.</li> <li>Mr Mitchell noted the Narrabri shop front is open.</li> <li>Mr Mitchell advised that in principal agreement with Forestry Corp on compensation payable to establish the corridor through the Pilliga Forest was completed and the land revocation is progressing through the NSW Government processes.</li> </ul>		
	10.2 Environment Impact Statement (EIS) Update		
	<ul> <li>Matt Errington provided an overview of the EIS document, exhibition process and the request by DPE for additional information.</li> <li>Mr Errington advised that 116 submissions had been made during the exhibition of the EIS. Of these 86 were community submissions with 27 of these coming from the Narrabri district, 15 submissions were from government agencies and 15 from other entities.</li> <li>Mr Errington advised that the key issues raised in the submissions related to hydrology and route selection.</li> <li>Mr Errington stated that subsequently, the DPE directed ARTC to provide a Preferred Infrastructure Report (PIR) which:         <ul> <li>Addresses the hydrology and flooding impacts of the Project</li> <li>Provides appropriate justification and information on the design of the Project and alternative rail alignments considered</li> <li>Provides design alternatives to demonstrate how residual flooding impacts can be reduced</li> <li>In response a Route Selection Summary Report has been prepared which distils the information on route selection and pulls together the information that was used in the process. The Report also</li> </ul> </li> </ul>		
	incorporates the considerations associated with flood impacts and other environmental matters.  • Mr Errington advised that an Amendment Report has been prepared outlining the following amendments:  • Crossing Loops  • Public Level Crossings  • Public Road Closures  • Public Road Realignments  • Temporary Workforce Accommodation		
	<ul> <li>Construction and Operation Footprints</li> <li>Mr Errington advised the number of level crossings had been reduced from 51 to 49, whilst the number of road closures has been reduced from 4 to 2 – one at Narromine and one at Barwon (Munns Road). He also advised that some of the seven crossing loops have been slightly relocated to provide a better local and environmental outcome. The Baradine accommodation camp is to be located at the old racecourse rather than the Baradine Showground. He also advised that mobile accommodation facilities will be established in some remote compounds servicing up to 30 people</li> <li>Mr Errington added that there will be some alterations to the construction and operational footprint, with the mapping updated. Also, some culverts have been updated and 200 culvert locations along the 306km alignment may require drainage control treatment in order to comply with the flow velocity limits agreed with DPE. This will require some additional land, but the extent of these areas is not confirmed and will be refined in detailed design. Other options exist such as including more culverts etc however this also has cost implications. An assessment of the most efficient and effective methods to manage flows and mitigate erosion at culverts will be examined individually.</li> </ul>		



NO.	DISCUSSIONS
NO.	Mr Errington advised that additional environmental assessments had been undertaken to address issues raised in the submissions. He advised that a hydrology Working Group had been established to examine issues raised by the independent hydrologist. The group meets monthly, and the information reviewed should be made publicly available.  Mr Errington provided an update on biodiversity assessments with a focus on firming up assumptions on threatened species, improving certainty on biodiversity impacts and consequential biodiversity offsets. He highlighted recent surveys undertaken in the Pilliga Forest and particularly a thermal drone survey of koala.  Mr Errington then outlined the next steps in the process together with documentation and information services that will be made available to the community.  In terms of the next steps, Mr Errington highlighted the following:  Documentation will be publicly available on DPE's Major Projects Portal  PIR/Amendment Report Summary to help community navigate the documents  Social PinPoint to make detailed flood mapping publicly available along the entire alignment  Upcoming community consultation and stakeholder engagement activities in April/May  Cr Denis Todd noted that Munns Road will be closed but enquired whether it is possible to still get to Coonamble. Mr Errington responded, yes.  Ms Neil enquired whether there would be an accommodation camp at Narrabri West. Mr Errington took the matter on notice.  ACTION  10.3 Hydrology Update  Akhtar Hossain provided an update on the flooding and hydrology assessment, noting that an updated report has been prepared to support the Preferred Infrastructure Report and the Amendment Report.  For the benefit of new members Mr Hossain provided an overview of the status of the flood modelling at Narrabri. He advised that flood data from Narrabri Shire Council has been provided to Inland Rail and this information is being reviewed.  Mr Hossain advised Inland Rail had developed a flood model based on the Australian activities aconfiden
	<ul> <li>Mr Hossain noted that the N2N Reference design proposes to construct a 3.9 kilometres viaduct, which has 30 piers, to cross the Namoi River and Narrabri Creek. The viaduct will not be inundated in the 1% AEP event and only sections will be flooded in the PMF. He advised similar work had been undertaken on the Bohena Creek with the hydraulic model calibrated against observed flood behaviour. This model was used to assess impact against the proposed alignment. Two bridges, one 1.3 kilometres long and the other 750 metres long</li> </ul>
	will be installed to cross Bohena Creek along with necessary culverts to minimise impact. He said the modelling had provided an understanding of the



