

Transport Access Program

Byron Bay Interchange

Determination Report

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Glossary and abbreviations

Term	Meaning
ввса	The Bus Bay Capacity Assessment prepared by DCI & Associates Pty Ltd dated 8 April 2018, being Appendix H to the REF
ВВТСМ	The Byron Bay Town Centre Masterplan prepared by McGregor Coxall dated 20 July 2016
Bypass	The Byron Bay Bypass described in the <i>Byron Bay Bypass</i> Environmental Impact Statement dated January 2016
CEMP	Construction Environmental Management Plan
Contractor	The Contractor for the Proposed Activity appointed to undertake the Detailed Design and construction of the Proposed Activity
Council	Byron Shire Council
Detailed Design	Detailed design broadly refers to the process that the Contractor undertakes (should the Proposed Activity proceed) to refine the concept design to a design suitable for construction
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EP&A Regulation	Environmental Planning and Assessment Regulation 2000 (NSW)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
Heritage Act	Heritage Act 1977 (NSW)
MNES	Matters of National Environmental Significance under the EPBC Act
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in this instance, Sydney Trains
Proposal Area	The area in which the Proposed Activity is to be undertaken, as shown in Figure 1-1 of the REF
Proposed Activity	The construction and operation of the Byron Bay Interchange
REF	Review of Environmental Factors undertaken pursuant to Part 5 of the EP&A Act, in this case the "Review of Environmental Factors – Rural and Regional Interchange – Byron Bay Interchange" dated 17 May 2019
Section 60 Application	Application made pursuant to Section 60 of the Heritage Act
Section 60 Approval	Conditions of approval made pursuant to section 60 of the Heritage Act, at Annexure A of the REF
SoHI	Statement of Heritage Impact
SMEC	Snowy Mountains Engineering Corporation
TAP	Transport Access Program
TfNSW	Transport for New South Wales



Executive summary

Overview of Proposed Activity

Sydney Trains is proposing to construct a new interchange (the Proposed Activity) at Byron Bay. The Proposed Activity forms part of the Transport Access Program, a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure.

In summary, the Proposed Activity, as outlined in the Review of Environmental Factors (REF) and as outlined at Section 1.4 of this Determination Report includes:

- provision of three dedicated stops for regional coaches within the interchange;
- associated customer facilities such as covered canopies, shelters and waiting areas;
- provision of a disability car parking spot, "kiss and ride" bays and taxi bays;
- public amenities;
- accessible paths to key interchange elements; and
- landscaped areas within the interchange.

The majority of the Proposal Area is located on a parcel of land owned by the NSW Government (RailCorp). A small section of the western boundary of the Proposal Area is owned by Byron Shire Council (Council). The area in which the Proposed Activity is to be undertaken is shown in Figure 1-1 of the REF (Proposal Area).

The need for, and benefits of the Proposed Activity are further described in Chapter 2 of the REF.

The Proposed Activity would be constructed at a location along Butler Street, adjacent to the rail corridor. The Proposal Area currently contains a locally listed heritage item, the *Former railway water tower* (I1064), which is covered by dense regrowth vegetation. The Proposal Area is also within the curtilage of the *Byron Bay Railway Station and Yard Group*, being an area listed on the State Heritage Register (Item #01107). A Statement of Heritage Impact prepared for the Proposed Activity concluded the proposed works would not have any substantive adverse impact on the heritage significance of the *Byron Bay Railway Station and Yard Group*.

An operational noise assessment was prepared based on the predicted operational noise of the Proposed Activity. Operational noise levels associated with the Proposed Activity in isolation were found to result in minor exceedances of the Noise Policy for Industry noise criteria by up to 2 dB at the nearest receivers along Butler Street. During average traffic conditions, noise levels are predicted to comply with all criteria at all affected sensitive receivers.

The Proposed Activity would involve the removal of some vegetation at the Proposal Area. This would involve the removal of 0.46 ha of native vegetation, including 0.22 ha of an endangered ecological community listed under the *Biodiversity Conservation Act 2016* (NSW). The biodiversity assessment concluded that the Proposed Activity is not likely to have a significant impact on the endangered ecological community or threatened species. Mitigation measures have been provided to minimise potential impacts on threatened vegetation and species.



Overall, the environmental assessment concluded that the Proposed Activity would have minor impacts provided that key control measures are implemented.

Subject to approval, construction is expected to commence in 2020 and take approximately 14 months to complete.

Sydney Trains, as the Proponent and determining authority for the Proposed Activity, has undertaken a REF that details the scope of works and environmental impacts associated with the Proposed Activity. The REF was prepared by SMEC on behalf of Sydney Trains in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

Consultation

Consultation for the Byron Bay Interchange project was carried out through a two-stage engagement program. This program distinguished an initial stage of preparatory activities from a following stage encompassing the implementation of the exhibition and submission period including face-to-face engagement.

A total of 32 submissions were received as a result of the engagement activities during the REF exhibition period. Key themes raised during the exhibition of the REF were:

- non-Aboriginal heritage
- design and location of the interchange
- traffic and transport
- biodiversity
- noise and vibration
- air quality.

Changes to the Proposed Activity

Ongoing consultation with the community and external stakeholders as well as ongoing design development have resulted in a series of changes to the Proposed Activity as described in the REF including:

- amendment to the proposed landscape design
- minor changes to the architectural set and finishes on one retaining wall.

The impacts associated with the Proposed Activity and design modifications have been considered in accordance with relevant legislative and other requirements, including clause 228 of the EP&A Regulation. The changes to the Proposed Activity as described in the REF are discussed in Section 3 of this Determination Report.



Purpose of this report

The purpose of this Determination Report is for Sydney Trains, as the Proponent and Determining Authority, to determine whether or not to proceed with the Proposed Activity as described in the REF and amended by this Determination Report. The REF and Determination Report have been prepared in accordance with Sections 5.5 and 5.7 of the EP&A Act and clause 228 of the EP&A Regulation.

This report also presents a summary of the submissions provided during the public exhibition of the REF, Sydney Trains' response to the issues and comments raised in these submissions and changes made to the Proposed Activity as described in the REF as a result of the submissions received during the public exhibition of the Proposed Activity.

Conclusion

Based on the assessments in the REF and this Determination Report, and a review of the submissions received from the community and other stakeholders, it is recommended that the Proposed Activity be approved, subject to the mitigation measures included in the REF and the proposed Conditions of Approval. Sydney Trains will continue to liaise with the community and other stakeholders as the Proposed Activity progresses through Detailed Design and into the construction phase.



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1. Introduction

1.1. Background

The NSW Government is committed to facilitating and encouraging the use of public transport and improving interchanges around stations with other modes of transport such as buses, bicycles and cars. The Transport Access Program (TAP) is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.

The Byron Bay Interchange (the Proposed Activity) is being delivered as part of the TAP. The Proposed Activity would help to fulfil the objectives of the TAP, which include:

- stations and other modes of transport such as interchanges that are accessible to people with a disability, those who are less mobile, parents/carers with prams and customers with luggage
- modern buildings and facilities for all modes that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers between all modes for all customers
- safety improvements including extra lighting, help points, fences and security measures for car parks and interchanges, including stations, bus stops and wharves
- signage improvements so customers can more easily use public transport and transfer between modes at interchanges
- other improvements and maintenance such as painting, new fencing and roof replacements.

An application pursuant to Section 60 of the *Heritage Act 1977* (NSW) (Heritage Act) (Section 60 Application) was submitted to the NSW Office of Environment and Heritage (OEH) in November 2018 to seek approval for the proposed design and works of the Proposed Activity. In January 2019, the Section 60 Application went on public exhibition for four weeks with consultation being led by OEH.

OEH received 14 submissions from the community and stakeholders that discussed issues relating to the heritage significance, opportunities for consultation, and impact of the Proposed Activity. The Section 60 Application was approved by OEH in April 2019 with a number of conditions (Section 60 Approval) as attached in Appendix A of the REF.

Due to the community interest in the Proposed Activity during the OEH exhibition period, a second round of community engagement and consultation was undertaken during the exhibition period of the REF from 23rd May 2019 to 6th June 2019. The Review of Environmental Factors (REF) was updated with consideration for the Section 60 Approval Conditions and the submissions received from the community earlier in the year.

1.2. Review of Environmental Factors

A REF was commissioned for the Proposed Activity, which detailed the scope of work and environmental impact associated with the Proposed Activity (Appendix 1). The REF was prepared by SMEC on behalf of Sydney Trains in accordance with Section 5.5 and Section



5.7 of the *Environmental Planning and Assessment 1979* (EP&A Act) and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) to ensure that Sydney Trains takes into account, to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposed Activity. The REF is included at Appendix 1 of this Determination Report.

The REF was placed on public exhibition from 23 May 2019 to 6 June 2019, with 32 submissions received. Issues raised in these submissions are addressed in Section 2 of this Determination Report.

A notification letter outlining the scope of the Proposed Activity was also sent to Council on 29 October 2018 in accordance with the consultation requirements under clauses 13 and 14 of the *State Environmental Planning Policy (Infrastructure) 2007* (NSW), providing 21 days to provide comment. Further consultation with Council is outlined in Section 2.3 of this Determination Report.

1.3. Determination report

Sydney Trains is the proponent and determining authority for the Proposed Activity. Prior to proceeding with the Proposed Activity, Sydney Trains must make a determination in accordance with the provisions of Part 5 of the EP&A Act and clause 228 of the EP&A Regulation.

The purpose of this Determination Report is to address the following to allow for a determination of the Proposed Activity:

- present a summary of the submissions received during the public exhibition of the REF and response to the issues and comments raised in these submissions
- consider the environmental impacts with respect to the Proposed Activity, which are assessed in the REF (and any proposed modifications as detailed and assessed in this Determination Report)
- identify mitigation measures to minimise potential environmental impacts
- determine whether potential environmental impacts are likely to be significant
- address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposed Activity.

This Determination Report has been prepared having regard to, among other things, the objectives of Sydney Trains under the *Transport Administration Act 1988* (NSW) as follows:

- a. to deliver safe and reliable railway passenger services in an efficient, effective and financially responsible manner
- b. to be a successful business and, to that end:
 - I. to operate at least as efficiently as any comparable business, and
 - II. to maximise the net worth of the State's investment in Sydney Trains
- c. exhibit a sense of social responsibility by having regard to the interests of the community in which it operates



- d. where its activities affect the environment, to conduct its operations in compliance with the principles of ecologically sustainable development contained in Section 6(2) of the *Protection of the Environment Administration Act 1991* (NSW)
- e. to exhibit a sense of responsibility towards regional development and decentralisation in the way in which it operates.

1.4. Description of the Proposed Activity in the REF

An overview of the Proposed Activity, which is the subject of the REF, is provided in the Executive Summary with full details set out in Section 2 of the REF (Appendix 1 of this Determination Report).

