McCONNELL DOWELL
CREATIVE CONSTRUCTION™

# Construction Environmental Management Plan (CEMP)

## Kamay Ferry Wharves

June 2023

NSW GOVERNMENT

# DOCUMENT CONTROL

| | |
|---|---|
| **Title** | **Kamay Ferry Wharves Project Construction Environmental Management Plan** |
| Document Number (TeamBinder) | KFW02-MCD-BPW-EN-PLN-000001 |
| Current Revision | F |

# APPROVAL AND AUTHORISATION

# REVISION HISTORY

| Rev | Date | Details | Author | Reviewer |
|---|---|---|---|---|
| A | 25/10/2022 | Draft CEMP | P Sheehan | M Jones |
| B | 30/11/2022 | Updated to address TfNSW comments | M Jones | A Adamczewski |
| C | 13/03/2023 | Updated to address ER comments and include EPBC CoA. | M Jones | A Adamczewski |
| D | 30/03/2023 | Minor updates | M Jones | A Adamczewski |
| E | 09/05/2023 | Updated to address DPE comments | M Jones | A Adamczewski |
| F | 08/06/2023 | Updated to address DPE comments | M Jones | A Adamczewski |

# LIST OF EMERGENCY AND KEY CONTACTS

| Position | Name | Phone |
|---|---|---|
| EPA pollution hotline | - | 131 555 |
| Fire and Rescue NSW | - | 000 (for pollution incidents that present an immediate threat to human health or property)<br><br>1300 729 579 (for pollution incidents that do not present an immediate threat to human health or property) |
| NSW Health | Prince of Wales Hospital | 02 9382 2222 |
| | Sutherland Hospital | 02 9540 7111 |
| SafeWork NSW | - | 131 050 |
| Randwick City Council | - | 9093 6000 |
| Sutherland Shire Council | - | 9710 0333 |
| 24-hour community information line | - | 1800 718 556 |
| Project Manager | Adam Adamczewski | [redacted] |
| Environment & Sustainability Lead | Mitch Jones | [redacted] |
| Supervisor | Colin Ford | [redacted] |
| Transport for NSW Representative | Tony Matthews | [redacted] |
| Transport for NSW Environmental Representative | Chris Williams | [redacted] |
| Environmental Representative (ER) | Richard Peterson | [redacted] |

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# GLOSSARY/ABBREVIATIONS

| Abbreviation | Expanded text |
|---|---|
| ASS | Acid Sulfate Soils |
| CEMF | Construction Environmental Management Framework |
| CEMP | Construction Environmental Management Plan |
| CEMS | Contractors Environmental Management System |
| CEP | Construction Execution Procedure |
| CCS | Community Communication Strategy |
| CMO | HSEQ compliance database software |
| Compliance audit | Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (which incorporates the relevant approval conditions). |
| CoA | Conditions of approval |
| Contractor | McConnell Dowell Constructors (Aust) Pty Ltd. |
| DCCEEW | Commonwealth Department of Climate Change, Energy, the Environment and Water |
| DPI Fisheries | NSW Department of Primary Industries, Fisheries |
| DPE | NSW Department of Planning and Environment |
| DPE Water | Water Group of the Department of Planning and Environment |
| Ecologically sustainable development | Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992) |
| EEC | Endangered Ecological Community |
| EESG | Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former NSW Office of Environment and Heritage) |
| EIS | Environmental Impact Statement |
| EMS | Environmental Management System |
| Environmental aspect | Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment. |
| Environmental impact | Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects. |
| Environmental incident | An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment. |
| Environmental objective | Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve. |
| Environmental policy | Statement by an organisation of its intention and principles for environmental performance. |
| EP&A Act | *Environmental Planning and Assessment Act 1979* (NSW) |

| Abbreviation | Expanded text |
|---|---|
| EPA | NSW Environment Protection Authority |
| EPBC Act | *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)* |
| EPBC-CoA | Federal Conditions of Approval under the EPBC Act |
| EPI | Environment Protection Instruction |
| EPL | Environment Protection Licence |
| Environmental Representative | A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance. |
| ERG | Environmental Review Group – generally comprising representatives of Transport for NSW, Environmental Representative, Project delivery team, regulatory authorities, National Parks and Wildlife Service and councils (Randwick City Council, Sutherland Shire Council).<br><br>The ERG will be maintained for the duration of the Project and will meet regularly and undertake environmental inspections. The role the ERG is to work collaboratively with the project team to provide proactive advice on environmental management issues on the Project. |
| ESCP | Erosion and Sediment Control Plan |
| Environmental target | Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives. |
| EWMS | Environmental work method statement |
| Heritage NSW | Heritage NSW, Department of Premier and Cabinet |
| Hold point | Is a verification point that prevents work from commencing prior to approval from Transport for NSW |
| HSEQ | Health, Safety, Environment and Quality |
| JSEA | Job Safety and Environment Analyses |
| LALC | Local Aboriginal Land Council |
| Minister, the | NSW Minister for Planning and Public Spaces |
| MCoA | NSW Minister for Planning and Public Spaces Conditions of Approval |
| MMS | McConnell Dowell Management System |
| Non-compliance | Failure to comply with the requirements of the Project approval or any applicable licence, permit or legal requirements or this CEMP and Sub Plans. |
| Non-conformance | Failure to conform internal McConnell Dowell processes, systems, product or material specifications. |
| NPWS | NSW National Parks and Wildlife Service |
| PESCP | Progressive Erosion and Sediment Control Plan |
| PIRMP | Pollution Incident Response Management Plan |
| PMP | Project Management Plan |

| Abbreviation | Expanded text |
|---|---|
| Principal, the | Transport for NSW |
| POEO Act | *Protection of the Environment Operations Act 1997* (NSW) |
| Project, the | Kamay Ferry Wharves |
| RAP | Registered Aboriginal Party |
| Relevant Council(s) | Randwick City Council and Sutherland Shire Council |
| REMMs | Revised Environmental Management Measures |
| RMS - Roads and Maritime | Now Transport for NSW (TfNSW) |
| ROL | Road occupancy licence |
| SEAR's | Secretary's Environmental Assessment Requirements |
| SSI | State Significant Infrastructure |
| TfNSW | Transport for NSW |

# 1 INTRODUCTION

## 1.1 Plan Purpose

This Construction Environmental Management Plan (CEMP) (KFW02-MCD-ALL-EN-PLN-000001) and sub plans have been prepared to outline and describe how McConnell Dowell Constructors (Aust) Pty Ltd (McConnell Dowell), will manage potential environmental and community impacts during the construction of Kamay Ferry Wharves.

The CEMP has been prepared to outline and describe how the Project will comply with the NSW Minister for Planning Conditions of Approval (MCoA) and the Federal Minister for Environment's Conditions of Approval (EPBC-CoA). Additionally, it outlines how McConnell Dowell will minimise the environmental risks and achieve environmental outcomes on the project by providing a structured approach to ensure appropriate revised environmental management measures (REMMs) and controls are implemented. In accordance with MCoA A18, some strategies, plans and programs required have been combined in one document (refer to section 1.3).

A detailed description of the Project is provided Chapter 5 of the Kamay Ferry Wharves Environmental Impact Statement (Transport for NSW, 2021) and addressed in section 2.2 of this CEMP.

Implementing the CEMP and sub plans effectively will ensure that the Project meets the requirements of the MCoA, EPBC-CoA and REMMs (see Appendix A1 and Compliance Tracking Program) are met.

This CEMP has been prepared in accordance with:

- Ministers Conditions of Approval (MCoA) granted to the project on 21st July 2022.
- EPBC-CoA granted to the project on 16th March 2023.
- The requirements of the Environmental Management Plan Guideline (DPIE, 2020).
- Environmental Management Plan Guidelines (Australian Government, 2014).
- AS/NZS ISO 14001:2015

## 1.2 CEMP Scope

This CEMP addresses the requirements of MCoA C2 and REMM G1 as outlined in Table 1-1. The following considerations have also been incorporated:

- External and internal issues.
- Compliance obligations.
- Organisational units, functions and physical boundaries.
- Activities and services.
- Authority and ability to exercise control and influence.

The scope of works in relation to the Project is outlined in Section 2.2.

**Table 1-1 Compliance of the CEMP**

| MCoA | Compliance Obligation | Compliance Evidence |
|---|---|---|
| **C 2** | The **CEMP** must provide | |
| | (a) a description of activities to be undertaken during construction (including the scheduling of construction); | Section 2.3 |
| | (b) details of environmental policies, guidelines and principles to be followed in the construction of the SSI; | Section 4 and Appendix A |

| | | |
|---|---|---|
| | (c) a program for ongoing analysis of the key environmental and social risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the SSI. The initial risk assessment may be undertaken as part of the CEMF pursuant to Condition A15; | Section 5.1 |
| | (d) details of how the activities described in subsection (a) of this condition will be carried out to: | |
| | (i) meet the performance outcomes stated in the documents listed in **Condition A1 and** as required by this approval; and | Section 5, Section 8 and Section 9.1 |
| | (ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition | Section 5.1 and Appendix D |
| | (e) an inspection program detailing the activities to be inspected and frequency of inspections; | Section 9.1 |
| | (f) a protocol for managing and reporting any: | - |
| | (i) incidents, and | Section 7.2 |
| | (ii) non-compliances with this approval or statutory requirements; | Section 8.4 |
| | (g) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction; | Section 9.1 |
| | (h) a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C6. Where staged construction of the SSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction; | Section 1.3 and Section 8 |
| | (i) an organisational chart including description of the roles and environmental responsibilities for relevant employees and any independent appointments; | Section 4.4 |
| | (j) for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval; and | Section 6.3 |
| | (k) for periodic review and update of the **CEMP** and all associated plans and programs. | Section 3.1.1 |
| | Note*: **CEMP(s)** may reflect the construction of the project through geographical activities, temporal activities or activity-based staging.* | Noted |
| REMM | Compliance Obligation | Compliance Evidence |
| **G1** | Construction Environmental Management Plan (CEMP) will be prepared in accordance with the Environmental Management Plan Guideline (NSW DPIE, 2020) and Environmental Management Plan Guidelines (Australian Government, 2014). It will be implemented before starting work. As a minimum, the CEMP will include: | This CEMP |
| **G1 (a)** | a. Statutory approval requirements | Appendix C |
| **G1 (b)** | b. How the project will implement the identified mitigation and management measures outlined in the EIS | Appendix C |
| **G1 (c)** | c. Issue-specific environmental management plans procedures | Section 1.3<br>Appendix B |
| **G1 (d)** | d. Roles and responsibilities, including those of sub-contractors | Section 4.5 |
| **G1 (e)** | e. Communication requirements, including liaison with stakeholders and the community | Section 6.4 |
| **G1 (f)** | f. Induction and training requirements | Section 6.3 |
| **G1 (g)** | g. Environmental performance monitoring and evaluation procedures and remedial actions | Section 8.1 |

| | | |
|---|---|---|
| **G1 (h)** | h. Reporting requirements and record-keeping arrangements | Section 8.2 |
| **G1 (i)** | i. Emergency and incident management | Section 7.2 |
| **G1 (j)** | j. Audit and review procedures. | Section 8.3 |

## 1.3 CEMP and Sub Plans

A number of environmental management sub plans support the CEMP. These documents are prepared to identify requirements and processes applicable to the project. They address requirements of the MCoA, REMMs and other measures identified in the environment assessment documentation.

Environmental strategies may also be developed as required throughout the Project. These will also guide environmental management of potential impacts on-site.

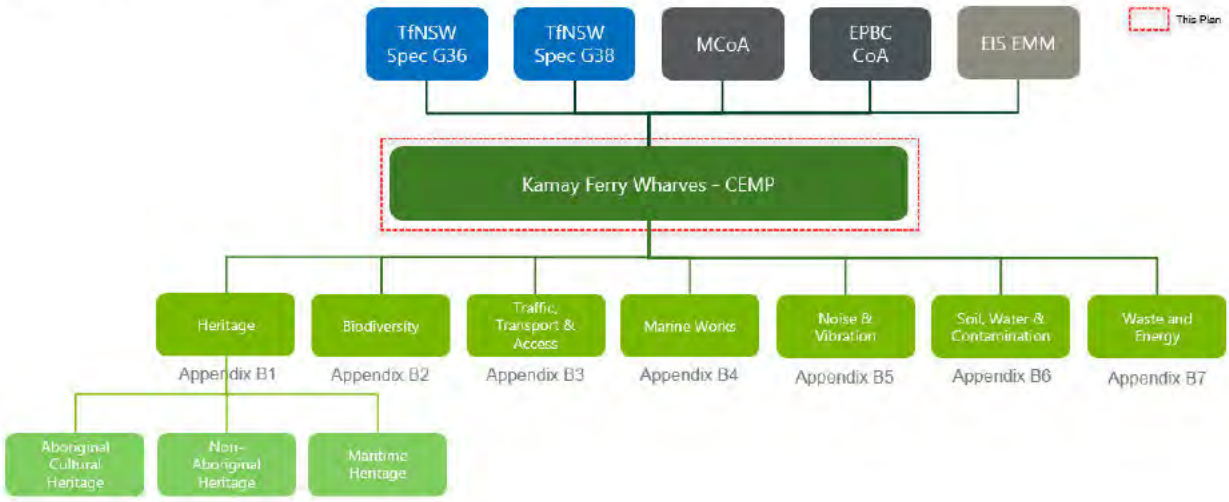
In accordance with MCoA A18, some strategies, plans and programs required have been combined in one document. A list of construction sub plans and strategies for the Project, their consultation requirements and approval requirements are outlined below in Table 1-2. An overview of the sub plans and their relationship to other key documents is outlined in figure 1-1 and Appendix B.

**Table 1-2**

| Sub Plan | Document No. | Relevant government agencies to be consulted | Approval Pathway | |
|---|---|---|---|---|
| **Appendix B1 –** Heritage Management Sub Plan *(Including Aboriginal Cultural Heritage, Non-Aboriginal Heritage, and Maritime Heritage).* | KFW02-MCD-BPW-EN-PLN-000006 | Heritage NSW, La Perouse LALC, Randwick City Council, Sutherland Shire Council, NPWS | Submitted to the ER for endorsement | Submission for approval by the Planning Secretary |
| **Appendix B2 –** Biodiversity Management Sub Plan (Flora and Fauna) | KFW02-MCD-BPW-EN-PLN-000002 | DPI Fisheries, DPE Water, EHG, NPWS, Randwick City Council and Sutherland Shire Council | Submitted to the ER for endorsement | Submission for approval by the Planning Secretary |
| **Appendix B3 –** Traffic, Transport and Access Management Sub Plan | KFW02-MCD-BPW-EN-PLN-0000010 | Randwick City Council, Sutherland Shire Council, NPWS | Submitted to the ER for endorsement | Submission for approval by the Planning Secretary |
| **Appendix B4 –** Marine Works Management Sub Plan | KFW02-MCD-BPW-EN-PLN-000007 | Port Authority of NSW (including Harbour Master) | Submitted to the ER for approval | N/A |
| **Appendix B5 –** Construction Noise and Vibration Management Sub Plan | KFW02-MCD-BPW-EN-PLN-000003 | Randwick City Council, Sutherland Shire Council, NPWS | Submitted to the ER for endorsement | Submission for approval by the Planning Secretary |

| Sub Plan | Document No. | Relevant government agencies to be consulted | Approval Pathway | |
|---|---|---|---|---|
| **Appendix B6 –** Soil, Water & Contamination Management Sub Plan | KFW02-MCD-BPW-EN-PLN-000004 | DPE Water, EHG, Sydney Water (if Sydney Water assets are affected), NPWS, Randwick City Council and Sutherland Shire Council | Submitted to the ER for endorsement | Submission for approval by the Planning Secretary |
| **Appendix B7 –** Waste and Energy Management Sub Plan | KFW02-MCD-BPW-EN-PLN-000005 | Nil. | Submitted to the ER for approval | N/A |

**Figure 1-1 Relationship of the CEMP to other key management plans**




## 1.4 Construction Environmental Management Framework

Under MCoA A15, a Construction Environmental Management Framework (CEMF) may be prepared to facilitate the approval of construction environmental management and monitoring plans required for each stage of construction consistent with the Staging Report prepared under MCoA A7. However, as construction of the project is not proposed to be staged a Staging Report is not required and a CEMF will not be prepared.

## 1.5 Plan Distribution

The CEMP is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Project website.

There is no restriction on the distribution of this CEMP within McConnell Dowell Group entities. The controlled copy of the current version of this CEMP will be maintained on the project document control database. A controlled copy of this CEMP, as well as future updates, will be provided to Transport for NSW (TfNSW) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

# 2 PROJECT OVERVIEW

## 2.1 Background & Project Description

Transport for New South Wales (Transport for NSW) has gained approval to reinstate the ferry wharves at La Perouse and Kurnell in Botany Bay (the project). This will allow for an alternative connection between La Perouse and Kurnell other than by road. The primary purpose of this infrastructure is to operate a public ferry service. It will also provide supplementary temporary mooring for non-ferry commercial vessels (such as whale watching vessels) and recreational boating. A ferry service previously operated in this location until 1974 when a heavy storm caused significant damage to the infrastructure.

This project is recognised as a priority under the Kamay Botany Bay National Park Plan of Management (Department of Planning, Industry and Environment (DPE), 2020) and associated master plan to deliver improved visitor amenity and access, provide new experiences and acknowledge the diversity of stories associated with place. The project also supports the Kamay 2020 Project, which commemorates 250 years since the encounter between Aboriginal Australians and the crew of the *HMB Endeavour*.

The reinstatement of the ferry wharves is considered transport infrastructure and therefore is to be delivered by Transport for NSW, separate to the rest of the Kamay National Park Kurnell Master Plan which is to be delivered by NSW National Parks and Wildlife Service (NPWS).

## 2.2 Scope of Work

The project includes the reinstatement of two public ferry wharves and associated infrastructure to allow a ferry service to operate between La Perouse and Kurnell in Botany Bay.

Key features of the project include:

- Demolition of the existing viewing platform at Kurnell
- Construction of temporary ancillary works including access roads, compound areas, stockpiles, fencing and temporary building platforms (including a temporary jetty structure at Kurnell and at La Perouse). Site Environmental Plans showing the proposed site layout of the construction compounds are provided in Appendix H
- Relocation of swing moorings at La Perouse
- Construction of two wharves on piles, one at La Perouse and one at Kurnell that would include:
    - A berth for ferries (to cater for ferries between 15 metres to 40 metres in length)
    - A multi-user berth for commercial and recreational vessels (to cater for vessels between 2 metres and 20 metres long)
    - Sheltered waiting areas and associated furniture located on the wharves
- Signage and lighting
- Landside paving and landscaping at the entrance to the wharves
- New footpaths connecting the entrance of the wharves to the existing footpaths
- Reconfiguration of existing car parking area at La Perouse to increase the number of spaces, and associated footpath changes to accommodate these additional car parking spaces

- Bicycle racks near the La Perouse wharf
- Installation of utilities to service the wharves including power and water.

**Figure 2-1 Visualisation of La Perouse Wharf**

**Figure 2-2 Visualisation of Kurnell Wharf**

The location and general area including the construction and operation of the project is called the “project location”, this is shown on Figure 2-3. The construction boundary and the key features of the project are shown in Figure 2-4 and Figure 2-5. Additionally, Site Environmental Plans showing the proposed site layout of the construction compounds are provided in Appendix H.

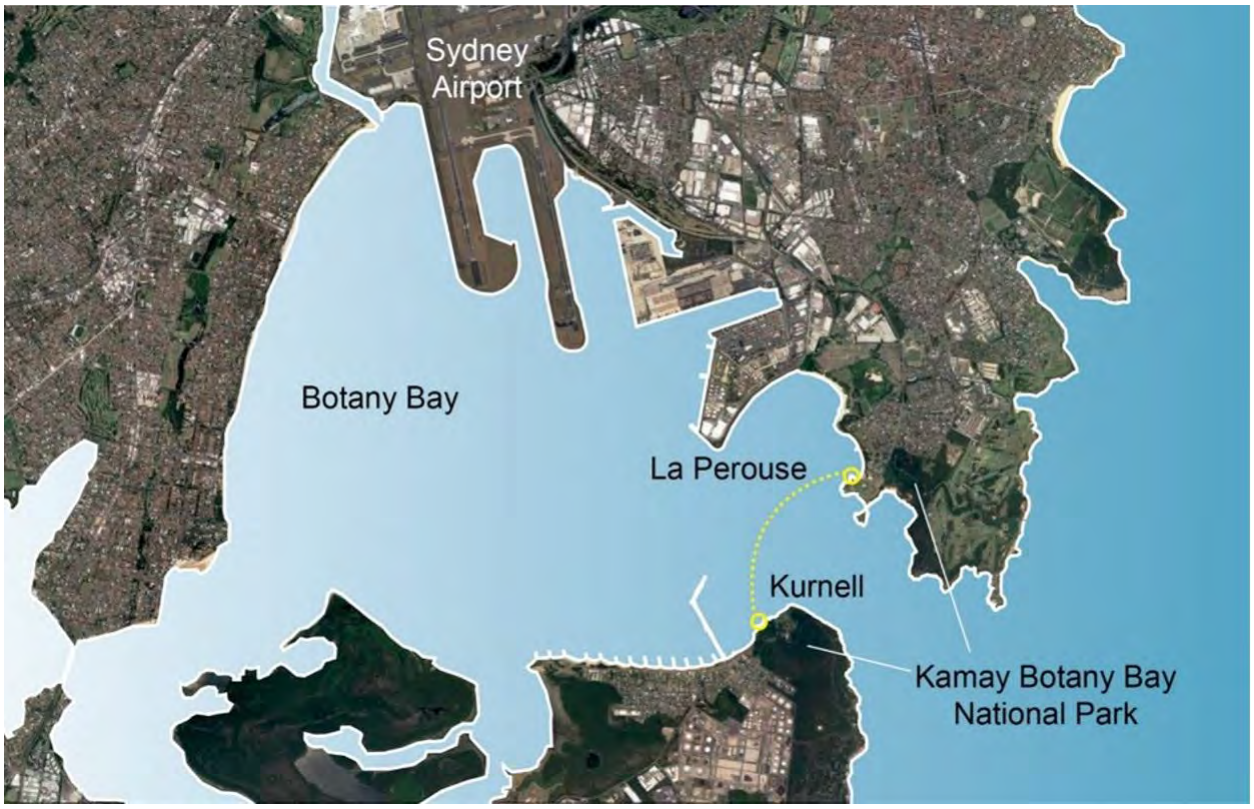



**Figure 2-3 Project Location – Regional Context**


**Figure 2-4 Construction Boundary and the Key Features - La Perouse**


**Figure 2-5 Construction Boundary and the Key Features - Kurnell**

## 2.3 Construction Phases

Construction of the project will not be staged, and therefore a Staging Report (MCoA A07) is not required, construction will be completed in 1 stage by MCD and will consist of the follow three phases:

- Phase 1: Low Impact Works & Site establishment
- Phase 2: Main construction
- Phase 3: Site demobilisation.

These phases (refer to Table 2-1) would overlap as both marine and land-side construction would happen concurrently (i.e., as elements of the construction are completed, the temporary construction infrastructure would be demobilised).

Table 2-1: Construction phases with indicative timing and commencement dates.

| Phases | Activities | |
|---|---|---|
| | La Perouse | Kurnell |
| Phase 1: Low Impact Works & Site Establishment | June 2023 – July 2023 (1-2 months)<br>• Install fencing<br>• Set up compound and laydown areas<br>• Establish utilities connection for site compound<br>• Set up site offices and access<br>• Form temporary access roads<br>• Investigation work (surveys, site assessments, hydrographic survey)<br>• Heritage "PAD" exploratory digs<br>• Form temporary jetty structure at La Perouse.<br><br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• 5T Excavator<br>• Vacuum truck (NND)<br>• Hand Tools | June 2023 – July 2023 (1-2 months)<br>• Install fencing<br>• Set up compound and laydown areas<br>• Establish utilities connection for site compound<br>• Set up site offices and access<br>• Vegetation trimming / removal<br>• Form temporary access roads<br>• Investigation work (surveys, site assessments, hydrographic survey)<br>• Demolish the existing Kurnell viewing platform<br>• Establish temporary jetty structure at Kurnell.<br><br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• 5T Excavator<br>• Vacuum truck (NND)<br>• Hand Tools<br>• Chainsaw<br>• EWP |
| Phase 2: Main construction | July 2023 – March 2024 (8 months)<br>• Piling<br>• Wharf construction<br>• Car parking reconfiguration and footpaths<br>• Installation of utilities | July 2023 – June 2024 (11 months)<br>• Piling<br>• Wharf construction<br>• Installation of utilities<br>• Installation of wharf furniture<br>• Landscaping. |

| Phases | Activities | |
|---|---|---|
| | La Perouse | Kurnell |
| | • Installation of wharf furniture<br>• Landscaping.<br><br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• 5T Excavator<br>• Piling Rig<br>• Delivery & Support barges<br>• Hand Tools<br>• Vibration Roller / Wacker Packer | •<br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• 5T Excavator<br>• Piling Rig<br>• Delivery & Support barges<br>• Hand Tools<br>• Vibration Roller / Wacker Packer |
| Phase 3: Site demobilisation | October 2023– July 2024 (8 months)<br>• Removal of temporary work areas and site offices.<br><br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• Hand Tools | January 2024 – August 2024 (7 months)<br>• Removal of temporary work areas and site offices.<br><br>**Indicative Plant & Equipment**<br>• Delivery trucks / Hiab Carne<br>• 30T Excavator<br>• Hand Tools |

Construction of the project is anticipated to take about 13 months beginning in June/July 2023.

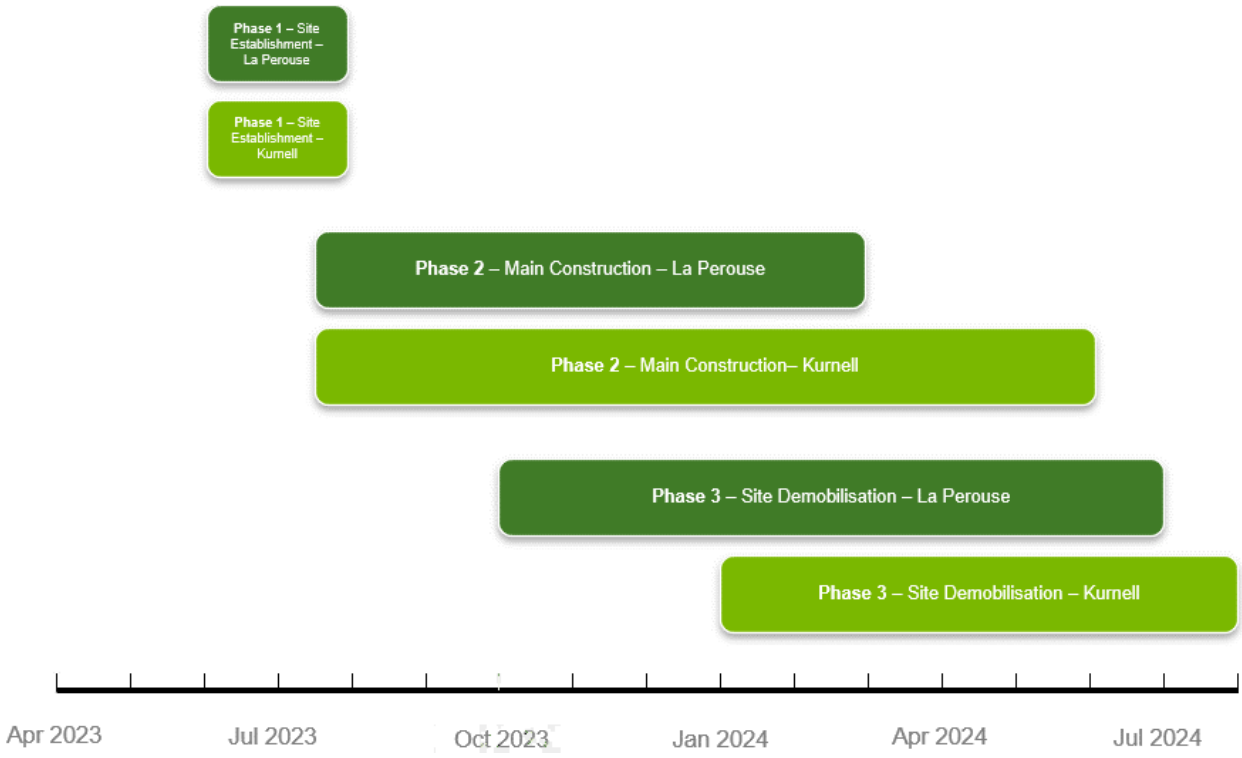



**Figure 2-4 Indicative Construction Program**

### 2.3.1 PHASE 1: LOW IMPACT WORKS AND SITE ESTABLISHMENT

#### 2.3.1.1 Low Impact Works

Low Impact works take place before construction starts to 'make ready' the key construction site. Works will be conducted prior to the approval of the CEMP in accordance with the MCoA.

These works would be managed by a separate Low Impact Works Permit and Environmental Work Method Statements (where required) which will be reviewed and approved by the ER (in accordance with MCoA A32) prior to Low Impact Works commencing.

Examples of activities that are considered Low Impact Work under the MCoA include:

- survey work including carrying out general alignment survey, installing survey controls (including installation of global positioning systems (GPS)), installing repeater stations, carrying out surveys of existing and future utilities and building and road dilapidation surveys;
- investigations including investigative drilling, contamination investigations and excavation;
- installation and use of minor construction ancillary facilities if the ER has determined the operational activities will have a minor impact on the environment and the community;
- minor clearing and relocation of vegetation and relocation of seahorses,
- installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and at-property treatments;
- property acquisition adjustment work including installation of property fencing,
- relocation and connection of utilities where the relocation or connection has been determined by the ER to have a minor impact to the environment and the community;
- archaeological testing under the Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) or archaeological monitoring where there is no impact to heritage items;

- maintenance of existing buildings and structures required to facilitate the carrying out of the SSI; and
- other activities determined by the ER to have minor impact on the environment and the community, which may include but not be limited to construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.

The low impact work described in this definition becomes construction when the CEMP is approved. This also applies to low impact work that has already commenced.

#### 2.3.1.2 Site Establishment

Site facilities including offices, crib sheds, toilets, parking area & waste facilities will be established at Kurnell and La Perouse. The area will be fenced off from the public with appropriate shade cloth applied to the fences as required.

##### Security and exclusion zones

As part of the Site Establishment works landside construction areas would be fenced off to ensure the safety of the public and security of the construction sites.

For the marine based work, an exclusion zone would be established for the duration of marine construction. This area would be marked by navigation buoys with solar lights. The extent of this exclusion zone would be confirmed in consultation with the Harbour Master. Transport for NSW Operations Team would notify the nearby marinas of the exclusion zone.

##### Construction parking

Construction parking would be provided within the construction boundary at La Perouse and Kurnell. Alternative arrangements for transport for construction workers will need to be explored by McConnell Dowell to ensure public parking is not impacted.

##### Plant lay down areas

A plant lay down area would be established at each landside construction site. The La Perouse plant laydown area would be 2,250m$^2$. A crane pad would also be created at the La Perouse wharf tie-in area. Kurnell plant laydown area would be 1,750m$^2$.

##### Temporary Access

At La Perouse, a temporary road would be constructed to provide access from Anzac Parade to the wharf tie-in area, as outlined in Appendix H – Site Environmental Plan. The road would be about 5m wide and 45m long and would be constructed of crushed concrete on top of geotextile material.

At Kurnell, a temporary access road would be constructed from Cape Solander Drive to Monument Track and along Monument Track to the proposed wharf as outlined in Appendix H – Site Environmental Plan. The road would be about 5m wide with a passing bay extending to 8m for a length of 25m and would be constructed of crushed concrete on top of geotextile material.

At the end of construction, these temporary roads would be deconstructed, and materials would be removed for materials recovery or disposal. At La Perouse, the temporary road would be remediated, and the area would form part of the landscaping and footpath area. At Kurnell, the temporary road would be deconstructed, and the Monument Track footpath would be reinstated.