NO.	DISCUSSIONS
	tull range of impacts. The final length of the bridges and number of piers will be determined in detailed design.  Since the initial model was prepared the modelling has been updated. The PIR outlines design changes following assessment against the Quantitative Design Limits (QDLS) established in consultation with the DPE. Also, adjustments to the flood modelling have taken account of community submissions to the EIS, the DPE and independent reviewer's comments.  Mr Hossain noted the establishment of the Hydrology Working Group advising that it has been meeting monthly over the last 12 months. The Group involves the DPE Independent Flood Reviewer, DPE technical officers, ARTC representatives and its consultant hydrologist. Dr Mark Jempson then explained his role as an independent hydrology consultant.  Cr Lamont asked what information the DPE hydrologist had noted in his visit to Narrabri and examination of the Narrabri flood data – he provided location scenarios such as impacts at Auscott, Mulgate Creek and in the Narrabri CBD. Mr Hossain, in reply, advised he had assessed the main stream flows and the flood impacts at Bohena Creek. He has noted the inconsistencies between the Council flood study and the Inland Rail flood data. There is a need for more work to establish a revised flood impact estimate regarding Bohena Creek.  Dr Jempson noted that the Bohena Creek flow estimates for the 1% AEP in the Inland Rail flood model are higher than those detailed in the Council flood study. He advised that the Council flood study did not become available until after the EIS had been exhibited. He advised that flow rates are higher than in the detailed Council study this has been confirmed in consultation with land owners. The design has been based on these higher flow rates and can therefore be considered conservative but the inconsistencies between the flood model and the Council data needs to be resolved. The work on this issue is ongoing.  David Scilley commented that when Spring Creek comes in during flood it acts



NO.	DISCUSSIONS
NO.	The Sub-committee noted that afflux on existing above floor flooding of habitable buildings, beyond the QDLs, ranges from 140 mm to 300 mm.  Mr Hossain noted that the Quantitative Design Limits (QDLs) are for events up to and including 1% AEP requiring the assessment of:  Flood level (afflux)  Velocity  Hazard  Duration  Mr Hossain noted that QDLs apply outside the project boundary. He also noted that the viaduct superstructure will be above the 1% AEP flood event with the majority being above the PMF.  Mr Hossain explained the 1% AEP and 0.2% AEP impact assessment modelling. He indicated that the design is compliant with QDLs except for buildings on Wee Waa Road that are already flooded where the afflux limit (10 mm Habitable building and 20 mm non-habitable buildings on Wee Waa Road that are already flooded where the afflux limit (10 mm Habitable buildings, beyond the QDLs, ranges from 140 mm to 300 mm.  Mr Mitchell explained that the overall impact on Narrabri as shown in the Impact Assessment map is with 0-10 mm in the 1% AEP event, whilst the impact is similar in the 0.2% AEP flood although there is an increase in afflux of 10-50 mm shown (yellow) near the alignment in the north-west of Narrabri.  In response to Ms Neil, Mr Hossain explained the Manhattan graph detailing afflux on habitable buildings. Mr Mitchell noted the buildings are near Auscott Ltd with the maximum increase in afflux in the 1% AEP event being 30 mm. Existing flood levels in that area were modelled to reach a maximum 981 mm without IR.  Mr Hossain outlined the assessment of the project's consistency with the Floodplain Management Plan for the Lower Namoi Valley Floodplain 2020. He indicated that in terms of flood mitigation the design is substantially compliant with the QDLs. Mr Hossain inglinglighted potential impacts on flooding from the viaduct abutments and indicated there is an option to extend the viaduct further north. This will be examined in the Detailed Design.  Ms Neil enquired as to the impacts on properties downstream an