In summary, the Proposed Activity as outlined in the REF comprises:

- provision of three dedicated stops for local and regional services within the interchange
- provision of one shuttle bus bay/mini van drop off and pickup area
- associated customer facilities such as covered canopies, shelters and waiting areas
- provision of a disability car parking spot, "kiss and ride" bays and taxi bays
- public amenities
- · accessible paths to key interchange elements
- landscaped areas within the interchange.

As outlined in Section 2.2 of the REF, details of the Proposed Activity are provided in Table 1-1.

Table 1-1 Proposed Activity

Activity	Detail
Bus Interchange	 construction of interchange install tactile ground surface indicators at boarding points
	 crossings to be designed in accordance with Australian Standards
	 provide allocated seating space for wheelchair users
	 provide accessible passenger information, signage and wayfinding for bus service customers
	 provide a shared kiss and ride / taxi zone
	 build new amenities and associated lay-over buildings
	 construct accessible paving for access to carpark, bus shelters and buildings
	 install drainage at the Proposal Area.
Refurbishment of the heritage water tower	 remove intrusive vegetation, repair brickwork / reset loose bricks / repoint brickwork as required / re- render copings



Activity	Detail
	 heli-bar stitching required for cracking through wall in two locations preservation of steel tank remove graffiti / remove rubbish from tower exterior and interior remove trees and loose rust and mud from interior of tank seal window and door openings with new wire frames, securely fixed to prevent removal and to exclude entry
	 remove loose (40 mm) 2-inch galvanised pipe and other loose sheet metal stabilise exterior (80 mm) 4-inch cast iron pipe near top of tank.
Security, electrical and CCTV	 installation of CCTV, lighting and signage provide electrical switchboards to comply with current standards provide emergency lighting, exit and directional signage as required
Landscaping	 removal of existing vegetation to construct the interchange replanting and landscaping where designated.

The need and objectives of the Proposed Activity are outlined in Section 2.1 of the REF, and justification of the Proposed Activity is outlined in Section 2.10 of the REF.

Subject to approval, construction is expected to commence in 2020 and take approximately 14 months to complete.

2. Consultation and assessment of submissions

2.1. Consultation for the Proposed Activity

Consultation for the Proposed Activity was carried out through a two-stage engagement program. This program distinguished an initial stage of preparatory activities from a following stage encompassing the implementation of the exhibition and submission period including face-to-face engagement.

The REF was placed on public exhibition from 23 May 2019 to 6 June 2019 at three locations as well as being placed on the TfNSW website¹ and the NSW Government "Have Your Say" website². Community consultation activities undertaken during this period included:

¹ https://www.transport.nsw.gov.au/projects

² http://www.haveyoursay.nsw.gov.au



- community information sessions on 30 May 2019, 1 June 2019 and 2 June 2019 at the Byron Bay Farmers Market, Byron Bay Community Centre and Byron Bay Community Market
- distribution of 1,400 brochures to nearby residents and/or businesses
- installation of project signage at the Proposal Area on Butler Street
- static public display at Byron Bay Library, Council office and TfNSW administrative office in Chatswood, NSW
- placement of advertisements in the Northern Star, Byron Shire News and the Echo local newspapers
- door knocking local businesses and residents either directly next to or in close proximity to the Proposal Area
- arrangement of a briefing to Council councillors and officers
- placement of information on the TfNSW website
- a briefing with Bundjalung of Byron Bay Aboriginal Corporation (Arakwal) on Saturday
 1 June 2019
- a briefing with Council Project Office, Station Building, Byron Bay on Thursday 30 May 2019.

2.2. Consideration and response to submissions

A total of 32 submissions were received as a result of the engagement activities for the Proposed Activity. Key themes raised during the exhibition of the REF were:

- non-Aboriginal heritage
- design and location of the interchange
- traffic and transport
- biodiversity
- noise and vibration
- air quality.

A summary of all issues raised in the submissions and the associated responses is provided in Table 2-1 below. A formal submissions report has not been prepared for the Proposed Activity.

Table 2-1 Response to submissions received

No.	Stakeholder ID number	Issues raised	Sydney Trains' response
1	General sup	port for the Proposed	Activity
1.1	BB03, BB05, BB22, BB24, BB26	Five submissions expressed support for the Proposed Activity based on varying reasons relating to the	Feedback on the Byron Bay Interchange is appreciated. We have taken note of your feedback on the project and thank you for your support.



No.	Stakoholdor	Issues raised	Sydney Trains' response
NO.	Stakeholder ID number	Issues raiseu	Sydney Trains' response
		Proposed Activity's location, objective to reduce congestion in the town centre, inclusion and treatment of heritage within the design, and revitalisation of the area	
2	General obje	ection to the Proposed	Activity
2.1	BB02, BB09, BB16, BB17, BB18, BB28, BB31	Seven submissions expressed opposition to the Proposed Activity based on varying reasons including the location, treatment of heritage and vegetation, noise and vibration impacts, light impacts, and the design	Sydney Trains acknowledges the general concern regarding the Proposed Activity. The development of the proposed Byron Bay interchange has been informed by the Bus Bay Capacity Assessment (BBCA) and REF. Improvements need to be made to the current bus interchange amenities to alleviate traffic within the town centre. Sydney Trains considered various sites and arrangements during the concept phase. The community raised several concerns about the Proposed Activity during the exhibition of the REF. For more information regarding the Byron Bay Interchange please visit TfNSW's website for more details. Further details can also be found to address heritage, noise & amenity within this table (Table 2-1). As a result of community feedback, further refinements have been incorporated into the proposed interchange design. An outline of these refinements are outlined in Section 3 of this Determination Report.
2.2	BB04, BB12, BB17, BB27, BB28	Five submissions expressed concern that the health of residents living near the interchange would be impacted due to exhaust fumes coming from vehicles travelling through the interchange	The proposed design of the interchange is an outdoor facility with no enclosed bus bays. The interchange has been designed to minimise emissions at the facility, and vehicle emissions would dissipate as per the current Jonson Street bus stop. In addition, the number of vehicles frequenting the interchange would be aligned with those currently in operation in the Byron Bay town centre. There would not be a large increase in the number of vehicles in the area, especially once the bypass is in operation and the ambient air environment would not be adversely affected by the relocation of services from Jonson Street (130m east of the proposed interchange location) to the proposed Interchange.



No.	Stakohaldar	Issues raised	Sydney Traine? recononce
NO.	Stakeholder ID number	issues raised	Sydney Trains' response
			The BBCA presented in the REF has been revised to assess current and future use of the facility to capture the SkyBus service which was introduced in mid-2018. The assessment found that the number of bays would support both the current and future bus timetables of bus and van services. As outlined in the BBCA, the average dwell time of heavy vehicles at the facility would be restricted, which minimises prolonged generation of engine fumes. Bus and vans terminating at Byron Bay will not layover at the facility but return to depot or another location, through strict operational management. This will limit the opportunity for sustained exhaust generation.
			In addition to the project-specific mitigation measures outlined in Section 7.1 the REF, given the prevailing wind conditions at Byron Bay, it is anticipated that air quality at the interchange would not be adversely impacted by operational activities. These wind conditions were taken into account when designing the open plan interchange, which has been developed with an understanding of the local environment and sensitivity to the environmental constraints of the area. The interchange design has implemented opportunities to minimise adverse impacts to the existing environment through TfNSW's principles of ecologically sustainable development.
2.3	BB21, BB22, BB29	Three submissions requested that the rail corridor be preserved for potential use in the future	The rail corridor is considered an "active corridor", and no permanent construction can occur within it including near the railway station infrastructure. Thus, the design of the interchange leaves adequate room (approximately 10m) between the current station platform and the interchange to allow for potential use of the rail corridor in the future. Possible uses include a rail trail that would be implemented by Council.
3	Proposed A	ctivity Design	
3.1	BB09	The design does not have capacity to accommodate private motor vehicle use	The capacity of the facility is constrained by the TAP 2 project objectives, as well as the spatial extent of the land parcel of the proposed interchange footprint. The objectives of TAP 2 can be found here: https://www.audit.nsw.gov.au/our-work/reports/transport-access-program . In accordance with TAP 2 objectives, the
			In accordance with TAP 2 objectives, the proposed interchange has been developed to support local services, and is not a commuter



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			interchange. The proposed design allows for kiss and ride bays, taxi bays and disabled parking facilities. As outlined in Section 5.9 of the REF, public parking is available at the Butler Street Reserve. In addition, parking facilities are planned to be formalised and constructed directly east of the proposed interchange between the Railway Hotel and Jonson Street. Public parking design has been developed separately to the interchange. Local capacity is managed through the Council and it outside the scope of the REF or this Determination Report.
3.2	BB06, BB09	Two submissions questioned the capacity of the design to accommodate current bus, coach and shuttle movements.	Sydney Trains has been consulting closely with local bus/van operators including Blanch's, Premier Motor Service and Northern Rivers Buslines to identify potential impacts and determine ideal schedule times and operations. These operators are TfNSW engaged contractors. Sydney Trains will continue to engage with these local services and others to ensure the interchange can adequately accommodate their operations.
			The BBCA presented in the REF has been refined to capture additional new services, such as the SkyBus service. The details of this updated report and assessment can be found in Section 3 of this Determination Report. The refined report also assessed the proposed interchange design against current and future use for all private coaches, buses and vans. The revised BBCA has found that bus and van services can operate safely and sufficiently at the proposed interchange, based on design configuration. Furthermore, the provision of three bus bays will provide for current bus operations as well as future proof the facility to support additional services that could be implemented as a result of development and growth in service demand. An additional fourth bay will also accommodate ad-hoc shuttle bus movements and unscheduled services.
			During festivals and seasonal peaks when there is an increase in bus and coach services in Byron Bay, it is anticipated that the Butler Street Reserve could be potentially used as a temporary waiting area where necessary. The dedicated taxi bay can also be used for rideshare services, such as Uber.
3.3	BB09, BB10	Two submissions questioned the long-term capacity of the design to	The refined BBCA has determined that the provision of three bus bays will provide for current bus operations as well as future proof the facility to support additional services that