### 2.3.2 PHASE 2: MAIN CONSTRUCTION

#### 2.3.2.1 Deconstruction of Kurnell Wharf

The existing jetty at Kurnell needs to be deconstructed before works on the temporary causeway can be constructed. The jetty shall be deconstructed in the following sequence:

- Removal of Jetty Furniture
- Removal of Handrail.
- Removal of Deck boards
- Removal of Girders
- Removal of Headstocks
- Removal of Braces
- Removal of Piles

All deconstructions shall be performed by an excavator and materials retained for recycling where applicable.

#### 2.3.2.2 Temporary Jetty Construction (Kurnell)

McConnell Dowell has selected a temporary jetty structure over the temporary crane and rig platform proposed at La Perouse and the temporary causeway at Kurnell. Whilst the concept designs in the EIS provided suitable working platforms the McConnell Dowell design has focused on:

- reducing the construction impact to the environment by eliminating the need to placing potentially polluting materials by the platform and causeway structures
- reducing the potential to damage the natural landscape and any remedial works required
- reducing the installation and removal period for the temporary jetty structure on both sites
- providing a suitable platform on both sites which will not be susceptible to wave and tide conditions creating a stable-maintenance free work area
- providing a platform which will serve the marine construction works by acting as a land to sea material transfer point at both sites, within the approved construction footprint.

The temporary jetty at Kurnell will be constructed by use of an excavator and crane. The excavator will install piles for the jetty structure in a sequence that allows the excavator to be supported by the structure while it installs the piles. Two piling methods are being considered: primarily, the temporary piles will be fitted with teeth and the pile will be screwed into the rock; if there are problems experienced with this technique, an alternative method where the excavator will first auger an oversized socket into which the crane will then lift the pile and the pile will be set with a low strength grout. The crane will then assist in construction of the girders and deck.

At the end of construction, the temporary jetty structures would be de-constructed, and the material would be removed from site. Deconstruction of the temporary jetty structures would take about one month.

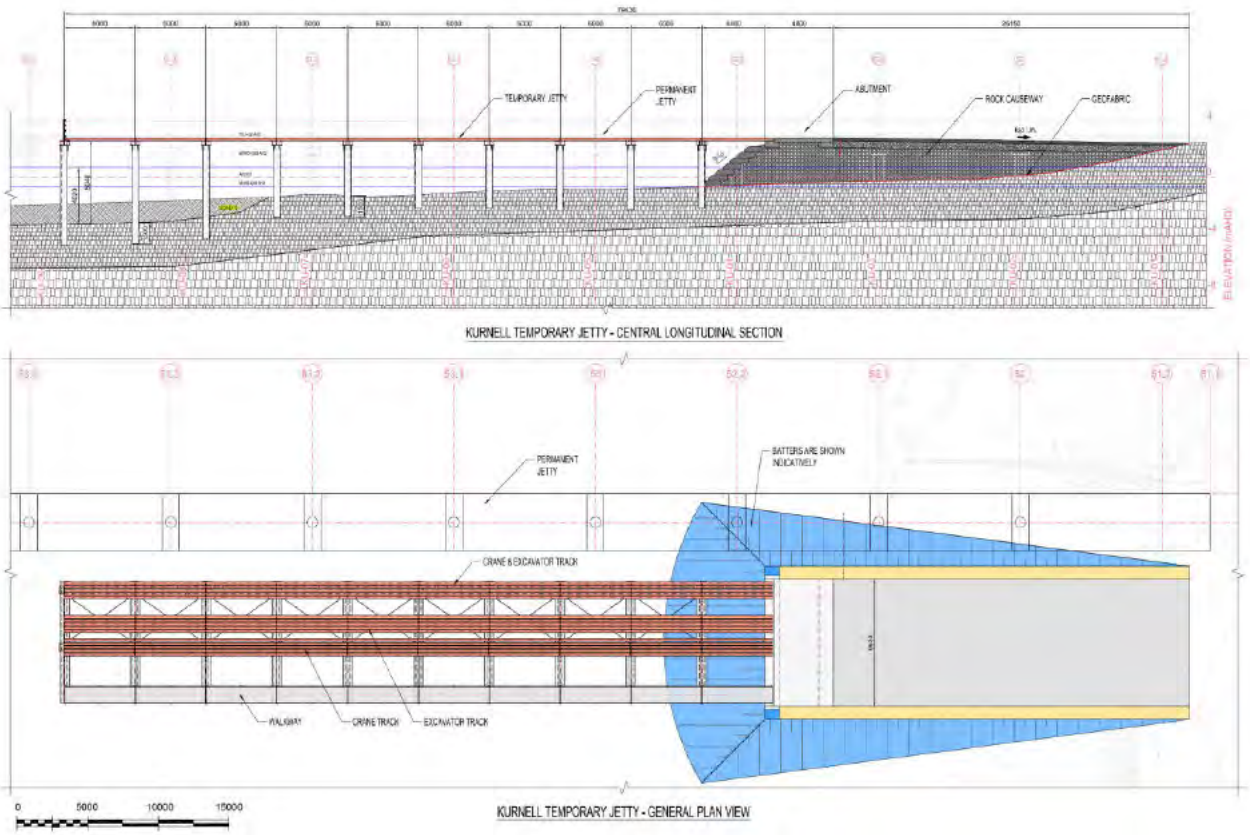



**Figure 2-5 Temporary Jetty Construction (Kurnell)**

### 2.3.2.3 Temporary Crane Platform (La Perouse)

In order to provide access for the piling plant required to install landside piles for the ferry wharf, a temporary crane platform would be constructed at La Perouse. Section 5.5.1 of the EIS outlines the proposed location, measurements, materials and construction methodologies and timeframes of the temporary crane platform which will be updated by MCD during detailed temporary works design.


**Figure 2-8 Temporary Crane Platform (La Perouse)**

#### 2.3.2.4 Relocation of public moorings at La-Perouse site

TfNSW will permanently remove and relocate six existing moorings at La-Perouse to facilitate the works.

#### 2.3.2.5 Piling

The construction methodology selected for the installation of marine piles on the project is Drive, Drill, Drive (DDD). This process involves firstly driving pile to driveable depth, internally auguring the pile to design depth, and then driving the pile again to design depth. Some piles most notably at La Perouse can be driven to depth without the need for post auguring.

There are 3 types of piles to be installed on the Project:

- Type A – Fixed berth structure piles.
- Type B – Berthing piles structure (requiring rock sockets)
- Type C – Cantilevered mooring piles

All piles on the project will be initially driven by the PM East. The PM East barge will have on deck:

- 250-tonne crawler crane.
- Piling leader
- Vibratory hammer
- Hydraulic Impact hammer.

The 250-tonne crawler crane shall lift the piles from the PM East deck into a pile pitch frame. This will enable the crane to pitch the pile vertically in a safe manner. The pile will then be lifted into the piling leader which will have been previously surveyed into the correct construction position. Once the pile is in the leader and locked off further survey alignment will be carried out. Once pile position is acceptable and the piling leader is supporting the pile the crane will vibe the pile to refusal. Once the vibratory hammer has completed its run the crane barge will then lift the hydraulic hammer onto the pile and hammer until refusal.

For all B type piles and where Type A & C piles require additional penetration, once refusal is achieved, sockets or internal auguring will be completed using a jack-up barge (JUB) with SR-35 piling rig:

1. Hammered piles will be sealed from water ingress, allowing standing water to be pumped from inside the pile. Water will be discharged within 1m above seabed.
2. The JUB will be set up in such a way that two (2) piles can be accessed from each location. The piling rig will auger overburden and sandstone down to the nominated toe elevation using a 700 dia auger.
3. Augured spoil will be discharged into water-tight skip bins on the JUB. These will be periodically removed by the crane barge and transferred to shore for disposal by MCD.

***Note:*** *The jack up barge and drill rig can accommodate a range of pile heights. Where the pile has reached the required level and the drill rig will be utilised to create the socket, the pile will be cut down to improved operation efficiency. This may be a 'rough' preliminary cut above the final cutoff level, or the final cutoff level. Where the pile has refused and the drill rig is being used to drill to reduce resistance in preparation for additional drilling, there is a range of pile heights above the water level that can be accommodated by the drill rig and the jack Up barge. In the unlikely event that the pile refuses at a level where the drill rig cannot drill out the pile, given the circumstances a decision will be made to cut down the pile. Given the high initial refusal indicating that the pile toe will not end up significantly below the design toe RL , this cutoff level should be determined so that the pile is reduced in length to a point representing approximately 1m above the final anticipated cutoff level.*

For Rock Sockets:

4. The pile socket depth and size will be confirmed to mee the design. Once confirmed, the internal of the pile will be cleaned using a cleaning attachment, and the socket base will be cleaned use a cleaning bucket.
5. Reinforcing cages will be installed using the piling rig.

6. Concrete will be pumped from shore via line pump. A walkway will be installed to run concrete lines from land between berthing piles to the pour location. Two piles will be completed per pour within 24 hours of cleanout
7. Piles nominated for testing will have logging tubes installed and will be filled to pile cut-off level as specified on the drawings.

For additional penetration:

8. The augured hole will be drilled to the design toe depth.
9. Crane barge will return and hammer these piles to depth.

#### 2.3.2.6 Precast Concrete Installation

The approach/waiting structure is comprised of precast headstocks, planks and an in-situ topping slab installed on Type A steel piles. There is a combination of mono-pile and dual pile arrangements depending on location. An uplift restraint system will be installed between headstocks and planks once in-situ topping and all deck furniture has been installed.

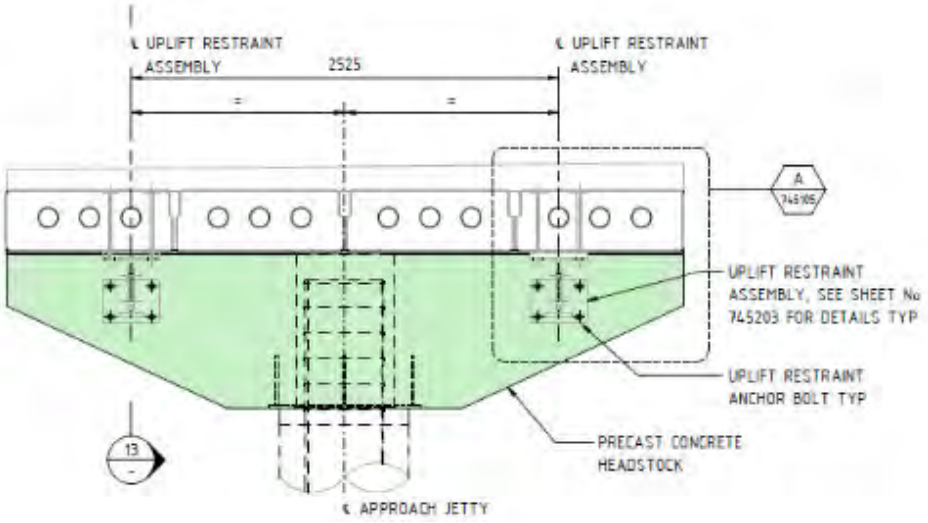



**Figure 2-6 Typical Precast Arrangement**

Precast concrete elements will be moved to the installation location with all fixings, brackets, cast-ins and all associated installation hardware. Elements will be loaded onto the supply barge at La Perouse and moved to either the La Perouse or Kurnell workfaces via the supply barge.

Installation sequence and allowances as follows:

1. Type A Pile Preparation:
   - Piles cut to nominated cut-off height.
   - Install headstock access system
   - Install the pile plug spigot and soffit. The system will double as temporary restraint for headstocks whilst the concrete plugs cure.
2. Headstock Installation:
   - Headstocks lifted into position by a crane barge and accurately located with assistance of surveyor.
   - Temporary restraint installed to prevent movement of headstock.
   - Complete plug pour 1/2 to lock headstock in position using hand-batched 50MPa bag mix on the barge or pumped material from land.
   - Install mortar pads and elastomeric bearings

3. Plank Installation:
    - Precast planks installed by crane barge.

#### 2.3.2.7 Berth Structure Steelwork Installation

The Berth Structure is comprised of a painted steel substructure with pre-fitted fendering and mooring hardware (red), and aluminium super-structure (yellow) with grating.

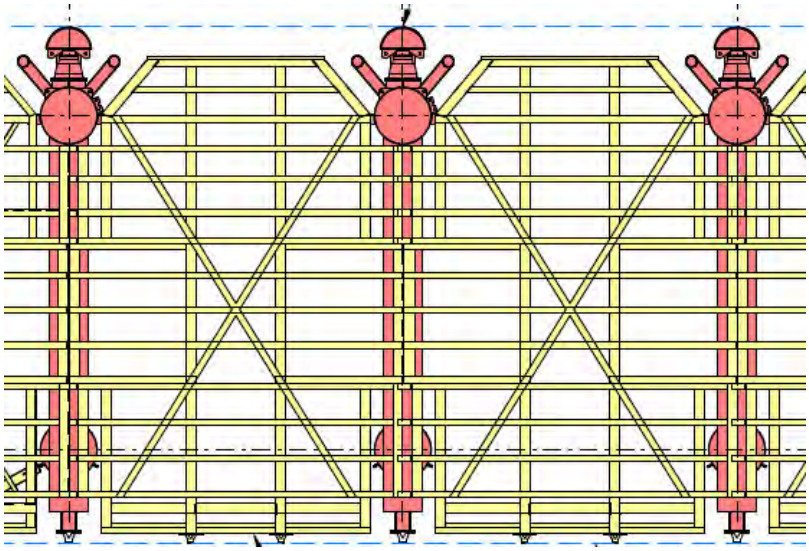


**Figure 2-7 Berth Structure Arrangement (Typical)**

Sleeves will be lifted into position over Type B piles by crane barge, divers plug the base of the annulus using temporary brackets and grout tremie poured into the annulus to lock the sleeves in position. Methodology as follows:

1. Locating notches marked with assistance of surveyor and cut into pile-tops during trimming.
2. Steel headstock lifted into position and secured.
3. Divers install temporary brackets to plug the base of the sleeves. Initial hand-batched grout pours of 200-300mm completed to ensure the annulus is sealed.
4. Main grout poured completed by transferring grout in kibbles from shore to install location.
5. Grout to be poured using a tremie pipe fed to the base of the annulus.
6. It is assumed that grout slurry will overflow into the cut pile.
7. All grout supply and testing by MCD. Grout must be free of aggregate.
8. It is assumed that cut off level for piles on both the Commercial and Recreational berths will be approx. 100mm below top of sleeve.

#### 2.3.2.8 Wharf Construction & Fit out

Concreting of wharf deck and installation of utilities (water, power & fire). Wharf fit out installs the installation of handrails, shelter of the waiting area, seating, and public artwork.

#### 2.3.2.9 Ground disturbance

Land disturbance would be limited to localised excavation and disposal associated with the wharf landside landscaping and paving areas, utilities installation and parking areas.

#### 2.3.2.10 Servicing and utilities

The project may require the removal of two light poles and associated cabling at La Perouse. This would be confirmed during detailed design in consultation with the utility provider.

The project would require the installation and extension of electricity, telecommunication and water services. New routes would be created for the proposed services to avoid impacting the existing services. This would require trenching activities.

Final features for the wharves, such as furniture and handrails, would be installed during this phase.

#### 2.3.2.11 Landscaping

Hard landscaping and planting is proposed at the wharf tie-in areas at both La Perouse and Kurnell. This would be explored during detailed design, and is likely to include:

- At La Perouse:
    - Level changes that provide inclusive access and bespoke integrated seating that define a scenic lookout for the headland.
    - Surface treatment drawing from the existing context, providing a visual connection to the surrounding local features and footpath connections.
    - Scenic lookout furniture would form part of an integrated suite of architectural and landscape treatments, providing consistency and connection to the local character.
    - The existing plaque, which holds local community value, would be incorporated within the landscape design through continued engagement with stakeholders.
    - Low-lying coastal, native planting palette which responds to the local coastal character of the headland and retains existing views across the bay and environs.
- At Kurnell:
    - Low-lying native plantings which respond to the local coastal heath character of Kurnell and celebrate the iconic Norfolk Pines that are situated adjacent to the wharf.
    - The low-lying vegetation would ensure views towards the surrounding heritage and cultural landmarks are preserved and enhanced where possible.
    - The wharf entry would include seating orientated to appreciate views towards surrounding monuments, sculptures and the coastline
    - Lighting along Monument Track.

#### 2.3.2.12 Car Park – La Perouse

On the southern side of Anzac Parade, the existing parallel car parking spaces would be reconfigured to 90-degree angle spaces to provide 13 additional car parking spaces. The existing footpath would also be extended and diverted around these proposed spaces.

On the western side of Anzac Parade, six existing car parking spaces would be reconfigured into three accessible car park spaces and two no-parking bays to meet Disability Discrimination Act 1992 (Cth) (DDA) requirements and two kiss and ride spaces.

### 2.3.3 PHASE 3: SITE DEMOBILISATION

Periodically throughout construction, as works are completed elements such as the temporary crane platform (La Perouse) and the temporary causeway (Kurnell) would be removed. Lastly, the temporary access roads, site offices, compound areas and site fencing would be removed, and the sites returned to the pre-construction condition.

### 2.3.4 HAULAGE ROUTES

All land side traffic would reach the construction sites using existing roads, and then use the proposed temporary access roads to access the wharf locations. At La Perouse, this would be via Anzac Parade, and at Kurnell this would be via Captain Cook Drive.

The key haulage routes are shown on Figure 2-12 and Figure 2-13.


**Figure 2-8: Haulage Route at La Perouse**


**Figure 2-9: Haulage Route at Kurnell**

## 2.4 Project Stakeholders and Interested Parties

### 2.4.1 KEY PARTICIPANTS

**Table 2-2 Key Participants**

| Participant | Details |
|---|---|
| Transport for NSW Environment Manager | Chris Williams |
| Transport for NSW Representative | Tony Matthews |
| Environmental Representative (ER) | Richard Peterson |
| McConnell Dowell Project Manager | Adam Adamczewski |
| McConnell Dowell Construction Manager | James Fruh |
| McConnell Dowell Supervisor | Joe Petaccia & Colin Ford |
| McConnell Dowell Environment & Sustainability Lead | Mitch Jones |
| McConnell Dowell Regional Environment & Sustainability Manager (Regional Support) | Tim Walker |

### 2.4.2 INTERESTED PARTIES

McConnell Dowell takes seriously its obligations in relation to understanding the needs and expectations of interested parties. The following parties (Table 2-3) are identified as having a specific interest in the Project's environmental management.

**Table 2-3 Interested Stakeholders**

| Interested Party | |
|---|---|
| Commonwealth Government | Department of Climate Change, Energy, the Environment and Water |
| State Government | NSW National Parks and Wildlife Service |
| | NSW Department of Planning and Environment |
| | NSW Department of Primary Industries – Fisheries |
| | Heritage NSW |
| | Port Authority of NSW |
| | NSW Environmental Protection Authority |
| Local Government | Bayside Council |
| | Sutherland Shire |

| | |
|---|---|
| | Randwick City Council |
| Aboriginal Stakeholders | La Perouse Local Aboriginal Land Council (LPLALC) |
| | Community Elders |
| | La Perouse Aboriginal Community Alliance |
| | Gamay Rangers |
| | Aboriginal Government Interagency Forum |
| | Registered Aboriginal Parties |
| | Aboriginal Community Members |
| Industry | Potential construction contractors |
| | Potential ferry service and commercial vessel operators (recreation and tourism). |
| Community (including special interest groups) | Residential associations and local environmental groups |
| | Recreational and commercial boating and diving groups |
| | Visitors from other parts of Sydney and tourists |
| | Port Botany Community Consultative Committee |
| | Individual landowners, residents and businesses. |

Throughout construction, consultation with these parties will be undertaken in accordance with the Community Consultation Strategy required by MCoA B2 and all other conditions of approval relating to stakeholder consultation.

### 2.4.3 OTHER INTERESTED PARTIES

The following other interested parties are identified as having a specific interest in the Project, with particular interest in its environmental management

**Table 2-4 Other Interested Parties**

| Interested Parties | Key Stakeholder | Requirements | Monitoring & Review Mechanism |
|---|---|---|---|
| External providers | • Various subcontractors (as required) | • Subject matter advice on key environmental aspects<br>• Technology support<br>• Timely approvals | • Defined in documented contract agreements of external provider's<br>• Supplier / subcontractor / consultant audits |
| Customer | • Project specific client | • Compliance with regulatory, contract and project specific requirements<br>• Response to complaints | • Defined in documented information of<br>• Management Review meetings |

| Interested Parties | Key Stakeholder | Requirements | Monitoring & Review Mechanism |
|---|---|---|---|
| | | • Proper communication channels | • Internal audits<br>• Non-conformance reports and register |
| Statutory & Regulatory Bodies | • Federal/ State regulatory bodies specific to project | • Complying with the statutory and regulatory requirements as defined from time to time<br>• Local community complaints | • Defined in project documented information<br>• Management Review meetings<br>• Internal audits<br>• Complaints register<br>• Weekly environmental inspections |
| Other stakeholders | • Other agencies/ bodies specific to the project | • Complying with their respective requirements as identified in the contract and from time to time | • Defined in project documented information<br>• Internal audits |
| Public | • Neighbouring sensitive land uses<br>• Local residences<br>• Any other public interfaces | • Safety and environmental compliance of the project<br>• Does not cause an environmental nuisance | • Defined in project documented information<br>• Inspection and test plans, inspection checklists and test reports<br>• Internal audits |
| Employees | • McConnell Dowell staff and contractors | • Management support<br>• Communication of project / system requirements | • Project training register<br>• Daily prestart and toolbox records |
| Certification Body | • Bureau Veritas | • The environmental management system developed based on MMS is being is complied with. | • Certification audits |
| Competitors | • Tier 1, 2 and 3 competitors | • Provide challenges to our ability to deliver projects | • Internal audits to ensure MCD is providing equal or better products to customers than that of the competitors. |

Consultation to understand the needs and expectations of these interested parties will be developed as required. The requirements of interested parties will be monitored and reviewed to ensure that these requirements are being met.

# 3 ENDORSEMENT AND APPROVAL

This CEMP and sub plans must be submitted for review and endorsement by the Transport for NSW Environment Manager prior to submission to the NSW Department of Planning and Environment (DPE) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

The CEMP and sub plans must be endorsed by the Environmental Representative and then submitted to the Planning Secretary for approval no later than one month before the commencement of construction, or where construction is staged no later than one month before the commencement of that stage (MCoA C4).

The CEMP sub plans identified in Table 3-1 must be prepared in consultation with the relevant government agencies identified for each CEMP sub plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP sub plan, including copies of all correspondence from those agencies as required by MCoA C6.

**Table 3-1 CEMP sub plan consultation requirements**

| Required CEMP sub plan | Relevant government agencies to be consulted for each CEMP sub plan |
|---|---|
| Traffic, Transport, and Access | Relevant Councils(s) and NPWS |
| Noise and Vibration | Relevant Councils(s) and NPWS |
| Biodiversity | DPI Fisheries, DPE Water, EHG, NPWS and relevant council(s) |
| Soil, Water & Contamination | DPE Water, EHG, Sydney Water (if Sydney Water's assets are affected), NPWS, relevant council(s) |
| Heritage Sub Plan | *Aboriginal Cultural Heritage*<br>Heritage NSW, relevant RAP(s), relevant LALC(s) and NPWS.<br><br>*Non-Aboriginal Heritage*<br>Heritage NSW, NPWS and relevant council(s)<br><br>*Maritime Heritage*<br>Heritage NSW, NPWS and relevant council(s) |

Additional CEMP sub plans identified in Table 3-2 will also be developed in consultation with the relevant government agencies. These additional CEMP sub plans will be reviewed and endorsed by the Transport for NSW Environment Manager and approved by the Environmental Representative prior to construction.

**Table 3-2 Additional CEMP Sub Plans consultation requirements**

| Required CEMP sub plan | Relevant government agencies to be consulted for each CEMP sub plan |
|---|---|
| Marine Works | Botany Bay Harbour Master and NSW Maritime |
| Waste and Energy | Nil. |

Under MCoA C14, the Construction Monitoring Programs (CMP) identified in Table 3-3 must be prepared in consultation with the relevant government agencies identified for each CMP.

**Table 3-3 Construction Monitoring Programs consultation requirements**

| Construction Monitoring Program | Relevant government agencies to be consulted for each Construction Monitoring Program |
|---|---|
| Construction Monitoring Program – Noise & Vibration *(Attachment of the Noise and Vibration Sub Plan)* | EPA |
| Construction Monitoring Program – Turbidity *(Attachment of the Soil, Water & Contamination Sub Plan)* | DPI Fisheries |

## 3.1 CEMP/Sub Plan revision and changes to the Project

### 3.1.1 CEMP REVISION

A document review process ensures that environmental documentation including this CEMP is updated as appropriate for the specific works that are occurring on-site. This includes the management review process described in Section 8.6 or project changes that occur in accordance with Section 3.1.2.

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of the Construction Environment & Sustainability Lead or Environmental Site Representative to prepare the revised documents.

The revised document will then be issued to the Environmental Representative to approve minor changes to the CEMP in accordance with MCoA A32(i). Minor changes include those that are consistent with the terms of the approval and the CEMP, CEMP sub-plans and monitoring programs.

Where the Environmental Representative deems it necessary, the amended CEMP will be forwarded to the Planning Secretary for approval.

Revised versions of the CEMP will be made publicly available on the project website within 48 hours.

### 3.1.2 CHANGES TO THE PROJECT

Any design changes or changes in scope of works, may require additional environmental assessment and consistency assessment in consultation with the Transport for NSW Environmental Manager to determine if a Project modification may be required.

Should the consistency assessment determine that a Project modification may be required i.e. the impacts are of a nature and scale that it is not considered consistent with the Project approval, the Construction Environment & Sustainability Lead will be informed and a modification application under Section 5.25 of the EP&A Act prepared and lodged by Transport for NSW to DPE for determination.

In line with the Transport for NSW Part 5.1 Assessment procedure, the Environmental Representative will approve all refinements that are deemed consistent with the Project approval, where appropriate.

# 4 ENVIRONMENTAL MANAGEMENT APPORACH

## 4.1 Environmental Leadership and Commitment

McConnell Dowell undertakes a reflective, resourceful, inclusive and flexible approach to environmental management and leads by example in ensuring that statutory and contractual requirements are met and positive environmental performance is maximised.

Our approach to environmental leadership is underpinned by our ISO 14001 accredited Environmental Management System (EMS) that forms part of the integrated McConnell Dowell Management System (MMS).

In line with the requirements of ISO 14001, McConnell Dowell Group top management, represented by the Executive Committee (EXCO), are committed to review and endorse this document as part of a broader review of the MMS every 12 months. This process ensures top management (EXCO):

- Take accountability for the effectiveness of the environmental management system;
- Make certain that environmental objectives are established and are compatible with the strategic direction and the context of the organisation; and
- Ensure the integration of the environmental management system requirements into the organisation's business processes.

## 4.2 Environmental Policy

McConnell Dowell have established an Environmental Policy endorsed by the McConnell Dowell Group CEO. This document directs the level of commitment to positive and proactive environmental performance for all activities.

The Environmental Policy attached at Appendix A makes the following key commitments:

- Visible and demonstrated environmental leadership.
- Promoting innovative thinking and practices to achieve positive environmental outcomes.
- Compliance with applicable environmental obligations.
- Monitoring environmental performance and seeking continual improvement.
- Prevention of pollution and minimising environmental impacts.

## 4.3 Sustainability Policy

McConnell Dowell have also established a Sustainability Policy also endorsed by the McConnell Dowell Group CEO. The policy outlines the Group's commitment to one of our five core values - sustainability

The Sustainability Policy attached at Appendix A makes the following key commitments:

- Business sustainability leadership through professionalism, competence and industry participation.
- Client and community protection through an uncompromising commitment to safety, quality and the environment.
- Team growth through sharing and collaboration and business growth through partnerships, market knowledge, innovation and adaptability.

- Client and community sustainability through long term relationships and acting today with the future in mind.

## 4.4 Contractors Environmental Management System (CEMS)

### 4.4.1 ENVIRONMENTAL MANAGEMENT SYSTEM

McConnell Dowell operates an ISO 14001 accredited Environmental Management System that forms part of the fully integrated McConnell Dowell Management System (MMS). The MMS provides the framework for managers to implement specified corporate standards and practices in a consistent manner. It defines the application of work practices, processes, and systems for engineering/design, acquisition of materials, equipment and services, construction, and other services related to tendering and project execution.

The environmental management framework applicable to the project is shown diagrammatically below in Figure 4-1 and elements of the framework explained below.

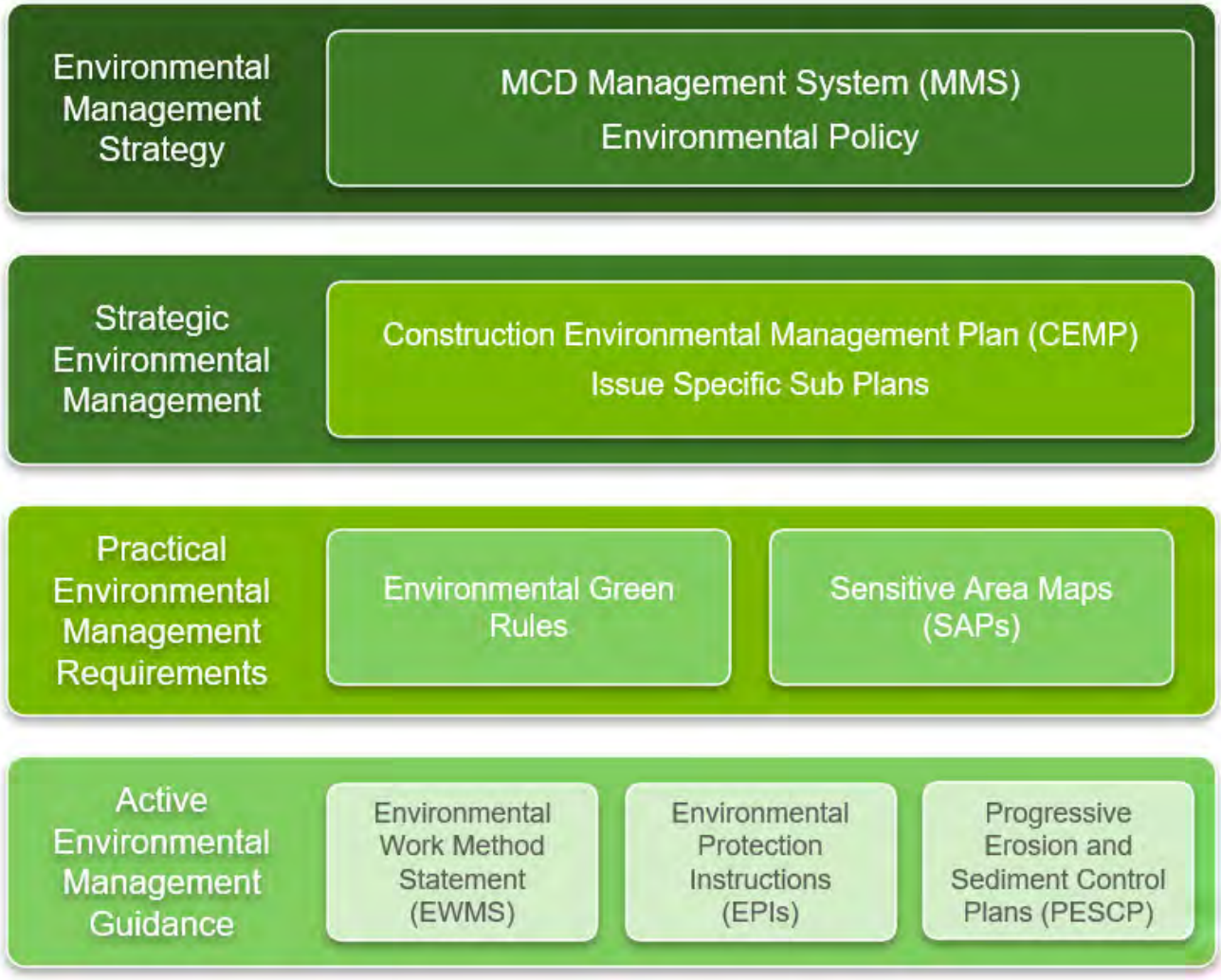



**Figure 4-1 McConnell Dowell Environmental Management Framework**

### 4.4.2 CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN & ISSUE SPECIFIC SUB PLANS

This CEMP provides a system and set of procedures to ensure that sound and effective controls are established and maintained to manage potential environmental impacts throughout the Project and, wherever practicable, to deliver positive environmental outcomes. As part of our commitment to continuous improvement we will take a proactive approach to environmental management for the Project. This document is therefore based upon a risk management process where the environmental risks associated with each element of the Project are identified and assessed, and appropriate mitigation strategies implemented to eliminate or minimise the subsequent risk. An overview of the CEMP, Scope, Sub Plans and Distribution is outlined in Sections 1.2, 1.3 & 1.4.

