



Transport  
for NSW



# COMPLIANCE TRACKING PROGRAM

Woolgoolga to Ballina (section 3-11)

Pacific Highway Upgrade

Six Monthly Construction  
Compliance Report (October 2020  
to March 2021)

AUGUST 2021



## Document control

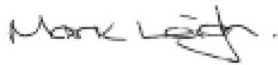
Report name	W2B_3-11_6MthlyComplianceReport_Oct20_Mar21.docx
Document number	W2B-PC0-0-ZH-RPT-00017
Revision number	A

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## Revision history

Revision	Date	Description	Approval
0	16/06/21	Draft & Internal Review	M Mulhearn
1	17/06/21	Draft for ER Review	M Mulhearn
A	18/08/21	Final	M Mulhearn

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## Glossary / Abbreviations

CEMP	Construction Environmental Management Plan
CFFMP	Construction Flora and Fauna Management Plan
CHMP	Construction Heritage Management Plan
Compliance audit	Verification of how implementation is proceeding with respect to a construction environmental management plan (CEMP) (which incorporates the relevant approval conditions).
CRO	Community Relations Officer
DoEE	Commonwealth Department of Environment and Energy
EEC	Endangered Ecological Community
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
EMS	Environmental Management System
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection License
ER	Environmental Representative – A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
ERG	Environment Review Group – comprising representatives of RMS, Environmental Representative, Project delivery team, regulatory authorities (eg EPA, DPI – Fisheries Conservation and Aquaculture, NOW) and councils (Clarence Valley Council and Richmond Valley Council). The ERG meets regularly and provides proactive advice on environmental management issues and review the environmental performance of the Project.
EWMS	Environmental Work Method Statements
HPG	Hydrostatic Profile Gauge
MCoA	Minister's Conditions of Approval
Non-compliance	Failure to comply with the requirements of the Project approval or any applicable license, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.
OEH	Office of Environment and Heritage
OPP	Oxleyan Pygmy Perch

Project, the	The Woolgoolga to Ballina Project (Sections 3 to 11)
PC	Pacific Complete
Secretary	Secretary of the Department of Planning, Industry and Environment
SPIR	Submission / Preferred Infrastructure Report
RMS	Roads and Maritime Services
TfNSW	Transport for New South Wales (nee RMS)

# 1 Introduction

## 1.1 Project description

Transport for New South Wales (TfNSW) is upgrading the Pacific Highway between Woolgoolga and Ballina on the NSW North Coast, known as the Woolgoolga to Ballina Pacific Highway upgrade project. An overview of the project is shown in Figure 1.

The 155 kilometre upgrade between Woolgoolga to Ballina is the last highway link between Hexham and the Queensland border to be upgraded to four lanes. The project will duplicate the existing highway to two lanes in each direction from about six kilometres north of Woolgoolga (north of Coffs Harbour) to about six kilometres south of Ballina.

The project bypasses the towns of Grafton, South Grafton, Ulmarra, Woodburn, Broadwater and Wardell. The project will include building new lanes and realigning the road.

Key features of the upgrade include:

- Duplicating 155 kilometres of the Pacific Highway to a motorway standard (Class M) or arterial road (Class A), with two lanes in each direction and room to add a third lane if required in the future
- Split-level (grade-separated) interchanges at Range Road, Glenugie, Tyndale, Maclean, Yamba/Harwood, Woombah (Iluka Road), Woodburn, Broadwater and Wardell
- Bypasses of South Grafton, Ulmarra, Woodburn, Broadwater and Wardell
- More than 100 bridges including major crossings of the Clarence and Richmond rivers
- Bridges over and under the highway to maintain access to local roads that cross the highway
- Access roads to maintain connections to existing local roads and properties
- Structures designed to safely encourage animals over and under the upgraded highway where it crosses key animal habitat or wildlife corridors
- Rest areas conveniently located at intervals to assist with reducing driver fatigue
- Heavy vehicle checking stations near Halfway Creek and north of the Richmond River
- Connections from the project to the local road network and other sections of the Pacific Highway

The Woolgoolga to Ballina upgrade does not include the completed Devils Pulpit and Glenugie upgrade projects.

Sections of the project are located adjacent to previously approved highway upgrades, including the following:

- Sapphire to Woolgoolga Pacific Highway upgrade – NSW Approval (06\_0293) 13 January 2009
- Glenugie Pacific Highway upgrade – NSW Approval (09/0073) 17 December 2009, Commonwealth Approval (2009/5002) 13 January 2010
- Devils Pulpit Pacific Highway upgrade – NSW Approval (09\_0179), 1 February 2011, Commonwealth Approval (2010/8586) 20 January 2012
- Ballina Bypass Pacific Highway upgrade – NSW Approval 22 May 2003.

The land to which the Woolgoolga to Ballina NSW Approval (SSI\_4963) applies is described as follows:

*The Pacific Highway between Woolgoolga and Ballina, from about six kilometres north of Woolgoolga at Arrawarra Beach Road to Pimlico Road about six kilometres to the south of Ballina, excluding the Glenugie and Devils Pulpit upgrades but including the tie-ins to those projects.*

Pacific Complete (PC) has been appointed by Transport for NSW (TfNSW) as the Delivery Partner (DP). Pacific Complete comprises Laing O'Rourke Australia Pty Ltd and WSP [formerly Parsons Brinckerhoff] working in close collaboration with Transport for NSW.

Pacific Complete is responsible for the procurement and management of the detailed design and construction phases associated with Pacific Highway Upgrade – Woolgoolga to Ballina (Sections 3 to 11).

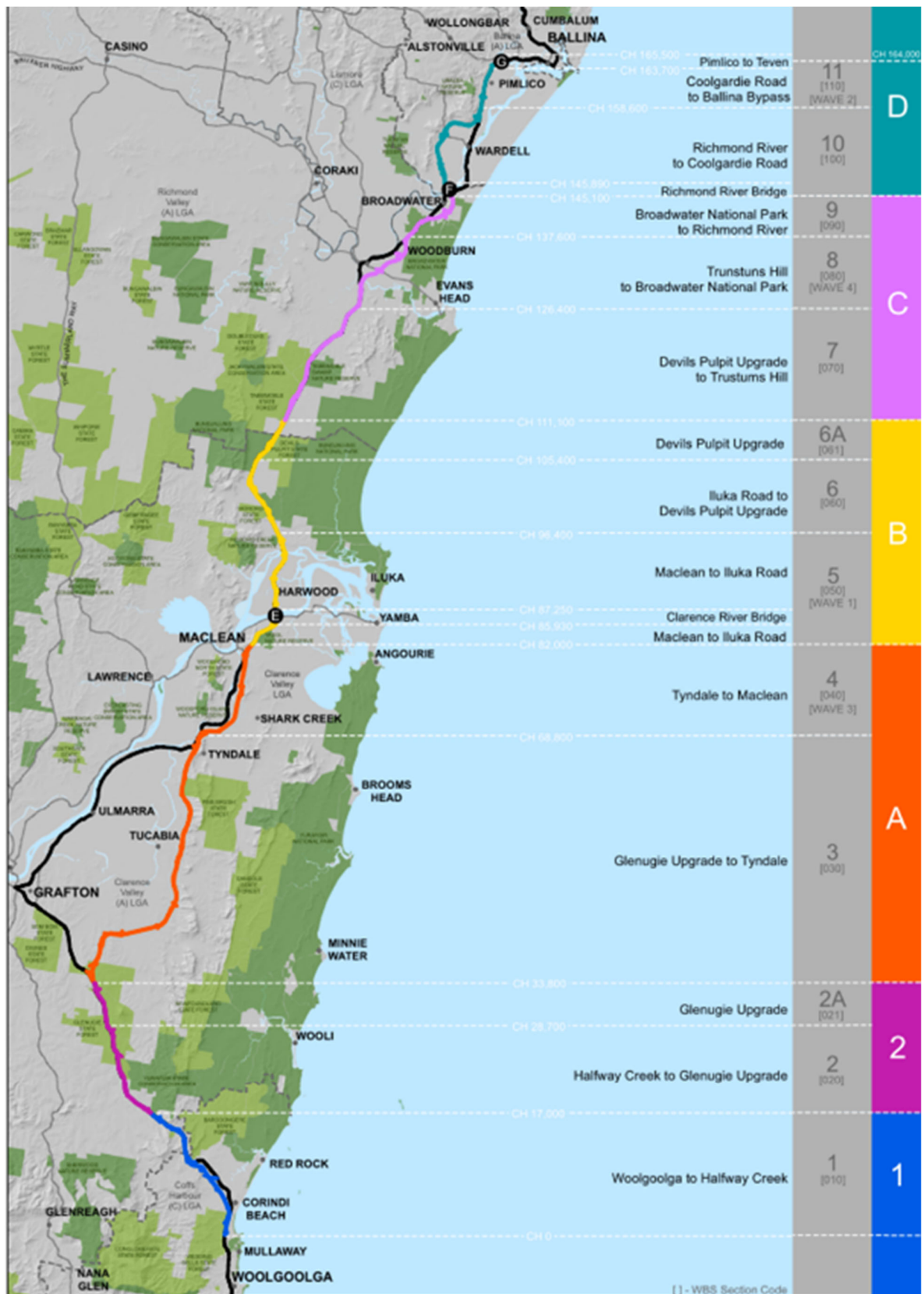


Figure 1 Woolgoolga to Ballina project

Pacific Highway Upgrade – Woolgoolga to Ballina (section 3-11)  
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## 1.2 Staging

Staging Reports have been prepared in accordance with the requirements of the NSW Ministers Condition of Approval A7, which states:

*The Applicant may elect to construct and/or operate the SSI in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Secretary prior to the commencement of each proposed stage. The Staging Report shall provide details of:*

- a) how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and*
- b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI.*

*Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specified stage(s).*

The project is also approved under the Commonwealth *Environment Protection and Biodiversity Act 1999* (012/6394 approval dated 14 August 2014). EPBC CoA 1 requires that:

*The Staging Report as required by NSW approval conditions A7 must be submitted to the Minister prior to the commencement of each of the proposed stage(s). In accordance with NSW approval condition A7, the Staging Report must outline how the proposal will be staged. The Staging Report must also outline the threatened species and communities, and migratory species impacted in each stage.*

Transport for NSW submitted the Woolgoolga to Ballina Pacific Highway Upgrade Staging Report to the Department, version 8, on 17 April 2020. The staging report has been updated to reflect the operational milestones for Stage 2 of the project, detailing open to traffic and operational phases.

## 1.3 Purpose

This plan has been developed to address the requirements of the Ministers Conditions of Approval (MCoA) D27. The Woolgoolga to Ballina Compliance Tracking Program – Sections 3-11 was approved by the Department on 16 March 2016. This report addresses the reporting period 1 October 2020 to 31 March 2021.

## 1.4 Environmental management systems overview

The Construction Environmental Management Plan (CEMP) is the primary system to manage and control the environmental aspects of the Project during construction. It also provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled. The strategies defined in the CEMP have been developed with consideration of the Project approval requirement, safeguards and mitigation measures presented in the environmental assessment and approval documents. The CEMP establishes the system for implementation, monitoring and continuous improvement to minimize impacts from the Project on the environment.

This Compliance Tracking Program is separate to the CEMP, but is part of a suite of environmental management documents prepared for the Project.

## 1.5 Relevant documentation

Documentation relevant to the Compliance Tracking Program includes:

- RMS, Woolgoolga to Ballina. *Upgrading the Pacific Highway. Environmental Impact Statement* (December 2012)
- RMS, Woolgoolga to Ballina. *Upgrading the Pacific Highway. Submissions and Preferred Infrastructure Report* (November 2013)

- New South Wales *Environmental Planning and Assessment Act 1979* (SSI-4963), approval dated 24 June 2014 (including Modification 1 dated 15 January 2015); Modification 2 dated 7 October 2015; Modification 5 dated 27 September 2017; and Modification 6 dated 21 February 2018).

## 2 Scope of the activities undertaken during the reporting period

The approved Construction Environmental Management Plan Section 2.3, Table 1 provides an overview of the construction activities across the project as at 31 March 2021.

Figures 2 – 15 highlight construction activities' completion status across the project during the reporting period, as highlighted in the Pacific Highway Upgrade Community Update, December 2020, TfNSW.

**Table 1 Scope of activities undertaken during the reporting period**

Construction activities	Glenugie to Maclean	Maclean to Devils Pulpit	Devils Pulpit to Richmond River	Richmond River to Ballina
Enabling works	√	√	√	√
Relocation or protection of services	√	√	√	√
Site establishment	√	√	√	√
Bulk earthworks	√	√	√	√
Drainage and structures	√	√	√	√
Bridge construction	√	√	√	√
Rest areas	√	√	√	√
Pavement work	√	√	√	√
Road furniture	√	√	√	√
Landscaping and restoration	√	√	√	√
Open to traffic	√	√	√	√
Ancillary site demobilisation	√	√	√	√



## 2.1 Photographs of Activities Undertaken During the Reporting Period

In November and December 2020, seven kilometres between Wells Crossing and Glenugie was opened to dual carriageway. The Coolgardie interchange was opened to its permanent arrangement. In December 2020, 15 kilometres between Devils Pulpit and Woodburn was opened to dual carriageway, the final section of the Pacific Highway upgrade.

As of 17 December 2020, 100% of the Pacific Highway upgrade to four lane-divided road has been completed and is opened to traffic. A celebration was held at the New Italy Museum to mark the completion of the Pacific Highway duplication, attended by politicians and dignitaries as well as long-standing employees and community members.



Upgrading the Pacific Highway and carrying out safety improvements to the existing highway have brought major improvements to road conditions. These improvements support regional development and provide safer travel, reduced travel times with improved transport efficiency, more consistent and reliable travel and improved amenity for local communities.



Figure 2 Open to traffic images from across the project



**Figure 3 Concrete paving on the largest concrete pavement job in Australia's history**

## Glenugie to Maclean



Aerial view of the Maclean interchange looking south west



Twin bridges over Jubilee Street, Townsend



**Figure 4 Glenugie to Maclean**



**Figure 5 Workers laying out geofabric**



## Maclean to Devils Pulpit



Started demobilisation at Mororo site compound



Aerial view of the new carriageway at Farlows Flat



100%  
complete

**Figure 6 Maclean to Devils Pulpit**

## Devils Pulpit to Broadwater

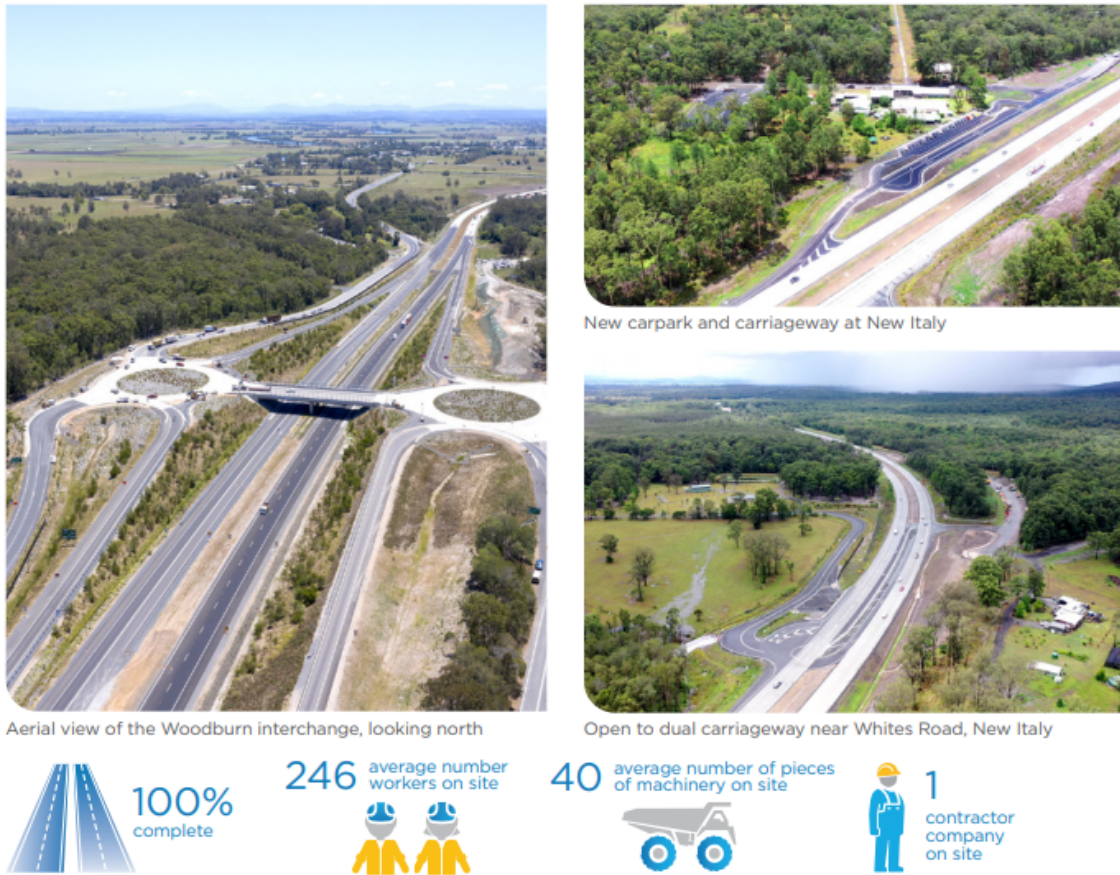


Figure 7 Devils Pulpit to Broadwater



Figure 8 Assessing fire damage in late 2020



## Broadwater to Ballina bypass



Aerial view of the Coolgardie interchange, looking north



100%  
complete

78 average number  
workers on site



1  
contractor  
company  
on site

**Figure 9 Broadwater to Ballina bypass**



**Figure 10 Aerial view of Coolgardie Interchange during construction**

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## New bridge over the Clarence River at Harwood



Aerial view of the new bridge over the Clarence River at Harwood, looking south



**Figure 11 New bridge over the Clarence River at Harwood**



**Figure 12 Harwood Bridge**

## New bridge over the Richmond River at Broadwater



Traffic on the new bridge over the Richmond River at Broadwater



Figure 13 New bridge over the Richmond River at Broadwater



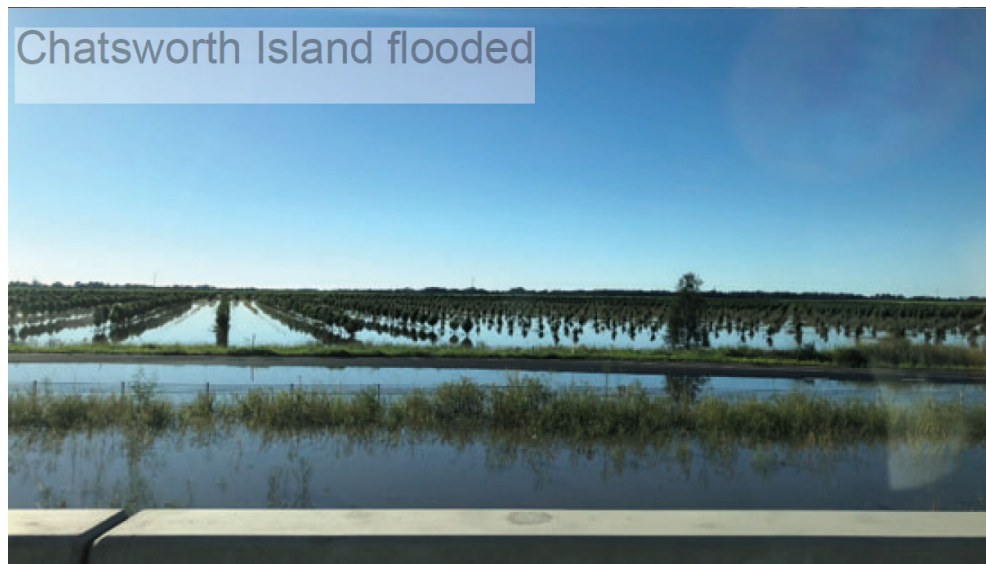
Figure 14 Richmond River Bridge



## 2.2 Major weather events

During the reporting period in March, the project was subject to intense weather event that resulted in minor to major flooding within the Clarence River catchment. This weather event affected large areas of NSW including Hunter, Mid-North and North Coast. During this event traffic was impacted along the Pacific Highway between Newcastle and Ballina, including areas within the Woolgoolga to Ballina project.

The flood event impacted construction activities along the project for a number of days and weeks given the level of inundation. In addition noise monitoring activities within the Harwood area were impacted as noise and traffic loggers were inundated. These monitoring activities were required to be repeated after the flood and cleanup activities were completed.



**Figure 15 Chatsworth Island Flooded**



**Figure 16 Pacific Highway in contra-flow**



**Figure 17 Harwood and Yamba Road © Clarence Valley Council 2021**



**Figure 18 Yamba Road © Clarence Valley Council 2021**





**Figure 19 Maclean interchange © Clarence Valley Council 2021**



**Figure 20 Inundated noise logging equipment in Harwood**

## 2.3 Environmental Approvals

There were the following additional environmental approvals received during the reporting period:

- ER approval for discontinuation of the use of hair funnel traps (as detailed in the Threatened Mammal Monitoring Program) in habitat adjoining fauna connectivity structures, received 10 March 2021.

## 2.4 Ancillary Facilities

Ancillary Facilities for the project are being managed in accordance with the approved Ancillary Facilities Management Plan developed to satisfy MCoA D21 and approved by the Department on 10 February 2016.

There were no new Ancillary Facilities approved for use during the reporting period.

Major Ancillary Facility Addendums approved by the ER during the reporting period are detailed in Table 2.

**Table 2 Major Ancillary Facility Addendums approved during the reporting period**

Facility # (ID / Name)	EIS Section	Type of Facility	Approval Date
MAFA Addendum Environmental Completion Major Ancillary Facility Chatsworth Island	5	Major	25/10/2020
MAFA Addendum Environmental Completion Major Ancillary Facility Harwood South	5	Major	25/10/2020
MAFA Addendum Environmental Completion Major Ancillary Facility Maclean Depot	5	Major	25/10/2020
MAFA Addendum Environmental Completion Major Ancillary Facility Castles	5	Major	23/2/2021

Decommissioning of ancillary facilities continues across the project, with the decommissioning of major ancillary facilities during the reporting period, including but not limited to:

- McIntyres Lane
  - Concrete and hardstand removal completed in October 2020 including 7,628m<sup>3</sup> material diverted from landfill under resource recovery orders for use in local subdivision development
  - Reinstatement of original site landform completed
  - Rehabilitation works completed.





**Figure 21 Hardstand removal, McIntyres Lane ancillary facility**



**Figure 22 Earthworks – cut to fill and topsoil spreading, McIntyres Lane ancillary facility**



**Figure 23 McIntyres Lane completed site hydromulched**

- Iluka Road
  - Offices and associated facilities decommissioned and removed from site
  - Concrete and hardstand removal completed in February including 13,452m<sup>3</sup> material diverted from landfill under resource recovery orders for use in local subdivision development
  - Rehabilitation works completed.



**Figure 24 Iluka Road office building removal**



**Figure 25 Iluka Road hardstand removal**





**Figure 26 Iluka Road topsoil and seeding completed / partial grass strike**



**Figure 27 Iluka Road completed site with good grass cover and consistent with surround paddock**

- Broadwater
  - Offices and associated facilities decommissioned and removed from site
  - Concrete and hardstand removal commenced in March including 8,677m<sup>3</sup> material diverted from landfill under resource recovery orders for use in local subdivision development (completed in April)
  - Rehabilitation works commenced (completed in April)



**Figure 28 Broadwater hardstand removal**



**Figure 29 Broadwater progressive rehabilitation**



### 3 Performance of environmental controls

The construction activities are managed in accordance with the approved Construction Environmental Management Plan (CEMP) and subplans.

Key features of the environmental management during the reporting period are outlined below.

#### 3.1 Erosion and sediment control

Erosion and sediment control measures have been implemented in accordance with the approved Construction Environmental Management Plan and Construction Soil and Water Management Plan across the project to ensure the appropriate management of erosion and runoff during construction. Erosion and sediment control plans (ESCP) have been prepared by construction contractors and their soil conservationists in consultation with the Project Soil Conservationist, Pacific Complete, Transport for NSW and DPI Fisheries (where required).

Progressive ESCPs have also been prepared to allow for adaptation to changing site conditions and staging of the construction works. These plans continue to be developed throughout the project to address progressive changes in site conditions and stages of works. The PESCP's are reviewed & approved by Pacific Complete in accordance with RMS General Specification G38.

The Project Soil Conservationist continues to actively provide guidance to contractors through performing regular scheduled inspections and monitoring, provision of actions following inspections and the review and approval of ESCPs. Contractors' Certified Practitioner in Erosion and Sediment Control (CPESC) also provides training to site personnel, including practical sessions.

Major controls and measures implemented during the reporting period include, but not limited to:

- 
- Review of Erosion and Sediment Control Plans to ensure effectiveness and progressive changes.
- Decommissioning of sediment basins, including backfilling and landscaping of basins undertaken as per approved PESCPs, with particular focus to rainfall forecast. Works were programmed and resourced, ensuring Bluebook compliance.
- Installation of fire rectification, replacement and repair of ERSER controls in all fire damaged drains across site, Portion C.
- Hand seeding and or soil binding to provide temporary stabilisation (over geotextile / sediment fencing).
- Continued of revegetation on disturbed batters (topsoil, hydro-mulch and hydro-seeding) at various locations.
- Jute mesh, shotcreting, geotextile, rock, grass lining in open drains.
- Approximately 60,000m<sup>3</sup> of fill material hauled from Teven Stockpile to Lumley's Stockpile area west of Wardell, during the previous reporting period. In order to comply with Blue book and EPL requirements, a 3ML Sediment Basin was used for the duration of the works.
- End of day controls installed to further reduce sediment impacts on perimeter controls, and ultimately reduce the risk of impacts on the surrounding environment.
- Progressive stabilisation of surplus spoil mounds.



**Figure 30 Vegetated drainage line, Section 7**

Environmental work method statements (EWMS) have been prepared to address erosion and Sediment control throughout the project, for example:

- EWMS for Operation of sediment basin
- EWMS for Piling and compound construction
- EWMS for Access track works and vegetation clearing
- EWMS for Working in proximity to a watercourse
- EWMS for Temporary waterway crossings
- EWMS for Temporary rock platforms and temporary jetty
- EWMS for Earthworks
- EWMS for Acid Sulfate Materials Management
- EWMS for Acid Sulfate Treatment
- EWMS for Local excavation of Abutments, Pour Wingwalls, Place Sill Beams and Backfill
- EWMS for Waterproof, Asphaltting and Emulsion Spraying for Bridges
- EWMS for Culvert construction
- EWMS for Marine Piling
- EWMS for Edwards Drain Creek Work
- EWMS for Deck Pouring and Curing
- EWMS for Lees Drain Creek Work
- EWMS for Crackers Drain Creek Work
- EWMS for Crackers Drain Temporary Crossing Removal
- EWMW for Bridge Construction
- EWMS for Paving

- EWMS for Crushing and Screening
- EWMS for Bridge structures
- EWMS for Borrow pit excavation
- EWMS for dewatering and discharge to waters
- EWMS for Lime stabilisation activities
- EWMS for Superstructure Concrete Work for Bridges
- EWMS for Grouting Works for Bridges
- EWMS for Hydro-Demolition of Bridges
- EWMS for Application of Matacryn Waterproofing Membrane
- EWMS for Asphalt and Sealing Operations
- EWMS for Foam Bitumen
- EWMS for Lees Drain Temporary Crossing Removal
- EWMS for Decommissioning of Temporary Waterway Crossings
- EWMS for Bridge Structures Construction and Demolition
- EWMS for Stitch Pours over Serpentine Channel
- EWMS for Local Excavation of Abutments, Pour Wingwalls, Place Sill Beams, Backfill, Prime and Seal
- EWMS for Bridge Demolition BR01
- EWMS for Lime Stabilisation
- EWMW for Prime Seal and Asphalt Works
- EWMS Bailey Bridge Removal
- EWMS Edwards Creek Temporary Crossing Removal
- EWMS for Open Drain Removal of Geofabric
- EWMS for Temporary Culvert Removal Edwards Creek

Erosion and sediment controls are monitored regularly through:

- Daily monitoring by Contractors Construction Teams
- Pre and post rainfall inspections
- Minimum weekly inspections by the Pacific Complete project team
- Fortnightly inspections by Independent Certified Practitioner in Erosion and Sediment Control (CPESC)
- Fortnightly inspections by independent Environmental Representative (ER) and Transport for NSW (TfNSW)
- Monthly by Pacific Complete CPESC

The PESCP revision process incorporates the feedback received during inspections.



**Figure 31 Rehabilitation of surplus spoil mounds in Section 7 and 8**

### **Protection of waterways**

The Woolgoolga to Ballina upgrade project includes the construction of over 150 bridges over creeks, rivers and floodplains, including major bridge crossings of the Clarence and Richmond Rivers. Construction activities throughout the project have taken place in proximity to a number of waterways, minor and major farm drains, creeks and rivers.

Specific waterways intersected by works include but are not limited to: Serpentine Channel, Shark Creek, Clarence River, Richmond River, Clarence River North Arm, Mororo Creek, Coldstream River, Tabbimoble Creek and Floodways, James Creek, Tuckombil Canal, major farm drains - Crackers, Lees; Edwards Creek, Pheasants Creek, Pillar Valley Creek, Chaffin Creek Farlows Flat, Champions Creek, Bingal Creek, Oakey Creek, Wardell Creek, Randalls Creek, Woodburn town drain Montis Creek tributary and various unnamed waterways, cane drains and drainage lines.

Four waterways in Section 4 are natural low point depressions, these include Crackers Drain, Lees Drain, Shark Creek and Edwards Creek. Lees Drain and Crackers Drain are cane drains from nearby cane farms. All of these water bodies had temporary haul roads constructed over the waterways, however the haul road from Lees Drain has been removed.

The temporary crossing at Crackers Drain is required to remain in place until a permanent bridge is constructed by others in the future. The temporary crossing was therefore altered to ensure it remains Bluebook compliant as it will be in place for an extended period of time. Culvert removal at Edwards Creek and geo fabric removal in the 'north-south- drain northeast of Edwards Creek and bridge removal at Shark Creek was undertaken during the previous reporting period.

Modification to the Infrastructure Approval (MOD # 5) was approved 27 September 2017 in relation to Conditions of Approval MCoA B8, B9 and B13, whereby exemptions may apply for works during the Oxleyan Pygmy Perch (OPP) spawning period in OPP habitat, in consultation with Department of Primary Industries Fisheries.

Consultation with DPI Fisheries in November 2020 occurred; to discuss remedial works required to operational water quality treatment devices, located within the OPP 50m buffer zone during the spawning season - October 2020 to March 2021, in Section 7 near Broadwater. Approval granted by DPI Fisheries to undertake the following construction activities within the 50m buffer zone:

- Minor earthworks to shape local drainage
- Adjustment of concrete canvas weirs
- Hydromulching activities to remediate any disturbed areas

These remedial works were completed in December 2020.



Temporary OPP bridges have been removed at Bridges C52, C07, C53 and C54, with completion of revegetation at Bridge C52, during a previous reporting period (April – September 2019).

Irrigation areas have been implemented across the project to provide water management onsite. These are established at least 50m from the drainage lines to facilitate infiltration and prevent sediment release from these irrigations systems. The areas in operation are in section 7 for the OPP culverts. These irrigate inside the project alignment.

Control measures near OPP habitat are working well including:

- All site water reporting to sumps with no local management areas;
- Clean water diversions are in place where appropriate and drains are protected by earth bunds, coir logs, sand bags, rock wrapped checks and/or geofabric/sediment fencing;
- OPP zones stabilised at the end of each day during the spawning season; and
- No high risk works undertaken when the BoM forecast is for 90% change of 10mm or more rain.