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		accommodate potential future growth.	could be implemented as a result of development and growth in service demand. Future expansion to the north could be potentially arranged but would require large interchange entry modifications. The details and assessment of the updated BBCA are presented in Section 3 of this Determination Report.
3.4	BB07, BB22	The project needs to have an adequate drainage system.	The drainage design of the proposed interchange has been developed with an appreciation of the catchment of the area, local and regional topography and existing drainage lines. Drainage infrastructure is also developed using quantitative and validated modelling. The proposed drainage structures of the interchange form part of a self-managed system that does not discharge stormwater onto Butler Street. Water quality would also be ensured through the self-managed system in accordance with the operator's requirements.
3.5	BB30	One submission expressed that the interchange design is too open plan and does not fit in with the surrounding area.	The design of the proposed interchange has been developed to provide a safe and secure facility with adequate visibility and CCTV sightlines. The proposed interchange design considers the surrounding landscape and residential character of the Butler Street area. The design has also been developed in accordance with Section 60 Approval, which aim to protect the heritage value of the area.
			These conditions were presented in Appendix A of the exhibited REF. Condition 3 in the Section 60 Approval specifies that planting and landscaping must work to "preserve the visual links to the water tower from the east and west of the site". Recent refinements to the proposed landscaping design are compliant with these conditions and have incorporated hedging vegetation to assist with screening of the adjacent properties. The details of landscaping refinements are presented in Section 3 of this Determination Report.
3.6	BB03	One submission recommended alternative materials (copper, Corten or other sheet metal) for the canopy soffit lining due its suitability to the region's climate.	Sydney Trains is in discussion with the project architect and manufacturer to determine the best material for the canopy soffit lining. Selection of a material will take into consideration factors including regional climate, aesthetics, cost and durability. Alternative products, such as Parklex, are being considered as real wood veneer products for the underside of the canopies. The authentic wood texture is important in maintaining harmony between the



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			interchange and the surrounding heritage and landscape context of the Proposed Activity.
			A formal assessment of the sustainability of finishes and fixtures that may be used in the proposed interchange is outside the scope of REF or this Determination Report, and material specifications would be developed at later stages of the Proposed Activity, if approved.
3.7	BB22	One submission requested that an adequate number of rubbish and recycling bins be included at the interchange.	Three pairs of both garbage and recycling bins will be positioned at various points throughout the interchange to ensure there is an adequate amount of facilities to combat waste and littering. Once operational, Council will monitor the adequacy of the bins and may choose to provide additional bins in the future should they be needed.
3.8	BB06	One submission requested that wayfinding signage be installed at the interchange.	Sydney Trains is proposing to install a sign at the south-east corner of the site directing people to the town centre and the Byron Visitor Centre. An overall precinct map would be part of the static displays, in conjunction with timetabling details for scheduled services. Other signage will be in place around the interchange directing customers to the various bus bays and other interchange services.
3.9	BB22	One submission requested the installation of a water fountain at the interchange.	The incorporation of a water fountain was considered during the design process for the proposed interchange. However, the inclusion of a water fountain was ruled out due to the potential health and hygiene issues associated with unintended use of the feature, such as bathing or washing of clothes.
3.10	BB22	One submission suggested that a notice board be implemented at the interchange.	A community notice board is outside the scope of works associated with the Proposed Activity. Poster cases displaying wayfinding signs and timetables will only be implemented in the final design of the interchange to support operations and assist people when navigating around the site. The Community Centre and Information Centre are located 110m east of the Proposal Area and will remain to be the main source for notice board facilities and alike.
3.11	BB09	One submission suggested that a real time display of bus timetabling be included at the interchange.	The Proposed Activity design does not include screens for real-time timetable display, however TfNSW-supported smartphone applications provide relevant, up to date schedule information.



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
3.12	BB01	One submission suggested that luggage lockers be installed at the interchange for use by visitors.	As the interchange will be operated and maintained by Byron Shire Council following construction, Sydney Trains is discussing with Council the potential to implement luggage lockers near the amenities building. Locker quantities and specifications are yet to be decided upon.
3.13	BB09	One submission suggested that multilingual signs be implemented at the interchange.	Sydney Trains has considered the potential to implement multilingual signs at the interchange and has raised this issue with the wayfinding and technical advisory team as part of signage development for the whole of the interchange. Multilingual signs are currently under review as part of the wayfinding strategy.
3.14	BB22	One submission suggested that a shower be included in the amenities building.	The Proposed Activity does not include provision for a shower in the amenities building, as such facilities are outside of the scope of works.
3.15	BB09, BB15, BB29	Three submissions suggested that services for electric transport, such as electric bikes and cars, be included at the interchange.	The interchange design does not include provision for charging services for electric vehicles.
3.16	BB09, BB13	Two submissions suggested that a food and beverage or information kiosk be included at the interchange.	The interchange design does not include provision for a kiosk. The potential to incorporate vending machines would be addressed in the interchange operational management plan, which would be developed by TfNSW and Council.
3.17	BB23	One submission requested that the interchange be located outside of Byron Bay, elsewhere in the Byron Shire region.	In February 2015, the NSW Government announced that it would upgrade the interchange facility in Byron Bay. As such, alternative interchange locations elsewhere in the Byron Shire Region are outside the scope of the Proposed Activity. However, the proposed interchange would be utilised by local and regional services thus supporting connections between Byron Bay and surrounding towns.
			The positioning of the proposed interchange has been selected as the preferred option following extensive investigation into alternative locations and designs. Before the existing site was chosen, several locations for the interchange were explored, however, were not progressed due to issues relating to flooding, contamination and alignment with the objectives



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			of Council and the Byron Bay Town Centre Masterplan (BBTCM).
3.18	BB08, BB09, BB14, BB16, BB19, BB25, BB27, BB30, BB31	Several submissions discussed alternative locations for the interchange including: North of the existing site Butler Street Reserve Within the rail corridor The Cavanbah Centre Outside of Byron Bay town centre.	The nominated location of the interchange has been selected following extensive investigation into suitable locations and designs. Before the existing site was chosen, several locations for the interchange were explored, however, were not progressed due to issues relating to flooding, contamination and alignment with Council objectives and the BBTCM. The Butler Street Reserve was initially investigated as a potentially suitable location for the interchange. However, during preliminary site investigations, evidence of buried waste was encountered during geotechnical investigations. Further assessment indicated that land had previously been used as an uncontrolled landfill during the 1960s and 1970s. The level of contamination and the work required to remediate this land meant that the Butler Street Reserve site was not a viable option. The option to locate the interchange further north of the existing site was not progressed for two reasons. Crucially, bulk earthworks necessary to construct the proposed interchange would result in changes to existing drainage links. This alteration to the existing drainage regimes in the northern portion of the site would adversely affect the risk of flooding the town centre and would not comply with the planning approval requirements of the Byron Local Environmental Plan 2014. Secondly, as the proposed site has previously been cleared for historic railway activities, vegetation is considered regrowth. In contrast, vegetation to the north of the proposed site is intact and clearing would result in much large impacts to biodiversity than those assessed in the REF Biodiversity Assessment Report. The potential breeding habitat for native fauna. For these reasons, the area directly north of the proposed interchange footprint was determined to be unsuitable. Utilising the rail alignment is not a feasible solution due to it being considered an "active corridor", and no permanent construction can occur within it including near the railway station infrastructure. Permanent structures



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			in accordance with ESC 215- Transit Space- Section 6.1.1 Table 1. As a result, the design of the Interchange leaves adequate room to allow for potential use of the rail corridor in the future should heavy rail be re-introduced. Alternative uses can include a rail trail, implemented by Council.
			Locating the facility outside of Byron Bay's town centre does not align with the objectives and purpose of an interchange, or greater TAP objectives. While the Cavanbah Centre on Ewingsdale Road was considered as part of the optioneering process, the facility is not readily accessible by foot. Shuttle buses would be required to support the movement of patrons into town, and these buses would require a dedicated drop off and pick up location in town.
			The current site was chosen as it aligns with the objectives of the BBTCM to establish a transport hub on the western side of the railway line that is accessed from Butler Street. This design would also reduce congestion in the town centre, and support pedestrianisation and active transport accessibility.
3.19	BB09, BB17	Two submissions opposed the loop road layout of the interchange as it does not allow for efficient travel	On 30 January 2018, the elected Council agreed on the current site for the interchange at the water tower with a loop road arrangement. This option would have minimal impact on the need to change the Bypass road design and would have no encroachment on the existing railway tracks to the east. As the approved Bypass and proposed interchange would interface along Butler Street, the configurations must be complementary. The loop-configuration is the preferred option for the proposed interchange. A one-way design would not allow for north/south bus travel and there would not be provisions for buses to turn in and out of the interchange and would not support safe and efficient access to the proposed facility.
3.20	BB05, BB11, BB22	Three submissions requested for planting of vegetation at the interchange to enhance the visual aesthetics of the facility. In particular, one submission preferred	As a result of feedback received during the second round of formal community consultation, and in response to the Section 60 Approval, the landscape design presented in the REF has been refined to enhance the visual aesthetics of the facility. For example, Condition 3 specifies a 14m exclusion zone of plants greater than 1.5m in height around the heritage water tower structure.
		the use of native plants in the	Additionally, the proposed planting design and species selection has been reviewed by the



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		landscaping at the interchange	representatives of the Arakwal indigenous group as well as the National Parks and Wildlife Service (NPWS). Opportunities to incorporate more native vegetation have been reviewed and applied to the refined landscaping design. Details of the revised landscaping design are presented in Section 3 of this Determination Report.
3.21	BB22	One submission asked whether planting could be incorporated into the structure of the water tower	Planting within the water tower structure; such as a green roof with trailing plants, poses maintenance and structural issues over time. Compromises to the structural integrity of the structure have the potential to adversely impact safety within the proposed interchange site, and therefore eliminate further consideration of this suggestion. In addition, planting must be compliant with the project-specific Section 60 Approval. These conditions were provided in Appendix A of the exhibited REF. Additional planting within the structure is not aligned with the Section 60 Approval.
3.22	BB30	One submission requested greater planting at the interchange to mitigate noise and light impacts for residents along Butler Street	In response to feedback collected during the exhibition of the REF, the landscape design has been refined to incorporate hedging around the bus turning loop. Hedging has been developed to mitigate potential headlight spill from vehicles operating in the proposed interchange and protect the visual amenity of residential properties along Butler Street. An assessment of the landscaping refinements is presented in Section 3 of this Determination Report.
3.23	BB09	One submission requested that the design provide adequate weather protection for all users	The issue of weather protection has been considered at all stages of design of the proposed interchange. Weather protection structures have been developed on balance with the need for air flow within the facility, which is an air quality mitigation measure. The design includes canopies throughout the interchange, including bus boarding areas, and the amenities building.
3.24	BB09, BB22, BB24	Three submissions requested that the interchange design should provide adequate protection from Byron Bay's weather. In particular, the design should take into consideration the	Byron Bay's climate, in particular heavy rain events and summer conditions, has been considered in the design of the interchange. The canopy structure has been designed to provide adequate protection against rainfall at an angle of 65 degrees. Additionally, the wind driven rain "profile" meets specification T MU SS 90002 ST – Shelter at Railway Stations and Interchanges which demonstrates the



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		tropical climate of the area	pedestrian route as the minimum required dry area at 1800mm.
			Furthermore, Sydney Trains is reviewing the design to incorporate as many trees and seats as possible to provide respite during summer days and peak periods. While Condition 3 in the Section 60 Approval requires the project to maintain an east-west visual link through the former rail siding, the refined landscaping design seeks to incorporate as many shade trees as possible to provide natural shelter from the elements including solar glare and rainfall events. Details of the refined landscaping design are described and assessed in Section 3 of this Determination Report.
4	Community	engagement	
4.1	BB04, BB07, BB17, BB18, BB27, BB31	Community engagement and consultation for the project have been limited	The interchange design and location were developed based on consideration of the BBTCM. The BBTCM outlines a community-focused vision for the development of Byron Bay and can be found here: https://www.byron.nsw.gov.au/Community/Place-planning/Byron-Bay-Masterplan . The strategies outlined in the BBTCM were developed based on feedback gathered through active engagement with the community, Council, various stakeholders and a community leadership group over a period of 16 months with an aim to reflect the community's vision for the future. The BBTCM was endorsed by Council in June 2016, and as such, future development of Byron Bay should align with the strategies outlined in the report. This includes the recommendation for an interchange facility on the western edge of the railway corridor (refer to Section 5.2 of the BBTCM). The design and planning of the proposed interchange project has been developed through continual consultation with key stakeholders, including Council and local transport operators. This has been done so that the proposed interchange supports the objectives and needs of current and future potential users of the facility. In addition, consultation with the wider community of Byron Bay was carried out in two phases. The first round of consultation was led by the OEH and occurred in January to February 2019. During this period, the project's Section 60 Approval went on exhibition for public viewing and comment. More than a



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			dozen submissions were received, voicing concerns around potential impacts to the heritage significance of the proposed interchange; concerns around potential impacts to biodiversity were also raised.
			Due to the high level of community interest in the project, a second phase of formal community consultation was carried out over May and June 2019. During the second phase of formal consultation, several engagement activities were undertaken to communicate with, consult and involve the community and stakeholders. These activities included but were not limited to:
			 distribution of Community Update letters to properties within a 500m radius of the proposed interchange footprint, and selected business and residents up to 1km east of the proposed interchange
			three advertisements in local newspapers
			 signage displayed at the proposed interchange site
			 information about the consultation period and REF documentation uploaded on three NSW Government websites
			 a physical display of the REF at Byron Bay Library
			 a physical display of the REF at Council office
			 doorknocking of properties near the proposed interchange
			two pop-up information sessions at local markets
			one community information session at the Byron Bay Community Centre
			 informal and formal meetings with stakeholders.
			More than 30 submissions were received throughout the second phase of formal community consultant, which have helped to develop the refinements to the proposed design of the proposed interchange. Details of these refinements are provided in Section 3 of this Determination Report.
4.2	BB09, BB30	Two submissions expressed that the	A thorough community and stakeholder engagement strategy was developed, which



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		May-June 2019 submission period should have been longer	included a two-week public exhibition of the Review of Environmental Factors. During this time, many engagement activities were undertaken and a broad spectrum of stakeholders reached. Detail regarding community engagement activities can be found in response 4.1.
5	Heritage		
5.1	BB04	One submission expressed concern about the current state of the heritage water tower	The location of the Proposed Activity has innate local heritage value and houses a number of heritage items. The most visible heritage item within the Proposal Area is the water tower. A SoHI was prepared for the proposed works and was provided in Appendix A of the exhibited REF.
			In accordance with the Heritage Act, a Section 60 Application was lodged with the OEH as part of the planning approvals process and environmental impact assessment for the works. Sixteen site-specific conditions were developed by OEH which are aimed at protecting the heritage features of the site. These conditions were also presented in Appendix A of the REF. Conditions 4 and 5 of the Section 60 Approval specifically outline the requirements relating to the water tower:
			Condition 4: A detailed schedule of conservation/remediation works for the water tower must be prepared by the nominated heritage consultant and submitted for approval to the Heritage Council of NSW (or delegate) prior to the commencement of conservation works
			 Condition 5: The approved schedule of conservation/ remediation works must be completed to the satisfaction of the nominated heritage consultant prior to the commencement of the remainder of the works endorsed under this approval.
			The OEH justification for these conditions is to ensure that the highly significant water tower is appropriately conserved and remediated prior to any works being undertaken which could impact its structure or integrity.
			If approved, the Section 60 Approval would form the basis of the site-specific Construction Environmental Management Plan (CEMP). The concerns around safety and structural integrity would be noted and managed accordingly.



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
5.2	BB05	As the heritage water tower is being included in the interchange design, it should receive restoration and maintenance works	The water tower has highly significant heritage value and this has been recognised throughout all stages of design development. If the Proposed Activity is approved, the water tower would be appropriately conserved, being incorporated through design. Structural remediation would be undertaken to stabilise the water tower and protect its heritage value. Remediation work at the tower would likely include:
			 masonry repairs including repointing of brick and splayed render repairs
			carpentry to doorway and windows
			steel tank corrosion control
			structural condition assessments
			paint stripping and cleaning
			removal of vegetation.
			Details relating to the treatment of heritage items were presented in Section 5.2 of the exhibited REF.
5.3	BB04, BB07, BB18, BB28, BB31	The project will impact and diminish the heritage significance of the heritage conservation and residential area	The management and protection of heritage items has been extensively considered throughout the planning and design of the proposed interchange. The project SoHI and Section 60 Approval was presented in Appendix A of the exhibited REF. The SoHI outlines and assesses the way important heritage items, such as the water tower, may be impacted by the proposed works.
			As acknowledged in the REF and SoHI, there are two conservation areas in close proximity to the proposed interchange: the Burns Street Conservation Area (C002) and the Railway precinct and Byron Bay Conservation Area (C004). The proposed interchange footprint is outside the boundaries of both of these Conservation Areas. The operation of the bus terminal will, to a large extent, be similar to and consistent with the former noises and levels of activity associated with the operation of the railway station (up to 2004) and the Loco Siding (up to the 1960s) and, whilst the houses at 60 and 62 Butler Street, opposite the site of the proposed works, may be affected by the return of activity to the Loco Siding area, this is not a significant impact from a heritage perspective.
			The Railway Precinct, Byron Bay Conservation Area, located east of the Loco Siding area



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			encompassing the Byron Bay Railway Station and its eastern forecourt to Jonson Street, will not be directly impacted by the proposed works. The heritage qualities and significance of this conservation area will be indirectly enhanced by the relocation of the bus terminal to a more amenable location within the vicinity, maintaining the role of this area as the central point in Byron Bay for interurban public transport
5.4	BB18	In place of the current design, the heritage items can be reinterpreted in a different way	The design endeavours to capture the heritage interpretation of the area in as much as is reasonable and feasible. The integration of the heritage items within the proposed interchange footprint has been considered throughout the design process. A number of potential design options were developed as part of the heritage interpretation of the area. However, design options were constrained and informed by key issues such as safety and sensitivity to the local environmental and future interchange precinct, if approved. For example, the heritage interpretation of the site has been developed in accordance with the Section 60 Approval, which specifies how certain structures, such as the water tower, turntable and other archaeological relics should be treated. The approved designs must be compliant with
			the Section 60 Approval, and the full list was supplied in Appendix A of the exhibited REF.
6	Noise		
6.1	BB30	Noise mitigation measures need to be implemented to minimise construction noise impacts	If approved, construction of the proposed interchange is expected to take approximately 14 months to complete. A site-specific CEMP would be developed based off the findings of the REF. For example, construction works would occur within standard construction hours and be timed to avoid peak periods where possible. Additional construction noise mitigation
			measures include two days of respite for every 14 days of work; and the installation of temporary screening, such as noise blankets, along the western boundary of the construction area between the work site and residential receivers.
6.2	BB09, BB12, BB16, BB17,	There will be noise impacts from the	As outlined in Section 5.3 of the exhibited REF, an ONA was prepared to assess the operational noise and vibration impacts of the interchange



No.	Stakeholder	Issues raised	Sydney Trains' response
	ID number		Cyano, Italia Tooponoo
	BB18, BB27	interchange during operation	once in use. The report found that operational noise impacts associated with the Proposed Activity would comply with all noise criteria at all residential receivers.
			Operational noise associated with the Proposed Activity would not exceed road noise associated with the Bypass. Only during peak hour movements will noise impacts exceed noise criteria at minor levels at specific locations along Butler Street. These locations were identified in the exhibited REF and are already scheduled to receive architectural noise mitigation treatments as part of the separate Bypass.
			The operational noise assessment found that no additional noise mitigation measures are required at the locations assessed as likely to be impacted to meet the noise criteria guidelines.
7	Traffic		
7.1	BB09	One submission requested the need for a bus layover space on Butler Street	The request for a bus layover space on Butler Street is outside the scope of the Proposed Activity as it would require modification to the layout of Butler Street and therefore, implicate the separate Bypass, which is being delivered by Council. Feedback about the Bypass should be directed to Council.
7.2	BB11	The interchange would potentially impact local bus, coach and shuttle services	The project team has been working with local bus, coach and shuttle operators throughout the planning and development of the proposal to ensure timetabling and access conditions that accommodate all services.
7.3	BB19, BB25, BB28, BB30	The interchange will not address local traffic issues and congestion. Rather, as the interchange is accessed via the Bypass, there will be cumulative traffic impacts. Congestion	An objective of the approved Bypass is to remove heavy vehicles from Jonson Street, including the majority of buses. Buses and coaches travelling to and from the interchange would not increase congestion on Butler Street as these vehicles were always intended to travel down the alignment regardless of the interchange location.
	on Butler Street will increase due to the additional number of heavy vehicles	Furthermore, potential disruptions to traffic flow on Butler Street have been addressed in the design of the interchange. Firstly, there is sufficient capacity within the interchange itself to prevent the back up of vehicles into Butler Street. Secondly, the entry and exit point of the interchange via the Butler Street/Somerset Street roundabout has been designed to sufficiently accommodate heavy vehicle turning	



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			movements. Overall, the interchange, including its access point, has been designed to ensure service timetables are met.
8	Pedestrian a	access	
8.1	BB17	One submission expressed concern about the efficiency and safety of pedestrian movements within the proposed interchange	The continuous off-road shared path of Butler Street has been incorporated into the interchange design and is a part of the pedestrian access of the interchange. This maintains a north-south link throughout the site. Additionally, widening and enhancing of the east-west pedestrian crossing will create a safer and more efficient path of travel through the interchange.
8.2	BB09, BB22	Two submissions suggested an alternative pedestrian crossing at the interchange	As part of the interchange design, Sydney Trains is obligated to maintain adequate distance between any permanent construction and the railway tracks in accordance with ESC 215- Transit Space- Section 6.1.1, Table 1. There would be an inadequate distance between the Interchange entry path and the rail tracks to accommodate the suggested alternative pedestrian crossing.
8.3	BB07, BB10, BB32	Three submissions expressed concern about the safety of pedestrian movements on Butler Street.	Sydney Trains recognises that pedestrian access and movements across Butler Street are an important issue within the community. Sydney Trains can advise that, once construction of the approved Bypass is completed, formalised pedestrian access will be considered as part of standard road safety audit processes. The number of pedestrian movements in relation to the number of vehicle movements is a contributing factor to determining the need for safety upgrades or enhancements, such as a crossing. This process would be undertaken by Council through continuous review of road safety and design. Pedestrian access on Butler Street is outside the scope of works of the Proposed Activity and will not be provided as part of the
9	Air quality		Proposed Activity.
9.1	BB12, BB27	Two submissions requested that appropriate mitigation measures be implemented to	Overall, the impacts associated with construction plant and equipment are considered to have the most noticeable impact on the air quality of the local environment. These impacts would be temporary and would



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		address air quality impacts from the	be regulated throughout the approximate 14 month construction period.
		interchange during operation	Construction air quality mitigation measures are outlined in Section 7 of the REF. These measures will form the basis of the CEMP for the Proposed Activity.
			The open plan interchange has been designed to minimise the blanketing of fumes in the facility, and vehicle emissions would dissipate as per the current Jonson Street bus stop. The number of vehicles frequenting the interchange would be aligned with those currently in operation in the Byron Bay town centre. There would be a minimal increase in the number of vehicles in the area, and the ambient air environment would not be adversely affected by the relocation of services from Jonson Street (130m east of the proposed interchange location) to the proposed Butler Street interchange.
			As outlined in the BBCA, the average dwell time of heavy vehicles at the facility would be restricted, which minimises prolonged generation of engine fumes. Buses and vans terminating at Byron Bay will not layover at the facility but will return to depot or another location, which limits the opportunity for sustained exhaust generation.
			In addition to the project-specific mitigation measures outlined in Section 7 the exhibited REF, given the prevailing wind conditions at Byron Bay, it is anticipated that air quality at the interchange would not be adversely impacted by operational activities. These wind conditions were taken into account when designing the open plan interchange, which has been developed with an understanding of the local environment and sensitivity to the environmental constraints of the area. The interchange design has implemented opportunities to minimise adverse impacts to the existing environment through the principles of ecologically sustainable development.
9.2	BB12, BB16, BB17, BB27	Air quality at the interchange will be negatively impacted by engine fumes from heavy vehicles using the facility	The REF found that activities during the construction stage of the works would have the largest to potential to impact local air quality. These impacts would be temporary and confined to the approximate 14 month construction period for the Proposed Activity. An outline of air quality mitigation measures were outlined in Section 7 of the exhibited REF.



No.	Stakeholder	Issues raised	Sydney Trains' response
- NO.	ID number	135ucs raiseu	Sydney Hallis Tespolise
			Due to the prevailing wind conditions in the area, it is anticipated that air quality at the interchange would not be adversely impacted by operational activities. As outlined in the BBCA, the average dwell time of heavy vehicles at the facility would be restricted, and services terminating at Byron Bay will not layover at the facility but will return to depot or another location. Additionally, the open plan facility works to allow the dispersant of particulates and emissions; any potential pollutants would not be captured by canopies or enclosed roofs, which mitigates the risks to changes to air quality once the interchange is in operation.
			These findings were validated through consideration of the air quality modelling undertaken for a separate local project: the Bypass. This project is approved and construction is currently underway. Air quality modelling undertaken for the Bypass found that the relocation of traffic from Jonson Street to Butler Street would result in minimal and almost negligible changes to existing air quality. As the interchange and approved Bypass are located on Butler Street, these findings would also be applicable to the interchange.
10	Amenity		
10.1	BB22	One submission suggested the installation of a water tank to capture rainwater for use by the toilets in the amenities building	The amenities building will capture rainwater via a water tank and this water will be used for toilet flushing.
10.2	BB04, BB16, BB17, BB18, BB27, BB28	Six submissions expressed concern that the amenity of residents living near the project would be impacted by the interchange during operation. Residents on Butler Street would be impacted by noise and vibration, lighting, and changes to their visual landscape.	Changes to the physical landscape of Butler Street will occur with the construction of the Bypass. This is a separate project which is being constructed immediately next to the proposed interchange. Impacts to the neighbourhood amenity of residents living near the proposed interchange footprint have been considered and factored into the design of the project. The REF provides mitigation measures specific to the interchange works to address changes in noise and vibration levels, lighting levels and the surrounding visual landscape. Furthermore, in response to feedback collected through the community capacitation the
		Four submissions expressed concern that the interchange	through the community consultation, the landscaping design of the proposal was refined to utilise hedging plant species, and more



No.	Stakeholder	Issues raised	Sydney Trains' response
No.	ID number		
		would be operating 24 hours a day, seven days a week, increasing visual, noise and light impacts.	frequently positioned trees along the bus turning loop to mitigate the potential for light spill to disturb residential properties along Butler Street. This vegetation would act as a screen to mitigate the visibility of the interchange from residential properties. Details of the refined landscaping design and an assessment of the changes to the design presented in the exhibited REF can be found in Section 3 of this Determination Report.
			The BBCA has been revised to incorporate new local bus services. The revised BBCA assesses current and future services, and highlights that the interchange will not be accommodating vehicles continuously throughout the night. The schedule for weekday mornings would consist of four individual coach services using the interchange prior to the peak of local services beginning at 7:30am. The last service utilising the interchange would be at 11:25pm.
			A summary and environmental assessment of the refined BBCA can be found in Section 3 of this Determination Report. Additionally, buses and coaches will not idle at the interchange for an extended period. The average dwell time of heavy vehicles at the facility is restricted, which works to mitigate the generation of vehicles exhaust, as well as associated noise and vibration. In addition, buses and vans terminating at Byron Bay will not layover at the facility but will return to depot or another location.
			As outlined in Section 5.3 of the REF, an operational noise assessment was prepared to assess the noise and vibration impacts of the interchange once in use. The report found that operational noise impacts associated with the proposed interchange would comply with all noise criteria at all residential receivers. Only during peak hour movements will noise impacts exceed noise criteria at minor levels at specific locations along Butler Street. These locations are identified in the REF and are already scheduled to receive architectural noise mitigation treatments as part of the separate Bypass.
			The operational noise assessment found that no additional noise mitigation measures are required at the locations assessed as likely to be impacted. Furthermore, noises associated with the operation of the proposed interchange



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			would not exceed road noise generated from the approved Bypass.
			Construction of the interchange is expected to commence after construction of the Bypass and be completed before construction of the Bypass is finalised. Section 5.3 of the REF provides further details about the noise mitigation measures for the interchange project. The construction mitigation measures would form the basis of the CEMP for the Proposed Activity and would work to minimise the temporary minor adverse noise impacts associated with construction.
10.3	BB30	One submission expressed concern that the amenity of residents living near the project would be impacted during construction	The REF would form the basis of the CEMP for the Proposed Activity, which is developed to mitigate and manage impacts of the proposed works throughout the approximate 14 month construction period. For example, construction would occur within standard construction hours and be timed to avoid peak periods where possible. Additional construction noise mitigation measures include two days of respite for every 14 days of work; and the installation of temporary screening, such as noise blankets, along the western boundary of the construction area, which essentially screen the work site from residential receivers. Additionally, construction lighting would be confined to task lighting rather than ambient lighting. A summary of the mitigation measures associated with the interchange project is provided in Section 7 of the REF.
10.4	BB17, BB20, BB24, BB32	Four submissions expressed concern about potential safety and security risks at the interchange. In particular, both submissions noted that the amenities building could attract antisocial behaviour and loitering.	The project team is committed to ensuring the safety and security of the interchange area and nearby areas. The design of the interchange is purposefully open plan and well-lit to deter antisocial behaviour and loitering. In response to safety concerns raised during the second round of community consultation, a 2.1metre-high chain link fence would be installed at the southern boundary of the interchange behind the amenities block to prevent direct access from the dense bushland.
		One submission requested that 24-hour CCTV be installed to monitor the area.	An operational plan for the interchange would be developed in consultation with Council, which would be responsible for the operation and maintenance of the facility. Due to community concerns about safety, a stakeholder has recommended that the operational plan consider locking the amenities block for certain periods at night. A CCTV system will also be installed at the interchange



No.	Stakeholder	Issues raised	Sydney Trains' response
	ID number		supporting safety within the facility and
			surrounds. The specifics of the interchange operational plan are outside the scope of the REF and this Determination Report. However, the schedule for operation would be developed to enhance safety and functionality of the facilities.
10.5	BB12, BB14, BB15	The existing visual amenity of residents along Butler Street will be impacted by the interchange	A Visual Impact Assessment (VIA) has been prepared for the project and can be found at Appendix G of the exhibited REF. The report assesses the landscape character and visual impact of the project and offers recommendations to minimise impacts. However, the interchange design was required to be designed in accordance with the Section 60 Approval which protects the existing heritage value of the site. These conditions can be found in Appendix A of the exhibited REF. In terms of screening of the interchange, Condition 3 in the Section 60 Approval specifies that the project must "preserve the visual link between the east and west of the site". To minimise the view of buses and other operational activities at the interchange, the project design has worked to incorporate maximum allowable vegetation screening as part of the refined landscape design, whilst remaining sensitive to the Section 60 Approval. Hedges, for example, have been utilised for these purposes. Further mitigation measures have been developed to protect the visual amenity of residents along Butler Street through landscaping design. The details of these changes are provided in Section 3 of this Determination Report.
11	Lighting		
11.1	BB12, BB17, BB18, BB27, BB30	Five submissions expressed concern about potential light spill impacts from vehicle headlights and interchange lights during operation.	During construction of the interchange, lighting will be confined to task lighting, rather than ambient lighting, to reduce light spill. The details of these construction mitigation measures are outlined in Section 7 of the REF and would form the basis of the CEMP for the Proposed Activity if the proposed interchange were approved.
			The potential impacts of light spill from the interchange during operation have been factored into the landscaping, road layout and lighting design. Potential light spill generated by vehicles operating within the proposed interchange has been modelled and mitigated through design in accordance with using Asset



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
			Standards Authority (ASA) and Australian standards. To minimise light spill, the interchange roadway will be lit with 8-metre-high downward directional lights. The remaining lights at the interchange will be 4-metre-high pole top lights to allow for the safe movement of pedestrians through the facility. These lights are also consistent with the Railway Park project on the eastern side of the railway station.
			Additionally, hedging species have been selected around the bus turning loop of the proposed interchange to further mitigate any headlight spill from the interchange impacting residents along Butler Street. Please see section 3 of this Determination Report for the details of the refined landscaping design.
11.2	BB05	The interchange should be adequately lit.	The interchange will be adequately lit. Lighting will be installed in accordance with ASA standard T HR SS 80001 ST Infrastructure Lighting and T HR SS 80002 ST for the accessible path. The remainder of the interchange will be illuminated to comply with AS 1158 Lighting for Roads and Public Spaces.
12	Out of scope	•	
12.1	BB14	One submission questioned how access to properties along Butler Street facing the interchange would be impacted by the project.	Access to properties along Butler Street is outside the project scope.
12.2	BB02, BB14, BB16, BB17, BB18	Several submissions discussed or mentioned issues relating to the Bypass	While the designs of the interchange and the approved Bypass would interface, Sydney Trains is involved only in the delivery of the proposed interchange and not the Bypass, which is being delivered by Council. Feedback about the separate Bypass is outside the scope of the Proposed Activity and should be directed to Council.
12.3	BB18	One submission expressed frustration at local conservation issues	Comments about conservation of vegetation outside the project footprint are outside the scope of the Proposed Activity. Feedback relating to this issue should be directed to Council and the relevant authorities.
12.4	BB08, BB30	Two submissions made comments and suggestions about the layout of local roads	Comments about local roads and traffic issues is outside the scope of the Proposed Activity. Feedback and inquiries about local roads and



No.	Stakeholder ID number	Issues raised	Sydney Trains' response
		and traffic flow issues in Byron Bay	traffic issues should be directed to Council and relevant authorities.
12.5	BB09	One submission suggested modification to the railway infrastructure in Byron Bay	Comments about modifications to railway infrastructure are outside the scope of the Proposed Activity.