#### 4.4.2.1 Issue Specific Sub Plans

Issue Specific Sub Plans (Sub Plans) have been developed to address a specific aspect of environmental management (such as Noise & Vibration). These Sub Plans outline risks, opportunities, mitigation and management measures in relation to that environmental aspect. An overview of the Sub Plans developed for the project is outlined in Section 1.3.

### 4.4.3 ENVIRONMENTAL GREEN RULES

McConnell Dowell has developed a suite of ten environmental management rules set to enforce positive messages about what is expected as a minimum standard on site to minimise our impact on the natural environment and local community, Environmental Green Rules are outlined in Appendix E.

### 4.4.4 SITE ENVIRONMENTAL PLANS (SEP)

Site Environmental Plans (SEPs) are spatial representations, in the form of an aerial photographs developed for a specific footprint of the Project to illustrate the key site features relating to environmental management.

The SEPs incorporate key features of the project and identify any environmental and/or socially sensitive areas, sites or places. At a minimum the SEPs are to include:

- The wharf design and alignment
- Construction boundary and compounds
- Aboriginal, non-Aboriginal and underwater heritage features
- Endangered terrestrial vegetation communities
- Endangered seagrass meadows
- Key fish habitat
- Recorded threatened fauna sightings
- Coastal wetlands
- No-go areas
- Noise sensitive receivers
- Areas of potential soil contamination including asbestos.

The SEPs are developed prior to construction to meet the requirement of a *'Sensitive Area Plan' (SAP)* and will be updated as required.

An example of the Site Environmental Plan is included in Appendix H.

### 4.4.5 ENVIRONMENTAL WORK METHOD STATEMENTS (EWMS)

Environmental work method statements (EWMS) are prepared to manage and control all high-risk activities and others that have the potential to negatively impact on the environment. EWMS will be prepared prior to the commencement of relevant construction activities and will incorporate relevant mitigation measures and controls, including those from relevant management sub plans. They also identify key procedures to be used concurrently with the EWMS.

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, and concurrence provided by the TfNSW Environmental Manager.

EWMS for activities identified as having high environmental risk will undergo a period of consultation with stakeholders and authorities prior to approval. A list of upcoming/future EWMS will be provided to Environmental Review Group (ERG) participants during regular meetings for consultation.

EWMS will be prepared for high-risk activities including those outlined in the EIS and those identified through the Environmental Risk Assessment (ERA) Workshop. As a minimum, EWMS will be prepared:

- as outlined in the Principal supplied approvals, licences and permits specified in Contract Information Item 14;
- as identified in the environmental risk assessment workshop; and
- as identified by the McConnell Dowell and/or required by TfNSW at any stage during the completion of the Work Under the Contract.
- Any other activities identified in the Environmental Risk Assessment as high risk.

The EWMS will include at least the following elements:

- Description of the work activity, including any plant and equipment to be used
- Outline of the sequence of tasks for the activity, including interfaces with other construction activities
- Identification of any environmental and/or socially sensitive areas, sites or places
- Identification of potential environmental risks/impacts due to the work activity
- Mitigation measures to reduce the identified environmental risk, including assigned responsibilities to site management personnel
- Process for assessing the performance of the implemented mitigation measures.

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 by signing an attendance record prior to commencing work.

Regular monitoring, inspections and auditing of compliance with the EWMS will be undertaken by Project management and environmental personnel to ensure that all controls are being followed and that any non-conformances are recorded and corrective actions implemented.

A register of EWMS will be maintained by McConnell Dowell.

### 4.4.6 ENVIRONMENTAL PROTECTION INSTRUCTIONS

McConnell Dowell has developed a standard suite of Environmental Protection Instructions (EPIs) that can be amended, if necessary, to meet specific Project requirements.

These documents provide a summary of the method of implementation for a number of the environmental controls articulated in the CEMP and issue-specific sub-plans. As the Project progresses there may be a

need for new EPIs to cover areas not identified during the pre-mobilisation risk assessment process. Any new EPIs will be developed by the Environment & Sustainability Lead and will be communicated to the Construction Team through inductions and toolbox talks. If necessary, training on any new EPI will be provided by the Environment & Sustainability Lead.

Refer to Appendix F for current Project specific EPIs.

### 4.4.7 PROGRESSIVE EROSION AND SEDIMENT CONTROL PLANS (PESCP)

Progressive Erosion and Sediment Control Plans (PESCPs) will be developed prior to and throughout construction to prescribe and depict where controls should be located on site to provide adequate mitigation against erosion and sediment loss from the Project site during construction.

The PESCPs will be prepared in accordance with:

- Volume 1 of Managing Urban Stormwater: Soils and Construction (Blue Book) (Landcom 2004)
- Managing Urban Stormwater: Soils and Construction − Installation of Services, Volume 2A (OEH 2008)
- Managing Urban Stormwater: Soils and Construction – Main Road Construction, Volume 2D (OEH 2008).
- Advice from a suitably qualified or Certified Professional in Erosion and Sediment Control (as required).

### 4.4.8 PROCEDURES, FORMS AND OTHER DOCUMENTS

Project specific procedures will be developed by McConnell Dowell throughout construction as required. Where applicable, existing McConnell Dowell procedures and work instructions will be applied or amended for use on the Project.

## 4.5 Roles, Responsibilities and Authorities

Protection of the environment is the responsibility of all individuals and organisations involved with the Project. All personnel will be made aware of environmental issues associated with the Project and their responsibilities through training and awareness methods detailed in Section 6.3.

The Organisational Chart describes the organisational structure for environmental management of the Project. The roles and responsibilities of personnel specifically responsible for implementation of this document are summarised in Table 4-1.

The key environmental management roles and responsibilities for the construction phase of the Project are described below. The structure of these roles is shown in Figure 4-2 and Table 4-1.

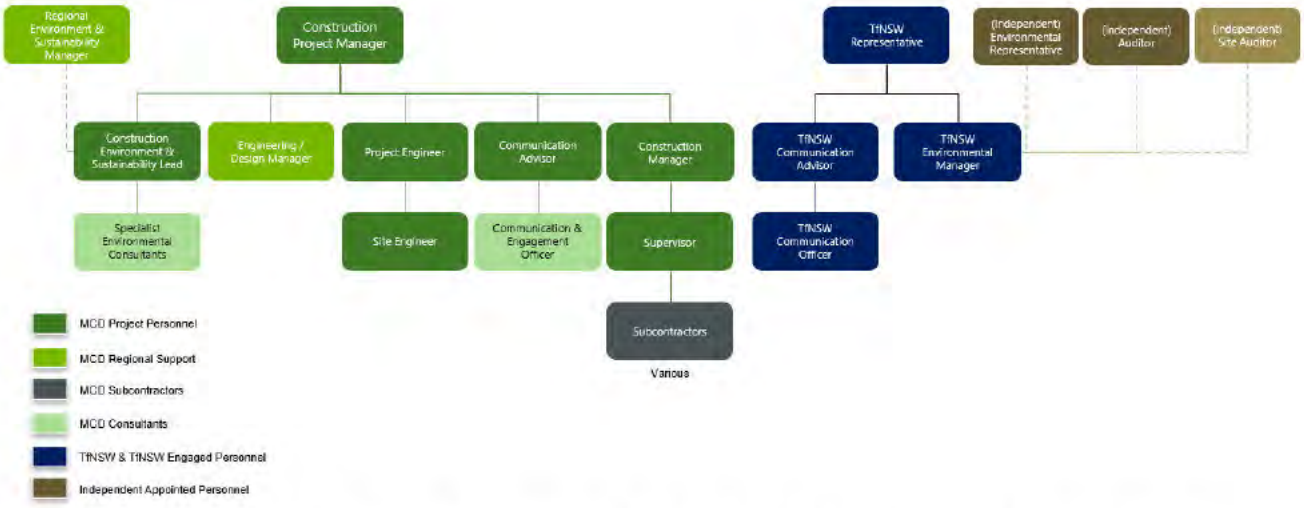



**Figure 4-2 – Project Delivery Team Chart – Key Roles Relating to Environmental Management**

**Table 4-1 Roles and Responsibilities**

| Role | Responsibilities |
|---|---|
| Construction Project Manager | Promote at all times the company's policies, procedures and standards relating to environmental management and ensure that they are complied with.<br>Ensure sufficient resources are available to achieve the policy, objectives and targets and that those resources have sufficient skills to conduct the roles competently.<br>Report performance on a regular basis to internal and external stakeholders.<br>Report significant incidents internally and externally as required by law and Contract Conditions.<br>Overall environmental performance of the Project.<br>Ensure the Project achieves legislative compliance.<br>Provide leadership in the development of the CEMP and Sub Plans, and authorise its use.<br>Nominate key personnel, assigning environmental responsibilities and allocating sufficient resources to achieve implementation of this CEMP and Sub Plans.<br>Ensure all personnel are familiar with and implement all relevant environmental controls as required.<br>Monitor environmental performance to ensure compliance and continued improvement.<br>Participate in the review of the Project environmental management system and this CEMP and Sub Plans.<br>Encourage all personnel to maintain acceptable environmental management work practices and foster awareness of environmental matters.<br>Encourage the reporting of incidents, events and other concerns and ensure appropriate feedback on proposed corrective actions. |
| Construction Environment & Sustainability Lead | Functional and technical leader for the Project's environmental obligations.<br>Principal contact for internal and external communication in relation to environmental matters. |

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| | Oversee all environmental management aspects of the Project.<br>Authority to stop a particular task or activity in circumstances where environmental controls or mitigation measures have not been implemented, have been implemented incorrectly / inadequately, are ineffective or where activities may otherwise be considered to lead to environmental harm. In such circumstances, prescribe corrective action that will be implemented before work recommences.<br>Develop, review and ensure this document (and associated plans) is correctly implemented. Ensure measures are put in place to manage and mitigate environmental risks and issues as identified.<br>Ensure that environmental plans, procedures and work instructions as applicable are prepared, reviewed and approved prior to commencement of work.<br>Ensure all significant environmental issues are reflected in the significant environmental aspects identified for the Project.<br>Report significant incidents internally and externally as required by law, the Project Conditions.<br>Ensure that all key environmental aspects and associated impacts are incorporated into the CEMP, and that suitable control measures are proposed to minimise the Project's environmental impact.<br>Ensure that all relevant environmental permits are obtained for the Project.<br>Ensure all staff and contractors engaged to work on the Project are appropriately inducted and trained in environmental issues and controls relevant to the Project.<br>Ensure monitoring programs, which assess the performance of the CEMP and specific Plans, are implemented.<br>Investigate and report incidents and non-conformance and ensure corrective and preventive action is taken and is effective.<br>Provide leadership sufficient to inspire and influence others to achieve the Project objectives and targets<br>Manage and track compliance with all environmental approvals, licences, permits and other obligations.<br>Lead the tracking of environmental and sustainability targets for the Project.<br>Ensure appropriate environmental training is identified in a Training Needs Analysis and that training is provided to personnel where required.<br>Review and update this CEMP and Sub Plans, as required.<br>Prepare environmental data for monthly reports. |
| Regional Environment & Sustainability Manager | Provide regional functional and technical support for the Project as required.<br>Review and provide guidance on the tracking of environmental and sustainability targets for the Project. |
| Communication Advisor | Identified potential community issues, planned activities are developed, implemented and monitored to mitigate risks.<br>Work with the MCD Project Manager to forecast need for communication with the community and flagging this as early as possible.<br>Liaise with TfNSW C&P Advisor to discuss and plan community and stakeholder activities and resolve issues<br>Identify potential and emerging risks, issues and concerns.<br>Manage the resolution of complaints.<br>Lead the range of consultation, engagement and communication activities during the construction in line with responsibilities and actions set out in the approved CCS. |

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| | Development of and managing approval of draft responses to stakeholders.<br>Provide updates on CCS activities and preparing weekly and monthly reports.<br>Oversee the distribution of this communication to the areas required |
| Communication and Engagement Officer | In accordance with MCoA B Section 6, fulling the role of Public Liaison Officer. This involves assisting the public with questions and complaints during work. This role must be available at all times that work is occurring.<br>Day-to-day management of communication and engagement with community and stakeholders including door knocks, onsite meetings<br>Record stakeholder and community interactions in Consultation Manager and as part of other reports as required.<br>Liaise with the Community Advisor and MCD Project Manager to forecast need for community communication and flagging this as early as possible.<br>Answer calls and emails on the Project phone number and email address<br>Prepare construction notifications and complex for the approval of Transport Community and Place |
| Engineering / Design Manager | Provide effective environmental leadership.<br>Ensure designs are undertaken in accordance with the requirements of the scope of works, technical requirements, relevant standards and this CEMP & Sub Plans.<br>Ensure design has minimal environmental impact.<br>Ensure processes and resources are in place to adhere to environmental and sustainability obligations where they affect design, or are affected by design.<br>Participate in incident and non-conformance report investigations and ensure that corrective and preventative action proposed is implemented effectively. |
| Project and Site Engineers | The environmental responsibilities of the Project/Site engineers include (but are not limited to) the following:<br>• Provide input into the preparation of environmental planning documents as required.<br>• Ensure that instructions are issued and adequate information provided to employees that relate to environmental risks on-site.<br>• Ensure that the works are carried out in accordance with the requirements of the CEMP and supporting documentation, including the implementation of all environmental controls.<br>• Identify any environmental risks.<br>• Identify resource needs for implementation of CEMP requirements and related documents.<br>• Ensure that complaints are investigated to ensure effective resolution.<br>• Take action in the event of an emergency and allocate the required resources to minimise the environmental impact.<br>• Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Superintendent and Project Environment & Sustainability Lead. |
| Construction Manager | The environmental responsibilities of the superintendent include (but are not limited to) the following:<br>• Ensure that requirements of this CEMP & Sub Plans are communicated to all personnel under his/ her control.<br>• Be aware of all environmental risks, issues and concerns relating to his/ her area of work. |

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| | • Be aware of all approval and contractual conditions relating to his/ her area of work.<br>• Perform surveillance and monitoring of environmental controls to ensure they are adequately established, effective and maintained.<br>• Support the PER in achieving the project environmental objectives, including on ground implementation of EWMS and ESCP's.<br>• Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to PER.<br>• Co-ordinate action in emergency situations and allocate required resources<br><br>Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager and PER. |
| Supervisors | The environmental responsibilities of the Supervisor/s include (but are not limited to) the following:<br>• Undertake any environmental duties as defined by the superintendent or Site project engineer.<br>• Control field works and implement/maintain effective environmental controls.<br>• Where required, undertake environmental risk assessment of works prior to commencement.<br>• Ensure site activities comply with EWMS and ESCP's and relevant records are kept.<br>• Ensure all site workers are site inducted prior to commencement of works.<br>• Attend to any spills or environmental incidents that may occur on-site.<br>• Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Superintendent.<br><br>Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, Superintendent or PER. |
| All personnel<br>Including Sub Contractors | The environmental responsibilities of the wider project team (including sub – contractors) include (but are not limited to) the following:<br>• All personnel are responsible for complying with environmental controls and requirements of this CEMP & Sub Plans.<br>• Active awareness, demonstrated by reporting inadequate environmental controls or practices to supervision.<br>• Participate in the mandatory Project/site induction program and training/toolboxes.<br>• Report any environmental incidents to the Supervisor immediately or as soon as practicable if reasonable steps can be adopted to control the incident.<br>• Undertake remedial action as required to ensure environmental controls are maintained in good working order.<br><br>Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, Superintendent, Supervisor or PER. |
| Transport for NSW Environmental Manager | The environmental responsibilities of the Transport for NSW Environmental Manager include, but are not limited to, the following:<br>• Review any environmental management plans and related documents prepared for the Project<br>• Review and consider minor Project refinements that are consistent with the Project environmental assessment in accordance with the Transport for NSW Division 5.2 Environmental Assessment Procedure and Environment Branch requirements |

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| | • Monitor the environmental performance of the Project in relation to Transport for NSW requirements<br>• Provide guidance and where appropriate, monitor compliance with DPE post approval document submission requirements. |
| Transport for NSW Representative | The environmental responsibilities of the Transport for NSW Representative include (but are not limited to) the following:<br>• Evaluate and advise on compliance with Transport for NSW environmental requirements<br>• Review and approve any environmental management plans for the Project or related activities that are not required to be approved by the Minister of DPE. |
| Transport for NSW Communication Advisor (Community and Place Manager) | Ensuring compliance with Statutory requirements (including the MCoA) and the CCS though regular auditing and evaluation of CCS in meeting its objectives.<br>Identification of community issues and ensuring planned activities are developed, implemented and monitored to mitigate risks.<br>Review potential and emerging risks, issues and concerns including liaising with stakeholders as required and recommending options for their resolution/ mitigation.<br>Manage approval of the communication and engagement strategy and changes.<br>Support the Contractors Communication Advisor in the resolution of complaints as required and ensuring close out<br>Accompany the Contractor at meetings with complainants and interested community members as required.<br>Lead the engagement with identified stakeholders e.g., Councils, Government Agencies.<br>Respond to Council and Government stakeholder enquires and complaints outside the contractor remit.<br>Reviewing and contributing to contractor communication reporting and circulating to project team<br>Facilitate approval (based on attached) of all published material and engagement activities (prior to distribution or action).<br>Strategic risk: planning, analysis and mitigation<br>Support the timely delivery of the CCS |
| Transport Communication Officer (Community and Place Officer) | Review and assisting in day-to-day correspondence,<br>Review Draft Project Communication to be distributed to stakeholders and used at information sessions/community events/activities during the construction phase of the Project.<br>Plan and support community forums<br>Upload documents in TeamBinder<br>Editing and branding.<br>Monitor social media and referring relevant matters to Transports Media Team.<br>Monitor local sentiment<br>Coordination with Transport social media team.<br>Publish to Transport website<br>Work with the Construction and Project team to identify and resolve issues that have the potential to jeopardise Transports reputation.<br>Support the timely delivery of the CCS |

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| (Independent) Site Auditor | Review contamination reports relating to the site throughout the duration of the project to ensure that any work required in relation to sediment, soil or groundwater contamination is appropriately managed.<br><br>As required, provide a Section B1 Site Audit Statement to certify that the nature and extent of the contamination has been appropriately determined; and<br><br>a Section B2 Site Audit Statement to certify that the Soil and Water Management Plan is appropriate.<br><br>Review of contamination reports, and determine if remediation is required, if required review any Remedial Action Plans prepared in accordance with the guidelines made and approved under section 105 of the Contaminated Land Management Act 1997. |
| (Independent) Environmental Representative (ER) | The environmental responsibilities of the Environmental Representative are detailed in MCoA A32 and include:<br>• receive and respond to communication from the Planning Secretary in relation to the environmental performance of the SSI;<br>• consider and inform the Planning Secretary on matters specified in the terms of this approval;<br>• consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;<br>• review documents identified in Conditions A7, A19, A20, A22, C1, C6 and C14 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:<br>o make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or<br>o (make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary/Department); and<br>o provide a written statement / submission via the Major Projects portal to the Planning Secretary advising the documents have been endorsed by the ER;<br>• regularly monitor the implementation of the documents listed in Conditions A7, A20, Cl1 , C6 and C14 to ensure implementation is being carried out in accordance with the document and the terms of this approval;<br>• as may be requested by the Planning Secretary, help plan or attend audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A37 of this approval;<br>• as may be requested by the Planning Secretary, assist in the resolution of community complaints;<br>• consider or assess the impacts of minor construction ancillary facilities comprising lunch sheds, office sheds and portable toilet facilities as required by Condition A21 of this approval; consider any minor amendments to be made to the Site Establishment Management Plan, CEMP, CEMP Sub-plans and monitoring programs without increasing impacts to nearby sensitive land uses or that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;<br>• prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report |

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| | • providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports." The Environmental Representative Monthly Report must be submitted within seven days following the end of each month for the duration of the ER's engagement for the SSI, or as otherwise agreed by the Planning Secretary; and<br>• review the appropriateness of any activities reliant on the definition of Low Impact Work. |
| (Independent) Auditor | Conduct independent Audits of the SSI in accordance with the Independent Audit Post Approval Requirements (DPIE, 2020) and provide an audit report within the applicable timeframe. |

### 4.5.1 SUPPLIER AND SUBCONTRACTOR MANAGEMENT

All personnel engaged on the Project are required to operate within the requirements of this CEMP. Subcontractor selection and engagement, including consideration of environmental management and sustainability factors, is managed via the **Procurement – Projects Procedure** (CMC-PRO-PRO001-GEN-GRP). This includes pre-registration on Felix (online procurement application for pre-contracts) and final evaluation through the **Pre-Award Evaluation** process **(Pre-Award Evaluation (**CMC-PRO-FRM009-GEN-AUS).

Subcontractors will be made aware of environmental issues related to the Project and their responsibilities through training and awareness methods detailed in Section 4.4.

In some circumstances, based on the activities to be conducted by the subcontractor, the Construction Environment & Sustainability Lead may determine that the subcontractor be required to develop a Project specific Subcontractor Environmental Management Plan or Environmental Works Method Statement (EWMS).

Where a Subcontractor Environmental Management Plan/EWMS is required, the document is to address the specific work packages awarded and will be submitted to the Environmental Management Representative for approval. Works will be unable to commence until approval has been received. Such plans must assess the level of environmental risk and implement appropriate management controls for the subcontractor's full scope of work to a standard that is consistent with this CEMP.

Regardless of the approach to managing a subcontractor's environmental impacts, all subcontractors will be subject to the following:

- Regular on-site auditing to assess their performance against the requirements of this CEMP.
- Completion of the appropriate training requirements as specified.
- Implementation, protection and maintenance of environmental management controls as set out in environmental management documentation.
- Monthly reporting of sustainability data.

## 4.6 Working hours

Approved working hours on this project are:

- **Standard hours**
  - Monday to Friday 7am to 6 pm
  - Saturday 8 am to 1 pm

- No work on Sundays or public holidays

In accordance with MCoA E44, where out of hours works are required, an Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of work which is outside the hours defined in MCoA E42, and that are not subject to an EPL. The Protocol forms part of the Construction Noise and Vibration Sub Plan which must be approved by the Planning Secretary before commencement of the construction.

Work outside of normal working hours is permitted without prior approval by the Principal in the following circumstances in accordance with MCoA E44:

- **Safety and Emergencies, including:**
  - for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or
  - where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.
- **Low impact, including:**
  - construction that causes I-Aeq(15 minute) noise levels:
    - no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and
    - no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); or
  - construction that causes LAFmax(15 minute) noise levels no more than 15 dB(A) above the rating background level at any residence; or
  - construction that causes:
    - continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), or intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).
- **By Approval, including:**
  - where different construction hours are permitted or required under an EPL in force in respect of the SSI; or
  - negotiated agreements with directly affected residents and sensitive land user(s).
- **By Prescribed Activity, including**:
  - Piling between 10:00pm and 7:00am Monday-Friday inclusive and if endorsed by the ER;
  - delivery of material that is required to occur outside of standard construction hours in Condition E42 to directly support Piling.

On becoming aware of the need for emergency work in accordance with this condition, the Proponent must notify the ER, the Planning Secretary and the EPA of the reasons for such work. The Proponent must use best endeavours to notify all noise and/or vibration affected residents and owners/occupiers of properties identified sensitive land user(s) of the likely impact and duration of those work.

## 4.7 Environmental Aspects

A number of environmental management sub plans support the CEMP. These documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the project. They address requirements of the CoA, REMMs and other measures identified in the environment assessment documentation.

Environmental strategies may also be developed as required throughout the Project. These will also guide environmental management of potential impacts on-site.

Table 4-2 describes the environmental aspects of the works, their applicable construction sub plans and strategies for the Project, and their approval requirements. More detailed information on the existing environmental conditions on site is provided in the respective environmental issue-specific management Sub-Plans.

**Table 4-2 Environmental Aspects**

| Environmental Aspect | Existing Conditions and Key Issues | Sub Plan / Strategy | Approval Pathway |
|---|---|---|---|
| Air Quality | Management of potential air quality risks from the project.<br>Air quality monitoring as part of daily and weekly inspections. | CEMP Appendix F - Air Quality Environmental Protection Instruction | Submission for approval by the Planning Secretary |
| Contaminated Land | An Unexpected Contaminated Finds Guide, Acid Sulfate Materials Management Procedure and Asbestos Management Procedure has been developed for the project.<br>An Emergency Spill Management Procedure has been developed to manage spill prevention and response on this project. | Soil, Water & Contamination Management Sub Plan<br>Waste & Energy Management Sub Plan | Submission for approval by the Planning Secretary |
| Archaeology/ Cultural Heritage | Existing Aboriginal cultural heritage, non-Aboriginal heritage and maritime heritage risks on this project.<br>Communication with Land Councils<br>Marine and land Archaeologists to be retained | Heritage Management Sub Plan | Submission for approval by the Planning Secretary |
| Fauna and Flora | Significant flora and fauna aspects both terrestrial and marine risks on this project.<br>Works in environmentally sensitive area | Biodiversity Management Sub Plan | Submission for approval by the Planning Secretary |
| Greenhouse Gases | NGER reporting<br>Sustainability Reporting and practices | McConnell Dowell Subcontractor Sustainability Reporting Guidelines | N/A |
| Noise and Vibration | Noise and vibration risks on this project for both local community and sensitive marine fauna. | Construction Noise and Vibration Management Sub Plan | Submission for approval by the Planning Secretary |
| Resource Use and Waste | Waste and energy targets for the project, TfNSW and McConnell Dowell. | Waste and Energy Management Sub Plan | Submission for approval by the Environmental Representative |
| Soils and Ground Contamination | Soil and water risks on this project and;<br>Erosion and sediment risks | Soil, Water & Contamination Management Sub Plan<br>Progressive Erosion and Sediment Control Plans | Submission for approval by the Planning Secretary (Sub Plan only) |

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| Water | Interface risks on this project with other operations occurring within Botany Bay | Marine Works Management Sub Plan | Submission for approval by the Environmental Representative |
| Ancillary Site Facilities | The construction compounds at La Perouse and Kurnell will be located within the construction boundary of the Project | Construction Environmental Management Plan | Submission for approval by the Planning Secretary |

Where a separate sub plan is not required, information regarding environmental management and control of specific areas is outlined in the below sections.

## 4.8 Fire safety and burning off

Total fire ban declarations and resultant work restrictions will be communicated to staff at daily pre-start meetings.

All items of plant used during proclaimed high fire danger periods that could discharge sparks must be fitted with spark arresters. Do not undertake cutting, welding, grinding or other activities likely to generate fires in the open on days when a total fire ban is in force.

When there is a risk of fire being caused by work such as welding, thermal or oxygen cutting, heating or other fire producing or spark producing operations or when burning off is proposed, provide training to all personnel in fire prevention, fire safety and basic fire-fighting skills. All personnel and vehicles involved in such activities will be provided with fire-fighting equipment.

Burning off is not permitted.

## 4.9 Use of pesticides

Herbicides used on site are applied only by hand or by hand-held equipment and, when applied outdoors on any one occasion, no more than 5 litres (or 5kg) of concentrate or 20 litres (20kg) of ready-to-use product will be used.

All personnel managing and using pesticides must receive appropriate training and hold an appropriate licence prior to commencing work. Only pesticides registered for use near water may be used near water.

Public notification of pesticide use will be distributed accordingly. Implement the following measures whenever pesticides are to be used adjacent to, or across the road from, a "sensitive place":

- use of mechanical means of pest control (such as mowing or slashing) where feasible; or
- use of hand-held application of pesticides where mechanical means of pest control are not feasible.

Avoid applying pesticides:

- on hot days when plants are stressed;
- after the seed has set;
- within 24 hours of rain or when rain is imminent;
- when winds will cause drift of pesticides into non-target areas.

## 4.10 Ancillary Site facilities

### 4.10.1 LOCATION AND LAYOUT OF ANCILLARY FACILITIES

The construction compounds at La Perouse and Kurnell will be located within the construction boundary of the Project. The proposed location and site layout for construction facilities within the ancillary facility boundary is shown in Appendix J Layout of Ancillary Facilities.

