

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Moorebank Precinct East Stage 2

23 JULY 2020



## SYDNEY INTERMODAL TERMINAL ALLIANCE

## Moorebank Precinct East Stage 2

Construction Environmental Management Plan

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#### **REVISIONS**

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005	27/09/2018	Updated with ISCA requirements, EPL information, and RfMA 002	ZQ	JC

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Revision	Date	Description	Prepared by	Approved by
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007	07/08/2019	Updates to reflect DoTEE comments on Rev 006	MWR	AL
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009	30/08/2019	Update to include reference to Condition 7b	JC	JC
010	24/10/2019	Minor updates associated with:	ZQ	AL
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		<ul> <li>RfMA 007 – Update to compliance and non- compliance definitions and inclusion of cumulative impacts required by EPBC CoA (2011/6029)</li> </ul>		
		<ul> <li>RfMA 008 – MAUW construction compound</li> </ul>		
		<ul> <li>RfMA 012 – Additional temporary construction access points</li> </ul>		
		<ul> <li>RfMA 013 – ISCA and UHIMS updates</li> </ul>		
		<ul> <li>RfMA 014 – Suitable spoil importation</li> </ul>		
		<ul> <li>RfMA 015 – Moorebank Precinct EPL</li> </ul>		
		<ul> <li>RfMA 019 – Clarification of definitions for Early Works and Construction Phase A activities</li> </ul>		
		<ul> <li>RfMA 021 – New parking area</li> </ul>		
		<ul> <li>RfMA 024 – MPW EPBC (2011/6086) and MPE EPBC (2011/6229) approval</li> </ul>		



Revision	Date	Description	Prepared by	Approved by
		requirements for DotEE review and approval		
011	21/11/2019	Update to address ER comments and removal of Construction Phase A updates associated with RfMA 019 and minor updates associated with RfMA 016 – Temporary access time extension	RP	JC
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013	20/12/2019	Updated to address ER comments on Revisions 11 and 12, and approved CTAMP-B	ZQ	AL
014	16/01/2020	Updated to address ER comments	ZQ	JC
015	23/07/2020	Updates associated with:  RfMA 018 – MAUW boundary extension  RfMA 028 – MAUW/MADR Stockpile Area  SSD 7628-Mod 2 approval, including Appendix D  Periodic review of management plans – Clarification of internal audit requirements	KB CS	JC AW

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#### **KEY TERMS AND ACRONYMS**

Acronym / Term	Meaning
ВМР	Bushfire Management Plan
CAQMP	Construction Air Quality Management Plan
CAR	Corrective action request
CBD	Central Business District
CCC	Campbelltown City Council
ccs	Community Communication Strategy
CEC	Community Engagement Consultant
CEMP	Construction Environmental Management Plan
CMP	Contamination Management Plan
CoC	Conditions of Consent
Commonwealth CoA	Commonwealth Conditions of Approval
Construction area / Construction footprint	Extent of construction works, namely areas to be disturbed during the construction of the Project, as identified in the MPE S2 RtS.
Contractor's CLM	Community Liaison Manager
Contractor's CM	Contractor's Construction Manager
Contractor's EM	Contractor's Environmental Manager
Contractor's PM	Contractor's Project Manager
DIPNR	Department of Infrastructure Planning and Natural Resources
DJLU	Defence Joint Logistics Unit
DNSDC	Defence National Storage and Distribution Centre
DotEE	Commonwealth Department of the Environment and Energy
DP&E	Department of Planning and Environment
DPI	Department of Primary Industries
DPI Fisheries	NSW Department of Primary Industries Fisheries division
DPI Water	NSW Department of Primary Industries Water division



Acronym / Term	Meaning
Early Works	Site preparation works, including:
	(a) establishment of site access points;
	(b) installation of temporary site fencing;
	(c) remediation, where required, including unexploded ordnance (UXO), exploded ordnance (EO) and exploded ordnance waste management;
	(d) survey; acquisitions; or building/ road dilapidation surveys;
	(e) establishment of site compounds;
	(f) installation of environmental mitigation measures;
	(g) heritage archival monitoring and recording;
	(h) heritage salvage;
	(i) clearing of non-native vegetation;
	(j) importation, stockpiling and placement of 60,000 m³ of spoil
	(k) utilities adjustment and relocation that do not present a significant risk to the environment, as determined by the Environmental Representative; and
	(I) other activities determined by the Environmental Representative to have minimal environmental impact.
ECM	Environmental Control Map
EEC	Endangered ecological communities
EIA	Environmental Impact Assessment
EIFR	Environmental Incident Frequency Rate
EIS	Environmental Impact Statement
EMS	Environmental Management System
ENM	Excavated natural material
Environmental Emergency	Any event that causes or has the potential to cause material harm to the environment. An environmental emergency is a Class 3 incident.
Environmental Incident	A set of circumstances resulting in harm, or potential harm, to the environment. Environmental incidents include pollution incidents and environmental emergencies. Environmental incidents may arise from natural (e.g. storm, wind or bushfire) or human factors.
EO	Exploded ordnance
EP&A Act	Environmental Planning and Assessment Act 1979



Acronym / Term	Meaning
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
EPRMP	Emergency Preparedness and Response Management Plan
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999
ER	Environmental Representative
EWEMP	Early Works Environmental Management Plan
FCMMs	Final Compilation of Mitigation Measures
FERP	Flood Emergency Response Plan
GFA	Gross floor area
ICAM	Incident Cause Analysis Method
IMEX	<ul> <li>Import Export Terminal. Includes the following key components:</li> <li>Truck processing, holding and loading areas – entrance and exit from Moorebank Avenue</li> <li>Rail loading and container storage areas – installation of four rail sidings with adjacent container storage area serviced by manual handling equipment initially overhead gantry cranes progressively.</li> <li>Administration facility and associated car parking – light vehicle access from Moorebank Avenue</li> </ul>
ISCA	Infrastructure Sustainability Council of Australia
Material harm	<ul> <li>Material harm is harm that:</li> <li>Involves actual or potential harm to the health or safety of human beings or to</li> <li>Ecosystems that is not trivial, or</li> <li>Results in actual or potential loss or property damage of an amount, or amounts in</li> <li>Aggregate, exceeding \$10,000, (such loss includes the reasonable costs and</li> <li>Expenses that would be incurred in taking all reasonable and practicable measures to</li> <li>Prevent, mitigate or make good harm to the environment).</li> </ul>
MAUW	Moorebank Avenue Upgrade Works



Acronym / Term	Meaning
Minor Amendment	<ul> <li>Minor amendments to the CEMP are those that:</li> <li>Comprise updating the CEMP or are of an administrative nature, and are consistent with the terms of the consent and the CEMP, sub-plans and monitoring programs approved by the Secretary</li> <li>Do not significantly alter the outcomes of the project, such that a planning modification would be required by DP&amp;E</li> <li>Are not considered to carry significant environmental risk, more than those outlined in the Project Environmental Impact</li> </ul>
	Statement (EIS)  Will not detrimentally increase predicted impacts to the surrounding communities.
Moorebank Avenue Compound	The construction area located on the western side of Moorebank Avenue, in an existing area of hardstand within the MPW site. The Moorebank Avenue Compound will include:  Site offices Car parking Equipment storage and laydown areas.
Moorebank Precinct	Refers to the whole Moorebank intermodal precinct, i.e. the MPE site and the MPW site.
MPE	Moorebank Precinct East
MPE Concept EIS	The Environmental Impact Statement prepared to support the application for approval of the MPE Concept Plan under the Environmental Planning and Assessment Act 1979.
MPE Concept Plan Approval	MPE Concept Approval (MP 10_0193), granted by DP&E on 29 September 2014 for the development of an intermodal terminal facility including; a rail link connecting the site to the Southern Sydney Freight Line, an intermodal terminal, warehousing and distribution facilities and a freight village.
MPE EPBC Approval	Commonwealth Approval (No. 2011/6229) granted in March 2014 under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> , for the impact of the MPE Project on listed threatened species and communities (sections 18 and 18A of the EPBC Act) and Commonwealth land (sections 26 and 27A of the EPBC Act).
MPE Project	The MPE Intermodal Terminal Facility as approved under the MPE Concept Approval (MP 10_0193) and the MPE EPBC Approval (2011/6229).
MPE site	Including the former DSNDC site and the land owned by SIMTA which is subject to the MPE Concept Plan Approval (Lot 1



Acronym / Term	Meaning
	DP1048263). The MPE site does not include the rail corridor, which relates to the land on which the rail link is to be constructed.
MPE Stage 1 Project	MPE Stage 1 Project (SSD 14-6766) for the development of the Intermodal terminal facility at Moorebank. This reference also includes associated conditions of approval and environmental management measures which form part of the documentation for the approval.
MPE Stage 2 EIS	Moorebank Precinct East Stage 2 Proposal – Environmental Impact Statement publicly exhibited between 13 December 2016 and 24 February 2017.
MPE Stage 2 RtS	Moorebank Precinct East Stage 2 Proposal – Response to Submissions Report (July 2017), prepared in response to the submissions received regarding the MPE Stage 2 Proposal.
MPE Stage 2 Project	As approved under SSD 7628, Stage 2 of the MPE Concept Approval (MP 10_0193) and SSD 7628-Mod 2 Approval including the construction and operation of warehousing and distribution facilities on the MPE site and upgrades to approximately 2.1 kilometres of Moorebank Avenue.
	"the Project" for the purposes of this CEMP.
MPW	Moorebank Precinct West
Native vegetation	For the purposes of this management plan, native vegetation is defined as areas of plant community types mapped by Arcadis and WSP Parsons Brinckerhoff in the Moorebank Precinct (including Moorebank Precinct East and Moorebank Precinct West), being a consolidation of all assessments for the Moorebank Precinct conducted since 2011.
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 7628 Conditions of Consent or EPBC Act Approval (EPBC 2011/6229) Conditions of Approval but is not an incident
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan
OEH	Office of Environment and Heritage
Operational area / Operational footprint	Extent of operational activities for the operation of the Project
OSD	On-site detention basin
POEO Act	Protection of the Environment Operations Act 1997
Pollution Incident	A set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a



Acronym / Term	Meaning
	substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise (POEO Act).
PIRMP	Pollution Incident Response Management Plan
Pre-construction area	Extent of pre-construction works, namely areas to be disturbed during the pre-construction stage of the Project, as identified in the MPE S2 RtS.
Project Management Team	The project management team would include, as a minimum the project Manager, Construction Manager, Environmental Manager and Site Supervisor. Additional parties may be included where deemed relevant.
Project personnel	All persons listed in Section 2.4 including sub-contractors working on the Project site.
Project site / Project footprint	The subject of the MPE Stage 2 EIS, the part of the MPE site which includes all areas to be disturbed by the Project (including the operational area and construction area).
Rail link	Part of the MPE Stage 1 Proposal (14-6766), connecting the MPE site to the SSFL. The Rail link (as discussed above) is to be utilised for the operation of the Proposal.
RALP	Rail Access Lands Package
RfMA	Request for Minor Amendment
RtS	Response to Submissions
SODCT	Sustainability Online Data Collection Tool
SHEMS	Safety Health and Environmental Management System
SIMTA	Sydney Intermodal Terminal Alliance
SIMTA Precinct Developer	Qube
SSD	State significant development
SSFL	Southern Sydney Freight Line
The Project	The MPE Stage 2 Project. Stage 2 of the MPE Concept Approval (MP 10_0193) and Modification 2 Approval, approved under SSD 7628. It involves the construction and operation of warehousing



Acronym / Term	Meaning
	and distribution facilities on the MPE site and upgrades to approximately 1.5 kilometres of Moorebank Avenue.
UHI	Urban Heat Island
UHIMS	Urban Heat Island Mitigation Strategy
UXO	Unexploded ordnance
VENM	Virgin excavated natural material
Warehousing Compound	The main construction compound of the Project. The warehousing compound will include:
	Site office(s)
	Staff amenities
	Car parking
	Storage and laydown areas
	Material stockpiling
	Materials testing facilities
	Materials crushing facilities
	Concrete batching plant.



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#### 1 BACKGROUND

#### 1.1 Introduction

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stage 2 of the Moorebank Precinct East (MPE) Project, which comprises the second stage of development under the MPE Concept Approval (MP10\_0193) and approved under Development Consent SSD 7628. This has subsequently been modified under the MPE Stage 2 Modification 2 (SSD 7628-Mod 2) application, which was approved on 31 January 2020.

The MPE Project involves the development of an intermodal facility including warehouse and distribution facilities, freight village (ancillary site and operational services), stormwater, landscaping, servicing and associated works on the eastern side of Moorebank Avenue, Moorebank. It is to be developed in three key stages:

- Stage 1 Construction of the IMEX facility and rail link
- Stage 2 Construction of warehouse and distribution facilities
- Stage 3 Extension of the IMEX and completion of warehouse and distribution facilities.

The MPE site is located approximately 27 kilometres (km) south-west of the Sydney Central Business District and approximately 26 km west of Port Botany and includes the former Defence National Storage and Distribution Centre (DNSDC) site. The MPE site is situated within the Liverpool Local Government Area (LGA), in Sydney's South West subregion, approximately 2.5 km from the Liverpool City Centre.

Stage 2 of the MPE Project (the Project) involves the construction and operation of warehousing and distribution facilities on the MPE site. It includes an upgrade of approximately 2.1 kilometres of Moorebank Avenue.

Key components of the Project include:

- Earthworks including the importation of 600,000 m<sup>3</sup> of fill and vegetation clearing
- Importation, stockpiling and placement of up to 250,000 m³ of suitable spoil (separate to the 600,000 m³ of imported clean general fill permitted for bulk earthworks)
- Approximately 300,000 m<sup>2</sup> gross floor area (GFA) of warehousing and ancillary offices
- Warehouse fit-out
- Freight village, 8,000 m<sup>2</sup> GFA of ancillary retail, commercial and light industrial land uses
- Internal road network and hardstand across the site
- Ancillary supporting infrastructure within the site, including:
- Stormwater, drainage and flooding infrastructure
- Utilities relocation/installation
- Fencing, signage, lighting, remediation and landscaping
- Moorebank Avenue upgrade including:
- Raising by about two metres and some widening
- Embankments and tie-ins to existing Moorebank Avenue road levels
- Signalling and intersection works



- Intersection upgrades along Moorebank Avenue including:
- Moorebank Avenue/MPE Stage 2 access
- Moorebank Avenue/MPE Stage 1 northern access
- Moorebank Avenue/MPE Stage 2 central access
- Moorebank Precinct West (MPW) Southern Access/MPE Stage 2 southern emergency access.

The location of the Project site is provided in Figure 1-1.

This CEMP defines the environmental management framework under which the Project will be delivered.



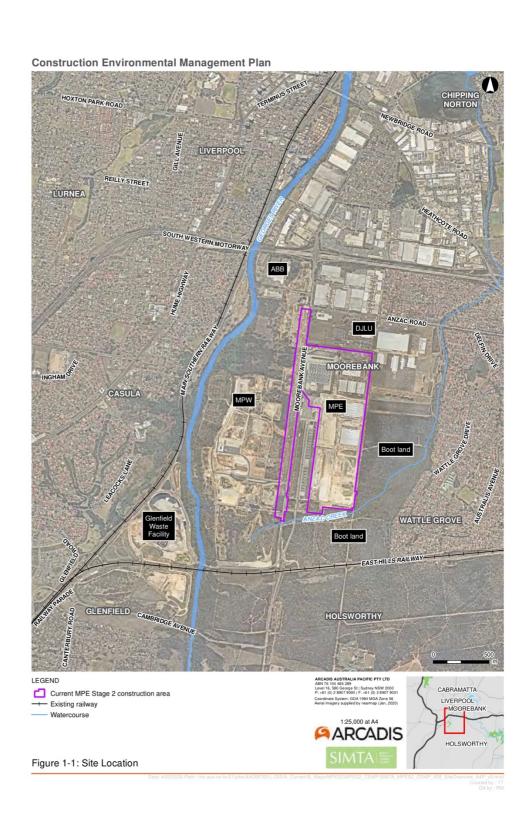


Figure 1-1 Site Location



#### 1.2 Development Consent

The MPE Stage 2 Project has been assessed by the DP&E under Part 4.7 (Division 4.1 prior to 1 March 2018) of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) as State significant development (SSD). The Planning Assessment Commission granted approval for the MPE Stage 2 Project on 31 January 2018 and is subject to the Minister's CoCs (SSD 7628). The Project has subsequently been modified under Modification 2 (SSD 7628-Mod 2), which was approved on 31 January 2020. The Project, including its potential impacts, consultation and proposed mitigation and management, is documented in the following suite of documents:

- State significant development (SSD) Consent SSD 7628 and Modification 2 (SSD-7628-Mod 2)
- Moorebank Precinct East Stage 2 Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, December 2016)
- Moorebank Precinct East Stage 2 (Modification 2) Environmental Impact Statement SSD 7628-Mod 2 (Aspect Environmental Pty Limited, July 2019)
- Moorebank Precinct East Stage 2 Response to Submissions (Arcadis Australia Pacific Pty Limited, July 2017)
- Moorebank Precinct East Stage 2 (Modification 2) Response to Submissions (Aspect Environmental Pty Limited, September 2019)
- MPE Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
   Approval (No. 2011/6229) granted on March 2014
- MPW Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Approval (No. 2011/6086) granted on September 2016 (for Moorebank Avenue Upgrade Works only)
- Consolidated assessment clarification responses issued on 10 November 2017 (Arcadis 2017).

#### 1.2.1 CEMP Context

This CEMP forms part of the overarching Project Management Plan for delivery of the Project, and provides a structured approach to the management of environmental issues during construction of the Project. The CEMP is to be read in conjunction with the Project Management Plan.

This CEMP has been developed in accordance with:

- Department of the Environment and Energy (DotEE) Approval (EPBC 2011/6229)
- The Minister's Conditions of Consent (CoC) and Development Consent SSD 7628
- Final Compilation of Mitigation Measures (FCMM) from the MPE Stage 2 Response to Submissions (RtS)
- Infrastructure Sustainability Council of Australia (ISCA) Project specific requirements
- Guideline for the Preparation of Environmental Management Plans (Dept. of Infrastructure Planning and Natural Resources (Department of Infrastructure, Planning and Natural Resources (DIPNR)), 2004)
- MPE Stage 2 Proposal: Response to Submissions, Appendix I: Consolidated Proposal Description
- MPE Stage 2 Proposal: Response to Submissions, Appendix H: Preconstruction Environmental Works Method Statement



MPE – Stage 2 Proposal Environmental Impact Statement.

This CEMP is relevant during the construction phase of the Project. This plan will supersede the Early Works Environmental Management Plan (EWEMP) that was developed to provide context to the sub-plans that were required during Early Works activities.

#### 1.2.2 Staged Submission of this Plan

Subject to the approval of the Secretary (CoC A14), the Project has elected to stage the submission of a number of strategies, plans and programs that are required by the CoCs based on the Delivery Works Phases identified in Table 1.

In accordance with CoC A15, Table 1 identifies the stage of the development to which this document applies, and the relationship to any future stage. The trigger for updating the document is also identified in Table 1. When a document is updated, the most recent version of the document will supersede the previous version(s).

Table 1 Staged Documentation and Triggers to Satisfy CoC A15

Delivery Works Phases	General Description of Works	Current Document	Trigger to Update Document
Early Works			
Early Works	Utilities adjustments and relocations, clearing and stripping of topsoil, heritage salvage, fill importation, establishment of site access, temporary fencing and compound establishment, asbestos and hazardous material removal and demolition of buildings	☐ Document prepared to address Early Works only	Prior to the commencement of construction works
Construction	1		
	Early Works activities (as		
Construction Phase A	described above), bulk earth works, drainage and utilities, construction and internal fit-out of warehousing and finishing works	Document prepared to address Construction Works Phase A only (does not address Moorebank Avenue upgrade works)	Prior to the commencement of Moorebank Avenue upgrade works



#### 1.2.3 CEMP Purpose, Objectives and Application

The primary purpose of the CEMP is to define the environmental management framework and management measures that will be implemented throughout the construction of the Project, enabling Project personnel to understand their obligations under applicable environmental legislation, specifications and approvals and minimise environmental impacts associated with construction of the Project.

The objectives of this CEMP are to:

- Identify and implement relevant environmental legal and other regulatory requirements applicable to the construction works
- Identify the potential environmental aspects and impacts associated with construction of the Project and provide management measures which will enable the Project to minimise and manage impacts on the environment and community
- Assign responsibility for the implementation, management and review process
- Provide a consistent and uniform approach which assures that the required standards and environmental protection are attained and maintained for the duration of the Project works
- Provide all personnel working on the Project with sufficient information to undertake their works in accordance with the development consent conditions, contractual, legal and other relevant environmental requirements
- Provide a framework for training, development and support (systems, procedures and documentation) necessary to undertake the works
- Ensure that the commitments of the Environmental Impact Assessment (EIA) process are captured and implemented on-site
- Establish and define environmental roles and responsibilities
- Ensure that senior management and construction personnel understand their environmental duty of care under legislation and terms of the contract
- Meet the requirements of, and align with, SIMTA's Environment Management System (EMS), as certified under AS/NZS ISO 14001:2015 Environmental Management System.

Implementing this CEMP effectively will enable the Project team to meet its regulatory and policy requirements in a systematic manner and continually improve its environmental performance.

#### 1.2.4 Stakeholder Consultation

The CEMP sub-plans were produced in consultation with the relevant stakeholders identified in the CoCs.



Table 2 provides a summary of the stakeholders consulted during preparation of the plans.

During the consultation process comments received were addressed within relevant sub-plans, with plans updated to address comments received. Evidence of consultation is included in each relevant sub-plan.



Table 2 Consultation Summary

Agency	Plan(s) Consulted	Status
Campbelltown City Council	Construction Traffic and Access Management Plan	Open
Department of Defence	Construction Heritage Management Plan	Closed
Environmental Protection Authority	Construction Noise and Vibration Management Plan	Closed
Liverpool City Council	Construction Traffic and Access Management Plan	Open
	Construction Heritage Management Plan	Open
Moorebank Heritage Group	Construction Heritage Management Plan	Closed
NSW Heritage Division	Construction Heritage Management Plan	Open
	Unexpected Finds Protocol – included in Construction Heritage Management Plan	Open
Office of Environment and Heritage	Unexpected Finds Protocol – included in Construction Heritage Management Plan	Open
	Construction Flora and Fauna Management Plan	Open
Registered Aboriginal Parties	Unexpected Finds Protocol – included in Construction Heritage Management Plan	Open
Roads and Maritime Services	Construction Traffic and Access Management Plan	Open
Transport for NSW	Construction Traffic and Access Management Plan	Open

#### 1.2.5 CEMP Approval and Implementation

This CEMP must be submitted to DotEE for approval in accordance with the MPE EPBC Approval (EPBC 2011/6229) and MPW EPBC Approval (EPBC 2011/6086).

This CEMP must be reviewed and endorsed by the Project's Environmental Representative (ER). Once endorsed, the CEMP will be submitted for the approval of the Secretary of DP&E no later than one month prior to the commencement of construction, in accordance with CoC C8. At a minimum, this will serve as notification to DP&E at least one month prior to the commencement of construction as required in CoC A18. Construction must not commence until the CEMP is approved (CoC C2(a)).

Construction will be undertaken in accordance with the most recent, approved version of this CEMP (CoC B1(c), C2(b)).

#### 1.2.6 Distribution and Availability

The master 'controlled' CEMP document will be held within the Project's document management system where it can be accessed by personnel as necessary. The most recent approved version of this CEMP and other nominated documents and records



will be made publicly available on the Project's website, a minimum of 48 hours prior to commencement of construction, in accordance with CoC C20.

#### 1.2.7 Revision

The CEMP will be reviewed annually, as a minimum, but may be revised more regularly depending on process changes and refinements. Revisions of this CEMP may result from:

- CEMP review
- Audits (either internal or by external parties)
- Changes to the EMS
- Changes to procedures, scope of works and/or systems after an incident or potential incident
- Design changes
- Construction activity changes
- Changes in the CoCs
- Identification of opportunities for improvement or deficiencies in the Project system (e.g. through the course of site inspections)
- Following, complaints.

Revisions that are classified as Minor Amendments, in accordance with CoC C24(h) shall be reviewed and approved by the Principal's Representative prior to issue to the ER who has been given the authority to approve/reject "minor" amendments to the CEMP. Minor amendments to the CEMP are those that:

- Comprise updating the CEMP or are of an administrative nature, and are consistent with the terms of the consent and the CEMP, CEMP sub-plans and monitoring programs approved by the Secretary
- Do not significantly alter the outcomes of the project, such that a planning modification would be required by the DP&E
- Are not considered to carry significant environmental risk, more than those outlined in the Project Environmental Impact Statement (EIS)
- Will not detrimentally increase predicted impacts to the surrounding communities.

Where the amendments are not considered to be outside the definition of "minor" provided above, the CEMP will be submitted to DP&E for review and approval. Updates to the CEMP must also be submitted to DotEE for approval in accordance with the EPBC Act Approval (2011/6229).

Updates to this plan are numbered consecutively and issued to holders of controlled copies.

#### 1.2.7.1 Changes to the CEMP and Sub-plans

CoC A2 identifies that the Project must be undertaken 'in accordance with' relevant environmental impact assessment (EIA) documentation and in compliance with the CoCs. To demonstrate compliance with this condition, an assessment process has been prepared, to facilitate the review and approval of minor amendments to the CEMP and associated sub-plans.



The assessment process involves:

- Preparation of an Accordance Assessment, developed by the Principal's Representative to assess the proposed change and satisfy themselves that the change is in compliance / in accordance with the documents listed in CoC A2
- Submission of a Request for a Minor Amendment (RfMA) by the Principal's Representative to the ER to update the CEMP and sub-plans
- ER reviews RfMA and subsequently endorses the updated CEMP and sub-plans under CoC C24(h)).

The term "Minor Amendment" as it relates to this process is defined within Section 1.2.7 of this CEMP. Consideration of 'Minor Amendments' is also given to consistency with relevant Commonwealth CoAs.

#### 1.3 Project Description

The Project involves the construction and operation of warehousing and distribution facilities on the MPE site and upgrades to approximately 2.1 km of Moorebank Avenue. Key components of the Project include:

- Warehousing comprising approximately 300,000 m<sup>2</sup> gross floor area (GFA) and including, but not limited to, warehousing and attached offices, container storage areas, car parking, truck loading/unloading areas and vehicle manoeuvring and access roads
- A freight village, comprising 8,000 m<sup>2</sup> GFA and including, but not limited to, freight village buildings, car parking, truck loading/unloading areas and vehicle manoeuvring and access roads
- Establishment of an internal road network, and connection of the Project to the surrounding public road network
- Ancillary supporting infrastructure within the Project site, including:
- Stormwater, drainage and flooding infrastructure
- Utilities relocation and installation
- Vegetation clearing, remediation, earthworks, signage and landscaping
- Moorebank Avenue Upgrade comprising the following key components:
- Establishment of a temporary diversion road on the MPW site
- Modifications to the existing lane configuration, including some widening
- Earthworks, including construction of embankments and tie-ins to existing
   Moorebank Avenue road level at the southern and northern extents of the Project.
- Raking of the existing pavement and installation of new road pavement
- Establishment of temporary drainage infrastructure, including temporary basins and / or swales
- Adjusting the vertical alignment by about two metres from the existing levels, including kerbs, gutters and a sealed shoulder
- Signalling and intersection works
- Upgrading existing intersections along Moorebank Avenue, including:
  - Moorebank Avenue / MPE Stage 2 access
  - Moorebank Avenue / MPE Stage 1 northern access
  - Moorebank Avenue / MPE Stage 2 central access



■ MPW Northern Access / MPE Stage 2 southern emergency access

The Project construction compounds and construction area are shown in Figure 1-2, and the warehousing, freight village and Moorebank Avenue upgrade works are shown in Figure 1-3.



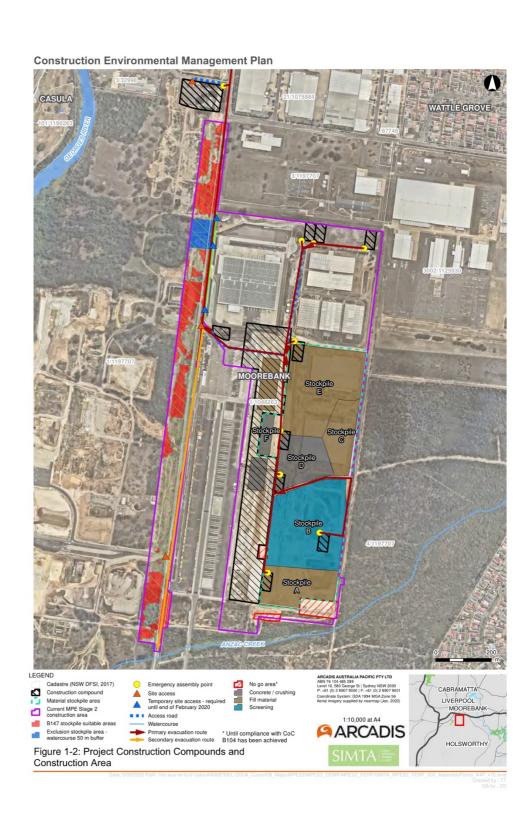


Figure 1-2 Project Construction Compounds and Construction Area





Figure 1-3 Warehousing, Freight Village and Moorebank Avenue Upgrade



#### 1.3.1 Summary of Project Delivery Phases

The Project construction period is anticipated to be approximately 24 to 36 months, which will be generally divided into three works phases, as detailed in the following sections.

The terminology for the project phases or periods has developed from the preparation of the EIS and RtS documentation in response to the language of the CoCs and the need to stage the delivery of the environmental management documentation required by the CoCs. Current terminology, and the equivalent terminology from the CoCs and RtS are included in Table 3.

Table 3 Project Delivery Phase Terminology

Project Delivery Phase	CoC A18 Phase Equivalent	MPE Stage 2 RtS Works Period Equivalent
Early Works	Early Works Fill importation (to 60,000m³)	Works Period A: Pre-construction Works Period B: Site preparation
Construction Phase A	Fill importation Construction	Works Period B: Site preparation Works Period E: Bulk Earthworks Works Period F: Construction and internal fit out of warehousing Works Period G: Miscellaneous construction works
Construction Phase B	Fill importation Construction	Works Period C: Construction of Moorebank Avenue Diversion Road Works Period D: Pavement and intersection works along Moorebank Avenue

#### 1.3.2 Early Works

Early Works is generally described as site preparatory works including utilities adjustments and relocations, clearing and stripping of topsoil (top 100 mm of topsoil), heritage salvage and fill importation (including VENM and ENM, up to 60,000 m³), establishment of site access, temporary fencing and compound establishment, asbestos and hazardous material removal and preparation for the demolition of buildings.

The Early Works includes but is not limited to:

- Geotechnical and utilities investigation works including potholing to confirm the location of existing services, disconnection of non-critical services (with retention in place), grout filling of disconnected draining lines, and adjustment and relocation where applicable
- Clearing of non-native vegetation, stripping of topsoil and stockpiling of topsoil on site for later re-use within site landscaping
- Stabilisation of areas where topsoil has been stripped with imported clean hard fill
  or by other methods determined by the ER to have minimal environmental impact
- Removal of asbestos from heating equipment and fire resistant building elements (e.g. fire doors) by a licenced asbestos removalist followed by clearance by a certified occupational hygienist



- Hazardous material cleaning and decontamination in Buildings 67, 69, 81 and 83
- Heritage salvage works in Buildings 37, 75 and 80 on the Project site to recover architectural elements for adaptive re-use
- Importation, stockpiling and placement of up to 60,000 m³ (not exceeding a total of 22,000 m³ of material per day) of imported clean general fill material by truckand-dog and / or semi-trailer
- Establishment of a site access point at the existing MPE site northern access and construction of associated access road, utilising existing paved areas with minor pavement extensions required, to provide for access and manoeuvrability of vehicles into and through the site in accordance with CoC B10
- Establishment of temporary site fencing, a site compound/s (includes MAUW compound establishment) and temporary car parking areas to support Early Works and construction of the Project in accordance with CoC B10
- Other activities determined by the ER to have minimal environmental impact.

Any of the activities defined in SSD Consent 7628 as 'Early Works' may be undertaken during Early Works, which may overlap the construction works phase and be undertaken concurrently with construction phase activities. All works during Early Works will be undertaken in accordance with the EWEMP and required sub-plans.

Upon the commencement of construction, this CEMP will supersede the EWEMP.

## 1.3.3 Construction Works Phase A (excluding Moorebank Avenue Upgrade Works)

Construction Works Phase A will include all works described in Early Works in addition to bulk earthworks, drainage and utilities, construction and internal fit-out of warehousing and finishing works. All vegetation clearing, and filling will be completed within the construction boundary. Construction Works Phase A excludes Moorebank Avenue works described in Section 1.3.4 below.

Construction Works Phase A includes, but is not limited to:

#### **Completion of Site Preparation Activities**

- Demolition of existing structures in accordance with Australian Standard AS2601-1991 – Demolition of Structures
- Clearing of remaining vegetation
- Adjusting the building formation of the site (to final operational levels) within which the Warehousing Compound will be located
- Establishment of temporary batch plant and materials crushing plant

#### **Bulk Earthworks, Drainage and Utilities**

- Importation, stockpiling and placement of up to 600,000 m<sup>3</sup> of imported clean general fill for bulk earthworks
- Importation, stockpiling and placement of up to 250,000 m³ of suitable spoil (separate to the 600,000 m³ of imported clean general fill permitted for bulk earthworks)
- Installation of on-site detention (OSD) and drainage infrastructure within the MPE Stage 2 site
- · Construction of retaining walls
- Creation of internal road formation by general earthworks (by constructing fill embankments)



- Bulk earthworks and adjusting the building formation of the Project site to final level, including the terminal hardstand
- Utilities relocation and installation
- Establishment of hardstand areas.

#### **Construction and Internal Fit-out of Warehousing**

- Foundation and floor slab installation
- Erection of framework and structural walls
- Installation of roof
- Internal fit-out of warehouses (racking and associated services).
- Installation of solar panels, rainwater harvesting systems and Green star features as per the recommendations of the UHIMS. This includes helicopter assisted installation.

#### Miscellaneous Construction and Finishing Works

- Pavement construction (internal transfer roads and perimeter road), including forming of new kerbs, gutters, medians (where required) and other structures
- Line marking, lighting and sign posting
- Installation of road furniture, including traffic signs and pavement markers.
- Miscellaneous structural construction
- Finishing works, including landscaping and general site rehabilitation, where required
- · Commissioning of the Project
- Decommissioning/demobilisation of the Project site, including removal of construction compound(s) and temporary construction environmental controls.

#### 1.3.4 Construction Works Phase B

Construction Works Phase B will include all works described in Early Works Phase and Construction Works Phase A, in addition to the Moorebank Avenue upgrade works. Generally, the Moorebank Avenue upgrade works are described as construction of the Moorebank Avenue Diversion Road, bulk earthworks, drainage and utilities, and pavement works.

Construction Works Phase B includes, but is not limited to:

#### Construction of the Moorebank Avenue Diversion Road

- Stripping of topsoil within footprint of temporary diversion road
- Installation of temporary drainage
- Placement of fill and temporary road pavement (e.g. gravel)
- Construction of interface between temporary diversion road and existing Moorebank Avenue
- Installation of temporary road signage, street lighting and signalling
- Transfer of traffic onto temporary diversion road from Moorebank Avenue.

#### **Bulk Earthworks, Drainage and Utilities**

Removal of existing pavement and stripping of topsoil within Moorebank Avenue



- Importation, stockpiling and placement of approximately 600,000 m<sup>3</sup> of imported clean general fill for bulk earthworks
- Importation, stockpiling and placement of up to 250,000 m³ of suitable spoil (separate to the 600,000 m³ of imported clean general fill permitted for bulk earthworks)
- Creation of a road formation by general earthworks (by constructing fill embankments)
- Utilities relocation and installation

#### **Pavement Works Along Moorebank Avenue**

- Placement of select layer of earthworks material on top of the road formation
- Placing and compacting the pavement later (concrete, or concrete and asphalt) over the select layer (consisting of a sub-base and base) and potential sealing with bitumen
- Traffic switching from diversion road onto final, upgraded Moorebank Avenue
- Removal of construction traffic management and progressive opening of the internal road and warehouse access roads to traffic
- Removal of road surface, road signage, street lighting and signalling from temporary diversion road
- Commissioning of Moorebank Avenue.

#### **1.4 Construction Program**

Construction of the Project is planned to commence in the first quarter of 2018 with construction expected to last between 24 and 36 months. The delivery phases are interrelated and overlap; the order of staging may alter slightly based on detailed construction contractor staging. Works will be undertaken progressively in different areas of the Project site. Some warehouses may be operational, prior to completion of construction in other areas of the site.

An indicative construction program is outlined in Table 4.

Table 4 Indicative Construction Program

	Construction Works Period	2018			2019				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Pre-construction activities								
Early Works	Site preparation activities & fill importation								
Construction Phase A	Bulk earthworks, drainage and utilities								
	Construction and internal fit-out of warehousing								
	Miscellaneous construction and finishing works								



	Construction Works Period	2018				2019			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Construction Phase B	Construction of the Moorebank Avenue diversion road								
	Pavement and intersection works along Moorebank Avenue								

#### 1.5 Construction Hours

In accordance with CoC B65, construction works will generally be undertaken during standard daytime construction working hours, being:

- 07:00 am to 06:00 pm Monday to Friday
- 08:00 am to 01:00 pm Saturday
- No works on Sunday or public holidays.

In accordance with CoC B66, activities resulting in a high noise impact (including impulsive or tonal noise emissions) shall only be undertaken:

- Between the hours of 08:00 am to 05:00 pm Monday to Friday
- Between the hours of 08:00 am to 01:00 pm Saturday, and
- 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, where 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.

NOTE: 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 that is the subject of this condition.

High-noise impact activities and work includes jack hammering, rock breaking or hammering, pile driving, cutting of pavement, concrete or steel or other work occurring on the surface that generates noise with impulsive, intermittent or low tonal frequency characteristics.

Notwithstanding CoC B65 and B66, works may be undertaken outside the hours specified under those conditions in the following circumstances in accordance with CoC B67:

- For the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons
- Where it is required in an emergency to avoid the loss of lives, property and / or to prevent environmental harm
- Where different construction hours are permitted or required under an EPL in force in respect of construction, in which case these construction hours must be complied with
- Where they are undertaken in accordance with an Out-Of-Hours Work Protocol detailing the assessment management and monitoring of noise as part of the Construction Noise and Vibration Management Plan.

Extended hours works and OOH works may occur during construction. For more detail, refer to the Construction Noise and Vibration Management Plan (CNVMP).



#### 1.6 Ancillary Construction Facilities

Temporary construction compounds will be required to support construction of the Project. The locations of these compounds, provided in *Figure 1-2*, are indicative and subject to confirmation by the construction contractor. Two primary construction compounds were identified in the MPE Stage 2 EIS, being:

- Warehousing Compound (located within the Project site)
- Moorebank Avenue Compound (located on the MPW site).

The Liberty compound is also designated as an ancillary construction facility.

The location of these compounds is shown in *Figure 1-2* and further detail on the compounds is provided below.

#### 1.6.1.1 Warehousing Compound

The main construction compound for the Project (Warehousing Compound) will be located within the Project site. It is expected that some additional satellite compounds will be required during the construction of each individual warehouse on the Project site; however, the Warehousing Compound will be used for the majority of construction works.

The Warehousing Compound will include:

- Site office(s)
- Staff amenities
- Car parking
- Storage and laydown areas
- Materials testing facilities
- Material crushing facilities
- Concrete batching plant.

#### 1.6.1.2 Moorebank Avenue Compound

The Moorebank Avenue Compound will be located on the western side of Moorebank Avenue, immediately south of Bapaume Road. Access will be from Bapaume Road.

The Moorebank Avenue Compound will include:

- Site offices
- Car parking
- Amenities block
- Equipment storage and laydown areas.

Materials, such as pre-cast culverts, will be temporarily stored within the compound area on occasion.

Access and egress to this compound for light vehicles will be via a left or right turn from Moorebank Avenue into Bapaume Road. Heavy vehicle access and egress will be via a left turn from Moorebank Avenue into Bapaume Road and vice versa. Heavy vehicles accessing the compound will travel southbound along Moorebank Avenue, will turn right into Chatham Avenue, turn around within the MPW site, turn left from Chatham Avenue (northbound) onto Moorebank Avenue and turn left into Bapaume Road.



#### 1.6.1.3 Additional Compounds/ Ancillary Facilities

Additional construction compound and stockpile sites will be temporary in nature and removed / decommissioned at the completion of construction. In the event that additional construction compounds are required, or indicative compound locations or uses are amended, the following site selection criteria will be applied to their location and operation (CoC B147):

- Facility is development of a type that would, if it were not for the purpose of the development, otherwise be exempt or complying development; or
- Facility is located as follows:
  - (i) at least 50 metres from any waterway unless an erosion and sediment control plan is prepared and implemented so as not to affect water quality in the waterway in accordance with Managing Urban Stormwater series;
  - (ii) within or adjacent to land upon which the development is being carried out;
  - (iii) with ready access to a road network;
  - (iv) so as to avoid the need for heavy vehicles to travel on local streets or through residential areas in order to access the facility;
  - (v) on level land;
  - (vi) so as to be in accordance with the INCG (DECC 2009) or as otherwise agreed in writing with affected landowners and occupiers;
  - (vii) so as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing;
  - (viii) so as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval;
  - (ix) so as not to affect lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence;
  - (x) to enable operation of the ancillary facility during flood events and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure; and<sup>1</sup>
  - (xi) so as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries required outside standard construction hours.
- Practicable, the number of deliveries required outside standard construction hours.

Consideration to each of the above factors will be undertaken prior to the establishment of any additional construction compound or stockpiles for the purpose of the Project. Where these facilities do not align with the description and location in the MPE Stage 2 EIS or RtS, an Ancillary Facilities Management Plan will be prepared in consultation with Liverpool Council and submitted to the Secretary for approval one month prior to installation of the facility (CoC B147).

<sup>&</sup>lt;sup>1</sup> Spoil stockpiles may be located in flood prone areas. However, this will only be permitted with the installation of appropriate erosion and sediment controls, including flood water diversions that are protective of other properties, in accordance with the CSWMP and the Progressive Erosion and Sediment Control drawings (as approved by a Certified Professional Erosion and Sediment Control (CPESC) or suitably qualified person).



# 1.7 Project Objectives and Targets

Project objectives and targets have been developed incorporating the governance, social and environmental aspects of sustainable development. Corresponding reporting and monitoring requirements are also detailed in Table 5. Note that the sustainability targets and objectives below have been developed in accordance with ISCA requirements.

Table 5 Project Environmental and Sustainability Targets

Objective	Target / Indicator	Reporting / Monitoring	Responsibility	Timing for Compliance	CEMP/ Sub-plan Reference	
Governance and Manage	Governance and Management					
Construct the Project in accordance with environmental approvals	<ul> <li>Zero non- compliances at each quarterly construction compliance reporting stage</li> </ul>	Audits, construction compliance reporting, management review	Construction Contractor	Quarterly	Section 2 and 4 of this CEMP	
Compliance with all relevant legislative requirements	<ul> <li>Zero regulatory infringements (penalty notices or prosecutions)</li> <li>Zero formal regulatory warnings</li> </ul>	Audits, construction compliance reporting, management review	Construction Contractor	End of Project	Section 2.5 of this CEMP	
Minimise the potential for environmental incidents	Class 2 or Class 3 Environmental Incident Frequency Rate (EIFR) of <1	Monthly reports	Construction Contractor	Monthly	Section 2.8 of this CEMP	
Manage the environmental, social and economic impacts of our supply chain	Supplier evaluation will consider sustainability aspects through use of multi-	Monitoring of Supply Contracts Monthly report	Construction Contractor	Monthly	Section 2.4.2 of this CEMP	



Objective	Та	rget / Indicator	Reporting / Monitoring	Responsibility	Timing for Compliance	CEMP/ Sub-plan Reference
		criteria analysis or other scored means				
Embed sustainability through all aspects of the Project	•	Achieve a Commended Design and As Built Rating within the Infrastructure Sustainability Council of Australia (ISCA) Framework for the Project.	Design Rating As Built rating	Construction Contractor Principal's Representative	Monthly	Table 5
Minimising Social Impact	s					
Proactively engage with the Project team	•	50% of project environmental and sustainability inspections accompanied by supervisory or engineering personnel	Monthly reports, weekly inspections	Construction Contractor	Weekly	Section 4.2 of this CEMP
	•	100% of weekly environmental and sustainability inspections signed off by the Contractor's PM	Monthly reports, weekly inspections	Construction Contractor	Weekly	Section 4.2 of this CEMP
	•	Environmental Toolbox Talks – minimum 1 per month	Training records	Construction Contractor	Monthly	Section 2.7 of this CEMP



Objective	Target / Indicator	Reporting / Monitoring	Responsibility	Timing for Compliance	CEMP/ Sub-plan Reference
Support local health and amenity (Sta-4)	<ul> <li>Receive less than three substantiated environmental complaints per month</li> <li>Complainant contacted within four hours of receiving complaint</li> <li>Complainant concerns adequately resolved such that prevention of perceived or potential human health and/or environmental impacts are achieved.</li> </ul>	Complaints form and incident register	Construction Contractor Elton Consulting (Community Engagement Consultant)	Monthly	Community Communication Strategy
Maximise employment and training opportunities	<ul> <li>Trade jobs created during construction are filled by apprentices</li> </ul>	Monthly reports	Construction Contractor	End of Project	To be confirmed
Minimising Environmenta	al Impacts				
Protect Biodiversity (Eco-2)	<ul> <li>No harm to any threatened species</li> </ul>	Weekly inspections	Construction Contractor	Daily	Appendix L - Construction Flora and Fauna Management Plan
Minimise energy consumption and	<ul> <li>&gt;15% reduction of scope 1 and 2 greenhouse gas emissions against a</li> </ul>	Monthly online reporting of energy and fuel usage	Construction Contractor	Monthly	To be confirmed



Objective	Target / Indicator	Reporting / Monitoring	Responsibility	Timing for Compliance	CEMP/ Sub-plan Reference
emission of greenhouse gasses	modelled business as usual scenario				
(Ene-1/Ene-2)	<ul> <li>&gt;20% renewable energy usage on site</li> </ul>	Monthly online reporting of energy and fuel usage	Construction Contractor	Monthly	To be confirmed
Use of sustainable materials (Mat-1)	<ul> <li>&gt;15% reduction in embodied energy in construction materials based on a business as usual scenario</li> </ul>	Concrete specifications and volumes reports.	Construction Contractor	Monthly	To be confirmed
	>1 materials used that meet ISCA ECO label requirements	Product information	Construction Contractor	When procured	To be confirmed
Minimise visual impacts	during construction out of ho regarding light spill Weekly in	Daily inspections (during out of hours works) / Weekly inspections at all	Construction Contractor	tor Daily (during out of hours works) / Weekly at all other times	Appendix P – Consideration of Light Spill
		other times			Community Communication Strategy
Minimise waste production	90% of construction and demolition waste to be recycled	Waste Tracking Spreadsheet	Construction Contractor	Monthly	Appendix M - Construction Demolition and Waste Management Plan
	100% of spoil beneficially reused on-site or locally (not including	Waste Tracking Spreadsheet	Construction Contractor	Monthly	Appendix M - Construction Demolition and Waste Management Plan



Objective	Target / Indicator	Reporting / Monitoring	Responsibility	Timing for Compliance	CEMP/ Sub-plan Reference
	contaminated material)				
	<ul> <li>&gt;60% of office waste recycled</li> </ul>	Waste Tracking Spreadsheet	Construction Contractor	Monthly	Appendix M - Construction Demolition and Waste Management Plan
	95% Topsoil to remain Productive	Waste Tracking Spreadsheet	Construction Contractor	Monthly	Appendix M - Construction Demolition and Waste Management Plan



# 1.8 Environmental Policy

Qube's Safety, Health and Environmental Policy (Figure 1-4) describes the Project's commitment to continual improvement in environmental performance and compliance with applicable legislative requirements. The Project and its nominated contractors will operate in accordance with these policies which will be:

- Displayed at prominent locations on the project site
- Communicated to site personnel during induction and training
- Made publicly available and accessible to clients and concerned / interested members of the public.

All personnel associated with the Project, including sub-contractors, must comply with the spirit and intent of these policies.

The Sustainability Policy and the Sustainable Procurement Policy are currently being prepared and will be included in the Sustainability Plan for the Project.











## Safety Health & Environment Policy

Qube is committed to providing a safe and healthy workplace, and ensures the protection of the environment.

Effective safety is a shared responsibility. Our commitment and encouragement of personal accountability is summarised by our program:

#### **ZERO HARM**

Zero Harm reflects our belief that we operate in an environment where risks are managed, and that work does not impact upon our people's health and wellbeing.

The Company demonstrates a commitment to ensuring the health and safety of all our workers and protection of the environment, by:

- Striving for continuous improvement by establishing safety and environment performance targets and then measure and monitor performance through effective audit programs.
- Providing resources which enable communication, the sharing of safety and environment knowledge and ideas, and effective consultation with Workers and other Stakeholders.
- Ensuring relevant legislative and regulatory compliance is achieved.
- Preventing injuries and environmental incidents through the implementation of the Qube Safety and Environment Management System based on hazard management principles (hazard identification, risk assessment, hazard control and review).
- Ensuring all incidents are reported and investigated to prevent recurrence and serious incidents are reported to relevant state authorities.
- Implementing effective injury management to reduce the personal and financial cost of work related injuries.

#### **Environmental Management**

Through the adoption and promotion of sound and sustainable environmental practice in business, it is Qube's objective to be the company of choice in creating value for workers, shareholders, business partners, customers and suppliers, by:

- Managing day to day operations in a manner that seeks to prevent any harmful impact on the environment
- Complying with and aim to exceed all applicable environmental legislation nationally
- Implementing and maintaining an Environmental Management System that

ZERO HARM











conforms with or exceeds AS/NZS ISO 14001:2004

- Promote leadership in environmental protection through employee training and support for third party educational and training initiatives
- Develop business, community and political relationships with like-minded partners to foster a culture of environmentally sustainable growth and development
- Communicate proactively, promptly and transparently with all stakeholders, the community, media and government on environmental issues
- Engage proactively in thought leadership, development, implementation and promotion of new environmentally sustainable business practices

Maurice James

QH-SHE-PO-012 (Version 1.0)

Figure 1-4 Qube Environmental Policy

Issue Date: 28.04.2016 Review Date: 28.04.2018



## **2 ENVIRONMENTAL MANAGEMENT**

## 2.1 Environmental Management Systems

# 2.1.1 Environmental Management System

Qube's Environmental Management System (EMS) is part of an overarching management system which is known as SHEMS (Safety Health and Environmental Management System). The SHEMS provides the process and policy that govern all on-site and offsite activities. The SHEMS assists in the management of all construction activities from a safety, health and environmental management perspective. It is within this framework that the EMS exists. The EMS is built on ISO 14001:2015 and has third party accreditation. Qube's EMS provides the framework for reporting and documentation of environmental activities and this plan references relevant parts of Qube's EMS.

## 2.2 Environmental Management Documentation

## 2.2.1 Construction Environmental Management Plan

This CEMP is the overarching management plan for a suite of environmental management documents for the Project. It provides a structure and systematic approach to environmental management and aligns to the EMS.

Figure 2-1 shows the structure of the suite of environmental management documents that are applicable to the Project.



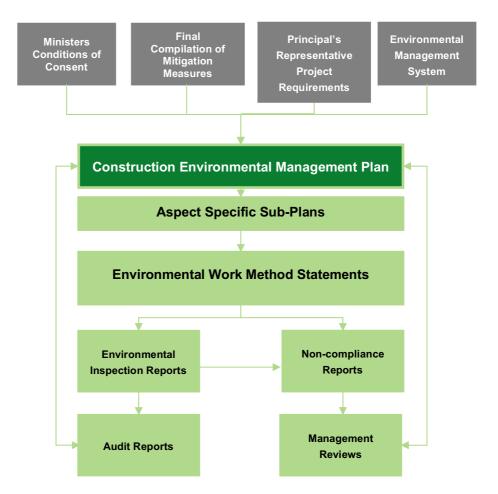


Figure 2-1 Environmental Management Documentation

## 2.2.2 Aspect-specific Sub-plans

A number of environmental management sub-plans support the CEMP. These documents are prepared to identify requirements and processes applicable to specific environmental aspects of the activities described in Section 1.3 and address requirements of the FCMM identified in the RtS. A list of construction sub-plans, as required by CoC C1, is provided below:

- Construction Traffic and Access Management Plan (B2)
- Concrete Batching Plant Management Plan (B31)
- Construction Soil and Water Management Plan (B34)
- Flood Emergency Response Plan (B52)
- Construction Air Quality Management Plan (B57)
- Construction Noise and Vibration Management Plan (B77)
- Construction Heritage Management Plan (B92)
- Construction Flora and Fauna Management Plan (B108)
- Construction and Demolition Waste Management Plan (B118)
- Contamination Management Plan (B134)
- Bushfire Emergency and Evacuation Plan (B143).



## 2.2.3 Environmental Control Maps

The key environmental constraints for the Project are identified in the sub-plans and captured spatially in Environmental Control Maps (ECMs) (Appendix D). Key environmental constraints include:

- Project boundaries
- Heritage
- Endangered ecological communities (EEC), threatened flora and fauna species and habitat vegetation
- Potential UXO areas
- Sensitive receivers (e.g. watercourses)
- Location of site offices.

The ECMs must be available in hard copy format in the Contractor's site office. The content of the ECMs must be included in the site induction and covered in pre-starts and prior to works adjacent to environmental constraints.

#### 2.2.4 Environmental Work Method Statements

Environmental Work Method Statements (EWMS) are prepared to manage and control all activities that have the potential to negatively impact on the environment. EWMS will be prepared prior to the commencement relevant construction activities on site and will incorporate relevant mitigation measures and controls from management plans. EWMS are specifically designed to communicate requirements, actions, processes and controls to construction personnel using plans, diagrams and simply written instructions.

EWMS will be prepared progressively in the lead up to and throughout construction in consultation with relevant members from the Project team. All construction personnel and sub-contractors undertaking a task governed by an EWMS must participate in training on the EWMS and acknowledge that they have read and understood their obligations prior to commencing work.

Regular monitoring, inspections and auditing against compliance with the EWMS will be undertaken by Project personnel to verify that all controls are being followed and that any non-compliances are recorded, and corrective actions implemented (see Section 4 of this CEMP for further detail).

# 2.2.5 Environmental and Sustainability Forms

Each Construction Contractor is required to prepare their own environmental monitoring or management forms and checklists, relevant to their works. Where forms or checklists have been included within this CEMP or sub-plans, these are indicative and can be replaced with contractor-specific forms. The relevant Construction Contractor must provide environmental and sustainability forms, registers and/or checklists to the Principal's Representative for review prior to commencement of works. The forms, registers and/or checklists must include the relevant minimum specified content within the contractor-specific forms.

At a minimum the following are to be developed:

- Project induction and training register
- Weekly environmental inspection
- Water discharge permit
- Noise and vibration monitoring form



- Air quality monitoring form
- Water quality monitoring form
- Corrective actions register
- Waste monitoring register
- Incident register
- Pre-clearing checklist
- Energy consumption register
- Water consumption register
- Materials register
- Clearing permit.

#### 2.3 Document Control and Records

All Project documentation, including environmental records, will be controlled in accordance with the SHEMS document control system and the Project contractual requirements. Documents will be forwarded by the Construction Contractor to the Principal's Representative using Aconex – the Project's primary Document Control System. Aconex will be used to store records, documents, and plans as a minimum.

Environmental records will be kept as objective evidence of compliance with environmental requirements, filed in Aconex and made available to all Project personnel. Where deemed necessary by the Contractor's Environmental Manager (EM), hard copies will be kept on site for information and managed by the Contractor's EM.

Obsolete documents will be removed from all points of issue and points of use by the issuer of the updated document or person determining the document is obsolete. Any obsolete documents retained for legal and/or knowledge preservation purposes will be suitably identified.

Relevant sub-plans and EWMS will be issued to those personnel who are responsible for their implementation. The Contractor's EM will ensure that the current issue documentation is available. Compliance with document control requirements will be monitored through audits and inspections.

Documentation will be maintained in a legible manner, dated (with dates of revision) and readily identifiable, and retained for a minimum of four years after completion of construction of the Project.

Relevant documentation will be uploaded to the Project website.

# 2.4 Roles and Environmental Responsibilities

#### 2.4.1 Construction Contractor

All Project personnel are responsible for the implementation of this CEMP and have the responsibility to stop works if there is potential for a safety or environmental incident to occur.

The interaction between the key organisations involved in environmental management is displayed in Figure 2-2.



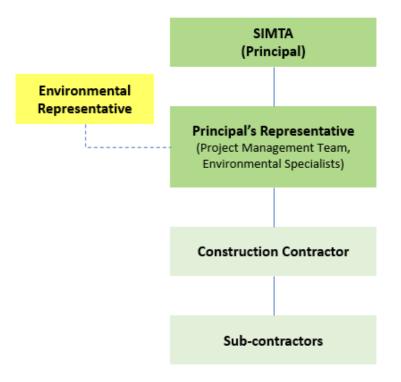


Figure 2-2 Organisational chart

The key roles and responsibilities of relevant Project personnel are outlined below in Table 6. These roles are indicative only and the contractor may allocate the responsibilities across these roles. The Construction Contractor will provide roles and responsibilities and staff names to the Principal's Representative prior to the commencement of construction.

Table 6 Construction Contractor's Roles and Responsibilities

Role	Responsibility
	<ul> <li>Include environmental consideration into all aspects of Project planning</li> </ul>
	<ul> <li>Ensure that Project responsibilities and authorities are defined and communicated</li> </ul>
	Attend audit meetings and action results of any audit findings
	Allocate Project resources to handle environmental issues
	Oversee the implementation and maintenance of the CEMP
Contractor's	Endorse the CEMP
Project Manager (Contractor's PM)	Appoint/nominate and provide support for the Contractor's EM
(Contractor 3 i m)	<ul> <li>Report to senior management and the Principal's Representative on the performance of the system and environmental breaches</li> </ul>
	<ul> <li>Take action to resolve environmental non-compliances and incidents</li> </ul>
	Sign off on all environment and sustainability inspections
	<ul> <li>Enforce environmental requirements for suppliers and sub- contractors</li> </ul>
	Report environmental incidents to the Principal Representative



Role	Responsibility
	Authorise expenditure to implement environmental management requirements within limits of authority as defined in the Principal's Representatives Project requirements
	Undertake ICAM investigations
	<ul> <li>Review audit corrective actions and take action as necessary to ensure timely close out of issues</li> </ul>
	Be contactable 24 hours a day
	<ul> <li>Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm.</li> </ul>
	<ul> <li>Communicating with all personnel and sub-contractors regarding compliance with the CEMP and site specific environmental issues/EWMS</li> </ul>
	Identifying resources required for implementation of the CEMP
	Organise and manage site plant, labour and temporary materials
Contractor's	<ul> <li>Co-ordinating the implementation and maintenance of site environmental controls and provide support for the Contractor's EM</li> </ul>
Manager (Contractor's CM)	Report all environmental incidents in accordance with incident reporting protocol
	Undertake ICAM investigations
	Take action to resolve non-compliances and incidents
	Be contactable 24 hours a day
	<ul> <li>Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm.</li> </ul>
	<ul> <li>Assist and guide the respective workers to meet their environmental responsibilities.</li> </ul>
	Check and monitor the implementation of this CEMP
	Report to the Contractor's CM on environmental issues
	Monitor the rectification of incidents
	<ul> <li>Provide technical advice to personnel and management in the review of work methods</li> </ul>
Contractor Environmental	<ul> <li>Implement appropriate action to address any environmental incidents</li> </ul>
Manager	Manage and investigate identified non-compliances to CoCs
(Contractor's EM)	<ul> <li>Development, implementation, monitoring and updating of the CEMP and sub-plans</li> </ul>
	<ul> <li>Ensure environmental risks of the Project are identified and appropriate mitigation measures implemented</li> </ul>
	<ul> <li>Develop environmental site induction and maintain a register of attendance</li> </ul>
	Present and participate in toolbox meetings
	<ul> <li>Manage environmental document control, reporting, inductions and training</li> </ul>



Role	Responsibility
	Oversee site monitoring, inspections and internal audits
	Undertake ICAM investigations
	<ul> <li>Manage all sub-contractors and consultants with regards to environmental matters, including assessing their environmental capabilities, identifying additional training needs and overseeing the submission of their environmental documents</li> </ul>
	<ul> <li>Respond to stakeholder enquires/complaints within required timeframes</li> </ul>
	<ul> <li>Act as a 24-hour contact (if other staff as outlined above are not available)</li> </ul>
	<ul> <li>Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm</li> </ul>
	<ul> <li>Liaise with construction team as required in order to implement the ISCA requirements</li> </ul>
	<ul> <li>Submit energy and materials use data to the Principal using the Sustainability Online Data Collection Tool (SODCT)</li> </ul>
	<ul> <li>Cooperate and participate in audits and action results of any audit findings.</li> </ul>
	Implement environmental controls on-site
	Present and participate in toolbox talks and meetings
	<ul> <li>Monitor the skills required by workers to effectively implement the CEMP and sub-plans</li> </ul>
Site Supervisor	Train staff in their obligations under EWMS
	Meet environmental reporting requirements of the Project
	<ul> <li>Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm.</li> </ul>
	Implement the Community Consultation Strategy
Contractor's	<ul> <li>Assist the Contractor's EM in consulting regulatory agencies and community</li> </ul>
Community Liaison Manager (Contractor's	<ul> <li>Communicate potential environmental impacts to the community and all stakeholders</li> </ul>
CLM)	Manage the resolution of environmental complaints
	<ul> <li>Act as a 24-hour contact (if other staff as outlined above are not available).</li> </ul>
	Minimise the potential of pollution of land, air and water
	Preserve the natural and cultural heritage environment
	Minimise the occurrence of offensive noise
All Personnel	<ul> <li>Take all feasible and reasonable steps to comply with the requirements of this CEMP</li> </ul>
	Comply with the relevant Acts, Regulations and Standards
	Comply with the Project policies and procedures
	Comply with the CEMP and sub-plans



Role	Responsibility
	Comply with lawful management directions
	<ul> <li>Promptly report to management on any non-compliances, environmental incidents and/or breaches of the system</li> </ul>
	<ul> <li>Undergo induction and training in environmental awareness as directed by management</li> </ul>
	<ul> <li>Report all incidents in accordance with reporting requirements outlined in this CEMP</li> </ul>
	Fulfil the General Environmental Obligations
	<ul> <li>Undertake works in a manner that will enable the Project to obtain the required ISCA As-built rating.</li> </ul>

#### 2.4.1.1 Contractor's Management Team

The Contractor's Management Team, includes, as a minimum the Contractor's PM, Contractor's CM, Contractor's EM and Site Supervisor. The Contractor's Management Team will:

- Check the status and adequacy of the CEMP to confirm that it meets current client and contract requirements as well as relevant environmental standards
- Review environmental incident investigations reports and implement recommendations
- Identify any improvement opportunities to the delivery of construction and / or to the CEMP
- Assist to resolve any relevant complaints received.

#### 2.4.2 Sub-contractors

All sub-contractors are required to work in accordance with this CEMP. Prior to engagement, prospective sub-contractors are required to complete a sub-contractor questionnaire or similar that will consider their past environmental performance.

All sub-contractors are required to attend Project and/or site inductions where the requirements and obligations of the CEMP will be communicated. A record of all sub-contractors inducted would be maintained as part of the Project induction.

Monitoring of sub-contractors will be undertaken to assess:

- The sub-contractor's general work practices
- The implementation and effectiveness of the sub-contractor's environmental protection measures
- The sub-contractor's compliance with the requirements of the CEMP
- The maintenance of environmental measures.

Monitoring may be part of a general project wide review or targeted to a specific activity or sub-contractor.

# 2.4.3 Principal's Representative and Community Engagement Consultant

For the purposes of this plan, the Principal's Representative is considered to consist of both the Project Management Team and a team of environmental specialists. The



Principal's Representative is responsible for reviewing and assessing compliance of the Construction Contractor's works with the Project requirements.

Elton Consulting is the Community Engagement Consultant (CEC) for SIMTA and will act as the 'control tower' for all public communications; they will be the central contact to keep nearby residential receivers informed of the progress of the development. General responsibilities of the Principal's Representative and the CEC are outlined within Table 7.

Table 7 Principal's Representative's Roles and Responsibilities

Role	Responsibility
SIMTA (Principal)	<ul> <li>Act as proponent for planning approvals and development consent</li> <li>Provide advice and leadership on environmental policy and regulation</li> </ul>
	<ul> <li>Review the CEMP and sub-plans to ensure that it meets all relevant regulatory and Project requirements</li> <li>Review the Construction Contractor's environmental monitoring</li> </ul>
	reports and compliance documentation to confirm that the CEMP and sub-plans are being implemented  Issue a stop work direction immediately where an unacceptable
Principal's Representative (Project	<ul> <li>environmental impact may occur</li> <li>Liaise with relevant regulators if an incident occurs, including necessary notifications, if required</li> </ul>
Management Team and Environmental	<ul> <li>Ensure that independent and internal audits of the system are conducted</li> </ul>
Specialists)	Review audit outcomes and act as necessary
	<ul> <li>Review environmental performance through the monthly reporting cycle</li> </ul>
	<ul> <li>To manage all aspects of the contract between SIMTA and the Construction Contractor</li> </ul>
	<ul> <li>Compile and submit compliance status to the Secretary (e.g. pre- construction and quarterly compliance reports for the Project).</li> </ul>
	<ul> <li>Preparing and coordinating content for the Project website, newsletters, factsheets, etc.</li> </ul>
	<ul> <li>Working with subcontractors in the organisation and delivery of community information sessions</li> </ul>
Community	<ul> <li>Reviewing subcontractor community relations materials, including notifications, letters, advertising, signs and factsheets</li> </ul>
Engagement Consultant	<ul> <li>Monitoring, responding to and triaging project calls and emails</li> </ul>
(CEC) (Elton Consulting)	<ul> <li>Preparing overarching project key messages</li> </ul>
Consuming)	<ul> <li>Managing the calendar of all project communication and engagements activities</li> </ul>
	<ul> <li>Coordinating regular subcontractor communications meetings, to be held initially on a weekly basis</li> </ul>
	Liaising with SIMTA on all of the above.



## 2.4.4 Environmental Representative

The primary role of the ER is to independently oversee compliance with the Development Consent. The nominated ER(s) must be submitted to the Secretary for approval no later than one month prior to the commencement of construction, in accordance with CoC C22 and C23 and engaged for the duration of construction.

The role of the ER is specified in CoC C24:

- On behalf of the Applicant, receive and respond to communication from the Secretary in relation to the environmental performance of the development.
- Consider and inform the Secretary on matters specified in the terms of this
  consent.
- Consider and recommend any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community.
- Review the following documents required to be prepared under the terms of this
  consent, ensure they are consistent with requirements in or under this consent
  and if so, endorse them prior to submission to the Secretary (if required to be
  submitted to the Secretary) or prior to implementation (if not required to be
  submitted to the Secretary):
  - (i) CEMP;
  - (ii) OEMP; and
  - (iii) the other plans and sub-plans required by these conditions, and referenced in conditions C1 and C3.
- Regularly monitor the implementation of all documents required to be prepared under the terms of this consent to ensure implementation is being carried out in accordance with what is stated in the document and the terms of this consent.
- As may be requested by the Secretary, help plan, attend or undertake
  Department audits of the development including scoping audits, programming
  audits, briefings, and site visits, but not independent audits required under
  condition C18 of this consent.
- If conflict arises between the Applicant and the community in relation to the environmental performance of the development, attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary.
- Consider any minor amendments to be made to the CEMP, CEMP sub-plans and
  monitoring programs that comprise updating or are of an administrative nature,
  and are consistent with the terms of this consent and the CEMP, CEMP sub-plans
  and monitoring programs approved by the Secretary and, if satisfied such
  amendment is necessary, approve the amendment. This does not include any
  modifications to the terms of this consent.
- Prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly Environmental Representative Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month (or other timeframe agreed with the Secretary). The Environmental Representative Report must be submitted within seven (7) days following the end of each month for the duration of construction of the development, or as otherwise agreed with the Secretary.



## 2.5 Legislative Requirements

The regulatory framework for the Project is outlined within the Legislation Register, (Appendix A). This register identifies relevant legislative instruments, their key objectives and relevance to the Project, including legislative obligations.

The Project will comply with all relevant guidelines, standards, codes and legislation as outlined within the following sections and Appendix A and Appendix B of this CEMP.

A copy of this approved CEMP and all relevant permits, licences and development approvals relevant to the Project activities will be kept at the Construction Contractor's Project offices, and shall be readily available for perusal by relevant regulatory officers or the Certifying Authority.

## 2.5.1 Development Approvals

The Project has been approved under both the *Environmental Planning and Assessment Act* 1979 (EP&A Act) and the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act). Both these approvals have environmental conditions relevant to the construction works for the Project, which are discussed below.



#### 2.5.1.1 MPE EPBC Act Approval (2011/6229)

The EPBC Act approval for the MPE Concept was granted by DotEE in March 2014 (No. 2011/6229). This approval was provided for the impact of the MPE Project on listed threatened species and communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The construction and operation of the Project has been designed to be consistent with the EPBC Act Approval conditions, where relevant. EPBC Act Approval conditions for the Project include specific conditions and commitments that are required to be addressed in this CEMP. These conditions are identified within Table 8, along with where they have been addressed in preparing this CEMP.

Table 8 EPBC Act Approval (2011/6229)

Condition	Requirement	CEMP Section
7a)	Details on the timing of the construction works (accompanied by current and detailed maps)	Section 1.4
7b)	Identification and quantification of all potential impacts associated with noise, vibration, air quality, traffic, light spill, hydrological changes, contamination, and indigenous heritage (including cumulative	This CEMP and relevant aspect specific sub-plans, and Appendix P – Consideration of Light Spill
	impacts associated with the separately approved but related and adjacent intermodal terminal facility project, EPBC approval 2011/6086) upon Commonwealth land. Consideration must be given to people and communities at SME, DNSDC, Defence housing, and the environment more generally in neighbouring bushland areas. Of note, the air quality assessment must quantify all emissions of	Note: The School of Military Engineering (SME) and Defence housing have been relocated off the MPW Site to the Holsworthy Barracks and are no longer sensitive receivers to the MPE site.
	PM2.5 and PM10 arising from project-related sources identified in the EIS.;	The DNSDC has been relocated to the DJLU, to the north of the MPE site, and is listed as a sensitive receiver in aspect specific sub-plans.
7c)	Results of further investigations with regard to land contamination and indigenous heritage impacts (specifically PADS 2 and 3)	Refer to Contamination Management Plan and Construction Heritage Management Plan
7d)	Refined details (including implementation timeframes) for the mitigation measures outlined in the EIS	Relevant sub-plan
	(Sections 7.4.2, 7.4.3, 7.4.6, 7.4.7, 7.4.8, 7.4.9) and summarised at Annexure A	MPE Stage 2 Urban Design and Landscape Plan – Lighting sub-plan addresses light spill
7e)	A commitment to ensure no lights are installed above the height of 40 metres or, the maximum approved height of the intermodal warehouse buildings (whichever is less);	Appendix P – Consideration of Light Spill
7f)	Identification of the trigger values and criteria for all matters mentioned in condition 7(b) (excluding light spill, land contamination and indigenous heritage) that will be adopted for monitoring and managing potential impacts to Commonwealth land;	Relevant sub-plan



Condition	Requirement	CEMP Section
7g)	Details of a comprehensive monitoring program (including locations, frequency and duration) for:  1. validating the anticipated impacts associated with condition 7(b); and  2. determining the effectiveness of proposed mitigation / management measures;	Relevant sub-plan,  Appendix P – Consideration of Light Spill
7h)	Provisions to revise the approved CEMP in response to monitoring associated with condition 7(g) including, details of response I contingency mechanisms to address any exceedances of the relevant trigger values;	Section 1.2.7
7i)	Evidence of consultation with Defence regarding the adequacy of proposed mitigation measures in particular, those measures to mitigate potential light spill impacts upon residential dwellings within SME outside of standard construction hours; and	Section 1.2.4, Appendix P – Consideration of Light Spill Note: The School of Military Engineering (SME) and Defence housing have been relocated off the MPW Site to the Holsworthy Barracks and are no longer sensitive receivers to the MPE site.
<b>7</b> j)	Details of a complaints handling procedure;	Community Communication Strategy

### 2.5.1.2 MPW EPBC Act Approval (2011/6086)

The EPBC Act approval for the MPW Concept was granted by DotEE in September 2016 (No. 2011/6086). This approval was provided for the impact of the MPW Project on listed threatened species and communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The Moorebank Avenue upgrade works will be performed under the MPE Stage 2 Consent as described in Section 1.1 and 1.3. Since the western side of the Moorebank Avenue upgrade works construction footprint is located in an existing area of hardstand within the MPW site, the works must comply with the MPW Commonwealth Approval. Table 9 outlines how the relevant conditions have been addressed in preparing this CEMP.

Table 9 EPBC Act Approval (2011/6086)

Condition	Requirement	CEMP Section
2	For the protection of the environment, including listed threatened species and communities, the person taking the action must prepare a construction environmental management plan (CEMP) addressing at least the elements outlined in Conditions 5 to 13. Apart from early works as described in Condition 3, construction must not commence until all specified CEMP approvals have been obtained in writing, and once approved, the CEMP must be implemented.	This Plan



Condition	Requirement	CEMP Section
	The CEMP may be prepared in stages, in which case the corresponding stage must be clearly defined, and construction of that stage must not commence until all specified approvals have been obtained in writing.	
3	For the protection of the environment, including listed threatened species and communities, the person taking the action must ensure that early works are undertaken in accordance with SSD 5066 and comply with the measures described in Condition 8 wherever perfluoroalkyl substance (PFAS) contamination is identified.	Not applicable to this plan as early works is not in the scope of works  Addressed in the MPW PFAS Management Plan
5	Sections of the CEMP and OEMP relating to traffic must be prepared by a suitably qualified expert and must:  a) Be consistent with the Traffic, Transport and Access Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 4A to 4Q from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 4A to 4Q from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed  d) be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix E – CTAMP-B
6	<ul> <li>Sections of the CEMP and OEMP relating to noise and vibration must be prepared by a suitably qualified expert and must:</li> <li>a) be consistent with the Noise and Vibration Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS</li> <li>b) incorporate all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as 'mandatory'</li> <li>c) explain how all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed</li> <li>d) be approved by the Minister or a relevant New South Wales regulator.</li> </ul>	Addressed in Appendix J - CNVMP
7	Sections of the CEMP and OEMP relating to biodiversity must be prepared by a suitably qualified expert and must:  a) be consistent with the Biodiversity Provisional Environmental Management Framework (3 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'mandatory'	Addressed in Appendix L - CFFMP



Condition	Requirement	CEMP Section
	<ul> <li>c) explain how all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed</li> <li>d) include detailed biosecurity protocols, prepared in consultation with relevant New South Wales and Commonwealth biosecurity agencies, in relation to international and interstate container movement be approved by the Minister.</li> </ul>	
8	· ·	Addressed in the MPW PFAS Management Plan
	contamination, including:  roles and responsibilities  management of potential PFAS contaminated sites as yet un-investigated  management of areas of known PFAS contamination, including strategies to reduce runoff, dewatering and migration of contamination across and off the proposed site  a contingency action plan for unexpected PFAS contaminant discoveries  iii. detail soil, groundwater and surface water PFAS contamination monitoring requirements and testing and disposal procedures appropriate to the risk posed by any contamination  iv. include requirements for site validation reports appropriate to the risk posed by any contamination	



Condition	Requirement	CEMP Section
	<ul> <li>v. include requirements for remedial action plans appropriate to the risk posed by any contamination</li> <li>vi. detail review procedures appropriate to the risk posed by any contamination</li> <li>vii. impose the following performance measures for managing earthworks and the potential for effects to occur due to disturbance of PFAS contaminated soil during construction: <ul> <li>contaminated sediment to be discharged outside the site of the action to be minimised</li> <li>contaminated waste material, including excavated soil, to be released through dewatering to be handled appropriately to the risk posed by the contamination and disposed of in an environmentally sound manner such that potential for the PFAS content to enter the environment is minimised</li> <li>contaminated waste material, including excavated soil, with a PFOS or PFOA content above 50 milligrams per kilogram (mg / kg) to be stored or disposed of in an environmentally sound manner, such that PFAS content does not enter the environment</li> <li>all soil remaining at the site of the action to be suitable for purpose.</li> </ul> </li> <li>be approved by the Minister.</li> </ul>	
9	Sections of the CEMP and OEMP relating to water must be prepared by a suitably qualified expert and must:  a) be consistent with the Water Quality, Storm water and Flooding Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 9A to 9AG from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 9A to 9AG from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed  d) be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix G - CSWMP
10	Sections of the CEMP and OEMP relating to air quality must be prepared by a suitably qualified expert and must:  a) be consistent with the Air Quality Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 10A to 10U (CEMP only) and 1 OV to 10AH and 11 A to 11 H (OEMP only) from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 10A to 10U (CEMP only) and 10V to 10AH and 11A to 11 (OEMP only) from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix I - CAQMP



Condition	Requirement	CEMP Section
11	Sections of the CEMP and OEMP relating to Aboriginal heritage must be prepared by a suitably qualified expert and must:  a) be consistent with the Aboriginal Heritage Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed  d) be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix K - CHMP
12	Sections of the CEMP and OEMP relating to European heritage must be prepared by a suitably qualified expert and must:  a) be consistent with the European Heritage Provisional Environmental Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed  d) be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix K - CHMP
13	Sections of the CEMP and OEMP relating to visual impacts (including light spill) must be prepared by a suitably qualified expert and must:  a) be consistent with the Light Spill Provisional Environmental Management Framework (2 July 2014), provided at Appendix 0 to the finalised EIS  b) incorporate all measures 14A to 14H from Table 7.1 of the finalised EIS that are described as 'mandatory'  c) explain how all measures 14A to 14H from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed  d) be approved by the Minister or a relevant New South Wales regulator.	Addressed in Appendix C – Aspects and Impacts Register (see visual category) excluding 14C which is not applicable to the MPE site. Also addressed in the MPE Stage 2 Urban Design and Landscape Plan (UDLP)
14	To address residual impacts on protected biodiversity values, including listed threatened species and communities, the person taking the action must finalise a biodiversity offset strategy (BOS). The BOS must be approved in writing within twelve (12) months of commencement of early works, by a relevant New South Wales regulator, and once approved must be implemented. The BOS must be prepared by a suitably qualified expert and must:	Addressed in the Moorebank Precinct East Biodiversity Offset Strategy



Condition	Requirement	CEMP Section
	<ul> <li>a) be consistent with the biodiversity offsets strategy provided at Appendix E to the finalised EIS</li> <li>b) incorporate all measures 6S, 6U, 6W and 6Y to 6AA from Table 7.1 of the finalised EIS that are described as 'mandatory'</li> <li>c) incorporate all measures 6S, 6U, 6W and 6Y to 6AA from Table 7.1 of the finalised EIS that are described as 'subject to review' or justify any alternative protocols</li> <li>d) offset impacts on protected biodiversity values including listed threatened species and communities in accordance with the FBA</li> <li>e) include map(s) and shapefiles that identify the location and boundaries of all offset sites</li> <li>f) be approved by a relevant New South Wales regulator, and also by the Minister if the BOS does not involve the protection and management in perpetuity of the 'Casula', 'Moorebank' and 'Wattle Grove' Offset Areas identified at Annexure 2.</li> </ul>	

## 2.5.1.3 EP&A Act Approval

The Project is being delivered under Part 4, Division 4.1 (Division 4.1 prior to 01 March 2018) of the EP&A Act. The CoCs include requirements to be addressed in this CEMP and delivered during the Project. These requirements, how they are addressed, along with division of responsibilities is provided within Table 10, prepared in accordance with CoC C21.

Table 10 Conditions of Consent (CoCs)

CoC	Relevant Requirement	CEMP Section	How Addressed
A1	established under this consent all reasonable measures must be	Section 3 Section 4	Section 3 of this CEMP identifies the management measures to be implemented to prevent and minimise environmental harm. Aspect-specific management measures are also identified in each sub-plan required under this CEMP.
			Section 4 sets out the processes for monitoring and reviewing the effectiveness of these management measures. Opportunities to further minimise environmental harm will be identified through the ongoing evaluation of environmental management performance and effectiveness of this plan.
A2	The development may only be carried out:  (a) in compliance with the conditions of this consent;  (b) in accordance with all written directions of the Secretary in relation to this	This plan	This CEMP and associated sub-plans have been developed to comply with the Conditions of Consent (CoCs), written directions



CoC	Relevant Requirement	CEMP Section	How Addressed
	consent; (c) in accordance with the EIS, Submissions Report, Consolidated assessment clarification responses and updated Biodiversity Assessment Report; (d) in accordance with the amended Development Layout Plans and Design Plans, amended WSUD plans and amended architectural plans to be submitted for the Secretary's approval as part of this consent; and (e) in accordance with the management and mitigation measures at APPENDIX B of this consent.		of the Secretary, amended development layout and management and mitigation measures outlined in Appendix B of the CoCs.
A15	If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program	Section 1.2.2	This CEMP is relevant to construction only. It will supersede the Early Works Environmental Management Plan (EWEMP).
A18	The date of commencement of each of the following phases of the development must be notified to the Department, at least one month before that date:  (a) early works; (b) fill importation; (c) construction; (d) operation; and (e) occupation.  If the construction, operation or occupation of the development is to be staged, then the Applicant must notify the Department in writing at least one month before the commencement of each stage, and clearly identify the development to be carried out in that stage.	Section 1.2.5	The date of commencement for the construction phase will be notified to DP&E at least one month before work begins.
A19	Where conditions of this consent require a document to be prepared in consultation with an identified party, the Applicant must:  (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval;	Section 1.2.4  Appendix P - Evidence of	This CEMP and associated sub-plans have been developed in consultation with the identified parties.



CoC	Relevant Requirement	CEMP Section	How Addressed
	(b) provide evidence that at least two weeks was provided for the relevant party to comment on the document; and	Stakeholder Consultation	
	(c) include in the document:		
	(i) details of the consultation undertaken;		
	(ii) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and		
	(iii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.		
A20		Section 2.5.1	All applicable licences, permits and approvals will be obtained as
	obtained and maintained as required for the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply	Appendix A –	required.
	with such licences, permits, approvals and consents.	Legislation Register	Approvals, permits and licences required for MPE Stage 2 Project (the Project) are discussed in Section 2.5.2, Appendix A and B.
		Appendix B – Project Permits and Licences Register	
A27	Before the construction of any utility works associated with the development, approvals required from service providers must be obtained.	Section 2.5.2.2	Utilities connections for the Project will be from the MPE Stage 1 site and approvals from utilities providers will not be required.
A28	Prior to operation of the development, a compliance certificate for water and	Section 2.5.2.2	A compliance certificate under Section 73 of the Sydney Water Act
	sewerage infrastructure servicing of the site under section 73 of the Sydney Water Act 1994 must be obtained.	Appendix A – Legislation Register	1994 for water and sewerage infrastructure servicing of the site will be obtained.
A32	All plant and equipment used at the site or to monitor the performance of the development must be:	Aspect-specific sub-plans (e.g. CAQMP,	All plant and equipment used at the site or to monitor the performance of the development will be maintained and operated in a proper and efficient manner.
	<ul><li>(a) maintained in a proper and efficient condition; and</li><li>(b) operated in a proper and efficient manner.</li></ul>	CNVMP)	and proper and emoleric marrier.



CoC	Relevant Requirement	CEMP Section	How Addressed
B1	The Applicant must:  (a) prepare each plan, program and other documents in consultation with the specified stakeholders;  (b) not commence each phase of the project until the plans, programs and other documents required under this consent are approved by or, where not required to be approved, submitted to the Secretary specified within the timeframes; and  (c) implement the most recent version of the required plans and programs approved by the Secretary for the duration of the development.	Section 1.2.4 Section 1.2.5 Appendix P - Evidence of Stakeholder Consultation	This CEMP and associated sub-plans, programs and documents in consultation with identified stakeholders.  This CEMP and associated sub-plans will be submitted to the Secretary, and approved, where required, prior to the commencement of construction.  Construction will be undertaken in accordance with the most recent, approved version of this CEMP and associated sub-plans.
B2	Prior to commencement of early works and construction, the Applicant must prepare a Construction Traffic and Access Management Plan (CTMP) to the satisfaction of the Secretary	Appendix E – CTAMP	A Construction Traffic and Access Management Plan (CTAMP; Appendix E) has been prepared to address the requirements of this condition.
B19	The Applicant is responsible for all works required by public utility adjustment/relocation works necessitated by the road infrastructure upgrade works and as required by the various public utility authorities and/or their agents.	Section 2.5.2.2	Public utility works involving adjustment / relocations works will be undertaken by the Construction Contractor who will be responsible for the approval / agreement of the utility service provider prior to the works.
B31	The applicant must prepare a Concrete Batching Plant Management Plan to the satisfaction of the Secretary. The plan must be approved by the Secretary prior to the establishment of Concrete Batching Plant and form part of the CEMP required by condition C1.	Appendix F – Concrete Batching Plant Management Plan	Concrete Batching Plant Management Plan (Appendix F) will be prepared to address the requirements of this condition prior to the establishment of the Concrete Batching Plant.
B34	Prior to early works, fill importation or any other surface disturbance, the Applicant must prepare a <b>Soil and Water Management Plan (SWMP)</b> to the satisfaction of the Secretary.	Appendix G – CSWMP	A Construction Soil and Water Management Plan (CSWMP; Appendix G) has been prepared to address the requirements of this condition.
B52	Before the commencement of construction, the Applicant must prepare a Flood Emergency Response Plan to the satisfaction of the Secretary. The	Appendix H – Flood	A Flood Emergency Response Plan (Appendix H) has been prepared to address the requirements of this condition.



CoC	Relevant Requirement	CEMP Section	How Addressed
	Plan must form part of the CEMP and OEMP required by conditions C1 and C3 and must:	Emergency Response Plan	
B57	The Applicant must prepare a <b>Construction Air Quality Management Plan</b> ( <b>AQMP</b> ) to the satisfaction of the Secretary	Appendix I – CAQMP	A Construction Air Quality Management Plan (CAQMP; Appendix I) has been prepared to address the requirements of this condition.
B60	The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).	Appendix A - Legislation Register	The Project will not cause or permit the emissions of any offensive odour, as defined in the POEO Act.
B64	Continuous noise monitoring at sensitive receivers must be undertaken during early works, fill importation, construction and for at least 12 months following occupation of the entire site.	Appendix J – CNVMP	A Construction Noise and Vibration Management Plan (CNVMP; Appendix J) has been prepared to address the requirements of this condition.
B65	The construction hours detailed in Table 2 must be complied with, except where they may be undertaken under condition B66.	Section 1.5	Hours of the activities associated with construction are able to be undertaken according to Section 1.5.
B66	Except as permitted by an EPL, activities resulting in high noise impact (including impulsive or tonal noise emissions) must only be undertaken:  (a) between the hours of 8:00 am to 5:00 pm Monday to Friday;	Section 1.5	Activities resulting in high noise impact (including impulsive or tonal noise emissions) must only be undertaken in accordance with the condition. An Environmental Protection Licence (EPL) (No 21054) was issued by the EPA on 4 June 2018. A variation to the
	(b) between the hours of 8:00 am to 1:00 pm Saturday; and		EPL was issued on 18 April 2019 to capture cut and fill earthworks
			occurring on the MPE Stage 2 Project Site.
	(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.  Note:		The licence applies to the Moorebank Precinct (excluding the MPE Stage 1 Rail Access Land Package (RALP) which has a separate EPL licence (No. 20966) and authorises > 100,000 – 500,000
	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 that is the subject of this condition.		tonnes crushing, grinding or separating processing capacity per annum and > 500,000 – 2,000,000 tonnes extraction, processing or storage capacity per annum. The licence applies to all other activities carried on at the premises, including road construction, bulk earthworks 'cut and fill' and importing fill.



CoC	Relevant Requirement	CEMP Section	How Addressed
B67	Works may be undertaken outside the hours detailed in Table 2 in the following circumstances:	Section 1.5 Appendix J –	Out of hours works may occur during construction. The protocol is included in Appendix J – CNVMP.
	(a) for the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons;	CNVMP	
	(b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm;		
	<ul> <li>(c) where different construction hours are permitted or required under an EPL in force in respect of construction, in which case these construction hours must be complied with;</li> <li>(d) where they are undertaken in accordance with an Out-Of-Hours Work Protocol detailing the assessment, management and monitoring of noise as part of the Construction Noise and Vibration Management Plan.</li> </ul>		
B68	The Applicant must prepare an Out-Of-Hours Work Protocol for any work undertaken outside the hours specified in condition B64 or outside the circumstances specified under condition B66. An Out-Of-Hours Work Protocol must provide for the assessment, management and monitoring of out of hours work noise including:	Appendix J – CNVMP	Out-of-Hours works may occur during construction. The protocol is included in Appendix J – CNVMP.
	(a) where works are shown to be inaudible at the nearest sensitive receivers and vibration levels do not exceed those stipulated by Table 2.2 and Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006);		
	(b) where a negotiated agreement has been arranged with affected receivers;		
	(c) where noise can be shown to satisfy the noise management levels specified in the Interim Construction Noise Guideline (ICNG, DECC, 2009) at non-residential land uses; or	t	
	(d) where works are undertaken as part of an Extended Hours Work Plan approved as part of the Out-Of-Hours Work Protocol.		
B69	An Extended Hours Work Plan will be prepared for any construction undertaken during the extended hours detailed in Table 3 as required by condition B67(d). The Extended Hours Work Plan must provide for:	Appendix J – CNVMP	Extended Hours may occur during construction. The Extended Hours Work Plan is detailed in Appendix J – CNVMP.
	(a) a three month assessment period, commencing at the start of extended hours construction works;		



CoC	Relevant Requirement	CEMP Section	How Addressed
	(b) implementation of the Construction Noise and Vibration Management Plan;		
	(c) noise monitoring at a representative number of sensitive receivers (including closest and furthest) to confirm the predicted noise levels;		
	(d) targeted consultation with the noise affected sensitive receivers;		
	(e) notification of the relevant Council, local residents and other affected stakeholders and sensitive receivers of the timing and duration at least 48 hours prior to the commencement of the works.		
	(f) construction work timeframes and methods for investigation of noise complaints;		
	(g) submission of monthly complaints reports to the Department for the life of extended hours activities;		
	(h) continual refinement of mitigation measures based on consultation with the noise affected sensitive receivers;		
	(i) implementation of work practices set out in section 5.2 of the ICNG;		
	(j) a final summary report submitted to the Secretary at the end of the assessment period in subcondition (a), detailing the outcomes of the assessment period, the resolution of complaints during the assessment period, and demonstrate the acceptability of works outside standard hours.		
B78	Blasting is not permitted on the site	Appendix J – CNVMP	No blasting will be undertaken for the Project.
B92	Prior to commencement of Early Works and Fill Importation, the Applicant must prepare a <b>Heritage Management Plan</b> , to the satisfaction of the Secretary.	Appendix K – CHMP	A Construction Heritage Management Plan (CHMP; Appendix K) has been prepared to address the requirements of this condition. The plan has been prepared by a suitably qualified person and identified stakeholders have been consulted in the development of this plan.
B108	Prior to clearing of native vegetation, the Applicant must prepare a Construction Flora and Fauna Management Plan (CFFMP) in consultation with OEH. The CFFMP must form part of the CEMP required by condition C1 and must include the following:	Appendix L – CFFMP	A Construction Flora and Fauna Management Plan (CFFMP; Appendix L) has been prepared to address the requirements of this condition.



CoC	Relevant Requirement	CEMP Section	How Addressed
B118	Prior to the commencement of early works, the Applicant must prepare a <b>Construction and Demolition Waste Management Plan</b> for the development to the satisfaction of the Secretary	Appendix M – CDWMP	A Construction and Demolition Waste Management Plan (CDWMP; Appendix M) has been prepared to address the requirements of this condition.
B134	Prior to early works and fill importation, a <b>Contamination Management Plan</b> must be prepared to the satisfaction of the Secretary and form part of the CEMP required under condition C1	Appendix N – CMP	A Contamination Management Plan (CMP; Appendix N) has been prepared to address the requirements of this condition.
B139	Prior to commencement of permanent built surface works and/or landscaping, or as otherwise agreed by the Secretary, an Urban Heat Island (UHI) Mitigation Strategy must be prepared and submitted to the Secretary for approval, in consultation with the NSW Government Architect. The UHIMS must be prepared by a suitably qualified and experienced person(s).  The UHI Mitigation Strategy must: d) details of where and how recommendations from the UHI Mitigation Strategy have been incorporated into the: i) CEMP required by condition C1	Section 1.3.3	UHIMS will be constructed or installed in accordance with relevant design drawings and specifications during Construction Phase A.
B143	Before the commencement of construction, the Applicant must ensure that a Bushfire Emergency and Evacuation Plan is prepared. The Plan must form part of the CEMP and OEMP required by conditions C1 and C3 and must:  (a) be prepared by a suitably qualified and experienced person(s);  (b) be consistent with the Development Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan, December 2014 and Australian Standard AS3745 2010 Planning for Emergencies in Facilities; and  (c) a copy of the plan must be submitted to the Secretary, NSW Rural Fire Service, Council and the Certifying Authority prior to occupation	Appendix O – Bushfire Emergency and Evacuation Plan	A Bushfire Emergency and Evacuation Plan (Appendix O) has been prepared to address the requirements of this condition.
B148	Prior to establishment of any ancillary facility that is not identified by description and location in the documents listed in A2 that satisfies the criteria in condition B148, the Applicant must prepare and implement an Ancillary	Ancillary Facilities	An Ancillary Facilities Management Plan has been prepared to address the requirements of this condition.



СоС	Relevant Requirement	CEMP Section	How Addressed
	Facilities Management Plan which outlines the environmental management practices and procedures for the establishment and operation of the ancillary facility. The Ancillary Facilities Management Plan must be prepared in consultation with the relevant council and submitted to the Secretary for approval one month prior to installation of ancillary facilities. The Ancillary Facilities Management Plan must detail the management of the ancillary facilities and include:	Management Plan	
B155	No later than one month before early works and fill importation, a <b>Community Communication Strategy</b> must be prepared and submitted to the Secretary for approval	Community Communication Strategy	A Community Communication Strategy has been prepared to address the requirements of this condition.
C1	Before the commencement of construction, a Construction Environmental Management Plan (CEMP) must be prepared to the satisfaction of the Secretary. The CEMP must:	This CEMP Section 1.2.5	This CEMP has been prepared to meet the Project's regulatory and policy requirements in a systematic manner and to continually improve the Project's environmental performance.
			The nominated sub-plans have been prepared in accordance with the applicable CoCs.
	(a) identify the statutory approvals required to carry out the development;	Section 2.5	Legislation, permits and licences applicable to the Project have
		Appendix A - Legislation Register	been identified within this CEMP.
		Appendix B – Project Permits and Licences Register	
	(b) outline all environmental management practices and procedures to be followed during construction works associated with the development;	Section 2	Section 2 and Section 3 of this CEMP include environmental management practices and procedures to be followed during construction.
		Section 3	
			Aspect-specific sub-plans will include additional detail. Refer to Aspect and Impacts Register (Appendix C) for identified



СоС	Relevant Requirement	CEMP Section	How Addressed
		Individual aspect-specific sub-plans	environmental aspects and a reference to the relevant aspect- specific sub-plans, where appropriate.
	(c) describe all activities to be undertaken on the site during construction of the development, including a clear indication of construction stages;	Section 1.3	Activities to be undertaken on site during construction are identified in Section 1.3 of this CEMP.
	(d) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;	Section 4	Environmental performance of the Project will be monitored in accordance with Section 4 of this CEMP, and in accordance with the monitoring activities identified in the relevant aspect-specific sub-plans.
		Individual aspect-specific sub-plans	
	(e) describe the roles and responsibilities for all relevant employees involved in construction works associated with the development; and	Section 2.4	Roles and responsibilities of key personnel have been nominated in Section 2.4 of this CEMP.
	(f) include the management plans required under this approval, including:	Refer to specific plan	
	(i) Construction Traffic and Access Management Plan;		
	(ii) Concrete Batching Plant Management Plan;		
	(iii) Soil and Water Management Plan;		
	(iv) Flood Emergency Response Plan;		
	(v) Construction Air Quality Management Plan;		
	(vi) Construction Noise and Vibration Management Plan;		
	(vii) Heritage Management Plan;		
	(viii) Construction Flora and Fauna Management;		
	(ix) Construction and Demolition Waste Management Plan;		
	(x) Contamination Management Plan; and		
	(xi) Bushfire Emergency and Evacuation Plan.		



CoC	Relevant Requirement	CEMP Section	How Addressed
C2	The Applicant must:  (a) not commence construction until the CEMP is approved by the Secretary; and  (b) carry out the construction of the development in accordance with the most recent version of the CEMP approved by the Secretary, unless otherwise agreed by the Secretary.	Section 1.2.5	Construction activities will not commence until the CEMP is approved by the Secretary. Activities will be undertaken in accordance with the most recent, approved version of the CEMP.
C7	The Applicant must ensure that the environmental management plans required under this consent are prepared in accordance with any relevant guidelines, and include:  (a) detailed baseline data; (b) a description of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures/criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the management measures to be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria; (d) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any:	See next column	<ul> <li>(a) Baseline data is included in aspect-specific sub-plans where applicable</li> <li>(b) Sections 1.7 and 1.1.1 Appendix C</li> <li>(c) Applicable management measures are included in aspect-specific sub-plans.</li> <li>(d) Monitoring and reporting requirements are addressed in Section 4</li> <li>(e) Where appropriate, unexpected finds procedures are included in aspect-specific sub-plans.</li> <li>(f) Section 4.5 describes the review process for the CEMP and environmental management of the Project.</li> <li>(g) Section 2.8 Community Communication Strategy Section 4.4</li> <li>(h) Section 4.5</li> </ul>



CoC	Relevant Requirement	CEMP Section	How Addressed
	(i) incidents and non-compliances;		
	(ii) complaints;		
	(iii) non-compliances with statutory requirements; and		
	(h) a protocol for periodic review of the plan.		
	Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for a particular management plan.		
C8	At least one month prior to the commencement of a new phase of the development, the CEMP or OEMP and applicable subplans must be reviewed and submitted to the Secretary for approval.	Section 1.2.5	This CEMP and applicable sub-plans will be submitted to the Secretary for approval at least one month prior to the commencement of construction.
C9	Within three months of:	Section 4.5	The review and submission process for the CEMP will be
	(a) the submission of an annual review under condition C10;		undertaken in accordance with this condition, as described in Section 4.5.
	(b) the submission of an incident or non-compliance notification under condition C13;		
	(c) the submission of an audit under condition C18;		
	(d) the approval of any modification of the conditions of this consent; or		
	(e) the issue of a direction of the Secretary under condition A2;		
	the strategies, plans and programs required under this consent must be reviewed, and if necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, must be revised, to the satisfaction of the Secretary. Where revisions are required, the revised document must be submitted to the Secretary for approval within six weeks of the review.		
	Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve the environmental performance of the development.		



CoC	Relevant Requirement	CEMP Section	How Addressed
C10	Each year, the Applicant must submit a review the environmental performance of the development (including all tenants and occupants) to the to the Department. The review must:	Section 4.5	A review of the environmental performance of the development will be submitted to the Department, in accordance with this condition.
	(a) describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the next year;		
	(b) include a comprehensive review of the monitoring results and complaints records from the previous year, including a comparison of these against the:		
	(i) the relevant statutory requirements, limits or performance measures/criteria;		
	(ii) requirements of any plan or program required under this consent;		
	(iii) the monitoring results of previous years; and		
	(iv) the relevant predictions in the EIS, Submissions Report, Consolidated assessment clarification responses; Modification Assessment, or conditions of this consent;		
	(c) identify any non-compliance over the previous year, and describe what actions were (or are being) taken to ensure compliance;		
	(d) identify any trends in the monitoring data over the life of the development;		
	(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and		
	(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.		
	The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the CCC and any interested person upon request.		
C11	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including	Section 2.8.3	Written notification to the Department will occur immediately, as required.



CoC	Relevant Requirement	CEMP Section	How Addressed
	the development application number and the name of the development if it has one), and set out the location and nature of the incident.		
C12	A written incident notification addressing all requirements for such notification set out in Appendix D of this consent, must also be emailed to the Department at the following address: compliance@planning.nsw.gov.au within 7 days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition or, having given such notification, subsequently forms the view that an incident has not occurred.	Section 2.8.3	Written incident notification addressing all requirements for such notification will occur as required.
C13	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary the Applicant must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements for such reporting set out in Appendix D of this consent, and such further reports as may be requested.	Section 2.8.3	A detailed report of an incident addressing the requirements set out in Appendix C of the Development Consent will be provided to the Secretary within 30 days, or as otherwise agreed with the Secretary.
C14	Any written requirements of the Secretary or relevant public authority (as determined by the Secretary) which may be given at any point in time, to address the cause or impact of an incident must be complied with and within any timeframe specified by the Secretary or relevant public authority.	Section 2.8.4	Any written requirements of the Secretary (or relevant public authority) that may be given to address the cause or impact of an incident will be complied with.
C15	If statutory notification is provided to EPA as required under the POEO Act in relation to the development, such notification must also be provided to the Secretary within 24 hours after the notification was provided to EPA.	Section 2.8.3	Notification will be provided to the Secretary within 24 hours after notification was provided to the EPA.
C16	The Department must be notified in writing to compliance@planning.nsw.gov.au within 7 days after the Applicant becomes aware of any non-compliance.	Section 4.4	DP&E will be notified in writing to compliance@planning.nsw.gov.au within 7 days after the Project becomes aware of any non-compliance.
C17	The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known), and what actions have been, or will be, undertaken to address the non-compliance.	Section 4.4	Section 4.4 outlines the requirements for the notification of the non-compliance, in accordance with this condition.



CoC	Relevant Requirement	CEMP Section	How Addressed
C18	Within one year of the commencement of any development under this consent, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must:  (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the	Section 4.3.2	Within one year of the commencement of any development and annually thereafter, an Independent Environmental Audit will be undertaken by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary.  Section 4.3.2 outlines the requirements of this condition.
	Secretary;		
	(b) be carried out in consultation with the relevant agencies and the CCC;		
	(c) assess the environmental performance of the development (and tenancies) and assess whether it is complying with the relevant requirements in this consent, and any strategy, plan or program required under this consent; and		
	(d) review the adequacy of any approved strategy, plan or program required under this consent; and		
	(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under this consent.		
C19	Within three months of commencing an Independent Environmental Audit, or unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary.	Section 4.3.2	A copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations will be implemented to the satisfaction of the Secretary.
C20	At least 48 hours before the commencement of construction until the	Section 1.2.6	Required documents, including this CEMP will be made available
	completion of all works under this consent, including demolition and remediation, the Applicant must:	Community Communication	on the SIMTA website, as required.
	(a) make copies of the following publicly available on its website:	Strategy	
	(i) the documents referred to in condition A2 of this consent;		
	(ii) all current statutory approvals for the development;		



CoC	Relevant Requirement	CEMP Section	How Addressed
	(iii) all approved strategies, plans and programs required under the conditions of this consent;		
	(iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;		
	<ul><li>(v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li></ul>		
	(vi) a summary of the current stage and progress of the development;		
	(vii) contact details to enquire about the development or make a complaint;		
	(viii) a complaints register updated on a monthly basis;		
	(ix) the Annual Reviews of the development;		
	<ul> <li>(x) audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report;</li> </ul>		
	(xi) any other matter required by the Secretary; and		
	(b) keep such information up to date, to the satisfaction of the Secretary.		
C21	The Proponent must prepare and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Compliance Tracking Program must be submitted to the Secretary for approval prior to the commencement of construction.	Compliance Tracking Program	A Compliance Tracking Program has been prepared to address the requirements of this condition.
C22	A suitably qualified and experienced ER who is independent of the development must be nominated by the Applicant, approved by the Secretary	Section 2.4.4	The Secretary has approved a suitably qualified and experienced ER for the Project.
	and engaged for the duration of construction of the development in accordance with the <i>Environmental Representative Protocol</i> (DPE 2017). Additional ERs may be engaged for the purpose of this condition in which case the obligations to be carried out by an ER under the terms of this		The role of the ER is described in Section 2.4.4.



СоС	Relevant Requirement	CEMP Section	How Addressed
	consent may be satisfied by any ER that is approved by the Secretary. The details of nominated ER(s) must be submitted to the Secretary for approval no later than one month prior to the commencement of works, or within another timeframe agreed with the Secretary.		
	This condition does not preclude the same ER for MPW projects being considered by the Secretary.		
C23	Construction must not commence until an ER nominated under C24 has been approved by the Secretary.	Section 2.4.4	Construction will not commence until an ER is approved by the Secretary.
C24	From commencement of any works until completion of construction, the approved ER must:	Section 2.4.4	Section 2.4.4 of this CEMP outlines the roles and responsibilities of the ER for the Project.
	(a) on behalf of the Applicant, receive and respond to communication from the Secretary in relation to the environmental performance of the development;		
	(b) consider and inform the Secretary on matters specified in the terms of this consent;		
	(c) consider and recommend any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;		
	(d) review the following documents required to be prepared under the terms of this consent, ensure they are consistent with requirements in or under this consent and if so, endorse them prior to submission to the Secretary (if required to be submitted to the Secretary) or prior to implementation (if not required to be submitted to the Secretary):		
	(i) CEMP;		
	(ii) OEMP; and		
	(iii) the other plans and sub-plans required by these conditions, and referenced in conditions C1 and C3;		
	(e) regularly monitor the implementation of all documents required to be prepared under the terms of this consent to ensure implementation is being		



**CEMP Section** How Addressed carried out in accordance with what is stated in the document and the terms of this consent: (f) as may be requested by the Secretary, help plan, attend or undertake Department audits of the development including scoping audits, programming audits, briefings, and site visits, but not independent audits required under condition C18 of this consent: (g) if conflict arises between the Applicant and the community in relation to the environmental performance of the development, attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary: (h) consider any minor amendments to be made to the CEMP, CEMP subplans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of this consent and the CEMP, CEMP sub-plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this consent; and (i) prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly Environmental Representative Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month (or other timeframe agreed with the Secretary). The Environmental Representative Report must be submitted within seven (7) days following the end of each month for the duration of

construction of the development, or as otherwise agreed with the Secretary.



The Final Compilation of Mitigation Measures (FCMMs) were prepared as part of the consolidated assessment clarification responses issued on 10 November 2017. A list of the FCMMs as relevant to the Project and how they have been complied with in this CEMP are provided in Table 11 and the Compliance Tracking Program, prepared in accordance with CoC C21.

Table 11 Final Compilation of Management Measures (FCMMs)

No.	Relevant Requirement	How Addressed		
0B	The Construction Environmental Management Plan (CEMP), or equivalent, for the Amended Proposal would be based on the PCEMP (Appendix G of the EIS), and include the following preliminary management plans:	All nominated plans have been / will be prepared as sub-plans to the CEMP or as		
	Preliminary Construction Traffic Management Plan (PCTMP) (Appendix K of the EIS)	stand-alone documents.		
	Air Quality Management Plan (AQMP) (Appendix M of the EIS)	The Community Communication Strategy is being prepared in place of the		
	<ul> <li>Erosion and Sediment Control Plans (ESCPs) and Bulk Earthworks Plans (Appendix P of the EIS).</li> </ul>	Community Information and Awareness		
	As a minimum, the CEMP would include the following sub-plans:	Strategy.		
	Construction Traffic Management Plan (CTMP)			
	<ul> <li>Construction Noise and Vibration Management Plan (CNVMP), prepared in accordance with the Interim Construction Noise Guideline</li> </ul>			
	Construction Air Quality Management Plan			
	Flora and Fauna Management Plan			
	<ul> <li>A Soil and Water Management Plan (SWMP) and Erosion and Sediment Control Plan</li> </ul>			
	Contamination Management Plan			
	Flood Emergency Response and Evacuation Plan			
	UXO, EO, and Exploded Ordnance Waste Management Plan			
	Asbestos Management Plan			
	<ul> <li>Heritage (Indigenous and Non-Indigenous) Management Plan/s</li> </ul>			
	Bushfire Management Strategy			
	Community Information and Awareness Strategy.			



No.	Relevant Requirement	How Addressed
0D	The construction and/or operation of the Amended Proposal may be delivered in a number of stages. If construction and/or operation is to be delivered in stages a Staging Report would be provided to the Secretary prior to commencement of the initial stage of construction and updated prior to the commencement of each stage as that stage is identified.	The construction of the Project is not proposed to be delivered in multiple stages.
6E	An Emergency Response Plan would be prepared and implemented. The plan would meet the requirements of Clause 153C of the POEO Act and the POEO (General) Regulation (Cl. 98B) and specify the procedure to be followed in the event of a spill, including the notification requirements and use of absorbent material to contain the spill. A spill kit would be provided on the Amended operational area at all times.	Section 2.8
6G	The CEMP would include an Earthworks Specification, which would include details on earthworks material criteria, handling and placement requirements, embankment and cutting formation (including foundation, batter and benching requirements), unsuitable material and bridging layer requirements, conformance testing methods and acceptance criteria (e.g.for material acceptance and compaction control).	Refer to Construction Soil and Water Management Plan (Appendix G)
7B	The following measures would be included in the CEMP (or equivalent) to minimise hazards and risks:	Section 1.3.3
	<ul> <li>Construction works, including the storage, handling and use of hazardous construction materials would be undertaken in accordance with the provisions of the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2011.</li> <li>All demolition activities would be undertaken in accordance with Australian Standard AS2601-1991 –</li> </ul>	Refer to Bushfire Emergency and Evacuation Plan (Appendix O), Asbestos Management Plan contained within the Contamination Management Plan
	Demolition of Structures	(Appendix N)
	<ul> <li>Safe operational access and egress for emergency service personnel and workers will be provided at all times, and specified in the CEMP.</li> </ul>	Health and safety requirements for the Project will be addressed within the Health and Safety Plan, to be prepared
	<ul> <li>Regular maintenance and inspection of all environmental and safety protection controls would be undertaken.</li> </ul>	by the Contractor's CM in accordance with the Principal Representative's Project Requirements
7D	All asbestos removal works, including the demolition of the eight structures identified as containing asbestos (refer to Figure 14-1 of the EIS will be undertaken in accordance with the Environmental Management Plan (GHD, 2016) and the following:	Refer to Asbestos Management Plan contained within the Contamination Management Plan (Appendix N)
	The Code of Practice for the Safe Removal of Asbestos (NOHSC, 2005)	
	Code of Practice: How to Safely Remove Asbestos (WorkCover NSW, 2017)	



No.	Relevant Requirement	How Addressed
	Asbestos removal would be carried out by an appropriately licensed asbestos removalist. The licensing requirements for asbestos removal are specified in the Code of Practice How to Safely Remove Asbestos (WorkCover NSW, 2011).	
9B	Management of Aboriginal heritage would be included in the CEMP for the Amended Proposal. Information within the CEMP would include:	Refer to the Construction Heritage Management Plan (Appendix K)
	A summary of the findings of the Aboriginal Heritage Impact Assessment	
	Report (provided at Appendix S of the EIS)	
	Guidance on unexpected archaeological and cultural finds (including human remains).	
11F	Waste would be diverted from landfill, including diversion of spoil, construction and demolition waste, and commercial and industrial waste, where reasonable and feasible. The management of waste would be considered as part of the preparation of the CEMP for the Amended Proposal, detailing the appropriate procedures for waste management.	Refer to the Construction Demolition and Waste Management Plan (Appendix M) and the Construction Spoil Management Plan
12A	Measures to mitigate the effect of the construction waste streams would be incorporated into the Amended Proposal's CEMP, including the following information:	Refer to the Construction Demolition and Waste Management Plan (Appendix M)
	Avoidance and reuse of material will have priority over recycling	
	Recycling will have priority over disposal	
	Earth excavated from the site will be used for fill material and landscaping where feasible	
	If possible concrete components will be crushed and reused onsite, with the remainder sent to a recycling facility	
	Waste generation will be minimised by ordering the correct quantity of materials	
	Selection of materials which maximise recycled content, while having low embodied water and energy use	
	Selection of materials which maximise durability and lifespan.	
	The following procedures and protocols will be considered within the CEMP regarding waste management:	
	Characterisation of construction waste streams	
	Management of any identified hazardous waste streams	
	<ul> <li>Procedures to manage construction waste streams, including handling, storage, classification, quantification, identification and tracking</li> </ul>	
	Mitigation measures for avoidance and minimisation of waste materials	



No.	Relevant Requirement	How Addressed
	Procedures and targets for reuse and recycling of waste materials.	
	Inclusion of the waste management strategies included in the Concept Plan Statement of Commitments for construction waste management.	
15A	A community information and awareness strategy would be included in the CEMP and would outline measures to maintain communication with the community and all relevant stakeholders throughout the construction process of the Amended Proposal.	The Community Communication Strategy provides mechanisms to facilitate communication with the community and relevant stakeholders.



# 2.5.2 Permits and Licences

Permits and licences relevant to this Project are detailed in the Project Permits and Licences Register, included as Appendix B of this CEMP. This register will be revised and updated in conjunction with the management review outlined in Section 4.5 or when there has been a change to relevant legislation.

Compliance conditions relating to items listed on the Permits and Licences Register are incorporated into this CEMP. Specific details and controls are included within the associated sub-plans.

A summary of the key permits and licences applicable to the Project is provided below.

#### 2.5.2.1 Environment Protection Licence

Construction and operation of the Project will be undertaken in accordance with the requirements of the *Protection of the Environment and Operations Act 1997* (POEO Act). An Environment Protection Licence (EPL) may be issued under Section 43(a) of the POEO Act to authorise the carrying out of scheduled activities at any premises, as required under Section 48. The requirement for an EPL under Section 48(1) applies to activities where Schedule 1 of the POEO Act indicates that a licence is required for premises at which the activity is carried out.

An EPL (No. 21054) was issued by the EPA for the Moorebank Precinct on 4 June 2018. A variation to the license was issued on 18 April 2019 to capture cut and fill earthworks occurring on the MPE Stage 2 Project Site and additional considerations observed during a site inspection on the 23 November 2018.

The licence applies to the Moorebank Precinct (excluding the MPE Stage 1 Rail Access Land Package (RALP) which has a separate EPL licence (No. 20966) and authorises > 100,000 – 500,000 tonnes crushing, grinding or separating processing capacity per annum and > 500,000 – 2,000,000 tonnes extraction, processing or storage capacity per annum. The licence applies to all other activities carried on at the premises, including road construction, bulk earthworks 'cut and fill' and importing fill.

### 2.5.2.2 Utilities Agreements and Approvals

Utility connections for the Project will be to the existing utilities on the MPE Stage 1 site, which will be undertaken via applications made directly to the relevant utility providers and approved through their authority and delegation under Part 5 of the EP&A Act. No direct connections from the Project to any authority mains will be required and approvals from the utility service providers must be obtained (CoC A27).

Should it be identified that public utility adjustment/relocation works will be required by the Project, in particular for the Moorebank Avenue upgrade works, the Construction Contractor will be responsible for identifying the works required and gaining approval from the relevant utility service providers prior to undertaking the works. All relocation / adjustment works identified as required for the Project will be undertaken by the Project (CoC B19).

A Section 73 Compliance Certificate will be obtained from Sydney Water Corporation for water and sewerage infrastructure servicing the Project prior to commencement of operation of the Project (CoC A28).

# 2.5.3 Other Requirements

#### 2.5.3.1 ISCA Requirements

Infrastructure Sustainability Council of Australia (ISCA) requirements will be carried out for the Project and are referenced from the ISCA Version 1.2 documentation. The ISCA requirements which are relevant to the Project are detailed in Table 12.



Table 12 ISCA Requirements

ISCA Credit	Requirement	Phase	Reference Document	CEMP Section
Cli-1: Climate change risk assessment	Carry out a climate change risk assessment covering direct and indirect risks to the asset.	Design	Climate Change Risk Assessment Report	N/A
Cli-2: Adaptation measures	Provide a climate change study report showing identification of risks and implementation of adaptation measures.	Design	Climate Change Risk Assessment Report	N/A
Eco-1: Ecological value	The ecological value of the infrastructure site is maintained through ecological assessment.	Construction	CFFMP	N/A
	The ecological value of the infrastructure site is enhanced.	Construction	CFFMP	Section 2.2.3
Eco-2: Habitat connectivity	The existing degree of habitat connectivity is maintained (based on previous ecological assessments). This can include	Construction	CFFMP	Section 1.7; Table 5
	offset strategies.			Section 2.7.1.1; Table 13
				Section 4.2.2; Table 17
	Ecological assessments and management plans must be reviewed by a suitably qualified professional.	Construction	CFFMP	Section 1.7; Table 5 Section 4.5
Ene-1 Energy and carbon monitoring and reduction	Model and monitor the energy and carbon footprint of the site.	Construction	SODCT	Section 1.7; Table 5 Section 4.1
	Report actual energy and carbon footprints compared to base case scenarios.	Construction	SODCT	Section 1.7; Table 5 Section 4.6.1
Ene-2: Use of Renewable energy	Opportunities for renewable energy use are comprehensively investigated.	Design	MLP Sustainability Management Plan	N/A
	Report and monitor substitution of energy from renewable sources.	Construction	SODCT	Section 1.7; Table 5 Section 4.6.1



ISCA Credit	Requirement	Phase	Reference Document	CEMP Section
Inn-1: Innovation strategies and technologies	Investigate and implement innovations.	Design	MLP Sustainability  Management Plan	N/A
Lan-1: Previous land use	Report on area of land used by the Project.	Design	MLP Sustainability Management Plan	N/A
Man-6: Knowledge sharing	Sustainability knowledge is shared within the project, to stakeholders, beyond the project boundaries to the wider industry.	Construction	CEMP	Section 1.7; Table 5 Section 2.7.1
Mat-1: Materials lifecycle impact measurement and reduction	Monitor and model materials lifecycle impacts across the infrastructure lifecycle.	Construction	SODCT	Section 1.7; Table 5 Section 2.4.2
	Reduce materials lifecycle impacts compared to the base case scenario.	Construction	MLP Sustainability Management Plan SODCT	Section 1.7; Table 5
Sta-1: Stakeholder engagement strategy	Develop a comprehensive stakeholder engagement strategy.	Design	SIMTA CES	N/A
	A suitably qualified professional must manage, review and audit strategy.	Construction	ccs	Section 1.7; Table 5 Section 4.1
	Facilitate community involvement in the development of the strategy.	Design	SIMTA CES	N/A
Sta-3: Effective communication	The community has been provided with information that:  - was provided in a timely manner  - supported community participation  - was meaningful and relevant  - was accessible	Construction	CCS	Section 1.2.4 Section 1.2.6 Section 2.6.2 Section 4.5
	Public information is verified by independent reviews and audits.	Construction	ccs	Section 1.2.5



ISCA Credit	Requirement	Phase	Reference Document	CEMP Section
				Section 1.7; Table 5
				Section 4.3
Sta-4: Addressing community	Ensure that community concerns are adequately addressed and verified by internal management, reviews and audits.	Construction	ccs	Section 1.2.4
concerns	and remise by mornal management, reviews and addition			Section 1.7; Table 5
				Section 2.6.3
				Section 4.5



### 2.5.3.2 Guidelines and Standards

This CEMP has been prepared in accordance with the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004) as demonstrated in Table 13.

Table 13 Guideline for the Preparation of Environmental Management Plans requirements

EMP Guideline	e Section	CEMP Reference	
Background	Introduction  Location  Construction activities  Timing and schedule  Project description  EMP context  EMP objectives	Section 1.1  Section 1.1  Section 1.1  Section 1.5 and Section 1.4  Section 1.1  Section 1.2.1, also Section 2.1 and Section 2.2  Section 1.2.3	
	Environmental policy	Section 1.8	
Environmental management	Environmental management structure and responsibility	Section 2.4	
·	Approval and licencing requirements	Section 2.5.1, Section 2.5.2 and Appendix B	
	Reporting	Section 4.6	
	Environmental training	Section 2.7	
	Emergency contacts and responses	Table 15 and Section 2.8	
Implementation	Risk assessment	Section 3.1 and Appendix C	
	Environmental management activities and controls	Issue-specific sub-plans	
	Environmental control plans or maps	Section 2.2.3 and Appendix D	
	Environmental schedules	Environmental schedules (e.g. site inspection checklists, waste register, imported spoil tracking register) will be retained on the project's document management system and/or included in issue-specific subplans where appropriate	
Monitor and review	Environmental monitoring	Section 4.1 and aspect-specific sub-plans	
	Environmental auditing	Section 4.3	
	Corrective actions	Section 4.4	



EMP Guidelin	e Section	CEMP Reference
	EMP review	Section 4.5

Compliance with relevant legislation and industry best practice is often achieved through the adherence to relevant guidelines and standards. Guidelines and Standards used during the compilation of this CEMP and sub-plans include (but are not limited to):

- AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids
- AS 2890.1:2004 Parking facilities off-street Parking
- AS 2890.2:2002 Parking facilities Off-street commercial vehicle facilities
- AS 2890.6:2009 Off-street parking for people with disabilities
- AS/ISO 10002:2006 Customer Satisfaction Guidelines for Complaints handling in Organisations
- AS/NZS ISO 14001:2015 Environmental Management Systems
- AS/NZS ISO 19011:2014 Guidelines for Auditing Management Systems;
- AS/NZS ISO 31000:2009 Risk Management
- AS1158 Street Lighting Applications
- AS1158.3:1999 Pedestrian Area (Category P) Lighting
- AS2601;2001 The Demolition of Structures
- AS3580.10.1 2003 Methods for sampling and analysis of ambient air –
   Determination of particulates Deposited matter Gravimetric Method
- AS3580.9.3-2015 Methods for sampling and analysis of ambient air Method 9.3:
   Determination of suspended particulate matter—Total suspended particulate matter (TSP)—High volume sampler gravimetric method
- AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting
- AS4970:2009 Protection of Trees on Development Sites
- Assessing Vibration: A Technical Guide (DECC 2006)
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)
- Australian Dangerous Goods Code Edition 7.4
- Australian Rainfall and Runoff Volume 1 (2001), Engineers Australia
- DECC June 2007 Local Government Air Quality Toolkit, Visual Guide: Dust from urban construction sites (DECC 2007)
- DIN 4150-3: Structural Vibration Effects of Vibration on Structures (for structural damage)
- Environmental Guidelines: Solid Waste Landfills, NSW EPA 1996
- Environmental Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (EPA 1997)
- EPA's Smoky Vehicles Program under the NSW Protection of the Environment and Operations Act 1997 and NSW Protection of the Environment and Operations Regulations 2010.
- Guide to Road Design (Austroads)



- Guideline for the Preparation of Environmental Management Plans (DIPNR 2004)
- Guidelines for Controlled Activities (NSW Office of Water)
- Interim Construction Noise Guideline (DECC 2009)
- Managing Urban Stormwater Soils and Construction Volume 1, 4th Edition (Landcom 2004)
- National Environment Protection Council 2016 Ambient Air: National Environment Protection Measure for Ambient Air Quality
- National Environment Protection Measure (NEPM) (Diesel Vehicle Emissions)
- NEPM Guidelines for the Assessment of Site Contamination
- NSW Biodiversity Offsets Policy for Major Projects (OEH 2014)
- NSW Department of Primary Industries (DPI) Policy and Guidelines for Fish Habitat Conservation and Habitat Management (2013)
- NSW EPA 2006 Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (2006)
- NSW EPA Best Practice Note: Land farming (2014)
- NSW EPA Contaminated Sites, Sampling Design Guidelines (1995)
- Principal's Project Requirements IMEX Terminal No. 1 (IMEX No. 1)
- State Environmental Planning Policy No. 55 Remediation of Land
- Storing and Handling Liquids: Environmental Protection Participants Handbook (EPA)
- The Code of Practice for the Safe Removal of Asbestos (NOHSC, 2005)
- WorkCover NSW, Code of Practice: How to Safely Remove Asbestos (WorkCover NSW, 2017)
- Waste Classification Guidelines Part 1: Classifying waste (NSW EPA 2014).

#### 2.6 Communication

Clear lines of communication throughout all levels and functions (e.g. management, staff and subcontracted service providers), as well as to key external stakeholders, is key to minimising environmental impacts and achieving continual improvements in environmental performance.

A Community Communication Strategy (CCS) has been developed to provide mechanisms to facilitate communication between SIMTA and the key stakeholders, including regulators, Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development. Elton Consulting is the Community Engagement Consultant (CEC) for SIMTA and will act as the 'control tower' for all public communications. All community liaison must be undertaken in accordance with the CCS.

The Construction Contractor will communicate with internal and external stakeholders and other interested parties will be kept informed of the Project's progress and any changes and issues as necessary as described in this section.

#### 2.6.1 Internal Communications

The Contractor Management Team will meet at least fortnightly to discuss progress and any issues with environmental and sustainability management or performance



on-site, any amendments to plans that might be required or any new / changes to construction activities. Meeting minutes will be taken and maintained by the Construction Contractor.

Any changes to environmental management personnel and practice on site will be communicated to Project personnel through the following internal communications:

- Management reports
- Site inspection reports
- Noticeboards
- Site meetings
- Employee induction, training and toolbox sessions
- Briefings, notifications and alerts
- Project reports.

#### 2.6.1.1 Incidents

Information relating to incidents will be communicated / reported in accordance with the reporting hierarchy as shown in Section 2.8 and CoC C11 to C17.

### 2.6.2 External Communications

External communication methods that will be undertaken by the CEC and/or the Construction Contractor include:

- Site meetings
- ER meetings
- ER Compliance Reports
- Site Environmental Compliance reports
- Visitors induction and training
- Stakeholder meetings
- Community notifications for landowners and businesses who are directly impacted by the Project (e.g. community updates, project information flyers and/or other communications material)
- Notifications and Project updates to Principal's Representative.

Media inquiries are the responsibility of the Principal's Representative. Direct requests from the media to any personnel for information about the Project will be referred directly to the Principal Representative.

Information relating to external notification for incidents is further detailed in Section 2.6.2 of this CEMP and the CCS.

# 2.6.3 Complaints

Public complaints shall be logged with Principal's Representative and are to be responded to in accordance with the CCS. Public complaints may be received via:

- Project email simta@elton.com.au
- 24-hour project information line 1800 986 465
- Postal address PO Box 1488 Bondi Junction NSW 2022



- Project website www.simta.com.au
- Face to face interactions with Project personnel.

Environmental management-related complaints will be forwarded onto the Contractor's EM by the Contractor's CLM and / or the Principal's Representative, in accordance with the CCS.

### 2.6.3.1 Damage to Third Party Property or Infrastructure

Reports (including through complaints) of damage to third party property or infrastructure as a result of construction work will be treated as an incident that follows the process outlined in Section 2.8. Potential damage will be notified, classified, reported and investigated as per the incident management process. The Construction Traffic and Access Management Plan (CTAMP) contains protocols for the identification and rectification of damage to roads and road infrastructure.

The initial response timeframes will follow the complaints process, as outlined within the CCS, however investigations and potential rectifications will be undertaken as per the incident management process (Section 2.8). Dispute resolution is outlined within the CCS.

### 2.7 Training and Competence

# 2.7.1 Training

All Project personnel shall undergo general environmental awareness training and training relevant to their responsibilities under the CEMP. Records of Project environmental induction and other environmental training will be maintained in the Construction Contractor's site office.

### 2.7.1.1 Project Environmental Induction

All workers and sub-contractors attending site will receive a site-specific induction that includes details of environmental and compliance obligations. The Contractor's EM is responsible for developing the site-specific induction and maintaining a register of attendance at the project environmental induction including dates, names of people inducted and trainer details.

All employees (including sub-contractors) will receive induction/ training in the following:

- Environmental Policy
- Sustainability Policy
- Requirements of the CEMP and sub-plans
- Individual authorities and responsibilities
- Site environmental rules
- Heritage considerations
- Potential consequences of departure from rules
- Emergency procedure and response (e.g. spill clean-up)
- Legal obligations
- Location of environmentally sensitive areas and exclusion zones
- Waste management



- Conservation of on-site resources including water, materials, and energy
- Water consumption
- Sustainability requirements of the Project
- Communications and reporting incidents
- Environmental competency requirements for works
- Site personnel will be informed of their individual responsibility to be proactive and report any instances of environmental control measures not operating properly.

All visitors to the Project site must undergo a visitor's induction. All visitors must be accompanied by Project personnel at all times.

### 2.7.1.2 Task-specific Training

All construction personnel and sub-contractors undertaking a task governed by an EWMS will participate in training on the EWMS, and acknowledge that they have read and understood their obligations prior to commencing work.

The Contractor's EM or Site Supervisor is responsible for training staff in the EWMS and maintaining a register / sign off sheets of EWMS training.

#### 2.7.1.3 Pre-start and Toolbox Talks

Pre-starts will be held on a daily basis by the Site Supervisor and provide the Project personnel and sub-contractors with any updates on environmental matters, including any key or recurring environmental issues. The Pre-starts will be based on requirements in relevant EWMS and ECM. Attendance of all work team members at the meetings is required.

Toolbox talks will be undertaken in response to evolving issues on the ground, particularly in response to environmental incidents, non-compliance issues or any changes to the CEMP and environmental management procedures.

Attendance at toolbox talks is mandatory for site personnel and sub-contractors. Specific environmental issues that may be addressed in toolbox talks include:

- Community awareness
- Soil and water management practices
- Working with potentially contaminated soils
- Noise minimisation for staff working out of hours
- Incident management, and environmental emergency mock training
- Heritage awareness
- Sustainability requirements
- Waste management
- Any other subjects listed in environmental management plans.

The Contractor's EM is responsible for identifying additional environmental training requirements in response to changes in the Project environmental management documentation, site conditions or review of the CEMP.

The Contractor's EM is responsible for maintaining a register of environmental training carried out, including dates, names of people trained and details of the training and trainer. This may take the form of a sign-off sheet for pre-starts and toolbox talks.



# 2.7.1.4 Recommended Environmental Training

A summary of proposed awareness training by environmental aspect is provided in Table 14. The training shall be scheduled to reflect works / activities in the construction program.

Table 14 Awareness Training by Environmental Aspect

Aspect	Training Inclusion	Personnel Required	Timing / Frequency / Means
Emergency spill response	<ul> <li>Use and location of spill kits</li> <li>Spill control</li> <li>Emergency response procedures</li> <li>Presentation and assessment</li> <li>Spill response drill</li> <li>Identification of hydraulic hose fatigue.</li> </ul>	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> <li>Contractor to provide relevant training</li> </ul>
Erosion and sediment control	<ul> <li>Standard erosion and sediment controls from the Landcom 'Blue Book'</li> <li>Implementation of erosion and sediment controls on site</li> <li>Erosion and Sediment Control Plans.</li> </ul>	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> <li>Contractor to provide relevant training</li> </ul>
Heritage awareness	Stop works and reporting protocols for discovery of previously unknown heritage and archaeological items.	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> <li>Protocol posted on message boards</li> </ul>
Contamination awareness	<ul> <li>Contamination status of site</li> <li>Stop works protocols for unidentified potential contamination (e.g. hydrocarbons and asbestos)</li> </ul>	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> <li>Protocol distributed to workers and posted on message boards</li> </ul>
Environmental legal obligations	<ul> <li>POEO Act and other project requirements</li> <li>Applicable fines and prosecutions.</li> </ul>	Construction personnel	<ul><li>Project induction</li><li>Project toolbox talks</li></ul>



Aspect	Training Inclusion	Personnel Required	Timing / Frequency / Means
Energy and resource usage	<ul> <li>Awareness training of energy and resource efficiency in the workplace including office / compound and site initiatives such as harvesting rainwater for dust suppression instead of potable mains water and use of bio-fuels, eco-driving.</li> <li>Data collation.</li> </ul>	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> </ul>
Waste management	<ul> <li>Waste management and recycling</li> <li>Water reduction</li> <li>Spoil and topsoil management</li> <li>Data collation.</li> </ul>	Construction personnel	<ul><li>Project induction</li><li>Project toolbox talks</li></ul>
Community / stakeholder awareness	<ul> <li>Adjacent community and Project involvement</li> <li>Relevant Project stakeholders</li> <li>Accepted behaviours</li> <li>Approved hours of work.</li> </ul>	Construction personnel	<ul><li>Project induction</li><li>Project toolbox talks</li></ul>
Biodiversity	<ul> <li>'No go' areas and exclusion areas</li> <li>Environmental Control Maps</li> <li>Wildlife status of project and surrounds</li> <li>Stop work and reporting protocols for injured wildlife</li> <li>Measures to stop feral animals coming to site.</li> </ul>	Construction personnel	<ul> <li>Project induction</li> <li>Project toolbox talks</li> </ul>
Noise and vibration	<ul> <li>Work hours</li> <li>Management measures to reduce noise and vibration from Early Works activities</li> <li>EPL requirements</li> <li>POEO Act and other project requirements.</li> </ul>	Construction personnel	<ul><li>Project induction</li><li>Project toolbox talks</li></ul>

# 2.7.2 Worker Competency

The Contractor's PM is responsible for identifying the competency needs for the Project and allocating resources for training. Some key competency environmental standards for the Project include:

- Specific hazardous liquid / hazardous waste removal licence
- Traffic management qualifications



- Asbestos awareness (removal)
- Erosion and sediment control including Volume 1 of Managing Urban Stormwater:
   Soils and Construction ('Blue Book') (Landcom 2004)
- Air quality, noise and vibration and water quality monitoring
- Incident Cause Analysis Method (ICAM).

Records of licences, training and verification of competencies will be documented in a training register and maintained on site.

Evidence of training and competency is to be provided prior to commencement of works by site personnel and contractors, applicable to the tasks to be undertaken.

The Site Supervisor and Contractor's EM is responsible for monitoring the skills required by workers to effectively implement the CEMP, sub plans and associated procedures on site. The Contractor's EM / Site Supervisor will communicate additional training needs identified to the Contractor's PM.

# 2.8 Emergency Preparedness and Response

An environmental incident is an incident or set of circumstances resulting in harm, or potential harm, to the environment. Environmental incidents include pollution incidents and environmental emergencies. Environmental incidents may arise from natural (e.g. storm, wind or bushfire) or human factors.

A pollution incident is an incident or set of circumstances during or as a consequence of, which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises. It does not include an incident or set of circumstances involving only the emission of any noise (POEO Act).

An environmental emergency is any event that causes or has the potential to cause material harm to the environment. An environmental emergency is a Class 3 incident.

The Construction Contractor must develop an Emergency Preparedness and Response Management Plan (EPRMP) and be in accordance with the Pollution Incident Response Management Plan (PIRMP), required under the EPL for the Project.

Each Construction Contractor must nominate a Site Emergency Contact and an alternate contact that will be available 24-hours a day, seven days a week. The Site Emergency Contact has the authority to stop and direct works. Emergency contact details are included in Table 15.

Table 15 Emergency Contact Details

Contact Name	Telephone Number	Address
Ambulance	000	N/A
Fire Brigade	000	N/A
Police	000	N/A
OEH Pollution Hotline	131 555 or (02) 9995 5555 (if calling from outside NSW).	N/A



Contact Name	Telephone Number	Address
Ministry of Health	(02) 9391 9000	N/A
SafeWork NSW	13 10 50	N/A
Liverpool City Council	Customer Contact Centre for NSW residents: 1300 36 2170 Calling from interstate: (02) 9821 9222	Ground Floor, 33 Moore St, Liverpool NSW 2170
	National Relay Service (NRS) for hearing and speech impaired customers: 133 677	
Rural Fire Service	9603 7077	Cnr Alderney St and Townson Ave, Minto 2566
Liverpool Hospital	8738 3000	Corner of Elizabeth and Goulburn Streets, Liverpool, NSW 2170
Principal's Representative	Contact details to be confirmed	Contact details to be confirmed
Contractor's PM	Contact details to be confirmed	Nominated 24-hour contact
Contractor's CM	Contact details to be confirmed	Nominated 24-hour contact
Contractor's EM	Contact details to be confirmed	Back-up 24-hour contact
Contractor's CLM	Contact details to be confirmed	Back-up 24-hour contact
Contractor Health & Safety Manager	Contact details to be confirmed	Contact details to be confirmed
SIMTA Hotline number	1800 986 465	N/A



# 2.8.1 Incident Response

All environmental incidents will be managed in accordance with the flowchart shown in Figure 2-3.



STOP the work immediately and CHECK for danger.

Senior member of the team present when an incident occurs is to take charge and **DELEGATE** the main assisting roles of the emergency response.

**CONTACT** Site Emergency Response Team and await further assistance if required.

**CONTACT** emergency services (000) If an incident presents an immediate threat to human health or property.

WEAR appropriate PPE.

**ELIMINATE** sources of danger **CONTROL** the source of the incident e.g. stop dust emitting activity, right an upturned drum

CONTAIN the incident e.g. use earth or sand bunds to control spills.

CHECK the incident does not have the potential to cause further harm (e.g. check spill has not reached any nearby watercourse / sensitive areas)

INTERNAL NOTIFICATION of the incident to the Contractor EM

External notification and reporting requirements detailed in "Incident Notification and Classification Flowchart"

**CLEAN UP** plan to be prepared and implemented

Figure 2-3 Environmental Incident Response Flowchart



### 2.8.2 Incident Classification and Notification

All environmental incidents are to be reported and managed in accordance with Qube's Incident Reporting and Management procedure (SHEMS-QM-13-PR-0126) and in accordance with the PIRMP, once implemented. Environmental incidents will be classified and notified in accordance with Figure 2-4.

Incident notification requirements, in accordance with Appendix C of the CoCs must:

- Identify the development and application number
- Provide details of the incident (time, date, nature, duration and location of the incident)
- State the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
- Outline the circumstances in which the incident occurred (including the cause of the incident, if known)
- Identify how the incident was detected
- Identify when the Applicant became aware of the incident
- Identify any actual or potential non-compliance with conditions of consent or with an approved construction management plan
- Describe what immediate steps were taken in relation to the incident
- Identify further action(s) to be taken in relation to the incident
- Identify a contact for further communication regarding the incident and set out their contact details.

The incident report requirements, in accordance with Appendix C of the CoCs must include:

- A summary of the incident
- The outcomes of an incident investigation, including identification of the cause/s of the incident
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence
- Details of any communication with other stakeholders regarding the incident.



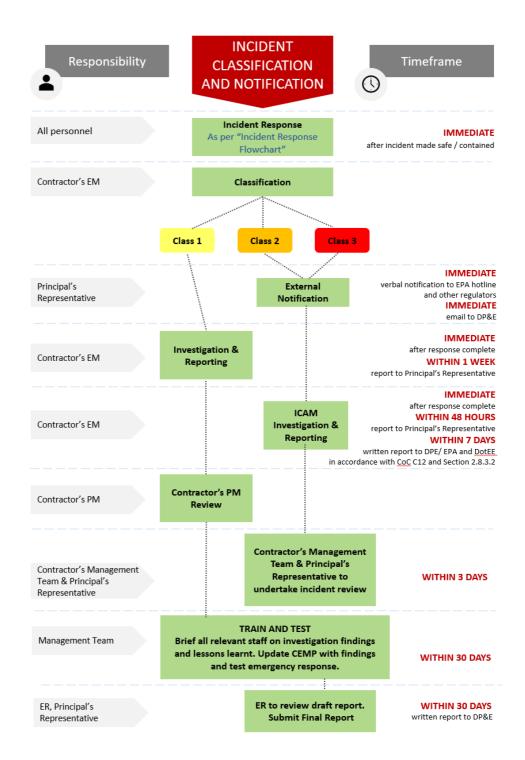


Figure 2-4 Environmental Incident Classification and Notification

Additional clarifications on the environmental incident classification and notification process for the Construction Contractor are as follows:

- Incidents will be classified into one of three classes as per Table 16 The Contractor's EM is responsible for the classification of incidents in consultation with the Principal's Representative
  - ER to be consulted when classification of incidents is uncertain



- For actual or potential Class 2 and 3 environmental incidents the Contractor's EM will immediately inform the Principal's Representative
- An ICAM certified person must complete a detailed ICAM investigation for actual or potential Class 2 and 3 environmental incidents
- Designated personnel to implement corrective and preventative actions.



Table 16 Environmental Incident Classification

	Class One	Class Two (including potential)	Class Three
Direct costs including clean up or implementing corrective action/s	Up to \$10,000	\$10,000 to \$100,000	More than \$100,000
Impact	<ul> <li>Pollution or degradation which has low severity impacts on the community and/or environment in the short-term (&lt;1 month duration) and is fully reversible with no residual impacts</li> <li>Harming a protected animal that is not vulnerable or threatened</li> <li>Non-compliance with an approved management plan where non-compliance is administrative</li> </ul>	<ul> <li>Pollution or degradation which has moderate severity impacts on the community and/or environment (1-3 months duration) but is fully reversible with</li> </ul>	<ul> <li>Pollution or degradation which has high severity impacts on the community and/or environment and may have irreversible residual impacts</li> </ul>
		<ul> <li>no residual impacts</li> <li>Harming an animal that is (or is part of) a vulnerable species or vulnerable ecological community</li> </ul>	<ul> <li>Harming an animal that is (or is part of) a threatened species or threatened ecological community (other than a vulnerable species or community) (S2.1)</li> </ul>
		<ul> <li>Picking a plant that is (or is part of) a vulnerable species or vulnerable ecological community.</li> <li>Non-compliance with an approved management plan where non-compliance results in persistent failure to attain/maintain objectives and targets identified in Table 5.</li> </ul>	<ul> <li>Picking a plant that is (or is part of) a threatened species or threatened ecological community (other than a vulnerable species or community)</li> </ul>
			<ul> <li>Damaging a declared area of outstanding biodiversity value</li> </ul>
			<ul> <li>Knowingly damages any habitat of a threatened species or threatened ecological community</li> </ul>
			Contravention of a stop work order.



#### 2.8.3 External Notification

All external notification of environmental incidents will be undertaken by the Principal's Representative.

The CCS provides mechanisms to facilitate communication between SIMTA, the Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during construction.

#### 2.8.3.1 State Matters

In accordance with POEO Act, the Principal's Representative will immediately notify the EPA of all actual or potential Class 2 and Class 3 incidents via the EPA Environment Line (131 555).

The notification to the EPA will need to include information on:

- The time, date, nature, duration and location of the incident
- The location of the place where pollution is occurring or is likely to occur
- The nature, the estimated quantity or volume and the concentration of any pollutants involved
- The circumstances in which the incident occurred (including the cause of the incident, if known)
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution
- Other information prescribed by the regulations.

In addition to notifying the EPA of pollution incidents, the Principal's Representative will also immediately notify other regulatory authorities as outlined below:

- The Ministry of Health (via the local Public Health Unit 02 9391 9000)
- The WorkCover Authority 13 10 50
- Liverpool City Council 1300 36 2170
- Campbelltown City Council 02 4645 4000
- Fire and Rescue NSW 000.

These authorities must be notified for all notifiable pollution incidents under the amended legislation. Further information in relation to the incident must be provided immediately if it becomes available after the initial notification.

If statutory notification is provided to EPA as required under the POEO Act, such notification must also be provided to the Secretary within 24 hours after the notification was provided to EPA (CoC C15). Full written details of the incident shall be provided to the Secretary within 7 days of the date on which the incident occurred. The ER will also be immediately notified.

DP&E will be notified in writing (compliance@planning.nsw.gov.au) immediately upon becoming aware of an incident that causes or threatens to cause material harm (as defined by the Development Consent), in accordance with CoC C11. Additional written notification of the incident (refer to Annexure C of the Development Consent for requirements) shall be provided to the Secretary within 7 days of the date on which the incident occurred (CoC C12). A detailed report of the incident addressing the requirements set out in Appendix C of the Development Consent will be provided to the Secretary within 30 days, or as otherwise agreed with the Secretary (CoC C13).



Records of contact with and details of the information provided to external authorities must be maintained in the project records. Any contact with the regulatory authorities will be logged using Aconex.

#### 2.8.3.2 Commonwealth Matters

Environmental incidents relating to the EPBC Act must be notified to the Secretary of the DotEE within seven days of the event (epbcmonitoring@environment.gov.au).

These types of incidents include reporting of Class 2 and Class 3 non-compliance (Table 16), and/or the death or injury to the following:

- Migratory bird species
- Listed marine species
- Threatened species or listed ecological community (includes taking of listed plants and animals).

### 2.8.4 Incident Review

Actual and potential Class 1 incidents will be reviewed by the Contractor's EM.

Actual or potential Class 2 or 3 incidents will be reviewed by the Contractor's Management Team and the Principal's Representative.

Within three days of a potential or actual Class 2 or 3 incident, the Contractor's EM will convene a briefing with the Contractor's Management Team and Principal's Representative to provide an update on the incident investigation.

The following information relating to the incident investigation shall be documented:

- The condition of the environment and the status of any rectification or remediation works
- The completed ICAM report, including appropriate causal analysis and corrective actions
- Program for the implementation of the corrective actions and any maintenance activities
- Incorporation of any requirements of regulatory agencies as a result of external notification
- Any other relevant information.

Any written requirements of the Secretary (or relevant public authority) that may be given to address the cause or impact of an incident will be complied with in accordance with CoC C14.

The Contractor's EM will provide the Principal's Representative evidence to show the recommendations from the ICAM have been undertaken. The ER will also be provided with the ICAM report.



### **3 IMPLEMENTATION**

This section addresses the key risks associated with the Project and the environmental controls established to manage the key risks.

### 3.1 Aspects, Impacts and Risk Management

Project-wide environmental aspects, impacts and opportunities have been identified and assessed in accordance with the risk assessment as presented in the MPE Stage 2 EIS. The key environmental aspects and impacts for the Project, as identified in the MPE Stage 2 EIS, include potential:

- Construction traffic impacts on local roads surrounding construction worksites
- Noise and vibration impacts on surrounding residents and businesses
- Diminishing air quality through construction vehicle emissions and dust generation
- Loss of biodiversity
- Pollution of adjacent waterways from water discharge and/or spills from worksites
- Discovery of previously unidentified Aboriginal or non-Aboriginal heritage
- Discovery of previously unidentified contaminated soils
- Visual impacts of temporary construction worksites on surrounding residences and businesses.

### 3.1.1 Aspects and Impacts Assessment

A risk workshop was undertaken with the Project Management Team and a team of environmental specialists to identify the aspects and impacts, the relevant risk ranking, control measures to reduce environmental harm, opportunities contributing to positive outcomes for the environment, community and the economy and a residual risk ranking. The resulting Aspects and Impacts Register (Appendix C) has been reviewed, and where appropriate updated, by the Environmental Representative, the Project Management Team and environmental specialists.

The Aspects and Impacts Register identifies the actual or potential environmental impact and provides a reference to relevant management documentation within the CEMP where control measures can be found.

A risk assessment has been conducted on each environmental impact, in accordance with Figure 3-1.



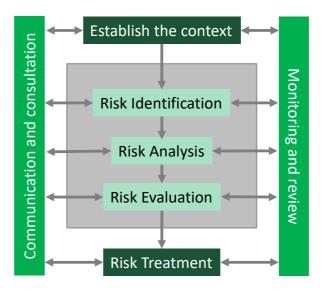


Figure 3-1 Risk Assessment Process

Environmental impacts will be controlled to a degree which is commensurate with the level of risk, with greater emphasis on managing impacts with 'moderate' and 'high' risks.

The control measures to address these issues are also documented in the Aspects and Impacts Register (Appendix C) and within the aspect-specific sub-plan.

The Aspects and Impacts Register will be updated on an annual basis with the review of the CEMP or where additional aspects, impacts or opportunities are identified during construction of the Project and specific site conditions are encountered and documented.

# 3.1.2 Cumulative Impacts

A qualitative assessment of the potential cumulative impacts of the Project was undertaken during the preparation of the EIS for MPE Stage 2 (refer to Section 19 of the EIS). This assessment covered all the relevant aspects of construction and cumulative environmental impacts are documented within each of the sub-plans to this CEMP.

With the implementation of the management measures outlined in each of the individual aspect management plans, the potential cumulative impacts are considered to be manageable.

# 3.2 Environmental Management Activities and Controls

Environmental management measures are documented in the sub-plans to this CEMP.

Environmental hold points provide a key control and are discussed below.

Other measures to manage environmental impacts include ECMs (Appendix D) and the Aspects and Impacts Register (Appendix C).

### 3.2.1 Environmental Hold Points

The activities outlined in Table 17 below have been identified as 'moderate' or 'high' risk activities. They are not to proceed without objective review and approval by the nominated approval authority. The activities below are considered provisional hold



points that must be identified within either the EWMS or an Inspection Test Plan, or other procedural documentation.

Table 17 Construction Environmental Hold Points

ltem	Activity Held	Release Criteria	Approval Authority	Plan Reference
Traffic	Truck movements	Approved road occupancy licence	Contractor's EM	Appendix E - CTAMP
Dewatering	Dewatering/ pumping water off the site	Verification that water quality criteria set-out in the CSWMP have been met	Contractor's EM	Appendix G - CSWMP
Sediment and erosion control measures	Prior to ground disturbing activities in the new works area	An Erosion and Sediment Control Plan has been developed, reviewed, and approved	Principal's Representative	Appendix G - CSWMP
Site clearing/ vegetation removal	Commenceme nt of site clearing or vegetation removal in new works area	Pre-clearing requirements as outlined in the CFFMP have been undertaken and verified	Principal's Representative	Appendix L - CFFMP
Unexpected finds including threatened species, heritage item and contamination	Recommence ment of works in the affected area	Refer to aspect specific sub-plan	Principal's Representative	Appendix K – CHMP Appendix L – CFFMP Appendix N - CMP
Dangerous Goods	Transport of Dangerous Goods	Verification that transport vehicles meet the requirements	Contractor's CM	Appendix E - CTAMP
Dangerous Goods	Storage of Dangerous Goods	Verification that bunded storage is provided and that offset distances are maintained for the storage area	Contractor's CM Site Supervisor	Appendix G - CSWMP
Controlled / hazardous waste	Transport of controlled / hazardous waste from the site	Verification that the waste has been classified in accordance with the guidelines, transport licensing in place and	Contractor's EM	Appendix M - CDWMP



Item	Activity Held	Release Criteria	Approval Authority	Plan Reference
		landfill can lawfully receive the waste		
Spoil transport	Removal of spoil from site	Verification that the spoil has been classified and the disposal location can lawfully receive the waste.	Contractor's EM	Appendix M - CDWMP
		Obtain Approved Form Under Section 143 of the POEO Act from location owner if not a NSW EPA licensed facility)		
Spoil transport	Import of spoil to site for fill	Waste classification of imported spoil as either ENM, VENM,	Contractor's EM	Appendix E – CDWMP
		or other material approved by the EPA prior to spoil entering the site.		Spoil Management Plan (SMP)
		Visual check and confirmation		
		Supply Approved Form Under Section 143 of the POEO Act from SIMTA to spoil owner and transporter		
Heritage	No works to be undertaken impacting on PADs V and W. Archaeological monitoring to be undertaken in accordance with an Archaeological Monitoring Program.	Archaeological Monitoring Program to be implemented	Principal's Representative	Appendix K - CHMP



#### 4 MONITOR AND REVIEW

### 4.1 Environmental Monitoring

Environmental monitoring will be undertaken to verify:

- The environmental impacts predicted for the Project
- The effectiveness of environmental controls including management measures
- Progress of sustainability requirements
- Implementation of this CEMP.

Monitoring requirements under the Development Consent and the EPL for aspects such as air quality, noise and vibration, soil and water, traffic, heritage, waste and resources, and flora and fauna are included in the relevant sub-plans.

Where relevant, the sub-plan will provide detail on the following:

- Responsibility for monitoring
- Relevant standards applicable to the monitoring
- Monitoring technique
- Monitoring location and installation requirements
- Frequency of monitoring
- Sample collection requirements, including chain of custody
- Calibration and maintenance requirements of equipment
- Data management, review and distribution.

Responsibilities for monitoring activities are identified within Section 2.4 in addition to the aspect specific monitoring responsibilities identified within individual sub-plans.

Monitoring may also be required in response to incidents and this would be determined in accordance with the ICAM.

# 4.2 Observations and Inspections

# 4.2.1 Daily Observations

A daily pre-start on plant and equipment will be undertaken and any leaks, fauna relocation or excessive emissions reported to the Contractor's EM.

Site environmental controls will be inspected daily by the Site supervisor and site personnel. Each work team must inspect the environmental controls as relevant to their work area, in accordance with the ECM and ESCP.

Project activities which have a potential risk of significant impact on the environment (as identified in Section 3 of this CEMP) will require more frequent inspections that may be attended by the Contractor's EM.

Any measures undertaken to repair environmental controls must be documented and reported to the Contractor's EM.



#### 4.2.2 Inspections

Table 18 provides a summary of the minimum inspections that will be undertaken for the Project.

Table 18 Inspection Summary

Inspection Type	Frequency	Focus	Responsibility	Record
Environment and sustainability site inspection	Weekly	Relevant social and environmental aspects related to works period	Contractor's EM	Inspection log / report
Rainfall and pre-shutdown inspection	Detailed within CSWMP	Erosion and sediment controls	Contractor's EM	Inspection log / report
Environmental Representative Inspection	Fortnightly	Compliance with CoCs	ER	ER Report
Principal's Representative Inspection	Weekly	Compliance with CoCs and Commonwealth Approvals	Principal's Representative	Principal's Representative Report

Environmental Representative inspections are expected to be undertaken fortnightly. The frequency of inspections will be determined based on the nature of current / upcoming works and the location of works (e.g. proximity to environmentally sensitive areas).

The weekly environment and sustainability inspections will cover all environmental and social aspects of the Project which are relevant to the stage of works being undertaken. The purpose of these inspections is to:

- Determine compliance with CoCs
- Determine compliance with management measures detailed within sub-plans
- Review the performance and effectiveness of environmental controls
- Identify non-compliances to expected performance levels or implementation of controls expected under this CEMP and the respective sub-plans
- Document observations and track performance.

The Construction Contractor will develop and use an environment and sustainability inspection checklist to document performance and identify potential issues on site. Any corrective actions undertaken are required to be documented, in accordance with the requirements described in Section 4.4.

Weekly inspection checklists will be forwarded to the Principal's Representative through Aconex.



### 4.3 Environmental and Sustainability Auditing

Project environmental and sustainability audits will be undertaken in accordance with the EMS, CoCs and ISCA. This will include three internal sustainability audits and one independent (external) audit.

Auditing will be undertaken in accordance with ISO19011:2014 – *Guidelines for Quality and/or Environmental Management Systems Auditing* by an ISO14001 accredited lead auditor.

The results of the audits will be communicated to the site team during the audit close out meeting and an audit report will be issued to management for action and to inform the CEMP review (refer to Section 4.4). A follow up/close out verification inspection and meeting will occur within one month of the issue of the audit report.

Corrective action requests (CARs) can be issued as part of the audit process as outlined in Section 4.4.

#### 4.3.1 Internal Audits

Internal sustainability audits will be undertaken quarterly thereafter on a rolling schedule. The fourth internal sustainability audit will be replaced by the annual independent external audit. The audit scope will be determined by the auditor based on current site activities.

#### 4.3.2 External Audits

External auditing will be undertaken by an independent environmental auditor annually.

External audits will focus on determining compliance with the CEMP, CoCs, FCMM and ISCA requirements as a minimum.

In accordance with CoC C18, within one year of the commencement of any development under the CoC, and every three years thereafter, an Independent Environmental Audit of the development will be undertaken by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary. Audits will be carried out in consultation with relevant agencies and the Project's Community Consultative Committee. Independent environmental audits will be undertaken in accordance with guidance provided in ISO 19011:2014 (or as updated) – Guidelines for Quality and/or Environmental Management Systems Auditing.

The audits will assess the environmental performance of the development, compliance with the Development Consent and strategies, plans or programs required under the Development Consent; the adequacy of those strategies, plans or programs and make recommendations to improve the environmental performance of the development and/or any of those strategies, plans or programs required by the Development Consent or approved under the EPBC Act.

Within three months of commencing the nominated audit, a copy of the audit report will be submitted to DP&E and any other NSW agency that requests it. In addition, a response to the audit recommendations and proposed timetable to implement the recommendations must be submitted to DP&E.



#### 4.4 Non-conformance, Non-compliance and Actions

#### 4.4.1 Non-conformances

Non-conformances are observations or actions that are not in accordance with the CEMP and the aspect specific sub-plan. These are not recorded as non-compliances as there may be activity-specific justification for a change in implementation of the requirements of the management plan.

Where a non-conformance is also considered to represent a possible non-compliance, it is to be recorded as a potential non-compliance. Depending upon the nature of the non-conformance, the non-conformance may require reporting to the DP&E and ER as an incident (CoC C11 and C12).

It is the responsibility of all personnel to report non-conformances to their Site Supervisor and / or the Contractor's EM. The Contractor's EM will investigate non-conformances, log corrective actions, and delegate responsibility for corrective actions within assigned timeframes.

Non-conformances with the implementation of the CEMP and sub-plans shall be recorded and addressed by logging the issue within the Project Corrective Actions Register to be developed by the Construction Contractor and handled in accordance with the Environmental Management System – Corrective and Preventative Action [SHEMS-QM-04-PR-0022]. Non-conformances shall be recorded and addressed through Aconex.

#### 4.4.2 Non-compliances

A non-compliance as defined in Development Consent SSD 7628 is "an occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with this consent but is not an incident". Non-compliances may also arise where an occurrence, set of circumstances or development is considered to be in non-accordance with the EPBC Act Approval (EPBC 2011/6086) CoA, REMMs or RCMMs. Incident response, classification and notification requirements are outlined in Section 2.8.

Potential non-compliances with the CoC can be identified by anyone and are to be reported to the Contractor's EM as a potential non-compliance. Whether the occurrence, set of circumstances, or development requires to be notified to the DP&E as a non-compliance, is the responsibility of the Project proponent (or delegate thereof).

Non-compliances with the CoC shall be recorded and addressed by logging the issue within the Project Corrective Actions Register to be developed by the Construction Contractor and handled in accordance with the Environmental Management System – Corrective and Preventative Action [SHEMS-QM-04-PR-0022]. Non-compliances shall be recorded immediately and addressed through Aconex.

DP&E will be notified in writing to compliance@planning.nsw.gov.au within seven days after the Project becomes aware of any non-compliance (CoC C16 and C17). The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known), and what actions have been, or will be, undertaken to address the non-compliance.

Documentary evidence providing proof of the date of publication and non-compliance with any of the CoA must be provided to DotEE at the same time as the compliance report is published.



#### 4.4.3 Corrective and Preventative Actions

A corrective actions request (CAR) will be issued where there is a non-conformance or non-compliance with any of the requirements of this CEMP or project requirements, respectively during site inspections, audits or incident investigations. CARs are differentiated by risk ranking.

The nominated timeframes to resolve items on the corrective actions register is detailed in Table 19.

Table 19 Corrective Actions Timeframe for Resolution

Risk Ranking	Issued to
1	Action needs to be commenced immediately to resolve the issue
2	Action needs to be resolved within 1 week
3	Action needs to be resolved within 1 month

Trends relating to environmental incidents and non-compliance findings will be reviewed at the Construction Contractor's Management Team meetings to identify any recurring or systemic issues that are indicative of the need to take preventative action.

Preventive actions are dependent on the issue but may include:

- Progressive landscaping
- · Early identification of the requirement for out of hours works
- Stopping of works based on forecast inclement weather
- Preparation of site to manage inclement weather.

Any member of the project team, including sub-contractors, can contribute and provide suggestions to any preventative action.

Corrective actions may be required as a result of the following:

- Internal inspection outcomes that cannot be rectified immediately
- Incidents and associated corrective actions
- Internal audit observations/non-compliance
- Client audits or other notice of non-compliance
- Notices or action from regulatory authorities
- Breach of legislative requirements or permit/license conditions and project approvals
- Repetitive observations which have not been resolved in a timely manner.

Corrective actions are dependent on the issue but may include:

- Site remediation and rehabilitation
- Increased environmental awareness (re-training, toolbox meetings)
- Review and improve existing environmental controls and update of environmental controls maps, or erosion sediment control plans.

# 4.5 Management Review

The Construction Contractors Management Team and Principal's Representative will annually review the adequacy of the environmental controls and procedures within the



CEMP to determine whether they are still applicable to the activities being carried out on site.

The management review will be minuted and changes to the plan made by the Principal's Representative, and submitted for approval as per Section 1.2.7.

An annual review of the development will be undertaken and submitted to DP&E, Liverpool City Council and the CCC, in accordance with the MPW EPBC Approval (2011/6086) for MAUW and CoC C10. The details of this review are outlined in Section 4.6.3.

In accordance with CoC C9, the strategies, plans and programs required under the Development Consent will be reviewed within three months of the:

- Submission of an annual review under condition C10
- Submission of an incident or non-compliance notification under condition C13
- Submission of an audit under condition C18
- · Approval of any modification of the conditions of consent, or
- Issue of a direction of the Secretary under condition A2.

Where revisions are required, the revised document must be submitted to the Secretary for approval within six weeks of the review.

### 4.6 Environmental Reporting

Reporting requirements for specific environmental areas (e.g. noise, air quality, water quality, vegetation) are listed in the relevant aspect specific sub-plan.

# 4.6.1 Monthly Environmental and Sustainability Reporting

A monthly environment and sustainability report will be prepared for the Contractor's PM for inclusion in the monthly project report. This report will include the following:

- Analysis of performance against the Project environmental objectives targets as per Section 1.7 and Table 12 of this CEMP
- Analysis of performance against targets set in the CEMP sub-plans and monitoring results
- Analysis of performance against conditions of the Development Consent
- Details of any environmental incident(s) including:
  - Actions taken or outstanding
  - Lessons learned
  - Results from incident investigation.
- Verification that the CEMP is compliant with the Contractor's EMS by referring to the number and results of inspections, audits, observations and monitoring
- Verification that the National Greenhouse and Energy Reporting reporting and ISCA reporting requirements have been implemented during the month and summary of progress against ISCA requirements
- Identification of any environmental innovations or opportunities implemented on the Project.

The report will be submitted to the Principal's Representative through Aconex within one week of month end.



Sustainability reporting requirements will be provided to the Principal through the SODCT. Specific sustainability reporting requirements are detailed within the Sustainability Management Plan and aspect-specific management plans; the reporting requirements align with the overall Project Objectives and Targets as detailed in Section 1.7 and Table 12.

#### 4.6.2 Compliance Reporting

In accordance with Condition 19 of the MPW EPBC approval (2011/6086), Condition 12 of the MPE EPBC approval (2011/6229) and CoC C21(c) the Principal's Representative shall submit reporting of compliance status to the appropriate approval authority, periodically, including but not limited to:

- A Pre-Construction Compliance Report prior to the commencement of construction (to the Secretary)
- Quarterly Construction Compliance Reports (to the Secretary)
- Annual EPBC Act Approval Compliance Report (to DotEE).

The Principal Representative will compile and review the compliance issues identified in the Construction Contractor's monthly environment and sustainability reporting and submit the compliance report to the Secretary.

A Compliance Tracking Program has been developed for the Project as per CoC C21.

#### 4.6.3 Annual Environmental Management Review

In accordance with the MPW EPBC Approval (2011/6086) for MAUW and CoC C10, an Annual Environmental Management Review (AEMR) of the development shall be prepared and submitted to the relevant regulatory agencies (including DotEE) each year. This report will review the performance of the Project against the CEMP and will include, but not necessarily be limited to:

- Development undertaken during the reporting period
- Proposed development to be undertaken the following reporting period
- Details of compliance with the various conditions of approval and approved management plans (Commonwealth and State)
- A copy of the complaints register, and details of how these complaints were addressed and received
- Any discrepancies between the predicted and actual impacts of the development and potential causes of any significant discrepancies
- A summary of incidents and non-compliances, including where environmental goals and objectives have not been achieved and corrective actions undertaken
- Proposed measures to improve environmental performance of the development
- Copies of relevant independent environmental audit reports and compliance reports.

# APPENDIX A – LEGISLATION REGISTER

### **Legislation Register**

Legislation Objectives & Application Relevance

#### **Commonwealth Legislation**

Environment Protection and Biodiversity Act 1999 (EPBC) The objects of this Act are:

- To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance, the impacts to land owned by the Commonwealth and the impacts to land by the Commonwealth
- To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources
- To promote the conservation of biodiversity
- To provide for the protection and conservation of heritage
- To promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples
- To assist in the co-operative implementation of Australia's international environmental responsibilities
- To recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity
- To promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

EPBC Approval (No. 2011/6229) for the MPE Project, issued in March 2014, includes a number of Conditions of Approval to be addressed as part of the Project.

Key sections under this Act that are relevant to the Project include, but are not limited to:

- Section 18 and 18A: Offences relating to threatened species
- Section 25: Requirement for approval of prescribed actions
- Section 26 and 27A: Protection of the environment from actions involving Commonwealth land
- Section 28: Requirement for approval of activities of Commonwealth agencies significantly affecting the environment.

#### **NSW Legislation**

Biodiversity Conservation Act 2016 The purpose of this Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development and in particular:

- To conserve biodiversity at bioregional and State scales
- To maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations
- To improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation
- To support biodiversity conservation in the context of a changing climate
- To support collating and sharing data, and monitoring and reporting on the status of biodiversity and the effectiveness of conservation actions
- To assess the extinction risk of species and ecological communities, and identify key threatening processes, through an independent and rigorous scientific process
- To regulate human interactions with wildlife by applying a risk-based approach

Key sections of this Act that are relevant to the Project include, but are not limited to:

- Sections 2.1: Harming or attempting to harm protected animals without authorisation
- Section 2.2: Picking protected plants without authorisation
- Section 2.4: Damaging habitat of threatened species or ecological communities without authorisation
- Sections 2.8 and 2.10: Acts authorised under other legislation (e.g. development consent) or acts authorised by biodiversity conservation licence respectively
- Part 7: Biodiversity assessment and approvals under Planning Act

Legislation	Objectives & Application	Relevance
	To support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature  To support and guide prioritised and strategic	<ul> <li>Section 7.17: Modifications of planning approvals or activities for the Project.</li> </ul>
	<ul> <li>To support and guide prioritised and strategic investment in biodiversity conservation</li> </ul>	
	<ul> <li>To encourage and enable landholders to enter into voluntary agreements over land for the conservation of biodiversity</li> </ul>	
	<ul> <li>To establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity</li> </ul>	
	<ul> <li>To establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values</li> </ul>	
	<ul> <li>To establish market-based conservation mechanisms through which the biodiversity impacts of development and land use change can be offset at landscape and site scales</li> </ul>	
	<ul> <li>To support public consultation and participation in biodiversity conservation and decision-making about biodiversity conservation.</li> </ul>	
Biodiversity Conservation (Savings and Transitional) Regulation 2017	The Regulation sets out the provisions of a savings and / or transitional nature consequent on the enactment of the <i>Biodiversity Conservation Act 2016</i> . The Project is defined as a 'pending or interim planning application' and the former planning provisions apply to the Project, to the extent of the biodiversity assessment and approvals under the <i>EP&amp;A Act</i> . Modification to the planning approval for the Project is	<ul> <li>Key sections of this Act that are relevant to the Project include, but are not limited to:</li> <li>Clause 28: Former planning provisions continue to apply to pending or interim planning</li> </ul>
	subject to the Biodiversity Conservation Act 2016.	<ul> <li>applications</li> <li>Clause 30: Biodiversity         Conservation Act 2016 applies to modifications of planning approvals     </li> </ul>
Biosecurity Act 2015	The objects of this Act are to provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matters.	Key sections of this Act that are relevant to the Project include, but are not limited to:
	Other objects of the Act are:	<ul> <li>Part 3: Establishes a general</li> </ul>
	<ul> <li>To promote biosecurity as a shared responsibility between government, industry and communities,</li> </ul>	biosecurity duty requiring a person who is dealing with a
	<ul> <li>To provide a framework for the timely and effective management of the following:</li> </ul>	biosecurity matter to ensure that, so far as is reasonably practicable the biosecurity risk
	<ul> <li>Pests, diseases, contaminants and other biosecurity matter that are economically significant for primary production industries</li> </ul>	is prevented, eliminated or minimised.
	<ul> <li>Threats to terrestrial and aquatic environments arising from pests, diseases, contaminants and other biosecurity matter</li> </ul>	<ul> <li>Schedule 1: Establishes special provisions relating to weeds, including a duty to control weeds on roads (where the</li> </ul>
	<ul> <li>Public health and safety risks arising from contaminants, non-indigenous animals, bees, weeds and other biosecurity matter known to contribute to human health problems</li> </ul>	road is not fenced on both sides)

Legislation	Objectives & Application	Relevance
	<ul> <li>Pests, diseases, contaminants and other biosecurity matter that may have an adverse effect on community activities and infrastructure.</li> </ul>	<ul> <li>Schedule 2: Lists 'prohibited matter' including terrestrial weeds.</li> <li>Part 4: Makes it an offence to fail to discharge a biosecurity duty in relation to a prohibited matter and includes a duty to notify the local control authority.</li> </ul>
Biosecurity Regulation 2017	<ul> <li>This regulation supports the <i>Biosecurity Act 2015</i> through:</li> <li>Establishment of mandatory measures in relation to biosecurity matters</li> <li>Establishment of biosecurity zones for aquatic pests and diseases</li> <li>Establishment of biosecurity zones for plant pests and diseases</li> <li>Establishment of biosecurity zones for weeds</li> <li>Establishment of notification procedures</li> <li>Establishment of penalty notices offences and fees payable under the <i>Biosecurity Act 2015</i>.</li> </ul>	Key sections of this Act that are relevant to the Project include, but are not limited to:  Part 2: Sets out mandatory measures that must be implemented in relation to the biosecurity matters identified (i.e. sale or import of plants listed in Schedule 3)  Schedule 3: Lists weeds that must not be imported into or sold in NSW  Part 6: Sets out the requirements for notifiable matters (i.e. prohibited matter or events and biosecurity events).
Contaminated Land Management Act 1997 (CLM Act)	<ul> <li>Establish a process for investigating and (where appropriate) remediating land that the Environment Protection Authority (EPA) considers to be contaminated significantly enough to require regulation under Division 2 of Part 3</li> <li>To set out accountabilities for managing contamination if the EPA considers the contamination is significant enough to require regulation under Division 2 of Part 3</li> <li>To set out the role of the EPA in the assessment of contamination and the supervision of the investigation and management of contaminated sites</li> <li>To provide for the accreditation of site auditors of contaminated land to ensure appropriate standards of auditing in the management of contaminated land</li> <li>To ensure that contaminated land is managed with regard to the principles of ecologically sustainable development.</li> </ul>	Contamination on site must be assessed and managed in accordance with the CLM Act.  Key sections of this Act that are relevant to the Project include, but are not limited to:  Division 2, Part 3, Section 11-17: Details regulations of significantly contaminated land  Note also SEPP 55 below.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.	Condition A25 requires that the offices and amenities provided for the Project comply with the Act. This has been addressed during detailed design.
Environmental Planning and Assessment Act 1979 (EP&A Act)	The objects of this Act are:  To encourage:  The proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas,	Planning approval for the Project is regulated by DP&E under the EP&A Act.  Key sections of this Act that are relevant to the Project include, but are not limited to:

Legislation	Objectives & Application	Relevance
	forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment  The promotion and co-ordination of the orderly and economic use and development of land	Part 3A, Section 75O, Section 75U, Section 79C: Now repealed but relates to the approval pathway for the Concept Plan for the SIMTA
	<ul> <li>The protection, provision and co-ordination of communication and utility services</li> <li>The provision of land for public purposes</li> <li>The provision and co-ordination of community services and facilities</li> </ul>	Project  Part 4, Division 4.1: Relates to the approval pathway for State Significant Developments (SSD). In particular, Section 89E provides consent for the Project as SSD
	<ul> <li>The protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats</li> <li>Ecologically sustainable development</li> </ul>	<ul> <li>Section 94B(2): Payment of monetary levy to Liverpool City Council</li> <li>Section 96: Modification of consents</li> </ul>
	<ul> <li>The provision and maintenance of affordable housing, and to promote the sharing of the responsibility for environmental planning between the different levels of government in</li> </ul>	<ul><li>Division 1C: Investigative powers of Investigation Officers</li><li>Section 121B: Orders that may</li></ul>
	the State.  To provide increased opportunity for public involvement and participation in environmental planning and assessment.	be given from the Minister or Secretary (i.e. stop work and compliance orders).
Environmental Planning and Assessment	This Regulation together with the EP&A Act provides the overarching framework for planning in NSW. While the EP&A Act provides the overarching framework for the	Key sections of this Regulation that are relevant to the Project include, but are not limited to:
Regulation planning system 2000 to-day requi	planning system in NSW, this Regulation supports the day- to-day requirements of this system. The Regulation aims to address the following:	<ul> <li>Part 4: Development contributions</li> </ul>
	Requirements for preparing Environmental Impact Statements	Part 6: Procedures relating to development applications
	<ul><li>Building regulation and subdivision certification</li><li>Development contributions, including the preparation of</li></ul>	<ul> <li>Part 7: Procedures relating to complying development certificates</li> </ul>
	<ul> <li>contributions plans</li> <li>Planning certificates which provide information about land</li> </ul>	<ul> <li>Part 8: Certification of development</li> </ul>
	Other miscellaneous matters, including amounts for penalty notices (or fines) that may be issued for breaches of the EP&A Act and the Regulation, provisions for planning bodies (the Planning Assessment Commission and Independent Hearing and Assessment Panels), development by the Crown, and record keeping requirements for councils.	<ul> <li>Schedule 3: Designated development.</li> </ul>
Fisheries Management Act 1994	The objects of this Act are:  To conserve, develop and share the fishery resources of the State for the benefit of present and future generations  To conserve fish stocks and key fish habitats	Key sections of this Act that are relevant to the Project include, but are not limited to:  Part 7A: Conditions for threatened species conservation

<ul> <li>To conserve threatened species, populations and ecological communities of fish and marine vegetation</li> <li>To promote ecologically sustainable development, including the conservation of biological diversity,</li> <li>and, consistently with those objects:</li> <li>To promote viable commercial fishing and aquaculture industries</li> <li>To promote quality recreational fishing opportunities</li> <li>To appropriately share fisheries resources between the users of those resources</li> <li>To provide social and economic benefits for the wider community of NSW</li> </ul>
<ul> <li>including the conservation of biological diversity,</li> <li>and, consistently with those objects:</li> <li>To promote viable commercial fishing and aquaculture industries</li> <li>To promote quality recreational fishing opportunities</li> <li>To appropriately share fisheries resources between the users of those resources</li> <li>To provide social and economic benefits for the wider</li> </ul>
<ul> <li>To promote viable commercial fishing and aquaculture industries</li> <li>To promote quality recreational fishing opportunities</li> <li>To appropriately share fisheries resources between the users of those resources</li> <li>To provide social and economic benefits for the wider</li> </ul>
<ul> <li>industries</li> <li>To promote quality recreational fishing opportunities</li> <li>To appropriately share fisheries resources between the users of those resources</li> <li>To provide social and economic benefits for the wider</li> </ul>
<ul> <li>To appropriately share fisheries resources between the users of those resources</li> <li>To provide social and economic benefits for the wider</li> </ul>
users of those resources  To provide social and economic benefits for the wider
continuity of their
<ul> <li>To recognise the spiritual, social and customary significance to Aboriginal persons of fisheries resources and to protect, and promote the continuation of, Aboriginal cultural fishing.</li> </ul>
Heritage Act The objects of this Act are: Approval must be gained from the
• To promote an understanding of the State's heritage  Heritage Council when making changes to a heritage place listed
To encourage the conservation of the State's heritage
<ul> <li>To provide for the identification and registration of items of State heritage significance</li> <li>excavating any land in NSW where an archaeological relic might be disturbed.</li> </ul>
<ul> <li>To provide for the interim protection of items of State heritage significance</li> <li>Key sections of this Act that are relevant to the Project include, but</li> </ul>
<ul> <li>To encourage the adaptive reuse of items of State heritage significance</li> <li>are not limited to:</li> <li>Section 146: Relating to the</li> </ul>
<ul> <li>To constitute the Heritage Council of NSW and confer on it functions relating to the State's heritage</li> <li>notification of impacts and heritage finds to the Heritage Council of NSW</li> </ul>
<ul> <li>To assist owners with the conservation of items of State heritage significance.</li> <li>Section 139: Provision of excavation permits in certain circumstances.</li> </ul>
Local The purposes of this Act are: Key sections of this Act that are
Government Act 1993  To provide the legal framework for the system of local governments for NSW  relevant to the Project include, but are not limited to:
<ul> <li>To set out the responsibilities and powers of councils, councillors and other persons and bodies that constitute the system of local government</li> <li>Part 2, Division 2: Outlines the use and management of community land with requirements to provide:</li> </ul>
• To provide for governing bodies of councils that are democratically elected   100m minimum buffer width from the edge of t
• To facilitate engagement with the local community by gorge or the top of the councils, councillors and other persons and bodies that constitute the system of local government River and its tributaries
<ul> <li>To provide for a system of local government that is accountable to the community and that is sustainable, flexible and effective.</li> <li>on currently forested Crown lands and natura bushland classified as community land</li> <li>40 m minimum buffer widths from wetlands.</li> </ul>

Legislation	Objectives & Application	Relevance
National Parks and Wildlife Act 1974	<ul> <li>The objects of this Act are:</li> <li>The conservation of nature, including, but not limited to, the conservation of:         <ul> <li>Habitat, ecosystems and ecosystem processes</li> <li>Biological diversity at the community, species and genetic levels</li> <li>Landforms of significance, including geological features and processes, and Landscapes and natural features of significance including wilderness and wild rivers.</li> </ul> </li> <li>The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to:         <ul> <li>Places, objects and features of significance to Aboriginal people</li> <li>Places of social value to the people of NSW</li> <li>Places of historic, architectural or scientific significance.</li> </ul> </li> <li>Fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation</li> </ul>	Aboriginal Heritage sites are managed under this Act by the Office of Environment and Heritage (OEH).  Unexpected finds of heritage require stop work proceedings and approval sought from OEH to disturb site.  The Project would not impact any areas of archaeological potential or any Aboriginal sites of high, moderate or unknown archaeological and cultural significance. As such, does not require an AHIP under Part 6 of this Act.
	<ul> <li>Providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation.</li> </ul>	
Protection of the Environment Operations Act 1997 (POEO Act)	<ul> <li>To protect, restore and enhance the quality of the environment in NSW, having regard to the need to maintain ecologically sustainable development</li> <li>To provide increased opportunities for public involvement and participation in environment protection</li> <li>To ensure that the community has access to relevant and meaningful information about pollution</li> <li>To reduce risks to human health and prevent the degradation of the environment by the use of mechanisms that promote the following:         <ul> <li>Pollution prevention and cleaner production</li> <li>The reduction to harmless levels of the discharge of substances likely to cause harm to the environment</li> <li>The elimination of harmful waste</li> <li>The reduction in the use of materials and the re-use, recovery or recycling of materials</li> <li>The making of progressive environmental improvements, including the reduction of pollution at source,</li> </ul> </li> </ul>	<ul> <li>Key sections of this Act that are relevant to the Project include, but are not limited to:         <ul> <li>Section 148: Duty to report pollution incidents causing or threatening material harm</li> </ul> </li> <li>Schedule 1: Defines premises based activities that require an Environmental Protection Licence (EPL) under section 48</li> <li>Part 5.7A: Requires all EPL holders to prepare a Pollution Incident Response Management Plan</li> <li>Section 115: Offence to dispose of waste in a manner that harms or is likely to harm the environment</li> <li>Section 116: Offence to cause a spill of a substance in a manner that harms or is likely to harm the environment</li> <li>Section 120: Offense to cause</li> </ul>
	<ul> <li>The monitoring and reporting of environmental quality on a regular basis.</li> </ul>	<ul> <li>Sections 124 to 126:</li> <li>Require activities to be conducted in a proper and</li> </ul>

Legislation	Objectives & Application	Relevance
	<ul> <li>To rationalise, simplify and strengthen the regulatory framework for environment protection</li> </ul>	efficient manner relating to air pollution
	<ul> <li>To improve the efficiency of administration of the environment protection legislation</li> <li>To assist in the achievement of the objectives of the Mosta Australian and Research Programme Programme Act 2001</li> </ul>	<ul> <li>Section 128: Requires that all necessary practicable means are used to prevent or minimise air pollution</li> </ul>
	Waste Avoidance and Resource Recovery Act 2001.	<ul> <li>Section 129:Offence to cause or permit the emission of any offensive odour from premises licenses for scheduled activities</li> </ul>
		The POEO Act classifies environmental offences and penalties into three tiers; Tier 1 are the most serious which may involve wilful or neglectful disposal of waste causing (up to \$5 million in fines and seven years in jail), while Tier 3 can be dealt with penalty notices (i.e. on the spot fines) that can be paid or defended in court.
Protection of the Environment	The objects of this Regulation are:  Controls burning generally by imposing an obligation to	Key parts of this Regulation that are relevant to the Project include, but are not limited to:
Operations (Clean Air) Regulation	prevent or minimise emissions, by prohibiting the burning of certain articles and requiring approval for certain fires/incinerators	<ul> <li>Part 4: Outlines the motor vehicles and motor vehicle fuels required for the Project</li> </ul>
2010	<ul> <li>Requires the fitting of anti-pollution devices to certain motor vehicles and prescribes an offence of emitting excessive air impurities</li> </ul>	<ul> <li>Part 6: Outlines the control of volatile organic liquids.</li> </ul>
	<ul> <li>Imposes certain requirements and standards on the supply of petrol</li> </ul>	All construction vehicles and plant will be regulated under the Australian Design Rules (ADRs),
	<ul> <li>Prescribes standards for certain groups of plant and premises to regulate industry's air impurity emissions</li> <li>Imposes requirements on the control, storage and</li> </ul>	which provides the legislative framework for setting national fuel quality standards.
	transport of volatile organic liquids.	All dangerous goods present would be stored in locations and quantities below the risk levels under SEPP 33, and would be compliant with this Regulation.
Protection of the	The objects of this Regulation are:	This Regulation outlines the management and disposal of the
Environment Operations (Waste) Regulation	<ul> <li>Provides for the contributions to be paid by the occupiers of scheduled waste facilities for each tonne of waste received at the facility or generated in a particular area</li> </ul>	wastes on the site.  All wastes generated onsite will be classified in accordance with NSW EPA Waste Classification Guidelines
2014	<ul> <li>Exempts certain occupiers or types of waste from these contributions</li> </ul>	2014. Asbestos will be managed in
	Allows rebates to be claimed in relation to certain types of waste	accordance with the requirements of Part 7 and 11 of this Regulation.
	<ul> <li>Provides for certain reporting and record-keeping requirements in relation to scheduled waste facilities and scheduled landfill sites</li> </ul>	
	<ul> <li>Exempts certain waste streams from the full waste tracking and recordkeeping requirements</li> </ul>	

Legislation	Objectives & Application	Relevance
	Makes requirements relating to the transport of waste to interstate destinations	
	<ul> <li>Makes special requirements including reporting requirements relating to asbestos waste as well as prohibiting the re-use and recycling of asbestos waste</li> </ul>	
	<ul> <li>Imposes requirements on brand owners and retailers to recover, re-use and recycle packaging</li> </ul>	
	<ul> <li>Allows the EPA to issue exemptions from certain provisions of the Act and Regulations</li> </ul>	
	<ul> <li>Allows the EPA to approve the immobilisation of contaminants in waste</li> </ul>	
	<ul> <li>Makes it an offence to apply, or to cause or permit the application of, residue waste to land that is used for the purpose of growing vegetation, subject to any exemptions.</li> </ul>	
Protection of	The objects of this Regulation are:	Relates to procurement and use of
the Environment Operations	<ul> <li>Provides for the sale and use of various motor vehicle and motor vehicle accessories devices such as horns and alarms</li> </ul>	noise generating equipment during construction. Relevant sections of this piece of legislation include:
(Noise Control) Regulation 2017	<ul> <li>Regulates noise emitted as a result of the use of marine vessels</li> </ul>	<ul> <li>Part 2: Outlines the motor vehicles and motor vehicle accessories</li> </ul>
2011	<ul> <li>Requires labelling of certain other noise emitting articles such as chainsaws, air conditioners, air compressors, pavement breakers, garbage compactors</li> </ul>	<ul> <li>Part 6: Determination of noise levels. All plant used during construction would be</li> </ul>
	<ul> <li>Provides for the inspection and testing of certain articles.</li> </ul>	monitored in accordance with Part 6 of the Regulation.
Roads Act	The objects of this Act are:	Moorebank Avenue, to the south of
1993	<ul> <li>To set out the rights of members of the public to pass along public roads</li> </ul>	the intersection with Anzac Road, is owned by the Commonwealth of Australia and, as such, the <i>Roads</i>
	<ul> <li>To set out the rights of persons who own land adjoining a public road to have access to the public road</li> </ul>	Act 1993 does not apply.  An approval under Section 138 for
	<ul> <li>To establish the procedures for the opening and closing of a public road</li> </ul>	road infrastructure works associated with the Project is required in accordance with the Conditions of
	To provide for the classification of roads	Consent for the Project.
	<ul> <li>To provide for the declaration of RMS and other public authorities as roads authorities for both classified and unclassified roads</li> </ul>	
	<ul> <li>To confer certain functions (in particular, the function of carrying out road work) on RMS and on other roads authorities</li> </ul>	
	<ul> <li>To provide for the distribution of the functions conferred by this Act between RMS and other roads authorities, and</li> </ul>	
	<ul> <li>To regulate the carrying out of various activities on public roads</li> </ul>	
	Under Section 138 of the Roads Act, approval is required for works undertaken within a public road reserve. An approval under Section 138 of the Roads Act must be consistent with any conditions of consent under Division 4.1, Part 4 of the EP&A Act (Section 89K(f), EP&A Act).	

Legislation	Objectives & Application	Relevance
Rural Fires Act 1997	The objects of this Act are to:  For the prevention, mitigation and suppression of bush and other fires in local government areas (or parts of areas) and other parts of the State constituted as rural fire districts	Key sections of this Act that are relevant to the Project include, but are not limited to:  Section 63: Duty of public authorities and owners and occupiers of land to prevent
	<ul> <li>For the co-ordination of bush fire fighting and bush fire prevention throughout the State</li> <li>For the protection of persons from injury or death, and property from damage, arising from fires</li> </ul>	<ul> <li>Section 64: Occupiers to extinguish fires or notify fire fighting authorities</li> </ul>
	<ul> <li>For the protection of infrastructure and environmental, economic, cultural, agricultural and community assets from damage arising from fires</li> <li>For the protection of the environment by requiring</li> </ul>	<ul> <li>Division 4 – Bushfire Danger Periods: Applicability to the performance of hot works in open areas</li> </ul>
	certain activities to be carried out having regard to the principles of ecologically sustainable development described in Section 6 (2) of the <i>Protection of the Environment Administration Act 1991.</i>	<ul> <li>Division 6 – Total Fire Bans;</li> <li>Applicability to performance of hot works in open areas</li> </ul>
		<ul> <li>Division 7: Offences for starting fires.</li> </ul>
Sydney Water Act 1994	This Act establishes the Sydney Water Corporation whose responsibilities are to provide, construct, operate, manage or maintain systems or services for:	Key sections of this Act that are relevant to the Project include, but are not limited to:
	Storing or supplying water, or	<ul> <li>Section 73: Grant of compliance certificates for the Project prior</li> </ul>
	<ul> <li>Providing sewerage services, or</li> </ul>	to commencement of
	<ul> <li>Providing stormwater drainage systems, or</li> </ul>	operations.
	Disposing of waste water.	
Threatened Species	The objects of this Act were:	Biodiversity offsets for the Project site were developed in accordance
Conservation Act 1995	<ul> <li>To conserve biological diversity and promote ecologically sustainable development</li> </ul>	with the biobanking provisions of the TSC Act, and have been updated to
(Repealed)	<ul> <li>To prevent the extinction and promote the recovery of threatened species, populations and ecological communities</li> </ul>	reflect the requirements of the Biodiversity Conservation Act 2016.
	<ul> <li>To protect the critical habitat of those threatened species, populations and ecological communities that are endangered</li> </ul>	
	<ul> <li>To eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities</li> </ul>	
	<ul> <li>To ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed</li> </ul>	
	<ul> <li>To encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.</li> </ul>	
Waste	The objects of this Act are:	Key sections of this Act that are
Avoidance and Resource	To encourage the most efficient use of resources and to reduce environmental harm in accordance with	relevant to the Project include, but are not limited to:
Recovery Act 2001	the principles of ecologically sustainable development,	<ul> <li>Part 3 Section 12: Relating to the development of waste strategies.</li> </ul>

Legislation	Objectives & Application	Relevance
Legislation	To ensure that resource management options are considered against a hierarchy of the following order:  Avoidance of unnecessary resource consumption  Resource recovery (including reuse, reprocessing, recycling and energy recovery)  Disposal.  To provide for the continual reduction in waste generation  To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste  To ensure that industry shares with the community the responsibility for reducing and dealing with waste  To ensure the efficient funding of waste and resource management planning, programs and service delivery  To achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis  To assist in the achievement of the objectives of	Relevance
Water Act 1912	the POEO Act.  The objects of this Act are:  To govern the issue of water licences within all areas not specified by an approved 'water sharing plan'.	If during construction earthworks, the temporary dewatering of groundwater (from an excavation) is deemed necessary, then:  A licence to carry out such activity will be required under Part 5 of this Act.  The Construction Contractor must provide DPI Water with details on the volume of groundwater that is encountered and the duration of pumping,  It is a legal requirement for any take of groundwater to be authorised by a Water Act 1912 licence (in the case of dewatering activity) or a Water Access Licence (for onsite reuse) unless an exemption applies.
Water Management Act 2000	The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular:  To apply the principles of ecologically sustainable development	Key sections of this Act that are relevant to the Project include, but are not limited to:  Chapter 1, Part 3 Management Plans (Division 3 Water Use, Division 4 Drainage Management, Division 5 Floodplain Management).

Legislation	Objectives & Application	Relevance
	To protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality	
	<ul> <li>To recognise and foster the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including:</li> </ul>	
	<ul> <li>Benefits to the environment</li> </ul>	
	<ul> <li>Benefits to urban communities, agriculture, fisheries, industry and recreation</li> </ul>	
	<ul> <li>Benefits to culture and heritage</li> </ul>	
	<ul> <li>Benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water.</li> </ul>	
	<ul> <li>To recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources</li> </ul>	
	<ul> <li>To provide for the orderly, efficient and equitable sharing of water from water sources</li> </ul>	
	<ul> <li>To integrate the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna</li> </ul>	
	<ul> <li>To encourage the sharing of responsibility for the sustainable and efficient use of water between the Government and water users</li> </ul>	
	<ul> <li>To encourage best practice in the management and use of water.</li> </ul>	
Work Health	The objects of this Act are:	Key sections of this Act that are
and Safety Act 2011	<ul> <li>To provide a balanced and nationally consistent framework to secure the health and safety of workers and workplaces by:</li> </ul>	relevant to the Project include, but are not limited to:  Part 2: Provisions associated with the storage handling and
	<ul> <li>Protecting workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work or from specified types of substances or plant</li> </ul>	with the storage, handling and use of hazardous construction materials, to be implemented during construction.
	<ul> <li>Providing for fair and effective workplace representation, consultation, co-operation and issue resolution in relation to work health and safety</li> </ul>	
	<ul> <li>Promoting the provision of advice, information, education and training in relation to work health and safety</li> </ul>	
	<ul> <li>Providing a framework for continuous improvement and progressively higher standards of work health and safety.</li> </ul>	
State	The objects of this Policy are:	Key sections of this legislation that
Environmental Planning Policy No 55—	<ul> <li>To provide for a Statewide planning approach to the remediation of contaminated land.</li> </ul>	are relevant to the Project include, but are not limited to:

Legislation	Objectives & Application	Relevance
Remediation of Land	<ul> <li>To promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment:         <ul> <li>By specifying when consent is required, and when it is not required, for a remediation work</li> <li>By specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular</li> <li>By requiring that a remediation work meet</li> </ul> </li> </ul>	<ul> <li>Section 7 Contamination and remediation to be considered in determining development application.</li> <li>The Project site has been certified by a NSW EPA-accredited Site Auditor to be suitable for commercial / industrial use subject to all works being carried out in accordance with CoCs.</li> </ul>
	certain standards and notification requirements.	
Dangerous Goods (Road and Rail	The objects of this Regulation are:  To set out the obligations of persons involved in the transport of dangerous goods by land transport	Key sections of this Regulation that are relevant to the Project include, but are not limited to:
Transport) Regulation 2014	To reduce as far as practicable the risks of personal injury, death, property damage and environmental harm arising from the transport of dangerous goods by land transport	<ul> <li>Clause 67: Duty on prime contractors to transport dangerous goods in accordance with the Australian Dangerous Goods code</li> </ul>
	<ul> <li>To give effect to the standards, requirements and procedures of the ADG Code so far as they apply to the transport of dangerous goods by land transport</li> </ul>	<ul> <li>Part 5: Consignment procedures for dangerous goods</li> </ul>
	<ul> <li>To promote consistency between the standards, requirements and procedures applying to the transport of dangerous goods by land transport and other modes of transport.</li> </ul>	Part 12: Safety equipment.



# **APPENDIX B – PROJECT PERMITS AND LICENCES REGISTER**

# **Project Permits and Licences Register**

egislation Part 4 Requirement. Applicability		Requirement	Commencement Date				Project Responsibility
General							
Environment Protection and Biodiversity Conservation Act 1999	NA	Construction Compliance Report to determine regular periodic status of compliance against the Conditions of Consent and the approval to be closed out after completion of construction and operation phases of the Project to which the approval applies.	6 March 2014	28 February 2040	Contractor's Environmental Manager (EM) - Construction compliance report to be compiled.		
Environmental Planning and Assessment Act 1979	ronmental Yes Planning determination under Part 4, Division ning and 4.1 of the EP&A Act ensures the Project		31 January 2018	This approval will lapse ten years from the date of this approval unless works subject of this approval are physically commenced, on or before that lapse date.	Contractor's EM - The approval requirements will be briefed to all Project personnel prior to and during construction.		
Protection of Environment Operations Act 1997	Yes	Environmental Protection Licences (EPL) may be issued for the following purposes generally:  To authorise the carrying out of scheduled	To be confirmed	To be confirmed	Contractor's EM – The EPL requirements will be briefed to all Project personnel prior to and during		
		development work at any premises, as required under Section 47			construction.  Annual return reporting is to be		
		<ul> <li>To authorise the carrying out of scheduled activities at any premises, as required under Section 48</li> </ul>			prepared and provided in accordance with EPL commencement date.		
		<ul> <li>To authorise the carrying out of scheduled activities not related to premises, as required under Section 49</li> </ul>					

Legislation	Part 4 Applicability	Requirement	Commencement Date	Expiry Date	Project Responsibility
		<ul> <li>To control the carrying out of non-scheduled activities for the purpose of regulating water pollution resulting from any such activity, as referred to in Section 122.</li> </ul>			
		The following Scheduled Activities (listed under Schedule 1) are relevant to Project construction:			
		<ul> <li>Crushing, grinding or separating activities of a capacity to process more than 150 tonnes of materials per day, or 30,000 tonnes of materials per year.</li> </ul>			
Water					
Water Act 1912	Yes	In the unexpected event that temporary dewatering of groundwater (from an excavation) is deemed to be required, and then a licence to carry out such an activity will be required under Part 5, Section 112 of this Act.	To be confirmed if groundwater dewatering required	To be confirmed if groundwater dewatering required	Contractor's EM
Sydney Water Act 1994	Yes	Section 73 of this Act requires a compliance certificate for water and sewerage infrastructure prior to commencement of operations.	To be confirmed	To be confirmed	Contractor's EM
Biodiversity					
Biosecurity Act 2015 (Noxious Weeds Act 1993 repealed)	Yes	As an owner/occupier of land, given a weed control notice by a local control authority, or a successor in title to the owner or occupier who has notice of the notice, must not fail to comply with the notice (refer to Division 5, Clause 26).	If required	N/A	Contractor's EM – Noxious weeds to be controlled as specified under the control category.
Pesticides Act 1999	Yes	Any possession of pesticides on the site must be authorised through a permit in accordance with Section 12 of this Act.	If required	If required	Contractor's EM – Engage suitably qualified pest controller for the site as required.
		Any application of pesticides in association with the site must be undertaken by a person who is			

Legislation	Part 4 Applicability	Requirement	Commencement Date	Expiry Date	Project Responsibility
		licenced to carry out that type of work in accordance with Part 6 (Section 45) of this Act.			
Contamination					
Contaminated Land Management Act 1997	Yes	In accordance with Section 60, the Environment Protection Authority (EPA) must be notified if:	If required	N/A	Principal's Representative – Notification of the EPA will be
		<ul> <li>Contaminants exceed thresholds contained in the guidelines or regulations, where contamination has entered or will foreseeably enter neighbouring land, the atmosphere, groundwater or surface water</li> </ul>			undertaken, if required.
		<ul> <li>Contaminants in soil are equal to or exceed guideline levels with respect to the current or approved use of the land</li> </ul>			
		<ul> <li>Contamination meets other criteria that may be prescribed by the regulations.</li> </ul>			
Protection of the Environment Operations Act 1997		Notify the EPA immediately of pollution incidents where material harm to the environment is caused or threatened, in accordance with Section 148.	If required	N/A	Principal's Representative – Notification of the EPA will be undertaken, if required.
Hazardous Substances	1				
Dangerous Goods (Road and Rail) Transport Act 2008	Yes	In accordance with Section 6, sub-contractors will work under this section for the licensing of vehicles transporting dangerous goods. Copies of permits to be obtained upon engagement of sub-contractors and this register will be updated accordingly.	To be confirmed	To be confirmed	Sub-contractors – Ensure an appropriate licence is held and is in place where any transportation of dangerous goods is intended.
Dangerous Goods (Road and Rail) Transport Act 2008	Yes	In accordance with Section 7, sub-contractors will work under this section for the licensing of drivers transporting dangerous goods. Copies of permits to be obtained upon engagement of sub-	To be confirmed	To be confirmed	Contractor's EM – License requirements will be obtained and briefed to all relevant Project

Legislation	Part 4 Applicability	Requirement	Commencement Date	Expiry Date	Project Responsibility
		contractors and this register will be updated accordingly.			personnel prior to and during construction.
Protection of the Environment Operations (Waste) Regulation 2014		Makes special requirements, including load tracking and reporting requirements, relating to asbestos waste as well as prohibiting the re-use and recycling of asbestos waste.	To be confirmed	To be confirmed	Contractor's EM
Work Health and Safety Regulation 2017	Yes	Asbestos Removal Work Notification will be undertaken by an appropriately qualified subcontractors where required during the construction phase. Copies of relevant documentation to be obtained upon engagement		An asbestos removal licence or asbestos assessor licence lasts for five years unless	Contractor's EM – Ensure engagement of appropriately qualified assessors and removal of asbestos materials in accordance with this Regulation.
		of sub-contractors and provided to WorkCover		cancelled earlier (Clause 503 of the WHS Regulation).	An Asbestos Removal Work Notification will be undertaken by sub-contractors where required during the construction phase.
					Clearance certificates will be documented and kept.
Traffic and Transport					
Roads Act 1993	Yes	Section 138 approvals may be required from time to time during construction for the occupancy of roads (other than Moorebank Avenue) and traffic signalling requirements in the vicinity of the Project site.	To be confirmed	To be confirmed	Contractor's EM – Ensure all relevant licences and approvals are sought prior to undertaking works within a public road.
		Road occupancy licences under Section 138 of the local Councils and Roads and Maritime Services are required for any works that disturb the surface of a public road, require works to be carried out in, on or over a public road, or interfere with a structure, work or tree on a public road.			

Legislation Part 4 Applicability		Requirement	Commencement Date	Expiry Date	Project Responsibility
Heritage					
Heritage Act 1977 Yes		Notify Office of Environment and Heritage (OEH) (Heritage Division) on discovery of a relic, in accordance with Section 14A.	If required	N/A	Principal's Representative – Notify OEH (Heritage Division) on discovery of a relic.
Bushfire					
releva the Co		If hot works are deemed unavoidable, then relevant hot works permits will be obtained by the Construction Contractor under this Act, in accordance with Section 89.	To be confirmed	To be confirmed	Contractor's EM - Permit requirements will be obtained and briefed to all relevant Project personnel prior to and during construction.
Waste					
The Protection of the Yes Environment Operations (Waste) Regulation 2014		Comply with record keeping requirements in relation to the transport of certain types of waste.	To be confirmed To be confirmed		Contractor's EM – Waste transport records will be recorded and kept.
		Waste is to be transported to a facility that can lawfully accept the waste, in accordance with Section 143.	To be confirmed	To be confirmed	Contractor's EM – A s143 Agreement Notice and proof of waste classification must be provided prior to the acceptance of material on the Project site.



# APPENDIX C – ASPECTS AND IMPACTS REGISTER



# **Risk Rating Matrix**

All environmental issues have been assessed in accordance with the table below.

	Consequence										
Likelihood	1 – Not 2 – Minor 3 – Moderate significant		3 - Moderate	4 – Major	5 – Severe						
A – Almost certain	Moderate	Moderate	High	Very High	Very High						
B – Likely	Low	Moderate	High	Very High	Very High						
C - Possible	Low	Low	Moderate	High	High						
D – Unlikely	Low	Low	Low Low		Moderate						
E – Rare	Low	Low	Low	Low	Moderate						

### The table below shows the criteria for evaluating likelihood

Level	Descriptor	Description	Frequency of occurrence
А	Almost Certain	Is expected to occur in most circumstances	Once per month
В	Likely Will probably occur in most circumstances		Between once a month and once a year
С	Possible	Might occur at some time	Between once a year and once in 5 years
D	Unlikely	Could occur at some time	Between once in 5 years and once in 20 years
E	Rare	May occur in exceptional circumstances	Once in more than 20 years

### The table below shoes the criteria for evaluating consequence.

Level	Category	Safety	Financial	Operational	Environmental	Community
1	Not Significant	No medical control required	<\$100,000	< 6 hours disruption to operations	Pollution release immediately contained on-site, no need for external assistance.  No impact on native vegetation / fauna / fauna habitat.	No community or stakeholder complaints
2	Minor	Lost time injury occurs or medical control required	≥ \$100,000 but less than \$1M	≥ 6 hrs but < 24 hrs disruption to operations	Pollution release to environment contained on-site in < 24 hours, no need for external assistance.  Minor impacts to native vegetation / fauna / fauna habitat on-site.	Several community or stakeholder complaints.  Complaints rectified within adequate timeframes.
3	Moderate	Serious injury occurs	≥ \$1M but less than \$2M	≥ 24 hrs but < 48 hrs disruption to operations	Pollution release to off-site environment with short-term, localised, detrimental effect.  Moderate, short-term impact to vegetation / fauna / fauna habitat requiring action to correct or minor impact on threatened species or communities.	Multiple and sustained community or stakeholder complaints.  Complaints addressed after an interval.  Limited media coverage of issues raised.
4	Major	Single fatality occurs	≥ \$2M but less than \$10M	≥ 2 days but < 5 days disruption to operations	Pollution release to off-site environment with medium-term, regional detrimental effect.  Major, medium-term impact to vegetation / fauna / fauna habitat requiring action to correct or moderate impact on threatened species or communities.	Widespread community and stakeholder concern. Sustained failure to address complaints. Extensive media coverage.
5	Severe	Multiple but localised fatalities occur	≥ \$10M	≥ 5 days disruption to operations	Pollution release to off-site environment with long-term, wide-spread detrimental effect.  Severe, long-term impact to vegetation / fauna / fauna habitat or major impact on threatened species or communities.	Ongoing and widespread community and stakeholder concern, culminating in litigation.  Inability to address complaints.  Extensive and sustained negative media coverage.

Pre-	Post-
mitigation	mitigation

Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Control Measures (Opportunities shown in green)	Likelihood	Consequence Rating	Responsibility
	General	- Approvals and licensing	- Not identifying appropriate approvals / licences required or proceeding without them	- Works delayed - Infringements - Poor client relations - Reputational loss	В	5	- Check Environmental Assessment / Conditions of Consent / EIS and statutory documentation (Final Compilation of Mitigation Measures (FCMM), Revised Statement of Commitments (RSoC), Commonwealth Mitigation Measures (CMM), Conditions of Consent (CoC), EPL Conditions) - Document requirements in CEMP and associated sub-plans - Establish and maintain a register of approvals, licenses and permits - Implement a Compliance Tracking Program to track compliance	C	O Moderate	Contractor's PM SIMTA Contractor's EM
	Visual	- Use of vehicles, plant and equipment - General construction activities	- Changes to visual landscape	- Impacts to community - Visual amenity	В	2 Modamto	- Elements within construction sites will be located to minimise visual impacts, (e.g. setting back large equipment from site boundaries, use of hoardings, progressive re-vegetation)  - Regular maintenance will be undertaken of site hoardings and perimeter areas including the prompt removal of graffiti  - Re-vegetation / landscaping would be undertaken progressively  - Design of site hoardings would consider the use of artwork or project information		2	Contractor's EM Contractor's PM
	Contamination	- Unexpected finds (including UXO, EO and EOW)	Pollution of surface water, groundwater and land though spread of existing contamination     Safety hazards associated with UXO, EO and EOW	- Water quality degradation - Killing of fauna - Loss of amenity (e.g. fishing) - Safety risk to construction staff and community	В	5	- Implement management measures in the Contamination Management Plan - Identify any contamination hotspots and incorporate procedures for these locations into construction documentation - Develop Unexpected Finds Protocol - Implement management measures in a site-wide UXO, EO, and EOW Management Plan (or equivalent)		4 Hioh	Contractor's EM
General		- Use of vehicles, plant and equipment	- Pollution of surface water, groundwater and land through leaks and spills	- Water quality degradation - Killing of fauna - Loss of amenity (e.g. fishing) - Contamination of land	C	2	- Implement the management measures in the Emergency Preparedness and Response Management Plan - Identify any contamination hotspots and incorporate procedures for these locations into construction documentation - Spill response training sessions for relevant staff	. ш	4 I. ow	Contractor's EM
		- Use of heavy and light vehicles	- Use of unauthorised access routes	Disturbance to road users and residents     Safety risk to road users     Impacts to the community	C	4	- Implement management measures in the Construction Traffic and Access Management Plan - Implement community notification procedures	Ω	3 I ow	Contractor's EM
	Traffic	- Moorebank Avenue Works	- Road closures delays and diversions	- Disturbance to road users resulting in community complaints - Safety risk to road users	В	3	- Implement management measures in the Construction Traffic and Access Management Plan - Conduct Road Safety Audit on Cambridge Avenue - Implement community notification procedures - Implement a Fill Importation Management Protocol	C	3 Modewate	Contractor's PM Contractor's EM
	Noise and Vibration	- Use of vehicles, plant and equipment	- Production of noise and vibration	- Disruption to community - Damage to property - Disruption to wildlife	В	3	- Implement management measures in the Construction Noise and Vibration Management Plan - Implement OOH Protocol - Implement community notification procedures - Determine vibration limits and structure/receiver offset distances - Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration On-going vibration monitoring during vibration intensive works	C	I wo I	Contractor's EM Contractor's CLM

Pre- Post-mitigation mitigation

		mitigation mi					mitig	gation	
Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Control Measures (Opportunities shown in green)	Likelihood	Responsibility
	ERSED	- Movement of vehicles, plant and equipment	- Transport of soils and sediments	- Soil loss - Increased sedimentation and turbidity - Damage to offsite flora and fauna habitat	В	4	- Implement management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Locate stockpiles away from waterways, watercourses and drains - Reuse excavated material on site where possible	D	Contractor's EM
	Air	- Use of vehicles, plant and equipment	- Production of atmospheric pollutants	- Air quality degradation - Impacts to community - Impacts to flora and fauna	C	33	- Implement management measures in the Construction Air Quality Management Plan - Activities to be undertaken in accordance with EPL - Erosion and Sediment Control Plans approved before works commence - Use of recycled water for dust suppression	D,	ে Contractor's EM
General	Resource use	- Use of vehicles, plant and equipment	- Depletion of natural resources - Greenhouse gas emissions	- Depletion of resources - Contribution to climate change	В	2	- Inductions and toolbox training on waste management and energy saving practices in construction plant and equipment and during office work  - No idling of plant equipment where possible onsite  - Equipment / plant equipment inspections must be undertaken prior to use on site  - Consideration will be given to material substitution where reasonable and feasible to reduce embodied energy of construction materials  - Procurement of materials and consumables considering environmental impacts in their manufacture and disposal (e.g. silica fume for use within concrete, recycled paper, etc.)  - Where possible locally sourced materials will be used to reduce GHG emissions associated with transport during construction  - Reduce carbon emissions and costs through under clearing  - Engage local workforce / suppliers	S ,	Contractor's EM  Site Supervisor  All Project personnel
	Bushfire	- All works requiring a hot works permit	- Idling engines - Sparks from activities - Cigarette butts causing bushfire - Increases in temperature due to climate change	- Property damage - Destruction of flora and fauna	D	5	- Implement management measures in the Construction Bushfire Management Plan - Conduct hot works permit - Consult with the RFS regarding bushfire risk	Щ	Contractor's EM
	Waste	- Warehouse construction	- Generation of construction waste	- Depletion of natural resources and deposition of large amounts of waste to landfill	C	2	- Implement the management measures in the Construction Demolition and Waste Management Plan - Use local waste facilities	ш (	Contractor's EM Contractor's PM Sub-contractors
	Biodiversity	- Use of heavy and light vehicles and equipment	- Risk of collision with fauna - Creation of hazards for fauna	- Mortality	D	3	- Implement management measures in the Construction Flora and Fauna Management Plan - Implement two-stage clearing approach - Induction and tool box training on clearance zones and required protection measures - For animal injuries, contact the local wildlife rescue agency and/or veterinary surgery	ш,	Contractor's EM Site Supervisor
Utilities and Excavation	Bushfire	- Excavation / ground penetration for utility works	- Sparks from activities	- Property damage - Destruction of flora and fauna	D	\$	- Implement management measures in the Construction Bushfire Management Plan - Conduct hot works permits - Consult with the RFS regarding bushfire risk	ш	Contractor's EM
	Biodiversity	- Excavation / ground penetration for utility works	- Creation of hazards for fauna	- Fragmentation - Mortality	D	3	- Implement management measures in the Construction Flora and Fauna Management Plan - Induction and tool box training on clearance zones and required protection measures - For animal injuries, contact the local wildlife rescue agency and/or veterinary surgery	ш ,	Contractor's EM Site Supervisor

Pre- Post-mitigation mitigation

		mitigation m						mit	gation	
Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Control Measures (Opportunities shown in green)	Likelihood	Responsible Respon	oility
	Biodiversity	- Clearing of site vegetation	- Removal of vegetation	- Habitat loss - Fragmentation - Mortality	C	2	- Implement management measures in the Construction Flora and Fauna Management Plan - Induction and tool box training on clearance zones and required protection measures - Remove existing weeds species and prevent migration of species	Э	Site Supervisor	
	Waste	-Clearing of site vegetation	- Generation of vegetative waste	- Fire hazard	В	2	- Implement management measures in the Construction and Demolition Waste Management Plan - Avoidance of waste generated and reused where reasonable and feasible - Stockpiling of waste away from watercourses, regularly turning vegetative waste	Э	Contractor's EM  Site Supervisor  All Project persons	
	ERSED	-Clearing of site vegetation	- Exposure of soils	- Increased sediment transport, sedimentation and turbidity - Soil loss - Increased runoff	В	4	- Implement management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Locate stockpiles away from waterways, watercourses and drains - Reuse excavated material on site where possible	D	∽ Š Contractor's EM	
Clearing of Vegetation	Air	- Clearing of site vegetation	- Producing of particulates	- Impacts to community - Impacts to flora and fauna	C	3	- Implement management measures in the Construction Air Quality Management Plan - Erosion and Sediment Control Plans approved before works commence - Activities undertaken in accordance with EPL - Use of recycled water for dust suppression	D	Contractor's EM Contractor's PM	
	Resource Use	- Clearing of site vegetation	- Depletion of natural resources - Greenhouse gas emissions	- Depletion of resources - Contribution to climate change	В	2	- Inductions and toolbox training on waste management and energy saving practices in construction plant and equipment and during office work  - No idling of plant equipment where possible onsite  - Equipment / plant equipment inspections must be undertaken prior to use on site  - Consideration will be given to material substitution where reasonable and feasible to reduce embodied energy of construction materials  - Procurement of materials and consumables considering environmental impacts in their manufacture and disposal (e.g. silica fume for use within concrete, recycled paper, etc.)  - Where possible locally sourced materials will be used to reduce GHG emissions associated with transport during construction  - Reduce carbon emissions and costs through under clearing	C	Contractor's EM  Site Supervisor  All Project persons	
	Noise and Vibration	- Clearing of site vegetation	- Production of noise and vibration	- Disruption to community Damage to property - Disruption to wildlife	В	3	- Implement management measures in the Construction Noise and Vibration Management Plan - Implement community notification procedures - Determine vibration limits and structure/receiver offset distances	C	Contractor's EM Contractor's CLM	
Removal of Heritage Items	Heritage	- Demolition of heritage items	- Removal of heritage items	- Destruction of heritage values	C	4	- Implement the management measures in the Construction Heritage Management Plan - General inductions toolbox training on heritage management protocols - Label any known heritage items on Environmental Control Maps - Implement an Unexpected Finds Protocol	Э	Contractor's EM  Site Supervisor  All Project person	
Remediation	Resource use	- Remediation activities	- Depletion of natural resources - Greenhouse gas emissions	- Depletion of resources - Contribution to climate change	В	2	- Implement management measures in the Construction Soil and Wate Management Plan - Inductions and toolbox training on waste management and energy saving practices in construction plant and equipment and during office work - No idling of plant equipment where possible onsite - Equipment / plant equipment inspections must be undertaken prior to use on site - Consideration will be given to material substitution where reasonable and feasible to reduce embodied energy of construction materials - Procurement of materials and consumables considering environmental impacts in their manufacture and disposal (e.g. silica fume for use within concrete, recycled paper, etc.) - Where possible locally sourced materials will be used to reduce GHG emissions associated with transport during construction - Reduce carbon emissions and costs through under clearing - Use of local suppliers where possible	С	Contractor's EM  Site Supervisor  All Project persons	
	Contamination	- Remediation activities	- Pollution of surface water, groundwater and land though spread of existing contamination	- Water quality degradation - Killing of fauna, loss of amenity (e.g. fishing) - Contamination of ground	C	4	- Implement management measures in the Contamination Management Plan - Implement an Unexpected Finds Protocol	П	Contractor's EM Sub-contractors	

Pre-	Post-
nitigation	mitigation

Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence Barino		Likelihood	Rating	Responsibility
	Air Quality	- Movement and deposition of fill (i.e. site levelling, importation and compaction of fill material) - Use of vehicles and equipment - Stockpiling	- Producing of particulates (ie.dust or particulate matter)	- Impacts to community - Impacts to flora and fauna	C	3 Moderate	- Implement management measures in the Construction Air Quality Management Plan - Erosion and Sediment Control Plans approved before works commence - Activities undertaken in accordance with EPL - Use of recycled water for dust suppression	D 3	Low	Contractor's EM Contractor's PM
		- Contaminated material stockpiling	- Production of odours	- Impacts to community	В	2 Moderate	- Implement management measures in the Construction Air Quality Management Plan, Contamination Management Plan and Construction Demolition and Waste Management Plan - Activities undertaken in accordance with EPL		Low	Contractor's EM
	ERSED	- Stockpiling of soil	- Exposure of soils	- Increased sediment transport, sedimentation and turbidity - Soil loss - Increased runoff	В	4 Verv Hioh	- Implement management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Locate stockpiles away from waterways, watercourses and drains - Reuse excavated material on site where possible	D	Low	Contractor's EM
		- Removal of soil - Placement of fill	- Erosion of soil	Increased sediment transport, sedimentation and turbidity     Degradation of water quality     Damage to offsite flora and fauna habitat	В	4 Very High	- Implement management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Locate stockpiles away from waterways, watercourses and drains - Reuse excavated material on site where possible	D 23	Low	Contractor's EM
Earthworks (including topsoil stripping)	Noise and Vibration	- Earthworks activities	-Production of noise and vibration	- Disruption to community - Damage to property - Disruption to wildlife	B ,	3 High	- Implement management measures in the Construction Noise and Vibration Management Plan - Implement OOH Protocol - Implement community notification procedures - Determine vibration limits and structure/receiver offset distances Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration - On-going vibration monitoring during vibration intensive works	O -	Low I	Contractor's EM Contractor's CLM
espoon ourpping)	Visual	- Earthworks activities	- Changes to visual landscape	- Impacts to community - Visual amenity	В	2 Moderate	- Existing vegetation around the perimeter of construction sites would be retained - Develop and implement an Erosion and Sediment Control Plan - Implement management measures in the Urban Design and Landscape Plan	D 2	Low	Contractor's EM
		- Use of vehicles, plant and equipment - General construction activities	-Changes to visual landscape	- Impacts to community - Visual amenity	В	2 Moderate	- Elements within construction sites will be located to minimise visual impacts (e.g. setting back large equipment from site boundaries, use of hoardings or progressive re-vegetation)  - Regular maintenance will be undertaken of site hoardings and perimeter areas  - Re-vegetation/landscaping would be undertaken progressively  - Implement Fill Importation Management Protocol	D 2	Low	Contractor's EM Contractor's PM
		- Importation of fill during night-time hours	- Generation of light	- Light spill impacts to community and flora and fauna	C	3 Moderate	- Where required for construction works, cut-off and directed lighting would be used and lighting location considered to ensure glare and light spill are minimised	D 3	Low	Contractor's EM
	Traffic	- Use of heavy and light vehicles	- Use of unauthorised access routes	- Disturbance to road users and residents - Safety risk to road users - Impacts to the community	C	4 Hioh	- Implement management measures in the Construction Traffic and Access Management Plan - Implement community notification procedures - Implement the Fill Importation Management Protocol	D 3	Low	Contractor's EM
	Waste	- Excavation	- Generation of additional excavated material	- Loss of visual amenity - Degradation of water quality	В	3 Hioh	- Implement management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Segregate top 100mm of topsoil and stockpile for use in rehabilitation	D 2	Low	Contractor's EM
	Biodiversity	- Removal of topsoil and soil	- Removal of vegetation	- Habitat loss - Fragmentation - Mortality -Transport of noxious weeds	O 7	4 High	- Implement management measures in the Construction Flora and Fauna Management Plan - Induction and tool box training on clearance zones and required protection measures - Demarcate the 10 metre buffer zone around threatened plant populations in bootland - Remove existing weeds species and prevent migration of species	Ξ 4	Low	Contractor's EM Site Supervisor
	Biodiversity	- Removal of asbestos from buildings	- Asbestos fibres becoming airborne - Removal of fauna	- Habitat loss - Fragmentation - Mortality	В	2 Moderate	- Implement management measure related to asbestos in the Contamination Management Plan and the Construction Flora and Fauna Management Plan  - General inductions toolbox training on asbestos management protocols  - Asbestos to be removed in accordance with "The Code of Practice for the Same Removal of Asbestos (NOHSC, 2005) and Code of Practice: How to Safely Remove Asbestos (WorkCover NSW, 2017)	C 2	Low	Contractor's EM Site Supervisor

Pre- Post-mitigation Post-mitigation

Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence		Consequence		Likelihood		Responsibility
					2	ဒီ		i j	3	
Asbestos Removal	Air	- Removal of asbestos from buildings	- Asbestos fibres becoming airborne	- Impacts to human health	C	4	- Implement management measures related to asbestos in the Contamination Management Plan - General inductions toolbox training on asbestos management protocols - Wear appropriate PPE	D .	Low	Contractor's EM Site Supervisor
	Waste	- Removal of asbestos from buildings - Transport, handling and storage of asbestos	Incorrect disposal of waste	- Prosecution - Contamination of waste streams	C	4	- Implement management measures related to asbestos in the Contamination Management Plan and Construction Demolition and Waste Management Plan - General inductions toolbox training on asbestos management protocols	D	Low	Contractor's EM Site Supervisor
	Waste	- Building and concrete slab demolition	- Generation of building and concrete waste	Visual amenity     Degradation of water quality     Deposition of large amounts to landfill	В	2	- Implement management measures in the Construction Demolition and Waste Management Plan an Construction Soil and Water Management Plan relating to waste and imported spoil  - General inductions toolbox training on proper demolition protocols in accordance with appropraite guidelines	_   _	Low	Contractor's EM Site Supervisor
	ERSED	- Concrete slab removal	- Exposure of soils	-Increased sediment transport, sedimentation and turbidity - Soil loss - Increased runoff	В	4	- Implement the management measures in the Construction Soil and Water Management Plan - Implement an Erosion and Sediment Control Plan - Locate stockpiles away from waterways, watercourses and drains - Reuse excavated material on site where possible	D 3	Low	Contractor's EM
	Air Quality	- Removing building	- Producing particulates (ie.dust or particulate matter)	- Impacts to community - Impacts to flora and fauna	C	3	- Implement management measures in the Construction Air Quality Management Plan - General inductions toolbox training on proper demolition protocols in accordance with appropraite guidelines	D 2		Contractor's EM Site Supervisor
Demolition of Buildings	Resource use	- Use of vehicles, plant and equipment	- Depletion of natural resources - Greenhouse gas emissions	- Depletion of resources - Contribution to climate change	В	2	- Inductions and toolbox training on waste management and energy saving practices in construction plant and equipment and during office work  - No idling of plant equipment where possible onsite.  - Equipment / plant equipment inspections must be undertaken prior to use on site  - Consideration will be given to material substitution where reasonable and feasible to reduce embodied energy of construction materials  - Procurement of materials and consumables considering environmental impacts in their manufactur and disposal (e.g silica fume for use within concrete, recycled paper, etc.)  - Where possible locally sourced materials will be used to reduce GHG emissions associated with transport during construction  - Reduce carbon emissions and costs through under clearing  -Engage local workforce /suppliers	C		Contractor's EM Site Supervisor
	Biodiversity	- Removing building	- Removal of fauna	- Disturbance or injury to fauna	В	2	- Implement management measures in the Construction Flora and Fauna Management Plan - For animal injuries, contact the local wildlife rescue agency and/or veterinary surgery	C	Low	Contractor's EM Site Supervisor
	Visual	- Use of vehicles, plant and equipment - Removing building and concrete slab	- Changes to visual landscape	- Impacts to community and surrounding streetscape - Visual amenity	В	2	- Elements within construction sites will be located to minimise visual impacts, (e.g. setting back lar equipment from site boundaries, use of hoardings) - Implement management measures in the Urban Design and Landscape Plan	ge U	Low	Contractor's EM Site Supervisor
	Noise and Vibration	- Removing building and concrete slab	- Production of noise and vibration	- Disruption to community - Damage to property - Disruption to wildlife	C	3	- Implement management measures in the Construction Noise and Vibration Management Plan - Develop and implement OOH Protocol - Implement community notification procedures - Determine vibration limits and structure/receiver offset distances Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration - Ongoing vibration monitoring during vibration intensive works - Consider use of munchers rather than pneumatic breakers for concrete demolition	C		Contractor's EM Contractor's CLM
	Contamination	- Remediation activities - Demolition of existing structures potentially containing contaminating materials	- Pollution of surface water, groundwater and land though spread of existing contamination	- Water quality degradation - Killing of fauna, loss of amenity (e.g. fishing) - Contamination of ground	C	4	- Implement management measures in the Contamination Management Plan - Develop an Unexpected Finds Protocol - Implement management measures in the Construction Soil and Water Management Plan	D 3	Low	Contractor's EM Sub-contractors
	Air Quality	- Removal of hazardous materials from buildings	- Producing particulates (ie.dust or particulate matter)	- Impacts to community - Impacts to flora and fauna	С	4	- Implement management measures in the Construction Air Quality Management Plan - General inductions toolbox training on proper demolition protocols in accordance with appropraite guidelines	D °	Low	Contractor's EM Site Supervisor
Hazardous Material Removal	Contamination	- Remediation activities	- Pollution of surface water, groundwater and land though spread of existing contamination	- Water quality degradation - Killing of fauna, loss of amenity (e.g. fishing) - Contamination of ground	C	4	- Implement management measures in Contamination Management Plan - Develop an Unexpected Finds Protocol	D 3	Low	Contractor's EM Sub-contractors
	Human Health	- Removal of hazardous materials from buildings	- Hazardous materials	- Health impacts to workers	В	3	- Implement management measures in the Contamination Management Plan and Construction Demolition and Waste Management Plan - Wear appropriate PPE	C	Low L	Contractor's EM Site Supervisor

Pre- Post-mitigation mitigation

Construction Activity	Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence		Likelihood	Rating Ea	Responsibility
	Noise and Vibration	- Use of vehicles, plant and equipment	- Production of noise and vibration	- Disruption to community - Damage to property - Disruption to wildlife	В -	Low	- Implement management measures in the Construction Noise and Vibration Management Plan - Implement OOH Protocol - Implement community notification procedures - Determine vibration limits and structure/receiver offset distances Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration On-going vibration monitoring during vibration intensive works - Consider use of munchers rather than pneumatic breakers for concrete demolition	Э.		Contractor's EM Contractor's CLM
	Air	- Use of vehicles, plant and equipment	Production of atmospheric pollutants	- Air quality degradation - Impacts to community - Impacts to flora and fauna	C «	Moderate	- Implement management measures in the Construction Air Quality Management Plan - Activities to be undertaken in accordance with EPL - Concrete batching plant would be located centrally within the Project site	Q ,	Low	Contractor's EM
Crushing / Concrete Batching	ERSED	- Concrete batching	- Creation of dirty water / pollution of waters	- Degradation of water quality	B 3	3 High	- Implement the management measures in the Construction Soil and Water Management Plan and the Concrete Batching Management Plan - Implement an Erosion and Sediment Control Plan - Locate washout bays away from waterways, watercourses, drains - Concrete washout areas of sufficient size suitable for construction activity undertaken are provided - Concrete washout areas are clearly marked on Environmental Control Maps and delineated - Inductions on designated concrete washout areas	е О	Cow	Contractor's EM Site Supervisor
	Visual	- Establishment of concrete batching site	- Changes to visual landscape	- Impacts to community and surrounding streetscape - Visual amenity	В	Moderate	- Elements within construction sites will be located to minimise visual impacts (e.g. setting back larg equipment from site boundaries, use of hoardings) - Implement management measures in the Urban Design and Landscape Plan	e D	Low	Contractor's EM
	Waste	- Concrete works	- Generation of concrete waste	Depletion of natural resources and deposition of large amounts of waste to landfill     Degradation of water quality	В	Madamita	- Implement management measures in the Construction Soil and Water Management Plan and the Construction Demolition and Waste Management Plan - Implement an Erosion and Sediment Control Plan - Stockpiling of waste away from watercourses - Avoidance and reuse of material will have priority over recycling - Waste generation will be minimised by ordering the correct quantity of materials - Use local waste facilities	D	Low L	Contractor's EM Contractor's PM
	Bushfire	- Concrete works	- Sparks from activities	- Property damage - Destruction of flora and fauna	D s	S. S	- Implement management measures in the Construction Bushfire Management Plan - Conduct hot works permits - Consult with the RFS regarding bushfire risk	Щι	Moderate	Contractor's EM
Road Sealing	Air Quality	- Use of bitumen / road sealing Vegetation stockpiling	- Production of odours	- Impacts to community	C	2	- Implement management measures in the Construction Air Quality Management Plan - Activities undertaken in accordance with EPL	O ,	Zow	Contractor's EM Site Supervisor
Landscaping	Waste	- Landscaping	- Generation of landscaping waste	Depletion of natural resources and deposition of large amounts of waste to landfill     Loss of visual amenity	В	2 Modemotory	- Implement management measures in the Construction Demolition and Waste Management Plan - Avoidance and reuse of material will have priority over recycling - Waste generation will be minimised by ordering the correct quantity of materials - Use local waste facilities	O °	Low	Contractor's EM

# APPENDIX D - ENVIRONMENTAL CONTROLS MAPS

#### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area LURNEA Casula SOUTH WESTERN MOTORWAY Glenfield Wattle Grove Wattle Grove North Educational Receiver ANZAC ROAD Kitchener House ABB (I3) CASULA DJLU (I2) Cadastre (NSW DFSI, 2017) Existing railway MOOREBANK Watercourse 1:20,000 at A4 4/1197707 9 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) WATTLEGROVE CABRAMATTA

Appendix D: MPE Stage 2 Construction Environmental Control Maps (overview)

GLENFIELD

- EAST HILLS RAILWAY

HOLSWORTHY

LIVERPOOL

HOLSWORTHY

#### **Construction Environmental Management Plan**



LEGEND

Construction compound

Cadastre (NSW DFSI, 2017)



Hollow bearing tree

Page 1 of 13 1:2,000 at A4



ARCADIS AUSTRALIA PACIFIC PTY LTD
ABN 76 104 485 289
Level 16, 580 George St | Sydney NSW 2000
P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001

Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020)



Appendix D: MPE Stage 2 Construction Environmental Control Maps

#### **Construction Environmental Management Plan**



Appendix D: MPE Stage 2 Construction Environmental Control Maps

## **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Cadastre (NSW DFSI, 2017) Native vegetation WWII composite timber and steel store building WWII timber post and beam store building Modern building, c. 1990s Site access Hollow bearing tree - Compound access road 69 1/1197707 Page 3 of 13 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Site access Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 9 10 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

## **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Cadastre (NSW DFSI, 2017) WWII timber post and beam store building Modern building, c. 1990s Compound access road Page 4 of 13 54 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 53

Appendix D: MPE Stage 2 Construction Environmental Control Maps

9 10 11 12 13

### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Main warehousing compound Spoil stockpiling Cadastre (NSW DFSI, 2017) Native vegetation WWII composite timber and steel store building WWII timber post and beam store building Modern building, c. 1990s Threatened Flora Species Grevillea parviflora subsp. parviflora 82 Page 5 of 13 1:2,000 at A4 \_Main warehousing compound ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) Spoil stockpiling 9 10 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Existing Liberty compound Main warehousing compound Spoil stockpiling Cadastre (NSW DFSI, 2017) Native vegetation 50 Pre-1958, type unknown WWII timber post and beam store building Modern building, c. 1990s 52 Compound access road Threatened Flora Species Persoonia nutans Page 6 of 13 1:2,000 at A4 warehousing compound ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 9 10 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Main warehousing compound Spoil stockpiling Concrete stockpiling / crushina Cadastre (NSW DFSI, 2017) Native vegetation WWII QM (Quarter Master's) Threatened Flora Species Persoonia nutans Spoil stockpiling Page 7 of 13 Main warehousing compound 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) Concrete stockpiling /crushing 9 10 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Existing Liberty Existing Liberty compound compound Main warehousing compound Spoil stockpiling Spoil stockpiling Concrete stockpiling / Main warehousing crushina Cadastre (NSW DFSI, 2017) compound Native vegetation WWII QM (Quarter Master's) WWII timber post and beam store building Threatened Flora Species Acacia pubescens Page 8 of 13 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 9 10 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND 0 Current MPE Stage 2 construction area EDD/ Main warehousing compound Concrete stockpiling /crushing Concrete stockpiling / crushing Cadastre (NSW DFSI, 2017) Native vegetation Hollow bearing tree Threatened Flora Species Hibbertia puberula subsp. puberula Persoonia nutans MOOREBANK AVENUE Page 9 of 13 Main 1:2,000 at A4 warehousing compound ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 9 10 11 12

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Main warehousing compound Concrete stockpiling / crushing Cadastre (NSW DFSI, 2017) Native vegetation WWII carpentry workshop WWII timber post and beam store building Modern building, c. 1990s / Isolated Aboriginal find Threatened Flora Species Main warehousing compound Acacia pubescens 35 Persoonia nutans 4/1197707 Page 10 of 13 1:2,000 at A4 33 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 11 12 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

## **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Main warehousing compound Cadastre (NSW DFSI, 2017) Native vegetation Hollow bearing tree Watercourse Threatened Flora Species Grevillea parviflora subsp. parviflora Hibbertia puberula subsp. puberula Persoonia nutans MOOREBANKAVENUE Page 11 of 13 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020)

Appendix D: MPE Stage 2 Construction Environmental Control Maps

#### **Construction Environmental Management Plan** LEGEND Current MPE Stage 2 construction area Main warehousing compound Cadastre (NSW DFSI, 2017) Native vegetation Potential UXO area (indicative) Isolated Aboriginal find Main warehousing Hollow bearing tree compound Watercourse Threatened Flora Species Acacia bynoeana Acacia pubescens Grevillea parviflora subsp. Hibbertia puberula subsp. puberula Persoonia nutans Southern Burial Pits (Potential UXO) Page 12 of 13 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 9 10 11 **12** 13

Appendix D: MPE Stage 2 Construction Environmental Control Maps

### **Construction Environmental Management Plan** LEGEND 0 Current MPE Stage 2 construction area Cadastre (NSW DFSI, 2017) Native vegetation Isolated Aboriginal find Hollow bearing tree Watercourse Threatened Flora Species Acacia bynoeana Grevillea parviflora subsp. Hibbertia fumana Hibbertia puberula subsp. puberula Persoonia nutans Page 13 of 13 1:2,000 at A4 ARCADIS AUSTRALIA PACIFIC PTY LTD ABN 76 104 485 289 Level 16, 580 George St | Sydney NSW 2000 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001 Coordinate System: GDA 1994 MGA Zone 56 Aerial imagery supplied by nearmap (Jan, 2020) 11 12

Appendix D: MPE Stage 2 Construction Environmental Control Maps



# APPENDIX E – CONSTRUCTION TRAFFIC AND ACCESS MANAGEMENT PLAN



## APPENDIX F – CONCRETE BATCHING PLANT MANAGEMENT PLAN

To be included prior to establishment of Concrete Batching Plant in accordance with CoC B31.



# APPENDIX G – CONSTRUCTION SOIL AND WATER MANAGEMENT PLAN



### **APPENDIX H – FLOOD EMERGENCY RESPONSE PLAN**



# APPENDIX I – CONSTRUCTION AIR QUALITY MANAGEMENT PLAN



## APPENDIX J – CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN



# APPENDIX K – CONSTRUCTION HERITAGE MANAGEMENT PLAN



# APPENDIX L – CONSTRUCTION FLORA AND FAUNA MANAGEMENT PLAN



## APPENDIX M – CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN



### **APPENDIX N – CONTAMINATION MANAGEMENT PLAN**



# APPENDIX O – BUSHFIRE EMERGENCY AND EVACUATION PLAN



### APPENDIX P – LIGHT SPILL MANAGEMENT



#### LIGHT SPILL MANAGEMENT

#### **Purpose**

This Appendix has been developed for the construction period of the Project, to address the Department of the Environment and Energy (DotEE) Approval (EPBC 2011/6229 and EPBC 2011/6086) and forms part of the Construction Environmental Management Plan.

#### **Local Context**

A number of residential suburbs are located in proximity to the Project site. The approximate distances of these suburbs to the MPE Stage 2 site and the Moorebank Avenue site are provided below:

Suburb	Distance to MPE Stage 2 site	Distance to Moorebank Avenue site
Wattle Grove	360 m to the north-east	865 m to the north-east
Moorebank	1300 m to the north	1430 m to the north
Casula	820 m to the west	760 m to the west
Glenfield	1830 m to the south-west	1540 m to the south-west

The land surrounding the site includes:

- The Moorebank Precinct West (MPW) site, formerly the School of Military Engineering (SME) on the western side of Moorebank Avenue, which is owned by the Commonwealth
- The area immediately south of the MPE site, known as the 'Southern Boot Land', includes an existing rail
  spur within a vegetated remnant bushland. The East Hills Rail Corridor is south of the Southern Boot
  Land, which is owned and operated by Sydney Trains. Further to the south is the Holsworthy Military
  Reserve, which is owned by the Commonwealth
- The Boot Land, to the immediate east of the MPE site between the eastern site boundary and the Wattle Grove residential area, which is owned by the Commonwealth
- The Defence Joint Logistics Unit (DJLU) is located immediately north and north-east of the MPE site.

EPBC 2011/6229 condition 7b) states that consideration must be given to people and communities at SME, Defence National Storage and Distribution Centre (DNSDC), Department of Defence housing and the environment more generally in neighbouring bushland areas. The SME and Defence housing have been relocated off the MPW site to the Holsworthy Barracks and are no longer sensitive receivers to the MPE site. Therefore, consultation with Defence regarding proposed mitigation measures for light spill impacts, as required in Condition 7i) is no longer considered relevant.

The DNSDC has been relocated to the Defence Joint Logistics Unit (DJLU), to the north of the MPE site, and is listed as a sensitive receiver in the MPE Stage 2 EIS.



#### **Construction Impacts**

Lighting would be required during construction of the Project to illuminate within ancillary facilities, and on plant and equipment.

The MPE Stage 2 EIS states that the impacts of light spill during construction of the Project are expected to be minor as it would be localised and temporary in nature. There is a considerable separation of residential dwellings from the Project site, which would further reduce the impact of this lighting during construction.

The Light Spill Provisional Environmental Management Framework (PEMF) prepared for the MPW EPBC Act approval indicated that some out of hours construction works may be required as part of the construction of the Project. Lighting required to enable these works would have the potential for light spill impacts due to the presence of fixed lighting within the facility and movement of vehicles during night works. However, lighting would be contained to the area of actual works and designed to avoid light spill to surrounding areas as much as possible. No significant effects on fauna are expected during construction of the Project.

#### **Management Measures**

The following management measures will be implemented during the construction of the Project:

- Temporary lighting (fixed and portable) will be designed and located to minimise the effects of light spill on surrounding sensitive receivers (MPW Response to Submission Management and Mitigation Measure 14C)
- No lights will be installed above the height of 40 m or, the maximum approved height of the intermodal warehouse buildings (whichever is less) (EPBC Act Approval (2011/6229) 7(e))
- Where required for construction works, cut-off and directed lighting would be used and lighting location considered to ensure glare and light spill are minimised (MPE Stage 2 FCMM 8A)
- Potentially affected residents and relevant authorities will be notified in advance of any out of hours works (MPW PEMF).

Refer also to the Construction Flora and Fauna Management Plan (Appendix L of this CEMP) regarding management of potential light spill impacts on fauna.

#### **Monitoring**

Monitoring of light spill impacts will be undertaken by the Contractor's Environment Manager (or delegate) during weekly inspections of construction activities to monitor compliance with the requirements of the approval and this CEMP. Daily (nightly) monitoring will be undertaken during any out of hours works.

Inspections will focus on the following key issue:

Location and direction of temporary (fixed and portable) lighting.

An Environmental Inspection Checklist will be used to maintain compliance and effectiveness of controls. Items that require action will be documented during environmental inspections and notified to the relevant Site Supervisor. The Site Supervisor will be responsible for providing appropriate resources in terms of labour, plant and equipment to enable the items to be rectified in the nominated timeframes.

Further monitoring referred to in the MPW PEMF applies to the operation phase of the Project (and not the construction phase).