NO.	DISCUSSIONS		
	In summary, Mr Hossain advised that:		
	<ul> <li>The meeting reconvened at 2.30 pm</li> <li>10.4 Engagement Update</li> <li>Louise Johnson provided an update on engagement and consultation.</li> <li>Ms Johnson advised that Patricio Munoz had left Inland Rail in September 2021. Erica Tudor had recently been appointed as his replacement. She also detailed the Engagement Team responsible for communication and engagement along the corridor.</li> <li>Ms Johnson outlined the various consultation and engagement processes over the past 12 months. In particular, the work associated with exhibition of the EIS and ensuring landowners had access to the document by mailing USBs to landowners.</li> <li>Ms Johnson advised that property acquisition was currently a primary action. A voluntary acquisition process was initiated by ARTC in April 2021 for landowners interested in discussing property acquisition. In December 2021, the process under the Land Acquisition (Just Terms Compensation) Act 1990 was initiated with correspondence from Transport for NSW distributed by ARTC.</li> <li>Ms Johnson provided an overview of the property acquisition process noting that the six-month negotiation period is a minimum and where negotiations are progressing satisfactorily some additional time will be considered to reach an agreement. She indicated that where ever possible landholders are being matched with Stakeholder Engagement Team members they know.</li> <li>Ms Johnson outlined the consultation undertaken with various government agencies and non-government bodies.</li> <li>Ms Johnson noted that considerable consultation had occurred with local government, community groups and business organisations to ensure they are aware with a view to making them Inland Rail ready. She said there was a major focus on regional benefit and regional connectivity. See provided examples of regional connectivity opportunities in the near future before Inland Rail is finished — Coonamble to Curban to Narromine to Parkes and then to southern Australia. Also, areas around Narrabri were now operatio</li></ul>		
	<ul> <li>Mrs Judd enquired whether land subjection acquisition has been assessed for native title. Ms Johnson confirmed that this has occurred, and discussions have been held with the Gomeroi People and other parties.</li> </ul>		



NO.	DISCUSSIONS	
	<ul> <li>Mrs Judd enquired as to whether any cultural artefacts have been received. Ms Johnson responded that she was not aware of any artefacts being taken into the possession during field surveys but would confirm this advice. ACTION</li> </ul>	
11. Other Agenda Items	Andrew Knop (Narromine)	
	1. Access across the alignment For private crossings, ARTC Inland Rail will consult with landowners to consider specific requirements such as farm operations and the movement of farm machinery or livestock. All crossings will be designed to comply with the relevant standards. In addition, ARTC Inland Rail will allow the use of drainage culverts and bridges as a stock underpass, where the dimensions of such structures are adequate. A "call train control process" will allow landowners to call ARTC's train control in advance and book a time window to cross the track with stock or oversized machinery. Trains will have priority, and a signed agreement will be required between the parties.  More information on level crossings can be found on ARTC Inland Rail's website at: <a href="https://inlandrail.artc.com.au/level-crossings-fact-sheet/">https://inlandrail.artc.com.au/level-crossings-fact-sheet/</a> .	
	2. Management of the alignment ARTC will be responsible for rail corridor maintenance activities once Inland Rail is operational.	
	3. Consistent application of noise/vibration mitigation eligibility The Environmental Impact Statement (EIS) assesses operational noise and vibration impacts in accordance with NSW Environment Protection Authority (EPA) guidelines:	
	<ul> <li>Rail Infrastructure Noise Guideline (RING)</li> <li>Assessing Vibration: A Technical Guideline</li> </ul>	
	The EIS identifies sensitive receivers that trigger consideration of reasonable and feasible noise mitigation. A range of mitigation measures that can reduce the noise and vibration levels to the relevant triggers are included in the EIS to demonstrate that the impact can be mitigated; however, mitigation measures are not assigned to specific receivers.	
	Post-approval, an Operational Noise and Vibration Review (ONVR) is prepared. This is a detailed operational noise and vibration assessment based on the final project design. Receivers identified as exceeding the relevant trigger levels are assigned reasonable and feasible mitigation measures to reduce noise/vibration to below the trigger levels in consultation with the applicable property owner. These are the mitigation measures that ARTC Inland Rail commits to implementing prior to operations commence.	
	This is the standard process for the application of noise mitigation for rail projects, and it is not unique to Inland Rail.	
	<b>4. Public and farm liability risk exposure</b> During the term of any occupation, ARTC will keep current a public risk insurance policy, and this will be documented in any license or lease agreements for transparency.	
	5. ARTC's management of the compulsory acquisition process, with ARTC frequently providing landholders significantly out of date notification of the commencement of their acquisition process.	
	ARTC Inland Rail is acting as a representative of Transport for NSW (TfNSW) for the formal acquisition process in accordance with the Land Acquisition [Just Terms Compensation] Act 1991 (Just Terms Act). The commencement of the formal acquisition process is subject to approval of the NSW Minister for Regional Transport and Roads. Once Ministerial approval is received, the formal acquisition process and the required	