### 4.10.2 ANCILLARY FACILITY MANAGEMENT

| Measure/Requirement | Timing | Responsibility | Reference |
|---|---|---|---|
| Construction ancillary facilities that are not identified by description and location in the EIS can only be established and used in each case if:<br>• they are located within or immediately adjacent to the construction boundary;<br>• they are not located next to sensitive land use(s) (including where an access road is between the facility and the land use), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location;<br>• they have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the project's conditions of approval.<br>• the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of the project's conditions of approval, including in relation to environmental, social and economic impacts. | Pre-Construction / Construction | McConnell Dowell | MCoA A19 |
| Construction ancillary facilities must not be used for Construction until the CEMP, relevant CEMP Sub-plans and relevant CMPs have been approved by the Planning Secretary. | Pre-construction | McConnell Dowell | MCoA A21 |
| Minor construction ancillary facilities can be established and used where they have been assessed in the EIS or satisfy the following criteria:<br>• are located within or immediately adjacent to the construction boundary; and<br>• have been assessed by the ER to have:<br>o minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009) (ICNG), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts;<br>o minimal environmental impact with respect to waste management and flooding; and<br>o no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval. | Pre-Construction / Construction | McConnell Dowell | MCoA A22 |

| Measure/Requirement | Timing | Responsibility | Reference |
|---|---|---|---|
| Boundary screening must be erected between construction ancillary facilities (excluding minor construction ancillary facilities) and adjacent to sensitive land use(s) for the duration of the time that the construction ancillary facility is in use, unless otherwise agreed with the owner and occupier of the adjacent sensitive land use(s).<br>Boundary screening must minimise visual impacts on adjacent sensitive land use(s) and must incorporate Indigenous artwork wherever visible. | Pre-construction | McConnell Dowell | MCoA A23 |
| The SSI name, application number, telephone number, postal address and email address required MCoA B8 must be made available on-site boundary fencing / hoarding at each construction ancillary facility before the commencement of construction. This information must also be provided on the website required MCoA B12. | Pre-construction | McConnell Dowell | MCoA A24 |
| A visual inspection of the potential rock engravings (Site 3, La Perouse [AHIMS ID 45-6-0650] and Site 4, La Perouse [AHIMS ID 45-6-0651]) will be undertaken before setting-up the ancillary facilities and starting construction. | Pre-construction | McConnell Dowell | REMM AH6 |
| Establish exclusion zones for all registered AHIMS rock engraving sites within the construction boundary or directly adjacent and cover with geotextile fabric (or similar) before setting-up the ancillary facilities and creating the construction compound. | Pre-construction | McConnell Dowell | REMM AH7 |
| Archaeological work method statements will be prepared prior to setting up ancillary facilities, construction compounds or construction works to prevent impact and preserve the integrity the rock engraving at La Perouse (AHIMS ID 45-6-0653). During excavation and subsurface works or any other identified high-risk activities, archaeological supervision and vibration monitoring will be undertaken at the potential location of the rock engraving at La Perouse (AHIMS ID 45-6-0653).<br>If the engraving is identified and/or the vibration levels would result in damage to the integrity of the sandstone structure, works must cease, the site protected and the construction methodology be reviewed in consultation with a heritage consultant to mitigate further impacts. | Pre-construction and construction | McConnell Dowell | REMM AH8 |
| All areas and activities in the construction boundary will be managed to ensure the appropriate storage of equipment, parking, stockpile screening and arrangements for the storage and removal of rubbish and waste materials. | Construction | McConnell Dowell | REMM L4 |
| Geotextile fabric should be placed on the ground prior to any hardstand. Any hardstand should not cause erosion or produce sediment. | Construction | McConnell Dowell | REMM SW3 |
| Prepare and implement Sensitive Area Maps that identify sensitive habitats, protection areas, no anchoring zones, and exclusion zones to protect seagrass and threatened species. | Construction | McConnell Dowell | REMM MB2 |

| Measure/Requirement | Timing | Responsibility | Reference |
|---|---|---|---|
| Equipment, plant and machinery refuelling and maintenance will be carried out in impervious bunded areas. Vessels and associated plant and equipment will be maintained and refuelled at appropriate facilities offsite or adhere to industry standards, Port Authority NSW and pollution prevention regulations during refuelling, transfer, storage and handling of hazardous materials. Refuelling will always be attended. Machinery will be checked daily to ensure that there are no oil, fuel, or other liquid leaks. | Construction | McConnell Dowell | REMM SW5 |
| Vehicle wash-downs will be carried out offsite or within a designated bunded area with an impervious surface. | Construction | McConnell Dowell | REMM SW6 |
| Environmental Work Method Statements (EWMS) will be prepared and implemented to manage soil and water impacts prior to commencing high risk activities including site establishment. | Construction | McConnell Dowell | Best Practice |
| Site compounds, access tracks, stockpile sites and temporary work areas must be located and constructed to minimise erosion. | Construction | McConnell Dowell | Best Practice |
| A consulting arborist is to carry out an assessment of all trees within the construction boundary that are proposed for retention in accordance with Australian Standard 4970: Protection of Trees on Development Sites. The arborist is to provide a report with recommendations on the viable retention of all native trees within the construction boundary of the mapped PCTs, and include recommendations for amending design or using alternate construction methods to reduce any impacts on retained trees. | Construction | McConnell Dowell | REMM B4 |
| Use structures to shield residential receivers from noise such as site shed placement, temporary noise barriers, earth bunds, fencing, and consideration of site topography when situating plant. | Construction | McConnell Dowell | REMM SN1 |
| Water efficient appliances and fitting will be installed at the ancillary facility offices and cribs. | Construction | McConnell Dowell | REMM GG2 |
| Energy efficient appliances and lighting will be installed at the ancillary facility offices and cribs. These should have a minimum four-star rating. | Construction | McConnell Dowell | REMM GG2 |
| Water tanks will be installed at the ancillary facility to capture rainwater for reuse on Site. This is to minimise potable water usage. | Construction | McConnell Dowell | REMM GG2 |
| Where reasonable and feasible the ancillary facilities will be connected to mains power. | Construction | McConnell Dowell | REMM GG2 |
| On-site effluent will either be discharged to the local sewage system or temporarily stored in septic or portable facilities. These facilities will be of sufficient capacity and located away from environmentally sensitive areas such as waterways. The effluent will be regularly collected and disposed of to an appropriately licenced facility. Pit toilets are not permitted. | Construction | McConnell Dowell | REMM W4 |

### 4.10.3 PRE-CONSTRUCTION LAND CONDITION ASSESSMENT

The purpose of the pre-construction land condition assessment is to identify any existing waste or stored materials on the land prior to the area being occupied for construction.

A report of the pre-construction land condition assessment must be submitted by a suitable qualified consultant on behalf of McConnell Dowell for each area of land and submitted to TfNSW for approval. The report will be in the format detailed in the TfNSW Environmental Procedure "Management of Wastes on Roads and Maritime Services Land". (A copy of this procedure is available at: http://www.rms.nsw.gov.au/documents/about/environment/environment-waste-on-rms-land-procedure.pdf)

### 4.10.4 POST-CONSTRUCTION LAND CONDITION ASSESSMENT

When the areas of land used for the site facilities are no longer required, and after restoration of the areas, arrange for a post-construction land condition assessment for each area that has been used.

On behalf of McConnell Dowell a suitable qualified consultant will prepare a post-construction land condition assessment report which will be submitted to TfNSW for approval. The report must be in the format detailed in the TfNSW publication "Management of Wastes on Roads and Maritime Services Land".

### 4.10.5 CHANGES TO/AND OR RELOCATION OF ANCILLARY FACILITIES

In accordance with MCoA A21, ancillary facilities that are not identified by description and location in the documents identified in the EIS can only be established and used in each case if:

- They are located within or immediately adjacent to the construction boundary
- They are not located next to sensitive land user(s) (including where an access road is between the facility and the receiver), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location
- They have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval
- The establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.

## 4.11 Restoration of site

On completion of the works, all areas disturbed by construction activities (including the site compound, materials storage, access and haul roads) must be reinstated and restored to conditions as outlined in the post-construction land assessment.

Restoration includes spill clean-up and soil remediation where applicable, topsoiling of the area, weed control and seeding, planting, watering and maintenance. NPWS would be consulted and involved in restoration of the site.

# 5 PLANNING & SYSTEMS

## 5.1 Risk and Opportunity Identification

Environmental risks and opportunities associated with the Project works are managed through McConnell Dowell's **HSE Risk Management** (HSEQ-HS-PRO006-GEN-ALL) process.

This process complies with the Standard AS/NZS ISO 31000:2009 Risk Management Principles and Guidelines. During Project execution, the principal objectives of risk management are to develop and monitor the implementation and effectiveness of risk treatments and to identify and evaluate changes in the risk profile of the Project.

### 5.1.1 ENVIRONMENTAL RISK ASSESSMENT

An environmental risk assessment workshop was held prior to construction and included representatives from Transport for NSW, McConnell Dowell and suitable environmental representatives.

During the workshop, each construction activity was assessed to identify the relevant steps in the activity and the associated environmental hazards, initial risk levels, mitigation measures and opportunities to avoid, manage and/or minimise the risks and residual risks as well as:

- Identify activities, events or outcomes that have the potential to adversely affect the local environment and/or human health/property.
- Qualitatively evaluate and categorise each risk item.
- Assess whether risk issues can be managed by environmental protection measures.
- Qualitatively evaluate residual risk with implementation of measures.

Each of these items has been documented in the Project's Environmental Risk Assessment (ERA) and added to Appendix D. Where residual risk is assessed as high, or if required under the Contract Specification, an Environmental Work Method Statement will be developed for that activity.

Where relevant, the requirements from the Transport for NSW Environmental Specifications, MCoA, EPBC-CoA and Revised Environmental Management Measures (REMMs) will be incorporated into the environmental risk assessment, particularly in developing the agreed activity specific site controls.

The Environment Risk Assessment is a live document that will be continually revised during the Project duration as risks or further information comes to hand.

## 5.2 Environmental Compliance Obligations

McConnell Dowell ensures compliance with all relevant compliance obligations and aims to employ best practice environmental management procedures for the Project. Environmental compliance obligations include compliance with applicable environmental legislation, standards (including ISO 14001:2015), policies, procedures and other governance processes.

Compliance obligations also include requirements of, and commitments outlined in Project contract and related governance documents.

### 5.2.1 LEGISLATION

A register of legal requirements for the Project is contained in Appendix C. This register will be maintained by McConnell Dowell who will review the register at regular intervals, such as during management reviews (refer to Section 6.7.1), and update with any applicable changes.

Any changes made to the legal requirements register will be communicated to the wider project team, including sub-contractors where necessary, through toolbox talks, specific training and other methods as required.

### 5.2.2 APPROVALS

McConnell Dowell will comply with all written requirements or directions of the Planning Secretary. The following approvals and licences have been or will be obtained by TfNSW:

- Infrastructure Approval under Part 5, Section 5.19 of the EP&A Act – SSI 10049 granted by the Minister for Planning on 21st July 2022.

McConnell Dowell will obtain the following licences, approvals or exemptions:

- Road Occupancy Licence (ROL) under Section 138 of the Roads Act 1993
- Exemptions to allow hot works to be undertaken on Total Fire Ban days as detailed under Section 99 of the Rural Fires Act 1997
- Specific Resource Recovery Exemptions, where determined

As outlined in section 2.3.1 of the EIS, the following approvals are not required for a project approved under Division 5.2 of the EP&A Act including:

- Permits under sections 201, 205 and 219 of the *Fisheries Management Act 1994* (NSW) to carry out dredging, reclamation works, to harm marine vegetation in protected areas or block fish passage.
- Approvals under Part 4 of the *Heritage Act 1977* (NSW) (to demolish, disturb or excavate a place, building, work, relic, moveable object, precinct or land to which an interim heritage order or listing on the State Heritage Register applies), section 139 (excavation permits).
- Aboriginal heritage permits under section 90 of the *National Parks and Wildlife Act 1974* (NSW).
- Various approvals under the *Water Management Act 2000* (NSW), including water use approvals under section 89, water management work approvals under section 90, and activity approvals (other than aquifer interference approvals) under section 91. Despite the approvals not being required, the proposed management measures in Chapter 17 (Soil, water and contamination) would ensure the protection of waterfront land.
- Schedule 1 of the Protection of the *Environment Operations Act 1997* (NSW) lists the activities that require the need for an Environment Protection Licence from the Environment Protection Authority. None of the proposed activities for the project trigger the need for an Environment Protection Licence.

### 5.2.3 STANDARDS AND DIRECTIVES

#### 5.2.3.1 Organisational Standards

McConnell Dowell operates under an organisational Directive called **Environmental Management Standard** (REF-HSEQ-ENV-GUID002-GEN-GRP), which is a suite of minimum required standards for environmental management across all McConnell Dowell Group projects, across all geographies.

The minimum standards relate to key environmental risks common to organisation-wide activities, and relates to each one of the ten **Environmental Green Rules**, a set of rules to enforce positive messages about what is expected as a minimum standard on site.

The objective of the Environmental Management Standard and Environmental Green Rules Directives is to ensure the application of minimum environmental management standards on all projects and a consistency of approach across the organisation. A summary of the Environmental Green Rules is included in Appendix E.

### 5.2.4 APPROVALS, PERMITS AND LICENCES

A number of approvals, permits and licenses have and/or will be obtained for the Project. Appendix C contains a register of all relevant environmental approvals, permits and licenses. The register will be maintained by the Construction Environmental Manager and will be reviewed prior to the commencement of construction and/or phases of construction, and at regular intervals during construction and at least annually as part of the management review.

All necessary licences, permits and approvals required for the development of the Project will be obtained and maintained as required throughout the life of the Project. No condition of the Project Approval removes the obligation for Transport for NSW or McConnell Dowell to obtain, renew or comply with such necessary licences, permits or approvals except as provided under Section 5.23 of the EP&A Act.

#### 5.2.4.1 Compliance tracking

The Project Approval and REMMs are contained in the Compliance Tracking Program (Appendix C) and provide a reference to where each requirement is addressed by this CEMP or other Project documentation.

## 5.3 Environmental Objectives and Requirements

### 5.3.1 ORGANISATIONAL ENVIRONMENTAL OBJECTIVES

McConnell Dowell is committed to maintaining a high level of excellence in environmental compliance and continual improvement, which is reflected in our organisation-wide environmental objectives and targets, relevant to all McConnell Dowell works. These are presented in Table 5-1.

**Table 5-1 Environmental Objectives and Key Performance Indicators**

| Objective | Lead Performance Indicator | | Lag Performance Indicator | |
|---|---|---|---|---|
| | Description | Target | Description | Target |
| Ensure compliance with all applicable environmental legislation and prevent environmental harm | Number of INR raised during internal audit program relating to environmental legislation | Zero non-compliances | Serious Environmental Incident Frequency Rate (SEIFR) | 0.00 |
| | % completion of planned weekly environmental inspections | 100% | Statutory Notices received | Zero |
| | % of environmental actions closed out within required timescale | 100% | Fines or prosecutions for an environmental offence | Zero |

| | | | | |
|---|---|---|---|---|
| Ensure effective reporting of environmental data | % completion of monthly environmental data reported | 100% | - | - |

### 5.3.2 PROJECT SPECIFIC ENVIRONMENTAL OBJECTIVES AND TARGETS

As a means of assessing environmental performance during construction of the Project, environmental objectives and targets have been established. These objectives and targets have been developed with consideration of key performance outcomes for each key issue, as specified in the project MCoA/REMM. The objectives and targets are consistent with the Project environmental policy and will assist in monitoring whether the commitments of the policy are being met.

The performance of the Project will be monitored against the objectives and targets. Project performance monitoring will be documented in the Project construction compliance reports and at least on an annual basis as part of the management review.

Environmental objectives and targets for the Project are incorporated into relevant environmental management sub plans and a summary is provided in Table 5-2 below.

**Table 5-2 Environmental objectives and targets**

| Objective | Target | Measurement tool |
|---|---|---|
| Construction of the Project in accordance with environmental approvals. | Full compliance with statutory approvals. | Audits, construction compliance reporting, management view. |
| Compliance with all legal requirements. | No regulatory infringements (PINs or prosecutions). | No formal regulatory warning.<br>Audits, construction compliance reporting, management view. |
| Implement a rigorous and comprehensive EMS that meets the requirements of AS/NZS ISO 14001. | Address non-conformances and corrective actions within specific timeframes. | Audits, management reviews. |
| Engage with the affected and broader community, minimise complaints and respond to any complaints within a suitable timeframe. | Disseminate regular Project updates and other information through the Project website and other tools identified in the Community Engagement Strategy.<br>Record and respond to complaints within the timeframe specified in the Community Engagement Strategy. | Review complaints register, construction compliance report, audits. |
| Continuously improve environmental performance. | Develop and maintain a program of ongoing environmental training.<br>Capture lessons learnt from environmental incidents to minimise repeat issues.<br>Encourage and reward innovation and effort throughout the works force. | Construction compliance report, management review. |

# 6 SUPPORT PLAN FOR DELIVERY

## 6.1 Resources

The Project Manager is responsible for determining and providing the necessary resources needed for the effective establishment, implementation, maintenance and continual improvement of this CEMP and associated documents. Specific requirements are outlined, where relevant, in the Environmental Management Standard and issue-specific sub-plans.

## 6.2 Competence Requirements

The environmental competency and experience requirements for all staff positions are contained in the relevant Position Descriptions. Recruitment and procurement processes are conducted with the aim of engaging personnel with the required appropriate competency and experience.

## 6.3 Environmental Awareness Training

All personnel will receive training of a type and level of detail that is appropriate for the environmental aspects of their routine and emergency work assignments. As a minimum, all personnel are required to satisfactorily complete the Project Induction Training. Other mechanisms of raising environmental awareness are through toolbox talks, pre-start meetings, HSEQ alerts and more specialised training. Attendance records and assessments of all training and briefing sessions will be maintained.

Other training needs are assessed on a job-by-job, and position-by-position basis.

**Table 6-1 Environmental Awareness Training Methods**

| Training Method | Description |
|---|---|
| Project Induction | The induction includes a presentation of the requirements of this CEMP and associated documents. All personnel are to attend the Project induction prior to starting work on site. The purpose of the induction is to ensure that, at a minimum, the employee or sub-contractor understands:<br>• Key issues relevant to the Project and existing environment.<br>• Environmental Policy and the environmental management framework<br>• Concepts of environmental protection, due diligence and duty of care.<br>• Environmental permits, approvals, licenses and relevant conditions.<br>• Roles and responsibilities relating to environmental management for the Project and consequences of non-compliance.<br>The project induction will also include Aboriginal Cultural Heritage Awareness. This will ensure they are aware of the site's heritage values and context. Updates will be provided based on stakeholder feedback, consultation with the La Perouse Local Aboriginal Land Council and Registered Aboriginal Parties and following any unexpected finds. |
| Pre-Start Meetings | Pre-Start meetings will be undertaken at the beginning of each day/ shift before work commences with all personnel present (including subcontractors as required).<br>Specific environmental issues relevant to the shift's work will be raised and discussed at these meetings. |
| Toolbox Talks | Toolbox Talks will be undertaken once a week to discuss large site wide issues, upcoming works and give updates on any recent incidents and their outcomes. |

| | |
|---|---|
| | Issue-specific environmental awareness training will be provided to the workforce (including subcontractors) via Toolbox Talks, to provide site personnel with ongoing environmental training and information throughout the works.<br>Examples of training includes land/marine based spill response training or correct erection of a silt fence/silt curtains. |
| Specialised Training | Training for specific staff based on position and responsibilities. For example, noise and vibration monitoring, spill prevention and control, erosion and sediment control |
| HSEQ Alerts | HSEQ alerts are descriptions of serious health, safety, environmental or quality incidents and lessons learnt from other McConnell Dowell Group projects and facilities and relevant industry incident.<br>They are sent out to all McConnell Dowell Group management and HSEQ staff and are presented and discussed at Pre-Start Meetings and Toolbox Talks and posted on notice boards. |

## 6.4 Communication

### 6.4.1 INTERNAL COMMUNICATION

The Project team will meet regularly to discuss any issues with environmental management on-site, any amendments to plans that might be required or any new / changes to construction activities.

Regular meetings may also be scheduled with the Environmental Representative and relevant Transport for NSW environmental staff. The purpose of these meetings would be to communicate ongoing environmental performance and to identify any issues to be addressed.

In addition, Project team members will participate in toolbox talks on at least a weekly basis. This forum will provide an opportunity for the environment team members to communicate on environmental performance, to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

Further internal communications regarding environmental issues and aspects will be through awareness training as described in Section 6.3.

### 6.4.2 EXTERNAL COMMUNICATION

Transport for NSW is responsible for coordinating communications with all external parties unless otherwise delegated. All external communication is to be managed in accordance with the projects Community Communication Strategy.

Validated complaints will be recorded, categorised as a complaint for tracking purposes. As a minimum, the following will be recorded:

- The date and time of the complaint.
- Personal details of the party lodging the complaint (if available, subject to privacy considerations).
- Nature of the enquiry or issue of concern.
- The outcome of the complaint investigation and any remedial actions taken by the construction team to cease the impact.

### 6.4.3 LIAISON WITH EPA, GOVERNMENT AUTHORITIES OR OTHER RELEVANT STAKEHOLDERS

The Construction Environment & Sustainability Lead has the responsibility to report on the ongoing environmental performance of the Project to Transport for NSW. Where applicable Transport for NSW will

inform the Environmental Representative and EPA. The Construction Environment & Sustainability Lead will report regularly to Transport for NSW on progress and any key environmental matters through monthly reports.

The Project Manager and the Construction Environment & Sustainability Lead are 24-hour contacts. They have the authority to halt the progress of the works if necessary. They are the key emergency response personnel during an environmental site emergency.

A report will be prepared on each occasion the site is visited by EPA, and Transport for NSW will be immediately notified. The report will detail the purpose, outcome and actions pertaining to the visit and is submitted to the Principal's Transport for NSW Representative within one working day of the EPA visit.

### 6.4.4 COMMUNITY LIAISON AND/OR NOTIFICATION

A Community Consultation Strategy (CCS) has been prepared by Transport for NSW for the Project to meet the requirements of MCoA B1 and B2 (refer to Appendix C). The plan is designed to facilitate communication between Transport for NSW, McConnell Dowell, Certifying Authority, Council(s) and the local community during construction of the Project. The CCS will identify the relevant stakeholders and the consultation and communication methods to be used for the Project.

The CCS will be approved by the Planning Secretary prior to the commencement of construction. The CCS will be maintained and implemented throughout construction of the Project by McConnell Dowell.

Residents will be notified as required about any new or changed construction activities that will affect access to their properties or otherwise disrupt the stakeholders and residents' use of their premises, moorings or other property, at least five (5) working days before commencing work affecting residents.

Such notification must state the nature of the work, why it is necessary, the expected duration, details of any changes to the traffic arrangements or property access, and the name and contact telephone number.

Any concerns raised by residents must be addressed in accordance with the Complaints and Enquiries Procedure (refer to Section 6.4.5).

### 6.4.5 COMPLAINTS MANAGEMENT

Transport for NSW will prepare and implement a Complaints Management System for the commencement of any Work in accordance with the requirements of MCoA B7.

All community inquiries and complaints related to the construction activities will be referred to the 24-hour community information line (1800 718 556). A postal address, website (Kamay ferry wharves | Transport for NSW) and email address (kamaywharves@mcdgroup.com) has been provided for receipt of complaints and enquiries.

Records of all complaints received will include the following details:

- Date and time of the complaint
- Method by which the complaint was made
- Any personal details of the complainant
- The nature of the complaint
- Action taken in relation to the complaint and any follow up
- If no action taken, reasons why.

This information will be included in Complaints Register by the McConnell Dowell. The information contained within the register will be made available to the Minister on request.

Attempts will be made to resolve all complaints in accordance with the community engagement strategy. An initial response to complaints will be provided within 24 hours of a complaint being received. A further

detailed response, including steps taken to resolve the issue(s) that lead to the complaint, will be provided within 10 days. All complaints will be closed off in the stakeholder database. At all times the stakeholder will be kept informed of when they will receive a response.

The Construction Environment & Sustainability Lead will apply an adaptive approach to ensure that corrective actions are applied in consultation with the appropriate construction staff to allow modifications and improvements in the management of any environmental issues resulting in community complaints.

A written report would be provided to Transport for NSW within one working day of receiving a complaint. This would outline the complaint and action taken to remedy the problem. A final report which would include proposed measures to prevent reoccurrence would be submitted to Transport for NSW within five working days.

## 6.5 Documented Information

### 6.5.1 CREATING AND UPDATING DOCUMENTS

This CEMP will be further developed and revised to address any changes in the environmental management process, customer or key stakeholder comments, and changes identified through the continual improvement process.

This CEMP will be reviewed, at a minimum, on a twelve-monthly basis by Project leadership. The Project Manager will be responsible for ensuring this is carried out. Additionally, the CEMP will be reviewed within 3 months of the following (as required):

- An environmental incident
- An independent audit undertaken in accordance with Condition A37
- Any modification to the project.

Review of the CEMP is outlined further in Section 8.4 Compliance Tracking.

### 6.5.2 MANAGEMENT REVIEW

The project shall conduct management review meetings where all identified risks and opportunities will be monitored, measured and analysed to evaluate if the risks remain relevant and that any new or emerging risks are identified and managed.

Any risks and opportunities that are identified from the following will be considered for inclusion:

- From internal/external audits
- From analysis of trends in complaints & incident reporting
- From environmental investigations conducted during construction such as (but not limited too):
  - Heritage Salvage Excavation works
  - Ecological & Archaeological dive inspections
- Feedback from Regulatory Authorities (such as DPE, EPA, DPI, Council)
- Independent Audits undertaken in accordance with MCoA A37
- From track of compliance with conditions of approval

The project will implement any changes necessary to its environmental management systems and processes in response to changes in risk with the intention to drive continuous improvement for the project.

### 6.5.3 ENVIRONMENTAL RECORDS

The Construction Environment & Sustainability Lead is responsible for maintaining all environmental management documents and records as current at the point of use. Types of documents and records include:

- All monitoring, inspection and compliance reports/records
- Correspondence with public authorities
- Induction and training records
- Reports on environmental incidents, other environmental non-conformances, complaints and follow-up action
- Community engagement information
- Minutes of CEMP and construction environmental management system review meetings and evidence of any action taken
- CEMP and Sub Plans
- EWMS.

All environmental management documents are subject to ongoing review and continual improvement. This includes times of change to scheduled activities or to legislative or licensing requirements.

Only the Construction Environment & Sustainability Lead, or delegate, has the authority to change any of the environmental management documentation.

## 6.6 Document Control

The Construction Environment & Sustainability Lead will coordinate the preparation, review and distribution of McConnell Dowell's environmental documents and records.

The TfNSW Environmental Manager and Project Managers will coordinate external consultation and distribution of the CEMP and Sub-plans. The consultation and distribution list for the CEMP and Sub-plans is provided in Section 1.4.

During the Project, McConnell Dowell's environmental documents and records will be stored at the main site compound / electronically.

# 7 OPERATION AND IMPLEMENTATION

## 7.1 Implementation of Environmental Management Measures

The implementation of environmental controls on site is the responsibility of the Project Manager and Supervisors. Environmental controls are to be implemented prior to the beginning of the works, wherever practical and relevant, and maintained through the length of those works.

The outputs from the planning of works and the specific environmental management measures and their implementation are outlined in Appendix C.

## 7.2 Incident Management, Reporting and Investigation

In the event of an environmental incident, Transport for NSW's Environmental Incident Procedure will be implemented by McConnell Dowell.

Onsite management of environmental incidents are the responsibility of the Manager with assistance from any other resources required to contain the incident and prevent further environmental harm.

The cause of all incidents will be subject to an investigation, convened by the Environmental Manager to determine the root causes of the incident and to ensure that remedial / corrective action is able to be implemented to ensure a repeat of the incident is avoided.

A summary and review of incidents for the duration of the Project and for the relevant month shall be included in the Project Monthly Report.

### 7.2.1 NOTIFICATION PROCEDURE

Transport for NSW and applicable Regulator (where relevant) shall be notified of incidents that trigger notification as defined in the Incident Reporting and Investigation procedure. These triggers include offsite discharges, unauthorised disturbance or destruction of fauna, flora or heritage sites and breaches and non-conformances of licences and permits issued for the Project

The Project Manager or Construction Environment & Sustainability Lead is responsible for notifying the Client and parent companies of reportable incidents.

The Construction Environment & Sustainability Lead is responsible for notifying relevant Regulators along with discussions with Transport for NSW.

### 7.2.2 INCIDENT REPORTING – DPE

DPE must be notified immediately after the Transport for NSW becomes aware of an incident as defined in the MCoA A42. The notification must identify the SSI (including the application number and the name of the SSI if it has one) and set out the location and nature of the incident. Subsequent notification must be given and reports submitted in accordance with the requirements set out in MCoA A43, included below.

A written incident notification addressing the requirements set out below must be submitted to the Department via the Major Projects website within seven days after the Proponent becomes aware of an incident.

Written notification of an incident must:

- identify the SSI and application number
- provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)

- identify how the incident was detected
- identify when the Proponent became aware of the incident
- identify any actual or potential non-compliance with terms of the approval
- describe what immediate steps were taken in relation to the incident
- identify further action that will be taken in relation to the incident
- identify a project contact for further communication regarding the incident.

In accordance with MCoA A43, within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

- a summary of the incident
- outcomes of an incident investigation, including identification of the cause 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.

### 7.2.3 INCIDENT REPORTING – DCCEEW

In accordance with EPBC-CoA 31, DCCEEW must be notified by Transport for NSW in writing of any incident (defined as any event which has the potential to, or does, impact on one or more protected matter(s) other than as authorised by the approval) or non-compliance. The notification must be given within two business days of becoming aware of the incident or non-compliance. The notification must specify:

- any condition which is or may be in breach
- a short description of the incident
- the location (including co-ordinates), date, and time of the incident. In the event the exact information cannot be provided, provide the best information available.

### 7.2.4 INCIDENT REPORTING – EPA

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

- it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations).

### 7.2.5 REPORTING – OTHER AGENCIES

Other Agencies may need to be notified by McConnell Dowell in the event of an incident, may these include:

- Emergency Services – *reporting requirements outlined in the Emergency Response Plan.*
- Local Councils

- Port of NSW Authority – *reporting requirements outlined in Attachment D of the Marine Works Management Plan*
- DPI Fisheries – in the event of a marine fauna incident
- NWPS – in the event of a terrestrial fauna incident

## 7.3 Emergency Preparedness and Response

The **Emergency Response Plan** (KFW02-MCD-ALL-GN-PLN-000001) for the Project will take into account the following factors:

- Parts of the site or adjoining properties likely to be affected.
- Degree of predictability of the emergency.
- Likely speed of onset.
- Likely effect of the emergency.

The contents of the Emergency Response Plan are to include:

- Description of the potential emergency.
- Person responsible for actioning the Emergency Response Plan (ERP).
- Equipment required to deal with the emergency including rescue equipment.
- Emergency contact numbers.
- Direction to site workers and other affected persons on what they are required to do.
- Methods used to deal with the emergency (e.g., How to use specific equipment).

Emergency services are to be contacted and invited to visit the site in order to become aware of site access and other emergency considerations, during development and implementation of the ERP.

The ERP will incorporate the following components:

- Emergency contact list (for the above).
- Emergency Reporting Instructions.
- Emergency Muster Point Location.
- Emergency Response Co-ordinator Action Plan.
- Emergency Personnel and Equipment.

The Emergency Response Plan will be displayed in prominent locations around the site and employees will be trained in its requirements. All relevant Project personnel, subcontractors and relevant emergency agencies will be instructed and rehearsed, as appropriate, in the requirements of this CEMP.

In the event of an environmental emergency incident, McConnell Dowell will provide Transport for NSW with notification within CoA A42 and will provide records of the incident, response and corrective actions as required.

# 8 PERFORMANCE EVALUATION

## 8.1 Monitoring, Measurement, Analysis and Evaluation

### 8.1.1 ENVIRONMENTAL INSPECTIONS

The Project's environmental performance will be tracked through regular monitoring and environmental inspections.

A brief overview of proposed monitoring and inspection is provided in Table 8 1. Monitoring will be undertaken by McConnell Dowell to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address approval requirements. The monitoring requirements for required aspects are included in the relevant environmental management sub plans and summarised in Table 8 2 below.

**Table 8-1 Inspection Requirements**

| Monitoring/ Inspection Requirement | Description |
|---|---|
| Environment & Sustainability Inspections | Environmental compliance inspections are carried out by the Construction Environmental Manager and Environmental Site Representative for the Project or relevant work areas. Inspections are to be conducted weekly and /or post rainfall (more than 10mm of rain in a 24hr period).<br>The findings of the Inspection are recorded on Weekly Environment & Sustainability Inspection (CMO), in which required remedial actions are also recorded, including a responsibility and timeline for completion. These shall be monitored to ensure that they are closed out in the required time frame. |
| Environmental Representative (ER) Inspections | Regularly monitor the implementation of environmental mitigation measures onsite to ensure implementation is being carried out in accordance with the document and the terms of projects approval. |
| Environmental Review Group inspections | The Environmental Review Group – generally comprising representatives of Transport for NSW, Environmental Representative, Project delivery team, regulatory authorities, National Parks and Wildlife Service, and councils (Randwick City Council, Sutherland Shire Council). The ERG will be maintained for the duration of the Project and will meet regularly and undertake environmental inspections. The role the ERG is to work collaboratively with the project team to provide proactive advice on environmental management issues on the Project.<br>The Environmental Representative, Transport for NSW staff and members of the Environmental Review Group will undertake regular inspections of works sites, and in particular critical activities throughout construction of the Project. Inspections by the Environmental Representative and Transport for NSW Project staff would typically occur on a weekly or fortnightly basis depending on the complexity and anticipated risks associated with the phase of construction. ERG inspections will typically be less frequent, more likely on a monthly or two-monthly basis depending on the construction staging of Project.<br>A member of the Project environment team will participate in all Environmental Representative, Transport for NSW and ERG inspections, and records maintained. Deficiencies and required actions will be analysed and prioritised at the completion of the inspection and timeframes for implementation of corrective actions agreed. |
| Environment Monitoring | Environment Monitoring and inspection is conducted on a routine basis; however, additional monitoring may be required in the event of an incident, complaint or change in circumstances. |

| | |
|---|---|
| | The Construction Environmental Manager and Environmental Site Representative is responsible for the implementation of on-site environmental measurements, including delegation to appropriate personnel on the Project. |
| Calibration of Monitoring Equipment | Monitoring equipment will be calibrated prior to use as required and in line with user manuals for the equipment.<br>Any equipment identified as having doubtful accuracy or precision will be removed from use and recalibrated.<br>Where any monitoring equipment is found to be out of calibration, the validity of the previous monitoring results will be assessed and documented.<br>Calibration of monitoring equipment will be recorded on Equipment Calibration Record. |

### 8.1.2 ENVIRONMENTAL MONITORING

Monitoring will be undertaken by McConnell Dowell to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address approval requirements. The monitoring requirements for required aspects are included in the relevant environmental management sub plans and summarised in Table 8-2 below.

**Table 8-2 Project monitoring program overview**

| CoA / REMM | Description | Relevant Sub-Plan or CEMP Chapter | Reporting Requirements |
|---|---|---|---|
| REMM SN1 | Monitoring program to assess performance against relevant noise and vibration criteria. | Construction Noise and Vibration Management Sub Plan | Monitoring report to be submitted to ER |
| REMM SN2 | Vibration monitoring will be carried out prior to the commencement of construction and monitored throughout construction to identify any construction-related impacts on heritage items (including on underwater heritage). | Construction Noise and Vibration Management Sub Plan | Monitoring report to be submitted to ER |
| REMM UN1 | Underwater noise monitoring will be carried out in accordance with the underwater noise monitoring procedure. | Construction Noise and Vibration Management Sub Plan | Monitoring report to be submitted to ER |
| REMM MB1 | Marine fauna observer protocol in accordance with section 5.4.1 of the Underwater Piling Noise Guidelines (Government of South Australia, 2012) during piling activities. | Biodiversity Management Sub Plan | Monitoring report to be submitted to ER |
| REMM MB10 | Pre, during and post construction seagrass monitoring program to validate construction impacts. | Biodiversity Management Sub Plan | This monitoring will be carried out by Transport for NSW. Monitoring report to be submitted to DPE |
| REMM CP2 | A turbidity monitoring specification will be developed and implemented to achieve the limits in the Turbidity Water Quality Standards Criteria Summaries; A Compilation of State/Federal Criteria (USEPA, 1998) and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality Volume 1 (ANZECC, 2000). Should the monitoring record an | Soil, Water & Contamination Management Sub Plan | Monitoring report to be submitted to ER |

| CoA / REMM | Description | Relevant Sub-Plan or CEMP Chapter | Reporting Requirements |
|---|---|---|---|
| | exceedance measures such as stopping work and rectifying the exceedances will be carried out. | | |

The monitoring procedure within the relevant sub plans will address how these activities will be undertaken. The monitoring procedure will include:

- Purpose and scope
- Details of baseline data available
- Details of additional baseline data to be obtained and when
- Details of all monitoring of the project to be undertaken
- The parameters of the project to be monitored
- The location of monitoring
- The reporting of monitoring results
- Procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory
- Minimum acceptable frequency and standards listed in applicable approvals, licences and regulations
- Relevant EPA approved methods, Australian Standards or, in the absence of an Australian Standard, industry acceptable procedures
- Targets and parameters
- Processes for recording and reporting results
- Any consultation to be undertaken in relation to the monitoring programs.

Any monitoring data (including sensitive ecological data), surveys, maps and other spatial and metadata will be prepared in accordance with the Guidelines for biological survey and mapped data (Commonwealth of Australia 2018) and the Guide to providing maps and boundary data for EPBC Act projects (Commonwealth of Australia 2021) as required.

The Environmental Representative and Transport for NSW Representative will be advised of any construction phase non-conformances from monitoring and details reported in the monthly report.

Where a non-conformance is detected or monitoring results are outside of the expected range and are directly attributable to the Project (i.e., are influenced by factors under the direct control of the Project e.g., noise from construction equipment), the process described in Section 9.1 will be implemented. Steps in the process will include:

- An analysis of the results by the construction Environmental Manager in more detail with a view of determining possible causes for the non-conformance
- A site inspection by the construction Environmental Manager or delegate
- Advising relevant personnel of the problem
- Identifying and agreeing on actions to resolve or mitigate the non-conformance
- Implementing actions to rectify or mitigate the non-conformance.

A non-conformance Environmental Incident Report and/or Environmental Improvement Notice may be issued by the Construction Environment & Sustainability Lead in response to the non-conformance problem if it is found to be construction related.

The timing for any improvement will be agreed between the relevant Engineer/Superintendent and Construction Environment & Sustainability Lead based on the level of risk (e.g., a significant risk will require immediate action).

All environmental monitoring equipment shall be maintained and calibrated according to manufacturer's specifications and appropriate records kept.

### 8.1.3 ANALYSIS AND EVALUATION

Monitoring and inspection results will be used to assess the environmental performance of the Project against the relevant criteria.

The Construction Environment & Sustainability Lead is responsible for checking monitoring and inspection results against the environmental obligations and identifying non-conformance. They are also responsible for raising a non-conformance, incident and/ or corrective action as necessary.

## 8.2 Reporting

Reporting requirements will evolve as the Project progresses. In the early phases, emphasis is on the establishment of systems, controls and competence of all personnel, while later the emphasis will shift to monitoring performance. When nearing completion (as applicable) the focus will be on final reports to address approval requirements.

The Construction Environment & Sustainability Lead is responsible for managing environmental performance reporting. The Project Manager is responsible for submitting the reports required externally.

Reporting requirements are:

- Reporting to client and key stakeholders as specified within contract documents.
- Specific reporting to regulatory agencies.
- Reporting as required by legislation.
- Monthly National Greenhouse and Energy Reporting information
- Sustainability data reporting (including energy use, water use and waste generation).

Table 8-3 out the reporting requirements applicable to the Project, timing of the reporting, who is responsible for managing preparation of the reports and the intended recipient(s).

**Table 8-3 Project Reporting Requirements**

| CoA | Report | Requirement | Timing | Responsibility | Recipient |
|---|---|---|---|---|---|
| N/A | Monthly environmental report | For incorporation in Project Monthly Reports including environmental statistics (i.e., incidents, regulatory action, complaints on environmental issues), regulatory and authority considerations, monitoring program performance and key environmental issues | Within 10 working days of the end of each calendar month. | Construction Environment & Sustainability Lead | Transport for NSW |
| N/A | ER inspection report | Report of site environmental performance following routine inspections. | Monthly | Environmental Representative | Transport for NSW, DPE |
| N/A | Environmental risk assessment | Conducted for each construction phase, Project changes and significant issues. | Prior to construction during development of CEMP and as | Construction Environment & Sustainability Lead, Construction Manager | Transport for NSW |

| CoA | Report | Requirement | Timing | Responsibility | Recipient |
|---|---|---|---|---|---|
| | | | required thereafter. | | |
| MCoA C14 | Monitoring results and/or report | Report on monitoring data recorded and potential exceedances against criteria. | Refer to Section 8.1 | Construction Environment & Sustainability Lead | Transport for NSW, DPE |
| N/A | Transport for NSW environmental inspection reports | Response to matters raised in Transport for NSW site inspections. | As required. Typically, every two weeks for Transport for NSW inspection reports. | Construction Environment & Sustainability Lead | Transport for NSW |
| N/A | EPA and/or DPE environmental inspection reports | Response to matters raised in DPIE and/or EPA site inspections. | As required. Typically, monthly. | Construction Environment & Sustainability Lead | Transport for NSW, EPA, DPE |
| MCoA A32 | ER reports | Monthly report of activities on site | Monthly | ER | DPE |
| N/A | Waste Avoidance and Resource Recovery Report | Information relating to wastes generated or recycled. | Annual within one month form 1 July and at actual completion date | Construction Environment & Sustainability Lead | Transport for NSW |
| N/A | Air Emissions Performance Report | Report on conformity, or otherwise, of mobile non-road diesel plan and equipment with relevant standards or approved equivalent emission standards. | Annual before 31 July and at actual completion date | Construction Environment & Sustainability Lead | Transport for NSW |
| EPBC CoA 27 | EPBC Annual Compliance Report | Prepare a compliance report for each 12-month period following the date EPBC approval. | Annually following the date of EPBC Approval | Transport for NSW | DCCEEW |

## 8.3 Auditing

### 8.3.1 INTERNAL AUDITS

Internal Environmental audits are to be carried out and reported in accordance with the requirements of HSEQ **Audit Internal** procedure (HSEQ-SYS-PRO003-GEN-GRP).

In addition to these internal audits, McConnell Dowell will cooperate with any external environmental audits conducted by an authorised party in relation to compliance with contract or legislative requirements.

**Table 8-4 Internal Audit Requirements**

| Audit | Requirement | Timing |
|---|---|---|
| Internal audit | Verify compliance with approval and legal requirements, Transport for NSW specifications and construction documentation | The first audit within three months of the commencement of construction and then at six monthly intervals thereafter. The final submitted within five working days of contract completion date. |

### 8.3.2 INDEPENDENT AUDITS

Auditing will also be undertaken by an independent environment auditor who is engaged by TfNSW and independent to the Kamay Ferry Wharves in accordance with ISO 19011:2014 - Guidelines for Quality and/ or Environmental Management Systems Auditing, Independent Audit Post Approval Requirements (DPE, 2020) and Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019).

**Table 8-5 Independent Audit Requirements**

| Audit | Requirement | Timing |
|---|---|---|
| Independent environmental audit to meet MCoA A37 | Verify compliance with Project Approval, CEMP and sub plans | Within the first 12 weeks of the commencement of construction and;<br>Ongoing throughout construction at intervals, no greater than 26 weeks from the date of the initial Independent Audit or as otherwise agreed by the Secretary. |
| Independent environmental audit to meet EPBC-CoA 35 | Ensure that an independent audit of compliance with the EPBC conditions is conducted | Every five-year period following the commencement of the action until this EPBC approval expires.<br>*Note – Construction will be completed prior to the submission of the first Audit.* |

## 8.4 Compliance Tracking

A compliance tracking register has been developed for the Project (Appendix C). The requirements of the compliance tracking include:

- Provisions for notification of the commencement of works prior to the commencement of construction and prior to the commencement of operation of the Project (including prior to each stage, where works are being staged)
- Provisions for periodic review of Project compliance with the requirements of the Project Approval, CEMP and sub plans
- Provisions for periodic reporting of compliance status against the requirements of the Project Approval, CEMP and sub plans
- A program for independent environmental auditing in accordance with ISO 19011:2014 - Guidelines for Quality and/ or Environmental Management Systems Auditing, Independent Audit Post Approval Requirements (DPE, 2020) and Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019)
- Mechanisms for reporting and recording incidents and actions taken in response to those incidents
- Provisions for reporting environmental incidents during construction

- Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.

A summary of the required compliance reporting for the construction phase of the project and as tracked and monitored in the compliance tracking register (Appendix C) is provided in Table 8-6.

**Table 8-6 Required Compliance Reporting**

| Report | Requirement | Timing | Responsibility | Recipient |
|---|---|---|---|---|
| Annual Construction compliance reporting | Periodic review of compliance status of the Project against the requirements of the Project approval during construction | 12 months following the commencement of construction and then at 12 months intervals thereafter during construction | McConnell Dowell and Transport for NSW to review and submit | DPE & DCCEEW |
| Annual compliance reporting | Preparation of compliance reports consistent with the Annual Compliance Report Guidelines (2014) | The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister | McConnell Dowell and Transport for NSW to review and submit | DCCEEW |

## 8.5 Performance evaluation & Improvements

The project shall conduct management review meetings where all identified risks and opportunities from the TPRR will be monitored, measured and analysed to evaluate if the risks remain relevant and that any new or emerging risks are identified and managed. Any risks and opportunities that are identified during internal/external audits and customer satisfaction surveys will be considered for inclusion into the TPRR.

The project will implement any changes necessary to its environmental management systems and processes in response to changes in risk with the intention to drive continuous improvement for the project.

## 8.6 Management Review

### 8.6.1 TRANSPORT FOR NSW REVIEW

During delivery, Transport for NSW will conduct regular reviews of the project. These include:

**Table 8-7 Transport for NSW Management Reviews**

| Meeting | Purpose | Frequency | Attendees |
|---|---|---|---|
| Management review | Identification of areas of opportunity for improved environmental performance<br>Analysis of the causes of nonconformities and deficiencies, including those identified in environment inspections and audits | Quarterly | Transport for NSW and McConnell Dowell representatives |

| Meeting | Purpose | Frequency | Attendees |
|---|---|---|---|
| | Verification of the effectiveness of corrective and preventative actions.<br>Highlighting any changes in procedures resulting from process improvement. | | |
| PCG Meeting | Project Control Group, review of environmental, quality and safety aspects of the project<br>Review of construction contractor performance across the project | Monthly | Transport for NSW and McConnell Dowell |
| Project Review Meeting | Ensuring compliance of Site Management to the contractors EMS | Monthly | McConnell Dowell |

### 8.6.2 MCCONNELL DOWELL MANAGEMENT REVIEW

McConnell Dowell Executive Committee (EXCO) may include the Project in their regular review of the organisation's environmental management system to ensure its continuing suitability, adequacy and effectiveness.

The 12 monthly EXCO review includes consideration of:

- The status of actions from previous management reviews.
- Changes in:
  - External and internal issues that are relevant to the environmental management system.
  - The needs and expectations of interested parties, including compliance obligations.
  - Its significant environmental aspects.
  - Risks and opportunities.
- The extent to which environmental objectives have been achieved.
- Information on the organisation's environmental performances, including trends in:
  - Nonconformities and corrective actions.
  - Monitoring and measurement results.
  - Fulfilment of its compliance obligations.
  - Audit results.
- Adequacy of resources.
- Relevant communication(s) from interested parties, including complaints.
- Opportunities for continual improvement.

The outputs of the management review shall include:

- Conclusions on the continuing suitability, adequacy and effectiveness of this document and the environmental aspects of MMS.
- Decisions related to continual improvement opportunities.
- Decisions related to any need for changes to this document and the environmental aspects of MMS, including resources.

- Actions, if needed, when environmental objectives have not been achieved.
- Opportunities to improve integration of this document and the environmental aspects of MMS with other business processes, if needed.
- Any implications for the strategic direction of the organisation.

Documented information shall be retained as evidence of the results of management reviews.

### 8.6.3 PROJECT MANAGEMENT REVIEW

Review of the implementation and effectiveness of this CEMP and associated documents will be performed within the first 3 months of construction and on an annual basis thereafter as minimum, by the Project management team. The responsibility for this review lies with the Project Manager.

The review will include:

- Progress of the implementation of this CEMP.
- Effectiveness of this CEMP.
- Adequacy of resources.
- Effectiveness of training and training requirements.
- Results of inspections and audits.
- Critical non-conformances or repeated non-conformances.
- Overall performance against environmental compliance obligations.
- Organisational changes, changes to legislation and other obligations.
- Trend analysis of monitoring results, complaints and incidents.

# 9 IMPROVEMENT

## 9.1 Non-Compliance, Non-Conformance and Corrective Actions

Corrective and preventative actions may be identified from inspections, audits, non-conformances, non-compliances, incidents, management reviews and complaints. Correctives and preventative actions will be raised, assigned, tracked and closed out in the CMO compliance database.

The CMO database is used to record and monitor close-out of all corrective actions arising from hazard reports, incident reports, audits and inspections.

CMO is to be accessible to Project Management personnel and key team members, including environmental management and HSEQ representatives for review and close out of outstanding items.

Persons responsible for close out of corrective actions are to ensure that the items are closed out prior to the end of the close out date. Unclosed items that have passed the close out date shall be raised and discussed at team meetings and elevated as required for management action.

Where any changes and improvement to working practices are identified through the investigation of environmental incidents, these will be assessed and incorporated into the CEMP as part of the incident reporting and investigation process.

### 9.1.1 HSEQ ALERTS

Where a repeat incident occurs or where there is a significant incident, a HSEQ Alert may be issued.

HSEQ Alerts are used where incidents with broader implications and lessons that may be applicable to other Projects and Facilities are summarised and distributed to disseminate findings more widely. HSEQ Alerts from other Projects and Facilities may also be relevant to this Project Where applicable these lessons are communicated to the work force through Toolbox Talks and Pre-Start Meetings.

## 9.2 Continual Improvement

This CEMP has been developed using the best available methods, procedures, expertise and experience available to McConnell Dowell and as such it represents best practice environmental management standards. However, consistent with the philosophy of continuous improvement, there will be opportunities during the Project work to implement new or improved procedures, aside from the annual review of this CEMP and associated documents.

During the contract term relevant changes in technology and work methods will be examined for opportunities to improve the processes and systems for the benefit of all Project stakeholders. The Project Manager will be accountable to Transport for NSW and / key stakeholders for ensuring continuous improvement in all aspects of the design, construction, commissioning and completion of the Project.

# APPENDIX A: ENVIRONMENTAL AND SUSTAINABILITY POLICIES

## Environmental Policy

**McConnell Dowell undertakes a reflective, resourceful, inclusive and flexible approach to environmental management, underpinned by a robust ISO 14001 certified integrated management system. McConnell Dowell acts today with the future in mind and commits to:**

- Having visible and demonstrated environmental leadership throughout the business to equip, inspire, empower and lead our people to win and deliver environmentally sound projects.
- Complying with applicable environmental legislation, regulations, codes of practice, customer and project specific requirements.
- Establishing measurable objectives and targets to quantify our environmental performance, committing to and demonstrating continual improvement.
- Ensuring strong and positive leadership engagement with tender and project delivery teams at all levels to understand and resolve the environmental challenges they face.
- Monitoring our environmental performance and identifying initiatives that lead to improved environmental outcomes.
- Developing and implementing methods to protect the environment, prevent pollution and eliminate or minimise significant environmental impacts.
- Ensuring the efficient use of resources including energy, water and materials, and providing responsible waste management.
- Promoting innovative thinking and practices to achieve positive environmental outcomes.
- Understanding our customers, business partners and subcontractors' environmental capabilities and priorities and working together to develop common strategies to achieve shared goals.
- Identifying and communicating non-conformities, lessons learnt and corrective actions arising from environmental incidents to enhance environmental performance.
- Provision of the necessary resources and management support to achieve environmental goals.
- Equipping all employees with the knowledge, skills and resources to achieve our environmental goals. Engaging with employees, subcontractors, customers, and other key stakeholders on environmental issues.

**Scott Cummins**
Chief Executive Officer
McConnell Dowell Corporation Limited

MMS

# Sustainability Policy

McCONNELL DOWELL
CREATIVE CONSTRUCTION™

**McConnell Dowell undertakes its activities integrating social, environmental, economic and good corporate governance considerations. We do this with the objective of avoiding and mitigating harm to the environment, contributing to and enhancing the resilience of the communities in which we operate, and creating shared value for our customers and our people. We commit to:**

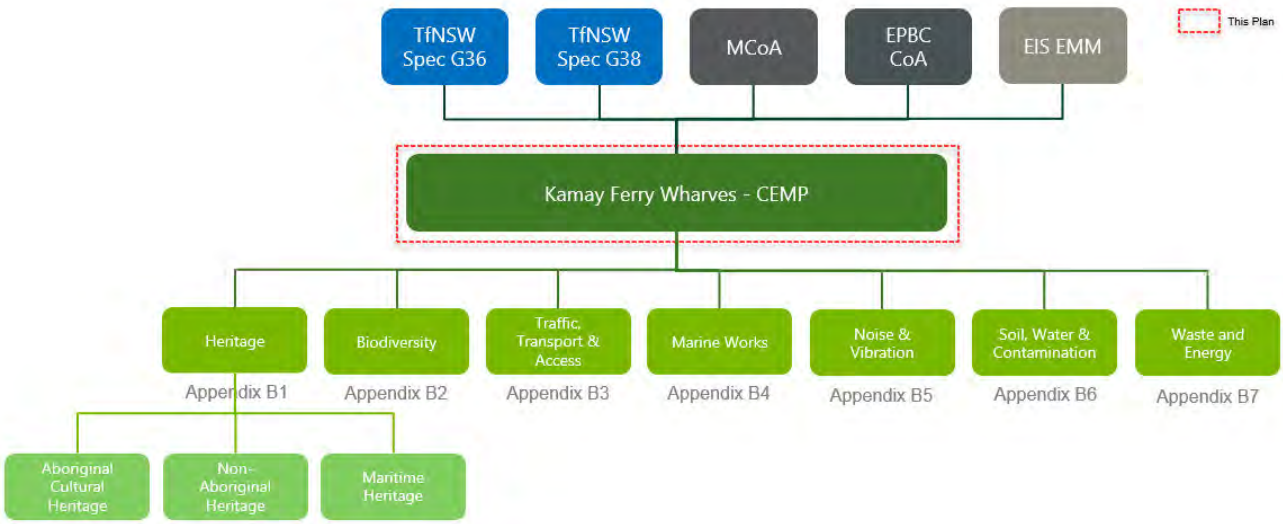
- Industry leadership through our professionalism, competence and active industry participation.
- Industry leading approaches to shared value generation through the delivery of safe, smart and efficient infrastructure.
- Accountability and management responsibility through delivering on what we promise and understanding and meeting our customers' needs and community expectations.
- Promotion of sustainable construction practices, including the prevention and mitigation of environmental pollution, climate change adaptation, the efficient and sustainable use of resources, and the principles of inclusion, engagement, equality and diversity.
- Generating growth in our business and the industry by fostering long-term, strong and positive partnerships with customers, communities, regulators, industry bodies and other key stakeholders.
- Addressing the risk of modern slavery across the business and implementation of our Modern Slavery Statement.
- Taking all reasonable steps to prevent modern slavery in our operations and supply chains.
- Ensuring our procurement choices and selection of suppliers and subcontractors is achieved in a balanced and holistic manner which includes sustainability.
- Actively encouraging continual improvement and promoting innovation, adaptability and resilience.
- We actively encourage the implementation of initiatives that leave a positive legacy for our stakeholders, the environment and communities in which we operate.
- Consideration of the appropriate use of materials, including water and energy, and the resulting generation of waste and carbon emissions in all our activities. Understanding and reducing our carbon, energy, materials and water footprints.
- Creating opportunities and involving, engaging and integrating with the communities in which we work.
- Nurturing the health, wellbeing and quality of life of those we work with and alongside. Everyone goes home without harm, every day.
- Protecting our business, our partners and customers through good corporate governance, compliance and sound risk management

**Scott Cummins**
Chief Executive Officer
McConnell Dowell Corporation Limited

MMS

# APPENDIX B: CEMP & SUB PLANS OVERVIEW

- **Appendix B1** – Heritage Management Sub Plan (Including Aboriginal Cultural Heritage, Non-Aboriginal Heritage, and Maritime Heritage).
- **Appendix B2** – Biodiversity Management Sub Plan (Flora and Fauna)
- **Appendix B3** – Traffic, Transport and Access Management Sub Plan
- **Appendix B4** – Marine Works Management Sub Plan
- **Appendix B5** – Construction Noise and Vibration Management Sub Plan
- **Appendix B6** – Soil, Water & Contamination Management Sub Plan
- **Appendix B7** – Waste and Energy Management Sub Plan



# APPENDIX C: LEGAL REQUIREMENTS AND COMPLIANCE TRACKING REGISTER

## Relevant legislation and guidelines

### Legislation

As outlined in Chapter 2 of the EIS, key environmental legislation relevant to the project include:

- Environmental Planning and Assessment Act 1979 (NSW)
- National Parks and Wildlife Act 1974 (NSW)
- Aboriginal Land Rights Act 1983 (NSW)
- Roads Act 1993 (NSW)
- Fisheries Management Act 1994 (NSW)
- Contaminated Land Management Act 1997 (NSW)
- Ports and Maritime Administration Regulation 2012 (NSW)
- Crown Land Management Act 2016 (NSW)
- Marine Safety Regulation 2016 (NSW)
- Heritage Act 1977 (NSW)
- Environment Protection and Biodiversity Act 1999 (Cth)

### Additional approvals, licences, permits and requirements

As outlined in Chapter 2 of the EIS, approvals, licenses and/or notification requirements under NSW legislation that may apply to the project include:

| Legislation | Requirement type | Description |
|---|---|---|
| National Parks and Wildlife Act 1974 (NSW) | Approval | The project is consistent with the Kamay Botany Bay National Park Plan of Management (NSW DPIE, 2020a). Refer to Chapter 3 (Strategic justification and project need) and Chapter 27 (Project justification and conclusion).<br>Consent and appropriate tenure is required from National Parks and Wildlife Services in accordance with the NPW Act. |
| Aboriginal Land Rights Act 1983 (NSW) | Notification or approval | There are four Aboriginal land claims which affect the construction boundary for the project as shown in Figure 2-4 and Figure 2-5. These include:<br>• A land claim over all of Botany Bay (12821)<br>• A land claim over the La Perouse headland (35528)<br>• Two land claims over the Crown Land at La Perouse (32010, 42494).<br>Transport for NSW will work with the land claim applicants (La Perouse Local Aboriginal Land Council and NSW Aboriginal Land Council) obtain consent or resolve the land claims prior to construction of the project on those lands. |
| Roads Act 1993 (NSW) | Approval | Consent is required under section 138 of the *Roads Act 1993* for any work or activities in the public reserve or on a public road, |

| Legislation | Requirement type | Description |
|---|---|---|
| | | namely associated with the additional car parking provisions at La Perouse. |
| Fisheries Management Act 1994 (NSW) | Notification | Notification to the Minister for Primary Industries for any dredging or reclamation works are required under section 199 of the *Fisheries Management Act 1994*. There is no dredging as part of the project. The construction of the temporary causeway at Kurnell would meet the definition of reclamation work, therefore notification to the Minister for Primary Industries would be required for this work. |
| Contaminated Land Management Act 1997 (NSW) | Notification | Section 60 of the *Contaminated Land Management Act 1997* applies as there is potential for land at La Perouse and Kurnell to be contaminated. This requires that Transport for NSW report known contamination to the EPA. |
| Ports and Maritime Administration Regulation 2012 (NSW) | Approval | As the project would disturb sediment, written permission from the Harbour Master would be required before the project commences in accordance with section 67ZN of the Ports and Maritime Administration Regulation 2012. |
| Crown Land Management Act 2016 (NSW) | Approval | Crown Lands have noted that Lot 5113, DP 752015 is the land on which the proposed wharf tie-in at La Perouse is located, is Crown Land, and is likely to be impacted during construction and operation of the wharf. In addition, the construction boundary sits within another Crown Land allotment at Lot 7045, DP1026891. Figure 2-2 and Figure 2-3 shows land zoning and ownership. Approval for a licence will be required. |
| Marine Safety Regulation 2016 (NSW) | Licence | The project would be subject to licencing under the terms of section 97 of the Marine Safety Regulation 2016 as it is located within navigable water in the harbour as defined in the *Marine Safety Act 1998* (NSW). The Harbour Master and Ports Authority will need to be informed of navigational exclusions |

## Guidelines

Refer to specific sub plans for guidelines applicable for that environmental aspect.

Legal requirements

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
|---|---|---|---|---|---|
| **General** | | | | | |
| *Environmental Planning and Assessment Act, 1979* | All | Comply with the terms, Minister for Planning's approval for the project. Obtain the Minister's approval for any project modifications that are not consistent with the planning approval. | S5.14<br>S5.25 | Yes | CEMP Table 1-1 |
| *National Parks and Wildlife Act 1974* | All | Authorisation is needed for the project | S151A(1b) | Yes | Approval from NPWS |
| *Roads Act 1993* | Work or activities in a public reserve or public road | Consent is required for any work or activities in the public reserve or on a public road, namely associated with the additional car parking provisions at La Perouse. | S138 | Yes | Traffic Management Sub Plan |
| *Crown Land Management Act 2016* | Crown land | Approval to grant licences, permissions, easements or rights of way over land reserved under the *Crown Land Management Act 2016*. Crown Lands have noted that Lot 5113, DP 752015 is the land on which the proposed wharf tie-in at La Perouse is located, is Crown Land, and is I kely to be impacted during construction and operation of the wharf. In addition, the construction boundary sits within another Crown Land allotment at Lot 7045, DP1026891. | S2 | Yes | Crown land approval |
| **Water** | | | | | |
| *Protection of the Environment Operations Act 1997* | Water pollution | Do not cause water pollution (other than to a sewer), except in accordance with the conditions of an Environment Protection Licence. | S120<br>S122 | Yes | CEMP Section 4.1 and 4.3 |
| *Ports and Maritime Administration Regulation 2012* | Disturb sediment in Botany Bay | Written permission from the Harbour Master would be required before the project commences. | S67N | Yes | Marine Works Management Sub Plan |
| *Marine Pollution Act 2012* | Operations | Avoid pollution of State waters from vessels | Part 3 – Part 9 | Yes | Soil and Water Quality Management Sub Plan |
| *Protection of the Environment Operations Act 1997* | Plant maintenance and operation | Do not operate plant if it emits noise caused by poor maintenance or operation. | S139 | Yes | CEMP Section 4.8 |

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
|---|---|---|---|---|---|
| *Protection of the Environment Operations Act 1997* | Materials management | Do not cause noise by failing to properly and efficiently deal with materials. | S140 | Yes | CEMP Section 4.8 |
| Protection of the Environment Operations (Noise Control) Regulation 2008 | Marine vessels – offensive noise and noise control equipment | As owner or captain, do not allow a vessel to be used on navigable waters so as to emit offensive noise.<br>Do not use a vessel on navigable waters if its noise control equipment is defective. | cl. 30-31<br>cl. 32 | NA | CEMP Section 4.8 |
| **Contaminated material** | | | | | |
| *Protection of the Environment Operations Act 1997* | Land pollution | Do not cause or permit land pollution other than under authority of a licence or regulation. (However, it is not a land pollution offence to place virgin excavated natural material or lawful pesticides and fertilisers on land, or by placing matter on land that has been notified to the EPA as an unlicensed landfill and which is operated in accordance with the regulations.) | S142A – S142E | Yes | CEMP Section 4.1 and 4.3 |
| *Contaminated Land Management Act 1997* | Reporting contamination | Notify the EPA if;<br>• Contaminants exceed thresholds contained in guidelines or the regulations where contamination has entered or will foreseeably enter neighbouring land, the atmosphere, groundwater or surface water.<br>• Contaminants in soil are equal to or exceed guideline levels with respect to the current or approved use of the land.<br>• Contamination meets other criteria that may be prescr bed by the regulations. | S60 | Yes | CEMP Section 4.1 and 4.3 |
| **Biodiversity** | | | | | |
| *Biodiversity Conservation Act 2016* | Fauna | Do not harm any animal that is; of a threatened species, that is part of a threatened ecological community or is a protected animal, unless authorised under other legislation (e.g., planning approval). | S2.1<br>S2.8 | Yes | Biodiversity Management Sub Plan |

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
|---|---|---|---|---|---|
| *Biodiversity Conservation Act 2016* | Habitat | Do not damage habitat of a threatened species or ecological community unless authorised under other legislation (e.g., planning approval). | S2.4<br>S2.8 | Yes | Biodiversity Management Sub Plan |
| *Biodiversity Conservation Act 2016* | Biodiversity | Do not damage declared areas of outstanding biodiversity value unless authorised under other legislation (e.g., planning approval). | S2.3<br>S2.8 | Yes | Biodiversity Management Sub Plan |
| *Biodiversity Conservation Act 2016* | Flora | Do not pick a plant that is; of a threatened species, that is part of a threatened ecological community or is a protected plant, unless authorised under other legislation (e.g., planning approval). | S2.2<br>S2.8 | Yes | Biodiversity Management Sub Plan |
| *Biosecurity Act 2015* | Weeds | Manage weeds on site in accordance with the relevant Regional Strategic Weed Management Plan. | S22 | Yes | CEMP Section 4.12 |
| *Biosecurity Regulation 2017* | Pests and Diseases | Notify the presence any pest or disease listed in Schedule 1 of the Biosecurity Regulation 2014, within 1 working day after suspecting or becoming aware of the pest or disease. | Regulation cl.7<br>Schedule 1 | Yes | Biodiversity Management Sub Plan |
| *Fisheries Management Act 1994* | Dredging or reclamation | Provide the Minister for Primary Industries 28 days' notice of planned dredging or reclamation work. | S199 | Yes | Biodiversity Management Sub Plan |
| *Environment Protection Biodiversity Conservation Act, 1999 (Commonwealth)* | Flora and fauna conservation | Do not kill, injure or take a member of a listed threatened species without a permit. | Part 13 | Yes | Biodiversity Management Sub Plan |
| | | Comply with the terms of any EPBC Act approval for the project. | | NA | CEMP Table 1-1 |
| **Waste** | | | | | |
| *Protection of the Environment Operations Act 1997* | Littering | Do not litter in a public place or an open private place. Do not litter from a vehicle.<br>Only deposit advertising material in receptacles provided for mail or newspapers or under the door of the premises.<br>Do not deposit advertising material on or in vehicles. | Part 5.6A | Yes | Waste and Energy Management Sub Plan |

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
|---|---|---|---|---|---|
| *Protection of the Environment Operations Act 1997* | Waste and transportation | Do not undertake a scheduled waste activity unless in accordance with an environmental protection licence.<br>A licence must be obtained when construction and demolition wastes are applied to land under certain circumstances. This includes the reincorporation of crushed road base material back into roads and the placing of excess fill material onto properties. A licence is not required if the material:<br>• Is VENM.<br>• Does not exceed 200 tonnes in the Sydney, Newcastle and Wollongong areas, or 20,000 tonnes outside these areas.<br>• Is covered by a "general exemption". Current exempted materials are ENM, recycled aggregates and raw mulch. These exemptions are conditional and require some chemical testing of materials before they are placed onto land.<br>• A licence must be obtained if more than 2,500 tonnes (or cubic metres) is stored on a stockpile site at any one time, or more than 30,000 tonnes of waste is received per year from off site. | Part 3.2<br>Schedule 1 | Yes | Waste and Energy Management Sub Plan |
| | | Only transport waste to a facility that can lawfully accept the waste. | S143 | Yes | Waste and Energy Management Sub Plan |
| | | Do not dispose of waste in a manner that harms or is likely to harm the environment. | S115 | Yes | Waste and Energy Management Sub Plan |
| *Protection of the Environment Operations (Waste) Regulation 2005* | Waste and transportation | Comply with general requirements for the transport of waste. For example, any vehicle used by the person to transport waste must be kept in a clean condition and be maintained so as to prevent spillage of waste. For some wastes only licensed transporters can be used. | Regulation cl.49 | Yes | Waste and Energy Management Sub Plan |

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
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| | | Comply with record keeping requirements in relation to the transport of certain types of waste. | Regulation Part 3 | Yes | Waste and Energy Management Sub Plan |
| **Heritage** | | | | | |
| *Heritage Act 1977* | Heritage | Notify the heritage Council on discovery of a relic | S146 | Yes | Heritage Management Sub Plan |
| *National Parks and Wildlife Act 1974* | Aboriginal places and objects | Notify the NPWS within reasonable time of becoming aware of the location or discovery of certain Aboriginal objects. | S89A | Yes | Heritage Management Sub Plan |
| *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)* | Protection of areas and objects | Report any discovery of Aboriginal remains to the Federal Minister for the Environment and Heritage. | S20 | Yes | Heritage Management Sub Plan |
| | | Comply with the provisions of any declaration in relation to a significant Aboriginal area or object. | S22 | Yes | Heritage Management Sub Plan |
| *Aboriginal Land Rights Act 1983* | All | Obtain consent or resolve the land claims (La Perouse Local Aboriginal Land Council and NSW Aboriginal Land Council) prior to construction of the project on those lands. | S2 | Yes | Heritage Management Sub Plan |
| **General** | | | | | |
| *Protection of the Environment Operations Act 1997* | Harming the environment | Do not risk harming the environment by wilfully or negligently:<br>disposing of waste unlawfully.<br>causing any substance to leak, spill or otherwise escape (whether or not from a container); or<br>emitting an ozone depleting substance | S115<br>S116<br>S117 | Yes | Waste and Energy Management Sub Plan |
| *Protection of the Environment Operations Act 1997* | Control equipment | Properly and efficiently maintain and operate any installed pollution control equipment (including monitoring devices). | S167 | Yes | Soil and Water Quality Management Sub Plan |
| *Protection of the Environment Operations Act 1997* | Notification of pollution incidents | Notify the EPA immediately of pollution incidents where material harm to the environment is caused or threatened. | S148 | Yes | CEMP Section 3.7.2 |
| *Protection of the Environment* | Site licensing | Do not carry out or allow an activity listed in Schedule 1, or carry out work | S47<br>S48 | Yes | CEMP Section 3.11.1 |

| Act | Activity / aspect | Requirement | Reference | Division 5.2 applicability | Relevant section of CEMP or supporting documentation |
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| *Operations Act 1997* | | to enable such an activity, unless the premises are licensed by the EPA. | | | |
| **Other** | | | | | |
| *Dangerous Goods (Road and Rail Transport) Act 2008* | Hazards and risks | Ensure that dangerous goods are transported in a safe manner. | S9 | Yes | Soil and Water Quality Management Sub Plan |
| *Pesticides Act 1999* | Hazards and risks | Use pesticides in an environmentally sensitive manner.<br>Do not use an unregistered pesticide without a permit.<br>Read the label or permit for the pesticide.<br>Use registered pesticides in accordance with instructions on the label.<br>Do not use any restricted pesticide unless authorised by a certificate of competency or a pesticide control order under the Act.<br>Compliance with pesticide codes of practice is required. | S12<br>S13<br>S14<br>S15<br>S17 | Yes | CEMP Section 4.12 |
| *National Greenhouse and Energy Reporting Act, 2007* and Regulations 2008 | Greenhouse gas emissions | Accounting and reporting of greenhouse gases produced and energy consumed during construction. Applicability dependent on thresholds. | - | Yes | Waste and Energy Management Sub Plan |

Minister Conditions of Approval

| MCoA Ref | Description | Owner | Evidence |
|---|---|---|---|
| **Administrative Conditions** | | | |
| **A01** | The Proponent must carry out the SSI in accordance with the terms of this approval and generally in accordance with the:<br>(a) Kamay Ferry Wharves Environmental Impact Statement (the EIS), dated June 2021 ;<br>(b) Kamay Ferry Wharves Response to Submissions Report (the Submissions Report), dated October 2021; and<br>(c) Kamay Ferry Wharves Marine Biodiversity Offset Strategy (the MBOS), dated November 2021 | ALL | Noted |
| **A02** | The SSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval. | ALL | Noted |
| **A03** | In the event of an inconsistency between:<br>(a) the terms of this approval and any document listed in Condition A1 inclusive, the terms of this approval will prevail to the extent of the inconsistency; and<br>(b) any document listed in Condition A1 inclusive, the most recent document will prevail to the extent of the inconsistency.<br><br>Note: For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document. | ALL | Noted |
| **A04** | The Proponent must comply with all written requirements or directions of the Planning Secretary, including in relation to:<br>(a) the environmental performance of the SSI;<br>(b) any document or correspondence in relation to the SSI;<br>(c) any notification given to the Planning Secretary under the terms of this approval;<br>(d) any audit of the construction or operation of the SSI;<br>(e) the terms of this approval and compliance with the terms of this approval (including anything required to be done under this approval); the carrying out of any additional monitoring or mitigation measures; and<br>(g) in respect of ongoing monitoring and management obligations, compliance with an updated or revised version of a guideline, protocol, Australian Standard or policy required to be complied with under this approval. | ALL | Noted |
| **A05** | This approval lapses five years after the date on which it is granted, unless work has physically commenced on or before that date. | ALL | Noted |
| **A06** | References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Australian Standards or policies in the form they are in as at the date of this approval, unless otherwise approved by the Planning Secretary. | ALL | Noted |
| **A07** | The SSI may be constructed and operated in stages (including but not limited to temporal, location or activity-based staging). Where staged construction and/or operation is proposed, a Staging Report (for either or both construction and operation as the case may be) must be prepared. The Staging Report must be endorsed by the ER and then submitted to the Planning Secretary for information no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).<br><br>Note: Unless otherwise specified in this approval, early works are a stage of construction. | N/a | |

| MCoA Ref | Description | Owner | Evidence |
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| A08 | The Staging Report must:<br>(a) if staged construction is proposed, set out how the construction of the whole of the SSI will be staged, including details of work and activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;<br>(b) if staged operation is proposed, set out how the operation of the whole of the SSI will be staged, including details of activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);<br>(c) specify how compliance with conditions will be achieved across and between each of the stages of the SSI; and<br>(d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.<br><br>Note: A Staging Report may reflect the staged construction and operation of the project through geographical activities, temporal activities or activity-based contracting and staging. | N/a | |
| A09 | The SSI must be staged in accordance with the Staging Report, and submitted for information to the Planning Secretary. | N/a | |
| A10 | Where staging is proposed, the terms of this approval that apply or are relevant to the work or activities to be carried out in a specific stage must be complied with at the relevant time for that stage. | N/a | |
| A11 | Where changes are proposed to the staging of construction or operation, a revised Staging Report must be prepared, endorsed by the ER and submitted to the Planning Secretary for information no later than one month prior to the proposed change in the staging. | N/a | |
| A12 | Should a Construction Environmental Management Framework (CEMF) be submitted for approval under Condition A15, the Staging Report must be submitted with the CEMF, i.e., no later than one month before the lodgement of any CEMP, CEMP Sub-plan or CMP to the Planning Secretary for approval. | N/a | |
| A13 | Any document that must be submitted or action taken within a timeframe specified in or under the terms of this approval may be submitted or undertaken within a later timeframe agreed with the Planning Secretary. This condition does not apply to the written notification required in respect of an incident. | All | Noted |
| A14 | Where the terms of this approval require consultation to be undertaken, evidence of the consultation undertaken must be submitted to the Planning Secretary and ER (as relevant) with the corresponding documentation. The evidence must include:<br>(a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;<br>(b) a log of the dates of engagement or attempted engagement with the identified party;<br>(c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;<br>(d) outline of the issues raised by the identified party and how they have been addressed; and<br>(e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed. | All | Noted |

| MCoA Ref | Description | Owner | Evidence |
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| A15 | A Construction Environmental Management Framework (CEMF) may be prepared to facilitate the approval of construction environmental management and monitoring plans required under Conditions C1 and C15. The CEMF must:<br>(a) identify the Construction Environmental Management Plans (CEMPs), CEMP Sub-plans and Construction Monitoring Programs (CMP) required for each stage of construction consistent with the Staging Report prepared under Condition A7;<br>(b) document the proposed structure of the CEMPs, CEMP Sub-plans and CMPs for the relevant stage of construction;<br>(c) provide, by way of a Risk Matrix, an assessment of the predicted level of environmental and social risk, including the potential level of community concerns posed by each construction stage. This must use a process consistent with AS/NZS ISO 31000: 2018; Risk Management — Guidelines; and<br>(d) nominate the endorsement level for the CEMPs, CEMP Sub-plans and CMPs required for each construction stage. The endorsement level being one of the following:<br>i) Low Risk — self endorsed and consultation with agency and council stakeholders is not mandatory;<br>ii) Medium Risk — endorsed by the ER and consultation with stakeholders required; and<br>iii) High Risk — endorsed by the Planning Secretary and consultation with stakeholders required.<br><br>For a Low-Risk Stage(s) the requirements of Part C of this approval do not apply. In these circumstances, a CEMP, CEMP Sub-pan and CMP, may be substituted with an alternate process such as a Construction Method Statement or the like.<br>The CEMF must be endorsed by the ER and then submitted no later than one month before the lodgement of any CEMP, CEMP Sub-plan or CMP to the Planning Secretary for approval.<br>Note: The Planning Secretary may vary the CEMF in relation the endorsement authority for the CEMPs, CEMP Sub-plans and CMPs. | N/a | |
| A16 | The approved CEMF must be implemented for the duration of construction. | MCD | CEMP |
| A17 | Where changes are proposed to the staging of construction, a revised CEMF must be prepared, endorsed by the ER and submitted to the Planning Secretary for approval no later than one month prior to the proposed change in the staging. | MCD | CEMP |
| A18 | Strategies, plans or programs required by this approval can be submitted on a progressive basis, with the agreement of the Planning Secretary.<br>With the agreement of the Planning Secretary, the Proponent may prepare the updated strategy, plan or program without undertaking all the consultation required under the applicable condition in this approval.<br>Strategies, plans or programs required by this approval can be combined in one document, as set out in documents in Condition A1 or with agreement with the Planning Secretary.<br><br>Notes:<br>*1. While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and*<br>*2. If the submission of any strategy, plan or program is to be undertaken in a progressive manner, then the relevant strategy, plan or program must clearly describe the specific stage to which strategy, plan or program applies, the relationship of this stage to future stages, and the trigger for updating the strategy, plan or program.* | MCD | CEMP |

| MCoA Ref | Description | Owner | Evidence |
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| A19 | Construction ancillary facilities that are not identified by description and location in the documents listed in Condition A1 can only be established and used in each case if:<br>(a) they are located within or immediately adjacent to the construction boundary;<br>(b) they are not located next to sensitive land use(s) (including where an access road is between the facility and the land use), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location;<br>(c) they have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and<br>(d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts. | MCD | CEMP |
| A20 | Before the establishment of a construction ancillary facility that is required prior to the approval of a CEMP (excluding minor construction ancillary facilities determined by the ER to have minimal environmental impact and those established under Condition A22), the Proponent must prepare a Site Establishment Management Plan which outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facilities. The Site Establishment Management Plan must be prepared in consultation with the relevant council and government agencies. The Plan must be submitted to the Planning Secretary for approval one month before the establishment of any construction ancillary facilities. The Site Establishment Management Plan must detail the management of the construction ancillary facilities and include:<br>(a) a description of activities to be undertaken during establishment of the construction ancillary facility (including scheduling and duration of work to be undertaken at the site);<br>(b) figures illustrating the proposed operational site layout and the location of the closest sensitive land use(s);<br>(c) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken prior to the commencement of site establishment work;<br>(d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:<br>(i) meet the performance outcomes stated in the documents listed in Condition A1; and<br>(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and<br>(e) a program for monitoring the performance outcomes, including a program for construction noise monitoring.<br>Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each construction ancillary facility.<br>Note: This plan is only needed before a CEMP is approved. Once a CEMP is approved a Site Establishment Management Plan(s) is not required. | MCD | SEMP (as required) |
| A21 | A construction ancillary facility established under Condition A19 must not be used for Construction until the CEMP required by Condition 0, relevant CEMP Sub-plans required by Condition C6 and relevant CMPs required by Condition C14 have been approved. | MCD | CEMP |
| A22 | Minor construction ancillary facilities can be established and used where they have been assessed in the documents listed in Condition A1 or satisfy the following criteria:<br>(a) are located within or immediately adjacent to the construction boundary; and<br>(b) have been assessed by the ER to have:<br>(i) minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009) (ICNG), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts;<br>(ii) minimal environmental impact with respect to waste management and flooding; and<br>(iii) no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval. | MCD | CEMP |

| MCoA Ref | Description | Owner | Evidence |
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| A23 | Boundary screening must be erected between construction ancillary facilities (excluding minor construction ancillary facilities) and adjacent to sensitive land use(s) for the duration of the time that the construction ancillary facility is in use, unless otherwise agreed with the owner and occupier of the adjacent sensitive land use(s). Boundary screening must minimise visual impacts on adjacent sensitive land use(s) and must incorporate Indigenous artwork wherever visible. | MCD | CEMP |
| A24 | The SSI name, application number, telephone number, postal address and email address required under Condition B8 of this approval must be made available on-site boundary fencing / hoarding at each construction ancillary facility before the commencement of construction. This information must also be provided on the website required under Condition B12 of this approval. | MCD | CEMP |
| A25 | All Independent Appointments required by the terms of this approval must have regard to Seeking approval from the Department for the appointment of independent experts (DPIE, 2020) and hold current membership of a relevant professional body, unless otherwise agreed by the Planning Secretary. | All | CEMP |
| A26 | The Planning Secretary may at any time commission an audit of how an Independent Appointment has exercised their functions. The Proponent must:<br>(a) facilitate and assist the Planning Secretary in any such audit; and<br>(b) make it a term of their engagement of an Independent Appointment that the Independent Appointment facilitate and assist the Planning Secretary in any such audit. | All | CEMP |
| A27 | The Planning Secretary may withdraw its approval of an Independent Appointment should they consider the Independent Appointment has not exercised their functions in accordance with this approval. | All | Noted |
| A28 | Work must not commence until an Environmental Representative (ER) has been nominated by the Proponent and approved by the Planning Secretary. | TfNSW | ER Approval |
| A29 | The Planning Secretary's approval of an ER must be sought no later than one month before the commencement of work. | TfNSW | ER Approval |
| A30 | The proposed ER must be a suitably qualified and experienced person(s) who was not involved in the preparation of the documents listed in Condition A1, and is independent from the design and construction personnel for the SSI and those involved in the delivery of it. Skills, qualifications, experience, availability and capacity of the ER must meet the requirements set out in Environmental Representative Protocol (Department of Planning and Environment, 2018) (the Environmental Representative Protocol). | TfNSW | ER Approval |
| A31 | The Proponent may engage more than one ER for the SSI, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by any ER that is approved by the Planning Secretary for the purposes of the SSI. | TfNSW | CEMP and sub plans |

| MCoA Ref | Description | Owner | Evidence |
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| A32 | For the duration of the Work until the completion of construction, or as agreed with the Planning Secretary, the approved ER must:<br>(a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the SSI;<br>(b) consider and inform the Planning Secretary on matters specified in the terms of this approval;<br>(c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;<br>(d) review documents identified in Conditions A7, A19, A20, A22, C1, C6 and C14 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:<br>(i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or<br>(ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary/Department); and<br>(iii) provide a written statement / submission via the Major Projects portal to the Planning Secretary advising the documents have been endorsed by the ER;<br>(e) regularly monitor the implementation of the documents listed in Conditions A7, A20, Cl1 , C6 and C14 to ensure implementation is being carried out in accordance with the document and the terms of this approval;<br>(f) as may be requested by the Planning Secretary, help plan or attend audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A37 of this approval;<br>(g) as may be requested by the Planning Secretary, assist in the resolution of community complaints;<br>(h) consider or assess the impacts of minor construction ancillary facilities comprising lunch sheds, office sheds and portable toilet facilities as required by Condition A21 of this approval; consider any minor amendments to be made to the Site Establishment Management Plan, CEMP, CEMP Sub-plans and monitoring programs without increasing impacts to nearby sensitive land uses or that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;<br>(j) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports." The Environmental Representative Monthly Report must be submitted within seven days following the end of each month for the duration of the ER's engagement for the SSI, or as otherwise agreed by the Planning Secretary; and<br>(k) review the appropriateness of any activities reliant on the definition of Low Impact Work. | TfNSW | Monthly Reports |
| A33 | The Proponent must provide the ER with documentation requested in order for the ER to perform their functions specified in Condition A32 (including preparation of the Environmental Representative Monthly Report), as well as:<br>(a) the complaints register (to be provided on a weekly basis or as requested); and<br>(b) a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work). | TfNSW | Monthly Reports |
| A34 | The Department must be notified in writing of the dates of commencement of works, construction and operation at least one month before those dates. | TfNSW | Written Notification |
| A35 | If the construction or operation of the SSI is to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of the commencement of the relevant works, construction and operation at least one month before those dates. | TfNSW | N/A |

| MCoA Ref | Description | Owner | Evidence |
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| A36 | Proposed independent auditors must be agreed to in writing by the Planning Secretary before the commencement of an Independent Audit. | TfNSW | Written response from DPE |
| A37 | Independent Audits of the SSI must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (DPIE, 2020). | TfNSW | Written response from DPE |
| A38 | The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least four weeks' notice (or timing as stipulated by the Planning Secretary) to the Proponent of the date upon which the audit must be commenced. | TfNSW | Audit Report |
| A39 | In accordance with the specific requirements in the Independent Audit Post Approval Requirements (DPIE, 2020), the Proponent must:<br>(a) review and respond to each Independent Audit Report prepared under Condition A37 or Condition A38;<br>(b) submit the response to the Planning Secretary; and<br>(c) make each Independent Audit Report and response to it publicly available two months after submission to the Planning Secretary, or as otherwise agreed by the Planning Secretary. | TfNSW | Audit Report |
| A40 | Independent Audit Reports and the Proponent's response to audit findings must be submitted to the Planning Secretary within two months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements (DPIE, 2020). | TfNSW | Response to Audit Report |
| A41 | Notwithstanding the requirements of the Independent Audit Post Approval Requirements (DPIE, 2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance. | TfNSW | |
| A42 | The Planning Secretary must be notified via the Major Projects Website immediately after the Proponent becomes aware of an incident. The notification must identify the SSI (including the application number and the name of the SSI if it has one) and set out the location and nature of the incident. | TfNSW | Major Projects Website Notification |
| A43 | Subsequent notification must be given and reports submitted in accordance with the requirements set out in APPENDIX A | TfNSW | CoA Appendix A |
| A44 | The Planning Secretary must be notified via the Major Projects Website within seven days after the Proponent becomes aware of any non-compliance. The notification must identify the SSI (including the application number and the name of the SSI if it has one), identify the condition/s against which the SSI is non-compliant, the nature of the non-compliance; the reason for the noncompliance (if known) and what actions have been, or will be, undertaken to address the noncompliance. | TfNSW | Major Projects Website notification |
| A45 | A non-compliance which has been notified as an incident under Condition A42 does not need to be notified as a non-compliance. | TfNSW | Major Projects Website notification |
| **Community Information and Reporting** | | | |
| B1 | A Community Communication Strategy must be prepared to provide mechanisms to facilitate communication about construction and operation of the SSI with:<br>(a) the community (including adjoining affected landowners and businesses, and others directly impacted by the SSI); and<br>(b) the relevant councils, EPA, EHG, DPI Fisheries, Heritage NSW, as applicable. | TfNSW | Community Consultation Strategy |

| MCoA Ref | Description | Owner | Evidence |
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| B2 | The Community Communication Strategy must:<br>(a) identify people, organisations, councils and agencies to be consulted during the design and work phases of the SSI;<br>(b) identify details of the community and its demographics;<br>(c) identify timing of consultation;<br>(d) set out procedures and mechanisms for the regular distribution of accessible information including to Language Other than English (LOTE) and Culturally and Linguistically Diverse (CALD) and vulnerable communities about or relevant to the SSI; detail the measures for informing Registered Aboriginal Parties (RAPs) as required by Condition E24; identify opportunities for education within the community about construction sites;<br>(g) detail the measures for advising the community in advance of upcoming construction including upcoming out-of-hours work as required by Condition E51;<br>(h) provide for the formation of issue or location-based community forums that focus on key environmental management issues of concern to the relevant community(ies) for the SSI;<br>(i) detail the role and respons bilities of the Public Liaison Officer(s) engaged under Condition B6;<br>(j) set out procedures and mechanisms:<br>(i) through which the community can discuss or provide feedback to the Proponent;<br>(ii) through which the Proponent will respond to enquiries or feedback from the community; and<br>(iii) to resolve any issues and mediate any disputes that may arise in relation to the environmental management and delivery of the SSI, including disputes regarding rectification or compensation; and<br>(k) address who will engage with the community, relevant councils and agencies. | TfNSW | Community Consultation Strategy |
| B3 | The Community Communication Strategy must be submitted to the Planning Secretary and be approved prior to the commencement of any Work. | TfNSW | Community Consultation Strategy |
| B4 | Work for the purposes of the SSI must not commence until the Community Communication Strategy has been approved by the Planning Secretary. | All | Noted |
| B5 | The Community Communication Strategy, as approved by the Planning Secretary, must be implemented for the duration of Work and for 12 months following the completion of construction. | MCD | Community Consultation Strategy |
| B6 | A Public Liaison Officer must be appointed to assist the public with questions and complaints they may have at any time during Work. The Public Liaison Officer must be available at all times that Work is occurring. | TfNSW | Community Consultation Strategy |
| B7 | A Complaints Management System must be prepared and implemented before the commencement of any Work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the SSI. | TfNSW | Community Consultation Strategy |
| B8 | The following information must be available to facilitate community enquiries and manage complaints one month before the commencement of Work and for 12 months following the completion of construction:<br>(a) a 24- hour telephone number for the registration of complaints and enquiries about the SSI;<br>(b) a postal address to which written complaints and enquires may be sent;<br>(c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved.<br>This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level. | TfNSW | Community Consultation Strategy |

| MCoA Ref | Description | Owner | Evidence |
|---|---|---|---|
| B9 | A Complaints Register must be maintained recording information on all complaints received about the SSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The Complaints Register must record the:<br>(a) number of complaints received;<br>(b) the date and time of the complaint;<br>(c) the method by which the complaint was made;<br>(d) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;<br>(e) nature of the complaint;<br>(f) means by which the complaint was addressed and whether resolution was reached, with or without mediation; and<br>(g) if no action was taken, the reason(s) why no action was taken. | TfNSW | Community Consultation Strategy |
| B10 | Complainants must be advised of the following information before, or as soon as practicable after, providing personal information:<br>(a) the Complaints Register may be forwarded to government agencies, including the Department (via the Major Projects Website), to allow them to undertake their regulatory duties;<br>(b) by providing personal information, the complainant authorises the Proponent to provide that information to government agencies;<br>(c) the supply of personal information by the complainant is voluntary; and<br>(d) the complainant has the right to contact government agencies to access personal information held about them and to correct or amend that information (Collection Statement).<br>The Collection Statement must be included on the Proponent or development website to make prospective complainants aware of their rights under the Privacy and Personal Information Protection Act 1998 (NSW). For any complaints made in person, the complainant must be made aware of the Collection Statement. | TfNSW | Complaints Register |
| B11 | The Complaints Register must be provided to the Planning Secretary upon request, within the timeframe stated in the request. | TfNSW | Complaints Register |
| B12 | A website or webpage providing information in relation to the SSI must be established before commencement of Work and be maintained for the duration of construction, and for a minimum of 24 months following the completion of construction. The following up-to-date information (excluding confidential, private, commercial information or any other information that the Planning Secretary has approved to be excluded) must be published before the relevant work commences and maintained on the website or dedicated pages including:<br>(a) information on the current implementation status of the SSI;<br>(b) a copy of the documents listed in Condition A1, and any documentation relating to any modifications made to the SSI or the terms of this approval;<br>(c) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval;<br>(d) a copy of each statutory approval, licence or permit required and obtained in relation to the SSI; a copy of the current version of each document required under the terms of this approval; and a copy of the audit reports required under this approval.<br>Where the information / document relates to a particular work or is required to be implemented, it must be published before the commencement of the relevant work to which it relates or before its implementation.<br>All information required in this condition must be provided on the Proponent's website, ordered in a logical sequence and which is easy to navigate. | TfNSW | Project Website |
| **Construction Environmental Management Plan** | | | |
| C1 | Except as provided by Condition A15, a Construction Environmental Management Plan (CEMP) must be prepared having regard to the Environmental Management Plan Guideline for Infrastructure Projects (Department of Planning, Industry and Environment, 2020). | MCD | CEMP |

| MCoA Ref | Description | Owner | Evidence |
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| C2 | The CEMP must provide:<br>(a) a description of activities to be undertaken during construction (including the scheduling of construction);<br>(b) details of environmental policies, guidelines and principles to be followed in the construction of the SSI;<br>(c) a program for ongoing analysis of the key environmental and social risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the SSI. The initial risk assessment may be undertaken as part of the CEMF pursuant to Condition AI15;<br>(d) details of how the activities described in subsection (a) of this condition will be carried out to:<br>(i) meet the performance outcomes stated in the documents listed in Condition A1 and as required by this approval; and<br>(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; an inspection program detailing the activities to be inspected and frequency of inspections; a protocol for managing and reporting any:<br>(i) incidents, and<br>(ii) non-compliances with this approval or statutory requirements;<br>(g) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;<br>(h) a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C6. Where staged construction of the SSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction; an organisational chart including description of the roles and environmental responsibilities for relevant employees and any independent appointments;<br>(j) for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval; and<br>(k) for periodic review and update of the CEMP and all associated plans and programs.<br>Note: CEMP(s) may reflect the construction of the project through geographical activities, temporal activities or activity based staging. | MCD | CEMP |
| C3 | CEMP(s) (and relevant CEMP sub-plans) must be submitted to the Planning Secretary for approval except those permitted to be endorsed by others pursuant to a CEMF approved by the Planning Secretary under Condition A15. | MCD | CEMP |
| C4 | Where a CEMP (and relevant CEMP sub-plans) requires Planning Secretary's approval, the<br>CEMP (and relevant CEMP sub-plans) must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one month before the commencement of construction, or where construction is staged, no later than one month before the commencement of each stage. | MCD | CEMP |
| C5 | CEMP(s) (and relevant CEMP sub-plans) not requiring the Planning Secretary's approval, but requiring ER endorsement, must be submitted to the ER no later than one month before the commencement of construction or where construction is staged no later than one month before the commencement of that stage. That CEMP (and relevant CEMP sub-plans) must obtain the endorsement of the ER as being consistent with the conditions of this approval and all undertakings made in the documents listed in Condition A1. | MCD | CEMP |

| MCoA Ref | Description | Owner | Evidence |
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| C6 | Except as provided by Condition A15, the following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A14.<br>Note: CEMP Sub-plan(s) may reflect the construction of the project through geographical activities, temporal activities or activity-based staging. | MCD | CEMP |
| C7 | The CEMP Sub-plans must state how:<br>(a) the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;<br>(b) the mitigation measures identified in the documents listed in Condition A1 will be implemented;<br>(c) the relevant terms of this approval will be complied with; and<br>(d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles. | MCD | CEMP |
| C8 | The Traffic, Transport and Access CEMP Sub-plan must include the following:<br>(a) identify roads to be utilised as part of Construction and measures to ensure construction vehicles follow this route;<br>(b) identify marine construction and vessel mooring zones and measures to delineate these areas;<br>(c) measures to physically separate pedestrian and construction vehicle movements, such as temporary barriers; and<br>(d) where access is via non-road land (such as across lawn areas of NPWS land) vehicle routes must be agreed in consultation with NPWS, and large vehicle movements is to be minimised to avoid excess ground compression and Aboriginal cultural heritage and vegetation impacts. | MCD | Traffic, Transport and Access Sub Plan |
| C9 | The Noise and V bration CEMP Sub-plan must include measures to minimise vibration impacts on Aboriginal and historic heritage, including:<br>(a) monitoring of vibration impacts in the immediate area of AHIMS Site # 45-6-0653 (Site 6 La Perouse), including procedures to be followed should any impact or damage occur; (b) identification of smaller equipment or hand tools for use in the following locations:<br>(i) the La Perouse Monument inside the Anzac Parade Loop, which is near the construction boundary and may be impacted if large vibration generating equipment is used;<br>(ii) the Coursed Stone Sea Wall, which is located at Kurnell and will be within 5-10 metres of Piling;<br>(iii) the Captain Cook Monument, which is set on sandstone bedrock and is within the construction boundary and adjacent to Monument Track, where a utilities trench will be installed; and<br>(iv) landscape works close to the ferry shelter shed, where there is potential for indirect vibration impacts to the structure. | MCD | Construction Noise and V bration Management Sub Plan |
| C10 | Unexpected Heritage Finds and Human Remains Procedure required under Condition C1O may be submitted as part of the Non-Aboriginal Heritage CEMP Sub-plan and Aboriginal Cultural Heritage CEMP Sub-plan. | MCD | Heritage Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| C11 | The Aboriginal Cultural Heritage CEMP Sub-plan must:<br>(a) be prepared by a suitably qualified and experienced person;<br>(b) be prepared in consultation with Heritage NSW and the RAPS;<br>(c) include a protocol for ongoing consultation with the RAPs and LALCs for the duration of this project;<br>(d) include measures to prevent harm to any Aboriginal objects outside the construction boundary; include a program to monitor and report on the effectiveness of any mitigation and management measures in protecting or limiting harm to Aboriginal objects; ensure any workers on site receive suitable Aboriginal cultural heritage induction(s) prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions;<br>(g) include a Trigger Action Response Plan that included stop work provision, notification protocols and significance assessment protocols to manage key Aboriginal heritage, including:<br>(i) the discovery of any potential human remains;<br>(ii) the discovery of previously unidentified Aboriginal objects within the construction footprints; and<br>(iii) managing unauthorised ground disturbance. | MCD | Heritage Sub Plan |
| C12 | Construction must not commence until the relevant CEMP(s) and CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER, (as applicable and as identified in the CEMF approved under Condition A15. | MCD | CEMP |
| C13 | The CEMP(s) and CEMP Sub-plans as approved or endorsed (as relevant), including any minor amendments approved by the ER, must be implemented for the duration of construction. | MCD | CEMP |
| C14 | Except as provided by Condition A15, the following CMP must be prepared in consultation with the relevant government agencies identified for each to compare actual performance of construction of the SSI against the performance predicted in the documents listed in Condition A1 or in the CEMP: | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C15 | Each CMP must provide:<br>(a) details of baseline data available;<br>(b) details of baseline data to be obtained and when;<br>(c) details of all monitoring of the project to be undertaken;<br>(d) the parameters of the project to be monitored;<br>(e) the frequency of monitoring to be undertaken;<br>(f) the location of monitoring;<br>(g) the reporting of monitoring results and analysis results against relevant criteria;<br>(h) details of the methods that will be used to analyse the monitoring data;<br>(i) procedures to identify and implement additional mitigation measures where the results of the monitoring indicate unacceptable project impacts; and<br>(j) any consultation to be undertaken in relation to the monitoring programs. | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C16 | CMP(s) must be submitted to the Planning Secretary for approval except those permitted to be endorsed by others pursuant to a CEMF approved by the Planning Secretary under Condition A15. | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C17 | Where a CMP requires Planning Secretary's approval, the CMP must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one month before the commencement of construction, or where construction is staged, no later than one month before the commencement of each stage. | All | Construction Noise and V bration Management Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| | | | Soil, Water & Contamination Sub Plan |
| C18 | CMP(s) not requiring the Planning Secretary's approval, but requiring ER endorsement, must be submitted to the ER no later than one (1) month before the commencement of construction or where construction is staged no later than one (1 ) month before the commencement of that stage. The CMP(s) must be endorsed by the ER as being consistent with the conditions of this approval and all undertakings made in the documents listed in Condition Al . | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C19 | Construction must not commence until the relevant CMP(s) have been approved by the Planning<br>Secretary or endorsed by the ER, (as applicable and as identified in the CEMF approved under Condition A15, and all relevant baseline data for the specific construction activity has been collected. | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C20 | The CMP(s), as approved or endorsed (as relevant), including any minor amendments approved by the ER, must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Planning Secretary, whichever is the greater | MCD | Construction Noise and V bration Management Sub Plan<br><br>Soil, Water & Contamination Sub Plan |
| C21 | The results of the CMP(s) must be submitted to the Planning Secretary, and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant CMP.<br>Note: Where a relevant CEMP Sub-plan exists, the relevant CMP may be incorporated into that CEMP Sub-plan. | TfNSW | TfNSW |
| Key Issue Conditions | | | |
| E1 | The clearing of native vegetation must not exceed the clearing footprint identified in the documents listed in Condition A1. All practicable measures to reduce the clearing of native vegetation within the clearing footprint must be undertaken, with the objective of reducing impacts to threatened ecological communities and threatened species habitat. | MCD | Biodiversity Sub Plan |
| E2 | Impacts to plant community types must not exceed those identified in the documents listed in Table 1. The Proponent must minimise impacts to plant community types and not exceed the total areas impacted as listed in Table 1. | MCD | Biodiversity Sub Plan |
| E3 | Impacts to threatened or endangered fauna and flora species exceeding those as impacted in the documents listed in Condition A1 or Table 2 must not occur. On the discovery of potential or actual impacts to any species not listed in the documents listed in Condition A1 or Table 2, all work in the associated location must stop to prevent further impact and the Planning Secretary and EHG notified. Work is not to recommence until appropriate approvals have been issued. | MCD | Biodiversity Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| E4 | The Proponent must meet the terrestrial biodiversity offset obligations for ecosystem and species credits as set out in Table 1 and Table 2. The offset obligations must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by:<br>a) acquiring and retiring "biodiversity credits" within the meaning of the BC Act; and / or<br>b) properties secured with the NPWS, on the basis of a draft credit report to show what the property would provide and written confirmation from NPWS that the financial contributions for acquisition and management have been received; and / or<br>c) making a payment into the Biodiversity Conservation Fund of an amount equivalent to the class and number of ecosystem and species credits, as calculated by the Biodiversity Offsets Payment Calculator; or<br>d) a Biodiversity Offset Strategy prepared in consultation with EHG and DAWE that provides supplementary measures or where the Proponent intends to utilise the biodiversity credit variation rules. | TfNSW | Credit Certificate |
| E5 | Evidence of the retirement of credits to satisfy Condition E4 or payment to the Biodiversity Conservation Fund to satisfy Condition E4 must be provided to the Planning Secretary, Environment and Heritage Group and DAWE for information before any impact occurs on the species or community types to be offset. | TfNSW | Credit Certificate |
| E6 | The location of areas of seagrass (Posidonia australis) and other seagrass beds (Type 1 Key Fish Habitat (KFH)) and macroalgae (Type 2 KFH) that have been identified for removal and disturbance at Kurnell and La Perouse must be confirmed and recorded by surveying and mapping prior to the commencement of clearing in consultation with DPI Fisheries and DAWE. | TfNSW | Monitoring Report |
| E7 | An inspection must be undertaken by an appropriately qualified and experienced ecologist (and diver) in the 24-hour period prior to the start of work that may impact potential habitat for White's Seahorse (Hippocampus whiteo (seagrass, kelp, sargassum, and existing structures such as piles, jetties, wharf pylons) located in and within 100 metres of the construction footprint. | MCD | Biodiversity Sub Plan |
| E8 | Any seahorses that are detected in the construction footprint must be relocated to nearby suitable habitat in consultation with an appropriately qualified and experienced ecologist and consistent with location and design criteria provided in section 5.2 Creation of artificial habitat - seahorse hotels of the MBOS. Seahorse relocations must be performed by a suitably qualified and experienced ecologist with consultation from DPI Fisheries and as outlined in the Biodiversity Management Plan. | MCD | Biodiversity Sub Plan |
| E9 | An inspection must be undertaken by an appropriately qualified and experienced ecologist (and diver) when any construction methods have the potential to impact potential habitat for Black Rockcod (Epinephelus daemelil) (rocky reefs, caves, ledges, gutters and artificial structures such as wharves, piers and rock emplacements). | MCD | Biodiversity Sub Plan |
| E10 | Suitable methods must be used to protect Black Rockcod habitat and individuals in the construction footprint at La Perouse and Kurnell sites in accordance with the provisions of the MBOS, Black Rockcod Recovery Plan 2012 and DPI Fisheries' Priorities Action Statement — Actions for Black Rockcod. | MCD | Biodiversity Sub Plan |
| E11 | Prior to the commencement of ferry services, and to avoid and / or mitigate potential impacts on marine biodiversity including but not limited to Black Rockcod (Epinephelus daemelil), the Proponent must consult DPI Fisheries regarding proposed ferry swept path/navigation channels for approach, departure and maneuvering areas for all traffic using the wharves. The swept path and navigation channel with DPI Fisheries' consultation response must be submitted to the Planning Secretary no later than one month before the commencement of operation. | TfNSW | Sweep path and navigational channel report |
| E12 | The Proponent must ensure that the proposal is undertaken in accordance with the requirements of DPI Fisheries policy and guidelines, including the Policy and | TfNSW | Biodiversity Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| | Guidelines for Fish Habitat Conservation and Management 2013, and the NSW Biodiversity Offsets Policy for Major Projects, Fact sheet: Aquatic biodiversity. | | |
| **E13** | The Proponent must allow for an additional winter and summer season in which to monitor marine biodiversity within the construction footprint prior to commencement of construction. | TfNSW | Monitoring Reports |
| **E14** | The Proponent must satisfy the marine biodiversity offset obligations that specify the required offset size in accordance with the EPBC Act, Environmental Offsets Policy 2012, NSW Biodiversity Offsets Policy for Major Projects — Fact sheet: Aquatic Biodiversity. Evidence of this must be provided to the Planning Secretary, DPI Fisheries and DAWE for information, within 12 months of the commencement of construction. | TfNSW | Marine Biodiversity Offset Strategy |
| **E15** | Areas of seagrass (Posidonia australis) and other seagrass beds (Type 1 KFH) and macroalgae (Type 2 KFH) that have been identified for removal or disturbance within the construction footprint at Kurnell and La Perouse must be offset in accordance with the MBOS and as agreed with DPI Fisheries and DAWE. | TfNSW | Marine Biodiversity Offset Strategy |
| **E16** | Prior to the commencement of pre-construction seagrass transplantation, the Proponent must establish a MBOS Implementation Reference Panel to review data collected, including from the marine biodiversity monitoring as required by Condition E 13, recommend changes to the MBOS if required, and review the Operational Impact Assessment Report (see Condition E20).<br>The MIRP must comprise representatives from the Proponent, DPI Fisheries-Coastal Systems, DPI Fisheries-Marine Research, DAWE, and DPIE Planning and Assessment, and include a suitably qualified, experienced and independent scientist. The MBOS Implementation Reference Panel must be operational for the life of the MBOS or as agreed by the Planning Secretary. | TfNSW | Marine Biodiversity Offset Strategy |
| **E17** | The MBOS must have an operational life of no less than ten (10) years from the date of MBOS approval, unless otherwise agreed by the Planning Secretary. | TfNSW | Marine Biodiversity Offset Strategy |
| **E18** | The MBOS may be reviewed and updated during its operational life as required and recommended by the MBOS Implementation Reference Panel. At least 50 per cent of the MBOS funding must be allocated to the restoration and rehabilitation of Posidonia australis and Zostera seagrass beds in consultation with the MBOS Implementation Reference Panel. | TfNSW | Marine Biodiversity Offset Strategy |
| **E19** | Prior to marine Works, a bank guarantee to a value identified by the MBOS Implementation Reference Panel must be provided to DPI Fisheries to offset marine biodiversity impacts in accordance with the DPI Fisheries Policy and guidelines for fish conservation and management, and the NSW Biodiversity Offsets Policy for Major Projects, Fact sheet: Aquatic Biodiversity. The MBOS Implementation Reference Panel may use this bank guarantee to manage key fish habitats, threatened species and/or populations if planned activities as agreed under the MBOS are unsuccessful. | TfNSW | Marine Biodiversity Offset Strategy |
| **E20** | An Operational Impact Assessment Report must be prepared on impacts to marine biodiversity following 12 months of the full operation of the ferry wharves. This report must:<br>(a) be submitted to the MBOS Implementation Reference Panel for review no later than six<br>(6) months after the 12-month full operation period;<br>(b) include the results of before and after monitoring of all seagrass species, White's Seahorse, populations and habitats impacted by the ferry wharf structures and associated commercial and recreational vessel uses; and<br>(c) be used to review the MBOS no later than six (6) months after the submission of the Operational Impact Assessment Report to the MBOS Implementation Reference Panel. | TfNSW | Marine Biodiversity Offset Strategy<br>Operational Impact Assessment Report |

| MCoA Ref | Description | Owner | Evidence |
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| E21 | An Unexpected Heritage Finds and Human Remains Procedure (required to be included in the relevant CEMP Sub-plans under Condition C10) must be prepared to manage unexpected heritage finds (including maritime discoveries) in accordance with guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW and submitted to the Planning Secretary no later than one (1) month before the commencement of construction. | MCD | Heritage Management Sub Plan |
| E22 | The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of construction.<br>Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately | MCD | Heritage Management Sub Plan |
| E23 | All reasonable steps must be taken so as not to harm, modify or otherwise impact Aboriginal objects or places of cultural significance except as authorised by this approval. | MCD | Heritage Sub Plan |
| E24 | The RAPs must be kept informed at intervals not exceeding three (3) months about construction of the SSI. The RAPs must continue to be provided with the opportunity to be consulted about the Aboriginal cultural heritage management requirements of the SSI throughout design and construction. | MCD | Heritage Sub Plan |
| E25 | At the completion of Aboriginal cultural heritage test and salvage excavations, an Aboriginal Cultural Heritage Excavation Report(s) must be prepared by a suitably qualified person. The Aboriginal Cultural Heritage Excavation Report(s), must:<br>(a) be prepared in accordance with the Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW, OEH 2011 and the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, DECCW 2010; and<br>(b) document the results of the archaeological test excavations and any subsequent salvage excavations (with artefact analysis and identification of a final repository for finds).<br>The RAPs must be given a minimum of 28 days to provide comments before the report is finalised. The final report must be provided for information to the Planning Secretary, Heritage NSW, relevant Councils, La Perouse Local Aboriginal Land Council (LALC), RAPs and local libraries within 12 months of the completion of the Aboriginal archaeological excavations (both test and salvage). | MCD | Heritage Sub Plan |
| E26 | Where previously unidentified Aboriginal objects or places of cultural significance are discovered, all work must immediately stop in the vicinity of the affected area. Works potentially affecting the previously unidentified objects and places must not recommence until Heritage NSW has been informed and provided a response in writing. The measures to consider and manage this process must be specified in the Unexpected Heritage Finds and Human Remains Procedure required by Condition E21 and include registration in the Aboriginal Heritage Information Management System (AHIMS). | MCD | Heritage Sub Plan |
| E27 | The Proponent must undertake a visual inspection before commencement of construction of AHIMS Site # 45-6-0650 (Site 3 - La Perouse) and AHIMS Site # 45-6-0651 (Site 4 - La Perouse and geotextile fabric (or similar) should be laid on the ground surface within the location of both sites. | MCD | Heritage Sub Plan |
| E28 | Supervision by an appropriately qualified and experienced archaeologist of AHIMS Site # 45-60653 (Site 6 - La Perouse) must be undertaken during ground penetrating works. If the engraving is identified, all works must cease and the construction methodology revised to mitigate further impacts. Any revision to the methodology must be undertaken in consultation with Heritage NSW , RAPs and LALCs | MCD | Heritage Sub Plan |
| E29 | During construction works impacts to the exposed sandstone surrounding AHIMS Site # 45-60653 (Site 6 - La Perouse) must be avoided. Visual markers must be used to delineate these areas. | MCD | Heritage Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| E30 | During construction works, monitoring of vibration impacts in the immediate area of AHIMS Site # 45-6-0653 (Site 6 - La Perouse) must be undertaken. If vibration monitors are affixed to sandstone, non-invasive adhesive methods (such as beeswax) must be used. If it is identified that levels of vibration would result in damage to AHIMS Site # 45-6-0653 (Site 6 - La Perouse), all works must cease and the construction methodology revised to mitigate further impacts. This must be undertaken in consultation with Heritage NSW, RAPs and LALCs. | MCD | Heritage Sub Plan<br><br>Construction Noise and V bration Management Sub Plan |
| E31 | Supervision by an appropriately qualified and experienced archaeologist is required for any excavation near AHIMS Site #52-3-0219 (Foreshore Midden — Captain Cook's Landing Place) where it exceeds 400mm in depth. If Aboriginal cultural heritage is identified during the proposed works, further archaeological investigations may be required. This must be determined in consultation with Heritage NSW, RAPs and La Perouse LALC | MCD | Heritage Sub Plan |
| E32 | A Non-Aboriginal Heritage Management Plan (HMP) must be prepared and include maritime heritage considerations and requirements. A suitably qualified and experienced maritime archaeologist is to undertake the maritime component of any aspect related to maritime heritage including relevant construction management plans, in consultation with Heritage NSW. The HMP must include a policy and measures to manage the retention, conservation, storage and display of any artefacts and relics recovered by the SSI. The HMP must be prepared prior to construction and be approved by the Planning Secretary. | MCD | Heritage Sub Plan<br><br>Construction Noise and V bration Management Sub Plan |
| E33 | Prior to the commencement of archaeological excavation, an Archaeological Research Design and Excavation Methodology must be prepared in accordance with the Heritage Council of NSW guidelines to guide the archaeological program. The revised methodology must be prepared in consultation with Heritage NSW and submitted to the Planning Secretary if requested. | MCD | Heritage Sub Plan |
| E34 | Prior to the commencement of archaeological excavation, the Proponent must nominate a suitably qualified Excavation Director who complies with Heritage NSW Excavation Director Criteria 2019 (September 2019) to direct the historical archaeological program. The Excavation Director must be present to oversee excavation, advise on archaeological issues, advise on the duration and extent of oversight required during archaeological excavations consistent with the Archaeological Research Design and Excavation Methodology required by Condition E33 | MCD | Heritage Sub Plan |
| E35 | Following the completion of the archaeological excavation programs a Final Excavation Report must be prepared that includes: the details of any further historical research undertaken to enhance the final reporting and results of archaeological excavations (including artefact analysis and identification of a final repository for relics including details of their ongoing conservation and protection in perpetuity by the landowner). The report must be prepared in accordance with guidelines and standards required by Heritage Council of NSW and the relevant Council's local studies unit within twelve (12) months of completion of archaeological excavation. | MCD | Heritage Sub Plan |
| E36 | The Proponent, in consultation with NPWS, must consider alternative placement locations for the installation of the Kurnell services cabinet to reduce impacts to the heritage landscape. | TfNSW | Urban Design and Landscape Plan |
| E37 | The Proponent, in consultation with Heritage NSW and NPWS, must implement measures to minimise impacts on remnant Coast Banksia communities at La Perouse and Kurnell including any offset planting (if required). | TfNSW | Heritage Sub Plan<br><br>Biodiversity Sub Plan |
| E38 | The approved hours of operation of any ferry service are 7:00am to 6:00pm every day. | TfNSW | Operational Environment Management Plan |

| MCoA Ref | Description | Owner | Evidence |
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| E39 | The Proponent must identify the utilities and services (services) potentially affected by construction to determine requirements for diversion, protection and/or support. Alterations to services must be determined by negotiation between the Proponent and the service providers. The Proponent in consultation with service providers must ensure that disruption to services resulting from the project are avoided where practical and advised to customers. | All | Noted |
| E40 | Any property access that is physically affected by the SSI must be reinstated to at least an equivalent standard, in consultation with the landowner or alternative access provided in consultation with the landowner. | MCD | Traffic, Transport and Access Sub Plan |
| E41 | A detailed land use survey must be undertaken to confirm sensitive land user(s) potentially exposed to construction noise and vibration, construction ground-borne noise and operational noise. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of work which generates construction or operational noise, vibration or ground-borne noise in that area. The results of the survey must be included in the Noise and Vibration CEMP Sub-plan required by Condition C6. | MCD | Construction Noise and V bration Management Sub Plan |
| E42 | Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;<br>(b) 8:00am to 1 :00pm Saturdays; and<br>(c) at no time on Sundays or public holidays | MCD | Construction Noise and V bration Management Sub Plan |
| E43 | Except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable NML at the same receiver must only be undertaken:<br>(a) between the hours of 8:00 am to 6:00 pm Monday to Friday;<br>(b) between the hours of 8:00 am to 1:00 pm Saturday; and<br>(c) if continuously, then not exceeding three hours, with a minimum cessation of highly noise intensive work of not less than one hour.<br>For the purposes of this condition, 'continuously' includes any period during which there is less than one hour between ceasing and recommencing any of the work. | MCD | Construction Noise and V bration Management Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| E44 | Notwithstanding Conditions E42 and E43, work may be undertaken outside the hours specified in any of the following circumstances:<br>(a) Safety and Emergencies, including:<br>(i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or<br>(ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.<br>On becoming aware of the need for emergency work in accordance with this condition, the Proponent must notify the ER, the Planning Secretary and the EPA of the reasons for such work. The Proponent must use best endeavours to notify all noise and/or vibration affected residents and owners/occupiers of properties identified sensitive land user(s) of the l kely impact and duration of those work.<br>Or<br>(b) Low impact, including:<br>(i) construction that causes l-Aeq(15 minute) noise levels:<br>• no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and<br>• no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); or<br>(ii) construction that causes LAFmax(15 minute) noise levels no more than 15 dB(A) above the rating background level at any residence; or (iii) construction that causes:<br>• continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to v bration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), or intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).<br>Or<br>(c) By Approval, including:<br>(i) where different construction hours are permitted or required under an EPL in force in respect of the SSI; or<br>(ii) negotiated agreements with directly affected residents and sensitive land user(s).<br>Or<br>(d) By Prescr bed Activity, including:<br>(i) Piling between 10:00pm and 7:00am Monday-Friday inclusive and if endorsed by the<br>(ii) delivery of material that is required to occur outside of standard construction hours in Condition E42 to directly support Piling. | MCD | Construction Noise and V bration Management Sub Plan |
| E45 | Mitigation measures must be implemented with the objective of achieving the following construction noise management levels and vibration objectives:<br>(a) construction 'Noise affected' NMLs established using the Interim Construction Noise Guideline (DECC, 2009);<br>(b) vibration criteria established using the Assessing v bration: a technical guideline (DEC, 2006) (for human exposure);<br>(c) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and<br>(d) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).<br>Work that exceeds the noise management levels and/or v bration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan.<br>Note: The ICNG identifies Particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction NML. | MCD | Construction Noise and V bration Management Sub Plan |
| E46 | Mitigation measures must be applied when the following residential ground-borne noise levels are exceeded:<br>(a) evening (6:00 pm to 10:00 pm) — internal LAeq(15 minute): 40 dB(A); and (b) night (10:00 pm to 7:00 am)— internal LAeq(15 minute): 35 dB(A).<br>The mitigation measures must be outlined in the Noise and Vibration CEMP Sub-plan. | MCD | Construction Noise and V bration Management Sub Plan |

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| E47 | Industry best practice construction methods must be implemented where reasonably practicable to ensure that noise levels are minimised. Practices must include, but are not limited to:<br>(a) use of regularly serviced low sound power equipment; and / or<br>(b) temporary noise barriers (including the arrangement of plant and equipment) around noisy equipment and activities such as rock hammering and concrete cutting; and / or (c) use of alternative construction and demolition techniques. | MCD | Construction Noise and V bration Management Sub Plan |
| E48 | Owners and occupiers of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before work that generates vibration commences in the vicinity of those properties. If the potential exceedance is to occur more than once or extend over a period of 24 hours, owners and occupiers are to be provided a schedule of potential exceedances on a monthly basis for the duration of the potential exceedances, unless otherwise agreed by the owner and occupier. These properties must be identified and considered in the Noise and Vibration CEMP Sub-plan required by Condition C6 and the Community Communication Strategy required by Condition B1 | All | Construction Noise and V bration Management Sub Plan |
| E49 | The Proponent must conduct vibration testing before and during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In the event that the v bration testing and attended monitoring shows<br>that the preferred values for v bration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures. | MCD | Construction Noise and V bration Management Sub Plan |
| E50 | Advice from a heritage specialist must be sought on methods and locations for installing equipment used for vibration and movement monitoring at heritage-listed structures. | MCD | Construction Noise and V bration Management Sub Plan |
| E51 | In order to undertake out-of-hours work as prescribed under Condition E42(d) (piling), the Proponent must justify to the ER the reasons why these works cannot be undertaken during standard working hours. These works must be endorsed by the ER prior to the commencement of such work.<br>Any justification must be in writing and include the following information:<br>(a) reasons for the OOH Work; a description of location and duration of the OOH Work;<br>(c) the noise characteristics and likely noise levels of the OOH Work;<br>(d) likely mitigation and management measures which aim to achieve the relevant noise management levels and vibration criteria under Condition E44 (including the circumstances of when respite or relocation offers will be available and details about how the affected community can access these offers); and<br>(e) proposed community notifications which must be provided to impacted sensitive receivers in the community at least 10 days prior to the proposed OOH Work. | MCD | Construction Noise and V bration Management Sub Plan |
| E52 | Prior to the commencement of ferry operation, the Proponent must prepare an Operational Noise Review (ONR) to confirm noise control measures that would be implemented for the operation of the SSI. The ONR must be prepared in consultation with relevant council(s) and must confirm the operational noise predictions based on the final vessel selection. The results of these revised predictions must be compared to the noise performance assumptions in the documents listed in Condition AI . Should the results indicate a worsening of impact predicted in the documents listed in Condition AI , appropriate mitigation measures must be identified and implemented. | TfNSW | Operational Noise Review |
| E53 | The ferry vessel selected for operation must be free of annoying noise characteristics as determined in the Noise Policy for Industry (EPA 2017) Fact Sheet C when assessed at offset distances representative of the nearest residential receivers to each wharf. Where it is demonstrated that this is not reasonably practicable, justification of the best achievable noise levels must be submitted to the Planning Secretary, prior to the commencement of ferry operation. | TfNSW | Operational Noise Review |
| E54 | Noise associated with the operation of the wharf and vessel based public address system(s) must not exceed 5 dB(A) above the background noise level when | TfNSW | Operational Noise Review |

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| | measured at the boundary of any sensitive receiver, excluding for emergency announcements and testing of the emergency PA system. | | |
| **E55** | Operational noise mitigation measures as identified in Condition E52 that will not be physically affected by work, must be implemented within six months of submitting the ONR, unless otherwise agreed by the Planning Secretary. Where implementation of operational noise mitigation measures are not proposed to be in accordance with this requirement, the Proponent must submit to the Planning Secretary a report providing justification as to why, along with details of temporary measures that would be implemented to reduce construction noise impacts, until such time that the operational noise mitigation measures are implemented. The report must be submitted to the Planning Secretary within six months of submitting the ONR. Note: Not having finalised detailed design is not sufficient justification for not implementing the proposed mitigation measures. | TfNSW | Operational Noise Review |
| **E56** | Within six (6) months of the commencement of ferry operation of the SSI, the Proponent must undertake monitoring of operational noise to compare actual noise performance of the SSI against the noise performance predicted in the review of noise mitigation measures required by Condition E52. | TfNSW | Operational Noise Compliance Report |
| **E57** | An Operational Noise Compliance Report (ONCR) must be prepared to document the findings of the operational noise monitoring carried out under ConditionE56. The ONCR must address the following:<br>compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under Condition E52;<br>(b) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on receivers;<br>(c) details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared;<br>(d) any required recalibrations of the noise model taking into consideration factors such as noise monitoring;<br>(e) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of mitigation measures; and<br>(f) identification of additional measures to those identified in the review of noise mitigation measures required by Condition E52, that are to be implemented, the effectiveness of the mitigation measures and reported to the Planning Secretary.<br>The Operational Noise Compliance Report must be submitted to the Planning Secretary and the EPA within 60 days of completing the operational noise monitoring and made publicly available. | TfNSW | Operational Noise Compliance Report |
| **E58** | A pre-construction condition assessment of Aboriginal and non-Aboriginal heritage items that have the potential to be impacted must be carried out by a suitably qualified building condition surveyor prior to construction. During construction, inspections of the construction activities and work areas must be undertaken to monitor and review the construction methodology and confirm the integrity of the nearby significant structural elements. For heritage items identified at risk during the pre-construction condition assessment, minimum safe working distances must be established, and vibration monitoring must be carried out prior to the commencement of construction and monitored through construction to identify any construction-related impacts. If impacts are detected during construction, work in the area must stop and appropriate environmental management measures must be implemented such as alternative construction techniques or installing protection structures in collaboration with a heritage specialist. | MCD | Heritage Management Sub Plan |
| **E59** | The Proponent, where liable, must rectify any property damage caused directly or indirectly (for example from v bration) by construction at no cost to the owner. Alternatively, the Proponent may pay compensation for the property damage as agreed with the property owner. | MCD | Construction Noise and V bration Management Sub Plan |

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| E60 | Prior to the commencement of any Work, erosion and sediment controls must be installed and maintained, as a minimum, in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book'. | MCD | Soil, Water & Contamination Sub Plan |
| E61 | Prior to the commencement of any Work, the Proponent must prepare a Soil and Water Management Plan (SWMP) to address any contamination found during construction works. The SWMP must be prepared in consultation with NPWS in respect of NPWS land. The SWMP must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme and include detailed measures to:<br>(a) identify contamination during works;<br>(b) store, test and appropriately dispose of disturbed groundwater and soils;<br>(c) include a clear and detailed unexpected finds protocol for use and implementation throughout the duration of construction works;<br>(d) include turbidity monitoring at both Kurnell and La Perouse at a frequency commensurate with the level of risk for each construction phase; and include a Trigger Action Response Plan (TARP) which includes contingencies to identify and manage any unpredicted impacts and their consequences to ensure corrective actions are implemented.<br>The Plan must be submitted to the Planning Secretary for information prior to the commencement of construction. | MCD | Soil, Water & Contamination Sub Plan |
| E62 | The Proponent must engage a NSW EPA-accredited site Auditor to review contamination reports relating to the site throughout the duration of the project to ensure that any work required in relation to sediment, soil or groundwater contamination is appropriately managed. | TfNSW | Section B1 Site Audit Statement<br>Section B2 Site Audit Statement |
| E63 | Prior to the commencement of construction, the Proponent must obtain:<br>a. a Section B1 Site Audit Statement to certify that the nature and extent of the contamination has been appropriately determined; and<br>b. a Section B2 Site Audit Statement to certify that the Soil and Water Management Plan required by Condition E61 is appropriate.<br>A copy must be provided to the Planning Secretary. | TfNSW | Section B1 Site Audit Statement<br>Section B2 Site Audit Statement |
| E64 | Following the NSW EPA-accredited Site Auditor review of contamination reports, if it is determined that remediation is required, a Remedial Action Plan must be prepared in accordance with the guidelines made and approved under section 105 of the Contaminated Land Management Act 1997, and reviewed by the EPA-accredited Site Auditor. | MCD | Soil, Water & Contamination Sub Plan |
| E65 | Where remediation is required, the Remedial Action Plan must be:<br>(a) prepared or reviewed and approved, by consultants certified under either the Environment<br>Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme and reviewed by an EPA-accredited Site Auditor; and<br>(b) prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997 and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the Remedial Action Plan is implemented. | MCD | Soil, Water & Contamination Sub Plan |
| E66 | Where remediation is required, prior to commencing with the remediation works, the Proponent must submit to the Planning Secretary for information the Remedial Action Plan and an Interim Audit Advice or a Section B Site Audit Statement prepared by a NSW EPA-accredited Site Auditor which certifies that the Remedial Action Plan is appropriate and that the site can be made suitable for the proposed use. | MCD | Soil, Water & Contamination Sub Plan |

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| E67 | Once reviewed by the auditor, the Remedial Action Plan must be implemented, and any changes must be approved in writing by the EPA-accredited Site Auditor. | MCD | Soil, Water & Contamination Sub Plan |
| E68 | Where remediation has taken place, a Section A1 Site Audit Statement — or a Section A2 Site Audit Statement (SAS) accompanied by an Environmental Management Plan — and a Site Audit Report (SAR) must be prepared certifying that the remediation works have made the land suitable for the intended land use. | MCD | Soil, Water & Contamination Sub Plan |
| E69 | The SAS and SAR must be submitted to the Planning Secretary no later than one (1) month prior to the commencement of operation of the approved land use. | All | Noted |
| E70 | Where, following site auditor review, remediation is not considered necessary, an Unexpected Contamination Finds Procedure for Contamination must be prepared before the commencement of Work and must be followed should unexpected contamination including asbestos (or suspected contamination) be excavated or otherwise discovered. The procedure must include details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved. The Procedure must be submitted to the Planning Secretary for information (if requested) before Work commences and must be implemented during all stages of work and construction. The unexpected finds procedure must be prepared or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. | MCD | Soil, Water & Contamination Sub Plan |
| E71 | Access to all utilities and properties must be maintained during construction, where practicable, unless otherwise agreed with the relevant utility owner, landowner or occupier. | MCD | Traffic, Transport and Access Sub Plan |
| E72 | Any property access physically affected by the SSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. | MCD | Traffic, Transport and Access Sub Plan |
| E73 | Local roads proposed to be used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not shown in Figure 49 and 50 of Appendix K of the EIS listed in Condition A1 must be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan required in Condition C6. | MCD | Traffic, Transport and Access Sub Plan |
| E74 | All requests to the Planning Secretary for approval to use local roads for construction activities must include a Traffic and Pedestrian Impact Assessment and be prepared in consultation with the relevel local council(s). The assessment must be undertaken by an appropriately qualified and experienced person and must include a swept path analysis if required by the Department. The assessment must include the following:<br>(a) a swept path analysis;<br>(b) demonstration that the use of local roads by heavy vehicles for the SSI will not compromise the safety of pedestrians and cyclists or the safety of two-way traffic flow on two-way roadways;<br>(c) provide details as to the date of completion of the road dilapidation surveys for the subject local roads; and<br>(d) descr be the measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times.<br>The outcomes and recommendations of the assessment must be incorporated into the Traffic Management CEMP Sub-plan required in Condition C6 as relevant. | MCD | Traffic, Transport and Access Sub Plan |
| E75 | Before any local road is used by a heavy vehicle for the purposes of the SSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the SSI. | MCD | Traffic, Transport and Access Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
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| E76 | If damage to roads occurs as a result of the SSI, the Proponent must either (at the relevant road authority's discretion):<br>(a) compensate the relevant road authority for the damage so caused; or<br>(b) rectify the damage to restore the road to at least the condition it was in pre-works as identified in the Road Dilapidation Report(s). | MCD | Traffic, Transport and Access Sub Plan |
| E77 | Safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternative route which complies with relevant standards, unless otherwise endorsed by an independent, appropriately qualified and experienced person, must be provided (including signposting) prior to the restriction or removal of the impacted access. | MCD | Traffic, Transport and Access Sub Plan |
| E78 | Construction and construction worker vehicles (including light and heavy vehicles) associated with the SSI must be accommodated within the construction boundaries on both the La Perouse and Kurnell sites at all times. On-site parking must be provided within the construction boundary to:<br>a) minimise parking on public roads;<br>b) minimise idling and queueing on local roads;<br>c) not carry out marshalling of construction vehicles near sensitive land use(s);<br>d) not block or disrupt access across pedestrian or shared user paths at any time; and | MCD | Traffic, Transport and Access Sub Plan |
| E79 | During construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented prior to the disruption. Adequate signage and directions to businesses must be provided prior to, and for the duration of, any disruption. | MCD | Traffic, Transport and Access Sub Plan |
| E80 | The SSI must be designed to meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management for new or modified local roads, parking, pedestrian and cycle infrastructure. | TfNSW | Design Reports |
| E81 | To improve local traffic flow and where existing road widths allow, line marking for two lanes within the Anzac Parade loop, La Perouse, must be provided before the commencement of operation of the SSI. Line marking must be undertaken in consultation with Randwick City Council and NPWS, unless otherwise agreed by the Planning Secretary. | TfNSW | Design Reports |
| E82 | Prior to the commencement of operation of Ferry services, the Proponent must provide an increase in car parking spaces (greater than 13) at La Perouse along the Anzac Parade parking loop through the reconfiguration of parking bays. The establishment of additional car parking spaces must be undertaken during the winter months. The Proponent must avoid the temporary closure of existing car parking bays for the purposes of installing the additional car parking spaces during the peak visitation periods at La Perouse. The Proponent must consider the impact that the provision of additional parking would have on surrounding heritage and artifacts and demonstrate the total and additional number of spaces that can be provided.<br>This must be undertaken in consultation with relevant council(s) and NPWS.<br>Evidence of consultation must be provided to the Planning Secretary for approval within 60 days of its completion.<br>Note: Identified mitigation measures may need to be further assessed under the EP&A Act. Work will need to meet relevant design standards and subject to independent road safety audits. | All | Design Reports |
| E83 | The operation of ferry services must not commence until the off-street parking at Kurnell, that is to be undertaken by NPWS, is operational, unless otherwise agreed to by the Planning Secretary. Associated wayfinding and signage must be provided to encourage the use of these parking facilities. | TfNSW | National Parks and Wildlife Service Design Reports |

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| E84 | Car parking facilities must be designed to meet the relevant Australian Standards to provide safe, convenient and disabled access from the carpark to the ferry service. | TfNSW | Design Reports |
| E85 | Prior to the commencement of Construction, a Construction Marine Works Management Plan (CMWMP) must be prepared by a suitably qualified person, in consultation with the Harbour Master. The CMWMP should, at a minimum, include the management and mitigation measures and recommendations outlined in the Navigation Safety Assessment prepared by Thompson Clarke Shipping, dated September 2021 .<br>Note: Prior to the commencement of any Works that will disturb the bed of a port, the Proponent must seek written approval from the Harbour Master in accordance with clause 67ZN of the Ports and Maritime Administration Regulation 2012. | MCD | Marine Works Sub Plan |
| E86 | Prior to the commencement of operation of the SSI, an Operational Maritime Risk Management Plan (OMRMP) must be prepared by a suitably qualified person, in consultation with the Harbour Master. The OMRMP must demonstrate how vessel movements associated with the proposal will not impact on commercial shipping movements in Port Botany and how vessel movements will interact with recreational vessels. | TfNSW | Operational Marine Risk Management Plan |
| E87 | The Proponent must prepare a Vessel Traffic Management Plan (VT MP) in consultation with Port Authority of NSW that identifies priority to sea going ships and protocols for interactions between different vessel types to aid with the safe operation of ferry vessels associated with the SSI. The VTMP must include operation of recreational vessels around the wharves and the use of the wharves for berthing/drop off/pick up (signage). The VT MP must include emergency management arrangements for incidents and accidents. | MCD | Marine Works Management Plan |
| E88 | Ferry movements must not impede any future activities by the Port Operator of the Port of Botany Bay within the navigation channel including, but not limited to, any dredging activities. | TfNSW | Operational Marine Risk Management Plan |
| E89 | All passenger ferry vessels operating between La Perouse and Kurnell to service the SSI must participate in the Vessel Traffic Service (VTS) system at all times. All ferry activities must be reported to the Harbour Master and all vessels must be fitted with an Automatic Identification System (AIS) transponder, in consultation with the Harbour Master, to enable monitoring of vessels by VTS and other AIS fitted vessels in the area. | TfNSW | Vessel Traffic Service |
| E90 | The SSI must be constructed in a manner that minimises adverse visual impacts of construction sites on the public domain, including provision of high quality public art and graphics to the hoarding surrounding the construction sites, minimising light spill, and incorporating high quality treatments and finishes for temporary structures that reflect the context within which the construction sites are located. | MCD | CEMP |
| E91 | The SSI must be designed with consideration of:<br>(a) the design objectives, principles and guidelines identified in documents listed in Condition A1;<br>(b) the principles and objectives of the draft Connecting with Country Framework; and<br>(c) relevant conservation management plans, masterplans and initiatives, where this information is known and/or available.<br>Responses to items (a) — (c) must be reviewed by the State Design Review Panel (SDRP) to inform the final design of permanent built works and landscape design of the SSI. | TfNSW | Urban Design and Landscape Plan |
| E92 | The SSI must be constructed and operated with the objective of minimising light spillage to surrounding properties and wildlife habitat. All lighting associated with the construction and operation of the SSI must be consistent with the requirements of AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 — Lighting for Roads and Public Spaces. Additionally, the Proponent must provide mitigation measures to manage any residual night lighting impacts to protect properties adjoining or adjacent to the SSI, in consultation with affected landowners. | All | Urban Design and Landscape Plan<br>Design Reports |

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| E93 | Adequate lighting and Aids to Navigation must be incorporated into the design of the wharf and jetty for navigation safety purposes. | TfNSW | Design Reports |
| E94 | The use of neutral external colour schemes and finishes that avoid reflection to minimise visual impacts must be maximised. | TfNSW | Urban Design and Landscape Plan |
| E95 | An updated Urban Design and Landscape Plan (ULDP) must be prepared to inform the final design of the SSI and detail how the SSI is to be maintained. The UDLP must be:<br>(a) submitted to the Planning Secretary prior to the construction of permanent built surface works and / or landscaping, excluding those for ecological requirements, or technical requirements, or requirements as agreed by the Planning Secretary that do not allow for alternate design outcomes; and<br>(b) implemented during construction and operation of the SSI. | TfNSW | Urban Design and Landscape Plan |
| E96 | The Proponent must establish an independent DRP to provide advice and recommendations to the Proponent during the finalisation of the SSI's design and construction detailing to facilitate quality design and place outcomes. The DRP must be formed and hotd its first meeting within six months of the date of this approval, or as otherwise agreed with the Planning Secretary.<br>Note: Nothing in this approval prevents the use of an existing design pane/ as the DRP convened for this project where the function and composition of that panel complies with the terms of this approval. | TfNSW | Urban Design and Landscape Plan |
| E97 | The responsibilities of the DRP include:<br>(a) providing advice and recommendations to the Proponent for consideration in finalisation of the design development of the SSI; and<br>(b) provide advice on the application of Kamay Ferry Wharves Submissions Report — UDLP to key design elements in relation to place making, architecture, heritage, urban and landscape design and artistic aspects of the SSI.<br>The DRP's advice must be consistent with the SSI as approved. | TfNSW | Urban Design and Landscape Plan |
| E98 | The DRP must be chaired by the NSW Government Architect (or their nominee), and must be comprised of, where relevant, suitably qualified, experienced and independent professional(s) in each of the fields of:<br>(a) urban design and place making;<br>(b) landscape architecture; (c) historic heritage; and (d) architecture.<br>The DRP must also comprise a First Nations representative with a background in design.<br>The DRP may seek advice from suitably qualified, experienced independent professionals in other fields as required, including but not limited to sustainability and active transport. | TfNSW | Urban Design and Landscape Plan |
| E99 | The DRP members must be sourced from the NSW State Design Review Panel Pool or otherwise be approved by the NSW Government Architect. | TfNSW | Urban Design and Landscape Plan |
| E100 | Prior to forming the DRP, a Design Review Panel Terms of Reference must be developed and endorsed by the NSW Government Architect. The Terms of Reference must be submitted to the Planning Secretary once it is endorsed by the NSW Government Architect and:<br>(a) must be generally consistent with the NSW State Design Review Panel Terms of Reference<br>(version 5);<br>(b) outline the frequency of DRP meetings, coordinated with the Proponent's program requirements, to ensure timely advice and design adjustment; and (c) identify cessation arrangements. | TfNSW | Urban Design and Landscape Plan |
| E101 | The DRP must be operated and managed in accordance with the Design Review Panel Terms of Reference. | TfNSW | Urban Design and Landscape Plan |
| E102 | The relevant councils, Heritage NSW, RAPs and La Perouse LALC may be invited to the meetings of the Panel as observers or to provide feedback on key design elements of the SSI. | TfNSW | Urban Design and Landscape Plan |

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| E103 | The Proponent must respond to the outcomes of the DRP's review. The DRP advice and recommendations, and the Proponent's response to each recommendation must be included when submitting the final UDLP to the Planning Secretary for information. | TfNSW | Urban Design and Landscape Plan |
| E104 | The SSI must be designed to retain as many existing trees as possible. Replacement trees and plantings must be provided at a ratio of no less than 2:1 and deliver a net increase in tree canopy and aim to enhance the relevant council's position in respect of the Sydney Green Grid, unless otherwise agreed by the Planning Secretary. | TfNSW | Urban Design and Landscape Plan |
| E105 | Replacement trees must:<br>(a) be located on public land in consultation with NPWS, that delivers increased shading to footpaths, pedestrian and cycle paths; be of a species suitable to the location, having regard for local ecology and existing street trees;<br>(c) meet the requirements for quality tree stock specified in the AS2303:2018: Tree Stock for Landscape Use;<br>(d) be provided no later than six months following the commencement of operation; and have a minimum pot size consistent with the relevant council's plans I programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by NPWS. | TfNSW | Urban Design and Landscape Plan |
| E106 | The ongoing maintenance and operation costs of urban design, open space, landscaping and recreational items and work implemented as part of this approval remain the Proponent's responsibility until satisfactory arrangements have been put in place for the transfer of the asset to the relevant authority. Before the transfer of assets, the Proponent must maintain items and work to at least the design standards established in the UDLP.<br>The Planning Secretary must be advised of the date of transfer of the asset(s) to the relevant authority. | TfNSW | Urban Design and Landscape Plan |
| E107 | Should any plant loss occur during the maintenance period the plants should be replaced by the same plant species unless it is determined by a suitably qualified person that a different species is more suitable for that location. | MCD | Noted |
| E108 | Management and routine maintenance for design elements and landscaping work (including weed management) to ensure the success of the design and landscape outcomes must be undertaken for the life of the SSI. | TfNSW | Urban Design and Landscape Plan |
| E109 | Prior to operation of the SSI the Proponent must install bicycle parking racks near the entrances to the ferry wharves as recommended by the documents listed in Condition A1 . At Kurnell, the Proponent must consult with NPWS on the installation of bicycle parking near the ferry wharf. The Proponent must also ensure that dedicated bicycle parking is provided on the ferry service and that the future ferry operator will accept bicycles on board alt vessels. | MCD | Noted |
| E110 | Continuous active transport paths linking the ferry wharves to the nearest public transport bus stops, located on Anzac Parade, La Perouse and Captain Cook Drive, Kurnell must be provided. Wayfinding signage must be provided to direct commuters from the ferry wharves to the bus stops. In Kamay Botany Bay National Park, all new permanent signage must be provided in consultation with NPWS. The path must be in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling (Austroads, 2017). | TfNSW | Design Reports |
| E111 | Waste generated during construction and operation must be dealt with in accordance with the following priorities:<br>(a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced;<br>(b) where avoiding or reducing waste is not poss ble, waste must be re-used, recycled, or recovered; and<br>(c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of. | All | Waste & Energy Sub Plan |
| E112 | The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must be done in accordance with a Resource Recovery | All | Waste & Energy Sub Plan |

| MCoA Ref | Description | Owner | Evidence |
|---|---|---|---|
| | Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, as the case may be. | | |
| E113 | Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste. | MCD | Waste & Energy Sub Plan |
| E114 | All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes. | MCD | Waste & Energy Sub Plan |
| E115 | The SSI must be designed, constructed and operated so as to maintain the NSW Water Quality Objectives where they are being achieved as at the date of this approval, and contr bute towards achievement of the NSW Water Quality Objectives over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the SSI contains different requirements in relation to the NSW Water Quality Objectives, in which case those requirements must be complied with | All | Soil, Water & Contamination Sub Plan |
| E116 | The Proponent must consider the Department of Industry's Guidelines for controlled activities on waterfront land Riparian corridors 2018 when carrying out work within 40 metres of a watercourse, including its bed. | All | Soil, Water & Contamination Sub Plan |
| E117 | If construction stage stormwater discharges are proposed, a water pollution impact assessment must be undertaken to inform licensing consistent with section 45 of the POEO Act. Any such assessment must be prepared in consultation with the EPA and be consistent with the National Water Quality Guidelines, with a level of detail commensurate with the potential water pollution risk. | MCD | Soil, Water & Contamination Sub Plan |
| E118 | Drainage feature crossings (permanent and temporary watercourse crossings and stream diversions) and drainage swales and depressions must be carried out in accordance with relevant guidelines and designed by a suitably qualified and experienced person. | TfNSW | Design Reports |
| E119 | All new or modified drainage systems associated with the SSI must be designed to:<br>(a) meet the capacity constraints of any council's drainage system to receive and convey the proposed flows from the SSI, or otherwise upgrade council's drainage system at the Proponent's expense, in consultation with the relevant council(s);<br>(b) minimise impacts on the receiving environment at the final outflow point resulting from any additional flow volume (including, but not limited to scour, flooding, water quality impacts, and impacts on riparian vegetation, aquatic ecology and property); and<br>(c) ensure mitigation measures are implemented where increased flows through cross drainage systems adversely impact on council or Sydney Water drainage infrastructure and/or the receiving environment. | TfNSW | Design Reports |

EPBC Conditions of Approval

| Ref | Description | Owner | Evidence |
|---|---|---|---|
| 1) | The approval holder must not clear outside of the project area. | All | CEMP Appendix B2 – Biodiversity Management Sub Plan |
| **National Heritage Places** | | | |
| 2) | The approval holder must comply with NSW Approval conditions E21 – E37 and E49 to minimise impacts on the Indigenous, Non-Indigenous, and Natural heritage values of Kurnell Peninsula Headland. | All | CEMP Appendix B1 – Heritage Management Sub Plan |
| **Listed Threatened Species and Ecological Communities** | | | |
| 3) | Within the project area, the approval holder must not clear more than:<br>a) 0.0683 hectares of seagrass meadows<br>b) 0.0683 hectares of White's Seahorse habitat. | All | CEMP Appendix B2 – Biodiversity Management Sub Plan |
| 4) | The approval holder must comply with NSW Approval conditions E6 – E8 and E11 related to preconstruction surveying and protection measures. | All | CEMP Appendix B2 – Biodiversity Management Sub Plan |
| 5) | The approval holder must comply with NSW Approval conditions E62 – E65, E67 – E68, and E70 related to the prevention and management of contamination on protected matters. | All | CEMP Appendix B6 – Soil, Water & Contamination Management Sub Plan |
| **Construction Environmental Management Plan** | | | |
| 6) | The approval holder must comply with NSW Approval conditions C1 – C13 related to the preparation and implementation of a Construction Environmental Management Plan (CEMP) to avoid, mitigate and manage impacts on protected matters during construction. | All | Construction Environmental Management Plan (this plan) |
| 7) | The CEMP required by the NSW Approval must include environmental management measures to manage impacts to protected matters and be informed by the contamination documentation. | TfNSW | Construction Environmental Management Plan (this plan) |
| **Marine Biodiversity Offset Strategy** | | | |
| 10) | The approval holder must comply with NSW Approval conditions E12 – E20 related to the requirements of the Marine Biodiversity Offset Strategy (MBOS) to compensate for the clearing of 0.0683 hectares of seagrass meadows and White's Seahorse habitat. | TfNSW | Marine Biodiversity Offset Strategy |
| 11) | To monitor the outcomes of the MBOS for seagrass meadows and White's Seahorse habitat, the approval holder must include a Marine Biodiversity Offset Report as part of the compliance report until at least the 10th anniversary of the commencement of the action, unless otherwise agreed to in writing by the Minister. Each Marine Biodiversity Offset Report must include:<br>a. a progress report on the implementation of the MBOS;<br>b. a list of success metrics;<br>c. details of the monitoring methodology(ies) implemented and the locations of reference sites;<br>d. monitoring results including a comparison against reference sites;<br>e. a summary of any adaptive management steps taken to improve implementation and/or monitoring methodology(ies); and<br>f. a conclusion as to whether the outcomes, as measured against the success metrics, have been achieved, are likely to be met or are unl kely to be met, as determined by a suitably qualified person. | TfNSW | Marine Biodiversity Offset Strategy |

| Ref | Description | Owner | Evidence |
|---|---|---|---|
| 12) | To assess the ongoing success of the MBOS, the approval holder must submit a Rehabilitation Monitoring Review to the department within 6 years of the date of this approval and every 5 years thereafter, unless otherwise agreed to in writing by the Minister. Each Rehabilitation Monitoring Review must include:<br>a. a review of the monitoring methodology by a suitably qualified person;<br>b. a conclusion based on the success metrics as to whether the environmental offsets for seagrass meadows and White's Seahorse habitat have been achieved, are likely to be met or are unl kely to be met, as determined by a suitably qualified person; and<br>c. if environmental offsets for seagrass meadows and White's Seahorse habitat have not been achieved based on the success metrics:<br>i. a list measurable and time-bound remediation measures which will be undertaken to ensure the success metrics are achieved; and<br>ii. justification for how the remediation measures will provide full compensation for the impacts to seagrass meadows and White's Seahorse habitat. | TfNSW | Marine Biodiversity Offset Strategy |
| **Submission and Publication of Plans** | | | |
| 13) | The approval holder must submit all plans required by these conditions electronically to the department. | TfNSW | Submission Evidence |
| 14) | If the approval holder submits a revised version of a plan for the Planning Secretary's approval, the approval holder must provide the revised plan to the department within 5 business days and an explanation of the differences between the approved plan and the revised plan. | TfNSW | Revised Document |
| 15) | If a revised version of a plan is approved by the Planning Secretary, the approval holder must provide the revised plan to the department within 10 business days of the Planning Secretary's approval. | TfNSW | Revised Document |
| 16) | Unless otherwise agreed to in writing by the Minister, the approval holder must publish each plan on the website within 15 business days of the date:<br>a. the plan is approved by the Planning Secretary; or<br>b. a revised version of the plan is approved by the Planning Secretary. | TfNSW | Revised Document<br>Submission Evidence |
| 17) | The approval holder must keep all published plans required by these conditions on the website until the expiry date of this approval. | TfNSW | Project Website |
| 18) | The approval holder must exclude or redact sensitive ecological data from plans published on the website or otherwise provided to a member of the public. | TfNSW | Noted |
| 19) | If sensitive ecological data is excluded or redacted from a plan, the approval holder must notify the department in writing what exclusions and redactions have been made in the version published on the website | TfNSW | Submission of unreacted document submission |
| **Notification of Date of Commencement of the Action** | | | |
| 20) | The approval holder must notify the department electronically of the date of commencement of the action, within 5 business days of the commencement of the action. | TfNSW | Written notification of commencement of action |
| 21) | If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister. | TfNSW | Written notification of commencement of action |

| Ref | Description | Owner | Evidence |
|---|---|---|---|
| **Compliance Records** | | | |
| 22) | The approval holder must maintain accurate and complete compliance records. | All | CEMP Section 8.4 |
| 23) | If the department makes a request in writing, the approval holder must provide electronic copies of compliance records to the department within the timeframe specified in the request.<br>Note: Compliance records may be subject to audit by the department, or by an independent auditor in accordance with section 458 of the EPBC Act, and/or be used to verify compliance with the conditions. Summaries of the results of an audit may be published on the department's website or through the general media. | TfNSW | Response to DCCEEW |
| 24) | The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps and other spatial and metadata required under the conditions of this approval are prepared in accordance with the Guidelines for biological survey and mapped data (Commonwealth of Australia 2018), or as otherwise specified by the Minister in writing. | All | CEMP Section 8.1.2 |
| 25) | The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps and other spatial and metadata required under the conditions of this approval are prepared in accordance with the Guide to providing maps and boundary data for EPBC Act projects (Commonwealth of Australia 2021), or as otherwise specified by the Minister in writing. | All | CEMP Section 8.1.2 |
| 26) | The approval holder must submit all monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the department within 12 months of the date of this approval. | TfNSW | Monitoring data |
| **Annual Compliance Reporting** | | | |
| 27) | The approval holder must prepare a compliance report for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the Minister. | TfNSW | Annual Compliance Report |
| 28) | Each compliance report must be consistent with the Annual Compliance Report Guidelines (Commonwealth of Australia 2014). | TfNSW | Annual Compliance Report |
| 29) | Each compliance report must include:<br>a. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents.<br>b. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared.<br>c. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented. | TfNSW | Annual Compliance Report |
| 30) | The approval holder must:<br>a) Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required.<br>b) Notify the department electronically, within 5 business days of the date of publication, that a compliance report has been published on the website.<br>c) Provide the weblink for the compliance report in the notification to the department.<br>d) Keep all published compliance reports required by these conditions on the website until the expiry date of this approval. | TfNSW | Annual Compliance Report |

| Ref | Description | Owner | Evidence |
|---|---|---|---|
| | e) Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public.<br>f) If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions and redactions have been made in the version published on the website.<br>Note: Compliance reports may be published on the department's website | | |
| **Reporting Non-Compliance** | | | |
| 31) | The approval holder must notify the department electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with these conditions or commitments made in a plan. | TfNSW | Non-compliance notifcation |
| 32) | The approval holder must specify in the notification:<br>a) Any condition or commitment made in a plan which has been or may have been breached.<br>b) A short description of the incident and/or potential non-compliance and/or actual noncompliance.<br>c) The location (including co-ordinates), date, and time of the incident and/or potential noncompliance and/or actual non-compliance.<br>Note: If the exact information cannot be provided, the approval holder must provide the best informa ion available. | TfNSW | Non-compliance notification |
| 33) | The approval holder must provide to the department in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual noncompliance, the details of that incident and/or potential non-compliance and/or actual noncompliance with these conditions or commitments made in a plan. The approval holder must specify:<br>a) Any corrective action or investigation which the approval holder has already taken.<br>b) The potential impacts of the incident and/or non-compliance and/or non-compliance.<br>c) The method and timing of any corrective action that will be undertaken by the approval holder. | TfNSW | Non-compliance report |
| **Independent Audit** | | | |
| 34) | The approval holder must ensure that an independent audit of compliance with these conditions is conducted for every five-year period following the commencement of the action until this approval expires, unless otherwise specified in writing by the Minister. | TfNSW | Audit report |
| 35) | For each independent audit, the approval holder must:<br>a) Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed timeframe for submitting the audit report to the department prior to commencing the independent audit.<br>b) Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the department.<br>c) Submit the audit report to the department for approval within the timeframe specified and approved in writing by the department.<br>d) Publish each audit report on the website within 15 business days of the date of the department's approval of the audit report. | TfNSW | Audit report |

| Ref | Description | Owner | Evidence |
|---|---|---|---|
| | e) Keep every audit report published on the website until this approval expires. | | |
| 36) | Each audit report must report for the five-year period preceding that audit report. | TfNSW | Audit report |
| 37) | Each audit report must be completed to the satisfaction of the Minister and be consistent with the Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (Commonwealth of Australia 2019). | TfNSW | Audit report |
| **Completion of the Action** | | | |
| 38) | The approval holder must notify the department electronically 60 business days prior to the expiry date of this approval, that the approval is due to expire. | TfNSW | Written notification |
| 39) | Within 20 business days after the completion of the action, and, in any event, before this approval expires, the approval holder must notify the department electronically of the date of completion of the action and provide completion data. | TfNSW | Written notification |
| **Changes to State Conditions** | | | |
| 40) | The approval holder must inform the department in writing within 2 business days of requesting any change to the NSW Approval conditions that may relate to protected matters. | TfNSW | Notification |
| 41) | The approval holder must inform the department in writing within 5 business days of any approved changes made to the NSW Approval conditions that may relate to protected matters. | TfNSW | Notification |

Revised Environmental Mitigation Measures

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| G1 | A Construction Environmental Management Plan (CEMP) will be prepared in accordance with the Environmental Management Plan Guideline (NSW DPIE, 2020) and Environmental Management Plan Guidelines (Australian Government, 2014). It will be implemented before starting work. As a minimum, the CEMP will include:<br>a) Statutory approval requirements<br>b) How the project will implement the identified mitigation and management measures outlined in the EIS<br>c) Issue-specific environmental management plans<br>d) Roles and responsibilities, including those of sub-contractors<br>e) Communication requirements, including liaison with stakeholders and the community<br>f) Induction and training requirements<br>g) Environmental performance monitoring and evaluation procedures and remedial actions<br>h) Reporting requirements and record-keeping arrangements<br>i) Emergency and incident management procedures<br>j) Audit and review procedures. | McConnell Dowell | Pre-construction and construction | CEMP |
| G2 | Prior to starting operations, operational environmental management measures will be incorporated into the existing Transport for NSW ferry wharf operational management system. | Transport for NSW | Operation | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| C1 | A Community Liaison Implementation Plan (CLIP) will be prepared and implemented under the CEMP. As a minimum the CLIP will:<br>Identify people, community interest groups, businesses, priority groups and stakeholders to be consulted with before and during construction<br>Set out procedures and mechanisms for distr buting accessible information about, or relevant to, the project's construction<br>Provide for the formation of community-based forums that focus on key environmental management construction issues<br>Set out procedures and mechanisms to:<br>Provide updates at key milestones and before starting impacting activities<br>Allow the community to discuss or provide feedback<br>To respond to community enquiries or feedback<br>To resolve issues and mediate any disputes<br>Include the means for Aboriginal community consultation with the Local Aboriginal Land Council (LALC), Registered Aboriginal Parties (RAPs) and other interest groups.<br>Include contact name and number for complaints<br>Include information on the actual impacts that can be expected because of the construction of the project and ways in which these will be mitigated<br>Include opportunities for community involvement in monitoring impacts. | Transport for NSW<br>McConnell Dowell | Detailed design, pre-construction and construction | Community Communication Strategy (CCS) |
| AH1 | Detailed design will consider opportunities to avoid impacts to significant heritage values and known/discovered intact archaeological remains in consultation with La Perouse Local Aboriginal Land Council and other Registered Aboriginal Parties. | Transport for NSW | Detailed design | N/A |
| AH2 | During detailed design, elements of design such as finishes and treatments as well as heritage interpretation, such as displays and panels, will be informed by the Aboriginal cultural heritage principles in the following policies and plans:<br>Kamay Botany Bay National Park: Interpretation and Storytelling Plan (WolfPeak Environment and Heritage, 2020)<br>Kamay Botany Bay National Park Kurnell Master Plan (NSW DPIE, 2019).<br>Kamay Botany Bay National Park Plan of Management (NSW DPIE, 2020a)<br>Meeting Place Precinct: Botany Bay National Park – Kurnell. Conservation Management Plan (Context Pty Ltd, 2008).<br>La Perouse Headland Conservation Management Plan (Jill Sheppard Heritage Consultants, 2009). | Transport for NSW | Detailed design | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| AH3 | A Construction Heritage Management Plan (HMP) will be prepared and implemented under the CEMP. The HMP will include:<br>a) Construction measures and procedures to minimise and manage impacts on Aboriginal cultural heritage<br>b) Sensitive area maps that identify Aboriginal heritage values, culturally and archaeologically sensitive areas and constraints within the study area<br>c) Unexpected Heritage Items Procedure (NSW Roads and Maritime Services, 2015d)<br>d) Include consultation with and contact details for the La Perouse Local Aboriginal Land Council, Registered Aboriginal Parties and National Parks and Wildlife Service. | McConnell Dowell | Pre-construction, and construction | HMP |
| AH4 | Aboriginal Cultural Heritage Awareness Inductions will be given to all workers during site inductions. This will ensure they are aware of the site's heritage values and context. Updates will be provided based on stakeholder feedback, consultation with the La Perouse Local Aboriginal Land Council, Registered Aboriginal Parties and following any unexpected finds. | McConnell Dowell | Pre-construction and construction | HMP |
| AH5 | A Salvage Excavation Program will be developed and be carried out prior to any subsurface impacts within the Low Potential PAD at La Perouse. This includes the jetty tie-in where utilities, wharf piles and landscaping works. Following completion of the archaeological excavation and the subsequent analysis and reporting, further consultation will be undertaken to determine the long-term repository for any retrieved Aboriginal objects. | McConnell Dowell | Pre-construction and construction | HMP |
| AH6 | A visual inspection of the potential rock engravings (Site 3, La Perouse [AHIMS ID 45-6-0650] and Site 4, La Perouse [AHIMS ID 45-6-0651]) will be undertaken before setting-up the ancillary facilities and starting construction. | McConnell Dowell | Pre-construction | HMP |
| AH7 | Establish exclusion zones for all registered AHIMS rock engraving sites within the construction boundary or directly adjacent and cover with geotextile fabric (or similar) before setting-up the ancillary facilities and creating the construction compound. | McConnell Dowell | Pre-construction | HMP |
| AH8 | Archaeological work method statements will be prepared prior to setting up ancillary facilities, construction compounds or construction works to prevent impact and preserve the integrity the rock engraving at La Perouse (AHIMS ID 45-6-0653). During excavation and subsurface works or any other identified high risk activities, archaeological supervision and v bration monitoring will be undertaken at the potential location of the rock engraving at La Perouse (AHIMS ID 45-6-0653).<br>If the engraving is identified and/or the vibration levels would result in damage to the integrity of the sandstone structure, works must cease, the site protected and the construction methodology be reviewed in consultation with a heritage consultant to mitigate further impacts. | McConnell Dowell | Pre-construction and construction | HMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| AH9 | