



28 January 2020

SF2016/011767; WST16/00028/07

The Manager  
Transport Assessments  
Department of Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

**Attention: Mr Mick Fallon**

Dear Mr Fallon

**SSI16\_7474; Inland Rail (Narrabri to North Star) Project; Amendment Report**

Thank you for your email on 10 December 2019 forwarding an amendment report in relation to SSI16\_7474 to Transport for NSW (TfNSW) for comment. Please note as at 1 December 2019, the legislation, including functions and responsibilities of Roads and Maritime Services and (TfNSW) are now being performed by the integrated TfNSW organisation. All future references to Roads and Maritime will now be referred to as TfNSW.

TfNSW has reviewed the submitted documentation and our comments are provided in the attached "Annexure A". There are a number of aspects of the proposal that either have not addressed TfNSW's previous submission, or, are inconsistent with discussions held between ARTC and TfNSW over the last two years. In this regard, TfNSW requests that the proponent provide additional information addressing the matters raised in Annexure A.

Please confirm with TfNSW that the application will not be determined until such a time as TfNSW has had an opportunity to comprehensively assess the application following provision of information addressing the matters provided in Appendix A. Should you require further information in relation to this matter, please contact Andrew McIntyre, Inland Rail Co-ordinator on 02 6861 1453.

Yours faithfully

Peter Stitt  
Acting Regional Director  
Western Region

**Transport for NSW**

# ANNEXURE A

## 1 INTRODUCTION

### 1.4 Key features of the proposal, p1-02

#### **Comment**

The applicant advises approval is only being sought to operate 1,800 metre trains, however, components of the inland rail proposal will be designed and built to accommodate future 3,600 metres trains that will require a separate approval process.

#### **Issue**

The proposal is being designed for longer trains, however, it is not clear what the approval process is, if any, to allow longer trains to operate on inland rail. Small incremental changes in train length could have significant impacts on road traffic.

#### **TfNSW position**

It is requested that the approval process stated in section 1.4.1 be explained and the thresholds of incremental changes not needing consent/approval be clarified.

## 2 OVERVIEW OF THE EXHIBITED PROPOSAL

### 2.1.2 Key features of the proposal, p2-01

#### **Bellata, Gurley and Moree Railway Stations**

#### **Comment**

The key features of the proposal include realigning the track at railway stations along the alignment to conform with required platform clearances for Inland Rail trains. TfNSW notes that the track will need to be realigned to fit the largest F-plate locomotive / rolling stock, which is wider than other freight and passenger trains.

#### **Issue**

Realigning the tracks adjacent to railway stations to provide the required wider clearances would cause safety issues for the public accessing passenger trains and workers (drivers, cleaners etc) accessing both passenger and smaller freight trains. The larger gap between platform and trains would be a hazard with the potential for injury to customers and/or workers.

#### **TfNSW Position**

No customer or workplace health and safety hazards are to be introduced as a result of the proposed works. Details of appropriate design/actions to ensure the gap between platform and trains is minimised to enable customers and workers to board trains safely. This could include a separate through track for F-plate locomotives and /or restrictions on boarding from certain platforms only.

## **2.2 Need for Inland Rail and the exhibited proposal, p2-04**

### **Jones Avenue Bridge**

#### **Comment**

It is identified that Inland Rail will connect key production areas (s2.2.1) and that the exhibited proposal will facilitate safe access for vehicles across the rail corridor in Moree via the proposed Jones Avenue road overbridge (s2.2.2).

#### **Issue**

TfNSW acknowledge the need for a safe, grade separated crossing of the rail corridor at Moree. However, TfNSW is of the opinion that a crossing at Jones Avenue would present both safety and security issues due to its location within the township and close proximity to existing natural walking paths utilised by the local community. These concerns have also been expressed by other stakeholders including Moree Plains Shire Council and Moree Local Aboriginal Land Council. Furthermore, the proposed Jones Avenue road overbridge would not adequately address severance issues, particularly in relation to heavy vehicles.