3. Changes to the Proposed Activity

As a result of feedback, a change or update to the scope of the Proposed Activity has been proposed. The key changes are provided in Table 3-1.

Table 3-1 Changes to the Proposed Activity

Landscape design	
Original design	The landscaping design as presented in the REF includes planting within a 14m radius of the Former railway water tower. As outlined in Section 5.8.3 of the REF, the inclusion of tree planting in the public domain would screen the Proposed Activity and help mitigate the visibility and potential visual impact of the Proposed Activity. Chain-link mesh fencing around the Proposed Activity would reach a maximum height of 1.5m along the perimeter.
Revised design	As a result of feedback captured in the consultation process, and with reference to the Section 60 Approval, the proposed landscape design presented in the exhibited REF has been re-assessed and revised.
	Community sentiment from Butler Street residents was that unobstructed views of the Proposed Activity from residential properties would not be preferable. Residents and local stakeholders who viewed the landscape design presented in the REF exhibition period requested that the visibility of the Proposed Activity from Butler Street properties be further mitigated. In particular, the potential for headlight spill from vehicles frequenting the Proposed Activity at night was a key issue raised throughout the consultation process.
	At the same time, the refined landscape design is also required to comply with the Section 60 Approval. Specifically, Condition 3 states that no trees or landscape elements that will grow higher than 1.5m are to be planted within 14m of the <i>Former railway water tower</i> , "to preserve the visual links to the <i>Former railway water tower</i> from the east and west of the site".
	On the 9 th August 2019, a refined design was submitted to the NSW Department of Planning, Industry and Environment (formerly OEH) for consideration under Section 65A of the Heritage Act. This design encompassed four trees to remain within the 14m radius to assist with a screening for the Butler Street residents to balance the two conflicting sentiments. On the 26 th September 2019, a refusal was received and the landscaping design was required to be adjusted again.
	In the final landscaping design, there are now closer positioned trees located around the turning area of the bus loop. The 14m offset for trees over 1.5m has been adhered to, to enable views through to the tower, as per the requirements of Condition 3.
Bus Bay Capacity As	sessment
Original Design	The BBCA presented in Appendix H of the REF was prepared in April 2018 and supported the design of the Proposed Activity as described in the REF.
Revised design	Following exhibition of the REF, a new service (SkyBus) has been established and is in operation in the Byron Bay area. SkyBus services would operate out of the Proposed Activity. The impacts of this service were not assessed in the REF. An updated BBCA (DCI & Associates, June 2019) was prepared to assess SkyBus services in addition to providing operational strategies for the Interchange. This operational



	proposal identifies ways to streamline the timetable of the Interchange, ensuring peak times are limited and the Interchange is used in a steady capacity throughout the day.
	The updated BBCA determined bus services can operate still sufficiently with three dedicated bus bays at the proposed Byron Bay Interchange.
	Overall, the revised BBCA would not result in a design change and/or to the assessment of environmental impacts described in the REF.
Architectural set	
Original design	The design includes a proposed 93m retaining wall along the eastern boundary of the Proposal Area. This proposed wall would be visible from the Railway Hotel. In the REF, the retaining wall would be a Class-2 finish in natural grey concrete.

3.1. Assessment of design changes

As part of the assessment of the design changes since the REF was publicly exhibited, the following design alternatives have been undertaken.

Landscaping

Changes to the landscaping design have been developed with an appreciation of both the Section 60 Approval and community consultation collected during the exhibition period. The proposed landscaping plan presented in the REF has been amended to reflect these two factors. Most notably, proposed landscaping around the *Former railway water tower* has been redesigned to comply with the requirements of the Section 60 Approval and Section 65A refusal. The exclusion zone applies to vegetation likely to reach at least 1.5m in height at maturity. Mid and low strata vegetation throughout the Proposed Activity has been enhanced in the revised landscape design.

The refined landscape design would incorporate more vegetation along the western edge at the bus loop to potentially screen light spill from vehicle headlights. Planting may also provide visual screening to residents along Butler Street. Species proposed for the interchange would be selected to comply with Condition 3 of the Section 60 Approval and the overall requirements of the Section 60 Approval.

The adjustments to the proposed landscaping design would have a net positive benefit on biodiversity and the socio-economic environment. The local Aboriginal community, Arakwal, was consulted throughout the revised landscaping design. Species selection within the Proposed Activity was informed by this consultation process. Overall, the landscape design changes associated with the Proposed Activity would satisfy the Section 60 Approval while providing additional mitigation for the visual impact of the Proposed Activity on local Butler Street residents.

The issue of safety and security around the amenities block was a key area of concern that was highlighted during the second round of the community consultation. This issue has been addressed through the inclusion of a new 2.1m continuous chain-link mesh fence located on



the southern side of the proposed amenities block. The fence would prevent access to the facilities from nearby bushland to the south of the Proposed Activity to enhance public safety.

Architectural set

Changes to the proposed 93m long retaining wall may result in a net-positive benefit. The proposed refined works would support the integration of indigenous art and would work within the heritage interpretation objectives of the Proposed Activity.

The visual impact of the Proposed Activity was assessed in Appendix G of the REF. The proposed retaining wall would be visible from viewpoint 3. In the REF, the Proposed Activity was assessed as having a "High" impact on the existing visual amenity of the Proposal Area. There have been no changes to the structure of the retaining wall albeit the colour. It will facilitate a public display of indigenous art and there may be a long-term benefit arising from the Proposed Activity.



4. Consideration of the environmental impacts

Environmental Planning and Assessment Act 1979 (NSW)

The REF addresses the requirements of Section 5.5 of the EP&A Act. In considering the Proposed Activity as described in the REF and amended in this Determination Report, all matters affecting or likely to affect the environment are addressed in the REF, the Determination Report, and associated documentation.

In accordance with the matters required to be considered pursuant to clause 228(2) of the EP&A Regulation, an assessment is provided in Section 6.1 of the REF.

In respect of the Proposed Activity an assessment has been carried out in Sections 3.3.3 and 5.4 of the REF regarding potential impacts on critical habitat, threatened species, populations or ecological communities, or their habitats, as contemplated under Section 5.7(4) of the EP&A Act.

The likely significance of the environmental impacts of the Proposed Activity has been assessed in accordance with the then NSW Department of Planning's 1995 best practice guideline <u>Is an EIS Required?</u> It is concluded that the Proposed Activity as described in the REF and amended by this Determination Report is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Accordingly, an environmental impact statement under Division 5.1 of the EP&A Act is not required.

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

As part of the consideration of the Proposed Activity, all MNES and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to MNES, this evaluation has been undertaken in accordance with Commonwealth Administrative Guidelines on determining whether an action has, will have, or is likely to have a significant impact. A summary of the evaluation is provided in Section 6.2 and Appendix C of the REF.

It is considered that the Proposed Activity described in the REF and amended by this Determination Report is not likely to have a significant impact on any Commonwealth land and is not likely to have a significant impact on any MNES.

Heritage Act 1977 (NSW)

The Proposed Activity would be undertaken within the curtilage of the *Byron Bay Railway Station and Yard Group*, which is listed on the State Heritage Register (Item #01107). The potential heritage impacts of the Proposed Activity are assessed in Section 5.2 of the REF and works would be undertaken in accordance with the Conditions of Approval (Appendix 2 of this Determination Report) and Section 60 Approval (Appendix A of the REF).

Byron Bay Interchange Determination Report

³ Refer to the National Library of Australia's 'Trove' website http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648



5. Conditions of Approval

If approved, the Proposed Activity as described in the REF and amended by this Determination Report would proceed subject to the Conditions of Approval included in Appendix 2 of this Determination Report.



6. Conclusion

Having regard to the assessment in the REF and consideration of the submissions received, it can be concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Consequently, an environmental impact statement is not required to be prepared under the EP&A Act.

It is also considered that the Proposed Activity as described in the REF and amended by this Determination Report does not have a significant impact on any MNES or Commonwealth land as required to be considered under the EPBC Act.

The Proposed Activity is expected to provide a better experience for public transport customers by improving interchange facilities and ensuring that Byron Bay Interchange is accessible to people with a disability, limited mobility, parents/carers with prams and customers with luggage.

The environmental impact assessment (REF and Determination Report) for the Proposed Activity is recommended to be approved subject to the proposed mitigation and environmental management measures included in the Conditions of Approval (refer to Appendix 2).



Appendix 1: Review of Environmental Factors



Appendix 2: Conditions of Approval



Conditions of Approval

Byron Bay Interchange

Note: these conditions of approval must be read in conjunction with the final mitigation measures in the Byron Bay Interchange Review of Environmental Factors.

Abbreviations

CEMP Construction Environmental Management Plan

CLP Community Liaison Plan

EIA Environmental Impact Assessment

EPA NSW Environment Protection Authority

EP&A Act Environmental Planning and Assessment Act 1979 (NSW)

EPL Environment Protection Licence issued by the EPA under the *Protection of*

the Environment Operations Act 1997 (NSW)

EMR Environmental Management Representative
 ISO International Organization for Standardization
 OEH NSW Office of Environment and Heritage

OOHWP Out Of Hours Work Protocol

PCSR Pre-Construction Sustainability Report

PMEM TfNSW Principal Manager Environmental Management (or nominated

delegate)

PMS TfNSW Principal Manager Sustainability (or nominated delegate)

REF Review of Environmental Factors

TfNSW Transport for NSW

TMP Traffic Management Plan

UDLP Urban Design and Landscaping Plan



Term	Definition
Construction	Includes all work in respect of the Project, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the EMR to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected).
Contamination	The presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
Emergency work	Includes works to avoid loss of life, damage to external property, utilities and infrastructure, prevent immediate harm to the environment, contamination of land or damage to a heritage (Indigenous or non-Indigenous) item.
Environmental impact assessment	The documents listed in Condition 1 of this approval.
Environmental management representative	An independent environmental representative appointed to the Project or a delegate nominated by TfNSW.
Noise sensitive receiver	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios, places of worship/religious facilities (e.g. churches), and other noise sensitive receivers identified in the EIA.
Reasonable and feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.
The Project	The construction and operation of the Byron Bay Interchange project as described in the EIA.
The Proponent	A person or body proposing to carry out an activity under Part 5 of the EP&A Act. In the case of the Project, Sydney Trains.



Conditions of approval

CoA number	Condition
General	
1.	Terms of approval
	The Project shall be carried out generally in accordance with the Environmental Impact Assessment (EIA) for this Project, which comprises the following documents:
	 Review of Environmental Factors - Rural and Regional Interchange - Byron Bay Bus Interchange; 17 May 2019
	 Byron Bay Interchange Determination Report; 6 February 2020.
	In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.
2.	Project modifications
	Any modification to the Project as approved in the EIA would be subject to further assessment. This assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised. The assessment shall be subject to approval under delegated authority by the determining authority (i.e Sydney Trains or TfNSW). The Proponent shall comply with any additional requirements from the assessment of the Project modification.
3.	Statutory requirements
	These conditions do not relieve the Proponent of the obligation to obtain all other licences, permits, approvals and land owner consents from all relevant authorities and land owners as required under any other legislation for the Project. The Proponent shall comply with the terms and conditions of such licences, permits, approvals and permissions.
Communic	ations
1	Community liaison plan

4. Community liaison plan

The Proponent shall develop and implement a community liaison plan (CLP) to engage with government agencies, relevant councils, landowners, community members and other relevant stakeholders (such as utility and service providers, bus companies and businesses) where required. The CLP shall comply with the obligations of these conditions and should include, but not necessarily be limited to:

- (a) details of the protocols and procedures for disseminating information and liaising with the community and other key stakeholders about construction activities (including timing and staging) and any associated impacts during the construction period
- (b) stakeholder and issues identification and analysis
- (c) procedures for dealing with complaints or disputes and response requirements, including advertising the 24 hour construction response line number
- (d) details (including a program) of training for all employees, contractors and subcontractors on the requirements of the CLP.



Condition

Sub-plans to the CLP will be developed as required. These sub-plans will detail site-specific consultation and communication requirements for construction works that impact residents, other stakeholders and businesses. They will also identify further mitigation measures and processes to reduce construction impacts.

The CLP shall be prepared to the satisfaction of TfNSW's Technical Director Project Communications prior to the commencement of construction and be implemented, reviewed and revised as appropriate during construction of the Project.

5. Community notification and liaison

The local community shall be advised of any activities related to the Project with the potential to impact upon them.

Prior to any Construction activities commencing and throughout the Project duration, the community is to be notified of works to be undertaken, the estimated hours of construction and details of how further information can be obtained (i.e. contact telephone number/email, website, newsletters etc.) including the 24 hour construction response line number.

Construction-specific impacts including information on traffic changes, access changes, detours, services disruptions, public transport changes, high noise generating work activities and work required outside the nominated working hours shall be advised to the local community at least seven (7) days prior to such works being undertaken or other period as agreed to by TfNSW's Technical Director Project Communications or as required by the NSW Environment Protection Authority (EPA) (where an environment protection licence (EPL) is in effect).

6. Website

The Proponent shall provide electronic information (or details of where hard copies of this information may be accessed by members of the public) related to the Project, on dedicated pages within its existing website, including:

- (a) a copy of the documents referred to under Condition 1 of this approval
- (b) a list of environmental management reports that are publicly available
- (c) 24 hour contact telephone number for information and complaints.

All documents must be compliant with the Web Content Accessibility Guidelines 2.0.

7. Complaints management

The Proponent shall set up a 24 hour construction response line number.

Details of all complaints received during construction are to be recorded on a complaints register. A verbal response to phone enquiries on what action is proposed to be undertaken is to be provided to the complainant within two (2) hours during all times construction is being undertaken and within 24 hours during non-construction times (unless the complainant agrees otherwise). A verbal response to written complaints (email/letter) should be provided within 48 hours of receipt of the communication. A detailed written response is to be provided to the complainant within seven (7) calendar days for verbal and/or written complaints.

Information on all complaints received during the previous 24 hours shall be forwarded to the environmental management representative (EMR) each working day.



Condition

Environmental management

8. Construction environmental management plan

The Proponent shall prepare a construction environmental management plan (CEMP) prior to the commencement of construction which addresses the following matters, as a minimum:

- (a) traffic and pedestrian management (in consultation with the relevant roads authority)
- (b) noise and vibration management
- (c) water and soil management
- (d) air quality management (including dust suppression)
- (e) Indigenous and non-Indigenous heritage management
- (f) flora and fauna management
- (g) storage and use of hazardous materials
- (h) contaminated land management (including acid sulphate soils)
- (i) weed management
- (j) waste management
- (k) sustainability
- (I) environmental incident reporting and management procedures
- (m) non-compliance and corrective/preventative action procedures
- (n) temporary Construction lighting

The CEMP shall:

- comply with these conditions of approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management
- ii. comply with the relevant requirements of the Guideline for Preparation of Environmental Management Plans (Department Infrastructure, Planning and Natural Resources, 2004)
- iii. include an environmental policy.

The Proponent shall:

- consult with government agencies and relevant service/utility providers as part of the preparation of the CEMP
- submit a copy of the CEMP to the EMR for review
- 3. submit a copy of the CEMP to the PMEM (or nominated delegate) for approval
- 4. review and update the CEMP at regular intervals, and in response to any actions identified as part of the EMR's audit of the document
- ensure updates to the CEMP are made within 7 days of the completion of the review or receipt of actions identified by any EMR audit of the document, and be submitted to the EMR for approval.



CoA number	Cor	ndition
		CEMP must be approved by the PMEM prior to the commencement of construction k associated with the Project.
9.	Env	rironmental management representative
		r to the commencement of construction, the PMEM shall appoint an EMR for the ation of the construction period for the Project.
		EMR shall provide advice to the PMEM in relation to the environmental compliance performance of the Project. The EMR shall have responsibility for:
	(a)	considering and advising the Proponent on matters specified in these conditions and compliance with such matters
	(b)	reviewing and where required by the PMEM, providing advice on the Project's induction and training program for all persons involved in the construction activities and monitoring implementation
	(c)	periodically auditing the Project's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by the PMEM
	(d)	reporting weekly to the Proponent, or as required by the PMEM
	(e)	issuing a recommendation to the Proponent for work to stop immediately, if in the view of the EMR circumstances so require. The stop work recommendation may be limited to specific activities if the EMR can easily identify those activities
	(f)	requiring reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts
	(g)	reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections
	(h)	providing reports to the Proponent on matters relevant to the carrying out of the EMR role as necessary
	(i)	where required by the PMEM, providing advice on the content and implementation of the CEMP and environmental controls map in accordance with these conditions
	(j)	reviewing and approving updates to the CEMP.
	The	EMR shall be available during construction activities to inspect the site and be

Hours of work

10. Standard construction hours

present on-site as required.

Construction activities shall be restricted to the hours of 7:00 am to 6:00 pm (Monday to Friday); 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except for the following works which are permitted outside these standard hours:

(a) any works which do not cause noise emissions to be more than 5dBA higher than the rating background level at any nearby residential property and/or other noise sensitive receivers



CoA	Candition
CoA number	Condition
	(b) out of hours work identified and assessed in the EIA or the approved out of hours work protocol (OOHWP)
	(c) the delivery of plant, equipment and materials which is required outside these hours as requested by police or other authorities for safety reasons and with suitable notification to the community as agreed by the PMEM
	(d) emergency work to avoid the loss of lives, property and/or to prevent environmental harm
	(e) any other work as agreed by the PMEM (or nominated delegate) and considered essential to the Project, or as approved by EPA (where an EPL is in effect).
11.	High noise generating activities
	Rock breaking or hammering, jack hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel and any other activities which result in impulsive or tonal noise generation shall not be undertaken for more than 3 hours without a minimum 1 hour respite period, unless otherwise agreed to by the PMEM (or nominated delegate), or as approved by EPA (where relevant to the issuing of an EPL), unless inaudible at nearby residential properties and/or other noise sensitive receivers.
12.	Construction noise and vibration
	Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with TfNSW's <i>Construction Noise Strategy</i> and the EPA <i>Interim Construction Noise Guideline</i> (July 2009). The mitigation measures shall include, but not necessarily be limited to:
	(a) details of construction activities and an indicative schedule for construction works
	 (b) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly sensitive noise receivers
	 (c) detail what reasonable and feasible actions and measures shall be implemented to minimise noise impacts (including those identified in the EIA)
	(d) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints
	(e) an out of hours work protocol (OOHWP) for the assessment, management and approval of works outside the standard construction hours identified in Condition 10 of this approval, including a risk assessment process which deems the out of hours activities to be of low, medium or high environmental risk, is to be developed. All out of hours works are subject to approval by the EMR and/or PMEM (or nominated delegate) or as approved by EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with the TfNSW Construction Noise Strategy
	(f) a description of how the effectiveness of actions and measures shall be monitored during the Construction; identification of the frequency of monitoring and the locations at which monitoring shall take place; the manner in which monitoring results are recorded and monitored; and, if any exceedance is detected, the manner in which any non-compliance shall be rectified.



CoA number	Condition
Noise and	vibration
13.	Vibration criteria
	Vibration (other than from blasting) resulting from construction and received at any structure outside of the Project shall be limited to:
	(a) for structural damage vibration - German Standard DIN 4150:Part 3 – 1999: Structural Vibration in Buildings: Effects on Structures
	(b) for human exposure to vibration - the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: A Technical Guideline (DEC 2006).
	These limits apply unless otherwise approved by the PMEM through the CEMP.
14.	Piling
	Wherever practical, piling activities shall be completed using non-percussive piles. If percussive piles are proposed to be used, approval of the EMR shall be obtained prior to commencement of piling activities.
15.	Non-tonal reversing beepers Non-tonal reversing beepers (or an equivalent mechanism) shall be fitted and used on all construction vehicles and mobile plant regularly used on site (i.e. greater than one

day) and for any out of hours work.