#### NO. DISCUSSIONS

minimum 6-month negotiation period do not commence until an Opening Letter has been issued to the landowner.

Acknowledging that the formal acquisition process commencement did not align with earlier forecasts, ARTC Inland Rail commenced a voluntary acquisition process for those owners willing to begin discussions. The voluntary process was undertaken in accordance with the principles of the Just Terms Act, ensuring owners would not be disadvantaged through entering these early voluntary acquisition discussions. Voluntary owner negotiations commenced by ARTC Inland Rail will convert to the formal acquisition process upon issuing an Opening Letter. The time spent in voluntary negotiations is not counted as part of the minimum 6-month negotiation period as defined in the Just Terms Act.

#### 6. Consistent application of whole of property purchase criteria

The acquisition of properties is undertaken in line with the principles of the Just Terms Act, regardless of whether the acquisition involves a partial or whole property. This process ensures consistency in the treatment of all owners, along with the ability for an owner to obtain independent professional advice.

#### Jane Judd (Narrabri)

# 1. Did recent surveys detect any more Koalas on the proposed route of the Inland Rail?

The Biodiversity Development Assessment Report (BDAR), which formed Technical Report 1 for the Environmental Impact Statement (EIS), has been updated in consultation with the Department of Planning and Environment (DPE) Biodiversity, Conservation and Science Directorate (BCS). It addresses comments provided in BCS's submission during EIS public exhibition as well as ongoing discussions with BCS regarding the agreed approach to various matters raised.

In August 2021, thermal drone surveys were flown at night over the Pilliga forests to search for the presence of Koalas. Follow up day-time surveys were conducted to confirm initial findings from the drone surveys for Koalas. An independent certified expert, Dr Steve Phillips, was engaged to provide advice on the presence/ absence of Koalas.

Koalas were recorded at one new location via old scats (west of Gilgandra) and one new location via thermal drone imagery in the Pilliga forests (Baradine Creek). Areas of generational persistence were mapped in the Pilliga Forest and Bohena Creek area. For the remainder of the proposal site, there is a lack of generational persistence within areas of potential habitat. An expert report has been prepared to map areas of important habitat for the Koala and is included in the updated BDAR.

# 2. Is ARTC aware that two creek crossings within the Pilliga are at locations of historic importance to the Koala?

The biodiversity assessment has considered all existing known records, as detailed in the BDAR. The BDAR included details of the targeted surveys conducted throughout the Pilliga forests, including locations of historical importance to the Koala, such as Etoo Creek near the Aloes picnic area, Baradine Creek, Rocky Creek, Bohena Creek and various other creeks in the area (see page 50 of Technical Report 1 of the EIS). The expert report has also considered historical records and more recent survey findings.

#### 3. What population trend for the local Koala population is ARTC aware of?

The findings of the independent certified expert, Dr Steve Phillips, confirmed that recent decades have seen a significant decline in Koala occupancy rates across the Pilliga region, citing field survey results from independent researchers from a variety of sources. He concludes that over the preceding three Koala generations (i.e., 18-20



## **DISCUSSIONS** NO. years), there has been a reduction of as much as 79% in habitat use by Koalas. In 2019, survey results from 104 sites distributed across the southern half of the Pilliga and into the northern portions of the Gilgandra Shire failed to find any substantive evidence of recent habitat use by Koalas. While the reasons for these declines remain to be determined beyond speculation, they collectively include the effects of a prolonged period of drought and high summer temperatures, compounded by the cumulative impacts of high frequency and severe wildfire events. 4. Is there going to be any fencing along the side of the track. If so, what provisions will be made for wildlife? Stock fencing would be provided in agricultural areas to prevent stock from accessing the rail line. More information on fencing can be found on ARTC Inland Rail's website at: https://inlandrail.artc.com.au/managing-fencing/. Targeted fauna fencing would be provided in the Pilliga forests and elsewhere to direct fauna to crossing structures. A Preliminary Fauna Connectivity Strategy has been prepared in consultation with BCS and is included in the updated BDAR. The Strategy identifies fauna connectivity structures and measures to improve connectivity for fauna species following construction. Key features of the proposed design with relevance to fauna connectivity are: Inclusion of dedicated culverts to encourage the movement of terrestrial (and some arboreal) fauna species and reinstate connectivity. Culverts would include a variety of fauna furniture targeted to key species, and dry passage would be provided all the time. Indicative culvert locations have been identified in the Pilliga forests and Bohena Creek area. The size, number and locations would be confirmed during detailed design and documented in the Final Fauna Connectivity Strategy. Inclusion of canopy bridges, predominantly located in the Pilliga forests, and other riparian and woodland corridors intersected by the proposal. These are rope bridges strung between poles and tied into nearby trees to allow arboreal animals to cross above the rail corridor. Installation of barrier poles at selected bridges in the Pilliga forests to prevent aerial species flying along creek corridors from flying into the side of trains. Fencing specifically constructed to funnel fauna towards crossing structures but prevent access to the rail line. Lengths of fencing would be further investigated in the Final Fauna Connectivity Strategy to allow a balance between fenced and unfenced sections and the associated barrier effect of fencing and consider the risk of flooding and damage. In closing, a Final Fauna Connectivity Strategy will be prepared post-approval during the detailed design phase. 5. If not, what provisions will be made to prevent wildlife collisions? Please refer to the above response. 6. Has the flooding modelling been revised to the satisfaction of DPE? The updated Flooding and Hydrology Assessment Report (FHAR), which formed Technical Report 3 for the EIS, has been updated in consultation with DPE, considering comments provided in submissions and the independent review undertaken on behalf of DPE. To ensure we meet guidelines, criteria, and community expectations, ARTC Inland Rail undertakes a four-tiered peer review process of the flood modelling and assessment. The model and associated assessment report is prepared by JacobsGHD, an ISO9001certified global engineering consultancy, and is reviewed by a range of industry



### NO. **DISCUSSIONS** professionals (from within and external to ARTC Inland Rail). It is then provided to the DPE for review by their independent flood expert. In addition to these formal reviews, ARTC Inland Rail meets monthly with DPE as part of the N2N Hydrology Working Group to address community and regulator concerns and update our flood modelling and assessment work, where required. The updated FHAR addresses the Working Group outputs where key topics have been raised, discussed, and documented with the DPE. DPE is currently reviewing the updated FHAR to confirm it meets their expectations. 7. How will ARTC prevent major disruption to local flood patterns and water dependent ecosystems? The updated FHAR provides detailed assessment and mapping of flooding conditions, both existing and with the proposal. Flood events modelled range from the 20% annual exceedance probability (AEP) up to the Probable Maximum Flood. The design of the proposal includes about 75 new bridges and about 630 banks of culverts to provide for the management of flows within watercourses and within floodplains during flooding events. Overall, the key findings of the updated FHAR are that there are no broadscale changes to flood regimes within the study area. As such, flood flows to water-dependent ecosystems would be maintained, and no significant impacts are predicted. 8. Have there been any actual changes to the route given the concern expressed within the Narrabri community? ARTC Inland Rail is confident with the final route alignment between Narromine and Narrabri, and we are not considering an alternative route in Narrabri. The alignment has been refined over many years using an iterative, transparent multi-criteria analysis process to achieve the Inland Rail Service Offering with consideration of environmental and social impacts. Landholders, community, and stakeholders have been informed and engaged since 2015. The Preferred Infrastructure Report (PIR) and supporting Route Selection Summary Report respond to DPE's PIR request on route selection, which confirms there are no significant residual flooding impacts associated with the N2N proposal. 9. What will be the relationship just south of Narrabri between the Newell Highway upgrade works and the embankments required to raise the height of the rail line over the existing roads and floodplains? Will there be any conflict, and will it create more flood problems? The updated FHAR has been prepared in accordance with the requirements of DPE and relevant guidelines. The modelling has considered the presence of existing infrastructure such as the Newell Highway. Proposed upgrade works to the Newell Highway are still in the preliminary stages of planning; therefore, there is insufficient information available to include these works in any flood modelling for the proposal. ARTC Inland Rail will continue to consult with Transport for NSW during detailed design to minimise potential impacts. 12. General Business Flood Modelling - Cr Lamont questioned whether there had been adequate consultation with local residents regarding local flood information and data. Ms Johnson advised that a significant amount of information and data had been shared by locals with ARTC. When the project moved to the Focus Area of Investigation phase land owners shared considerable information, including photographs, gauge readings, historical high-water marks etc. Dr Jempson added that prior to finalisation of the EIS land owners were requested to validate the flood mapping (depth/velocity/duration) to ensure its accuracy against real world experiences. Ms Johnson also noted that all impacted land owners within the Focus Area of Investigation were supplied with flood mapping whether they wished to assist or declined to do so. Meeting Closed at 3.20 pm. The Chair thanked all for their attendance.



## **Actions**

NO.	ACTIONS	ACTION BY	DUE DATE
1	That ARTC present a report on the likely engineering design for the railway across the flood plain north of Narrabri at a future meeting of the Subcommittee.	KJG/PM COMPLETED	09/12/2020
2	That ARTC provide CCC members with a copy of the latest map of the overall Inland Rail alignment.	PM COMPLETED	07/03/2020
3	The Chair to refer Other Agenda Items questions regarding historical matters associated with the Inland Rail project to the Commonwealth Department of Infrastructure, Transport, Cities and Regional Development for comment.	MJS COMPLETED	25/09/2019
4	That ARTC provide a response to recent public suggestions that a property acquisition associated with the Inland Rail project has been completed prior to determination of the final corridor.	PM COMPLETED	25/09/2019
5	That ARTC provide an updated noise logger location map at the next meeting of the CCC.	ME COMPLETED	13/03/2020
6	That ARTC provide a report on the potential to establish borrow pits in the Pilliga Forest and their capability to be subsequently used for water storage for fire-fighting purposes.	TR COMPLETED	25/02/2020
7	That ARTC investigate potential blockages and maintenance required on a culvert was south of the Kamilaroi Highway overpass in the vicinity of Mulgate Creek.	RP COMPLETED	31/05/2020
8	That ARTC provide a report regarding how local content will be assessed and monitored in the construction contract at a future meeting of the CCC.	RP/DM COMPLETED	09/12/2020
9	That the Chair write to ARTC requesting extension of the Inland Rail Flood Model to incorporate the area south east of the Newell Highway Rail Overpass.	MJS COMPLETED	13/05/2020
10	That ARTC confirm the likely speed of the train at the proposed passive rail crossing adjacent to the Narrabri Water Treatment Plant.	TR	31/03/2020
11	That ARTC, subject to tender protocols, provide noise mitigation budget costings	DM COMPLETED	09/12/2020
12	That ARTC provide details of the property acquisition budget for the N2N project.	DM COMPLETED	09/12/2020
13	That ARTC arrange for its N2N engagement team to meet with Narrabri Shire Council to discuss the future of accommodation camp sites after completion of construction.	DM COMPLETED	09/12/2020
14	That ARTC confirm the extent of increased flooding impact on properties adjacent to where the Inland Rail bridge crosses the Kamilaroi Highway at Narrabri.	PM/RH COMPLETED	09/12/2020
15	That ARTC confirm as to whether data from the 2016 Narrabri Flood Study or the 2019 Narrabri Flood Study has been used for the hydrology modelling at Narrabri as well as providing comment on the variance between the two Study results.	RH COMPLETED	19/01/2021
16.	That ARTC confirm whether a construction camp will be established at Narrabri West	ME	31/05/2022
17.	That ARTC confirm whether liaison has occurred with the Kamilaroi Traditional owners and other Aboriginal groups	LJ	31/05/2022



NO.	ACTIONS	ACTION BY	DUE DATE
18.	That ARTC confirm whether any cultural artefacts have been taken into possession during field surveys or at other times.	LJ	31/05/2020

## **Next Meeting**

The Chair advised that the next meeting would be dependent on whether the DPE decided to exhibit the additional information provided by the Proponent. Mr Silver indicated he would keep the Sub-committee informed of any developments.

Meeting minutes approved.

Michael J. Silver OAM Independent Chair

30 April 2022