TfNSW and Moree Plains Shire Council have made previous representations to ARTC and the Department of Planning, Industry and Environment in relation to the potential for relocating the proposed road overbridge to the south of Moree to realise the opportunity to create a true intermodal hub and connect Inland Rail to the Moree Special Activation Precinct (SAP), which will be one of three major inland freight ports utilising Inland Rail.

The provision of a grade separated crossing of the rail corridor in the location of the Moree SAP would fulfil the objective of connecting key production areas and ensure that rail and road freight are appropriately integrated, increasing freight efficiency and reducing supply chain costs.

#### **TfNSW Position**

TfNSW acknowledge that ARTC has committed to further engagement with TfNSW and Moree Plains Shire Council regarding the potential for revising crossings of the railway line in Moree (s7.8.10 and mitigation measure ID No. D2.4). Nonetheless, it is noted that the proposed road overbridge at Jones Avenue remains part of the preferred infrastructure.

TfNSW request that the proposed Jones Avenue overbridge is deferred to account for the SAP master planning development process and that the provision of a road overbridge in Moree is either developed in Separable Portion 2 of the Narrabri to North Star Project, or, the infrastructure approval includes conditions requiring the relocation of the overbridge to the alternate location in consultation with, and approval from, TfNSW and Moree Plains Shire Council.

### **3 ENVIRONMENTAL IMPACT STATEMENT CLARIFICATIONS**

#### **3.2.1 Freight train movements, p3-01**

##### **Freight Train Suspension between Moree and Narrabri during Construction**

###### **Comment**

Section 3.2.1 discusses the suspension of freight train movements during construction and concludes the expected additional trucks on the Newell Highway will not detrimentally impact the Level of Service of the road.

###### **Issue**

The SPIR must fully consider the impacts of, and demonstrate how such impacts will be mitigated, from additional truck movements, from both freight diverted off the rail network and construction traffic on the surrounding road network, including the potential for damage to the road infrastructure. There is to be no lasting impact/s to the Newell Highway and other classified roads as a result of the construction works and the change of freight movements from rail to road.

###### **TfNSW Position**

TfNSW requests that a rail possession strategy and construction traffic management plan be prepared in consultation with TfNSW and Narrabri Shire, Gwydir Shire and Moree Plains Shire Councils to minimise transfer of rail freight impacts to the road network and construction traffic impacts on the road network.

TfNSW request that any infrastructure approval include conditions of approval requiring appropriate road condition surveys/reports to be undertaken and any damage to roads as a result of the proposal to be rectified.

A copy of road condition reports is to be provided to the relevant road authorities (including TfNSW and local councils) for review.

#### **3.5 Hydrology and Flooding**

###### **Comment**

The SPIR states that 'the proposal site is already used for rail infrastructure, and culverts and bridge would be generally upgraded in their existing location'.

###### **Issue**

TfNSW is designing a suite of upgrades on the Newell Highway between Narrabri and Moree to improve the road surface and the highway's flood immunity. There are locations where the road and rail infrastructure act as a barrier to floodwaters causing flood impacts on nearby buildings. Edgeroi is an example where residences and a commercial building flood occasionally due to water being backed up by road and rail. TfNSW is seeking to resolve these flooding issues, however, as the road and rail infrastructure are in close proximity, it is only possible to resolve if both rail and road infrastructure are upgraded to accommodate floodwaters (ie not replaced with same culverts and storm water infrastructure that is incapable of managing stormwater without causing flooding impacts of nearby properties)

### **TfNSW position**

Given the proposal will involve raising the rail and thereby increasing the barrier for floodwaters, TfNSW requests that storm and floodwater measures proposed as part of inland rail be designed to match the drainage infrastructure proposed on the Newell Highway adjacent to inland rail.

## **3.6 Potential for Impacts on Moree Station, p3-04**

### **Moree Railway Station**

#### **Comment**

The SPIR confirms the need for platform works at Moree Railway Station, however, the design of the required works will be subject to further refinement during the detailed design process (in consultation with key stakeholders, including TfNSW) and a subsequent Statement of Heritage Impact.

#### **Issue**

In addition to heritage impacts, any modifications to Moree Railway Station also need to consider public and workplace health and safety issues associated with track and/or platform realignment.

#### **TfNSW Position**

TfNSW require the design of any modifications to Moree Railway Station to preserve the heritage significance of the Station and comply with relevant requirements in relation to the safety of the public and workers.

TfNSW request that any infrastructure approval include conditions of approval requiring the design of any modifications to Moree Railway Station and associated Statement of Heritage Impact to be submitted to TfNSW for review and endorsement.

## **7 RESPONSE TO GOVERNMENT AGENCY SUBMISSIONS**

### **7.1 Overview**

#### **Comment**

The SPIR states 'No submission on the exhibited proposal were received from Roads and Maritime'

#### **Issue**

TfNSW and Roads and Maritime provided a joint submission on 20 December 2017.

#### **TfNSW Position**

Please note a submission on the exhibited proposal was made by the former Roads and Maritime Services.

### **7.6.2 Preferred infrastructure features and design, p7-17**

#### **Level Crossings**

#### **Comment**

It is noted that ARTC has committed for each level crossing design to address potential short stacking between the rail corridor and adjacent roads.

**Issue**

There is no mention of taking into consideration track realignment where there are identified short stacking issues. In areas with short stacking issues, the railway track should be realigned to take into consideration 36.5 metre long trucks turning off/on to the Newell Highway and other classified roads.

Damage is caused to rail infrastructure and long vehicles, particularly agricultural vehicles including trailers (in excess of 40 m in length), where the approach and departure grades to the road rail interface are too steep.

**TfNSW Position**

That no short stacking issues remain or are created as a result of the proposed works. TfNSW request that any infrastructure approval includes conditions of approval requiring consultation with TfNSW during detailed design with regards to level crossings and track realignment, and submission of crossing and track designs for review and endorsement by TfNSW.

TfNSW also requests that ARTC's review of the level crossings includes the approach and departure grades for long vehicles and trailers in excess of 40 metres and that they are able to traverse the railway track without damaging rail infrastructure. The level crossing assessment criteria must also include a review and assessment for approach and departure grades for vehicles and trailers (minimum 40 metres in length).

**7.6.3 Traffic, transport and access p7-17****Design of Rail****Comment**

The applicant does not appear to have confirmed the setback of the Waterloo Crossing Loop from the Newell Highway.

**Issue**

The setback of the rail from the Newell Highway is required to understand the impacts of the new loop on the Newell Highway.

**TfNSW Position**

The applicant is to provide the requested setback of the Waterloo Crossing Loop from the Newell Highway.

**7.8.5 Traffic, transport and access, p7-22****Road Rail Connectivity****Comment**

Moree Plains Shire Council identified a severance issue for the east-west movement of regional high productivity vehicles and a subsequent need for a grade separated crossing south of Moree to facilitate high productivity vehicle access, in line with the transport study funded under the Murray-Darling Regional Economic Diversification Program. Moree Plains Shire Council also identified a requirement to facilitate access to existing and proposed intermodals and industrial areas.

The response provided in the SPIR identified that localised impacts are expected as a result of increased delays at some intersections and level crossings and that a further grade separated crossing, in addition to the

proposed Jones Avenue overbridge, was out of scope. A commitment was included for ARTC to work with relevant stakeholders to identify opportunities to facilitate local access between Inland Rail, Moree Gateway, and other intermodal facilities, where feasible and reasonable.

**Issue**

The response does not sufficiently address the issues raised. Severance is both a safety and freight efficiency issue which will not be fully addressed with the proposed overpass at Jones Avenue and the identified localised delays.

**TfNSW Position**

Grade separated crossings and associated connectivity to Inland Rail are a high priority, particularly in Moree where there is an opportunity for road freight movements to connect to rail in the location of the Moree Special Activation Precinct in a safe, sustainable and efficient manner via a grade separated crossing.

**7.8.10 Socio- Economic Impacts, pg 7-28**

**Comment**

Moree Plains Shire Council in consultation with the Moree community, including the Moree Local Aboriginal Lands Council, has raised concerns that the proposed Jones Avenue Bridge will not provide practical pedestrian access between east and west Moree, across Inland Rail and the Newell Highway. Based on the evidence provided, TfNSW agrees with this position.

**Issue**

The SPIR does not adequately address nor provide safe and practical pedestrian access between east and west Moree.

**TfNSW Position**

Further work is required to address severance issues, including safe and practical pedestrian access between east and west Moree. TfNSW remains committed to work with ARTC to develop safe and practical opportunities for pedestrians to cross the Newell Highway and Inland Rail, where both corridors adjoin.

**9 PREFERRED INFRASTRUCTURE – OPERATIONAL FEATURES**

**9.1 Design features, p9-01 – 9-09**

**Connectivity to sidings and loading points**

**Comment**

The SPIR does not address the potential for the connection of rail sidings/grain silos and/or other loading points adjacent to the rail line to Inland Rail.

**Issue**

It is noted that there are a number of grain silos adjacent to the rail corridor between Moree and North Star. It is understood grain from these silos is currently transported via road to Moree or North Star for transfer to rail. There is an opportunity for these silos to connect to Inland Rail and benefit from the associated transport efficiencies, however, the visibility of the preferred infrastructure does not allow for this to be known.

### **TfNSW Position**

TfNSW request that ARTC undertake appropriate consultation with GrainCorp and other agricultural accumulation/marketing companies in relation to the identified silos and other infrastructure (both active and inactive) to ascertain the potential for future connection to Inland Rail and appropriately future proof the preferred infrastructure for any required connections. All required load points and/or sidings along the Inland Rail route should form part of the preferred infrastructure.

## **11 OPERATION ENVIRONMENTAL SCREENING AND ASSESSMENT**

### **11.2.3 Operational impact assessment summary of findings, p11-02 – 11-03**

#### **Infrastructure Flooding**

##### **Comment**

It is noted that the proposed flood management objectives for the preferred infrastructure allow for increases in flood levels and total flood duration on surrounding public roads and adjacent land, property and buildings.

##### **Issue**

Increases in flood levels and duration could cause damage to surrounding roads and associated infrastructure, land, buildings and property. This could result in additional costs associated with natural disasters such as flooding for the Federal and State Governments and property owners/occupiers without providing appropriate mitigation.

##### **TfNSW Position**

The detailed design process needs to aim for the preferred infrastructure to not increase flood levels on surrounding roads and private properties. A detailed Flood Impact Assessment is to be prepared during detailed design to confirm the potential impacts of the preferred infrastructure on flooding. The Flood Impact Assessment is to be prepared in consultation with TfNSW and the relevant local councils and a copy submitted to TfNSW and councils for review and endorsement.

## **13 REVISED MITIGATION MEASURES AND CONCLUSION**

### **13.1.2 Construction, p13-10**

#### **Emergency Vehicles Access**

##### **Comment**

Mitigation measure ID No. C2.3 in Table 13.2 states that "Access for emergency vehicles would be maintained along key emergency access routes throughout the construction period, with suitable alternative access arrangements provided where required."

##### **Issue**

Access along all routes should be maintained for emergency vehicles. Furthermore, the SPIR does not clarify what is considered a key emergency access route.

##### **TfNSW Position**

ARTC should endeavour to maintain access on all routes for emergency services to ensure required response times can be met. Where this is not feasible, all emergency services and the relevant local council needs to be



consulted with regards to any potential loss of access for emergency vehicles and any accesses likely to be unavailable.

### **Table 13.3 Updated mitigation measures – operation, p13-16**

#### **Vegetation Management within Rail Corridor**

##### **Comment**

In relation to the handling of dangerous goods during operation, it is identified that “Operation would be undertaken in accordance with ARTC’s standard operating procedures.” However, there are no details of appropriate hazard control, particularly in relation to fuel load reduction to mitigate against the risk of fire.

##### **Issue**

Fuel load build-up has been an issue in the past along the Inland Rail route and the issue has not been managed appropriately. Having a fuel source adjacent to the road has the potential to cause a hazard for motorists and surrounding communities.

##### **TfNSW Position**

Appropriate management of the fuel load in the railway corridor should be undertaken to reduce the risk of fire and relevant management measures included in the Operational Environmental Management Plan developed for this project.

## **APPENDIX B**

### **Section 2.6.1 Access to construction work areas**

##### **Comment**

Access to construction work areas is proposed from public roads.

##### **Issue**

No assessment appears to have been undertaken to identify where access to public roads will occur and whether these locations are safe.

##### **TfNSW Position**

Pursuant to clause 101 of *State Environmental Planning Policy (Infrastructure) 2007*, vehicular access to construction sites should, as far as practicable, be from local roads. All vehicular access to construction sites and all road intersections that form part of construction haulage routes are to be in accordance with *Austrroads Guide to Road Design*, including safe intersection sight distance.

### **Figures 1.9 and 1.10 Crossing Loops**

##### **Comment**

Murgo and Cooleearlee Crossing Loops are incorrectly labelled.

##### **Issue**

Crossing Loop maps do not relate to labels.

##### **TfNSW**

To be corrected.

## **APPENDIX L**

### **PUBLIC LEVEL CROSSING TREATMENT METHODOLOGY**

#### **Review whether the Level crossing meets the criteria for automatic grades separation, pL-01**

##### **Level Crossing Review Criteria**

###### **Comment**

ARTC's policy for automatic grade separation is triggered where rail interfaces with four or more lane freeways/highways, or, where four rail tracks exist at a road interface, or, for topographical reasons.

###### **Issue**

The thresholds of four or more lanes or four rail tracks are significant and rare in regional NSW.

###### **TfNSW Position**

More appropriate triggers for automatic grade separation is required where an existing level crossing exists. TfNSW suggests a more appropriate trigger would be roads on the National Land Transport Network or for topographical reasons.

#### **Level Crossing Risk Tool, pL-01 – L-02**

###### **Comment**

The methodology states that all other crossings that do not meet the thresholds identified in ARTC's policy will be assessed using a formalised Level Crossing Risk Tool that identifies risk treatments and assists ARTC in being able to demonstrate that risks to safety would be managed So Far As Is Reasonably Practicable (SFAIRP) for both brownfield and greenfield interfaces.

###### **Issue**

The methodology, including ALCAM, provides a sound basis in assessing the risks associated with level crossings, from a rail perspective. ARTC have shared, and TfNSW has reviewed and provided feedback on, the methodology and calculations associated with the Tool.

The methodology can be further developed to provide a sound comparable basis applicable to all scenarios. Further, it can be augmented to account for impacts to the road freight industry.

###### **TfNSW Position**

Level crossing collisions between trains and vehicles are a severe road safety risk. To minimise risks to the public, TfNSW has adopted two policy positions in relation to level crossings as follows:

1. Building new level crossings is to be avoided wherever possible and all other options, including grade separation and use of existing level crossings should be explored and documented before a new crossing is proposed.
2. Public and private level crossings should be closed wherever it is practical and cost effective to do so. Access can be managed by redirecting traffic via an alternate route or, dependant on the benefit, by grade separation.

TfNSW requires and welcomes a rigorous and consistent quantitative treatment methodology to address level crossings across the Inland Rail project. The methodology is to be improved in consultation with TfNSW and other stakeholders.

TfNSW supports the use of the Australian Level Crossing Assessment Model (ALCAM) database as a guiding principle to assess the level crossing risk and the closure review process, particularly as the significant road and rail investment by both State and Federal governments will see increased traffic volumes, altering the risk profile of these interfaces. TfNSW also supports and requires the use of the guideline *Railway Crossing Safety Series 2011, Plan: Establishing a Railway Crossing Safety Management Plan* (NSW Roads and Traffic Authority, 2011) and *Australian Standard 1742.7* to assess the road risks and determine appropriate control measures associated with level crossing treatments.

TfNSW request that ARTC prepare the Public Level Crossing Treatment Report for the preferred infrastructure in consultation with TfNSW and relevant local councils / road authorities and that the design of any level crossing on a public road be submitted to TfNSW and/or the relevant local council for review and endorsement.

End