These measures have performed well during all heavy rainfall events (>60mm).



**Figure 32 OPP protected area signage and OPP during defishing activities**

All works undertaken within the OPP spawning period were in accordance with modified MCoA requirements and were undertaken in consultation and with agreement of DPI Fisheries. Enhanced environmental controls are in place to protect the fish and habitat within these work areas.

Works within other key fish habitat occurred with bridge construction at Bridges C01, C02

Key activities to protect local waterways during the project include:

- Progressive removal of temporary waterway crossings. Culvert works include the installation of permanent rock and jute lining for inlets and outlets of the culverts.
- Works have been completed within the OPP Water Management Area in Section 6, to protect the waterways – Tabbimoble Creek and Tabbimoble Floodways 2 and 3, with positive feedback received from DPI Fisheries (during previous reporting periods).
- Defishing works now finalised during this reporting period, with fish salvage successfully completed to facilitate outlet treatments on remaining culverts in Section 7.

### *Management of bridge construction*

- Ensuring no gaps within the jetty decks, provision of a material barrier between the deck and handrails to prevent windblown litter.
- Plastic barriers used under bridges during deck pours to prevent any drips from hitting the ground or waterway.
- Ensuring hydraulic lines where possible are sheathed with geofabric to prevent leaks which may be unable to be captured from bunding on barge. All gaps on the deck of the barge are to be sealed. All liquids on the deck of the barge are banded (fuel pods, plant, port-a-loos). Where not all individual components are banded perimeter bunding of the barge has been adopted.
- All pumps and hydrocarbons to be transported and used within spill trays.
- Biodegradable oil is used within cranes which are working over water.
- An oil containment boom is used during piling, pile excavation and high risk activities.
- Installation of geofabric skirt during drilling activities, which is slung between the pile and pontoon. Geofabric skirt contains material that may fall from the drilling bucket as it is slewed from the pile to the skips bins located on the pontoon.
- Undertake and record at least a weekly inspection that hydraulic lines over water are wrapped, no signs of leaks on sheathing / geofabric wrapping, bunds on barge in place
- Review weather forecasts checked daily and recorded when undertaking concrete pours to prevent the discharge of concrete contaminated surface runoff from concrete or curing compounds from entering the waterways or contaminating surrounding land.
- Review weather forecasts to determine the transport of excavation spoil skips to the nominated stockpile site.
- Runoff water quality monitoring to measure the pH of the runoff deck water conducted after each concrete deck pour. Once the pH was neutralised and acceptable, water was removed and recycled. Re-use includes dust suppression and wheel washing to reduce mud tracking.
- Specific controls implemented during the placing of stone mastic asphalt (SMA) includes: protection of waterways:
  - Setting up refuelling areas for plant and machinery >50m from waterways.
  - The identified refuelling area is also used as an asphalt clean-down area for delivery trucks.
  - A designated truck is available on site to remove the asphalt waste back to the Iluka Asphalt Batch Plant.
  - Weather forecasting determines work activities on daily basis (i.e. no asphalt paving to be performed on rainy days).
  - Works do not commence if waterways cannot be protected due to weather events. Environmental risk assessment conducted prior to each asphaltting event in accordance with EWMS.
  - Periodic inspection of vehicles and machinery for leaks etc.
  - Daily pre start for all plant and machinery and to check for leaks etc.
  - Where there are cuts at the bottom of concrete F-type barriers on-site, asphalt is spread on ground and levels adjusted with rakes to prevent any run off through the cuts.
- Completion of permanent rock/jute lining for inlet and outlet of the culverts and clean water drainage lines in Section 3 during previous reporting periods..
- Bridge drainage directed into tanks from the bridges to prevent alkaline water & cementitious material from entering the waterways below from the deck grinding works.
- The Section 3 water quality results have demonstrated favourable conditions within the waterways which traverse the project including immediately downstream, including evidence of re-establishment of the natural ecosystems with frequent native wildlife sightings.
- Shark Creek – removal of temporary steel Bailey bridge including removal of bridge components by crane (no piles in bed or banks of waterway).
- Edwards Creek – removal of temporary crossing (concrete box culverts) west of Bridge A36. Segmental concrete box culverts were removed by crane and base concrete slab was agreed with the ERG to remain in-situ as it's not above natural bed level of creek.
- Waterproofing membrane applied to bridge decks prior to application of asphalt.

- Installation of oil containment baffle boards in Section 7, 8 and 9. Installed in roadside swale drains and designed to prevent large volumes of fuel or oil entering adjacent waterways in the event of an accident on the highway.
- Completion of works at Bridges C01 and C02 in Section 7 during this reporting period.

*Management of local cane drains:*

- Dewatering and fish salvage by Aquatic Ecologist.
- Weekly site inspections and tracking of actions.
- No go zones in some areas allowing vegetation cover to re-establish, protecting the cane drains from sediment runoff.
- Removal of temporary waterway crossings.



**Figure 33 Completion of works at Bridges C01 and C02 in Section 7**

### **3.2 Flora and fauna**

A wide range of Endangered Ecological Communities (EEC), Threatened Ecological Communities (TEC's) and threatened flora and fauna species are known to occur within and/or adjacent to the project.

Works occurred during the reporting period within and/or adjacent to EEC's and TEC's and threatened flora and fauna species habitats.



**Figure 34 Fauna crossing culvert in Section 7**

Measures undertaken to manage and protect EEC, threatened species and their habitats during the reporting period include (but not limited to):

- Environmental no-go areas have been installed to protect EECs, and threatened flora and fauna.
- Species-specific induction and training conducted with site personnel, such as invertebrate management, rainforest management, etc.
- Pre-clearing diurnal surveys have been undertaken and all clearing was spotted by an Ecologist as per RMS G40 specification.
- Installation of fauna culverts and furniture (glider poles, rope bridges, drop down structures).
- Installation of permanent fencing was completed on majority of alignment during the previous reporting period.
- Microbats are known to exist in proximity to works north of Jubilee Street. Potential Microbat roosting habitat is present at existing culverts between CL81440 and CL81825. Microbat exclusions have remained in place during all culvert demolitions and grout filling of pipes.
- Frog pond construction has been completed in Section 3, during the previous reporting period, including revegetation around the frog ponds.
- Completion of majority of fauna connectivity structures across the project with finalisation of structures expected within the next period (April – September 2021).





**Figure 35 Wildlife protection, including Koala grids, signage, fauna furniture and culverts**



**Figure 36 Fauna rope bridge and permanent fauna fencing examples, Section 7**

## FAUNA CONNECTIONS

# 350

**16** threatened species

**3,600** hectares of biodiversity offsets

**300** kilometres of fauna fencing



Transport for NSW revised their Flora Translocation Strategy to include the implementation of the Green-leaved Rose Walnut Remediation Action Plan. The revised strategy was approved on 1 May 2020.

The Green Leaved Rose Walnut (GLRW) Rehabilitation Plan (dated 10 December 2019, has continued to be implemented during the reporting period. On 4 January 2021, ten (10) GLRW saplings were planted on site at CH80640. For a high survival rate the plants need to be a good size and the root system well developed before planting out. Refer to Figure 37 below.



**Figure 37 Green Leaved Rose Walnut sapling**

During construction, opportunistic fauna encounters/observations, not specifically related to construction activities, are captured on fauna registers & the project fauna-spotting app. A number of fauna relocations were required during construction works, as reported previously.

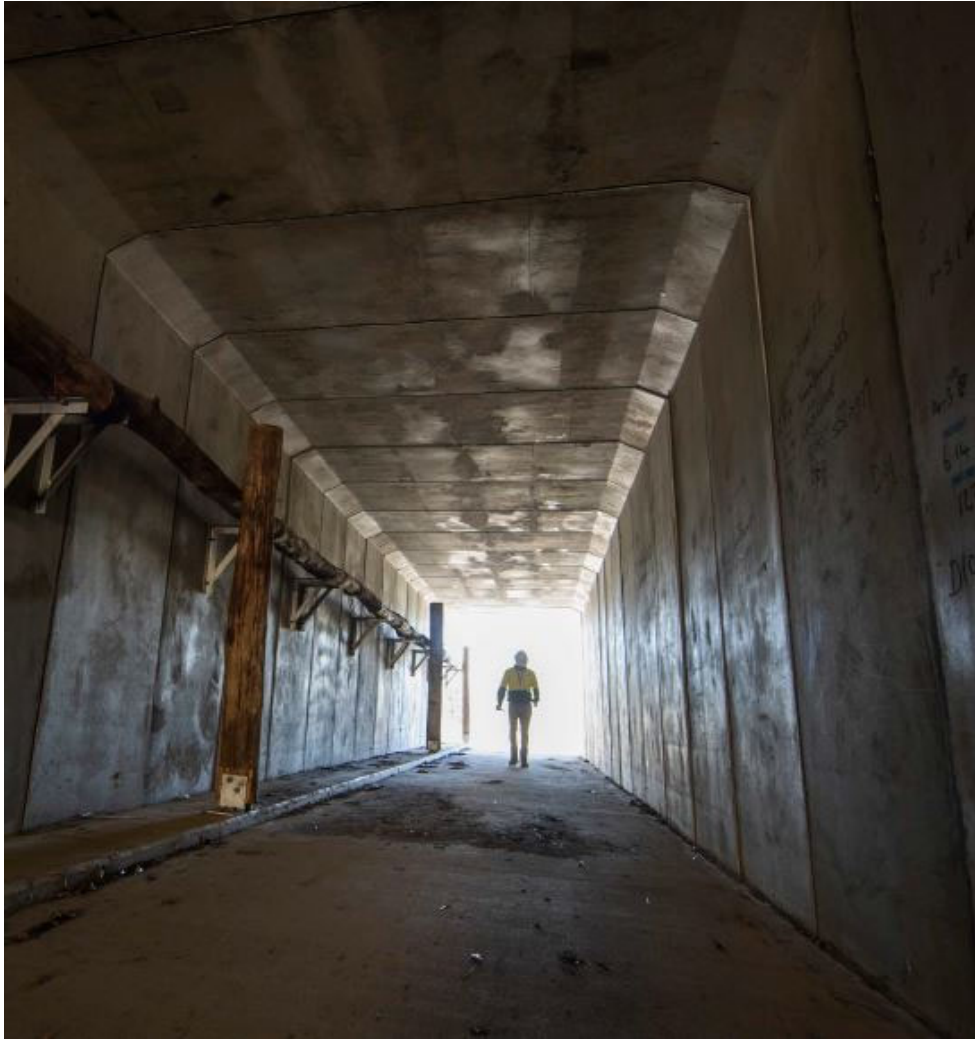
All unexpected flora and fauna finds are managed in accordance with the Unexpected Threatened Species Finds Procedure, Appendix O of the approved Pacific Complete Construction Flora and Fauna Management Plan (CFFMP), Sections 3 to 11, the relevant species management plans approved for the project and site specific EWMS.

Pacific Highway Upgrade – Woolgoolga to Ballina (section 3-11)

Six Monthly Construction Compliance Report (October 2020 – March 2021)

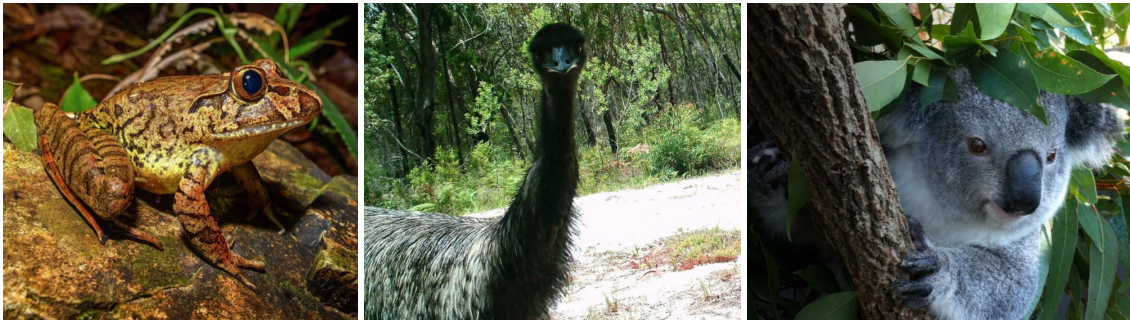
W2B-PC0-0-ZH-RPT-00017-A





**Figure 38 Inside a fauna culvert in Section 10**

There were no threatened fauna encounters/observations during the reporting period.



**Figure 39 Threatened Species on the Woolgoolga to Ballina project - Giant Barred Frog, Coastal Emu and Koala**

## Fauna & Flora Relocations

Fauna and flora relocations are reported in post clearing reported in post clearing reports.

There were no fauna or flora relocations during the reporting period.

## Nest Boxes

In accordance with the approved Nest Box Strategies for the project, nest boxes have been installed across the project, as per the Nest Box Management Plans.



**Figure 40 Nest box occupants**

## 3.3 Heritage

The approved Pacific Complete Construction Heritage Management Plan (CHMP) Sections 3 to 11, Appendix B5 of the CEMP and subsequent CEMP's prepared by contractors are the main sources of information and guidance for the management and protection and heritage constraints within and adjacent to the footprint of the project.

Works within the reporting period have occurred adjacent to several Aboriginal and non-Aboriginal items. The Transport for NSW salvage package has continued throughout the reporting period to ensure heritage sites within the project boundary have been cleared prior to construction in that location. Clearance letters are prepared by the salvage contractor post salvage works. Where required additional mitigation measures (ie establishment of exclusion fencing) are including in these clearance letters and implemented out on site.

Sections of the project are located within areas that are determined under the Native Title Act. The Federal Court of Australia recognised the native title rights and interests of the Yaegl People to land and waters in their native Title Determinations Applications (Federal Court Proceedings NSD 6052/1998 and NSD 168/2011) on June 25 2015. Sites officers from the Yaegl Traditional Owners group have previously been engaged to undertake cultural heritage monitoring.

Areas of significance continue to be managed in accordance with the projects No Go Permit and Cultural Heritage Management Plan. The Registered Aboriginal Parties (RAPs) continue to be onsite during any natural ground disturbance or works beyond the permanent fence within the cultural areas.

When potential heritage items are identified, works within the areas cease and the Roads and Maritime Standard Management Procedure – Unexpected Archaeological Finds (Appendix B of the approved Woolgoolga to Ballina Construction Heritage Management Plan), is followed until the appropriate clearance is provided for works to continue.

### 3.4 Noise and vibration

Noise intensive activities undertaken during the reporting period include:

- Truck and vehicle movements - heavy vehicles and plant used to carry out broad clearing and fill and compact
- General earthworks – cut and fill, haulage.
- Concrete pours and paving works
- Paving and sealing works

Key out of hour's works activities undertaken during the reporting period include:

- Concrete pours – to manage technical requirements including temperature.
- Concrete batch plant operation and deliveries – to support concrete pour technical requirements.
- Concrete saw cutting and finishing works, including curing – to manage technical requirements including temperature and hydration.
- Asphalt batching and delivery – to support traffic switches.
- Traffic control and traffic switches – to manage changing traffic conditions during construction.
- Sealing, line marking and installation of barriers – to support traffic switches.
- Refuelling and maintenance of plant and equipment – to support technical and safety requirements.
- Landscaping – weeding, monitoring and maintenance.
- Ancillary facility cleaning activities.

Measures undertaken during the reporting period to manage and mitigate noise and vibration include:

- Considering potential noise impacts during the preparation of construction procedures, during the planning of Out of Hours Works and at pre-start meetings
- Review of construction activities to ensure planning of noisy works occurs during standard hours wherever possible.
- All project personnel, including relevant sub-contractors on noise and vibration requirements from this plan through inductions, toolbox talks and targeted awareness training.
- Undertaken noise monitoring to refine construction methods or techniques to minimise noise.
- Prepare EWMS relative to site works.
- Ongoing proactive engagement with sensitive receivers within close proximity before the commencement of works and throughout the duration of works via letterbox drop, telephone and doorknock.
- Positioning work compounds, parking areas, equipment and material stockpile sites and entry/exit points away from noise-sensitive receivers to the greatest extent possible
- Locating haulage routes as far away as possible from residential receivers where practicable.
- To mitigate truck and heavy vehicle noise annoyance, controls implemented include speed restrictions and hours of operation.
- Plant and equipment used across the project maintained in sound working order, meeting manufacturer specifications.
- Noise generating works were at times managed with reduced start and finishing times and were carried out for periods of three hours, with one-hour breaks.
- Proactive community consultation, notifications and monitoring.
- Use of two-way radios instead of vehicle horns in strategic areas.
- Non-tonal reverse beepers in vehicles to reduce noise and the use of spotters while reversing plant and trucks.

Overall, it is considered that the noise and vibration management, in particular the Out of Hours Works review, consultation and approval process is working effectively.

Twelve (12) community complaints were received during the reporting period, relating to 'operational noise' from opening to traffic of the Pacific Highway.

In April 2020, the NSW Government amended existing laws through the following Orders to allow construction sites to operate on weekends and public holidays, until 31 March 2021:

- 2 April 2020 – Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order 2020
- 9 April 2020 - Environmental Planning and Assessment (COVID-19 Development – Infrastructure Construction Work Days) Order 2020

Standard construction hours under the COVID-19 Order 2020 are:

- 7:00 – 18:00 Monday to Sunday and public holidays.

### 3.5 Waste and chemical storage

Construction works involve the generation of waste, and the storage of chemicals and fuel. Waste management techniques utilised during the project include:

- Utilising excess timber mulch for erosion and sediment controls
- Segregation and recycling of demolition waste by demolition sub-contractor.
- Use of segregated construction and office waste skips within the main compound
- Specific bins for cigarette butt on site within designated smoking areas.
- Ongoing re-use of onsite captured water for construction activities.
- Waste generated by the project was classified and disposed of in accordance with EPA Waste Classification Guidelines to suitably licenced facilities.
- Utilising separate skips for contaminated soil to collect any spill affected materials for off-site disposal at appropriately licensed facility.
- Placement of spill kits at appropriate locations, and spill response training of staff and regular drills.
- Undertaking asbestos contamination audits prior to the demolition of residential buildings.
- Transporting surplus mulch material to Cape Byron Cogeneration Plant for beneficial electricity generation.
- Re-use of root balls from clearing & grubbing for creek bank stabilisation program undertaken by EPA & DPI Fisheries and Local Land Services.
- Reuse of timber on site for fauna furniture in connectivity structures, such as culverts.
- Concrete crushed on site with machinery reused to provide road base to reduce dust suppression and mud tracking onto roads.
- Waste concrete and scrap steel / other metal sent offsite for recycling.
- Appropriate storage and handling of hazardous products (e.g. fuels and chemicals) within appropriately sized bunded areas, located away from waterways, drainage lines; including registers, and safety data sheets for all stored chemicals.
- Weekly inspections of chemical and waste storage areas.
- Onsite treatment of spent Polymer product where it is re-used onsite as dust suppression. This is an alternative to trucking spent Polymer to licensed waste facility in Brisbane.
- Reuse of alkaline waters from containment areas within the batch plant ancillary sites (ie wedge pits, wash out pits, etc).
- Surplus foamed bitumen materials have been beneficially re-used onsite in in stabilisation works.
- To date more than 50 tonnes of waste material from foam bitumen batching activities has been beneficially reused at the RPQ Asphalt Batch Plant at Swanbank, after consultation with EPA.
- Surplus asphalt waste is removed off-site for beneficial reuse under the *Reclaimed Asphalt Pavement Order 2014*, for example sent to Tomago COLAS facility for re-use in the manufacture of dense grade asphalt mixes.
- Waste concrete recycling program that allows concrete to be mixed into general fill in accordance with the R44 Specification and project environmental requirements.

- Asphalt millings have been reused on site for upper zone material and to sheet access tracks and haul roads in Section 6.
- Unexpected asbestos finds are dealt with lawfully and disposed of at licenced facilities.
- Asphalt waste from site and batch plant was accumulated and stockpiled within the Iluka Asphalt Batch Plant. Where possible, waste asphalt materials were removed off-site for beneficial re-use under the *Reclaimed Asphalt Pavement Order 2014*.
- In Section 4, approximately 45020T of waste diverted from landfill (26,000T ENM; reclaimed asphalt 5000T, recovered aggregate 14020T).

Measures undertaken to appropriately store, manage and monitor chemicals during the reporting period include:

- Placement of spill kits at appropriate locations and spill response training of staff.
- Monitoring of spill kits via the weekly environmental inspections, which are restocked as required.
- Appropriate storage and handling of hazardous products (e.g. fuels and chemicals) in bunded areas
- Utilising appropriately sized bunding around chemical storage containers.
- EWMS Maintenance, Refuelling and Chemical Storage, including Safety Data Sheets.
- Use of Chemalert an online system used to assess and manage onsite chemicals.
- Self-bunding bulk fuel tanks and installing in-ground grates for catching potential re-fuelling drips
- Locating all fuel storage away from waterways and drainage lines
- Weekly inspections of chemical and waste storage areas through the weekly Environmental Inspection process
- Utilising registers and Material Safety Data Sheets for all chemicals and fuel kept onsite.
- Installation of catch-grates at refuelling points to avoid potential spillage.
- Pumps are contained inside small plastic sand pits when pumping onsite
- Bunding of polymer tanks at bridge sites
- Audits of chemical storage undertaken during the previous reporting period.

### 3.6 Acid Sulfate and ASTA

Potential acid sulfate soils (PASS) are prominent within the footprint of the project, due to the number of low lying wetland areas located along the alignment. Areas of PASS contain iron sulphides and when exposed to oxygen, chemical reactions between the iron sulphides and oxygen molecules can result in the formation of acid sulfate soils (ASS). These soils are highly acidic and can also result in the release of other substances occurring in soil such as heavy metals. In locations where PASS soils are likely to occur, and disturbance is unavoidable, testing for ASS is carried out prior to excavation. If the results are positive, the excavated material is taken and appropriately treated in a designated Acid Sulfate Soil Treatment Area (ASTA).

During the project there has been up to fifteen (15) sites in use across the project. These were established and operated in accordance with approved Acid Sulfate Soil Management Plans and EPL requirements.

Measures undertaken to appropriately manage Acid Sulfate Soils (ASS) and Acid Sulfate Treatment Areas (ASTA) include:

- Minimisation of the disturbance to Acid Sulphate Soils by adopting driven steel piles and not bored piles.
- Management and diversion of surface runoff around potential acid sulfate material
- Modifying the installation methodology for transverse drainage to minimise soil disturbance
- Validating and subsequently remediating excavated acid sulfate material
- Transportation of acid sulfate material to appropriately licenced receivable locations.
- Monitoring the pH of water from wick drains and preloading areas and appropriately treating (where required) prior to discharge / re-use
- Training and awareness for all personnel during the site induction including toolbox talks on the ASS EWMS and ASS Unexpected Finds Procedure for all personnel involved in ASS excavation and management

- Areas that are prone to Acid Sulphate Soils, temporary sediment basins have been constructed above ground. Excavated swales along the alignment have been removed from the design where possible and instead above ground swales will be constructed.
- Skip bins established adjacent to pile location to capture immediately all excavated materials with slew radius protected using geo synthetic textile covering.
- Mixed approach for ASS/PASS treatment that for some sites, lime is added immediately to the skips as materials are being excavated and or lime is added at the nominated ASTA pads (to avoid need for lime storage at sensitive bridge sites)
- Establishment of Acid Sulphate Soil Treatment Areas and validation sampling to ensure treatment was successful prior to stockpiling and/or removal from treatment location.
- Establishment of liming rates via field and SPOCAS testing.
- Bridge A07 billabong drainage works uncovered low levels of acid sulfate soils during this reporting period. These soils were treated with ag-lime and validated as being neutralised, as per the Acid Sulfate Soil Management Plan. The treated soils have been placed as a batter widening on the northern end of Bridge next to the southbound carriageway.

Current areas of work encountering and treating PASS include Sections 4 and Section 6 with excavated PASS complete in Sections 7, 8 and 9 during the previous reporting period (October 2019 – March 2020).

### 3.7 Sustainability

The project approach to sustainability focuses on maximising environmental, economic and socio-economic performance in the interests of enhancing public value for the Pacific Highway stakeholders and the environment.

Since project commencement, several sustainability initiatives have been developed, including but not limited to:

- Promotion and adoption of the Reduce, Reuse, Recycle philosophy across the project
- Waste concrete of appropriate quality is poured into formwork for a 'kelly' (or Elain/Foley) block. The kelly block has been designed to include lifting points to enable it to be reused on site as separation between plant and people and plant and plant (refer to Figure 44).
- Recycling bins and signage have been placed in the site compounds and the crib sheds.
- Sediment basin construction and commissioning includes additional construction water capacity, at specific sites, ensuring dewatering into basin and adequate capacity for water to be reused for dust suppression on site.
- Recycling of coffee pods with proceeds going to charity.
- Minimising printing and use of mobile technologies and recycling of office products (paper, printer and toner cartridges); reduction of hard copy documents by use of digital technology such as tablets and associated software (ie, Dropbox, FieldView).
- Reuse of materials onsite, such as star pickets, temporary fence materials, timber pegs, spoil, permanent sediment fence, concrete (crushed and re-used on site) and clean rock.
- Use of local businesses and companies where practicable and available.
- All quarry material sourced and imported from the closest possible source meeting the required specification.
- Reducing the hazardous material content in purchases, including toxicity.
- Considering the end-of-life options, including the reuse, repair, recycle and disposal options of products.
- Purchasing materials that have a recycled content, such as products made from recycled plastics (spill trays).
- Purchasing certified sustainable timber where possible.
- Separation of waste steel from other project waste streams and recycled.
- Curing capture and recirculation system for deck curing water.
- Beneficial re-use of rock platform materials to a locally approved developer.



- Where possible, site mulch is used for sediment controls reducing the need to use geofabric and sediment fence material, once used on site it is destined for landfill.
- Black builder plastic and geofabric are reused multiple times for purposes predominantly in Erosion and Sediment Controls and covering of earthen materials for quality control. Reusing these materials multiple times has saved great volumes going to landfill.
- Reuse of hessian from bridge deck curing and plywood and timber from formwork.
- Reuse of black plastic for bridge deck curing.
- Best practice energy conservation and greenhouse gas reduction by adopting energy efficient work practices, including:
  - Developing and implementing procedures to minimise energy use
  - Maximise use of battery operated small tools to reduce the use of generators and air powered tools
  - Switch off computers, computer screens, heating, air conditioning and other equipment at the end of each day or when not in use.
  - Cleared timber is used for terrestrial fauna furniture and as aquatic habitat structures
  - Chipped timber not used for erosion and sediment control to be used for co-generation at sugar mill.
- Pacific Complete has continued the 'KeepCup' initiative rolled out during a previous reporting period.
- Promotion of using water coolers and reusable bottles rather than single use plastic bottles for agency site visits.
- In Section 6, a new recycling initiative has commenced which encourages workers and staff to recycle plastic bottles and aluminium cans in a receptacle. This is taken to a recycling facility where funds are collected and donated to a local charity.
- Investigating the beneficial re-use of RAP materials off-site under the *Reclaimed Asphalt Pavement Order 2014*.
- Contractors incorporate sustainability principles into project contracts and tender evaluation criteria.
- Utilisation of the EPA's Recovered Aggregate Exemption and Order to legally export recovered aggregate offsite after demobilising from Bridge B07 and B08. Samples were sent to be laboratory tested to ensure the material had no contaminants. Then the material was exported to a residential developer in Yamba for beneficial reuse. This sustainability initiative saved over 10,000 tonnes of material being disposed of in landfill.
- Surplus temporary pipes and access track profiling's are being gifted for reuse by landholders under the EPA Resource Recovery Exemption; with an approved Section 143 Certificate.

These initiatives have resulted in more than 90% of the waste generated at some sites diverted from landfill for beneficial reuse.

### 3.8 Environmental Initiatives

During the reporting period, the following positive environmental initiatives were implemented across the project:

- Continuation of the emu awareness campaign (initially rolled out in June 2017) to support implementing the project's coastal emu protection measures.
- In areas where construction activity necessitated temporary removal of the emu fencing, such as permanent fencing installation, the following mitigation measures were undertaken as per project ecologist's recommendations:
  - Stage works so the extent of area without a temporary or permanent emu fence is minimised (maximum of 200-300m at a time).
  - Undertake daily pre-works inspection of the site to see if emus have entered the project alignment overnight.
  - If emu's are detected, stop works and contact the ecologist in accordance
  - with the Emu Management Plan.

- If emu's aren't detected, continue works cautiously under the controls below:
- Adopt a maximum speed of 20km/hr. for all plant and vehicles moving past the area with no fence. Speed signage and pre-start discussions would accompany this.
- Spotters used during construction at each location without fencing.
- A positive culture on the project has assisted injured animals (caused by the local road network) and delivered these animals to carers from the WIRES organisation.
- Continuing the positive fauna culture on the project, various award systems have been established, such as staff that spot Koalas and other threatened species; and staff with the best work crew in regard to environmental controls and maintenance, are rewarded for their diligence and efforts.
- Two-stage clearing methodology successful.
- Use of the Threatened species mobile phone app for project staff to record and map sightings of threatened animal species in real time.
- There are currently significant challenges facing recycling and waste management in Australia. As it stands locally, there is greater than 12,000 tonnes of recycled glass stockpiled in the Lismore recycling facility alone, this is growing at a rate of 500 tonnes per week.

As part of the Sections 10 and 11 works, the team identified an opportunity to use locally sourced recycled glass in the projects paving mix. This use of recycled glass was the first use of glass for this purpose on a major Pacific Highway project. Use of this material facilitates the beneficial reuse of this product locally, and may open the door to the future use of glass in pavement in Australia, which will contribute to resolving the significant challenges currently facing recycling.

- Pacific Complete have donated items from its compound and office demobilisation to the local Rural Fire Service (RFS) in December 2020. Items include white goods, picnic tables, chairs, storage cupboards, work stations, ice boxes and bollards.



**Figure 41 The NSW Rural Fire Service collecting donated items from Pacific Completes site demobilisation**

### 3.9 Landscaping

Landscaping is a key deliverable as part of the overall project. All works are carried in accordance with the approved Urban Design Landscape Plans approved in accordance with MCoA D20.

Some highlights from the project landscaping status at the completion of the reporting period is outlined below:

- Approximately 98% of revegetation has been completed in Section 4. This includes batter preparation, amelioration and ripping of subsoils, topsoil, hydro-mulching and hydro-seeding.
- Section 6, revegetation works include:
  - hydroseeding and hydromulching ongoing across site, including all major cut and fill batters and fire rectification works;
  - Landscape planting and landscape maintenance monitoring has commenced
- Installation of street trees and construction of garden beds, including the installation of mulch and plants continues.
- Permanent revegetation works completed Chatsworth Island northbound embankments west
- Where practical, seed is applied via hydro-truck to ensure consistent seed spread over surface area. Where seed is very fine/small, seed is applied by hand to ensure maximum seed to ground, given that some seed is always lost in the hydro-seeding process (stuck to machinery barrel).
- Part of the Landscaping Strategy is to increase Koala habitat and connect this to existing Koala habitat. In the reporting period about 90,000 koala food trees have been planted, covering 110 hectares of previously cleared land. Another 10,000 trees are to be planted on the remaining 20 hectares. This will be finalised following this reporting period, and this will increase the Koala food tree habitat and improve Koala habitat connectivity.
- Landscape planting progressing towards completion across the site with hydroseeding and hydromulching ongoing across the site, including all major cut and fill batters and fire rectification works.
- Landscape maintenance monitoring has commenced in some areas during this reporting period.
- Clearing of unsound trees, required after bushfires affected vegetation in late 2019 in Section 7, was completed within the previous reporting period (April – September 2020).
- 

## PLANTS

**1.4** MILLION

**1,250** hectares hydromulched

**130** hectares of koala food trees

**1,300** rootballs and timber logs





**Figure 42 Koala food tree plantation**



## 4 Program requirements

This Compliance Tracking Program has been prepared as a requirement of MCoA D27. The requirements, as stipulated by this MCoA are detailed in Table 2.

**Table 3 MCoA requirements for the Compliance Tracking Program**

MCoA No.	Requirement	Reference
D27	The Applicant shall prepare and implement a <b>Compliance Tracking Program</b> , to track compliance with the requirements of this approval, prior to the commencement of construction and operate from the date of its approval to a minimum of one year following commencement of operation, or as otherwise agreed by the Secretary. The Program shall be prepared for the approval of the Secretary, and include, but not necessarily be limited to:	This document
(a)	provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged);	Section 4.1
(b)	provisions for periodic review of the compliance status of the SSI against the requirements of this approval;	Section 4.2
(c)	provisions for periodic reporting of compliance status to the Secretary, including a <b>Pre-Construction Compliance Report</b> , prior to the commencement of construction, and a Pre-Operation Compliance Report prior to the commencement of operation. These reports may be staged to suit the staged construction/operation of the SSI;	Section 4.3
(d)	a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;	Section 4.4
(e)	mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;	Section 4.5
(f)	provisions for reporting environmental incidents to the Secretary and relevant public authorities during construction;	Section 4.6
(g)	procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and	Section 4.7
(h)	provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	Section 4.8

## 4.1 Secretary notification

MCoA D27 (a) requirement:

*“provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged)”*

Construction will commence for each stage of the Project according to the Staging Report and following approval by the Secretary of the relevant CEMP, associated environmental plans and other relevant documentation required by the approval.

The CEMP and associated subplans for Sections 3 to 11 were conditionally approved by the Department of Planning and Environment on 23 October 2015, pending the submission of a Construction Noise and Vibration Management Plan D26(a) and heritage education and training package, Appendix A of the Construction Heritage Management Plan. The Construction Noise and Vibration Management Plan (sections 3 to 11) was approved by the Department of Planning and Environment on 3 December 2015. The heritage education and training package was submitted to the Department of Planning and Environment on 4 March 2016.

Stage 2 construction commenced on 8 April 2016. The Secretary was notified prior to the commencement of construction on 31 March 2016.

## 4.2 Period compliance review

MCoA D27 (b) requirement:

*“provisions for periodic review of the compliance status of the SSI against the requirements of this approval”*

TfNSW will review the status of compliance and submit periodic compliance reports to the Secretary as follows:

- Prior to the commencement of construction
- Six months after the commencement of construction and then at six monthly intervals thereafter
- Prior to the commencement of operation.

This report captures the period 1 October 2020 to 31 March 2021. The compliance tracking tables (attached in Appendix A) form an integral part of this periodic review.

These tables establish a format for recording compliance and include:

- Description of the environmental obligation
- The stage of the project to which it relates
- Status
- Responsibility.

## 4.3 Period compliance reporting

MCoA D27 (c) requirement:

*“provisions for periodic reporting of compliance status to the Secretary, including a Pre-Construction Compliance Report, prior to the commencement of construction, and a Pre-Operation Compliance Report prior to the commencement of operation. These reports may be staged to suit the staged construction/operation of the SSI”*

Roads and Maritime submitted a Pre-construction Compliance Report to the Department of Planning and Environment on 4 March 2016. Appendix A of this document presents the compliance status at the end of the period 1 October 2020 to 31 March 2021 for the works associated with Sections 3 to 11.

At intervals prescribed in Section 4.2, the status of compliance will be reviewed and reported to the Secretary in the form of a Compliance Tracking Report. Compliance Tracking Reports will typically include the following:

- Scope of the activities undertaken during the reporting period.
- Performance of environmental controls that have been implemented.
- Compliance - as recorded in the compliance tracking tables.
- Non-compliances during the reporting period.
- Detail of all environmental incidents recorded and action taken during the reporting period.
- Outcomes of monitoring undertaken over the reporting period and review of compliance against relevant criteria.
- Significant outcomes of audits and ERG inspections undertaken during the reporting period. Detail of substantiated environmental complaints received, responses taken and current status (ie open or closed). The audits will assess compliance against the conditions of approval (both NSW and EPBC Act Approvals) and relevant environmental management measures as specified in the Construction Environment Plan (CEMP) for Sections 3 to 11.

## 4.4 Independent environmental auditing

MCoA D27 (d) requirement:

*“a program for independent environmental auditing in accordance with ISO 19011:2003 – Guidelines for Quality and/or Environmental Management Systems Auditing”*

### Environmental Audits

TfNSW will ensure that independent audits are undertaken in accordance with ISO 19011:2003 – *Guidelines for Quality and/or Environmental Management Systems* at six monthly intervals throughout construction. The audits will assess compliance against the MCoA and EMMs.

There were no audits undertaken during the reporting period. The audit programme finished in December 2020 and was replaced with Surveillance activities.

### Environmental Review Group Meetings/Inspections

The Environmental Review Group (ERG) consists of representatives from Environment Protection Authority (POEO), Environment Protection Authority (biodiversity), DPI (Fisheries), Department of Planning, Industry and Environment (DPIE) and the project Environmental Representative (ER).

Monthly ERG meetings and inspections in person were cancelled earlier in the year due to COVID-19 restrictions. However, TfNSW and ER Inspections have continued during the reporting period, as follows:

- 1 October 2020
- 26 – 27 October 2020
- 23 and 24 November 2020
- 15 – 16 December 2020
- 28 – 29 January 2021
- 1 – 2 March 2021
- 31 March 2021

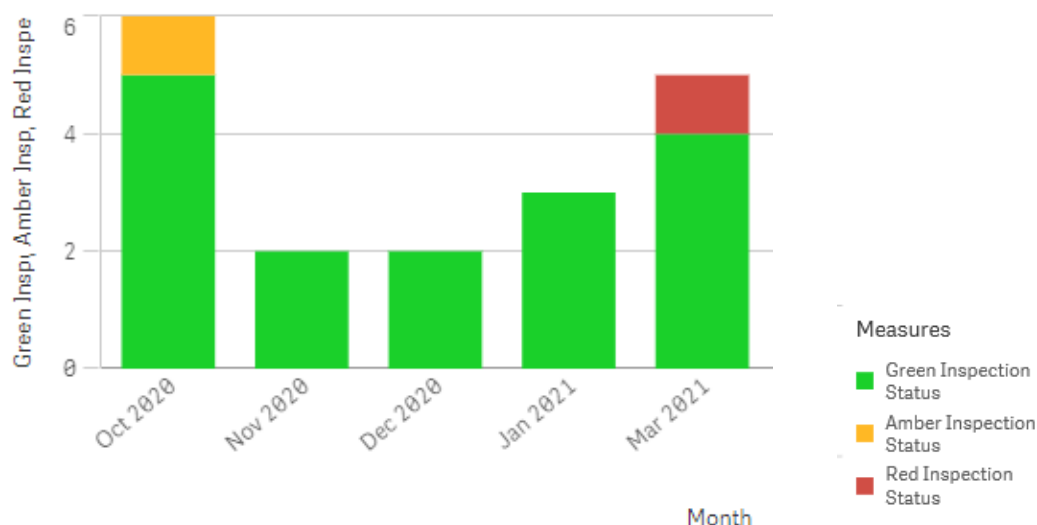
Virtual regulator meetings have been held each month following these inspections to discuss issues such as:

- Update of construction activities across the project
- Site inspections with project Contractors about upcoming high-risk environmental activities and management of these activities.

- Discussions on environmental management measures including erosion and sediment controls, dust and air quality, biodiversity issues across the project.
- Site inspection of individual locations and Contractors across the W2B project length.

Of the 18 'traffic light' inspections performed by TfNSW / ER during the reporting period 88.9% of these inspections received a 'Green' light (16), 5.6% received an 'Amber light' (1) and 5.6% received a 'Red' light (1). Refer to Figure 43 below.

#### Inspection Status By Month



**Figure 43 TfNSW / ER 'Traffic Light' Inspection Status, October 2020 to March 2021**

#### Weekly/ Fortnightly Environment Inspections

Contractors, Soil Conservationists, Pacific Complete, the Environmental Representative and TfNSW all carry out regular environmental inspections throughout the project. The individual contractors that are managed by their environment site representative, record observations requiring actions.

## 4.5 Incident reporting and response

MCoA D27 (e) requirement:

*"mechanisms for recording environmental incidents during construction and actions taken in response to those incidents"*

In accordance with the approved Construction Environmental Management Plan, Roads and Maritime's *Environmental Incident Classification and Reporting Procedure* is being implemented for all environmental incidents for the Project. The full procedure is provided in Appendix A5 of CEMP.

Environmental incidents are generally notified verbally immediately and in writing within 24 hours of any incident occurring to the TfNSW Representative and the Environmental Representative. Incident reports will be provided to RMS Representative and the ER within 24 hours of the incident occurring, including lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar incident. All efforts will be undertaken immediately to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident.

In accordance with MCoA A12, Pacific Complete will notify the Secretary and relevant public authorities of any incident with actual or potential significant off-site impacts on people or the biophysical

Pacific Highway Upgrade – Woolgoolga to Ballina (section 3-11)

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W2B-PC0-0-ZH-RPT-00017-A



environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.

Where an incident also requires reporting to the EPA and/or OEH, the incident report prepared for the purposes of notifying the EPA and/or OEH would meet this requirement.

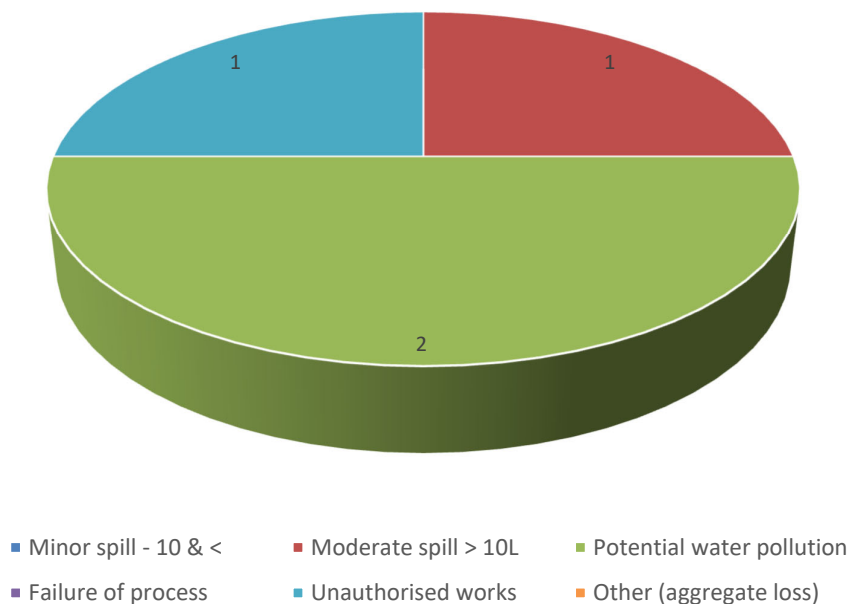
The EPA will be notified of any environmental incidents or pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the Protection of the Environment Operations Act 1997 NSW (POEO Act). The circumstances where this will take place include:

- If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.

In accordance with Roads and Maritime's *Environmental Incident Classification and Reporting Procedure*, environmental incidents for the reporting period are summarised below in Figure 44 and Appendix D.

Each incident is broken down into the following categories:

- Minor spill – spills <10 Litres that do not result in off-site environmental harm
- Moderate spill – spills >10 Litres that do not result in off-site environmental harm
- Potential water pollution – potential pollution of waters, or discharge of waters from site not in accordance with an approval requirement eg licence.
- Failure of process – a procedural, administrative or technical breach of environmental requirements including Environmental Work Method Statements, Erosion Sediment Control Plans etc that do not result in off-site environmental harm.
- Unauthorised Works – Failure to comply with the requirements of an approval, CEMP or EWMS. Works undertaken without required approval.
- Other – eg aggregate material lost from truck due to rear gate failure of truck.



**Figure 44 Environmental Incidents by Type recorded during the reporting period**

## 4.6 Incident reporting to Secretary

MCoA D27 (f) requirement:

*“provisions for reporting environmental incidents to the Secretary and relevant public authorities during construction”*

The Secretary will be notified of incidents in writing in circumstances where:

- The actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- The actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.

An initial notification to the Secretary will be made verbally within two working days. The written notification will be made within 10 working days.

Where incidents are considered minor, ie do not meet the criteria above, they will be reported to the Secretary in accordance with the compliance tracking program at frequencies prescribed in Section 4.3.

While not reported as environmental incidents, two (2) reportable environmental events occurred during this reporting period:

- Unauthorised vegetation clearing by an adjacent landowner, notified 12 March 2021.
- Emu strike on the Pacific Highway at Greenhills Cut on 29 March 2021, notified 1 April 2021 (ie, in the next reporting period).

All Environmental incidents are detailed within Appendix D.

## 4.7 Addressing non-compliance

MCoA D27 (g) requirement:

*“procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management”*

Section 8.4 of the CEMP (Sections 3 to 11) describes in detail the system for tracking compliance prior to and during construction.

Where a non-compliance has been identified, a corrective/preventative action (or actions) will be implemented.

Corrective/ preventative actions will be entered into the contractor's quality system database and include details of the issue, action required, timing and responsibilities. The record will be updated with the date of close out and any necessary notes. The contractor's database will be reviewed regularly to ensure actions are closed out as required.

The close out of required actions will be reviewed during forums including Environmental Representative (ER) and Environmental Review Group (ERG) inspections. The ER will be actively involved in the review and resolution of non-compliances.

There were three (3) potential non compliances with the conditions of approval identified in this reporting period, as summarised below and included in Appendix D:

- Item 1 – diversion of drain that was previously directing water collected from within operational drains into temporary infiltration ponds, had been diverted into an ephemeral waterway at a culvert 100m to the south via a constructed operational swale, with baffle in place.
- Item 3 – overtopping of residual concure pit into washout sump following >100mm of rainfall.
- Item 4 – floating an 8T roller and Posi track within the alignment in a 50m buffer for light vehicle use only.

Since September 2018, the Department receives a monthly environmental complaint summary, under an MCoA A4 request. During this reporting period, 17 complaints were reported to the Secretary.

### 4.8 Employee inductions

MCoA D27 (h) requirement:

*“provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities”*

Section 5.1 of the CEMP describes in detail how all personnel working on the Project are aware of their environmental obligations.

During construction, the Environmental Manager (or delegate) will conduct the environmental component of the site inductions. The environmental component will include, but not limited to, an overview of:

- Relevant details of the CEMP including purpose and objectives
- Key environmental issues including the Koala Zero Harm program
- Conditions of environmental licences, permits and approvals
- Specific environmental management requirements and responsibilities
- Mitigation measures for the control of environmental issues
- Incident response and reporting requirements
- Information relating to the location of environmental constraints such as exclusion areas for Cultural Heritage
- Site specific additional mitigation measures relating to the Coastal Emu and Long-nosed Potoroo

Regular toolbox talks are held where environmental issues are discussed to increase awareness, outline key constraints in relation to the construction site and remind staff of the environmental commitments outlined in the CEMP, EWMS, species management plans and other environmental documentation.

Pacific Complete run environmental inductions for all construction staff and contractors. The Pacific Complete induction covers sections 3 to 11 of the project and includes the above listed environmental components of the project. Contractors also run their own environmental inductions for all staff and sub-contractors. These inductions focus more specifically on the environmental constraints located within and adjacent to their worksites.

Since January 2016, Pacific Complete have inducted more than 18,500 people to the project. A record of all environment inductions is maintained and kept on-site.



## 5 Environmental monitoring

A range of environmental monitoring has occurred during the reporting period including surface water, noise, dust and flora and fauna monitoring in accordance with the project approvals, approved Pacific Complete CEMP and other project documentation such as approved threatened species or environmental management plans. Monitoring results are provided in Appendix B. Further details on monitoring are outlined below.

### 5.1 Water Quality

The Project has engaged a contractor to undertake project wide water quality monitoring in accordance with the approved W2B Water Quality Monitoring Plan, this includes both surface and groundwater monitoring. This monitoring includes taking water quality samples throughout each month during construction and analysis of data. In accordance with the approved plan, the results of the Project Water Quality Monitoring Program (Sec 3-11) for the reporting period will be provided in the Annual Monitoring Reports for the Construction and Operational phases.

In addition to the monitoring undertaken for the approved WQMP, additional monitoring is undertaken as outlined in the approved Threatened Fish Management Plan, in areas of construction adjacent to the identified threatened fish habitat. These details are captured in the annual threatened fish monitoring reports.

#### Sediment basin monitoring

There are a number of licenced sediment basins associated with the Environmental Protection Licence (EPL) for the project. Details of these basin discharges are captured in the monthly EPL reports provided to the EPA and displayed on the Principals website.

Sediment basins have been decommissioned across the project with special land irrigation areas remaining in Sections 7, 8 and 9 for use during completion works.

### 5.2 Noise Monitoring

Noise monitoring was carried out once during the reporting period. Background noise was dominated by passing traffic, Lorikeets and Cicadas. Noise from lighting towers/works was not audible from the monitoring location.

Refer to Appendix B1 for the noise monitoring results during the reporting period.

#### 5.2.1 Blasting

During the reporting period, no blasting was carried out. The last blast occurred in August 2019 therefore, no exceedances of the EPL overpressure or vibration limits occurred during the reporting period across the project.

### 5.3 Air quality

Dust monitoring was undertaken on a monthly basis at a number of locations along the alignment during the reporting period, in accordance with the approved Pacific Complete Construction Air Quality Management Plan (CAQMP), Appendix B6 of the CEMP.

As construction works progress to completion, dust gauges have been progressively decommissioned throughout the reporting period in some areas of the project.

During the report period there were up to seven (7) active dust deposition gauges installed across the project length (122km).

The remaining dust gauges were decommissioned in December 2020.



There were nil exceedances above the air quality monitoring goals outlined in the CEMP (maximum total deposited dust level 4 g/m<sup>2</sup>/month) recorded during the six month reporting period. Noted that the Australian Standard goals are measured over a twelve-month period, not monthly.

Management measures implemented to minimise dust emissions from construction activities include:

- Regular use of water carts to dampen exposed areas of land
- Signage onsite to remind drivers of speed limits to minimise dust generation.
- Rumble grids and rock shakedown at site exist gates to minimise the tracking of dirt and mud onto public roads
- Daily observations and weekly inspections by construction staff to identify locations at risk of dust emissions and to determine whether dust control measures are performing effectively
- Stabilisation of exposed areas with geofabric and seeding.

Full air quality monitoring results are detailed in Appendix B3.

## 5.4 Flora and Fauna

Biodiversity monitoring for threatened species, populations and communities identified within the approved Threatened Species Management Plans during the construction and operation phases of the project is ongoing.

In accordance with MCoA D6, D7 and D8, annual flora and fauna monitoring reports are submitted to EPA, DPIE and DoEE in accordance with these approval requirements.

### 5.4.1 Flora Monitoring

Flora monitoring is conducted as part of the weekly monitoring undertaken by the Contractors. This is a visual inspection of adjacent flora to ensure no impacts outside the approved clearing limits are occurring. Works are managed within the approved project through EWMS, signage and flagging delineation to reduce to the potential for impacts on flora outside the approved clearing limits.

Flora monitoring is conducted as part of pre-clearing surveys and reported by the contracted ecologist in pre-clearing and post-clearing reports. Clearing is minimised to that necessary to carry out the required works and to ensure compliance with MCoA B1.

Green leaved rose walnut monitoring continued throughout the reporting period, according to the GLRWMP, refer to Section 3.2 Flora and Fauna.

### Unexpected Flora Finds

There were no unexpected flora finds recorded during the reporting period.

### Weed Monitoring

Project wide weed monitoring is undertaken progressively by construction contractors. Areas are surveyed and given a priority rating of high, medium or low. Areas described as high or medium priority are required to have weed control measures implemented based on the weed species and level of infestation.

Undertaken during the reporting period, weed control targeted species such as: Annual ragweed; Coastal Morning Glory; *Lantana*; Cotton Bush; Blue Billy Goat Weed; Purple Top; Rattle Pod; Fireweed; black nightshade; pokeweed; cat's tongue; groundsel; fleabane; annual ragweed; *Ochna*; castor oil plant, devils fig; Dutchman's pipe; Cobblers peg; Wild Tobacco Bush; Tropical Soda Apple, *Camphor laurel*; Stinking Rodger; Wynn *Cassia*; and *Sirratro*.

Weed management also occurred around the Green Leaved Rose Walnut (*Endiandra muelleri*) at CH81660, as per the current management plan.

Weed control works are managed in accordance with the commitments outlined in the approved Construction Environmental Management Plan, and Construction Flora and Fauna Management Plan.



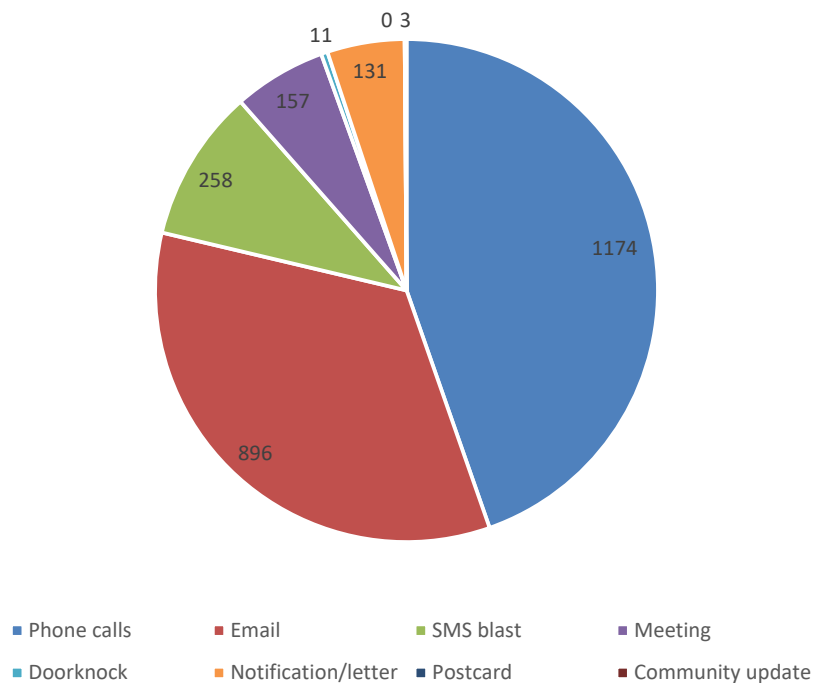
**Figure 45 Weed management activities, carried out safely away from operational traffic**

## 6 Community engagement and complaints management

### 6.1 Community consultation activities

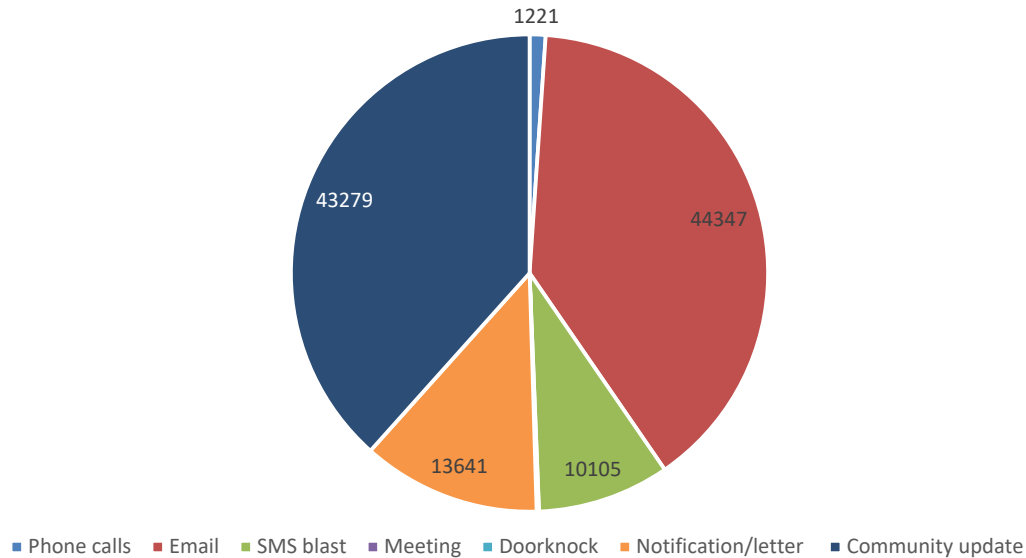
Community consultation activities carried out during the reporting period are detailed in Figures 46 and 47 and Table 4 below.

Figure 46 summarises the two thousand six hundred and thirty (2,630) consultation activities during the reporting period, according to the type of consultation activity.



**Figure 46 Summary of community consultation activities by type**

The 2,630 consultation activities have reached 112,774 stakeholders during the reporting period, as summarised in Figure 47 below.



**Figure 47 Number of stakeholders reached from community consultation activities**

One community consultation session was carried out during the reporting period, on 29 March 2021 at Maclean.

**Table 4 Community Consultation Activities**

Activity	Number of Events	Stakeholders Reached
Phone calls (in/out)	1174	1221
Email (in/out)	896	44347
SMS blast	258	10105
Meeting	157	170
Doorknock	11	11
Notification/ letter	131	13641
Community update	3	43279

## 6.2 Community complaints

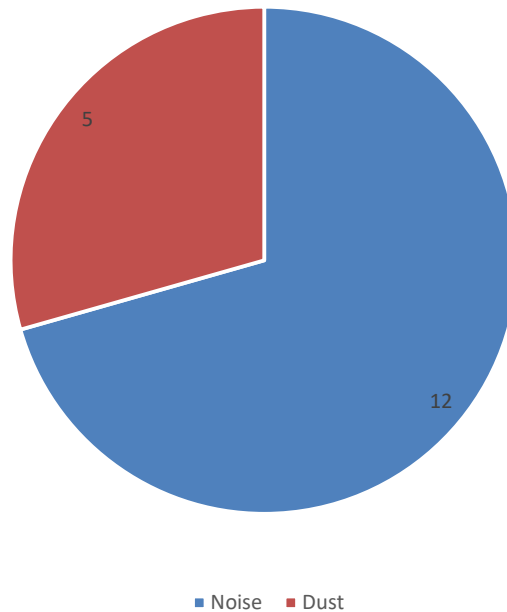
During the reporting period, there were one hundred and eighty-six (186) complaints received, of which seventeen (17) were related to environmental aspects or issues such as operational noise.

Seventeen (17) complaints were reported monthly to DPIE as per the request dated 17 September 2018, under MCoA A4.



Complaints received during the reporting period included the following issues:

- Dust
- Noise & Vibration from operational traffic



**Figure 48 Summary of the environmental community complaints received during reporting period**

All complaints received by Transport for NSW, Pacific Complete and contractors are entered into the project consultation management system and assigned to the appropriate person to follow up and close out the complaint. Complaints are handled in accordance with the approved Community Communication Strategy.

Refer to Appendix C for a numbered list of complaints received during the reporting period, their status and the TNSW/Pacific Complete/Contractor responses and actions taken.

**Appendix A    Compliance Tables**

# COMPLIANCE TRACKING - NSW CONDITIONS OF APPROVAL

## Woolgoolga to Ballina SSI-4963

### PART A - Administrative Conditions



Transport  
Roads & Maritime  
Services

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT							
	A1	In addition to meeting the specific performance criteria established under this approval, the Applicant shall implement all feasible and reasonable measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the SSI.	All	Pre-construction and Construction	RMS and Contractor	Compliant	This is addressed within the approved Pacific Complete Construction Environmental Management Plan (CEMP) and associated sub plans, design drawing specification etc. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
TERMS OF APPROVAL							
	A2	The Applicant shall carry out the SSI generally in accordance with the: (a) State significant infrastructure application SSI-4963; (b) Pacific Highway Upgrade Woolgoolga to Ballina Environmental Impact Statement Volumes 1A, 1B, 2, 3, 4A, 4B, 5, 6A, 6B, 6C, 7A, 7B and 8, prepared by Roads and Maritime Services, dated December 2012; (c) Pacific Highway Upgrade Woolgoolga to Ballina Submissions/Preferred Infrastructure Report Main Volume and Appendices, prepared by Roads and Maritime Services, dated November 2013; (d) Ancillary facility sites listed in Woolgoolga to Ballina Pacific Highway Upgrade - Ancillary descriptions and impact assessment, prepared by Roads and Maritime Services, dated 13 December 2013; (e) Connectivity structures listed in Woolgoolga to Ballina Alliance Update 20 Feb 2014 Structures Inventory (except Sections 1 and 2) and Woolgoolga to Glenugie Fauna Connectivity Tracking Register 11/02/2014, prepared by Roads and Maritime Services, and email correspondence from Roads and Maritime Services dated 14 March 2014; (f) Pacific Highway Upgrade Woolgoolga to Ballina: Utilities impact native vegetation (D00395_0102_Uilities Clearing Vegetation_v9), prepared by Roads and Maritime Services, dated 21 May 2014 (g) Modification request and letter dated 17 November 2014 to modify the definition of construction under subclause f in relation to section 4 utility adjustments and replacement of all references to OEH with EPA; and (h) Modification request and letter dated 24 September 2015 to modify the approval to capture additional works outside the project boundary that may impact on heritage items to require archaeological investigations; and (i) Modification request dated 1 December 2017 and accompanying environmental assessment, to modify the approval to realign the road between the Pacific Highway and Eight Mile Lane, Glenugie; and (j) conditions of this approval.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	Noted
	A3	If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	Noted.
	A4	The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department of Planning and Environment's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval; and (b) the implementation of any actions or measures contained in these documents.	All	Pre-construction and Construction	RMS and Contractor	Compliant	Noted. A request was received within a previous reporting period (ie, 1 April - 30 September 2018) on 17/9/2018, to supply a tabular summary of environmental complaints received each month. This commenced within the reporting period 1 October 2018 to 31 March 2019, with summaries for August & September 2018 submitted to the Department on 2/11/2018. This will continue after the end of the EPL reporting period each month. The submissions are tracked accordingly and recorded in TeamBinder.
LIMITS OF APPROVAL							
	A5	This approval shall lapse 10 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.	All	Pre-construction	RMS	Compliant	The project was approved by NSW Department of Planning and Environment in June 2014 and by the Federal Minister for the Environment in August 2014.  The project commenced in 2015 with construction officially commencing in April 2016.
STATUTORY REQUIREMENTS							
	A6	The Applicant shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	Pacific Complete has obtained an Environment Protection Licence (EPL) for S3-S11 (No. 20713, 29 January 2016). In addition, a Water Extraction Licence - Lewis Lane, Mororo (DPI Licence 30BL207354) has been directly procured by RMS. Other licences, permits and approvals will be obtained as required by law during the course of the project.
STAGING							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	A7	The Applicant may elect to construct and/or operate the SSI in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Secretary prior to the commencement of each proposed stage. The Staging Report shall provide details of: (a) how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and (b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI. Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).	All	Pre-construction	RMS	Compliant	The Stage 2 Staging Report (dated July 2016, Revision 5) was acknowledged by the Department of Planning and Environment on 2 August 2016. The department requested an updated Staging Report (and Compliance Report) which was submitted to the Secretary on 29/11/2016, (Version 6). A further updated Staging Report (Version 7) was submitted to the Secretary on 22/8/2017 and approval received 5/10/2017. A further updated Staging Report (Version 8) was submitted to the Secretary in April 2018. Formal notification of the commencement of Operational Phase 2 - Glenugie to MacLean was advised on 5 May 2020. Formal notification to the Department outlined commencement of Operational Phase 3 - Maclean to Devils Pulpit and Operational Phase 4 - Wooldburn Interchange to Whytes lane on 8 September 2020. Formal notification to the Department for Operational Phase 5 - Devils Pulpit to Woodburn interchange, and Operational Phase 6 - Wells Crossing to Glenugie occurred on 20 November 2020.
<b>SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM</b>							
	A8	The Applicant shall ensure that any strategy, plan, program or other document required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) is submitted to the Secretary no later than one month prior to the commencement of the relevant stage(s), unless otherwise agreed by the Secretary. Notes: • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program shall clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	All	Pre-construction	RMS	Compliant	Noted.
<b>COMPLIANCE</b>							
	A9	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Main Document - Section 5 Competence, Training and Awareness). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
	A10	The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	Noted.
	A11	In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the SSI, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.	All	Pre-construction, Construction and Operation	RMS	Compliant	Noted.
<b>INCIDENT REPORTING</b>							
	A12	The Applicant shall notify the Secretary and relevant public authorities of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred. Note: • Where an incident also requires reporting to the EPA and/or OEH, the incident report prepared for the purposes of notifying the EPA and/or OEH would meet this requirement.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	This is addressed in the approved Pacific Complete CEMP (main document - Section 7.1 Incident Reporting) and RMS Environmental Incident Classification and Reporting Procedure, as well as in Pacific Complete Compliance Tracking Program – Six Monthly Construction Compliance Reports (Sections 4.5 and 4.6 Incident Reporting and Response and Incident Reporting to Secretary). Environmental Incident reports (RMS 624 form), notifications and resolutions are held with PC's IMPACT (LORA) system.
	A13	The Applicant shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A12, within such period as the Secretary may require.	All	Pre-construction, Construction and Operation	RMS and Contractor	Compliant	Noted.

■ Modification 1 (15/10/2015)  
■ Modification 2 (7 October 2015)  
■ Modification 5 (27 September 2017)  
■ Modification 6 (21 February 2018)



COMPLIANCE TRACKING - NSW CONDITIONS OF APPROVAL  
Woolgoolga to Ballina SSI-4963



PART B - Environmental Performance

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
BIODIVERSITY							
	B1	The clearing of native vegetation shall be minimised with the objective of reducing impacts to any threatened species or EECs where feasible and reasonable, consistent with the following: (a) clearing of native vegetation shall be limited to a total area of 931.7 hectares, within the SSI boundary defined in the document referred to in condition A2(c), subject to condition B1(b); (b) clearing of native vegetation for ancillary facilities specified in the document referred to in condition A2(d) and outside the SSI boundary defined in the document referred to in condition A2(c) shall be limited to 4.75 hectares; (c) clearing of threatened ecological communities shall be limited to the areas specified in Table 6-1 (under the column titled: Revised—direct impact (hectares)) of Appendix J of the document referred to in condition A2(c), subject to condition B1(d); (d) clearing of the Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions shall be limited to a total area of 0.5 hectares; and (e) clearing of Koala (Phascolarctos cinereus) primary and secondary habitat shall be limited to a total area of 375 hectares.	All	Pre-construction and Construction	RMS and Contractor	Compliant	RMS, Pacific Complete and the Contractors will ensure compliance with the approved clearing limits under the Planning Approval. Clearing of native vegetation has been minimised during detailed design with the objective being to reduce impacts to threatened species or EECs where feasible and reasonable. Clearing limits are clearly shown on relevant construction drawings and closely monitored and reported throughout the project.
	B2	Where feasible and reasonable, remnant vegetation shall be retained between the SSI boundary and the SSI footprint.	All	Pre-construction and Construction	RMS and Contractor	Compliant	Vegetation clearance limits have been defined during the detailed design. Overall vegetation clearance (design plus actual construction clearance) will be monitored on a regular basis during the W2B project, captured and tracked on the Clearing Register.
	B3	Native vegetation shall be established in or adjacent to disturbed areas within the SSI boundary to provide habitat for wildlife following the completion of construction in the vicinity of the disturbed area, consistent with the Urban Design and Landscape Plan required under condition D20.	All	Construction and Operation	RMS and Contractor	Compliant	Urban Design and Landscape Plan(s) have been approved by the Department in accordance with MCoA D20 (17 July 2018).
	B4	Light spill from the SSI shall be avoided on Pink Underwing Moth and Atlas Rainforest Ground Beetle habitat, where feasible and reasonable.	10	Pre-construction	RMS and Contractor	Compliant	This has been captured as part of detailed design for the project. Light management measures including minimising wattage and avoidance of light spill have been implemented in relation to night works adjacent to Southern Pink Underwing Moth habitat.
PRE CLEARING							
	B5	Prior to construction, pre clearing surveys and inspections for endangered and threatened species shall be undertaken. The surveys and inspections, and any subsequent relocation of species, shall be undertaken under the guidance of a suitably qualified ecologist and shall be in accordance with the methodology incorporated into the approved Construction Flora and Fauna Management Plan. All clearing of Koala habitat trees shall be undertaken in the presence of a Koala spotter.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Section 5.4 Pre-Clearing Surveys, Section 5.4.3 Fauna Capture and Handling and Appendix N Fauna Handling and Rescue Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Qualified Ecologists are engaged to carry out pre-clearing surveys and to be present during clearing activities as required under the Construction Flora and Fauna Management Plan (approved 20 October 2015). Clearing of Koala habitat trees has been undertaken in the presence of a Koala spotter as detailed in the Koala Management Plan (approved 4 August 2016), Chapter 4.3 Mitigation & Monitoring details that pre-clearing surveys require an Ecologist / Koala spotter to be engaged prior to pre-clearing activities. As an additional measure, Pacific Complete has engaged the use of Koala Detection Dogs for pre-clearing surveys and unexpected sightings, as detailed in the 6 Monthly Compliance Report April to September 2018. Pacific Complete will apply RMS/PC specs to ensure compliance with this CoA.
	B6	Incidental or unanticipated threatened flora and fauna finds shall be immediately reported and clearing work stopped in the vicinity of the find to allow for an evaluation of an appropriate response in accordance with the Construction Flora and Fauna Management Plan.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Section 5.4 Pre-Clearing Surveys, Section 5.4.3 Fauna Capture and Handling and Appendix N Fauna Handling and Rescue Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Qualified ecologists are engaged to carry out pre-clearing surveys and are to be present during clearing activities as required under the Construction Flora and Fauna Management Plan. Refer to Section 3.3 of the Six Monthly Construction Compliance Report (April - September 2020) for details of unexpected finds of threatened fauna and Section 5.4.2 for details of unexepcted finds of threatened flora, during the reporting period.
OXLEYAN PYGMY PERCH HABITAT							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B7	High risk construction activities in known Oxleyan Pygmy Perch habitat shall not be undertaken during the Oxleyan Pygmy Perch spawning period, or on days when the relevant Bureau of Meteorology site predicts a 90% chance of 10mm of rain or more, unless otherwise agreed by DPI (Fisheries).	6, 7, 8, 9	Construction	Contractor	Compliant	<p>This requirement is addressed in Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Appendix J Threatened Fish Management Plan). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>The OPP spawning period as outlined in MCoA is October to April. High risk activities were carried out in OPP areas during this reporting period (April to September 2020) with approval from DPI Fisheries. Works were not undertaken on days where the relevant BoM site predicted &gt;90% chance of 10mm. Works undertaken from October 2020 to March 2021 were performed in accordance with approved EWMS and in consultation with NSW DPI Fisheries for these areas and for approved procedures for works during the OPP spawning period.</p>
	B8	Temporary bridge or arch structures in known Oxleyan Pygmy Perch habitat shall be used if the crossing is intended to be in place for more than 3 months, unless otherwise agreed by DPI (Fisheries)	6, 7, 8, 9	Construction	Contractor	Compliant	<p>This requirement is addressed in Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Appendix J Threatened Fish Management Plan). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. This was also considered as part of detailed design for the project. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.</p>
	B9	Where temporary crossings in known Oxleyan Pygmy Perch habitat are proposed with culverts or pipes, the Applicant shall, in consultation with DPI (Fisheries): (a) determine the size of the culverts or pipes to facilitate fish passage; and (b) identify the minimum size of clean rock to be used to ensure that rock material will not wash into the waterway in periods of high flows. Temporary culvert or pipe crossings shall be removed prior to the start of the Oxleyan Pygmy Perch spawning period, unless otherwise agreed by DPI (Fisheries)	6, 7, 8, 9	Construction	Contractor	Compliant	<p>This requirement is addressed in Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Appendix J Threatened Fish Management Plan and Appendix N Fauna Handling and Rescue Procedure. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. This was considered during detailed design.</p> <p>Temporary bridge structures have been established for construction activities. All works have been undertaken in consultation with NSW DPI Fisheries and monitored.</p>
CONNECTIVITY							
	B10	Subject to conditions B11 and B12, the Applicant shall revise the Connectivity Strategy identified in the documents listed in condition A2(e), based on the outcomes of the Mitigation Framework required by condition D1. Note: • The requirements for the Connectivity Strategy are contained in condition D2.	All	Pre-construction	RMS	Compliant	<p>This has been undertaken during detailed design and incorporated into the development of the project Connectivity Strategy for Sections 3 to 11.</p>
	B11	As part of detailed design, the Applicant shall further investigate design refinements for fauna crossings and associated exclusionary measures, between station 41.500 and station 80.000 to improve connectivity for the Coastal Emu, and in the proximity of station 96.000 and between station 137.800 and station 159.700 to improve connectivity for the Koala. Any changes to fauna crossings and exclusionary measures shall be included in the Connectivity Strategy required under condition D2.	3, 4, 5, 9, 10, 11	Pre-construction	RMS	Compliant	<p>This has been undertaken during detailed design and incorporated into the development of the project Connectivity Strategy for Sections 3 to 11.</p>
	B12	Investigations into the location and design of connectivity structures, including but not limited to those identified in the documents listed under conditions A2(c) and A2(e), shall be undertaken during detailed design with the input of a suitably qualified and experienced ecologist. The investigations shall be undertaken in consultation with the <del>QEH</del> EPA, DPI (Fisheries) and DoE and include workshops and on-site ground verification. The results of these investigations shall be detailed in the Connectivity Strategy required under condition D2.	All	Pre-construction	RMS	Compliant	<p>This has been undertaken during detailed design and incorporated into the development of the project Connectivity Strategy for Sections 3 to 11.</p>
	B13	The Applicant shall minimise riparian vegetation clearing during construction and undertake a targeted rehabilitation program post construction to restore in-stream and riparian habitat to at least the pre-construction condition or better, unless otherwise agreed by DPI (Fisheries). All areas disturbed by the SSI that are in the vicinity of known Oxleyan Pygmy Perch habitat waterways shall be stabilised prior to the Oxleyan Pygmy Perch spawning period, unless otherwise agreed by DPI (Fisheries).	All	Construction	Contractor	Compliant	<p>This requirement is addressed in Pacific Complete CEMP (Appendix B2 - Construction Flora and Fauna Management Plan, Appendix J Threatened Fish Management Plan). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Riparian vegetation clearing has been minimised wherever possible. Altered construction methodology and changes to foundation resulted in the project being able to avoid a temporary crossing at Tabbimoble Floodway No.1. All disturbed areas in the vicinity of OPP have been stabilised to the satisfaction of DPI Fisheries prior to the OPP spawning period.</p>
CONSTRUCTION NOISE							
	B14	The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan. Note: • The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction Noise Management Level.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p>

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B15	Construction activities associated with the SSI shall be undertaken during the following standard construction hours: (a) 7:00am to 6:00pm Monday to Friday, inclusive; and (b) 8:00am to 5:00pm Saturday; and (c) at no time on Sunday or public holidays.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures and Appendix C Out of Hours Work Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. COVID-19 Development Infrastructure Construction Work Days Order 2020 came into effect in April 2020, extended in October 2020 to March 2021. Construction hours: 7:00am - 6:00pm Monday to Sunday and public holidays under the Order (W2B-PC0-0-ZH-LET-00031).
	B16	Construction works outside the standard construction hours may be undertaken in the following circumstances: (a) construction works that generate noise that is: (i) no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and (ii) no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC 2009) at other sensitive receivers; or (b) for the delivery of materials required outside the standard construction hours by the NSW Police Force or other authorities for safety reasons; or (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or (d) between 6.00am and 7.00am and 6.00pm and 7.00pm Monday to Friday (except public holidays) in sparsely populated areas (these construction hours may be reviewed and/or revoked by the Secretary in consultation with the EPA in the case of unresolved noise complaints); or (e) low noise impact activities and work between: (i) 6.00am and 7.00am Monday to Friday; and/or (ii) 6.00pm and 7.00pm Monday to Friday; or (f) works approved through an EPL; or (g) works approved by a Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Appendix C Out of Hours Work Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Out of hours permits have been approved in accordance with Appendix C Out of Hours Work Procedure, of the approved Pacific Complete Construction Noise and Vibration Management Plan (CNVMP). Approved Out of Hours Works are reported monthly to the Environment Protection Authority, as required under the EPL (Environment Protection Licence). COVID-19 Development Infrastructure Construction Work Days Order 2020 came into effect in April 2020, extended in October 2020 to March 2021. Construction hours: 7:00am - 6:00pm Monday to Sunday and public holidays under the Order (W2B-PC0-0-ZH-LET-00031). OOHW applications are not required, however, restrictions may apply to intensive noise generating construction activities.
	B17	Construction activities which cannot be undertaken during the standard construction hours for technical or other justifiable reasons (Out of Hours work) may be permitted outside the standard construction hours with the approval of the Environmental Representative. Out of Hours work shall be undertaken in accordance with an approved Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI, where that plan provides a process for the consideration of Out of Hours work. This consideration includes: (a) process for obtaining the Environmental Representative's approval for Out of Hours work; (b) details of the nature and need for activities to be conducted during the varied construction hours; (c) justifies the varied construction hours in accordance with the Interim Construction Noise Guideline (DECC, 2009); (d) provides evidence that consultation with potentially affected receivers and notification of the relevant council has been undertaken, that the issues raised have been addressed and all feasible and reasonable mitigation measures have been put in place; and (e) provides evidence of consultation with the EPA on the proposed variation in standard construction hours.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Appendix C Out of Hours Work Procedure). and Appendix N Fauna Handling and Rescue Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Out of hours permits have been approved in accordance with Appendix C Out of Hours Work Procedure, of the approved Pacific Complete Construction Noise and Vibration Management Plan (CNVMP). Approved Out of Hours Works are reported monthly to the Environment Protection Authority, as required under the EPL (Environment Protection Licence). COVID-19 Development Infrastructure Construction Work Days Order 2020 came into effect in April 2020, extended in October 2020 to March 2021. Construction hours: 7:00am - 6:00pm Monday to Sunday and public holidays under the Order (W2B-PC0-0-ZH-LET-00031). OOHW applications are not required, however, restrictions may apply to intensive noise generating construction activities.
	B18	Construction activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken: (a) between the hours of 8:00am to 5:00pm Monday to Friday; (b) between the hours of 8:00am to 1:00pm Saturday; and (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition. The works subject to this condition may be undertaken in sparsely populated areas within the standard construction hours.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Non-compliances with this condition are reporting monthly to the EPA in the EPL Report and also in the incident reporting summary for this reporting period.
	B19	The Applicant shall, where feasible and reasonable, limit high noise impact activities and work to the mid-morning and mid-afternoon periods, except in sparsely populated areas.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Pacific Complete will approve Contractor EMPs and EWMSs to ensure compliance with this MCoA.
CONSTRUCTION VIBRATION							
	B20	The SSI shall be constructed with the aim of achieving the following construction vibration goals: (a) for structural damage to heritage structures, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration – Part 3 Effects of vibration on structures; (b) for damage to other buildings and/or structures, the vibration limits set out in the British Standard BS 7385-1:1990 – Evaluation and measurement of vibration in buildings—Guide for measurement of vibration and evaluation of their effects on buildings (and referenced in Australian Standard 2187.2 – 2006 Explosives – Storage and use – Use of explosives); and (c) for human exposure, the acceptable vibration values set out in Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 6.5 Construction Vibration and Blasting Assessment). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
	B21	Blasting associated with the SSI shall only be undertaken during the following hours: (a) 9:00am to 5:00pm, Monday to Friday, inclusive; (b) 9:00am to 1:00pm on Saturday; and (c) at no time on Sunday or public holidays. Blasting outside the above hours and in accordance with the standard construction hours where: (i) no sensitive receivers in sparsely populated areas would be impacted by blasting; or (ii) an agreement has been made with receivers within 200 metres of the blast zone to permit blasting in accordance with the standard construction hours. This condition does not apply in the event of a direction from the NSW Police Force or other relevant authority for safety or emergency reasons to avoid loss of life, property loss and/or to prevent environmental harm.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 6.5 Construction Vibration and Blasting Assessment, Section 7 Environmental Control Measures and Appendix B Blast Management Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Nil blasting occurred during this reporting period (October 2020 - March 2021). Blasting ceased in August 2019.

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B22	The Applicant shall ensure that Airblast overpressure generated by blasting associated with the SSI shall not exceed the criteria specified in Table 1 when measured at the most affected residence or other sensitive receiver. Note • a sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.	All	Construction	RMS	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 6.5 Construction Vibration and Blasting Assessment, Section 7 Environmental Control Measures and Appendix B Blast Management Procedure). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.  Nil blasting occurred during this reporting period (October 2020 - March 2021). Blasting ceased in August 2019.
	B23	The Applicant shall ensure that Ground vibration generated by blasting associated with the SSI shall not exceed the criteria specified in Table 2 and Table 3 when measured at the most affected residence or other sensitive receiver. Note • a sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.	All	Construction	RMS	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 6.5 Construction Vibration and Blasting Assessment, Section 7 Environmental Control Measures and Appendix B Blast Management Procedure). Pacific Complete will approve Contractor EMPs and EWMSs to ensure compliance with this CoA.  Nil blasting occurred during this reporting period (October 2020 - March 2021) with the last blast occurring in August 2019.
	B24	The blasting criteria specified in conditions B22 and/or B23 may be increased where the Applicant has obtained the written agreement of the relevant landowner to increase the criteria. In obtaining the agreement the Applicant shall make available to the landowner: (a) details of the proposed blasting program and justification for the proposed increase to blasting criteria including alternatives considered (where relevant); (b) the environmental impacts of the increased blast limits on the surrounding environment and most affected residences or other sensitive receivers including, but not limited to noise, vibration and air quality and any risk to surrounding utilities, services or other structures; and (c) the blast management and mitigation measures, and the procedures to be implemented to monitor blasting impacts. The Applicant shall provide a copy of the written agreement to the Secretary and the EPA, including details of the consultation undertaken (with clear identification of proposed blast limits and potential property impacts) prior to commencing blasting at the increased limits. Unless otherwise agreed by the Secretary, the following exclusions apply to the application of this condition: (a) Any agreements reached may be terminated by the landowner at any time should concerns about the increased blasting limits be unresolved. Should an agreement be terminated by a landowner, the Applicant shall not exceed the criteria specified in conditions B22 and/or B23 for future blasting at that receiver. (b) The blasting limit agreed to under any agreement for an occupied residential building can at no time exceed a maximum Peak Particle Velocity vibration level of 25 mm/s or maximum Airblast Overpressure level of 125 dBL.	All	Construction	RMS	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 6.5 Construction Vibration and Blasting Assessment, Section 7 Environmental Control Measures and Appendix B Blast Management Procedure). Pacific Complete will approve Contractor EMPs and EWMSs to ensure compliance with this CoA.
	B25	Wherever feasible and reasonable, piling activities shall be undertaken using quieter construction methods, such as bored piles or vibrated piles rather than impact or percussion piling methods.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.  Piling carried out during the reporting period used the bored piling methods. Percussive piling is used in sparsely populated areas, as required.
	B26	Prior to the use of the dynamic compaction construction method, the Applicant shall undertake an assessment of vibration generated by dynamic compaction on nearby sensitive receivers. Feasible and reasonable mitigation measures shall be implemented to minimise vibration impacts.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.  Vibration assessments and modelling have been carried out where construction activities require dynamic compaction construction methods and additional mitigation measures have been included within the approved Piling EWMS and implemented as required.
	B27	During construction, affected educational institutions shall be consulted and reasonable steps taken to ensure that noise generating construction works in the vicinity of affected buildings are not timetabled during examination periods where practicable, unless other reasonable arrangements to the affected institutions are made at no cost to the affected institution.	4, 5, 8, 9	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan, Section 7 Environmental Control Measures). Pacific Complete will manage consultation with potentially affected educational institutions. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. For example: consultation with Harwood Public School commenced in 2016 and continued during past reporting periods, in relation to the construction of Harwood Bridge over the Clarence River, where piling activities were scheduled outside of the schools NAPLAN exam periods.
OPERATIONAL NOISE							
	B28	The SSI shall be designed and operated with the objective of not exceeding the road noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).	All	Pre-construction	RMS	Compliant	This has been captured during detailed design and development of the operational noise design for the project.
	B29	Where feasible and reasonable, operational noise mitigation measures shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.	All	Pre-construction and Construction	RMS	Compliant	Operational noise mitigation measures are proposed to be installed as soon as reasonable and feasible in accordance with the approved Operational Noise Review. Consultation with landowners about nature of mitigation is ongoing prior to agreement and commencement of mitigation measures.
WATER QUALITY							
	B30	Except as may be expressly provided by an EPL, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997.	All	Construction	Contractor	Compliant	Pacific Complete has obtained an Environment Protection Licence (EPL) for S3-S11 (No. 20173, 29 January 2016).
HYDROLOGY AND FLOODING							



Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B31	The hydrological and flooding impacts resulting from the SSI are to be assessed during detailed design against the 'Design Objectives for Flood Management' described in Section 2.1 of the EIS Working Paper – Hydrology and Flooding. This shall include assessment against the 'Flood Management Objectives' and the 'Other Flood Impact Considerations' as well as the other requirements of this section of the EIS. The hydrology assessment shall include the refinement of or development of new flood models (where required) for the 14 catchments investigated during the EIS. These models shall be operated for the same design floods considered in the EIS, as well as the 2000 year ARI and the probable maximum flood (PMF) design events.	All	Pre-construction	RMS	Compliant	Flood modelling (final models) have been developed as part of detailed design. The Hydrological Mitigation Report for Glenugie to Devils Pulpit (Sections 3, 4, 5 & 6) was submitted to DPE on 17 March 2017. This report represents the design at December 2016 stage of the program and includes the road alignment, channel earthworks, cross drainage and bridge designs at various levels of design development and reflects the substantial detailed design stage for infrastructure within the Clarence Regional floodplain. The flood model will be updated once the final detailed design is complete. The Hydrological Mitigation Report for Devils Pulpit (Sections 7, 8, 9, 10 & 11) has been submitted to DPE.
	B32	For the Corindi, Shark Creek and Farlows Flat areas, flooding and hydrological impacts resulting from existing highway infrastructure shall be assessed. As part of this assessment, flood models shall assess the impacts of recent highway upgrades in this area. Where the existing highway in these areas has resulted in adverse flooding and/or hydrological impacts, opportunities to reduce the quantum of these impacts shall be considered during the detailed design of the SSI, where feasible and reasonable.	4, 5	Pre-construction	RMS	Compliant	Corindi Creek is located within Section 1 which is outside the area of this part of the project and has been reported separately. For Shark Creek and Farlows Flat, flood modelling, this is detailed in Sections 4 and 5 of the Hydrological Mitigation Report (Glenugie to Devils Pulpit), submitted to DPE on 17 March 2017.
	B33	Where the objectives and considerations referred to in condition B31 cannot be complied with, the Applicant shall: (a) achieve compliance through modified embankment or drainage design. This might include new or duplicated drainage structures designed to minimise afflux and other impacts to waterways that traverse the road alignment, to the greatest extent practicable; or (b) achieve an acceptable level of mitigation of impacts through alternative design measures (e.g. raised access tracks) in consultation with the affected land-owner; or (c) reach agreement with affected landowners on impacts to property.	All	Pre-construction	RMS and Contractor	Compliant	Noted. This is addressed in Section 6 of the Hydrological Mitigation Report for Glenugie to Devils Pulpit (Sections 3, 4, 5 and 6), submitted to DPE on 17 March 2017 and the Hydrological Mitigation Report for Devils Pulpit to Ballina (Sections 7, 8, 9, 10 and 11), submitted to DPE.
<b>CONSTRUCTION SOIL AND WATER MANAGEMENT</b>							
	B34	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) and Managing Urban Stormwater Soil and Construction Vols 2A and 2D Main Road Construction (Department of Environment and Climate Change, 2008) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or water.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B4 Construction Soil and Water Quality Management Plan, Chapter 6 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.  ESCPs are prepared in accordance with the Blue Book guidelines and RMS specifications in consultation with Project Soil Conservationist. ESCPs are updated as controls require and reviewed regularly.  Environmental Work Method Statements (EWMS) are prepared for activities assessed as having a high environmental risk and/or that pose a risk to receiving water quality. Including: clearing, ASS / PASS, Sediment basins and dewatering, working in waterways, underboring and culvert installation.
	B35	Where available, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used, where feasible and reasonable, in preference to potable water for construction activities, including concrete mixing and dust control.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B4 Construction Soil and Water Quality Management Plan, Chapter 6 Environmental Control Measures).  Water collected onsite from runoff in sediment basins, tannin treatment areas and other areas is recycled and reused where appropriate for activities such as dust suppression. Drillers recycle drilling water as much as possible to reduce the use of potable water. Ancillary facilities are designed to consider the capture and reuse of stormwater and include rainwater tanks where possible.
	B36	All surface water and groundwater shall be adequately treated as far as is practicable, prior to entering the stormwater system to protect the receiving water source quality.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B4 Construction Soil and Water Quality Management Plan, Chapter 6 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.  Captured water onsite is reused where possible and examples are detailed in the 6 Monthly Construction Compliance reports.
<b>LAND CONTAMINATION</b>							
	B37	Prior to the commencement of site preparation and excavation activities, or as otherwise agreed by the Secretary, in areas identified as having a moderate to high risk of contamination, a site audit shall be carried out by a suitably accredited contaminated site auditor. A Site Audit Report is to be prepared by the site auditor detailing the outcomes of Phase 2 contamination investigations within these areas. The Site Audit Report shall detail, where relevant, whether the land is suitable (for the intended land use) or can be made suitable through remediation. Where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated soils, materials and groundwater shall be identified in the Site Audit Report and incorporated into the Construction Environmental Management Plan. Where the investigations identify that the site is suitable for the intended operations and that a remediation strategy is required, the Site Audit Report shall include a remediation strategy for addressing the site contamination, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater, and be incorporated into the Construction Environmental Management Plan. Where remediation is required, a Site Audit Statement(s) shall be prepared verifying that the site has been remediated to a standard consistent with the intended land use. Note • Terms used in this condition have the same meaning as in the Contaminated Land Management Act 1997.	All	Pre-construction and Construction	RMS and Contractor	Compliant	Potentially contaminated sites associated with the project will be reviewed during detailed design to determine those sites that will require a phase 2 contamination investigation. The results of phase 2 contamination investigations will determine whether the sites are suitable or unsuitable for their intended land use. For those sites found to be unsuitable for their intended land use, appropriate management or remediation/validation strategies will be developed and implemented.  Soft soils works will impact on a potential contaminated site at the Mills Truck depot. The Site Audit Report and associated requirements will be completed and implemented prior to the commencement of permanent construction activities.  Additional contamination report has been prepared to identify asbestos prior to demolition of buildings.
<b>WATERCOURSE CROSSINGS</b>							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B38	Watercourse crossings shall be designed and constructed in consultation with the DPI (Fisheries), EPA, NOW and DoE, and where feasible and reasonable, be consistent with the Guidelines for Controlled Activities Watercourse Crossings (Department of Water and Energy, February 2008), Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge, 2003), Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, February 2004), and Policy and Guidelines for Fish Habitat Conservation and Management (DPI Fisheries, 2013). Where multiple cell culverts are proposed for crossings of fish habitat streams, at least one cell shall be provided for fish passage, with an invert or bed level that mimics watercourse flows.	All	Pre-construction and Construction	RMS and Contractor	Compliant	During the reporting period Consultation with agencies occurred during the installation of temporary waterway crossings. Hold points were implemented prior to construction of crossings to ensure appropriate management measures were in place and the required consultation had occurred.
	B39	All crossings of known Giant Barred Frog habitat or waterways with the confirmed presence of the species shall be designed and constructed with bridges. Should the Applicant construct a crossing structure other than a bridge, the Applicant shall demonstrate maintained connectivity for the Giant Barred Frog upstream and downstream of that crossing for a monitoring period of three consecutive years, or such other period agreed by the Secretary in consultation with the <del>QEH</del> <b>EPA</b> . Demonstration of maintained habitat connectivity shall: (a) be based on baseline data that confirms the presence, nature and distribution of Giant Barred Frog population using a survey methodology that has been endorsed by the <del>QEH</del> <b>EPA</b> , and detailed in the Mitigation Framework required in condition D1, and an assessment of the connectivity of the crossing site prior to commencement; or, if adequate baseline data is not provided to the satisfaction of the Secretary, be based on the assumption of occurrence of a population on either side of the crossing site; and (b) be based on evidence that the Giant Barred Frog has remained present upstream and downstream of the crossing site for the monitoring period, with periodic monitoring to occur at least biannually. Should the results of any instance of periodic monitoring record an absence of the Giant Barred Frog, the Applicant shall be required to demonstrate that this change is not as a result of the SSI within one month of the completion of that instance of periodic monitoring, to the satisfaction of the Secretary. Should the Secretary not be satisfied that the change is not a result of the SSI, the SSI will be deemed as the cause of the impact and the Applicant shall offset the loss of the habitat in accordance with this approval.	NA	Pre-construction	RMS	Compliant	Not applicable to Sections 3-11. Habitat for Giant Barred Frog occurs only in Section 1 and 2
	B40	Unless otherwise agreed by DPI (Fisheries), all crossings of Class 1 watercourses in known Oxleyan Pygmy Perch habitat shall be designed and constructed with a bridge or arch structure and, where feasible and reasonable, no supporting structures shall be installed within affected waterways.	6, 7, 8, 9	Pre-construction	RMS	Compliant	This has been considered as part of detailed design based on information in the Threatened Fish Management Plan. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.
	B41	Where an Oxleyan Pygmy Perch habitat waterway is realigned or its stream profile is changed, or an in-stream structure is installed in the waterway (both permanent and temporary construction structures), the Applicant shall ensure that the final design of that waterway does not result in water velocities exceeding 0.4 metres per second under normal flow conditions. The Applicant shall determine normal flow conditions to the satisfaction of DPI (Fisheries) through baseline monitoring of known Oxleyan Pygmy Perch habitat waterways.	6, 7, 8, 9	Pre-construction	RMS	Compliant	This has been considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.  Realignment of waterway BC52 was designed and constructed to the satisfaction of DPI Fisheries. Monitoring of the realigned waterway indicated velocities of 0.1 metres per second during normal flow conditions.
	B42	The Applicant shall ensure that the SSI does not increase the afflux of waterways with known Oxleyan Pygmy Perch habitat by more than the relevant flood management objective in the documents referred to in condition A2 for flood events up to the 1 in 100 year event.	6, 7, 8, 9	Pre-construction	RMS	Compliant	This has been considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.
	B43	The Applicant shall investigate the removal of the proposed embankment at station 145.2 and its replacement with an extension of the Richmond River bridge. The investigation shall consider issues around hydrology and flooding (including meeting the flooding objectives for bridges), constructability, cost, funding arrangements and visual impacts. The investigation shall include consideration of other relevant environmental impacts (noise, heritage, biodiversity, traffic etc.) and consider any alternative options. A copy of the investigation shall be submitted to the Secretary prior to the commencement of any bridge approach or embankment works in the vicinity.	10	Pre-construction	RMS	Compliant	An investigation into this embankment and its removal was provided to the Department on 26/7/2017. Confirmation of the receipt of the Richmond River bridge investigation was received on 15/9/2017, with the Department concluding that the proposed detailed design of the bridge without an embankment provides an improvement and reduces impacts to the concept design.
<b>ABORIGINAL HERITAGE</b>							
	B44	Prior to the commencement of construction affecting PAD site WWC Dirty Creek 1 and ancillary facilities at Section 4, Site 1; Section 4, Site 3; Section 7, Site 1; Section 10, Site 1a; and Section 11, Site 1a , the Applicant shall: (a) undertake field investigation, and where required, an archaeological investigation of the site(s) using a methodology generally consistent with testing undertaken for the Environmental Impact Statement, and prepared in consultation with the <del>QEH</del> <b>EPA</b> (Aboriginal heritage) and the Registered Aboriginal Parties; and (b) prepare a report on the results of the archaeological investigation, including recommendations (such as further archaeological work) in consultation with the <del>QEH</del> <b>EPA</b> and to the satisfaction of the Secretary, and shall include, but not necessarily be limited to: (i) consideration of measures to avoid or minimise disturbance to Aboriginal objects where objects of moderate to high significance are found to be present; (ii) recommendations for further investigations under condition B45 where impacts cannot be avoided; and (iii) details of management and mitigation measures to ensure there are no additional impacts due to pre-construction and construction activities; and (c) submit the report to the Registered Aboriginal Parties, the <del>QEH</del> <b>EPA</b> (Aboriginal heritage) and the Secretary.	4, 7, 10, 11	Pre-construction	RMS	Compliant	– PAD site <b>WWC Dirty Creek 1</b> does not occur within sections 3 to 11, however has been salvaged and clearance letter issued. – <b>Section 4, Site 1</b> – Assessed and mitigations advised/incorporated. - <b>Section 4, Site 3</b> – has not been assessed, will be carried out as part of an ancillary facility assessment if it is proposed for use. – <b>Section 7, Site 1</b> – Assessed. – <b>Section 10, Site 1a</b> – has not been assessed, will be carried out as part of an ancillary facility. – <b>Section 11, Site 1a</b> , heritage assessment prepared including test pitting. Recommended management measures have been implemented in Ancillary Facility Checklist for this site.
	B45	Prior to the commencement of construction activities affecting Aboriginal sites WWC39, WWC46, Tyndale 2 site, IR2W4, Site 11, E2/2, WWC37, Dubaljeen site (New Italy 1), The Gap Road 1, WX21 Site 8, Site 1, Site 2, Site 3 and Site 4 and sites recommended by condition B44 for further investigation, the Applicant shall: (a) develop a detailed salvage strategy, prepared in consultation with the <del>QEH</del> <b>EPA</b> (Aboriginal heritage) and the Registered Aboriginal Parties. The salvage strategy shall be prepared to the satisfaction of the Secretary; and (b) undertake any further archaeological excavation works recommended by the results of the detailed salvage strategy. Within twelve months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall prepare a report containing the findings of the excavations, including artefact analysis and Aboriginal Site Impacts Recording Forms (ASIR), and the identification of final storage location for all Aboriginal objects recovered (testing and salvage), in consultation with the Registered Aboriginal Parties, the <del>QEH</del> <b>EPA</b> (Aboriginal heritage) and to the satisfaction of the Secretary. The report shall be submitted to the Registered Aboriginal Parties, the <del>QEH</del> <b>EPA</b> (Aboriginal heritage) and the Secretary. Note: • Where archaeological testing has occurred as part of the environmental assessment and the results are included in the documents listed in condition A2, the sites tested shall be included in the final report prepared under condition B45.	3, 4, 7, 8, 9, 10, 11	Pre-construction	RMS	Compliant	A salvage strategy was prepared in consultation with RAPs and salvage works have been completed on sites that require salvage. Clearance letters have been prepared post salvage that outline that the site is clear for construction and outlines any additional mitigation measures (i.e. fencing). Detailed reports will be prepared by the heritage consultant as required by this condition. An extension to the provision of the Aboriginal Heritage Analysis Report for the northern half of the project was requested on 26 September 2017, in conjunction with the submission of the Aboriginal Heritage Analysis Report for the southern half of the project (approved 26 September 2017). The extension for submission of the report for the northern half of the project was approved for December 2019 providing a progress report was submitted by December 2018. RMS submitted the Progress Summary Report: Aboriginal Heritage Analysis Report for Iluka to Ballina, on 21 December 2018. On 31 August 2020 a further extension for submission of the Aboriginal Heritage Analysis report for the northern half of the project was approved, granted until 31 December 2020.

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B46	Identified impacts to Aboriginal heritage, shall be minimised to the greatest extent practicable through both detailed design and construction, particularly with regard to the Aboriginal sites Gittoes Jali and the Melino site, and the Aboriginal culturally significant places identified as Corindi Massacres (section 1), Burials (section 1), Halfway Creek Ceremonial Site, Birrugan and Mindi spiritual sites (sections 1, 2, 5 and 10), Pillar Valley men's and women's sites, Place H, Place I and Place J. Where impacts are unavoidable, works shall be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan.	3, 8, 9, 10, 11	Pre-construction and Construction	RMS and Contractor	Compliant	<p>This has been considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs. This requirement is also addressed in the Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Gittoes Jali clearance letter was received prior to construction activities commencing on Lang Hill. This clearance letter outlines the required management measures for the protection of the site.</p> <p>Where impacts are unavoidable in construction, works would be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan.</p>
	B47	The Applicant shall not destroy, modify or otherwise physically affect Aboriginal sites WWC5, WWC7, WWC26, WWC92, WWC115, WWC139, Tyndale 1, Scarred/engraved Tree (section 7), C3/2/2, Saw Pit Creek / New Italy, Gittoes Jali 2, Cooks Hill, Broadwater, Law PAD, Law Scarred Tree, MST 3, C21, Melino Scarred Tree 4, MST 2, MST1, Rudgley Scarred Tree or Saezza 1.	4, 7, 8, 9, 10, 11	Pre-construction and Construction	RMS and Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p><b>WWC5, WWC7, WWC26, WWC92, WWC115, WWC139, Tyndale 1</b> – exclusion fencing installed,</p> <p><b>WWC26</b>- salvage done, fencing installed,</p> <p><b>Scarred tree in Section 7</b> - Outside the project corridor. Exclusion fencing to be installed,</p> <p><b>C3/2/2</b> - Outside the project corridor,</p> <p><b>Gittoes Jali 2</b> – ongoing,</p> <p><b>Cooks Hill</b> - Outside of the project boundary,</p> <p><b>Broadwater</b> – ongoing,</p> <p><b>Law PAD</b> - To be fenced on vacant possession of the adjacent block,</p> <p><b>MST 3</b> - Exclusion fencing is to be re-installed on vacant possession of the block,</p> <p><b>C21</b> - Exclusion fencing is to be re-installed on vacant possession of the block,</p> <p><b>Melino Scarred Tree 4</b> - Exclusion fencing has been installed on vacant possession of the block,</p> <p><b>MST2</b> - Exclusion fencing is to be re-installed on vacant possession of the block,</p> <p><b>MST1</b> – ongoing,</p> <p><b>Rudgley scarred tree</b> - Fencing has been established,</p> <p><b>Saezza 1</b> - Exclusion fencing installed, awaiting site clearance letter.</p>
NON - ABORIGINAL HERITAGE							
	B48	Prior to the commencement of construction affecting the Convent (12-14 Rivers Street), Harwood (item 21), the Applicant shall carry out further historical research and investigate the options for relocation of the convent building, in consultation with the Department of Planning and Environment and the OEH (Heritage Division), to the satisfaction of the Secretary.	5	Pre-construction	RMS	Compliant	<p>Further historical research and investigation has been carried out for options to relocate the convent building. Community and agency consultation has been carried out. A tender called for its removal, with no compliant tenders received for the removal and relocation of the Harwood Convent building and no suitable land in or adjacent to the Harwood Heritage Conservation Area where the building could be relocated to was identified. Additional information was requested and provided to OEH and OEH concurrence with demolition was advised on 5/12/2016. Secretarial / DPE provided approval for the demolition of the convent building, dated 5 December 2016. The convent was subsequently demolished in December 2016.</p>
	B49	Prior to the commencement of construction in proximity to the following heritage items: 21; 23 (Roder's well and orchard); 26; 28; 29; and 43, the Applicant shall complete all archival recordings, including photographic recording of these heritage items, unless otherwise agreed by the Secretary. The archival recording shall be undertaken by an experienced heritage consultant, in accordance with the Guidelines issued by the Heritage Council of NSW. The areas containing these items shall be clearly identified and/or fenced until the completion of the archival recordings. Within 6 months of completing the archival recording, the Applicant shall submit a report containing the archival and photographic recordings and the historical research, where required, to the Department of Planning and Environment, the Heritage Council of NSW, and the local library and the local Historical Society in the relevant local government area(s).	5, 7, 9, 10	Pre-construction	RMS	Compliant	<p>Archival recordings completed for all items. Reports received and submitted to DPE.</p>
	B50	<p>Prior to construction affecting the following heritage items: 7; 23 (Roder's well and orchard) and 28, the Applicant shall carry out further historical and physical archaeological investigations of these heritage items, in consultation with the Department of Planning and Environment and the OEH (Heritage Division), to the satisfaction of the Secretary. These investigations shall:</p> <p>(a) include archaeological investigations and excavation in accordance with the Heritage Council's Archaeological Assessments Guideline (1996) using a methodology prepared, in consultation with the OEH (Heritage Division), and to the satisfaction of the Secretary. The archaeological investigation shall be undertaken by an archaeological heritage consultant, whose appointment has been endorsed by the Secretary. The nomination for the Excavation Director shall demonstrate ability to comply with the Heritage Council's Criteria for the Assessment of Excavation Directors (July 2011);</p> <p>(b) provide for the detailed analysis of any heritage items discovered during the investigations;</p> <p>(c) include management options for these heritage items (including options for relocation and display); and</p> <p>(d) if the findings of the investigations are significant, provide for the preparation and implementation of a heritage interpretation plan.</p> <p>Within 12 months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall prepare a report containing the findings of the excavations, including artefact analysis, and the identification of a final repository for finds, prepared in consultation with the OEH (Heritage Division) and to the satisfaction of the Secretary. The report shall be submitted to the Department of Planning and Environment, the Heritage Council of NSW, and the local library and the local Historical Society in the relevant local government area(s).</p> <p>Note:</p> <ul style="list-style-type: none"> <li>Where archaeological testing has occurred as part of the environmental impact assessment for the SSI and the results are included in the documents listed in condition A2, the sites tested shall still form part of the methodology and final report prepared for the non-Aboriginal archaeological investigation program.</li> </ul>	7, 9	Pre-construction	RMS	Compliant	<p>Item 7 is not included in Section 3 to 11 and is therefore covered under a separate compliance report. Further historical and physical archaeological investigations has been carried out for Item 23 and 28. Reports received and submitted to DPE</p>

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B51	The Applicant shall not destroy, modify or otherwise physically affect the heritage items listed in Table 5-1, Historic (non-Aboriginal) Heritage Assessment Working Paper and Table 3-38, Submissions/Preferred Infrastructure Report (RMS, November 2013).	5, 7, 10	Pre-construction and Construction	RMS and Contractor	Compliant	This was considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs. This requirement is also addressed in the Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures) and these sites are also listed as being within or adjacent to the works. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
HERITAGE - GENERAL							
	B52	Identified impacts to heritage sites shall be minimised where feasible and reasonable through both detailed design and construction, particularly with regard to the historic site known as the North Coast Railway Branch Tramway, Glenugie. Where impacts are unavoidable, works shall be undertaken in accordance with the actions to manage heritage construction impacts required by condition D26(d) and under the guidance of an appropriately qualified heritage specialist.	NA	Pre-construction and Construction	RMS and Contractor	Compliant	This heritage item occurs in Section 2, therefore will not be impacted by the works.
	B53	<b>This approval does not allow the Applicant to destroy, modify or otherwise physically affect human remains as part of the State Significant Infrastructure, except in accordance with an Unexpected Human Remains Procedure that has been approved by the Secretary.</b>	All	Construction	Contractor	Compliant	Pacific Complete has an Unexpected Heritage Finds Procedure detailed in the CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. An Unexpected Human Remains Procedure is currently being developed and is currently with the Registered Aboriginal Parties for approval, prior to submission to the Secretary for approval.
	B53A	<b>An Unexpected Human Remains Procedure shall be prepared and implemented to guide the relocation of recovered human remains. The Unexpected Human Remains Procedure shall:</b> a) be prepared in consultation with the RAPs; and b) meet the requirements of OEHL in relation to the <i>National Parks and Wildlife Act 1974</i> and <i>Guideles for Management of Human Skeletal Remains</i> (NSW Heritage Office, 1998b), and <i>NSW Health in relation to the NSW Health Policy Directive - Exhumation of human remains</i> (December, 2013).	All	Pre-construction and Construction	RMS and Contractor	Compliant	An Unexpected Human Remains Procedure is currently being developed for Secretary approval, in consultation with the RAPs and once approved, the CEMP will be updated accordingly.
	B54	The Applicant shall not destroy, modify or otherwise physically affect any heritage items outside the SSI footprint, unless otherwise agreed by the Secretary in accordance with condition B78-B54A.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
	B54A	<b>The Applicant may undertake archaeological investigations at sites outside the SSI boundary where the following works associated with the construction of the highway are proposed:</b> i. ancillary sites that do not meet the criterion set out in condition B73; or ii. utilities or services, or iii. access and service roads and driveways; or iv. or similar works required for the project that are located within 5 metres of the SSI boundary (with the exception of drainage works in flood prone areas where such activities can be investigated within 20 metres of the SSI boundary).  These investigations are permitted where this is required to assess the potential Aboriginal and non-Aboriginal archaeological impacts of the ancillary facility or other works on previously unidentified heritage sites, provided: (a) any archaeological investigations undertaken under this condition shall be consistent with the requirements in condition B44 for Aboriginal heritage and condition B50 for non-Aboriginal heritage and with the Construction Heritage Management Plan or a methodology prepared to the satisfaction of the Secretary in consultation with OEHL; and (b) the results of any relevant archaeological investigations undertaken under this condition shall be consistent with the reporting requirements of condition B45 for Aboriginal heritage and condition B50 for non-Aboriginal heritage, and for ancillary sites, be described in the assessment of the ancillary facility required under conditions B74 and B75	All	Pre-construction and Construction	RMS and Contractor	Compliant	Noted. Addressed in Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan, Chapter 7 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
	B55	The measures to protect heritage sites near or adjacent to the SSI during construction shall be detailed in the Construction Heritage Management Plan.	All	Construction	Contractor	Compliant	Pacific Complete CEMP including Appendix B5 Construction Heritage Management Plan has been approved (23 October 2015).
TRANSPORT AND ACCESS							
	B56	The SSI shall be designed with the objective of minimising adverse changes to existing access arrangements and services for other transport modes and, where feasible and reasonable, facilitate an improved level of access and service to other transport modes comparable to or better than the existing situation.	All	Pre-construction	RMS	Compliant	This was considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.
	B57	Safe pedestrian and cyclist access through or around worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan, Section 5.4.1 Management of Pedestrians and Section 5.4.2 Management of Cyclists). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
	B58	Construction vehicles (including staff vehicles) associated with the SSI shall be managed to: (a) minimise parking or queuing on public roads; (b) minimise idling and queuing in local residential streets where practicable; (c) minimise the use of local roads (through residential streets and town centres) to gain access to construction sites and compounds; and (d) adhere to the nominated haulage routes identified in the Construction Traffic Management Plan.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan, Section 4 Construction Activities and Impacts, Section 4.3 Road Network, Section 4.4 Construction Access Points, Section 4.5 Construction Site Office and Section 5.5 Construction Vehicle Management). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Construction sites provide ample parking to minimise parking on local roads. Access to work areas are via access gates, sufficient space for queuing is provided where feasible to prevent queuing on public roads.
	B59	In relation to new or modified local road, parking, pedestrian and cycle infrastructure, the SSI shall, where feasible and reasonable, be designed: (a) in consultation with the relevant council; (b) take into consideration existing and future demand, road safety and traffic network impacts; (c) to meet relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Engineering Practice; and (d) be certified by an appropriately qualified person that has considered the above matters.	All	Pre-construction and Construction	RMS and Contractor	Compliant	This has been considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.
PROPERTY AND LANDUSE							



Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B60	The Applicant shall ensure that the SSI is designed to minimise land take impacts to surrounding properties (including agricultural properties) as far as feasible and reasonable, in consultation with the affected landowners.	All	Pre-construction	RMS	Compliant	This was considered throughout the acquisition and detailed design phase of the project.
	B61	Where the viability of existing agricultural operations are identified to be impacted by the land requirements of the SSI, the Applicant shall, at the request of these landowners, employ a suitably qualified and experienced independent agricultural expert, whose appointment has been endorsed by the Secretary, to assist in identifying alternative farming opportunities for the land, including purchase of other residual land to enable existing agricultural activities to continue.	All	Pre-construction	RMS	Compliant	No impacts to the viability of existing agricultural operations have been identified to date. No requests for agricultural expertise has been received to date.
	B62	Unencumbered access to private property shall be maintained during construction unless otherwise agreed with the landowner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least an equivalent standard, in consultation with the landowner.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan, Section 4.5.1 Site Office Locations, Section 4.6.1 Haulage Routes and Section 5.8.6 Removal of Temporary Roadways and Detours). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Access to private property has been maintained throughout construction of all current works and shall continue throughout the duration of construction.</p>
	B63	The Applicant shall, in consultation with relevant landowners, construct the SSI in a manner that minimises intrusion and disruption to agricultural operations/activities in surrounding properties (e.g. stock access, access to farm dams, etc.), unless otherwise agreed by the landowner.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan, Section 4.6.1 Haulage Routes). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Landowners have been consulted regarding work potentially disruptive to agricultural operations / activities. This includes potential use of cane pads within the project boundary and realignment of fences through agricultural land. The project has assisted landowners with property access for cattle movement and prioritised the installation of the permanent boundary fence and gates for landowner cattle movements.</p>
	B64	Any damage caused to property as a result of the SSI shall be rectified or the landowner compensated, within a reasonable timeframe, with the costs borne by the Applicant. This condition is not intended to limit any claims that the landowner may have against the Applicant.	All	Construction	Contractor	Compliant	Noted. Pre-construction building condition inspections have been completed, with post construction inspections to be completed following construction. Any damage identified due to the project works will be rectified.
FORESTRY IMPACTS							
	B65	Where the SSI traverses a state forest, the Applicant shall, in consultation with the NSW Forestry Corporation, ensure that construction does not unduly disrupt existing forestry activities, access for fire fighting and access for other activities within state forests, unless otherwise agreed by the NSW Forestry Corporation.	3, 6, 7	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan, Section 4.7.3 Property Access and Section 4.7.8 State Forest Road Network). Pacific Complete will approve Contractor EMPs, EWMSs and related traffic management safety plans (or similar) to ensure compliance with this CoA.</p> <p>Consultation with NSW Forestry regarding access to forestry areas has been ongoing. Access to Tabbimoble forest is maintained via Glencoe Road during the works.</p>
AIR QUALITY							
	B66	The SSI shall be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Applicant shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B6 Construction Air Quality Management Plan, Chapter 7 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Dust mitigation measures such as the use of watercarts and temporary stabilisation are being implemented on all parts of the project. Contractor works are being monitored by Pacific Complete to ensure contractors are providing sufficient measures to control dust including monitoring and watercarts.</p>
HAZARDS AND RISK							
	B67	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: (a) all relevant Australian Standards; (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B4 Construction Soil and Water Quality Management Plan, Chapter 6 Environmental Control Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
WASTE MANAGEMENT							
	B68	Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence or waste exemption under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>No waste from outside the project has been received.</p>
	B69	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site.	All	Construction	Contractor	Compliant	<p>This requirement is addressed in the Pacific Complete CEMP (Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.</p> <p>Waste generation and transport is being tracked by each contractor for the project and reported to PC/RMS on a monthly basis.</p>

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B70	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2009).	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. Waste generation and transport is being tracked by each contractor for the project and reported to PC/RMS on a monthly basis.
	B71	All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.	All	Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures). Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
UTILITIES AND SERVICES							
	B72	Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant.	All	Pre-construction and Construction	RMS and Contractor	Compliant	This was considered as part of detailed design. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs. Utilities have been relocated in areas where construction has commenced.
ANCILLARY FACILITIES							
	B73	The sites for ancillary facilities that are associated with the construction of the SSI and that have not been identified and assessed in the documents listed in condition A2 shall: (a) be located more than 50 metres from a waterway (100 metres for a State Environmental Planning Policy No. 14 wetland or known Oxleyan Pygmy Perch habitat waterway); (b) not impact on connectivity structures or vegetation leading to a connectivity structure; (c) be located within or adjacent to the SSI boundary; (d) have ready access to the road network; (e) be located in areas of low ecological significance and require no clearing of native vegetation; (f) be located more than 50 metres from threatened species and endangered ecological communities and their habitats; (g) be located on relatively level land; (h) be separated from the nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant) and comply with construction noise management levels at sensitive receivers; (i) be above the 20 year ARI flood level unless a contingency plan to manage flooding is prepared and implemented; (j) have minor impacts on flood storage and not result in obstruction of floodplain flow or blockage of culverts and drains; (k) not unreasonably affect the land use of adjacent properties; (l) operate in accordance with the construction hours set out in conditions B15 and B16; (m) provide sufficient area for the storage of material to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours; and (n) be located in areas of low heritage conservation significance (including areas identified as being of Aboriginal cultural value) and not impact on heritage sites beyond those already impacted by the SSI. The Applicant shall undertake an assessment of the facility against the above criteria in consultation with the relevant public authority(s) and the relevant council. The assessment shall be approved by the Environmental Representative and included in the Ancillary Facilities Management Plan required under condition D21.	All	Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans have been and will continue to be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If required the plan will be submitted to the Secretary for approval.  Refer to Section 2.1 of the six monthly compliance report (October 2020 - March 2021) for a list of major ancillary facilities decommissioned during the reporting period.
	B74	Ancillary facilities that have not been previously identified and assessed in the documents listed in condition A2, and do not meet the criteria set out under condition B73, shall be approved by the Environmental Representative prior to its establishment. In obtaining this approval, the Applicant shall consult with the relevant public authority(s) and the relevant council, and demonstrate to the satisfaction of the Environmental Representative, how the potential environmental impacts can be mitigated and managed to acceptable standards. The outcomes of the assessment shall be documented in a report and include, but not necessarily be limited to: (a) details on the site location and access arrangements; (b) a description of the activities to be undertaken; (c) outcomes of the assessment of the site against the locational criteria set out in condition B73; (d) an assessment of the environmental impacts on the site and the surrounding environment, including, but not limited to noise, vibration, air quality, traffic and access during site establishment and operation, flora and fauna, heritage, erosion and sedimentation, water quality and light spill; (e) details of the mitigation, monitoring and management procedures specific to the ancillary facility that would be implemented to minimise environmental impacts; and (f) demonstrated overall consistency with the approved SSI (including impacts identified in the documents listed in condition A2). A copy of the report shall be included in the Ancillary Facilities Management Plan.	All	Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans have been and will continue to be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If additional impacts are anticipated then the plan will be submitted to the Secretary for approval.  Refer to Section 2.2 of the six monthly compliance report (October 2020 - March 2021) for a list of major ancillary facilities decommissioned during the reporting period.
	B75	Notwithstanding condition B74, ancillary facilities that that have not been previously identified and assessed in the documents listed in condition A2 and result in additional impacts to biodiversity, heritage, flooding and noise beyond those approved for the SSI, shall be approved by the Secretary prior to their establishment. In order to obtain this approval, the Applicant shall undertake an assessment of the ancillary facility in accordance with condition B74 and forward a copy of the assessment report to the Secretary, as part of the approval submission, at least one month prior to the establishment of the facility.	All	Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans have been and will continue to be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If required the plan will be submitted to the Secretary for approval.  Refer to Section 2.2 of the six monthly compliance report (October 2020 - March 2021) for a list of major ancillary facilities decommissioned during the reporting period.

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	B76	The land on which ancillary facilities are located shall be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner.	All	Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans have been and will continue to be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Individual ancillary facility approvals outline the specific rehabilitation commitments and principles for ancillary facilities. Urban Design and Landscape Plans (UDLP) have been prepared for the project and outline rehabilitation commitments and principles for ancillary facilities. Addendum documentation is being prepared as per the approved AFMP to capture details of the rehabilitation requirements for each individual location.
	B77	Where changes are made to the boundary or use of an ancillary facility, including facilities identified in the documents listed in condition A2, the Applicant shall assess the facility against the criteria set out in condition B73. If the ancillary facility site: (a) does not meet the criteria set out under condition B73 the Applicant shall seek the approval of the Environmental Representative in accordance with condition B74; or (b) results in impacts to biodiversity, heritage, flooding and noise beyond those approved for the SSI, the Applicant shall seek the approval of the Secretary in accordance with condition B75. The relevant approval shall be obtained prior to the establishment of the ancillary facility.	All	Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans will be prepared by Pacific Complete in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If required the plan will be submitted to the Secretary for approval.  Refer to Section 2.2 of the six monthly compliance report (October 2020 - March 2021) for a list of major ancillary facilities decommissioned during the reporting period.
	<del>B78</del>	<del>DELETED</del>	<del>P</del>	<del>Construction</del>	<del>Contractor</del>	<del>n/a</del>	<del>Noted.</del>
BORROW SITES							
	B79	The Applicant shall ensure that material extracted from the borrow sites established for the SSI, is only used for the construction of the SSI subject to this approval, and no other sections of the Pacific Highway or other works.	All	Construction	Contractor	Compliant	Pacific Complete will prepare site specific Borrow Site Management Plans as required by the project approval. This requirement will apply to all borrow site management plans prepared by Pacific Complete.  The Tyndale Borrow Site Management Plan (Portion A) was approved in August 2016 by DPE. The Lang Hill Borrow Site Management Plan (Portion C) was approved 23 November 2016 by DPE. The Lumleys Hill Borrow Site Management Plan (Portion D) was approved on 8 September 2017. The Gibsons Borrow Site Management Plan and the Jali Borrow Site Management Plan (Portion D) were approved on 11 September 2017. An associated Haulage Strategy was prepared for Portion D and endorsed on 28 September 2017. Monthly Haulage Reports have been prepared for this from January 2018 to 8 December 2018. The Haulage Strategy expired on 8 December 2018 - Old Bagotville Road Haulage Strategy Compliance Reports).
CONSTRUCTION ACTIVITIES							
	B80	The Applicant shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	All	Construction	Contractor	Compliant	Pacific Complete has an approved CEMP. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
OPERATIONAL PERFORMANCE							
	B81	The Applicant shall ensure that during the operation of the SSI, water quality risks to the Woodburn Bore field drinking water catchment are minimised to the satisfaction of Rous Water.	8	Operation	RMS	Compliant	This has been considered as part of detailed design and has been developed in consultation with Rous Water. Pacific Complete reviews detailed design lot reports to ensure compliance with relevant MCoAs.
	<div> <div></div> <div>Modification 1 (15/10/2015)</div> </div> <div> <div></div> <div>Modification 2 (7 October 2015)</div> </div> <div> <div></div> <div>Modification 5 (27 September 2017)</div> </div> <div> <div></div> <div>Modification 6 (21 February 2018)</div> </div>						

COMPLIANCE TRACKING - NSW CONDITIONS OF APPROVAL  
Woolgoolga to Ballina SSI-4963



PART C - Community Information and Reporting

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT							
	C1	<p>Prior to the commencement of construction or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Applicant (and its contractor(s)), the Environmental Representative (see condition D22), the relevant council and community stakeholders (particularly adjoining landowners) on the construction environmental management of the SSI. The Strategy shall include, but not be limited to:</p> <p>(a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;</p> <p>(b) procedures and mechanisms for the regular distribution of information to community stakeholders on construction progress and matters associated with environmental management;</p> <p>(c) the formation of community-based focus groups for key environmental management issues for the SSI. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based focus groups;</p> <p>(d) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Applicant and/or Environmental Representative in relation to the environmental management and delivery of the SSI;</p> <p>(e) procedures and mechanisms through which the Applicant can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSI; and</p> <p>(f) procedures and mechanisms that would be implemented to resolve issues/ disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSI. This may include the use of an appropriately qualified and experienced independent mediator.</p> <p>Issues that shall be addressed through the Community Communication Strategy include (but are not necessarily limited to):</p> <p>(i) traffic management (including property access, pedestrian access);</p> <p>(ii) heritage matters;</p> <p>(iii) landscaping and urban design matters;</p> <p>(iv) construction staging, hours and activities;</p> <p>(v) noise and vibration mitigation and management;</p> <p>(vi) air quality and dust;</p> <p>(vii) water quality, hydrology and flooding matters; and</p> <p>(viii) biodiversity matters.</p> <p>The Applicant shall maintain and implement the Strategy throughout construction of the SSI.</p>	All	Pre-construction	RMS	Compliant	An overarching Woolgoolga to Ballina Communication and Stakeholder Engagement Strategy has been prepared and approved. DPE Approval dated 13 May 2015.
COMPLAINTS AND ENQUIRIES PROCEDURE							
	C2	<p>Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of construction:</p> <p>(a) a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered;</p> <p>(b) a postal address to which written complaints and enquires may be sent;</p> <p>(c) an email address to which electronic complaints and enquiries may be transmitted; and</p> <p>(d) a mediation system for complaints unable to be resolved.</p> <p>The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	Information and systems required by this condition have been established. Refer to the overarching Woolgoolga to Ballina Communication and Stakeholder Engagement Strategy (DPE Approval dated 13 May 2015). Relevant details have been included in the approved Pacific Complete CEMP, refer to Section 6.3 Stakeholder and Community Communication. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA. While there were no non-compliances with the conditions of approval, Roads & Maritime did write to the Department of Planning and Environment on 17 January 2017 to inform the Department that we did not meet our obligations in the approved Communications and Engagement Strategy relating to and inadvertent administrative mistake in which the 1800 project number was diverted to a phone number that was not actively managed during the Christmas shut down period (2016/17).
	C3	<p>Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Construction Complaints Management System consistent with AS 4269: Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of the SSI. Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	Information and systems required by this condition have been established. Refer to the overarching Woolgoolga to Ballina Communication and Stakeholder Engagement Strategy (DPE Approval dated 13 May 2015). Relevant details have been included in the approved Pacific Complete CEMP, refer to Section 6.3 Stakeholder and Community Communication and Section 6.3.2 Complaints and Enquires Procedure. Pacific Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
PROVISION OF ELECTRONIC INFORMATION							
	C4	<p>Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI, for the duration of construction and for 12 months following completion of the SSI. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:</p> <p>(a) information on the current implementation status of the SSI;</p> <p>(b) a copy of the documents listed in condition A2, and any documentation supporting modifications to this approval that may be granted from time to time;</p> <p>(c) a copy of this approval and any future modification to this approval;</p> <p>(d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI;</p> <p>(e) a copy of each current strategy, plan, program or other document required under this approval;</p> <p>(f) the outcomes of compliance tracking in accordance with condition D27 of this approval; and</p> <p>(g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	<p>The website for the project is <a href="http://www.rms.nsw.gov.au/projects/northern-nsw/woolgoolga-to-ballina/index.html">http://www.rms.nsw.gov.au/projects/northern-nsw/woolgoolga-to-ballina/index.html</a>. Community &amp; Stakeholder Engagement Strategy (approved 13/5/15) Section 6, Table 6.1 &amp; Section 7 Enquiries &amp; Complaints - Phone: 1800 778 900 - maintained by Pacific Complete.</p> <p>Copies of the project approval and management plans are available on the project website. The website is regularly updated.</p>
		Modification 1 (15/10/2015) Modification 2 (7 October 2015) Modification 5 (27 September 2017) Modification 6 (21 February 2018)					



PART D - Environmental Management, Reporting and Auditing

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
BIODIVERSITY MITIGATION FRAMEWORK							
	D1	<p>The Applicant shall develop a framework for finalising mitigation measures for threatened species. This Mitigation Framework shall be developed by a suitably qualified and experienced ecologist in consultation with DPI (Fisheries), ŌEH EPA and DoE, and submitted to the satisfaction of the Secretary prior to commencement of detailed design of the relevant stage, unless otherwise agreed by the Secretary. The Mitigation Framework shall detail the process for finalising the biodiversity strategies, plans and programs required under this approval. The Mitigation Framework shall include:</p> <p>(a) a description of the methodology of all proposed pre-construction species and habitat surveys, including surveys undertaken in the 2013-2014 spring and summer seasons and as otherwise required under this project approval, and with reference where relevant to compliance with relevant NSW and Commonwealth field survey methods and guidelines;</p> <p>(b) a summary of potential changes to the avoidance, mitigation and/or offset measures specified in the documents listed in condition A2, as justified by the results of surveys described in condition D1(a);</p> <p>(c) a summary of the potential avoidance, mitigation and/or offset measures for all species for which the proposed level of impact or mitigation required differs from that assessed in the documents listed in condition A2, including evidence that those measures would achieve the same or an improved biodiversity outcome;</p> <p>(d) provision for updating the relevant Threatened Species Management Plans required under condition D8; and</p> <p>(e) a schedule for submission of all biodiversity strategies, plans and programs required under this approval in accordance with the requirements for submission in the conditions below.</p>	All	Pre-construction	RMS	Compliant	Mitigation Framework approved by DPE on 8 May 2015.
	D2 (a)-(g)	<p>The Applicant shall prepare and implement a Connectivity Strategy, to be submitted and approved by the Secretary prior to the commencement of construction. The strategy shall describe the rationale for, and final design and location of, fauna connectivity structures for the SSI and shall demonstrate the effectiveness of connectivity measures for the species targeted for the crossing. The Strategy shall be developed from the draft Connectivity Strategy in the documents listed in condition A2 in consultation with the EPA ŌEH, DPI (Fisheries) and DoE, to the satisfaction of the Secretary. The Strategy shall include:</p> <p>(a) details of all crossings for terrestrial and aquatic fauna, including but not limited to land bridges, bridge, arch and culvert crossings, and crossings for arboreal fauna;</p> <p>(b) justification for the location and design, and spacing of the connectivity structures, with reference to relevant State and Commonwealth threatened species guidelines and the results of on-ground surveys as required by D2(d);</p> <p>(c) demonstration of the effectiveness of the connectivity structures (including exclusionary fencing) in terms of location, design and number of connectivity structures to mitigate impacts to the relevant threatened species, and that the crossings:</p> <p>(i) maintain or improve connectivity and movement pathways;</p> <p>(ii) reduce the risk of mortality for threatened species;</p> <p>(iii) are located at locations, at sufficient frequency along the alignment, based on the ecological requirements of the targeted species, including but not limited to home range size, movement patterns, and habitat use;</p> <p>(d) the results of surveys undertaken to determine the habitat, species movement patterns, distribution of species to confirm the design and location;</p> <p>(e) consideration of connectivity under the existing highway, service roads and local roads (servicing over 100 vehicles per day);</p> <p>(f) commitment that pathways to connectivity structures are not to be impeded by ancillary facilities, rest areas or service roads, or local roads (servicing over 100 vehicles per day) that are realigned as part of the SSI or experience an increase in traffic volumes during operation of the SSI;</p> <p>(g) commitment to implement the landscaping of vegetation leading to connectivity structures;</p>	All	Pre-construction	RMS	Compliant	<p>The Connectivity Strategy (Sections 3-11) was submitted to Department of Planning &amp; Environment and the Department of Environment and Energy on 14 December 2016. Approval of this plan was received by Department of Planning and Environment on 27 April 2017 and Department of the Environment and Energy on 16 May 2017.</p> <p>An updated Connectivity Strategy (Sections 3 - 11) which includes Glenugie Link was submitted to the Department of Planning and Environment and the Department of Environment and Energy on 30 August 2018 (ie, the previous reporting period).</p> <p>An Addendum to the Connectivity Strategy was submitted on 1 February 2019 and approval of the Connectivity Strategy &amp; Connectivity Strategy Addendum was received by Department of Planning and Environment on 28 February 2019. The Department requested further comments regarding dry passage at Wardell eastern culvert, and an updated Connectivity Strategy was submitted on 6 March 2019.</p>
	D2 (h)-(m)	<p>(h) a fencing strategy, describing the location, design and length of fencing, which must extend beyond the edges of habitat for threatened species;</p> <p>(i) the maintenance of connectivity measures and fencing for the life of the impact of the action, including the timing and frequency;</p> <p>(j) an assessment of the flooding risk for proposed structures, and measures to confirm and provide for flood immunity of those structures in light of this assessment. The agreement of the EPA ŌEH on flood immunity levels shall be obtained prior to the commencement of construction of the relevant stage;</p> <p>(k) commitment that all bridges in identified wildlife corridors, or adjacent to threatened species habitat, or are likely to provide connectivity for threatened species based on surveys undertaken in accordance with the Mitigation Framework required in condition D1, shall provide a minimum three metre wide dry passage from toe of the scour protection to the top of the bank, with natural substrate and refuge features. Where this criteria cannot be achieved and with the agreement of the EPA ŌEH, consideration shall be given to the use of suitable materials in, and the final form of, the scour protection to provide for the safe and effective passage of fauna;</p> <p>(l) detailed consideration of the effects of connectivity structures on the maintenance or improvement of population viability and gene flow; and</p> <p>(m) incorporate the outcomes of the Mitigation Framework required under condition D1.</p> <p>Unless connectivity measures can be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to relevant species, in accordance with the requirements of the construction flora and fauna management plan required under condition D26(e), and threatened species management plans required under conditions D8 and D9, the residual impact to connectivity shall be offset.</p> <p>Where the location and/or design of connectivity structures has changed from that identified in the documents listed under conditions A2(c) and A2(e), the Strategy shall demonstrate how the new location and/or design would result in an improved biodiversity outcome. The Strategy shall clearly identify how the connectivity structures will work in conjunction with other biodiversity measures, such as complementary fauna exclusion fencing measures and the regeneration/replanting of native vegetation, to be implemented for the SSI.</p> <p>The Applicant shall demonstrate to the satisfaction of the Secretary how public authority comments on the Strategy have been addressed.</p> <p>The Strategy may be submitted in stages to suit the staging of the SSI.</p>	All	Pre-construction	RMS	Compliant	<p>The Connectivity Strategy (Sections 3-11) was submitted to Department of Planning &amp; Environment and the Department of Environment and Energy on 14 December 2016. Approval of this plan was received by Department of Planning and Environment on 27 April 2017 and Department of the Environment and Energy on 16 May 2017.</p> <p>An updated Connectivity Strategy (Sections 3 - 11) which includes Glenugie Link was submitted to the Department of Planning and Environment and the Department of Environment and Energy on 30 August 2018 (ie, the previous reporting period).</p> <p>An Addendum to the Connectivity Strategy was submitted on 1 February 2019 and approval of the Connectivity Strategy &amp; Connectivity Strategy Addendum was received by Department of Planning and Environment on 28 February 2019. The Department requested further comments regarding dry passage at Wardell eastern culvert, and an updated Connectivity Strategy was submitted on 6 March 2019.</p>
BIODIVERSITY OFFSET STRATEGY							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D3	<p>The Applicant shall prepare and implement a Biodiversity Offset Strategy to outline how the ecological values lost as a result of the SSI will be offset in perpetuity. The Strategy shall be developed from the draft Biodiversity Offset Strategy in the documents listed in condition A2, in consultation with the <del>QEH</del> <b>EPA</b>, DPI (Fisheries) and DoE, to the satisfaction of the Secretary.</p> <p>Unless otherwise agreed to by the <del>QEH</del> <b>EPA</b>, DPI (Fisheries) and DoE, offsets shall be provided on a like-for-like basis and at a minimum ratio of 4:1 for native vegetation (including salt marsh) impacted by the SSI or as required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (Commonwealth of Australia 2012) and Offsets Assessment Guide (Commonwealth of Australia 2012), whichever is the greater.</p> <p>The Strategy shall include, but not necessarily be limited to:</p> <p>(a) the objectives and outcomes that would be sought through a biodiversity offset package, including to achieve a neutral or net beneficial outcome for all threatened species and endangered ecological communities likely to be impacted directly or indirectly during both the construction and operation of the SSI;</p> <p>(b) confirmation of the vegetation type/habitat (in hectares) to be cleared and their condition, and the size of offsets required (in hectares);</p> <p>(c) details of the available offset measures that have been selected to compensate for the loss of existing native vegetation (including mangroves, salt marsh and riparian vegetation), threatened and vulnerable species and Endangered Ecological Communities and their habitats, and identification of potential offset sites;</p> <p>(d) consideration of contingency measures for offsets to address potential changes to impacted areas as a result of detailed design changes;</p> <p>(e) a process for addressing and incorporating offset measures arising from changes in biodiversity impacts (where these changes are generally consistent with the biodiversity impacts identified for the SSI in documents listed under condition A2), including:</p> <p>(i) changes to the SSI footprint due to detailed design;</p> <p>(ii) changes to predicted impacts as a result of changes to mitigation measures;</p> <p>(iii) the identification of additional species/habitat through pre-clearance surveys and construction; and</p> <p>(iv) additional impact associated with the establishment of ancillary facilities;</p> <p>(f) the decision-making framework that would be used to select the final suite of offset measures to achieve the objectives and outcomes established within the Strategy, including the ranking of offset measures; and</p> <p>(g) options for securing and management of biodiversity offsets in perpetuity.</p> <p>The Applicant may elect to satisfy the requirements of this condition by identifying a suitable offset strategy which addresses impacts from multiple Pacific Highway Upgrade projects within the North Coast bioregion. Any such strategy, including an agreement made with <del>QEH</del> <b>EPA</b> and DoE, shall be approved by the Secretary within a timeframe agreed to by the Secretary.</p> <p>The Biodiversity Offset Strategy shall be submitted to, and approved by, the Secretary prior to the commencement of construction work that would result in the disturbance of the relevant existing ecological communities, threatened species, or their habitat, unless otherwise agreed by the Secretary.</p>	All	Pre-construction and Construction	RMS	Compliant	Biodiversity Offset Strategy Approved (DPE 6 January 2016 and DoE 7 January 2016), meeting the Conditions of Approval:
	D4	<p>Prior to the commencement of construction work that would result in the disturbance of the relevant existing ecological communities, threatened species, or their habitat, unless otherwise agreed by the Secretary, the Applicant shall submit for the approval of the Secretary, the offset sites for the species listed under condition D4(a). The selection of the offset sites should be undertaken in consultation with the <del>QEH</del> <b>EPA</b>, DPI (Fisheries) and DoE. Submission of the offset sites for approval shall be accompanied by:</p> <p>(a) details of offset sites to compensate the impacts on:</p> <p>(i) Koala populations in Coolgardie/Bagotville, Broadwater and Woombah/Iluka;</p> <p>(ii) Moonee Quassia (Quassia sp. Moonee Creek);</p> <p>(iii) Sandstone Rough-Barked Apple (Angophora robur);</p> <p>(iv) Singleton Mint Bush (Prostanthera cineolifera); and</p> <p>(v) Lowland Rainforest in Sub-tropical Australia;</p> <p>(b) a map that defines the locations and boundaries of the sites;</p> <p>(c) demonstration, through ground truthing survey or an alternative method(s), the adequacy of the site(s), in terms of habitat suitability and presence of the relevant species, to offset the impacts of the SSI;</p> <p>(d) consideration of how the offsets achieve the outcomes required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy to the satisfaction of DoE; and</p> <p>(e) details of how the offset sites would be secured and managed in perpetuity.</p>	3, 4, 6, 9, 10, 11	Pre-construction and Construction	RMS	Compliant	Threatened Biodiversity Offset Status Report, update 3 was approved by DPE on 30 June 2016 and DOEE on 18 July 2016.
BIODIVERSITY OFFSET STRATEGY							
	D5 (a)-(g)	<p>The Applicant shall prepare and implement (following approval) a Biodiversity Offset Package, within twenty-four months of approval of the Biodiversity Offset Strategy, or as otherwise agreed by the Secretary. The package shall detail how the ecological values lost as a result of the SSI will be offset. The Biodiversity Offset Package shall be prepared in consultation with the <del>QEH</del> <b>EPA</b>, DPI (Fisheries) and DoE, for the approval of the Secretary, and shall (unless otherwise agreed by the Secretary) include, but not necessarily be limited to:</p> <p>(a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI;</p> <p>(b) the objectives and biodiversity outcomes to be achieved;</p> <p>(c) details of the final suite of the biodiversity offset measures selected and secured in accordance with the Biodiversity Offset Strategy including the identification of all offset sites, including, offset attributes, shapefiles, textual descriptions and maps that clearly define the location, boundaries of the offset areas;</p> <p>(d) an assessment demonstrating how the offset area(s) achieve the outcomes required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy and user guide to the written satisfaction of DoE;</p> <p>(e) the management and monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:</p> <p>(i) the monitoring of the condition of species and ecological communities at offset locations;</p> <p>(ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites;</p> <p>(iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the <del>QEH</del> <b>EPA</b>, DPI (Fisheries) and DoE; and</p> <p>(iv) the monitoring and reporting on the effectiveness of these measures, and progress against the performance and completion criteria;</p> <p>(f) the results of targeted field surveys within the offset sites (undertaken at any ecologically appropriate time of the year) to assess and describe habitat suitability, presence/absence of threatened species and ecological communities and an assessment of the baseline population;</p> <p>(g) a description of the current quality (prior to any management activities) of the offset area(s);</p>	All	Pre-construction and Construction	RMS	Compliant	A Biodiversity Offset Package has been prepared and was submitted for approval to the Departments in December 2017 (October 2017 - March 2018). DP&E have provided comments. RMS did not receive any comments from Federal Department of Environment and Energy during the reporting period.
	D5(h)-(m)	<p>(h) targeted management actions, regeneration and/or revegetation strategies to be undertaken on the offset area(s) to improve the ecological quality of these areas for the relevant species and communities;</p> <p>(i) clear performance objectives for management actions that will enable maintenance and enhancement of habitat within the offset area, as well as contribute to the better protection of individuals and/or populations of the relevant species;</p> <p>(j) performance and completion criteria for evaluating the management of the offset area, including contingency actions, criteria for triggering contingency actions and a commitment to the implementation of these actions in the event that performance objectives are not met; a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;</p> <p>(k) timing and responsibilities for the implementation of the provisions of the Biodiversity Offset Package and achieving performance objectives;</p> <p>(l) details of who would be responsible for monitoring, reviewing, and implementing the Biodiversity Offset Package; and</p> <p>(m) a description of funding arrangements or agreements including work programs and responsible entities.</p> <p>Land offsets shall be consistent with the Principles for the use of Biodiversity Offsets in NSW. Any land offset shall be enduring and be secured by a conservation mechanism which protects and manages the land in perpetuity. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.</p> <p>The Biodiversity Offset Package shall include details of the offset sites approved under condition D4, and timeframe for the delivery of the offset sites.</p> <p>Where monitoring required under conditions D8 and/or D9 indicates that biodiversity outcomes are not being achieved, remedial actions, as approved by the Secretary, shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.</p> <p>The requirements of the Biodiversity Offset Package shall be implemented by the responsible parties according to the timeframes set out in the Biodiversity Offset Package, unless otherwise agreed by the Secretary.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>• If an offset site proposed as a part of the Biodiversity Offset Strategy or Biodiversity Offset Package is already required to be protected as a result of a separate approval, only the management actions which can be demonstrated to be additional to those required for the separate approval, can be considered as an offset for this project in accordance with the EPBC Act Environmental Offsets Policy 2012 (or subsequent published revisions).</li> </ul>	All	Pre-construction and Construction	RMS	Compliant	A Biodiversity Offset Package has been prepared and was submitted for approval to the Departments in December 2017. DP&E have provided comments. RMS yet to receive any advice from Federal Department of Environment and Energy.

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D6	Prior to the commencement of construction of the relevant stage that would result in the disturbance of native vegetation (or as otherwise agreed by the Secretary), the Applicant shall prepare and implement a Nest Box Plan to provide replacement hollows for displaced fauna. The Plan shall be prepared in consultation with the <b>EPA OEH</b> and to the satisfaction of the Secretary. The Plan shall be prepared by a suitably qualified and experienced ecologist and detail the number and type of nest boxes to be installed, which shall be justified based on the number and type of hollows removed (based on pre clearing surveys), the density of hollows in the area to be cleared and in adjacent areas, and the availability of adjacent food resources. The Plan shall also provide details of maintenance protocols for the nest boxes installed including responsibilities, timing and duration.	All	Pre-construction and Construction	RMS and Contractor	Compliant	<p>Nest Box Plan approved (DPE approval 17 February 2015). Nest Box Management Plans for sections have been developed &amp; approved by NSW Department of Planning &amp; Environment:</p> <p>Nest Box MP Section 1 &amp; 2: approved 16/1/15 Nest Box MP Section 3: approved 23/2/15 Nest Box MP Sections 4 &amp; 5: approved 16/1/15 Nest Box MP Section 6: approved 23/2/15 Nest Box MP Section 7: approved 23/2/15 Nest Box MP Sections 8 &amp; 9: approved 16/1/15 Nest Box MP SEction 10 &amp; 11: approved 16/1/15</p> <p>These plans were informed by the results of detailed supplementary targeted surveys and the Nest Box Plans provide maintenance protocols, timing &amp; duration</p>
BIODIVERSITY TRANSLOCATION STRATEGY							
	D7	<p>The Applicant shall prepare and implement a Flora Translocation Strategy to determine the feasibility and potential efficacy of translocation measures (as identified in the threatened species management plans required under condition D8), prior to the commencement of construction work that would result in the disturbance of threatened flora species for which translocation is proposed. The Strategy shall be prepared by a suitably qualified and experienced ecologist, in consultation with the <b>OEH-EPA</b> and DoE, and to the satisfaction of the Secretary. The Strategy shall include:</p> <p>(a) a feasibility assessment of timeframe and staging requirements, availability of expertise, risk effectiveness analysis and availability/suitability of translocation sites; (b) detail of species specific information on the proposed methods of, and discussion of results of past recorded responses to, translocations; (c) a framework for the translocation process applicable to each affected species; and (d) consideration of appropriate compensatory habitat in the Biodiversity Offsets Package required under condition D5 where translocation is not reasonable or feasible.</p>	All	Pre-construction	RMS	Compliant	<p>Translocation Strategy Update 3 (for Section 3 -11) Approved by DPE on 2 February 2016. DoE have confirmed no comment. Translocation Strategy Update 2 (Waves 1, 2 and 3) Approval by DPE on 11 June 2015. A revised Translocation Strategy was submitted to the Department on 28 February 2020 and approved on 1 May 2020 and includes updated <i>Green-leaved Rose Walnut Remediation Action Plan (Action Plan)</i>.</p>
BIODIVERSITY THREATENED SPECIES MANAGEMENT PLANS							
	D8 (a)-(h)	<p>The Applicant shall prepare and implement Threatened Species Management Plans to detail how impacts of the SSI will be minimised and managed specifically for each species identified as significantly impacted in the documents listed in condition A2 or in accordance with condition D1. The Plans shall be developed from the draft Threatened Species Management Plans included in the documents listed in condition A2(c) (subject to condition D9), in consultation with <b>EPA OEH</b>, DPI (Fisheries) and DoE, and to the satisfaction of the Secretary, and shall include but not necessarily be limited to:</p> <p>(a) demonstration that adequate surveys have been undertaken to assess the impacts of the SSI with reference to the Mitigation Framework developed under condition D1, including baseline data collected from surveys, undertaken by a suitably qualified and experienced ecologist on threatened species and ecological communities within all habitat areas to be cleared of vegetation for the SSI, that are likely to contain these species and that are likely to be adversely impacted by the SSI (as determined by a suitably qualified expert). The data shall address the densities, distribution, habitat use and movement patterns of these species; (b) identification of potential impacts on each species; (c) details of and demonstrated effectiveness of the proposed avoidance and mitigation and management measures to be implemented for each threatened species including measures to at least maintain habitat values of habitat areas compared to baseline data and maintain connectivity for the relevant species; (d) an adaptive monitoring program to assess the use of the mitigation measures identified in conditions B10 and D2. The monitoring program shall nominate appropriate and justified monitoring periods, performance parameters and criteria against which effectiveness of the mitigation measures will be measured and include operational road kill and fauna crossing surveys to assess the use of fauna crossings and exclusion fencing implemented as part of the SSI; (e) monitoring methodology for threatened flora and fauna adjacent to the SSI footprint, (f) goals and performance indicators to measure the success of mitigation measures, which shall be specific, measurable, achievable, realistic and timely (SMART), and be compared against baseline data; (g) methodology for the ongoing monitoring of road kill, the species densities, distribution, habitat use and movement patterns, and the use of fauna crossings during construction and operation of the SSI, including the proposed timing, and duration of that monitoring; (h) provision for the assessment of monitoring data to identify changes to habitat usage and whether this can be attributed to the SSI;</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	<p>The following Threatened Species Management Plans have been prepared and approved:</p> <p><b>Threatened Flora Management Plan</b> Update 1 (Section 1, Section 2, Waves 1, 2 and 3) DPE Approval 30 April 2015, DoE Approval 5 May 2015. <b>Threatened Flora Management Plan</b> Update 2 (Sections 3 to 11) DPE Approval 21 August 2015, DoE Approval 4 September 2015. <b>Threatened Rainforest Plants Management Plan</b> (Section 10) DPE Approval 11 September 2015. <b>Threatened Mammal Management Plan</b> Update 1 DPE Approval 7 May 2015, DoE Approval 12 May 2015. <b>Threatened Mammal Management Plan</b> Update 2 DPE Approval 21 October 2015, DoE Approval 25 October 2015. <b>Threatened Invertebrates Management Plan</b> DPE Approval 29 July 2015. <b>Threatened Fish Management Plan</b> DPE Approval 30 July 2015. <b>Threatened Frog Management Plan</b> DPE Approval 7 May 2015. <b>Threatened Glider Management Plan</b> DPE Approval 4 May 2015. <b>Coastal Emu Management Plan</b> (Sections 3 and 4, excluding Wave 3) DPE Approval 3 June 2015. <b>Coastal Emu Management Plan</b> (includes updates for Wave 3) DPE Approval 18 December 2015. <b>Microbat Management Plan</b> (Section 3 to 11) DPE approval 25 May 2015. <b>Koala Management Plan</b> (Section 1 to 11), DPE Approval 4 August 2016, DoE Approval 11 August 2016. <b>Addendum to Koala Management Plan - Koala Revegetation Strategy</b> (Section 3 to 11), DPE Approval 26 February 2019 (this reporting period October 2018 to March 2019).</p>
	D8 (i)-(l)	<p>(i) details of contingency measures that would be implemented in the event of changes to habitat usage patterns, entities, distribution, and movement patterns attributable to the construction or operation of the SSI, based on adequate baseline data; (j) mechanisms for the monitoring, review and amendment of these plans; (k) provision for ongoing monitoring during operation of the SSI (for operation/ongoing impacts) until such time as the use and effectiveness of mitigation measures can be demonstrated to have been achieved over a minimum of three successive monitoring periods, unless otherwise agreed by the Secretary in consultation with the <b>EPA OEH</b>, DPI (Fisheries) and DoE; and (l) provision for annual reporting of monitoring results to the Secretary and the <b>OEH-EPA</b>, DPI (Fisheries) and DoE, or as otherwise agreed by those agencies.</p> <p>In developing the Plans, the Applicant shall demonstrate to the satisfaction of the Secretary and DoE, how the public authorities and expert reviewer recommendations provided for each draft plan in the documents listed in condition A2(c) have been addressed, including detailed justification of any variance from the recommendations of the expert reviewer of the management plans, including analysis of potential risk to the threatened species.</p> <p>The Plans must be submitted and approved by the Secretary prior to commencement of construction of the relevant stages of the action, and implemented prior to commencement of construction of the relevant stages, unless otherwise agreed by the Secretary.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	<p>As above. Approved Threatened Species Management Plans form part of the approved Pacific Complete CEMP (i.e. Construction Flora and Fauna Management Plan). Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the relevant requirements of the various Threatened Species Management Plans.</p>
	D9 (a)-(c)	<p>As part of the Threatened Species Management Plans required under condition D8, the Applicant shall prepare and implement a Koala Management Plan to demonstrate the ongoing survival of the Koala populations at Coolgardie/Bagotville, Broadwater and Woombah/Iluka. The Plan shall be prepared by a suitably qualified and experienced species expert and shall include, but not necessarily be limited to:</p> <p>(a) results of detailed surveys to determine:</p> <p>(i) the population status of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka Koala populations; (ii) habitat use and movement patterns of Koala populations within five kilometres of the proposed upgrade, or such area as determined by the independent ecologist; and (iii) habitat areas likely to be fragmented by the SSI; including the results of SPOT assessment and radio tracking.</p> <p>The results and adequacy of surveys shall be verified by an independent suitably qualified and experienced ecologist with appropriate qualifications and experience in Koala and road ecology. Where appropriate, the Applicant may vary the required area of survey specified under condition D9(a)(ii) to the satisfaction of the independent ecologist; (b) a detailed assessment of the impacts to the Koala populations based on the survey results required by condition D9(a), including population impacts and the identification of habitat likely to be fragmented and/or isolated as a result of the SSI; (c) a detailed description, including the location and design, of all proposed avoidance and mitigation measures;</p>	6, 9, 10	Pre-construction	RMS	Compliant	<p>Koala Management Plan (Section 1 to 11) was approved by DPE on 4 August 2016 and DoE on 11 August 2016. This updated Koala Management Plan includes the management of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka koala populations and a Population Viability Analysis (PVA) for the Ballina Koala population.</p>

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D9 (d)	<p>(d) justification that the location and design of mitigation measures:</p> <p>(i) have been designed with the objective of no Koala road kill from the commencement of construction of the SSI. In the event that a Koala is injured or killed during construction or operation, this shall be reported on the Applicant's website within 24 hours of this occurring, and the record shall remain available for a period of at least five years, unless otherwise agreed by the Secretary;</p> <p>(ii) include permanent fencing of the entire SSI for the length of the distribution of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka populations and for two kilometres beyond the distribution of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka population, following the highway or to the nearest natural barrier to Koala movement (e.g. river), after baseline surveys are complete in accordance with condition D9(a) and prior to operation;</p> <p>(iii) result in the complete, safe crossing of fauna crossings by the Koala. Fauna crossings shall be provided at a sufficient frequency to ensure that habitat connectivity is maintained or improved from pre-construction conditions, as determined by the independent ecologist and agreed by <b>EPA OEH</b>;</p> <p>(iv) provide sufficient opportunities for species dispersal and re-colonisation as determined by the independent ecologist and <b>EPA OEH</b>;</p> <p>(v) are in areas that, and are at a sufficient frequency to, achieve (i) - (iv), based on site specific information contained in the survey results required by condition D9(a) and the ecological requirements of the Koala, including but not limited to home range size, local movement patterns and habitat use, in accordance with the advice of the independent ecologist and <b>EPA OEH</b>;</p> <p>(vi) all koala underpass structures shall have a minimum height and width of 2.4 metres and a maximum length of 40 metres, or a minimum height and width of 3 metres and a maximum length of 50 metres. The underpass/culvert entrance shall be located at ground level, and no higher in the fill. Structures that provide passage over the road shall have a minimum width of 30 metres and shall be treated with contiguous habitat features;</p> <p>(vii) provide passage for Koalas under or over the existing highway (where the existing highway forms part of the SSI) and service roads or local roads (servicing over 100 vehicles per day);</p> <p>(viii) effectively minimise the risk of predation from dogs in both dedicated and combined crossings;</p> <p>(ix) provide dry passage for dedicated fauna crossings and for combined fauna crossings to the satisfaction of <b>EPA OEH</b> and DoE, at a flood immunity level determined in accordance with condition D2(c)(j);</p> <p>(x) provide habitat linkages to crossing structures from adjacent Koala habitat; and</p> <p>(xi) ensures that pathways to connectivity structures are not impeded by ancillary facilities, rest areas, service roads or local roads;</p>	6, 9, 10	Pre-construction	RMS	Compliant	Koala Management Plan (Section 1 to 11) was approved by DPE on 4 August 2016 and DoEE on 11 August 2016. This updated Koala Management Plan includes the management of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka koala populations and a Population Viability Analysis (PVA) for the Ballina koala population.
	D9 (e)-(i)	<p>(e) if the mitigation measures discussed in condition D9(d) cannot be demonstrated to be effective to the satisfaction of the Secretary, in consultation with <b>EPA OEH</b> and DoE, provision for the Plan to be revised to include the design and construction of a minimum of one dedicated underpass or land bridge every 500 metres. Underpass structures shall have a minimum height and width of three metres and a maximum length of 50 metres.</p> <p>(f) provision for the installation and vegetation planting of fauna overpasses prior to the commencement of construction;</p> <p>(g) a revegetation strategy to be implemented to increase connectivity adjacent to the SSI and leading to crossing locations, and the provision of vegetation planting on land bridges, to ensure the establishment of the vegetation prior to the commencement of construction;</p> <p>(h) details of the proposed monitoring methodology to ensure the effectiveness of the mitigation measures and the ongoing survival of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka Koala populations. Monitoring shall:</p> <p>(i) include goals that demonstrate the mitigation measures are effective, including clear objectives, milestones, performance measures, corrective actions, and thresholds for corrective actions, and timeframes for completion;</p> <p>(ii) occur until such time as the mitigation measures are demonstrated to be effective for three consecutive monitoring periods, or as agreed by the Secretary, to the satisfaction of the independent ecologist and OEH; and</p> <p>(iii) for the purposes of the Coolgardie/Bagotville population, consider the results of the surveys undertaken in the Koala habitat and population assessment: Ballina Shire Council LGA (Biolink Ecological Consultants Pty Ltd, November 2013) in determining the baseline population;</p> <p>(i) where the results of monitoring undertaken in accordance with condition D9(h) suggests that the mitigation measures are ineffective or changes to the population have occurred, the Applicant shall provide the Secretary, within one month of recording the changes, the corrective actions that have been implemented or proposed to be implemented, or a procedure for demonstrating that this change is not a result of the SSI. Should the Applicant be unable to demonstrate to the satisfaction of the Secretary that any change to the population is not attributable to the SSI, the SSI shall be deemed as the cause of the impact and the Applicant shall, within one month of these findings, provide, to the satisfaction of the Secretary, in consultation with the <b>EPA OEH</b> and DoE, the proposed corrective actions to address the impacts of the SSI. Any required corrective actions shall include, but not necessarily be limited to:</p> <p>(i) installation of further crossings or modifications to existing crossings and the provision of evidence of the complete, safe crossing of these fauna crossings by the Koala. Any additional crossings shall be provided at a sufficient frequency to ensure that habitat connectivity is maintained or improved from pre-construction conditions, within two years of their installation; and</p> <p>(ii) reassessment of all revegetation areas and frequent reporting and maintenance including addressing failures;</p>	6, 9, 10		RMS	Compliant	Koala Management Plan (Section 1 to 11) was approved by DPE on 4 August 2016 and DoEE on 11 August 2016. This updated Koala Management Plan includes the management of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka koala populations and a Population Viability Analysis (PVA) for the Ballina koala population.
	D9 (j)-(k)	<p>(j) if the measures in condition D9(i) cannot be demonstrated to be successful within one year of their implementation, procedure for the submission of further offsets in accordance with conditions D5 and D6(j), to be provided within one year of these findings. Further offsets may include:</p> <p>(i) the legal protection and conservation management of additional areas of existing habitat that actively regenerated and secured into conservation management; and/or</p> <p>(ii) strategic revegetation of cleared areas to improve connectivity; and/or</p> <p>(iii) development of a supplementary feeding program and/or breeding program; and/or</p> <p>(iv) development of a long term predator control program; and</p> <p>(k) evidence of consultation with species experts, <b>EPA OEH</b> and DoE in addressing the requirements of this condition, and demonstration of how comments provided by the species experts, <b>EPA OEH</b> and DoE, as a result of this consultation, have been addressed.</p> <p>The Koala Management Plan shall be submitted and approved by the Secretary prior to the commencement of construction of the relevant stages of the SSI. The approved Koala Management Plan shall be implemented prior to the commencement of construction of the relevant stages.</p>	6, 9, 10	Pre-construction	RMS	Compliant	Koala Management Plan (Section 1 to 11) was approved by DPE on 4 August 2016 and DoEE on 11 August 2016. This updated Koala Management Plan includes the management of the Coolgardie/Bagotville, Broadwater and Woombah/Iuka Koala populations and a Population Viability Analysis (PVA) for the Ballina Koala population.
NOISE AND VIBRATION LAND USE SURVEY							
	D10	Prior to the commencement of construction, the Applicant shall undertake a land use survey to identify areas that are sensitive to construction vibration and construction ground-borne noise impacts. The results of the survey shall be incorporated into the Construction Noise and Vibration Management Plan.	All	Pre-construction and Construction	Contractor	Compliant	Pacific Complete (Delivery Partner of Roads and Maritime Services) has an approved Construction Environmental Management Plan (CEMP) covering Sections 3 to 11. The land use survey was incorporated into the Construction Noise and Vibration Management Plan which was approved by DPE on 3 December 2015. Pacific Complete approves Contractor EMPs and EWMSs and RMS/PC specifications are used to ensure compliance with this MCoA.
NOISE AND VIBRATION OPERATIONAL NOISE REVIEW							
	D11	<p>The Applicant shall prepare a review of the operational noise mitigation measures proposed to be implemented for the SSI, within six months of commencing construction, unless otherwise agreed by the Secretary. The review shall be prepared in consultation with the EPA, to the satisfaction of the Secretary. The review may be submitted in stages to suit the staged construction of the SSI and shall:</p> <p>(a) confirm the operational noise predictions of the SSI based on detailed design. This operational noise assessment shall be based on an appropriately calibrated noise model (which has incorporated additional noise monitoring, where necessary for calibration purposes);</p> <p>(b) review the suitability of the operational noise mitigation measures identified in the documents listed in condition A2. The review shall take into account the detailed design of the SSI and, where feasible and reasonable, and where necessary, refine the proposed measures with the objective of meeting the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011), based on the operational noise performance of the SSI predicted under (a) above; and</p> <p>(c) where necessary, investigate additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the NSW Road Noise Policy (DECCW, 2011).</p>	All	Pre-construction and Construction	RMS	Compliant	These reports were developed following the detailed design process. The Operational Noise Review Report for Sections 3-11 was submitted to DPE on 4 May 2018 and approved on 1 June 2018. The ONR Addendum - Glenugie Link was approved on 9 April 2020.
WATER QUALITY MONITORING PROGRAM							



Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D12	<p>The Applicant shall prepare and implement a Water Quality Monitoring Program, to monitor the construction and operation impacts of the SSI on surface and groundwater quality and resources and wetlands, prior to construction. The Program shall be prepared in consultation with the OEH, EPA, DPI (Fisheries), NOW, DoE and Rous Water (in relation to the Woodburn borefields), to the satisfaction of the Secretary, and shall include but not necessarily be limited to:</p> <p>(a) identification of surface and groundwater quality monitoring locations (including watercourses, waterbodies and SEPP14 wetlands) which are representative of the potential extent of impacts from the SSI;</p> <p>(b) the results of any groundwater modelling undertaken;</p> <p>(c) identification of works and activities during construction and operation of the SSI, including emergencies and spill events, that have the potential to impact on surface water quality of potentially affected waterways and known Oxleyan Pygmy Perch habitat;</p> <p>(d) development and presentation of parameters and standards against which any changes to water quality will be assessed, having regard to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (Australian and New Zealand Environment Conservation Council, 2000) or relevant baseline data;</p> <p>(e) representative background monitoring of surface and groundwater quality parameters for a minimum of twelve months (considering seasonality) prior to the commencement of construction, to establish baseline water conditions, unless otherwise agreed by the Secretary;</p> <p>(f) a minimum monitoring period of three years following the completion of construction or until the affected waterways and/or groundwater resources are certified by an independent expert as being rehabilitated to an acceptable condition. The monitoring shall also confirm the establishment of operational water control measures (such as sedimentation basins and vegetation swales);</p> <p>(g) contingency and ameliorative measures in the event that adverse impacts to water quality are identified; and</p> <p>(h) reporting of the monitoring results to Department of Planning and Environment, OEH, EPA, DPI (Fisheries), NOW, DoE and Rous Water (in relation to the Woodburn borefields).</p>	All	Pre-construction, Construction and Operation	RMS	Compliant	<p>Pacific Highway Upgrade - Woolgoolga to Ballina Sections 3 to 11 Water Quality Monitoring Program (sixth issue, 21 August 2015) was approved on 24 August 2015. The Water Quality Monitoring Program forms part of the approved Pacific Complete CEMP (Appendix B4 - Construction Soil and Water Quality Management Plan).</p> <p>The first Annual Construction Water Quality Monitoring Report (July 2016 to June 2017) was submitted to the Department of Planning &amp; Environment on 20 February 2018.</p> <p>The second Annual Construction Water Quality Monitoring Report (July 2017 to June 2018) was submitted to the Department of Planning &amp; Environment on 5 April 2019 (within reporting period - April - September 2019).</p> <p>The third Annual Construction Quality Monitoring Report (July 2018 to June 2019) was submitted to the Department of Planning Industry &amp; Environment on 6 November 2019 (within this reporting period - October 2019 - March 2020).</p> <p>The fourth and final Annual Construction Water Quality Monitoring Reoprt 2019-2020 was submitted to DPIE on 16 February 2021, submitted to the EPA on 25 March 2021 (October 2020 - March 2021) &amp; NRAR on 11 May 2021 (next reporting period April - September 2021).</p>
HYDROLOGICAL MITIGATION REPORT							
	D13	<p>The Applicant shall prepare and implement a Hydrological Mitigation Report for properties where flooding and/or hydrological impacts are predicted to exceed the relevant flood management objective in the documents listed in condition A2 as a result of the SSI. The Report shall be prepared by a suitably qualified expert and be based on detailed surveys (e.g. floor levels) and associated assessment of potentially flood affected properties in the Corindi, Clarence and Richmond river floodplains. The Report shall:</p> <p>(a) identify properties in those areas likely to have an increased/exacerbated impact and detail the predicted impact; The types of impacts to be considered include all those examined in the EIS including but not limited to changes in flood levels and velocities, alteration to drainage, reduction in flood evacuation access or capability, impacts on infrastructure, impacts on stock and agriculture, and impacts to the environment;</p> <p>(b) identify mitigation measures to be implemented to address these impacts;</p> <p>(c) identify measures to be implemented to minimise scour and dissipate energy at locations where flood velocities are predicted to increase as a result of the SSI and cause localised soil erosion and/or pasture damage;</p> <p>(d) be developed in consultation with the relevant council, NSW State Emergency Service and directly-affected landowners;</p> <p>(e) identify operational and maintenance responsibilities for items (a) to (c) inclusive; and</p> <p>(f) refer to the assessments described in conditions B31 and B32.</p> <p>The report may be submitted in stages to suit the staged construction of the SSI.</p> <p>Construction shall not commence within those areas likely to have altered flood conditions until such time as works identified in the hydrological mitigation report have been completed, unless otherwise agreed by the Secretary.</p>	All	Pre-construction	RMS	Compliant	<p>The Hydrological Mitigation Report for Glenugie to Devils Pulpit (Sections 3, 4, 5 &amp; 6) was submitted to DPE on 17 March 2017 with these conditions addressed in the report as follows: (a) Section 5; (b) Section 6; (c) Sections 5.2.2 and 6.4; (d) Sections 6.2 and 6.3; (e) Sections 6.5 (f) Section 5.2; (g) Noted.</p> <p>The Hydrological Mitigation Report for Devils Pulpit to Ballina (Sections 7, 8, 9, 10 and 11) has been submitted to DPE with these conditions addressed in this report, as follows: (a) Section 5; (b) Section 6; (c) Sections 5.2.2 and 6.4; (d) Sections 6.2 and 6.3; (e) Section 6.5; (f) Section 5.2; (g) Noted.</p> <p>Issues closed out and/or landowners have no issues with road works proceeding. DP&amp;E have granted approval of HMR with requirements to provide updates to DP&amp;E on the status of individual treatments. These updates were provided in June 2018.</p>
	D14	<p>Based on the mitigation measures identified in condition D13, the Applicant shall prepare and implement a final schedule of feasible and reasonable flood mitigation measures proposed at each directly-affected property in consultation with the landowner. The schedule shall be provided to the relevant landowner(s) prior to the implementation/construction of the mitigation works, unless otherwise agreed by the Secretary. A copy of each schedule of flood mitigation measures shall be provided to the Department of Planning and Environment and the relevant council prior to the implementation/construction of the mitigation measures on the property.</p>	All	Pre-construction	RMS	Compliant	<p>The Hydrological Mitigation Reports will advise flood mitigation measures to be implemented at directly affected properties. The Hydrological Mitigation Report for Glenugie to Devils Pulpit (Sections 3, 4, 5 &amp; 6) was submitted to DPE on 17 March 2017 and Table 6.2 in that report addresses this condition.</p> <p>The Hydrological Mitigation Report for Devils Pulpit to Ballina (Sections 7, 8, 9, 10 and 11) has been submitted to DPE and Table 6.3 in that report addresses this condition.</p>
	D15	<p>The Applicant shall employ a suitably qualified and experienced independent hydrological expert, whose appointment has been endorsed by the Secretary, to deal with all hydrological matters and assist landowners in negotiating feasible and reasonable mitigation measures.</p>	All	Pre-construction	RMS	Compliant	<p>Mark Babister from WMA Water has been appointed as the suitably qualified independent hydrological expert for the project. This is detailed in Sections 1.6 and 2.5 of the Hydrological Mitigation Reports.</p>
	D16	<p>The Applicant shall provide feasible and reasonable assistance to the relevant council and/or NSW State Emergency Service, to prepare any new or necessary update(s) to the relevant plans and documents in relation to flooding, to reflect changes in flooding levels, flows and characteristics as a result of the SSI.</p>	All	Pre-construction	RMS	Compliant	<p>Noted. This is detailed in Section 6.3 of both of the Hydrological Mitigation Reports.</p>
TRANSPORT AND ACCESS.							
	D17	<p>The Applicant shall prepare and implement a Signage Policy to addresses the impact of towns (South Grafton, Ulmarra, Tyndale, Woodburn, Broadwater and Wardell) which are bypassed by the SSI, at least six months prior to operation, unless otherwise agreed by the Secretary. The Policy shall be prepared in consultation with the relevant council and to the satisfaction of the Secretary.</p> <p>The Policy shall be consistent with the Guide: Signposting (RTA July 2007), Tourist Signposting guide (RMS and Destination NSW 2012) and provide for signage that:</p> <p>(a) provides information on the range of services available within the bypassed towns of South Grafton. Ulmarra, Tyndale, Woodburn, Broadwater and Wardell; and</p> <p>(b) informs motorists of routes through the bypassed towns that may be taken as an alternative to the highway.</p> <p>The Policy may be submitted in stages to suit the staged construction of the SSI.</p>	3, 8, 9 and 10	Construction and Operation	RMS	Compliant	<p>The project Signage Policy and Business Access Strategy was submitted to the Department for approval in September 2018 and approved by the Department of Planning and Environment on 26 November 2018 (reporting period October 2018 - March 2019).</p>
	D18	<p>The Applicant shall prepare and implement a Business Access Strategy to address changes to access to businesses along the highway, at least six months prior to operation. The Strategy shall be prepared in consultation with the relevant council, business owners and the New Italy Museum and to the satisfaction of the Secretary.</p> <p>Note</p> <ul style="list-style-type: none"><li>• The Applicant may incorporate the requirements of this condition into the Signage Policy for the SSI under condition D17.</li></ul>	All	Construction and Operation	RMS	Compliant	<p>The project Signage Policy and Business Access Strategy was submitted to the Department for approval in September 2018 and approved by the Department of Planning and Environment on 26 November 2018.</p>
ROAD DILAPIDATION							
	D19	<p>Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, an independent and qualified expert shall prepare a Road Dilapidation Report. The Report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI. The Report shall be submitted to the relevant council for review prior to the commencement of haulage.</p> <p>Following completion of construction, a subsequent Report shall be prepared to assess any damage to the road that may have resulted from the construction of the SSI.</p> <p>Measures undertaken to restore or reinstate roads affected by the SSI shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant council, and at the full expense of the Applicant.</p> <p>Note:</p> <ul style="list-style-type: none"><li>• Nothing in this condition restricts the Applicant commencing adjustments and minor upgrades to the existing road network to cater for construction traffic and installation of temporary project signage prior to the commencement of construction.</li></ul>	All	Pre-construction and Construction	Contractor	Compliant	<p>Road dilapidation reports have been prepared for haulage roads utilised during the reporting period. Subsequent reports will be prepared following completion of corresponding construction activities.</p> <p>Reports received have been submitted to local Councils and will continue to be.</p>
URBAN DESIGN AND LANDSCAPING							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D20 (a)-(d)	<p>The Applicant shall prepare and implement an Urban Design and Landscape Plan prior to the commencement of permanent built works and/or landscaping, unless otherwise agreed by the Secretary, to present an integrated landscape and design for the SSI. The Plan shall be prepared in accordance with the Roads and Maritime Services urban design and visual guidelines, the design principles outlined in the EIS, and the revegetation principles outlined in the EIS Working Paper—Biodiversity. The Plan shall be prepared by an appropriately qualified expert in consultation with the relevant council and community, to the satisfaction of the Secretary. The Plan shall include, but not necessarily be limited to:</p> <p>(a) identification of design principles and standards based on:</p> <ul style="list-style-type: none"> <li>(i) local environmental values;</li> <li>(ii) heritage values;</li> <li>(iii) urban design context;</li> <li>(iv) sustainable design and maintenance;</li> <li>(v) community amenity and privacy;</li> <li>(vi) relevant design standards and guidelines; and</li> <li>(vii) the urban design objectives outlined in Section 4.2 of the EIS Working Paper—Urban Design Landscape Character and Visual Impact;</li> </ul> <p>(b) the location of existing vegetation and proposed landscaping (including use of indigenous and endemic species where possible). Details of species to be replanted/revegetated shall be provided, including their appropriateness to the area and habitat for threatened species;</p> <p>(c) a description of locations along the corridor directly or indirectly impacted by the construction of the SSI (e.g. temporary ancillary facilities, access tracks, watercourse crossings, etc.) and details of the strategies to progressively rehabilitate regenerate and/or revegetate the locations with the objective of promoting biodiversity outcomes and visual integration;</p> <p>(d) take into account appropriate roadside plantings and landscaping in the vicinity of heritage items and ensure no additional heritage impacts;</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	Urban Design and Landscape Plan(s) were prepared for the project and approved by the Department on 17 July 2018. An updated Urban Design and Landscape Plan for Glenugie to Maclean, Sections 3 and 4 (Revision 14) was approved on 22 March 2019
	D20 (e)-(k)	<p>(e) a description of disturbed areas (including borrow sites) and details of the strategies to progressively rehabilitate, regenerate and/or revegetate these areas, including clear objectives and timeframes for rehabilitation works, procedures for monitoring success of regeneration or revegetation, and corrective actions should regeneration or revegetation not conform to the objectives adopted;</p> <p>(f) location and design treatments for any associated footpaths and cyclist elements, and other features such as seating, lighting (in accordance with AS 4282-1997 Control of the Obtrusive Effect of Outdoor Lighting), fencing, materials and signs;</p> <p>(g) an assessment of the visual screening effects of existing vegetation and the proposed landscaping and built elements. Where properties have been identified as likely to experience high visual impact as a result of the SSI and high residual impacts are likely to remain, the Applicant shall, in consultation with affected landowners, identify opportunities for providing at-property landscaping to further screen views of the SSI. Where agreed with the landowner, these measures shall be implemented during the construction of the SSI;</p> <p>(h) graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to built elements of the SSI;</p> <p>(i) strategies for progressive landscaping and other environmental controls such as erosion and sedimentation controls, drainage and noise mitigation;</p> <p>(j) monitoring and maintenance procedures for the built elements, rehabilitated vegetation and landscaping (including weed control). including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and</p> <p>(k) evidence of consultation with the relevant council and community on the proposed urban design and landscape measures prior to its finalisation.</p> <p>The Plan may be submitted in stages to suit the staged construction program of the SSI.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	Urban Design and Landscape Plan(s) were prepared for the project and approved by the Department on 17 July 2018.
ANCILLARY FACILITIES							
	D21	<p>The Applicant shall prepare and implement an Ancillary Facilities Management Plan to detail the management of ancillary facilities associated with the SSI. The Plan shall be prepared in consultation with the EPA, OEH, DPI (Fisheries), DoE, and the relevant council, and to the satisfaction of the Environmental Representative, and shall include, but not necessarily be limited to:</p> <p>(a) a description of the ancillary facility (including a site layout plan), its components and details of the existing environment on and in the vicinity of the site;</p> <p>(b) details of the activities to be carried out at the facility, including the hours of operation, staging of operation and predicted date of commissioning;</p> <p>(c) a description of the plant, equipment and materials to be used and/or stored on the site, including dangerous and hazardous goods;</p> <p>(d) details of the light and heavy construction vehicle movements to and from each facility, including site access and route(s) to be used during the establishment and operation of the facility, and an assessment of potential construction traffic impacts on the local road network and access tracks;</p> <p>(e) a summary of the potential environmental impacts associated with the construction and operation of the facility;</p> <p>(f) demonstrate compliance with the locational and environmental criteria in condition B73(a)—B73(n);</p> <p>(g) details of the mitigation, monitoring and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts or, where this is not possible, feasible and reasonable measures to offset these impacts;</p> <p>(h) a description of how the management and mitigation measures set out in the documents listed in condition A2 will be implemented on the site, and if not, justification for such decisions particularly on those sites assessed as having a high risk of flood impacts;</p> <p>(i) an assessment of alternative site layouts where either noise management levels are predicted to be exceeded and acoustic treatment of residences is not proposed, or where such treatment is proposed (consequent to the operational impacts of the SSI) but will not be provided prior to establishment of an ancillary facility;</p> <p>(j) a cumulative noise impact statement for the ancillary facility addressing the worst-case cumulative noise impacts resulting from the concurrent operation of the site (including construction traffic movements to and from the site), nearby construction works within the SSI corridor and any other nearby construction activities associated with other road upgrade projects;</p> <p>(k) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and</p> <p>(l) mechanisms for the monitoring, review and amendment of this plan.</p> <p>The plan shall be approved by the Environmental Representative prior to the establishment of the ancillary facilities described therein. In considering the approval of the plan, the Environmental Representative shall take into account the Applicant's response to public authority and council comments on the plan.</p> <p>The Applicant may prepare a separate plan for the facility or include multiple sites within a single or multiple management plans.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans will be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If required the plan will be submitted to the Secretary for approval.
BORROW SITES							
	D22	<p>The Applicant shall prepare and implement a Borrow Sites Management Plan, to manage the construction, operation and rehabilitation of the borrow sites used to source construction material for the SSI, prior to the commencement of construction at the borrow sites, or as otherwise agreed by the Secretary. The Plan shall be prepared in consultation with the EPA, OEH and DPI (Fisheries) and to the satisfaction of the Secretary, and shall include, but not necessarily be limited to:</p> <p>(a) details of construction/extraction methods and activities carried out at the borrow site;</p> <p>(b) management and mitigation measures to be used to minimise surface and groundwater impacts, Aboriginal and non-Aboriginal heritage, air quality, noise and vibration, biodiversity and visual impacts;</p> <p>(c) consultation with sensitive receivers; and</p> <p>(d) details of the rehabilitation of the borrow site, including future landform and use of the borrow site, landscaping and revegetation, and measures that would be implemented to minimise or manage the ongoing environmental effects of the site.</p> <p>The Plan shall demonstrate that the construction and operation of the Lang Hill borrow site has no adverse impact on the known Oxleyan Pygmy Perch habitat waterway.</p>	3, 8, 10	Construction	Contractor	Compliant	The Tyndale Borrow Site Management Plan (Portion A) was approved in August 2016 by DPE. The Lang Hill Borrow Site Management Plan (Portion C) was approved 23 November 2016 by DPE. The Lumleys Hill Borrow Site Management Plan (Portion D) was approved on 8 September 2017. The Gibsons Borrow Site Management Plan and the Jali Borrow Site Management Plan (Portion D) were approved on 11 September 2017.
ENVIRONMENTAL REPRESENTATIVE							

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D23	<p>Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Applicant shall nominate for the approval of the Secretary a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) shall:</p> <p>(a) be the principal point of advice in relation to the environmental performance of the SSI;</p> <p>(b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Applicant upon the achievement of these plans/programs;</p> <p>(c) have responsibility for considering and advising the Applicant on matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the SSI;</p> <p>(d) ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s);</p> <p>(e) be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan;</p> <p>(f) be given the authority to approve/reject Out of Hours Works in accordance with condition B17. These works shall be conducted in accordance with the Out of Hours Works Protocol (OOHW Protocol) required in accordance with condition D26(vi);</p> <p>(g) be given the authority to approve/reject ancillary facilities in accordance with conditions B73 and B74 and the Ancillary Facilities Management Plans under condition D21;</p> <p>(h) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and</p> <p>(i) be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Applicant and the community is required</p>	All	Pre-construction	RMS	Compliant	Murray Curtis, from ERM, is the Environmental Representative for the Stage 2 works (i.e. Sections 3 to 11).
	D24	The Environmental Representative shall prepare and submit to the Secretary a monthly report on the Environmental Representative's actions and decision on matters specified in condition D23 for the preceding month. The reports shall be submitted for the duration of construction of the SSI, unless otherwise agreed by the Secretary.	All	Pre-construction and Construction	RMS	Compliant	Noted. PC supply the ER with monthly OOHW & Environmental Incident information (as reported monthl by PC) and an extract of the Environmental section of the PC Monthly Overview report, to assist with ER reporting.
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN							
	D25 (a)-(c)	<p>The Applicant shall prepare and implement (following approval) a Construction Environmental Management Plan for the SSI, prior to the commencement of construction, or as otherwise agreed by the Secretary. The Plan shall be prepared in consultation with the EPA, OEH, DPI (Fisheries), NOW and DoE and outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:</p> <p>(a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling);</p> <p>(b) statutory and other obligations that the Applicant is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;</p> <p>(c) a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval;</p>	All	Pre-construction and Construction	Contractor	Compliant	Pacific Complete (Delivery Partner of Roads and Maritime Services) has an approved Construction Environmental Management Plan (CEMP) covering Sections 3 to 11. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWWs and ESCPs to ensure compliance with the Pacific Complete CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
	D25 (d)	<p>(d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>(i) measures to monitor and manage dust emissions including dust from stockpiles, blasting, traffic on unsealed public roads and materials tracking from construction sites onto public roads;</p> <p>(ii) measures to minimise hydrology impacts, including measures to stabilise bed and bank structures as required;</p> <p>(iii) measures for the handling, treatment and management of contaminated materials;</p> <p>(iv) measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins);</p> <p>(v) measures to monitor and manage spoil, fill and materials stockpile sites including details of how spoil, fill or material would be handled, stockpiled, reused and disposed in a Stockpile Management Protocol. The Protocol shall include details of the locational criteria that would guide the placement of temporary stockpiles, and management measures that would be implemented to avoid/minimise amenity impacts to surrounding residents and environmental risks (including surrounding water courses). Stockpile sites that affect heritage, threatened species, populations or endangered ecological communities require the approval of the Secretary, in consultation with the EPA, OEH and DPI (Fisheries);</p> <p>(vi) measures to monitor and manage hazard and risks including emergency management and management measures to address potential risks to the Woodburn borefield drinking water catchment. These measures shall be developed in consultation with Rous Water;</p> <p>(vii) the issues identified in condition D26;</p> <p>(viii) details of community involvement and complaints handling procedures during construction, consistent with the requirement of conditions C1 to C4;</p> <p>(ix) details of compliance and incident management consistent with the requirements of condition D27; and</p> <p>(x) procedures for the periodic review and update of the Construction Environmental Management Plan and Plans required under condition D26, as necessary (including where minor changes can be approved by the Environmental Representative).</p> <p>The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of construction, or as otherwise agreed by the Secretary. The Plan may be prepared in stages, however, construction works shall not commence until written approval of the relevant stage has been received from the Secretary.</p> <p>The approval of a Construction Environmental Management Plan does not relieve the Applicant of any requirement associated with this SSI approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this SSI approval, the requirements of this SSI approval shall prevail.</p>	All	Pre-construction and Construction	Contractor	Compliant	Pacific Complete (Delivery Partner of Roads and Maritime Services) has an approved Construction Environmental Management Plan (CEMP) covering Sections 3 to 11. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWWs and ESCPs to ensure compliance with the Pacific Complete CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
	D26 (a)	<p>As part of the Construction Environmental Management Plan for the SSI, the Applicant shall prepare and implement:</p> <p>(a) a Construction Noise and Vibration Management Plan to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be developed in consultation with the EPA and shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (DECC, 2009) and shall include, but not necessarily be limited to:</p> <p>(i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI stipulated in this approval;</p> <p>(ii) details of construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;</p> <p>(iii) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);</p> <p>(iv) procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, applicable buffer distances for vibration intensive works, use of low-vibration generating equipment/vibration dampeners or alternative construction methodology, and pre- and post-construction dilapidation surveys of sensitive structures where blasting and/or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria); and</p> <p>(v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified;</p> <p>(vi) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition B15, including a risk assessment process under which the Environmental Representative may approve out-of-hour construction activities. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, consultation procedures with the EPA, the relevant council and affected landowners;</p> <p>(i) 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;</p> <p>(vii) a program for construction noise and vibration monitoring clearly indicating monitoring frequency, location, how the results of this monitoring would be recorded and, procedures to be followed where exceedances of relevant noise and vibration goals are detected; and</p> <p>(viii) mechanisms for the monitoring, review and amendment of this plan.</p>	All	Pre-construction and Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B3 - Construction Noise and Vibration Management Plan). The Pacific Complete Construction Noise and Vibration Management Plan was approved by DPE on 3 December 2015. Pacific Complete will approve Contractor EMPs, EWWs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.

Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D26 (b)	<p>(b) a Construction Traffic and Access Management Plan to manage construction traffic and access impacts of the SSI. The Plan shall be developed in consultation with the relevant council and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes;</li> <li>(ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;</li> <li>(iii) identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements;</li> <li>(iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access;</li> <li>(v) details of measures to manage traffic movements, parking, loading and unloading at ancillary facilities during out-of-hours work;</li> <li>(vi) a response plan which sets out a proposed response to any traffic, construction or other incident; and</li> <li>(vii) mechanisms for the monitoring, review and amendment of this plan.</li> </ul>	All	Pre-construction and Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B1 Construction Traffic and Access Management Plan) which was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
	D26 (c)	<p>(c) a Construction Soil and Water Quality Management Plan to manage surface and groundwater impacts during construction of the SSI. The Plan shall be developed in consultation with the EPA, DPI (Fisheries), NOW, Rous Water (in relation to the Woodburn borefield), DoE and the relevant council and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;</li> <li>(ii) surface water and ground water impact assessment criteria consistent with Australian and New Zealand Environment Conservation Council (ANZECC) guidelines or relevant site specific baseline data collected for known Oxleyan Pygmy Perch waterways;</li> <li>(iii) management measures to be used to minimise surface and groundwater impacts, including details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events;</li> <li>(iv) a Groundwater and Soil Salinity report should geotechnical investigations determine the presence, extent and severity of soil salinity within the SSI boundary, The report shall detail the outcomes of geotechnical investigations and identify and mitigate impacts to groundwater resources;</li> <li>(v) an Acid Sulfate Soils contingency plan, consistent with the Acid Sulfate Soils Manual, to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;</li> <li>(vi) a tannin leachate management protocol to manage the stockpiling of mulch and use of cleared vegetation and mulch filters for erosion and sediment control;</li> <li>(vii) an Oxleyan Pygmy Perch habitat waterway management framework to detail the measures and construction methods that will be employed to avoid direct discharge of construction water to known Oxleyan Pygmy Perch habitat waterways and downstream impacts to suitable habitat;</li> <li>(viii) management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;</li> <li>(ix) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and mechanisms for the monitoring, review and amendment of this plan.</li> </ul>	All	Pre-construction and Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B4 Construction Soil and Water Quality Management Plan) which was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
	D26 (d)	<p>(d) a Construction Heritage Management Plan to detail how construction impacts on Aboriginal and non-Aboriginal heritage will be minimised and managed. The Plan shall be developed in consultation with the <b>EPA OEH</b>, the NSW Heritage Council (for non-Aboriginal heritage) and Registered Aboriginal Parties (for Aboriginal heritage), and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) in relation to Aboriginal Heritage: <ul style="list-style-type: none"> <li>(A) details of further investigation and identification of Aboriginal cultural heritage sites within the SSI boundary;</li> <li>(B) details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, salvage, and conservation, of sites and items associated with the SSI;</li> <li>(C) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains) including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified archaeologist in consultation with Department of Planning and Environment, <b>EPA OEH</b> and Registered Aboriginal Parties and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the SSI, and registering of the new site in the <b>EPA OEH's</b> Aboriginal Heritage Information Management System (AHIMS) register;</li> <li>(D) <b>procedures for dealing with human remains in accordance with the Unexpected Human Remains Procedure.</b></li> <li>(E) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and</li> <li>(F) procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI; and</li> </ul> </li> <li>(ii) in relation to non-Aboriginal Heritage: <ul style="list-style-type: none"> <li>(A) identification of heritage Items directly and indirectly affected by the SSI;</li> <li>(B) details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity);</li> <li>(C) details of monitoring and reporting requirements for impacts on heritage items;</li> <li>(D) procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with the OEH, NSW Heritage Council and Department of Planning and Environment, and assessment of the consistency of any new heritage impacts against the approved impacts of the SSI; and</li> <li>(E) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification, protection and conservation of non-Aboriginal cultural heritage; and</li> </ul> </li> <li>(iii) mechanisms for the monitoring, review and amendment of this plan.</li> </ul>	All	Pre-construction and Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B5 Construction Heritage Management Plan) which was approved by DPE on 23 October 2015. Pacific Complete will be submitting the Aboriginal and Non-Aboriginal Heritage and Education Training Package which forms Appendix A of the Construction Heritage Management Plan in February 2015 following the completion of the consultation period as of 12 February 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA. An Unexpected Human Remains Procedure is currently in development, in consultation with the RAPs and will be submitted to the Secretary for approval once it has been finalised.
	D26 (e)	<p>(e) a Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan shall be prepared by a suitably qualified and experienced ecologist and developed in consultation with the <b>EPA OEH</b>, DPI (Fisheries) and DoE, and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) details of pre-construction surveys undertaken by a suitably qualified and experienced ecologist to verify the SSI footprint based on detailed design;</li> <li>(ii) plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and associated habitat features;</li> <li>(iii) the identification of areas to be cleared and details of management measures (such as fencing, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat;</li> <li>(iv) a protocol for the removal and relocation of fauna during clearing, including provision for engagement of a suitably qualified and experienced ecologist to identify locations where they would be present; to oversee clearing activities and facilitate fauna rescue and re-location; and consideration of timing of vegetation clearing with consideration to the avoidance of clearing native vegetation during the breeding/nesting periods of threatened species, where feasible and reasonable;</li> <li>(v) details of general work practices and mitigation measures to be implemented during construction and operation to minimise impacts on native fauna and native vegetation (particularly threatened species and their habitats and EEC) not proposed to be cleared as part of the SSI, including, but not necessarily limited to: fencing of sensitive areas; measures for maintaining existing habitat features (such as bush rock and tree branches etc.); seed harvesting and appropriate topsoil management; construction worker education; weed management (including controls to prevent the introduction or spread of <i>Phytophthora cinnamomi</i> and myrtle rust (<i>Puccinia psidii</i> s.l.); erosion and sediment control, including measures to at least maintain habitat values downstream; and progressive re-vegetation;</li> <li>(vi) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;</li> <li>(vii) weed management measures focusing on early identification, suppression and control of invasive weeds and effective management controls;</li> <li>(viii) a protocol for managing aquatic and terrestrial pest animal/invasive species and plant species, and pathogens;</li> <li>(ix) consideration of the Threatened Species Management Plans;</li> <li>(x) a description of how the effectiveness of these management measures would be monitored and linked to the monitoring undertaken as part of the Threatened Species Management Plans;</li> <li>(xi) a procedure for dealing with unexpected EEC/threatened species identified during construction, including cessation of work and notification of the <b>EPA OEH</b>, DPI (Fisheries) and DoE, determination of appropriate mitigation measures in consultation with these agencies (including relevant re-location measures) and updating of ecological monitoring and/or biodiversity offset requirements; and</li> <li>(xii) mechanisms for the monitoring, review and amendment of this plan.</li> </ul>	All	Pre-construction and Construction	Contractor	Compliant	This requirement is addressed in the Pacific Complete CEMP (Appendix B2 Construction Flora and Fauna Management Sub-Plan). The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
COMPLIANCE MONITORING AND TRACKING							



Category	Part	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
	D27	<p>The Applicant shall prepare and implement a Compliance Tracking Program, to track compliance with the requirements of this approval, prior to the commencement of construction and operate from the date of its approval to a minimum of one year following commencement of operation, or as otherwise agreed by the Secretary. The Program shall be prepared for the approval of the Secretary, and include, but not necessarily be limited to:</p> <p>(a) provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged);</p> <p>(b) provisions for periodic review of the compliance status of the SSI against the requirements of this approval;</p> <p>(c) provisions for periodic reporting of compliance status to the Secretary, including a Pre-Construction Compliance Report, prior to the commencement of construction, and a Pre-Operation Compliance Report prior to the commencement of operation. These reports may be staged to suit the staged construction/operation of the SSI;</p> <p>(d) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;</p> <p>(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;</p> <p>(f) provisions for reporting environmental incidents to the Secretary and relevant public authorities during construction;</p> <p>(g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and</p> <p>(h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.</p>	All	Pre-construction and Construction	RMS and Contractor	Compliant	<p>The Compliance Tracking Program &amp; Pre-Construction Compliance Report, Stage 2 Sections 3 to 11 was submitted to the Secretary on 4 March 2016 and approved on 16 March 2016. Six monthly reports have been submitted for the following reporting periods:</p> <p>- Report 1 - April to September 2016</p> <p>- Report 2 - October 2016 to March 2017</p> <p>- Report 3 - April 2017 to September 2017</p> <p>- Report 4 - October 2017 to March 2018</p> <p>- Report 5 - April 2018 to September 2018</p> <p>- Report 6 - October 2018 to March 2019</p> <p>- Report 7 - April 2019 to September 2019</p> <p>- Report 8 - October 2019 to March 2020</p> <p>- Report 9 - April 2020 to September 2020</p> <p>- Report 10 - October 2020 to March 2021 (ie, this report)</p>
OPERATIONAL NOISE AND VIBRATION COMPLIANCE							
	D28	<p>The Applicant shall undertake operational noise monitoring, to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition D11, within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary.</p> <p>The Applicant shall subsequently prepare an Operational Noise Compliance Report to document this monitoring. The Report shall include, but not necessarily be limited to:</p> <p>(a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition D11 and documents listed in condition A2;</p> <p>(b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy 2011;</p> <p>(c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;</p> <p>(d) details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared;</p> <p>(e) any required recalibrations of the noise model taking into consideration factors such as noise monitoring and actual traffic numbers and proportions;</p> <p>(f) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and</p> <p>(g) identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition D11, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy 2011, when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.</p> <p>The Applicant shall provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>The audit may be staged to suit the staged operation of the SSI.</li> </ul>	All	Operation	RMS	Compliant	<p>The requirements of this condition are being addressed with staged submissions of the operational noise compliance reports required under this condition. These timeframes are based on the operational stage commenced as identified in MCoA A7.</p> <p>Operational Noise Compliance Stage 1 - Glenugie to Maclean monitoring occurred in November - December 2020.</p> <p>Operational Noise Compliance Stage 2 - Richmond River to Pimlico monitoring occurred in Feb - March 2021.</p> <p>Operational Noise Compliance Stage 3 - Maclean to Devils Pulpit monitoring occurred in March 2021 (note: was impacted by flood so required to be repeated in next reporting period).</p>
ENVIRONMENTAL MANAGEMENT SYSTEMS							
	D29	<p>Prior to the commencement of operation, the Applicant shall incorporate the SSI into existing environmental management systems administered by the Applicant and prepared in accordance with the AS/NZS ISO 14000 Environmental Management System series.</p> <p>If there is an inconsistency between the existing environmental management systems and the conditions of this SSI approval, the requirements of this SSI approval shall prevail.</p>	All	Construction and Operation	RMS	Compliant	Noted. The requirements of the project are being progressively incorporated into the existing process and systems to manage the operational road network.
INDEPENDENT ENVIRONMENTAL AUDIT							
	D30	<p>Within 12 months of the commencement of operation, and then as required by the Secretary, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the SSI. This audit shall:</p> <p>(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals);</p> <p>(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and</p> <p>(e) recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.</li> <li>The audit may be staged to suit the staged operation of the SSI.</li> </ul>	All	Operation	RMS	Compliant	Noted. This requirement is being addressed following the final stage being fully operational. Procurement for the D30 audit commenced in the reporting period with audit to occur in the next reporting period.
	D31	Within 60 days of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary and relevant public authorities, together with its response to any recommendations contained in the audit report.	All	Operation	RMS	Not Triggered	Noted. The requirements of this CoA will be addressed following the D30 audit.
		<p>Modification 1 (15/10/2015)</p> <p>Modification 2 (7 October 2015)</p> <p>Modification 5 (27 September 2017)</p> <p>Modification 6 (21 February 2018)</p>					

# COMPLIANCE TRACKING - Project Modification # 6- Glenugie Link Mitigation Measures

## Woolgoolga to Ballina SSI-4963



ID #	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
BIODIVERSITY						
MOD3A-FF1	Works would be managed in accordance with the approved Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Flora and Fauna Management Plan (CFFMP, Appendix B2, CEMP).		Construction	Contractor	Compliant	The Pacific Complete Construction Environmental Manaement Plan, includes Appendix B2 Construction Flora and Fauna Management Sub-Plan. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
MOD3A-FF2	Where necessary, additional nest boxes would be installed in accordance with the approved Nest Box Management Plan Woolgoogla to Ballina pacific Highway Upgrade (Section 3) (Appendix A of the Construcion Flora and Fauna Management Plan).		Construction	Contractor	Compliant	Nest Box MP Section 3 was approved 23/2/15. At 31 March 2019, 12 nest boxes have been installed within Glenugie Link.
MOD3A-FF3	Works would be undertaken in accordance with approved threatened species management plans, including (but not limited to): <ul style="list-style-type: none"><li>Threatened Frog Management Plan (Appendix E, Construction Threatened Flora and Fauna Management Plan)</li><li>Coastal Emu Management Plan (Appendix G, Construction Threatened Flora and Fauna Management Plan)</li><li>Threatened Glider Management Plan (Appendix I, Construction Threatened Flora and Fauna Management Plan)</li><li>Threatened Mammal Management Plan (Appendix T, Construction Threatened Flora and Fauna Management Plan)</li><li>Microbat Management Plan Sections 3-11 (Appendix S, Construction Threatened Flora and Fauna Management Plan)</li></ul>		Construction	Contractor	Compliant	The following Threatened Species Management Plans have been prepared and approved: <b>Threatened Flora Management Plan</b> Update 1 (Section 1, Section 2, Waves 1, 2 and 3) DPE Approval 30 April 2015, DoE Approval 5 May 2015. <b>Threatened Flora Management Plan</b> Update 2 (Sections 3 to 11) DPE Approval 21 August 2015, DoE Approval 4 September 2015. <b>Threatened Rainforest Plants Management Plan</b> (Section 10) DPE Approval 11 September 2015. <b>Threatened Mammal Management Plan</b> Update 1 DPE Approval 7 May 2015, DoE Approval 12 May 2015. <b>Threatened Mammal Management Plan</b> Update 2 DPE Approval 21 October 2015, DoE Approval 25 October 2015. <b>Threatened Invertebrates Management Plan</b> DPE Approval 29 July 2015. <b>Threatened Fish Management Plan</b> DPE Approval 30 July 2015. <b>Threatened Frog Management Plan</b> DPE Approval 7 May 2015. <b>Threatened Glider Management Plan</b> DPE Approval 4 May 2015. <b>Coastal Emu Management Plan</b> (Sections 3 and 4, excluding Wave 3) DPE Approval 3 June 2015. <b>Coastal Emu Management Plan</b> (includes updates for Wave 3) DPE Approval 18 December 2015. <b>Microbat Management Plan</b> (Section 3 to 11) DPE approval 25 May 2015. <b>Koala Management Plan</b> (Section 1 to 11), DPE Approval 4 August 2016, DoE Approval 11 August 2016.
MOD3A-FF4	Survey for frog populations (including but not limited to the Greenthighed Frog) will be undertaken in accordance with the approved Woolgoolga to Ballina Pacific Highway Upgrade Threatened Frog Management Plan (Appendix E of the Threatened Flora and Fauna Management Plan) prior to construction.		Pre-Construction	Contractor	Compliant	Baseline monitoring, prior to construction, is included in the Appendices of the Threatened Frog Management Plan, approved by DPE 7 May 2015. This includes: Appendix C Giant Barred Frog; Appendix D Wallum Sedge Frog; and Appendix E Green Thighed Tree Frog.
MOD3A-FF5	The locations of connectivity structures will be determined in consultation with the relevant agencies. Once the final locations of the connectivity structures are determined in consultation with the EPA, they will be included in an update to the connectivity strategy required by MCoA D2.		Pre-Construction	Contractor	Compliant	The Connectivity Strategy (Sections 3-11) was submitted to Department of Planning & Environment and the Department of Environment and Energy on 14 December 2016. Approval of this plan was received by Department of Planning and Environment on 27 April 2017 and Department of the Environment and Energy on 16 May 2017. An updated Connectivity Strategy (Sections 3 - 11) which includes Glenugie Link was submitted to the Department of Planning and Environment and the Department of Environment and Energy on 30 August 2018. was submitted to the Department of Planning and Environment and the Department of Environment and Energy on 30 August 2018. An Addendum to the Connectivity Strategy was submitted on 1 February 2019. Approval of the Connectivity Strategy & Connectivity Strategy Addendum was received by Department of Planning and Environment on 28 February 2019. Receipt notification received 10/4/2019.
Hydrology, water quality and soil management						
MOD3A-SWH1	Works would be managed in accordance with the Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Soil and Water Management Plan (CSWMP, Appendix B4, CEMP).		Construction	Contractor	Compliant	The Pacific Complete Construction Environmental Manaement Plan, includes Appendix B4 Construction Soil and Water Management Sub-Plan. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
MOD3A-SWH2	Following development and refinement of the detailed design, the potential impacts to hydrology will be reviewed. If required an update to the hydrological mitigation report will be prepared and submitted to the Department of Planning and Environment.		Construction	Contractor	Compliant	The Hydrological Mitigation Report for Glenugie to Devils Pulpit (Sections 3, 4, 5 & 6) was submitted to DPE on 17 March 2017, addressing conditions of MCoA D13 and D14 in the report. Issues closed out and/or landowners have no issues with road works proceeding. DP&E have granted approval of HMR with requirements to provide updates to DP&E on the status of individual treatments. These updates were provided in June 2018. If required an update to the HMR will be submitted to DP&E.
Aboriginal Heritage						
MOD3A-AH1	Works will be managed in accordance with the Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Heritage Management Plan (Appendix B5, CEMP).		Construction	Contractor	Compliant	The Pacific Complete Construction Environmental Manaement Plan, includes Appendix B5 Construction Heritage Management Sub-Plan. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
MOD3A-AH2	Measures to minimise impacts through the modification area are: <ul style="list-style-type: none"><li>The design and construction of the proposed modification will minimise subgrade excavations where practicable.</li><li>Trees and vegetation will be cleared to the ground level with the roots left in situ.</li><li>An exclusion zone fence will be erected along the length of the proposed modification are and will remain in place for the duration of the project.</li></ul>		Construction	Contractor	Compliant	Noted.

ID #	Requirement	Stage 2 (Section 3-11)	Timing	Responsibility	Status (Compliant, Non Compliant, Not Triggered)	Comment
MOD3A-AH3	In accordance with the Cultural Heritage Management Plan, a cultural awareness strategy will be developed for the proposed modification area prior to the commencement of construction in consultation with the RAPs.A RAP working group will be established and maintained throughout the construction of the proposed realignment.		Construction	Contractor	Compliant	During a previous reporting period (April - September 2018), the Cultural Heritage Management Plan was developed in consultation with the RAPs and RMS.
<b>Traffic, transportation and access</b>						
MOD3A-TTA1	Traffic mananagement measures would be implemented on the proposed modification site in accordance with the approved Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Traffic and Access Management Plan (Appendix B1, CEMP).		Construction	Contractor	Compliant	The Pacific Complete Construction Environmental Manaement Plan, includes Appendix B1 Construction Traffic and Access Management Sub-Plan. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.
MOD3A-TTA2	Any ancillary facilities required for the project would be undertaken in accordance with the approved Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Ancillary Facilities Management Plan (Appendix B9, CEMP).		Construction	Contractor	Compliant	Pacific Complete has an approved Ancillary Facilities Management Plan (Appendix B9 of the Pacific Complete CEMP). The AFMP was approved by the Environmental Representative on 10 February 2016. The purpose of the AFMP is to detailed how Pacific Complete will assess, consult, gain approval and manage individual ancillary facility sites during the project. Site specific ancillary facility management plans will be prepared by Pacific Complete and contractors in accordance with the requirements of Appendix B9 Ancillary Facilities Management Plan (ER approved 10 February 2016). Ancillary Facility Management Plans are approved by the ER. If required the plan will be submitted to the Secretary for approval.
<b>Visual amenity and landscaping</b>						
MOD3A-VU1	A landscape design package will be developed for the landscaping and rehabilitation of the riparian corridor surrounding Picaninny Creek. The landscape design package will be developed in consultation with the relevant government authorities.		Construction	Contractor	Compliant	Noted
MOD3A-VU2	The area incorporated in this modification would be incorporated into an updated Urban Design and Landscape Plan: Glenugie to Maclean Sections 3 and 4, and lodged with the Department of Planning and Environment for approval in accordance with MCoA D20. This UDLP will include landscape treatments and measures to minimise the visual impact as a result of the refined alignment.		Construction	Contractor	Compliant	The updated Urban Design and Landscape Plan for Glenugie to Maclean, Sections 3 and 4 (Revision 14) was approved on 22 March 2019.
<b>Noise and vibration</b>						
MOD3A-NV1	Works would be managed in accordance with the Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Noise and Vibration Management Plan (Appendix B3, CEMP). Subject to approval of the modification, the CNVMP impact tables would be updated to incorporate the increase in size of Noise Catchment Area – A, and the updated impacts.		Construction	Contractor	Compliant	The Construction Noise and Vibration Management Plan (Appendix B3 of the CEMP) was approved on 3 December 2015. The CEMP & CNVMP impact tables for Noise Catchment Area A, have been updated following this modification approval.
MOD3A-NV2	An Addendum to the Operational Noise Report submitted to satisfy MCoA D11 would be submitted to the Department of Planning and Environment following detailed design.		Construction	Contractor	Compliant	The Operational Noise Review Report for Sections 3-11 was submitted to DPE on 4 May 2018 and approved on 1 June 2018. An updated ONR has been provided to Department on 6 November 2019 (this reporting period - October 2019 - March 2020), which has captured the area subject to the modification.
<b>Non-Aboriginal heritage</b>						
MOD3A-NAH1	Works would be managed in accordance with the Woolgoolga to Ballina Pacific Highway Upgrade (sections 3-11) Construction Heritage Management Plan (Appendix B5, CEMP), which includes the management of any unexpected finds during construction		Construction	Contractor	Compliant	The Pacific Complete Construction Environmental Manaement Plan, includes Appendix B5 Construction Heritage Management Sub-Plan. The Pacific Complete CEMP was approved by DPE on 23 October 2015. Pacific Complete will approve Contractor EMPs, EWMSs and ESCPs to ensure compliance with the PC CEMP, relevant RMS/PC environmental specifications and the requirements of this CoA.

## **Appendix B1 Noise Monitoring Result**



# 1 October 2020 - 31 March 2021 Noise Monitoring



Licensee: Laing O'Rourke Australia Construction Pty Ltd

Premises: Woolgoolga to Ballina Pacific Highway Upgrade Project, Harwood NSW 2465

Licence No: 20713

Contractor	Type of Noise Monitoring: Monthly or OOHW	Date of Noise Monitoring	Time of Noise Monitoring	Location	RBL (for OOHW noise monitoring)	Noise Monitoring Results						Comments
						Laeq	Lafmax	Lzpk	Lafmin	Laf10	Laf90 / * Laf50	
Quickway	Monthly	27/01/2021	19:15	Woombah Woods Caravan Park, 54 Iluka Rd, Woombah NSW 2469	42	54.3	69	83.9	46.5	56.6	49.5	Background noise dominated by passing traffic, Lorikeets and Cicadas. Noise from lighting towers/works not audible from monitoring location.

## **Appendix B2 Blast Monitoring Results**

N/A

## **Appendix B3 Air Quality Monitoring Results**

# 1 October 2020 - 31 March 2021 - Dust Monitoring Register



Licensee: Laing O'Rourke Australia Construction Pty Ltd

Premises: Woolgoolga to Ballina Pacific Highway Upgrade Project, Harwood NSW 2465

Licence No: 20713

Contractor	Location	Exposure Period - Date on/ Date off (DD/MM/YY)	Sample Gauge Number	Sample Name	Sample Comments	Air Monitoring for Solid Particles is conducted monthly (g/m2/month)				Laboratory Results			
						Sampling Days	Sample Volume (L)	Target Total Suspended Solids (g/m2/month)	Total Suspended Solids (g/m2/month) <4 g/m2/month	Ash (g/m2/month)	Combustible Matter (g/m2/month)	Soluble Matter (g/m2/month)	Grand Total Solids (g/m2/month)
Pacific Complete	Portion B	06/10/2020 - 05/11/2020	DDG 5-11	Fischers Lane	Insects	30	1.15	≤ 4	1.02	1.0	0.0	0.8	1.8
Pacific Complete	Portion B	06/10/2020 - 05/11/2020	DDG 5-16	Iluka Rd Compound	..	30	1.08	≤ 4	2.15	2.0	0.2	0.7	2.8
Pacific Complete	Portion B	06/10/2020 - 05/11/2020	DDG 5-18	Castles Stockpile Area	Insects	30	1.48	≤ 4	0.52	0.6	0.0	0.7	1.2
CPB	C S7, 8 & 9	23/10/2020 - 23/11/2020	DDG7 Control	K0905/1	Beetles	31	0.82	≤ 4	1.48				
CPB	C S7, 8 & 9	23/10/2020 - 23/11/2020	DDG7-1	K0905/2	..	31	0.3	≤ 4	0.34				
CPB	C S7, 8 & 9	23/10/2020 - 23/11/2020	DDG7-2	K0905/3	..	31	0.75	≤ 4	1.34				
CPB	C S7, 8 & 9	23/10/2020 - 23/11/2020	DDG7-3	K0905/4	..	31	0.72	≤ 4	0.81				
CPB	C S7, 8 & 9	22/09/2020 - 23/10/2020	DDG 7 Control	J9859/1	..	31	0.2	≤ 4	0.38				
CPB	C S7, 8 & 9	22/09/2020 - 23/10/2020	DDG 7-1	J9859/2	..	31	0.44	≤ 4	0.45				
CPB	C S7, 8 & 9	22/09/2020 - 23/10/2020	DDG 7-2	J9859/3	Cloudy	31	0.21	≤ 4	2.90				
CPB	C S7, 8 & 9	22/09/2020 - 23/10/2020	DDG 7-3	J9859/4	..	31	0.2	≤ 4	0.30				
CPB	C S7, 8 & 9	23/11/2020 - 07/12/2020	DDG7 Control	K1475/1	...	14	0.05	≤ 4	1.36				
CPB	C S7, 8 & 9	23/11/2020 - 07/12/2020	DDG7-1	K1475/2	...	14	0.09	≤ 4	0.75				
CPB	C S7, 8 & 9	23/11/2020 - 07/12/2020	DDG7-2	K1475/3	...	14	0.08	≤ 4	0.89				
CPB	C S7, 8 & 9	23/11/2020 - 07/12/2020	DDG7-3	K1475/4	...	14	0.07	≤ 4	0.49				



## **Appendix C   Community Complaints**

## Environmental Complaints Summary - October 2020 to March 2021

ID #	Event Type	Event Date	Summary	Issues	Complaint details	Response	Status	Action	Location
1	Call out	1/10/2020	Dust and damage	Air Quality: Dust, Construction: Damage (to property/environment)	Complaint about dust from construction and damage to property	Stakeholder advised the project team would investigate and advise of the result.	Closed	Letter for property dilapidation survey sent.	Portion C, section 7
2	Call in (1800 778 900)	12/10/2020	Dust	Air Quality: Dust	Complaint about dust	Stakeholder advised activity had been stopped until a water cart was available.	Closed	Activity stopped and water cart deployed.	Portion B, Section 5
3	Letterbox drop	21/10/2020	Traffic safety and dust	Traffic and transport: Traffic safety, Air quality: dust	Complaint about traffic safety and dust	Stakeholder advised water cart dispatched for dust and would advise further on traffic safety issue.	Closed	Water cart dispatched.	Portion C, section 7
4	Call in (1800 778 900)	18/11/2020	Traffic safety, dust and heavy vehicles	Traffic and transport: Traffic safety, Air Quality: Dust, Construction: Heavy vehicles	Complaint about traffic safety and dust caused by heavy vehicles	Stakeholder advised water truck deployed for dust and the project team would investigate other traffic safety concerns and advise of the result	Closed	Water truck deployed	Portion C, section 7
5	Email	4/12/2020	Noise and dust	Air Quality: Dust, Noise and Vibration: Noise – operation	Complaint about dust and noise from the opening of the Woodburn to Pimlico section of the motorway.	Stakeholder advised that dust levels would be monitored and provided information about operational noise and the compliance monitoring process.	Closed	Dust levels to be monitored and ONR and fact sheet emailed	Portion D, Section 10
6	Call in (specify team member)	28/01/2021	Noise	Noise and Vibration: Noise – operation	Complaint about noise from the opening of the new section of highway between Woodburn and Pimlico.	Stakeholder advised of operational noise compliance monitoring and meeting organised to discuss further.	Closed	Meeting scheduled.	Portion C, Section 8
7	Email	19/01/2021	Noise	Noise and Vibration: Noise – operation	Complaint about noise from Koala Grid	Stakeholder advised repairs to the grid would be carried out.	Closed	Repairs carried out 22/01/2021	Portion B, Section 5

ID #	Event Type	Event Date	Summary	Issues	Complaint details	Response	Status	Action	Location
8	Call in (1800 778 900)	18/01/2021	Noise and mitigation treatments	Noise and Vibration: Noise – operation, Noise and Vibration: Noise mitigation/ treatments	Complaint about noise from Koala Grid and level of At-house noise treatment	Stakeholder advised of ONR and post construction compliance monitoring process.	Closed	Nil	Portion D, Section 10
9	Call in (1800 778 900)	18/01/2021	Noise and mitigation treatments	Noise and Vibration: Noise – operation, Noise and Vibration: Noise mitigation/ treatments	Complaint about noise from the opening of the Woodburn to Pimlico section of the motorway	Stakeholder advised of ONR and post construction compliance monitoring process.	Closed	ONR and receiver ID sent via email.	Portion D, Section 10
10	Call in (1800 778 900)	30/03/2021	Noise mitigation treatment	Noise and Vibration: Noise mitigation/ treatments	Complaint about timing of ONCR and noise treatment	Stakeholder advised of the MCoA requirements in relation to ONCR and advised approximate timing of release	Closed	Project team to provide monthly updates.	Portion D, Section 10
11	Email	18/03/2021	Noise	Noise and Vibration: Noise – operation	Complaint about noise monitoring locations as part of operational noise compliance monitoring.	Stakeholder advised compliance monitoring had been carried out and provided information on ONCR noise monitoring locations.	Closed	Added to ONCR distribution list	Portion D, Section 10
12	SMS	17/03/2021	Noise mitigation treatment	Noise and Vibration: Noise mitigation/ treatments	Complaint about noise mitigation treatment	Stakeholder advised the work would be completed that day.	Closed	Work completed.	Portion C, Section 6
13	Email	8/03/2021	Inadequate consultation and noise	Noise and Vibration: Noise – operation, Consultation process: Inadequate consultation	Complaint about inadequate consultation on operational noise compliance monitoring	Stakeholder advised date information was emailed about timing of compliance monitoring and provided further updates on process.	Closed	Nil	Portion C, Section 9
14	Email	5/03/2021	Inadequate consultation and noise	Noise and Vibration: Noise – operation, Consultation process: Inadequate consultation	Complaint about inadequate consultation about operational noise compliance monitoring	Stakeholder advised date information was emailed about timing of compliance monitoring and provided further updates on process. (NOTE: Not a duplicate)	Closed	Nil	Portion A, Section 4

ID #	Event Type	Event Date	Summary	Issues	Complaint details	Response	Status	Action	Location
15	Call in (1800 778 900)	4/03/2021	Noise treatment, inadequate consultation and damage	Noise and Vibration: Noise mitigation/ treatments, Consultation process: Inadequate consultation, Construction: Damage (to property/environment)	Complaint about noise mitigation consultation, inadequate consultation and damage	Stakeholder provided TfNSW public liability claims form and advised the project team would ensure contact was made with both property owners about noise mitigation.	Closed	Public liability claim form provided and CM contact database updated	Portion A, Section 3
16	Call in (1800 778 900)	2/03/2021	Noise, maintenance and inadequate consultation	Noise and Vibration: Noise mitigation/ treatments, Consultation process: Inadequate consultation, Property and land use: Maintenance	Complaint about inadequate consultation about damage claim, maintenance and noise	Stakeholder advised the Claim was with CMA who had issued a letter directly via email. Meeting held to discuss noise and maintenance concerns determined to be not project related.	Closed	Nil	Portion D, Section 10
17	Call in (specify team member)	1/03/2021	Damage and noise mitigation	Construction: Damage (to property/environment), Noise and Vibration: Noise mitigation/ treatments	Complaint about damage and noise mitigation treatment	Stakeholder advised the project team were investigating the damage to the fence and that the noise mitigation treatment would be assessed by the builder.	Closed	Nil	Portion C, Section 8

## **Appendix D   Environmental Incident Summary**



# Summary of Environmental Incidents - 1 October 2020 to 31 March 2021

ID #	Date of Event	RMS Incident Category	Nature of Event	Summarise the Event Details	Corrective Actions	Event Status
1	31-Mar-21	1	Potential Water Pollution / Pollutant	During a routine ER/RMS inspection, it was identified that a drain that was previously directing water collected from within operational drains into temporary infiltration ponds, had been diverted into an ephemeral waterway at a culvert 100m to the south via a constructed operational swale, with baffle in place. Although this was in accordance with the approved methodology within the approved ESCP for the works, this approach did not align with the intent of previous management of water collected from within operational drains in this area. All works were undertaken within approved project and EPL boundary.	Within 1 hour after the issue was identified temporary diversion was reinstated to its original flow regime into the temporary infiltration basins. Water sampling was conducted upstream and downstream of the receiving culvert identifying negligible difference between downstream water, and upstream water collected as it flowed into the upstream end of the culvert, not influenced by downstream waters. Contractor to undertake further due diligence checks during works planning phase to assist in identifying any unknown existing issues. ESCP updated to capture revised methodology and toolboxed to relevant personnel.	Closed
2	29-Jan-21	2	Pollutant	A leak was identified on a contractor tipper truck on Whytes Lane Pimlico NSW. Bunded with soil and cleaned with spill kit. The leaking coolant line was tightened up, no further issue required as vehicle was taken off site for repairs. 0.2L.	The supervisor for the area was notified of the spill immediately. The oil was absorbed using absorbent material from spill kit on site. All contaminated material was removed from site, placed in a bag and transferred to a contaminated waste bin. On going pre start checks and routine maintenance on all equipment.	Closed
3	14-Dec-20	3	Potential Water Pollution / Pollutant	A concure curing trailer and tractor was washed down into a washdown pit following removal of residual concure from the trailer to a storage pod approximately 2-3 weeks ago. The washout pit had significant capacity post the washdown. The residual Concure captured in the pit from the washdown has over topped the washout sump following the in excess of 100mm of rainfall received and flowed down through the compound area. Spill containment measures were immediately implemented on identification of the over topping event. The sump was pumped out into a 5,000 litre tank and the bunded trailer was covered with tarpaulins to prevent further release. The nearest sensitive receiver is approximately 350m away to the north west. A small quantity of diluted concure was released. The product remained within the project boundary.	Upon identification Subcontractor implemented spill containment measures and pumped the diluted material back into a 5000 litre storage tank. The bunded trailer was covered to prevent further egress. Initial corrective action: Ensure washout pit is covered prior to rain where there is capacity not requiring pump out of the pit (note there is no runoff to the pit except from the washout bay).	Closed
4	26-Nov-20	4	Unauthorised Works	During construction of the maintenance access tracks, an 8T Roller and Posi track were floated on a flat bed truck from the Old Pacific Highway to within the new highway alignment on the designated access track over the ridge line of Lang Hill. Subcontractor had sought approval from relevant property owners, but had not yet submitted the relevant G36 Hold Point for working near sensitive areas. During a routine joint weekly inspection, it was identified by the PC Environmental Advisor, that although the site is within the Project Boundary there is an administrative condition in place stating that a 50m section of the access taken is limited to light vehicle use only.	All works in the vicinity of the site were stopped until relevant approval to access the 50m section of the track by HVs is sought from relevant regulatory stakeholders. A joint (PC/Subcontractor) review and potential upscale of Subcontractors Management team resourcing as it has been identified that it is potentially under resourced to manage the number of fast moving active work fronts across the project concurrently. Internal discussion with the team reiterating that no additional works are to occur until the relevant HP is released.	Closed