CoA number	Condition
16.	Property condition surveys
	Subject to landowner agreement, property condition surveys shall be completed prior to piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction (Designated Works) in the vicinity of the following buildings/structures: (a) all buildings/structures/roads within a plan distance of 50 metres from the edge
	of the Designated Works
	(b) all heritage listed buildings and other sensitive structures within 100 metres from the edge of the Designated Works.
	Property condition surveys need not be undertaken if a risk assessment indicates that selected buildings/structures/roads identified in (a) and (b) will not be affected as determined by a qualified geotechnical and construction engineering expert with appropriate registration on the National Professional Engineers Register prior to the commencement of Designated Works.
	Selected potentially sensitive buildings and/or structures shall first be surveyed prior to the commencement of the Designated Works and again immediately upon completion of the Designated Works.
	All owners of assets to be surveyed, as defined above, are to be advised (at least 14 days prior to the first survey) of the scope and methodology of the survey, and the process for making a claim regarding property damage.
	A copy of the survey(s) shall be given to each owner. A register of all properties surveyed shall be maintained.
	Any damage to buildings, structures, lawns, trees, sheds, gardens, etc. as a result of construction activity direct and indirect (i.e. including vibration and groundwater changes) shall be rectified at no cost to the owner(s).
Contamin	ation and hazardous materials
17.	Unidentified contamination (other than asbestos)
	If previously unidentified contamination (excluding asbestos) is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA guidelines, including the <i>Guidelines for Consultants Reporting on Contaminated Sites</i> (OEH, 2011).
	The Proponent shall:

(a) submit a copy of any contamination report to the EMR for review. The EMR is to be given a minimum period of 7 days to review and provide any comments to the Proponent in relation to the report

(b) submit a copy of the report to the PMEM for consideration upon completion of the EMR review period. The PMEM shall determine whether consultation with the relevant council and/or EPA is required prior to continuation of construction works within the affected area.

Note: In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing is these conditions



CoA number	Condition
	shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 17 and Condition 18 above.
18.	Asbestos management
	If previously unidentified asbestos contamination is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and report prepared to determine the nature, extent and degree of the asbestos contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA and SafeWork NSW guidelines and include the proposed methodology for the remediation of the asbestos contamination. Remediation activities must not take place until receipt of the investigation report.
	Works may only recommence upon receipt of a validation report from a suitably qualified contamination specialist that the remediation activities have been undertaken in accordance with the investigation report and remediation methodology.
	Note: In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements

19. Storage and use of hazardous materials

of both Condition 17 and Condition 18 above.

Construction hazard and risk issues associated with the use and storage of hazardous materials shall be addressed through risk management measures, which shall be developed by the construction contractor prior to construction as part of the overall CEMP, in accordance with relevant EPA guidelines, TfNSW's *Chemical Storage and Spill Response Guideline* and Australian and ISO standards. These measures shall include:

- (a) the storage of hazardous materials, and refuelling/maintenance of construction plant and equipment to be undertaken in clearly marked designated areas that are designed to contain spills and leaks
- (b) spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits to be kept in close proximity to potential discharge points in support of preventative controls
- (c) all hazardous materials spills and leaks to be reported to site managers and actions to be immediately taken to remedy spills and leaks
- (d) training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.



Condition

Erosion and sediment control

20. Erosion and sediment control

Soil and water management measures shall be prepared as part of the CEMP for the mitigation of water quality impacts during construction of the Project. The management measures shall be prepared in accordance with *Managing Urban Stormwater; Soils and Construction 4th Edition* (Landcom, 2004).

Heritage management

21. Indigenous and non-Indigenous heritage

If previously unidentified Indigenous or non-Indigenous heritage/archaeological items are uncovered during construction works for the Project, all works in the vicinity of the find shall cease and appropriate advice shall be sought from a suitably qualified heritage consultant (and in consultation with the Department of Planning, Industry and Environment where appropriate). Works in the vicinity of the find shall not re-commence until clearance has been received from the heritage consultant.

22. Protection of State heritage items

Design and construction of the Project must be undertaken in accordance with the conditions of the approval granted under section 60 of the *Heritage Act 1977* (NSW) and recommendations made in the REF.

In the event of any inconsistency between the conditions of the section 60 approval and the REF, the section 60 approval will prevail to the extent of the inconsistency.

Flora and fauna

23. Replanting program

All cleared vegetation shall be offset in accordance with TfNSW's *Vegetation Offset Guide* (ST-149). All vegetation planted on-site is to consist of locally endemic native species, unless otherwise agreed by the PMEM, following consultation with the relevant council, where relevant, and/or the owner of the land upon which the vegetation is to be planted.

24. Removal of trees or vegetation

Separate approval, in accordance with TfNSW's Application for Removal or Trimming of Vegetation, is required for the trimming, cutting, pruning or removal of trees or vegetation where the impact has not already been identified in the EIA for the Project. The trimming, cutting, pruning or removal of trees or vegetation shall be undertaken in accordance with the conditions of that approval.

Lighting

25. Lighting scheme

A lighting scheme for the construction and operation of the Project is to be developed and approved by a suitably qualified lighting designer and prepared in accordance with AS 1158 "Road Lighting" and AS 4282 "Control of the Obtrusive Effect of Outdoor Lighting". The lighting scheme shall address the following as relevant:

(a) consideration of lighting demands of different areas



CoA
numbor

Condition

- (b) strategic placement of lighting fixtures to maximise ground coverage
- (c) use of LED lighting
- (d) minimising light spill by directing lighting into the station and platform
- (e) control systems for lighting that dim or switch-off lights settings according to the amount of daylight the zone is receiving
- (f) motion sensors to control low traffic areas
- (g) allowing the lighting system to use low light or switch off light settings while meeting relevant lighting Australian Standards requirements
- (h) ensuring security and warning lighting is not directed at neighbouring properties.

Urban design and landscaping

26. Urban Design and Landscaping Plan

The Proponent shall prepare an urban design and landscaping plan (UDLP) which demonstrates design excellence in the essential urban design requirements of the Project, as evident in the following matters:

- (a) the appropriateness of to the proposed design with respect to the existing surrounding landscape, built form, behaviours and use-patterns
- (b) materials, finishes, colour schemes and maintenance procedures including graffiti control for new walls, barriers and fences
- (c) location and design of pedestrian and bicycle pathways, street furniture including relocated bus and taxi facilities, bicycle storage (where relevant), telephones and lighting equipment
- (d) landscape treatments and street tree planting to integrate with surrounding streetscape
- (e) design detail that is sympathetic to the amenity and character of heritage items located within or adjacent to the Project site
- (f) opportunities for public art created by local artists to be incorporated, where considered appropriate, into the Project
- (g) total water management principles to be integrated into the design where considered appropriate
- (h) design measures included to meet TfNSW's *Sustainable Design Guidelines Version 4.1* (ST-114).
- (i) Identification of design and landscaping aspects that will be open for community input.

The UDLP shall be:

- I. prepared prior to the finalisation of the Project's concept design
- II. prepared in consultation with relevant local councils and relevant stakeholders
- III. prepared by a registered architect and/or landscape architect

Traffic and access

27. Traffic management plan



Condition

The Proponent shall prepare a construction traffic management plan (TMP) as part of the CEMP which addresses, as a minimum, the following:

- (a) ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised
- (b) maximising safety and accessibility for pedestrians and cyclists
- (c) ensuring adequate sight lines to allow for safe entry and exit from the site
- (d) ensuring access to railway stations, businesses, entertainment premises and residential properties (unless affected property owners have been consulted and appropriate alternative arrangements made)
- (e) managing impacts and changes to on and off street parking and requirements for any temporary replacement provision
- (f) parking locations for construction workers away from stations and busy residential areas and details of how this will be monitored for compliance
- (g) routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses
- (h) details for relocating kiss-and-ride, taxi ranks and rail replacement bus stops if required, including appropriate signage to direct patrons, in consultation with the relevant bus operator. Particular provisions should also be considered for the accessibility impaired.
- (i) measures to manage traffic flows around the area affected by the Project, including as required regulatory and direction signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the TMP.

The Proponent shall consult with the relevant roads authority during preparation of the TMP, as required. The performance of all Project traffic arrangements must be monitored during construction.

28. Road condition reports

Prior to construction commencement, the Proponent shall prepare road condition surveys and reports on the condition of roads and footpaths affected by construction. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear, shall be repaired at the Proponent's expense.

29. Road Safety Audit

A Road Safety Audit shall be undertaken as part of the detailed design process. The Road Safety Audit shall include specific assessment of sight distances associated with the bus interchange arrangement and the surrounding existing road network including the intersection at Somerset Street and Butler Street. The Road Safety Audit is to be submitted to and accepted by the Proponent (or nominated delegate).

Sustainability

30. Sustainability officer

The Proponent shall appoint a suitably qualified and experienced sustainability officer who is responsible for implementing sustainability objectives for the Project.



CoA number	Condition
	Details of the sustainability officer, including defined responsibilities, duration and resource allocation throughout the appointment consistent with the Proponent's sustainability objectives are to be submitted to the satisfaction of the PMS prior to preparation of the pre-construction sustainability report (PCSR).
31.	Pre-construction sustainability report
	Prior to commencement of construction, the PCSR shall be prepared to the satisfaction of the PMS. The PCSR shall include the following minimum components:
	(a) a completed electronic checklist demonstrating compliance with TfNSW's Sustainable Design Guidelines Version 4.1 (ST-114).
	(b) a statement outlining the Proponent's own corporate sustainability obligations, goals, targets, in house tools etc.
	(c) a section specifying a process to identify and progress innovation initiatives on the Project, as appropriate. The process should identify any areas of innovation that are currently being explored and/or implemented on the Project.
	The Proponent shall submit a copy of the PCSR to the PMS for approval, at least 14 days prior to the commencement of construction (or within such time as otherwise agreed to by the PMS).

Other conditions

32. Graffiti and advertising

Hoardings, site sheds, fencing, acoustic walls around the perimeter of the Project site, and any structures built as part of the Project, are to be maintained free of graffiti and advertising not authorised by the Proponent during the construction period. Graffiti and unauthorised advertising will be removed or covered within the following timeframes:

- (a) offensive graffiti will be removed or concealed within 24 hours
- (b) highly visible (yet inoffensive) graffiti will be removed or concealed within a week
- (c) graffiti that is neither offensive or highly visible will be removed or concealed within a month
- (d) any unauthorised advertising material will be removed or concealed within 24 hours.

END OF CONDITIONS

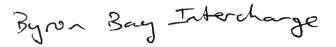


Appendix 3: Environmental Impact Assessment

BYRON BAY INTERCHANGE

APPROVAL

I, David Cleary, as delegate of the



- 1. Have examined and considered the Proposed Activity in the document titled "Review of Environmental Factors Rural and Regional Interchange Byron Bay Bus Interchange" dated 17 May 2019 and this Determination Report in accordance with the provisions of Section 5.5 of the *Environmental Planning and Assessment Act 1979* (NSW).
- 2. Determine on behalf of Sydney Trains (the Proponent) that the Proposed Activity may be carried out in accordance with the Conditions of Approval in this Determination Report, consistent with the Proposed Activity described in the document titled "Review of Environmental Factors Rural and Regional Interchange Byron Bay Bus Interchange" dated 17 May 2019 as amended by this Determination Report.

David Cleary

Environment Manager- Operations, Customer Service & Projects

Sydney Trains

Date: