

Appendix B10

Construction Sustainability Management Plan / Sustainability Strategy

The Northern Road Upgrade –
Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

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Contents

- 1 Introduction1**
 - 1.1 Context.....1
 - 1.2 Background5
 - 1.3 Environmental management system overview5
 - 1.4 Consultation6
- 2 Purpose and objectives7**
 - 2.1 Objectives.....7
 - 2.2 Targets8
- 3 Environmental requirements9**
 - 3.1 Relevant legislation and guidelines.....9
 - 3.2 Conditions of approval.....9
- 4 Infrastructure sustainability11**
 - 4.1 Definition11
 - 4.2 Project Sustainability Framework.....11
 - 4.3 Project Sustainability Strategy13
- 5 ISCA score and rating24**
- 6 Sustainability management measures27**
- 7 Compliance management35**
 - 7.1 Roles and responsibilities35
 - 7.2 Communication.....36
 - 7.3 Complaints management.....36
 - 7.4 Training36
 - 7.5 Monitoring and inspections37
 - 7.6 Auditing37
 - 7.7 Non-conformances37
 - 7.8 Reporting.....38
- 8 Review and improvement39**
 - 8.1 Continuous improvement.....39
 - 8.2 CSMP and Strategy update and amendment.....39

Tables

Table 2-1:	TNR Sustainability Strategy Objectives	7
Table 3-1:	Conditions of approval relevant to the CSMP and Strategy	10
Table 4-1:	TNR Sustainability Strategy.....	16
Table 5-1:	IS rating scheme themes and categories.....	24
Table 6-1:	Sustainability environmental management measures	28

Figures

Figure 1-1:	Overview of the Project (northern section).....	3
Figure 1-2:	Overview of the Project (southern section)	4
Figure 4-1:	TNR Upgrade Sustainability Framework.....	12

Glossary / Abbreviations

Term	Expanded text
CEMP	Construction Environmental Management Plan
CoA	Condition of approval
Compliance audit	Verification of how implementation is proceeding with respect to an OACEMP (which incorporates the relevant approval conditions)
CSMP	Construction Sustainability Management Plan
CSSI	Critical State Significant Infrastructure
DEC	Department of Environment and Conservation (NSW) (former)
DECC	Department of Environment and Climate Change (NSW) (former)
DEOH	Defence Establishment Orchard Hills
DoEE	Commonwealth Department of the Environment and Energy
DP&E	NSW Department of Planning and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management System
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment
Environmental heritage	Places, buildings, works, relics, movable objects and precincts, of State or local heritage significance as outline in Section 4 of the Heritage Act
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects
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
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve
Environmental Representative (ER)	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
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives
EPA	NSW Environment Protection Authority
EP&A Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Commonwealth Environmental Protection and Biodiversity Conservation Act 1999</i>
EPL	<i>NSW Environment Protection Licence under the Protection of the Environment Operations Act 1997</i>

Term	Expanded text
ESD	Ecologically Sustainable Development
EWMS	Environmental Work Method Statements
Federal-CoA	Condition of the Federal Department of the Environment and Energy Approval Decision
GHG	Greenhouse gas
Hold point	A point beyond which a work process must not proceed without express written authorisation from Roads and Maritime
ISCA	Infrastructure Sustainability Council of Australia
Minister, the	The Federal Minister of the Department of the Environment and Energy, or delegate
Non-compliance	Failure to comply with the requirements of the Project approval or any applicable licence, permit or legal requirements
Non-conformance	Failure to conform to the requirements of Project system documentation including this OACEMP or supporting documentation
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NSW-CoA	Condition of the NSW DP&E Infrastructure Approval
NSW Infrastructure Approval	The Infrastructure Approval for the Northern Road Upgrade issued by the New South Wales Government on 30 May 2018
OACEMP	Overarching Construction Environmental Management Plan
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
Project, the	The Northern Road Upgrade – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park
REMM	Revised Environmental Management Measure as provided in the Final EIS / SPIR
Roads and Maritime, RMS	NSW Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the NSW Department of Planning and Environment, or delegate
SPIR	Submissions and Preferred Infrastructure Report
TNR	The Northern Road

1 Introduction

1.1 Context

This Construction Sustainability Management Plan (CSMP) / Sustainability Strategy forms part of the Overarching Construction Environmental Management Plan (OACEMP) for The Northern Road Upgrade – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park (the Project).

This CSMP and Strategy constitutes both the management plan required under the EIS and the Strategy required under NSW-Condition of Approval (CoA) E51. This document identifies the Project sustainability outcomes and targets. The Construction Contractors will develop methodologies to achieve (or exceed) these targets and outcomes.

This CSMP and Strategy has been prepared to address the requirements of:

- the NSW Minister’s Infrastructure Approval dated 30 May 2018 and Federal Minister for the Environment and Energy’s Approval dated 15 June 2018
- the sustainability targets for the Project listed in *The Northern Road Upgrade – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park NSW Environmental Impact Statement / Commonwealth Draft Environmental Impact Statement (EIS)* (prepared by Jacobs for Roads and Maritime, 2017)
- Roads and Maritime specifications
- all applicable legislation.

Construction of the Project will be undertaken in three stages:

- Stage 4 - Mersey Road, Bringelly, to Eaton Road, Luddenham
- Stage 5 - Littlefields Road, Luddenham, to Glenmore Parkway, Glenmore Park
- Stage 6 - Littlefields Road, Luddenham to Eaton Road, Luddenham.

An overview of the Project, including the extent of the Project stages, is shown on Figure 1-1 and Figure 1-2.

Each stage will be delivered in a separate Construction package that will include all activities needed to complete the stage. Details of the proposed Project staging, including Construction activities and submission of corresponding environmental plans, strategies and protocols, is documented in the Project Staging Report.

The Construction Contractors will develop stage-specific environmental management documentation to address the control requirements outlined in the OACEMP that apply to the stages that they are delivering. Stage-specific CSMPs will be updated, tailored and finalised by the Contractors. The Contractors’ CSMPs will:

- state how the Contractor will achieve the relevant sustainability objectives in Section 2.1 and the targets identified in Table 4-1 of this CSMP and Strategy for each Project stage
- detail how the Contractor will achieve an ISCA rating of Excellent (refer Section 5).

The Contractors' CSMPs will be developed with consideration of the governance requirements specified in version 1.2 of the Project Sustainability Rating Tool issued by Infrastructure Sustainability Council of Australia (ISCA) and the requirements listed in Section 6. The Contractors' CSMPs will be developed to align with the intent of the sustainability objectives described in the documents listed in Section 4.2 and this overarching CSMP and Strategy.

The Contractors' CSMPs will include details of the role, qualifications and responsibilities of the Contractor's Sustainability Manager and any critical site activities that require the presence of the Contractor's Sustainability Manager.

Roads and Maritime will review the Contractors' stage-specific CSMPs for compliance with the approved OACEMP.

Roads and Maritime has also prepared an Early Works Sustainability Plan for use by the Contractors, should it be required.

It should be noted that the CSMP is also referred to in the Project environmental documents as:

- Sustainability Management Plan
- Sustainability Strategy

A full list of alternative and interchangeable sub-plan names is included in Appendix A5 of the OACEMP.

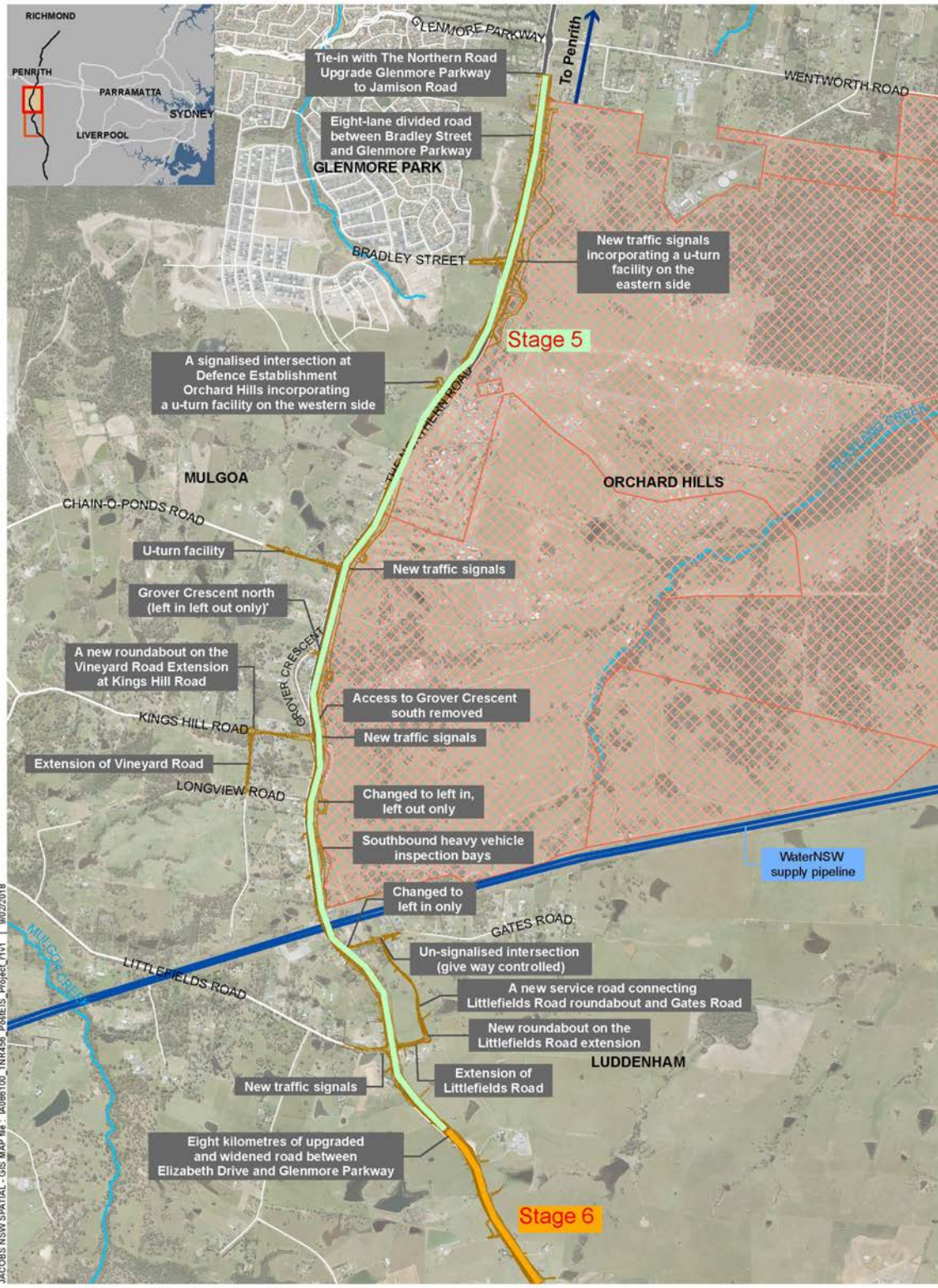


Figure 1-1: Overview of the Project (northern section)

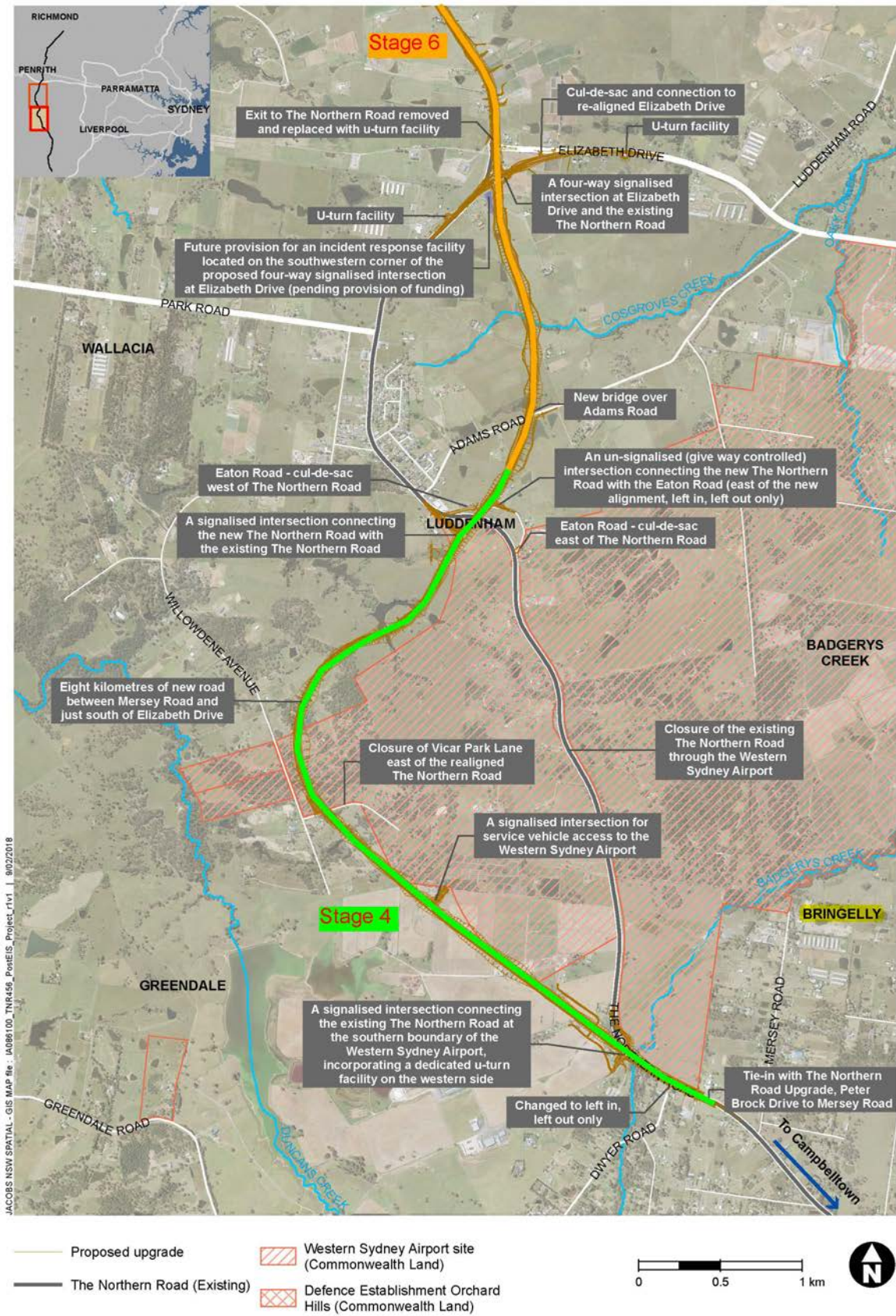


Figure 1-2: Overview of the Project (southern section)

1.2 Background

The EIS included an assessment of Project sustainability to address the Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning and Environment (DP&E) and the Commonwealth EIS Guidelines issued by the Federal Department of the Environment and Energy (DoEE). Sustainability objectives for the Project were included in the EIS as Section 10.

1.3 Environmental management system overview

The overarching Environmental Management System (EMS) for the Project is described in Section 3 of the OACEMP. The Contractors delivering the Project will have certified EMSs consistent with the overarching EMS described in the OACEMP. The Contractors will develop stage specific CSMPs in accordance with the OACEMP and their EMS.

This overarching CSMP and Strategy forms part of the environmental management framework for the Project, as described in Section 3.3 of the OACEMP.

The Contractors will develop, as part of their stage-specific CSMPs, detailed strategies and plans to address specific requirements of the conditions of approval and REMMs identified in this overarching CSMP and Strategy.

Management measures identified in this CSMP and Strategy may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS). EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be used concurrently with the EWMS. A template EWMS for use by the Contractors is provided in Appendix A9 of the OACEMP.

EWMS will be prepared by the Contractor Environmental Site Representatives in consultation with the Contractor Sustainability Manager and reviewed by the Roads and Maritime Environmental Manager (or delegate) and independent Environmental Representative (ER) prior to the commencement of the Construction activities to which they apply. Construction personnel undertaking a task governed by an EWMS will undertake the activity in accordance with the mitigation and management measures identified in the EWMS.

Used together, the OACEMP, strategies, procedures and EWMS form management guides that clearly identify required environmental management actions for reference by Roads and Maritime and its Contractors.

The review and document control processes for this CSMP and Strategy are described in Section 6.7 and 6.8 of the OACEMP.

1.3.1 CSMP preparation, endorsement and approval

This overarching CSMP and Strategy has been prepared to satisfy the NSW and Federal conditions of approval (CoA) in relation to sustainability during Construction of the Project.

The CSMP and Strategy will be reviewed by the ER and submitted to the Secretary for information prior to the commencement of Construction, or within another timeframe agreed with the Secretary, and will be implemented throughout the Construction of the Project.

1.4 Consultation

1.4.1 Consultation during preparation of the EIS

The targets for the Project Sustainability Strategy (provided in Table 4-1) were reviewed and agreed at a sustainability workshop held on 27 February 2017 with representatives from Roads and Maritime project team, Roads and Maritime sustainability team, relevant design teams and EIS project team members.

Sustainability questionnaires for both the design and delivery phases of the Project were developed to prompt the relevant teams to consider potential sustainability initiatives that have been, or could be considered and implemented. These questionnaires were developed in accordance with *Roads and Maritime Technical Guide: Sustainability in Infrastructure Design and Construction* (Roads and Maritime, 2016).

1.4.2 Consultation for preparation of the CSMP and Strategy

No consultation under the NSW Minister's Infrastructure Approval was required for the preparation of this CSMP and Strategy.

1.4.3 Ongoing consultation during Construction

There are no specific ongoing consultation requirements under the EIS and SPIR with regard to sustainability. Further details on community communication are provided in Section 7.2. Additional consultation may also be required under the ISCA framework (outlined in Section 5).

2 Purpose and objectives

The purpose of this CSMP and Strategy is to embed project sustainability objectives, commitments and targets into the Project delivery management systems.

2.1 Objectives

The key objective of the CSMP and Strategy is to ensure the effective implementation of the Project Sustainability Strategy during the Construction of the Project. The Strategy is provided in Table 4-1. Specific objectives are provided in the Strategy under 11 focus areas, as listed in Table 2-1.

Table 2-1: TNR Sustainability Strategy Objectives

Focus Area 1: Leadership and continual improvement
<ul style="list-style-type: none">• Align the project with TfNSW and Roads and Maritime sustainability policies• Embed sustainability into decision making, contracts and processes• Monitor sustainability performance• Share sustainability knowledge and lessons learnt• Support culture of continuous improvement
Focus Area 2: Energy and carbon management
<ul style="list-style-type: none">• Minimise energy use and reduce greenhouse gas emissions without compromising the delivery of services to our customers
Focus Area 3: Climate change resilience
<ul style="list-style-type: none">• Design and construct transport infrastructure to be resilient to climate change impacts
Focus Area 4: Air Quality
<ul style="list-style-type: none">• Minimise the air quality impacts of road projects and support initiatives that aim to reduce transport related air emissions
Focus Area 5: Resource use and waste management
<ul style="list-style-type: none">• Minimise the use of non-renewable resources and minimise the quantity of waste disposed to landfill
Focus Area 6: Pollution control
<ul style="list-style-type: none">• Minimise noise, water and land pollution from road and maritime construction, operational and maintenance activities
Focus Area 7: Biodiversity
<ul style="list-style-type: none">• Improve outcomes for biodiversity by avoiding, mitigating or offsetting the potential impacts of road and maritime projects on plants, animals and their environments
Focus Area 8: Heritage
<ul style="list-style-type: none">• Ensure cultural heritage is conserved and managed according to its heritage significance and that it contributes positively to awareness of the past
Focus Area 9: Liveable communities
<ul style="list-style-type: none">• Provide high quality urban design outcomes that contribute to the liveability of communities in NSW

Focus Area 10: Sustainable procurement

- Procure infrastructure, goods and services that over their lifecycle deliver value for money and contribute to the environmental, social and economic wellbeing of the community

Focus Area 11: Workforce

- Facilitate economic prosperity and development and provide a resilient local workforce
-

2.2 Targets

Roads and Maritime and its Contractors are committed to implementing sustainability initiatives during the Construction of the Project in accordance with the Project Sustainability Strategy. Specific targets are provided within the Strategy (Table 4-1).

The targets provide a measurable and verifiable framework to drive and track the Project's sustainability performance. They constitute benchmarks to be verified through documentary evidence as the Project progresses.

3 Environmental requirements

3.1 Relevant legislation and guidelines

3.1.1 Legislation and regulatory requirements

Legislation and regulations relevant to this CSMP and Strategy includes:

- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) (Commonwealth)
- *Protection of the Environment Operations Act 1997* (POEO Act)
- *Protection of the Environment Operations (General) Regulation 2009*

Relevant provisions of the above legislation are explained in the register of legal requirements included in Appendix A1 of the OACEMP.

3.1.2 Guidelines and standards

The main sustainability framework guidelines and policy documents relevant to this CSMP and Strategy are discussed in Section 4.2.

The specifications applicable to this CSMP and Strategy are:

- Roads and Maritime Services Specification G1 – Job Specific Requirements for The Northern Road Upgrade
- Roads and Maritime Services Specification G36 – Environmental Protection (Management System).

Roads and Maritime specifications are a key source of environmental protection management processes relevant to this CSMP and Strategy. The specifications set out environmental protection requirements, including Hold Points, which must be complied with by the Construction Contractors during Construction of the Project. A Hold Point is a point beyond which a work process must not proceed without express written authorisation from Roads and Maritime.

3.2 Conditions of approval

This overarching CSMP and Strategy provides a consistent approach to address the requirements of both the NSW and Federal approvals in the one document. The Project is located on both NSW and Federal (Stages 4 and 5 only) land. However, the NSW Infrastructure Approval conditions apply to both NSW and Federal land within the Project. The Federal approval conditions also apply to both NSW and Federal land within the Project. The extent of Federal land located in the vicinity of the Project is shown on Figure 1-1 and Figure 1-2.

The State (NSW-CoA) and Federal (Federal-CoA) conditions of approval relevant to this CSMP and Strategy and their applicability to each stage of the Project are listed in Table 3-1. A cross reference is also included to indicate where the condition is addressed in this CSMP and Strategy or other project management documents.

Table 3-1: Conditions of approval relevant to the CSMP and Strategy

CoA no.	Condition requirement	Applicability						Reference
		Stage 4		Stage 5		Stage 6		
		Cth	NSW	Cth	NSW	Cth	NSW	
Federal conditions of approval								
Federal-CoA 1	The approval holder must undertake the action, including those parts of the action that occur on Commonwealth Land, in accordance with all conditions in the NSW Infrastructure Approval.	✓	✓	✓	✓	✓		This CSMP and Strategy
Federal-CoA 9	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement all management plans required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	✓	✓	✓	✓	✓		Section 7.8
State conditions of approval								
NSW-CoA E51	A Sustainability Strategy for the Construction of the CSSI must be prepared in accordance with the Infrastructure Sustainability Council of Australia infrastructure rating tool or other justified rating mechanism to achieve an equivalent 'As Built' rating of Excellent.	✓	✓	✓	✓	✓		Sections 4, 5 and Table 4-1
NSW-CoA E52	The Sustainability Strategy must be submitted to the Secretary for information prior to the commencement of Construction, or within another timeframe agreed with the Secretary, and must be implemented throughout the Construction of the CSSI. The Sustainability Strategy must include:	✓	✓	✓	✓	✓		Section 1.3.1
	(a) details of the sustainability objectives and targets for the design and Construction of the CSSI;	✓	✓	✓	✓	✓		Sections 2.1, 2.2 and Table 4-1
	(b) details of the sustainability initiatives which will be investigated and / or implemented; and	✓	✓	✓	✓	✓		Sections 4.3.5 and 6
	(c) a description of how the strategy will be implemented for the CSSI.	✓	✓	✓	✓	✓		Section 6

4 Infrastructure sustainability

4.1 Definition

Infrastructure sustainability is defined by the Infrastructure Sustainability Council of Australia (ISCA) in the *Infrastructure Sustainability Technical Manual Version 1.2* as infrastructure that is designed, constructed and operated to optimise environmental, social and economic outcomes over the long term. The optimisation component is important as it reflects a 'triple bottom line' approach to decision making and performance measurement and it promotes doing more than simply minimising impacts (ISCA, 2017).

Significant benefits can be achieved by integrating sustainability considerations early and throughout all project phases. Implementing sustainable practices can create cost savings, improve work efficiencies and increase the security of the resources we use. This is important for the road and transport industries in particular, which use large quantities of construction materials and consume large amounts of electricity and fuels to run their operations.

The benefits of early consideration of sustainability include:

- infrastructure with a minimum environmental footprint that is relatively low maintenance, and uses materials that are durable and/or in plentiful supply locally
- reduced project risks and costs
- infrastructure that is sensitive to the surrounding environment and that contributes to the liveability of communities in NSW
- infrastructure that is adaptable to future needs and better integrated with other transport modes such as cycling, walking and public transport
- improved engagement with the construction supply chain to encourage more sustainable outcomes for the construction industry
- better contingency planning for environmental issues
- ease of movement through the sustainability component of the Transport for NSW framework for investment gating and assurance.

4.2 Project Sustainability Framework

The Project Sustainability Framework is illustrated on Figure 4-1 and incorporates the following documents:

- *Transport and Sustainability Policy Statement* (Transport for New South Wales (TfNSW), 2013)
- *Transport Environment and Sustainability Policy Framework* (TfNSW, 2013)
- *Roads and Maritime Environmental Sustainability Strategy 2015-19* (Roads and Maritime, 2016)
- *Roads and Maritime Technical Guide: Sustainability in Infrastructure Design and Construction* (Roads and Maritime, 2016)

- *The Northern Road Upgrade, Mersey Road to Glenmore Parkway Draft Sustainability Policy and Sustainability Strategy.*

Further details of these documents are provided below.

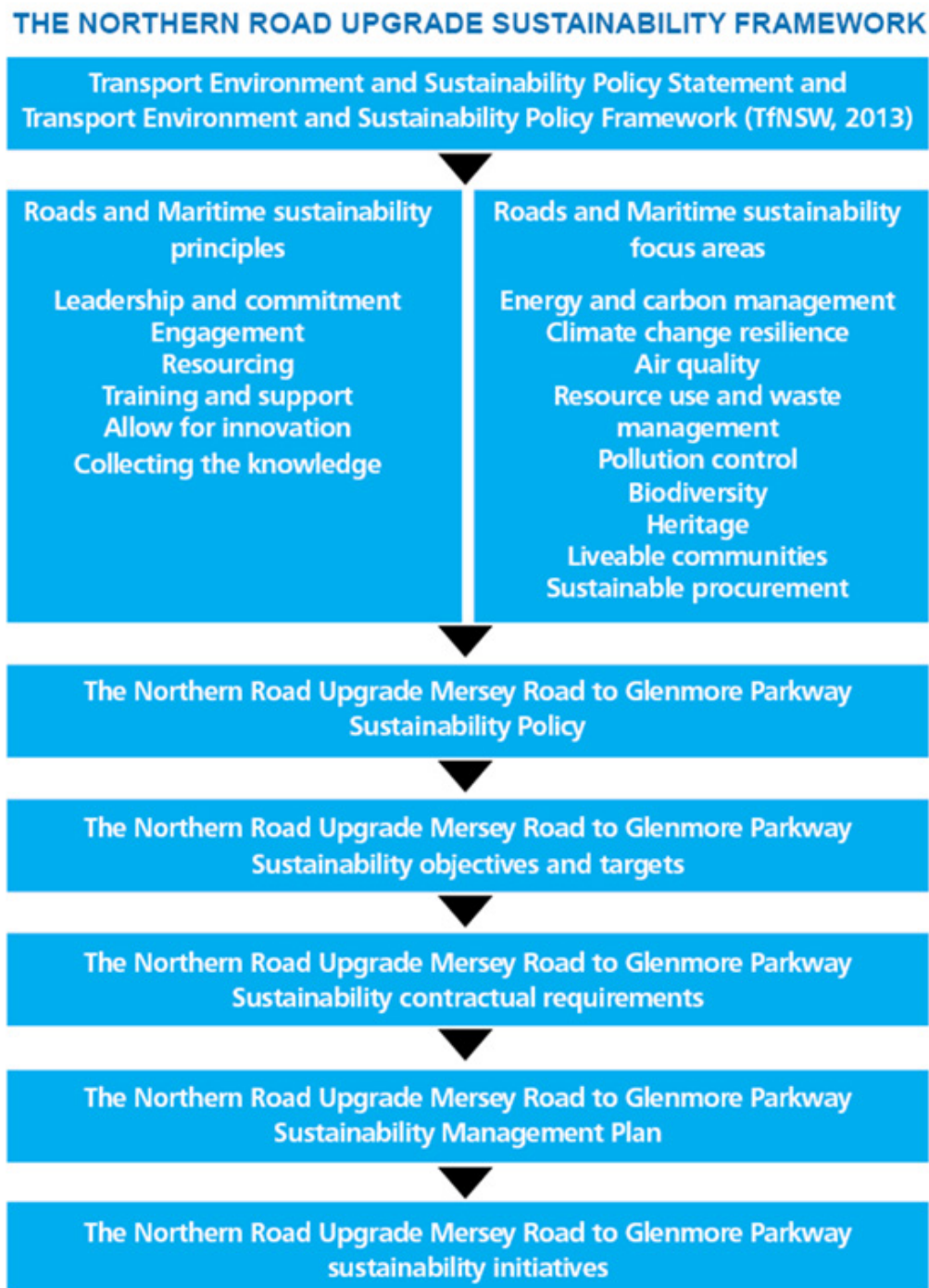


Figure 4-1: TNR Upgrade Sustainability Framework

4.2.1 Transport Environment and Sustainability Policy Statement

The *Transport Environment and Sustainability Policy Statement* states that NSW transport agencies are committed to delivering transport services, projects, operations and programs in a manner that balances economic, environmental and social issues to ensure a sustainable transport system for NSW, through:

- enabling development, expansion and management of the transport network to be carried out in a sustainable way, resilient to climate change
- minimising the impacts of transport on the environment, encompassing transport operations, infrastructure delivery and maintenance and corporate activities
- enhancing the quality of life for transport customers by procuring, delivering and promoting sustainable transport options.

4.2.2 Transport Environment and Sustainability Policy Framework

The *Transport Environment and Sustainability Policy Framework* presents a coordinated approach to deliver the NSW Government's environmental and sustainability agenda across transport agencies.

4.2.3 Roads and Maritime Environmental Sustainability Strategy 2015-19

The *Roads and Maritime Environmental Sustainability Strategy 2015-19* is Roads and Maritime's commitment to embed sustainability considerations into their business and minimise their environmental footprint and deliver positive economic outcomes for the people of NSW. The approach to drive sustainability in the document outlines nine key focus areas that deliver on the strategic priorities and that are aligned with the TfNSW Environment and Sustainability Framework.

4.2.4 Roads and Maritime Environmental Technical Guide

The *Roads and Maritime Environmental Technical Guide - Sustainability in Infrastructure Design and Construction* was developed to assist Roads and Maritime staff and contractors embed sustainability considerations in the planning, development and delivery of Road and Maritime infrastructure. It sets out:

- what sustainability means within the context of infrastructure design and construction
- Roads and Maritime sustainability principles and objectives
- key considerations at each project phase from initiation through to finalisation and decommissioning
- practical guidance and examples of sustainability initiatives that would assist achieve Roads and Maritime sustainability objectives.

4.3 Project Sustainability Strategy

The *Northern Road Upgrade Sustainability Strategy* describes how sustainability will be integrated into the Project. The Strategy aligns with the *TfNSW Transport Environment and Sustainability Policy Framework* and the *Roads and Maritime Environmental Sustainability Strategy*. The Strategy was developed in collaboration with the Project design teams, key

members of the EIS team and the Roads and Maritime project management team including environment, community and procurement personnel. The Strategy is provided in Table 4-1.

4.3.1 TNR Sustainability Policy

The draft TNR Sustainability Policy identifies the overarching commitments to the principles of sustainability and is the primary document for setting the Project direction on sustainability matters.

The Northern Road Upgrade, Mersey Road to Glenmore Parkway Draft Sustainability Policy

The Northern Road project team is committed to:

- sustainability leadership and continual improvement
- integrating governance, environmental, social and economic considerations into decision-making processes within the project
- enhancing positive environmental, social and economic outcomes wherever possible, while minimising adverse impacts, resource use and embodied impacts.

These commitments would be met by:

- establishing sustainability objectives and targets, aligned to TfNSW and Roads and Maritime sustainability policy
- embedding sustainability requirements within key roles, contracts and procurement criteria
- influencing and partnering with contractors, subcontractors and suppliers to adopt sustainable practices
- monitoring and reporting on performance against sustainability objectives
- implementing corrective actions where required and sharing lessons learnt
- periodically reviewing and evaluating sustainability policy and management systems to ensure continual improvement
- providing a safe and accessible road integrated into the urban environment and transport system
- establishing positive relationships with the community through ongoing and open engagement
- providing local training, education, apprenticeships and employment opportunities
- protecting and promoting cultural heritage, community health and wellbeing
- proactively managing environmental and heritage resources
- minimising energy, water, materials use and waste through the project life-cycle
- building in resilience to potential climate change impacts
- minimising land take requirements
- minimising pollution and environmental harm.

All personnel involved in the delivery of the Project have shared responsibility to actively contribute to the achievement of this policy.

4.3.2 TNR focus areas

The Sustainability Strategy in Table 4-1 identifies 11 high level overarching sustainability focus areas to deliver on the commitments of the sustainability policy. These include the nine focus areas provided in the Roads and Maritime sustainability strategy (as shown in Figure 4-1) and two additional focus areas, 'Leadership and continual improvement' and 'Workforce' which address the guiding principles provided in the Roads and Maritime sustainability strategy.

4.3.3 TNR objectives

The Project objectives identify the overarching aims to be realised under each focus area and align with the Roads and Maritime sustainability strategy. The Project objectives are provided in Table 2-1 and Table 4-1.

4.3.4 TNR targets

The Project targets provide a measurable and verifiable framework to drive and track the Project's sustainability performance and are presented in Table 4-1. They constitute benchmarks to be verified through documentary evidence as the Project progresses and may be refined as the Project develops. The targets were reviewed and agreed at the sustainability workshop held on the 27 February 2017 (refer Section 1.4.1).

Table 4-1 identifies the ISCA Credits which applies to each of the Project targets. The ISCA rating scheme is described further in Section 5.

4.3.5 TNR sustainability initiatives

Project initiatives are activities that can contribute towards Project targets and objectives. Initiatives have been identified through a review of:

- Project design and assessment
- *Roads and Maritime Technical Guide: Sustainability in Infrastructure Design and Construction* (Feb, 2016)
- questionnaire responses provided by the Project design and delivery teams.

The initiatives are recorded on a live tracking register and can be categorised into:

- initiatives that have already been incorporated into the Project design
- initiatives that will be incorporated into later Project stages (design, construction or operations).

The Construction related initiatives are provided in Section 6.

Table 4-1: TNR Sustainability Strategy

Objectives	Sustainability targets	ISCA Credit Reference	Reference
Focus Area 1: Leadership and continual improvement			
<ul style="list-style-type: none"> Align the project with TfNSW and Roads and Maritime sustainability policies Embed sustainability into decision making, contracts and processes Monitor sustainability performance Share sustainability knowledge and lessons learnt Support culture of continuous improvement 	<ul style="list-style-type: none"> Roads and Maritime to appoint a Sustainability Coordinator with relevant experience to drive the achievement of sustainability outcomes on behalf of Roads and Maritime. Contractor to appoint a Sustainability Representative with relevant experience to drive the delivery of sustainability outcomes. Conduct quarterly sustainability meetings during remainder of detailed design and Construction phases. Prepare a Construction Sustainability Management Plan to embed project sustainability objectives, commitments and targets into the project delivery management systems. Prepare quarterly reporting of performance against sustainability targets during Construction. Conduct annual reporting to RMS Senior Management and DPE and DoEE against sustainability targets. Achieve ISO14001, ISO9001 and AS/NZS4801 accreditation of the project management systems. 	<ul style="list-style-type: none"> Man-3: Organisational structure, roles, and responsibilities Man-3: Organisational structure, roles, and responsibilities Man-4: Inspection and auditing Man-1: Sustainability leadership and commitment Man-4: Inspection and auditing Man-5: Report and review Pro-2: Identification of suppliers 	<p>Section 7.1.1</p> <p>Section 7.1.2</p> <p>Section 7.2</p> <p>This overarching CSMP and Strategy and the Contractors' CSMPs</p> <p>Section 7.8</p> <p>Section 7.8</p> <p>OACEMP Section 1.2</p>

Objectives	Sustainability targets	ISCA Credit Reference	Reference
Focus Area 2: Energy and carbon management			
<ul style="list-style-type: none"> Minimise energy use and reduce greenhouse gas emissions without compromising the delivery of services to our customers. 	<ul style="list-style-type: none"> Prepare a greenhouse gas assessment during design covering Scope 1 and Scope 2 emissions and land clearing as a minimum, for the infrastructure lifecycle of the asset (Construction and Operation). Prepare an Energy Management Plan to identify and implement design stage energy saving opportunities. Prepare an Energy Management Plan to identify and implement Construction stage energy saving opportunities. Prepare a workforce travel plan to reduce travel emissions. Implement a range of opportunities with a financial payback of four years or less. Source a minimum of 10% of electricity from renewable energy generated onsite and/or accredited GreenPower during Construction – only when connected to the grid. Source a minimum of 10% of electricity from renewable energy generated onsite and/or accredited GreenPower during operation – only when connected to the grid. 	<ul style="list-style-type: none"> Ene-1: Energy and carbon monitoring and reduction Ene-1: Energy and carbon monitoring and reduction Ene-1: Energy and carbon monitoring and reduction Ene-1: Energy and carbon monitoring and reduction Man-7: Decision making Ene-2: Renewable energy Ene-2: Renewable energy 	<ul style="list-style-type: none"> Table 6-1 Not applicable to Construction Table 6-1, App B7 CWEMP Table 6-1 Table 6-1 Table 6-1 Not applicable to Construction

Objectives	Sustainability targets	ISCA Credit Reference	Reference
Focus Area 3: Climate change resilience			
<ul style="list-style-type: none"> Design and construct transport infrastructure to be resilient to climate change impacts 	<ul style="list-style-type: none"> Prepare climate change risk assessment to identify risks over the life of the asset Identify and implement adaptation measures to mitigate all high and extreme residual climate change risks Stretch target: Identify and implement adaptation measures to mitigate all medium residual climate change risks 	<ul style="list-style-type: none"> Cli-1: Climate change risk assessment Cli-2: Adaptation options Cli-2: Adaptation options 	Table 6-1
Focus Area 4: Air Quality			
<ul style="list-style-type: none"> Minimise the air quality impacts of road projects and support initiatives that aim to reduce transport related air emissions. 	<ul style="list-style-type: none"> Aim for no recurring or major exceedances of air quality objectives at Construction and Operation. Report on and aim to achieve compliance with air emissions standards for mobile non-road diesel plant and equipment as per the NSW Government Resource Efficiency Policy. 	<ul style="list-style-type: none"> Dis-4: Air quality Dis-4: Air quality 	<p>App B6 CAQMP</p> <p>Table 6-1, Sections 7.5 and 7.8 App B6 CAQMP</p>
Focus Area 5: Resource use and waste management			
<ul style="list-style-type: none"> Minimise the use of non-renewable resources and minimise the quantity of waste disposed to landfill. 	Materials		
	<ul style="list-style-type: none"> Prepare a Resource Use and Waste Management Plan to identify and implement opportunities to minimise embodied impacts. Best endeavours to target at least 10% of cement replacement material (measured by mass) used in concrete, whilst maintaining current quality and whole-of-life costs. 	<ul style="list-style-type: none"> Mat-1: Materials footprint measurement and reduction Was-1: Waste management Pro-1: Commitment to sustainable procurement Pro-3: Supplier evaluation and contract award 	<p>Table 6-1, App B7 CWEMP</p> <p>Table 6-1</p>

Objectives	Sustainability targets	ISCA Credit Reference	Reference
	<ul style="list-style-type: none"> Best endeavours to target at least 10% of recycled material used in road base and sub-base, whilst maintaining current quality and whole-of-life costs. 	<ul style="list-style-type: none"> Pro-1: Commitment to sustainable procurement Pro-3: Supplier evaluation and contract award 	Table 6-1
	<ul style="list-style-type: none"> Source at least 80% of steel used in Construction from suppliers certified under Australian Certification Authority for Reinforcing Steels or similar international association or organisation. 	<ul style="list-style-type: none"> Mat-2: Environmentally labelled products and supply chains 	Table 6-1
Water use			
	<ul style="list-style-type: none"> Estimate potable water use, and identify opportunities to reduce water use during Construction and Operation (excluding Sydney Water main relocation activities). Implement a range of water saving opportunities with a financial payback of four years or less. Source at least 15% of non-potable water use (e.g. dust suppression, concrete mixing) from non-potable sources. Use rainwater and/or stormwater to provide passive irrigation to all tree plots and vegetated areas. Monitor and report water use during Construction. 	<ul style="list-style-type: none"> Wat-2: Replace potable water Wat-1: Water use monitoring and reduction Wat-2: Replace potable water Wat-1: Water use monitoring and reduction Wat-1: Water use monitoring and reduction 	<ul style="list-style-type: none"> Table 6-1 Table 6-1 Table 6-1 Table 6-1 Sections 7.5 and 7.8

Objectives	Sustainability targets	ISCA Credit Reference	Reference
	Waste		
	<ul style="list-style-type: none"> Prepare Construction Waste Management Plan following waste hierarchy principles. Reuse/recycle a minimum of 85% of Construction and demolition generated materials (uncontaminated) (diversion from landfill). Implement packaging take-back arrangements with suppliers. 	<ul style="list-style-type: none"> Was-1: Waste management Was-2: Diversion from landfill Was-1: Waste management 	<p>Table 6-1, App B7 CWEMP</p> <p>Table 6-1, App B7 CWEMP</p> <p>Table 6-1, App B7 CWEMP</p>
	Spoil		
	<ul style="list-style-type: none"> Reuse/recycle a minimum of 90% of usable spoil (uncontaminated surplus excavated material). 	<ul style="list-style-type: none"> Was-2: Diversion from landfill 	Table 6-1, App B7 CWEMP
	<ul style="list-style-type: none"> Incorporate sufficient storage areas and identify opportunities for reuse within reasonable transport distances. 	<ul style="list-style-type: none"> Was-1: Waste management 	Table 6-1, App B7 CWEMP
	Land		
	<ul style="list-style-type: none"> Minimise land use and acquisition as far as practicable. 	<ul style="list-style-type: none"> Lan-1: Previous land use 	Not applicable to Construction
	<ul style="list-style-type: none"> Restore all disturbed land not required for operational phase. 	<ul style="list-style-type: none"> Lan-2: Conservation of on site resources 	App A4 AFC
Focus Area 6: Pollution control			
<ul style="list-style-type: none"> Minimise noise, water and land pollution from road and maritime construction, operational and maintenance activities 	<ul style="list-style-type: none"> Aim for no recurring or major exceedances of water discharge or water quality goals during Construction and Operation. 	<ul style="list-style-type: none"> Dis-1: Receiving water quality 	App B4 CSWMP
	<ul style="list-style-type: none"> Aim for no recurring or major exceedances of air quality objectives during Construction and Operation. 	<ul style="list-style-type: none"> Dis-4: Air quality 	App B6 CAQMP
	<ul style="list-style-type: none"> Adopt noise mitigation measures where reasonable and feasible. 	<ul style="list-style-type: none"> Dis-2: Noise 	App B3 CNVMP

Objectives	Sustainability targets	ISCA Credit Reference	Reference
Focus Area 7: Biodiversity			
<ul style="list-style-type: none"> Improve outcomes for biodiversity by avoiding, mitigating or offsetting the potential impacts of road and maritime projects on plants, animals and their environments. 	<ul style="list-style-type: none"> Prepare a Flora and Fauna Management Plan to avoid and proactively manage any impacts to flora and fauna in accordance with the Roads and Maritime Biodiversity Guidelines. 	<ul style="list-style-type: none"> No specific credit 	Table 6-1, App B2 CFFMP
	<ul style="list-style-type: none"> Offset biodiversity impacts Promote regeneration of local native vegetation communities. 	<ul style="list-style-type: none"> Eco-1: Ecological value Eco-2: Habitat connectivity 	Biodiversity offset strategy (RMS) Table 6-1, App B2 CFFMP
Focus Area 8: Heritage			
<ul style="list-style-type: none"> Ensure cultural heritage is conserved and managed according to its heritage significance and that it contributes positively to awareness of the past 	<ul style="list-style-type: none"> Prepare a Cultural Heritage Management Plan to avoid and proactively manage any impacts to Heritage items. 	<ul style="list-style-type: none"> Her-1: Heritage assessment and management Her-2: Monitoring and management of heritage 	Table 6-1, App B5 CCHMP
Focus Area 9: Liveable communities			
<ul style="list-style-type: none"> Provide high quality urban design outcomes that contribute to the liveability of communities in NSW. 	<ul style="list-style-type: none"> Establish and implement appropriate community engagement strategy 	<ul style="list-style-type: none"> Sta-1: Stakeholder engagement strategy Sta-2: Level of engagement Sta-3: Effective communication Sta-4: Addressing community concerns 	CCS, Section 7.2
	<ul style="list-style-type: none"> Prepare urban design and landscape plan 	<ul style="list-style-type: none"> Urb-1: Urban design Urb-2: Implementation 	UDLP
	<ul style="list-style-type: none"> Improve customer journeys and road safety through design. 	<ul style="list-style-type: none"> No specific credit¹ 	Not applicable to Construction

Objectives	Sustainability targets	ISCA Credit Reference	Reference
	<ul style="list-style-type: none"> Improve facilities for public and active transport to promote sustainable and efficient journeys. 	<ul style="list-style-type: none"> No specific credit¹ 	Not applicable to Construction
	<ul style="list-style-type: none"> Consider future community needs in design 	<ul style="list-style-type: none"> Sta-4: Addressing community concerns 	Not applicable to Construction
Focus Area 10: Sustainable procurement			
<ul style="list-style-type: none"> Procure infrastructure, goods and services that over their lifecycle deliver value for money and contribute to the environmental, social and economic wellbeing of the community. 	<ul style="list-style-type: none"> Prepare a sustainable procurement plan for the project for matters covered by the sustainability strategy goals and targets 	<ul style="list-style-type: none"> Pro-1: Commitment to sustainable procurement 	Table 6-1
	<ul style="list-style-type: none"> Incorporate sustainability criteria into project contracts and tender evaluation criteria 	<ul style="list-style-type: none"> Pro-2: Identification of suppliers Pro-3: Supplier evaluation and contract award 	This CSMP and Strategy, RMS Specifications G01, G36
	<ul style="list-style-type: none"> Monitor sustainability performance (objectives / targets / indicators) of key suppliers (contracts >\$1,000,000 in total) 	<ul style="list-style-type: none"> Pro-2: Identification of suppliers Pro-4: Managing supplier performance 	Section 7.5
Focus Area 11: Workforce			
<ul style="list-style-type: none"> Facilitate economic prosperity and development and provide a resilient local workforce. 	<ul style="list-style-type: none"> Prepare a sustainable workforce plan in accordance with draft TfNSW Social Workforce Procurement Policy and Social Procurement Workforce for Major Projects. 	<ul style="list-style-type: none"> Hea-1: Community health and well-being 	Table 6-1
	<ul style="list-style-type: none"> Achieve NSW Government for Infrastructure projects Social Procurement Workforce targets (Infrastructure Skills Legacy Program) where feasible: <ul style="list-style-type: none"> 20% of the total labour force of a project to be made up of 'learning workers' (defined as trainees and workers who need to update their qualifications to meet the needs of the 	<ul style="list-style-type: none"> Hea-1: Community health and well-being 	Table 6-1

Objectives	Sustainability targets	ISCA Credit Reference	Reference
	infrastructure project) <ul style="list-style-type: none"> - 20% of all trades positions on a project to be made up of apprentices - 2% of women in trade-related work - 1.5% of the total contract value of a project to support Aboriginal participation - 8% of the total project workforce aged less than 25 years - Strategies to ensure projects employ and train people from the local region. 		

Notes:

¹ Safety in Design and improved facilities are addressed during the detailed design phase.

Man-2: Risk and opportunity management will be managed through the tender process.

Man-6: Knowledge sharing will be managed through collaboration with ISCA.

Dis-5 Light pollution will be managed during the detailed design phase and implemented through the tender process.

Lan-3: Contamination and remediation will be managed during the detailed design phase and implemented through the tender process.

Lan-4: Flooding design will be managed during the detailed design phase and implemented through the tender process.

Was-3: Deconstruction/ Disassembly/ Adaptability will be managed through the tender process.

5 ISCA score and rating

ISCA is the peak industry body for advancing sustainability outcomes in infrastructure in Australia. ISCA develops frameworks, decision tools and rating tools that are designed to facilitate infrastructure developers to take an integrated triple-bottom-line approach to the funding, planning, procurement, design and delivery, operations and maintenance of infrastructure projects.

ISCA’s Infrastructure Sustainability (IS) rating scheme is the key means by which ISCA assists in the advancement of achieving sustainability outcomes in infrastructure. The IS rating scheme is an industry-compiled voluntary sustainability performance rating scheme that evaluates the planning, design, construction and operation of all infrastructure asset classes in all sectors. It is Australia’s only comprehensive rating scheme for evaluating sustainability across design, construction and operation of infrastructure.

The IS rating scheme is a whole of life, dynamic and complete sustainability management system which, when applied during the As Built stage:

- provides a common national language for sustainability in infrastructure
- facilitates scoping whole-of-life sustainability risks for projects and assets
- fosters resource efficiency and waste reduction
- fosters innovation and continuous improvement in the sustainability outcomes from infrastructure.

The IS rating tool is an industry developed, owned and operated infrastructure sustainability rating tool that is used by infrastructure developers to evaluate sustainability initiatives and potential environmental, social and economic impacts of infrastructure projects. The IS rating scheme’s themes and categories are listed in Table 5-1.

Subject to meeting necessary requirements, including evidence of initiatives that have been implemented on the project that will facilitate sustainability, ISCA will certify the achievement of a rating at either ‘Commended’ (for a rating level of 25-49), ‘Excellent’ (for a rating level of 50 - 74) or ‘Leading’ (for a rating level of 75 – 100).

Table 5-1: IS rating scheme themes and categories

Themes	Categories	Credit	
Management and Governance	Management Systems	Man-1	Sustainability leadership and commitment
		Man-2	Risk and opportunity management
		Man-3	Organisational structure, roles and responsibilities
		Man-4	Inspection and auditing
		Man-5	Reporting and review
		Man-6	Knowledge sharing
		Man-7	Decision-making
	Procurement and Purchasing	Pro-1	Commitment to sustainable procurement
		Pro-2	Identification of suppliers
		Pro-3	Supplier evaluation and contract award
		Pro-4	Managing supplier performance

Themes	Categories	Credit		
	Climate change adaptation	Cli-1	Climate change risk assessment	
		Cli-2	Adaptation options	
Using Resources	Energy and carbon	En-1	Energy and carbon monitoring and reduction	
		En-2	Renewable energy	
	Water	Wat-1	Water use monitoring and reduction	
		Wat-2	Replace potable water	
	Materials	Mat-1	Materials footprint measurement and reduction	
		Mat-2	Environmentally labelled products & supply chains	
Emissions, Pollution and Waste	Discharges to air, land and water	Dis-1	Receiving water quality	
		Dis-2	Noise	
		Dis-3	Vibration	
		Dis-4	Air quality	
		Dis-5	Light pollution	
	Land	Lan-1	Previous land use	
		Lan-2	Conservation of on site resources	
		Lan-3	Contamination and remediation	
		Lan-4	Flooding design	
	Waste	Was-1	Waste management	
		Was-2	Diversion from landfill	
		Was-3	Deconstruction/ Disassembly/ Adaptability	
	Ecology	Ecology	Eco-1	Ecological value
			Eco-2	Habitat connectivity
People and Place	Community Health, Well-being and Safety	Hea-1	Community health and well-being	
		Hea-2	Crime prevention	
	Heritage	Her-1	Heritage assessment and management	
		Her-2	Monitoring and management of heritage	
	Stakeholder Participation	Sta-1	Stakeholder engagement strategy	
		Sta-2	Level of engagement	
		Sta-3	Effective communication	
		Sta-4	Addressing community concerns	
	Urban & Landscape Design	Urb-1	Urban design	
		Urb-2	Implementation	
Innovation	Innovation	Inn-1	Innovation	

NSW-CoA E51 requires that a Sustainability Strategy for the Construction of the Project be prepared in accordance with the IS rating tool or other justified rating mechanism to achieve an As Built rating equivalent to Excellent (a rating level of 50 – 74).

Roads and Maritime has registered the Project with ISCA with the purpose of achieving a certified IS rating.

The Contractor will implement sustainability initiatives for the stage of the Project for which it is responsible for delivering to achieve an As Built IS rating of Excellent. The Contractor will determine the IS rating for the Project stage using the IS rating tool to confirm the As Built rating. The sustainability initiatives to be implemented by the Contractors will be documented in the Contractors' CSMPs in accordance with the ISCA categories and themes.

6 Sustainability management measures

A range of environmental sustainability management measures are identified in the EIS and Roads and Maritime Specification G1. These are provided in Table 6-1.

Table 6-1: Sustainability environmental management measures

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference		
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW			
Energy and carbon management									
G1 25.2.1	The GHG Assessment provided within the EIS as modified by the SPIR will be reviewed and updated for the construction phase for Scope 1 and Scope 2 emissions and land clearing as a minimum.	Pre-Construction	Contractor Sustainability Manager (SM)	✓	✓	✓	✓	✓	Contractor's CSMP
G1 25.2.2a	An Energy Management Plan will be prepared to identify and implement construction stage energy saving opportunities.	Pre-Construction	Contractor Environmental Site Representative Contractor SM	✓	✓	✓	✓	✓	Contractor's CSMP Appendix B7 CWEMP
G1 25.2.2b	A Workforce Travel Plan (WTP) to reduce travel emissions will be prepared.	Pre-Construction	Contractor SM	✓	✓	✓	✓	✓	Contractor's CSMP
G1 25.2.3a	A minimum of 10% of electricity needs will be sourced from renewable energy generated onsite or from accredited Green Power or a combination of the two during the construction phase.	Construction	Contractor SM	✓	✓	✓	✓	✓	Contractor's CSMP Appendix B7 CWEMP
G1 25.2.3b	Workforce travel emissions will be monitored during construction and reported to Roads and Maritime in the Quarterly Project Sustainability Report.	Construction	Contractor SM	✓	✓	✓	✓	✓	Contractor's CSMP Appendix B7 CWEMP

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference	
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW		
G1 25.2.3c	Energy use and emissions will be monitored during construction using the TfNSW Carbon Estimation Reporting Tool (CERT) or equivalent and reported in the Quarterly Project Sustainability Report. Energy use includes from materials and transport of materials, including concrete, steel, asphalt, aggregate, timber, and piping, electricity use, diesel and other fuels use, waste generated, and land use and clearing.	Construction	Contractor Environmental Site Representative Contractor SM	✓	✓	✓	✓	Appendix B7 CWEMP Section 7.5 Section 7.8
Climate change resilience								
G1 25.3	The Climate Change Risk Assessment provided in the EIS as modified by the SPIR will be reviewed and updated to represent the current design using the TfNSW Climate Risk Assessment Guidelines or equivalent. The revised Assessment will be provided to Roads and Maritime for review prior to the commencement of construction. Adaptation measures to mitigate all medium, high and extreme residual climate change risks will be identified and implemented.	Construction	Contractor SM	✓	✓	✓	✓	Contractor's CSMP
Air quality								
G1 25.4	Air emissions for mobile non-road diesel plant and equipment will be monitored for compliance with the relevant United States Environmental Protection Agency, European Union standards or approved equivalent emission standards. Mobile non-road diesel plant and equipment emissions during construction will be reported to Roads and Maritime in the Quarterly Project Sustainability Report	Construction	Contractor SM	✓	✓	✓	✓	Appendix B6 CAQMP Section 7.5 Section 7.8

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference	
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW		
Resource use and sustainable procurement								
G1 25.5.1a	<p>A Resource Use and Procurement Plan (RUPP) will be prepared to identify and implement opportunities to minimise embodied impacts and facilitate the goals and targets of the CSMP including sourcing at least:</p> <ul style="list-style-type: none"> • 10% cement replacement material (measured by mass) used in concrete, while maintaining specified quality and whole-of-life costs • 10% recycled material used in road base and sub-base, while maintaining specified quality and whole-of-life costs • 80% of steel used in construction from suppliers certified under the Australian Certification Authority for Reinforcing Steels or similar international association or organisation. 	Construction	Contractor SM	✓	✓	✓	✓	Contractor's CSMP
G1 25.5.1b	<p>A Water Reuse Strategy will be prepared as a component of the RUPP to detail the quantities and uses of water on the Project through the construction phase, to investigate and evaluate all feasible reuse options for stormwater and groundwater, and to identify water saving opportunities to reduce potable water use during construction.</p> <p>The Water Reuse Strategy will identify water saving opportunities with a financial payback of four years or less.</p> <p>At least 15% of non-potable water use (e.g. dust suppression, concrete mixing) will be sourced</p>	Construction	Contractor SM	✓	✓	✓	✓	Contractor's CSMP

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference	
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW		
	<p>from non-potable sources.</p> <p>Rainwater and/or stormwater will be used to provide passive irrigation to tree plots and vegetated areas that are part of the Contract.</p>							
G1 25.5.1c	Resource use and procurement during construction will be monitored and reported in the Quarterly Project Sustainability Report.	Construction	Contractor SM	✓	✓	✓	✓	Section 7.5 Section 7.8
Waste management and recycling								
G1 25.5.2	<p>A Waste Management Sub-Plan will be prepared in accordance with Clause 4.11 of Specification RMS G36.</p> <p>A minimum of 90% of usable spoil (uncontaminated surplus excavated material) based on percent diversion from landfill will be reused on site or recycled off site.</p> <p>Incorporate sufficient storage areas for spoil and identify opportunities for reuse within reasonable transport distances.</p> <p>A minimum of 85% of construction and demolition generated materials (non-spoil, uncontaminated) based on percent diversion from landfill will be reused on site or recycle off site.</p> <p>Packaging take-back arrangements with suppliers will be implemented.</p> <p>Waste management, take-back, and recycling during construction will be monitored and reported in the Quarterly Project Sustainability Report.</p>	Construction	Contractor Environmental Site Representative Contractor SM	✓	✓	✓	✓	Appendix B7 CWEMP Section 7.5 Section 7.8

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference	
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW		
Flora and fauna								
G1 25.6	A Flora and Fauna Management Sub-Plan will be prepared in accordance with Clause 4.8 of Specification RMS G36 to avoid and proactively manage any impacts to flora and fauna.	Pre-Construction Construction	Contractor Environmental Site Representative	✓	✓	✓	✓	Appendix B2 - CFFMP
Heritage								
G1 25.7	A Heritage Management Sub-Plan will be prepared in accordance with Clause 4.9 and Clause 4.10 of Specification RMS G36 to avoid and proactively manage any impacts to heritage sites or items	Pre-Construction Construction	Contractor Environmental Site Representative	✓	✓	✓	✓	Appendix B5 - CCHMP
Liveable communities								
G1 25.8	A Community Involvement Plan (CIP) will be prepared and implemented in accordance with Clause 3.7 of Specification RMS G36	Pre-Construction Construction	Contractor Community Relations Manager	✓	✓	✓	✓	CCS Section 7.2 Contractors CIP
Sustainable workforce								
G1 25.9	A Sustainable Workforce Plan will be prepared in accordance with the TfNSW Social Procurement Workforce Policy for Capital Projects and Social Procurement Workforce for Major Projects. The NSW DoI social procurement workforce targets (Infrastructure Skills Legacy Program) will be achieved where feasible, including: <ul style="list-style-type: none"> 20% of the total labour force of a project to be made up of "learning workers" (defined as trainees and workers who need to update their qualifications to meet the needs of the 	Pre-Construction Construction	Contractor SM	✓	✓	✓	✓	Contractor's CSMP Section 7.5 Section 7.8

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference		
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW			
	<p>infrastructure project)</p> <ul style="list-style-type: none"> • 20% of all trades positions on a project to be made up of apprentices • 2% of women in trade-related work • 1.5% of the total contract value of a project to support Aboriginal participation. • 8% of the total project workforce aged less than 25 years • strategies to ensure projects employ and train people from the local region. <p>The workforce targets during construction will be monitored and reported in the Quarterly Project Sustainability Report.</p>								
SE-13	<p>Roads and Maritime would undertake the project in accordance with the NSW Government Policy on Aboriginal Participation in Construction (NSW Finance and Services, 2016).</p> <p>As part of the tender process, the contractor would also be required to prepare a Small to Medium Enterprise (SME) Participation Plan in line with the NSW Government SME Policy Framework to show how their tender will support local industry, including jobs, skills and capability development.</p>	Construction	Contractor Construction Project Manager	✓	✓	✓	✓	✓	Contractor's CSMP
Infrastructure Sustainability Council of Australia									
G1 25.10	<p>The ISCA Verified "Design" and "As Built" rating of at least Excellent (obtaining a minimum rating score of 55) will be obtained while incorporating the direction and targets of the:</p> <ul style="list-style-type: none"> • ISCA 	Construction Post-Construction	Contractor SM	✓	✓	✓	✓	✓	Contractor's CSMP

ID	Measure / requirement	When to implement	Responsibility	Applicability			Reference
				Stage 4 Cth NSW	Stage 5 Cth NSW	Stage 6 NSW	
	<ul style="list-style-type: none"> TfNSW Environment and Sustainability Policy. TfNSW Environment and Sustainability Policy Framework 2013. Roads and Maritime Services Environmental and Sustainability Strategy 2015-2019. 						

7 Compliance management

7.1 Roles and responsibilities

The Project organisational structure and overall roles and environmental responsibilities are outlined in Section 5.1 of the OACEMP. Specific responsibilities for the implementation of sustainability management are detailed below.

The Contractor's CSMP will identify the names, responsibilities and authority of the Contractor's site management personnel who have primary responsibility for developing, implementing and maintaining the CSMP and rectifying any sustainability non-conformities.

7.1.1 Roads and Maritime Project Sustainability Coordinator

Roads and Maritime will appoint a Sustainability Coordinator to oversee the Contractor's achievement of sustainability outcomes during the Construction phases. The Roads and Maritime Sustainability Coordinator will provide a communication and coordination role between ISCA representatives and the Contractor's Sustainability Manager in regard to the Contractor's ISCA rating application and for any ongoing consultation activities with ISCA during Construction of the Project.

7.1.2 Contractor's Sustainability Manager

The Contractor's Sustainability Manager will be a full time member of the Contractors' site team. The Contractor's Sustainability Manager will have at least five years of relevant sustainability experience on road construction or other equivalent linear works to drive the achievement of sustainability outcomes for the Project.

The responsibilities and authority of the Contractor's Sustainability Manager will include, but not be limited to:

- advising on sustainability matters
- liaising with Roads and Maritime and with all relevant authorities on sustainability matters
- maintaining a register of all sustainability management documents for the Contract
- ensuring that the Contractor's CSMP is established, implemented and maintained in compliance with this overarching CSMP and Strategy, Roads and Maritime Specification G1, including any sub-plans, procedures and supplementary EWMS, and upgrades to these documents (as needed) to remain current with the progress of the Project
- overall responsibility for the establishment, management, monitoring and maintenance of sustainability across the stage of the Project which the Contractor is delivering
- carrying out regular inspections and auditing of the works to ensure that sustainability safeguards are being followed
- identifying where the implemented sustainability measures are not meeting the targets set, and identifying areas where improvement can be achieved
- conducting monthly sustainability meetings, inviting the Roads and Maritime Project Sustainability Coordinator, taking minutes of the meetings and providing the minutes to all invitees
- preparing a Quarterly Project Sustainability Report and Annual Project Sustainability Report (refer Section 7.8).

7.2 Communication

Roads and Maritime will prepare and implement a Community Communication Strategy (CCS) in accordance with the requirements of NSW-CoA B1 to document the approach to stakeholder and community communications for the Project. The CCS will identify opportunities and tools for providing information and consulting with the community and stakeholders during the Construction of the Project. Contractors will support the delivery of the CCS.

The Contractor Community Relation Manager will prepare a Community Involvement Plan (CIP) in accordance with Clause 3.7 of Specification RMS G36.

Sustainability information will be communicated to the community and stakeholders in accordance with the principles and procedures outlined in the CCS and CIP.

Further detail about the CCS is provided in Section 5.5.3 of the OACEMP.

During Construction, knowledge and lessons learned will be shared across the Project stages through participation of Contractors and Roads and Maritime personnel at quarterly sustainability meetings.

7.3 Complaints management

Roads and Maritime will develop a Complaints Management System (CMS) to document the overall approach to complaints management for the Project. The Contractors will adopt the requirements of the CMS, including reporting requirements. The CMS will include a Complaints Register which will record the details of all complaints relating to the Project.

Further detail about the CMS is provided in Section 5.5.3 of the OACEMP.

7.4 Training

To ensure that this CSMP and Strategy is effectively implemented, all site personnel (including sub-contractors) will undergo site induction training relating to sustainability management issues prior to Construction commencing. The induction training will address elements related to sustainability management, including:

- existence and requirements of this overarching CSMP and Strategy, the Contractor's CSMP and all plans and procedures prepared under the CSMPs
- relevant legislation and regulations
- roles and responsibilities for sustainability management
- incident response, management and reporting
- proposed sustainability management measures and initiatives.

Targeted training in the form of specific training will also be provided to personnel with a key role in sustainability management. Site sustainability personnel will undergo refresher training at not less than six monthly intervals.

The ER will review and approve the induction and training program prior to the commencement of Construction and monitor implementation.

Daily pre-start meetings conducted by the Contractor Foreman will inform the site workforce of any environmental issues relevant to sustainability management that could potentially be impacted by, or impact on, the day's activities.

Further details regarding staff induction and training are provided in Section 5.3 of the OACEMP.

7.5 Monitoring and inspections

The Contractor's Sustainability Manager will monitor the following and report in the Quarterly and Annual Project Sustainability Reports:

- workforce travel emissions
- energy use and emissions
- water use
- air emissions for mobile non-road diesel plant and equipment
- resource use and procurement
- waste management
- workforce targets.

Requirements and responsibilities in relation to monitoring and inspections are also documented in Section 6.1 and Section 6.2 of the OACEMP.

The Construction Contractors will conduct regular environmental inspections for the duration of the Project. Roads and Maritime will also conduct independent inspections to confirm the Contractors' compliance with sustainability management requirements.

7.6 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of sustainability management measures, compliance with this CSMP and Strategy, conditions of approval and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 6.4 of the OACEMP.

7.7 Non-conformances

A non-conformance is the failure or refusal to comply with the requirements of project system documentation, including this CSMP and Strategy. Any member of the Contractors' Project team may raise a non-conformance or improvement opportunity.

Where a non-conformance is detected, the process described in Section 6.6 of the OACEMP will be implemented. The Contractor's Quality Plan will describe the process for managing non-conforming work practices and initiating corrective / preventative actions or system improvements in accordance with the process outlined in Section 6.6.1 of the OACEMP.

7.8 Reporting

The Contractors' Sustainability Managers will prepare the Quarterly and Annual Project Sustainability Reports for submission to Roads and Maritime. The reports will provide information on:

- performance against the sustainability targets (Table 4-1)
- performance against ISCA credits (Table 5-1)
- the works that have been undertaken and the achievements that have been met
- the areas where improvements have been made
- the results of the monitoring identified in Section 7.5 and Table 6-1:
 - workforce travel emissions
 - energy use and emissions
 - air emissions for mobile non-road diesel plant and equipment
 - resource use and procurement
 - waste management
 - workforce targets.

The Contractor's Sustainability Manager will provide the report to the Roads and Maritime Project Sustainability Coordinator within two weeks of the end of each quarter.

Reporting requirements and responsibilities are also documented in Section 6.5 of the OACEMP.

The Contractors will maintain accurate records substantiating all Construction activities associated with the Project or relevant to the conditions of approval, including measures taken to implement this CSMP and Strategy. The Quarterly and Annual Project Sustainability Reports and other sustainability records will be made available to the DP&E and DoEE upon request, within the timeframe nominated in the request.

8 Review and improvement

8.1 Continuous improvement

Continuous improvement of this CSMP and Strategy will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- identify areas of opportunity for improvement of sustainability management and performance
- determine the cause or causes of non-conformances and deficiencies
- develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- verify the effectiveness of the corrective and preventative actions
- document any changes in procedures resulting from process improvement
- make comparisons with objectives and targets.

8.2 CSMP and Strategy update and amendment

The processes described in Section 6.8 of the OACEMP may result in the need to update or revise this CSMP and Strategy. This will occur as needed.

Any revisions to this CSMP and Strategy will be in accordance with the process outlined in Sections 1.6 and 6.8 of the OACEMP.

A copy of the updated CSMP and Strategy and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure (refer to Section 1.5 of the OACEMP).

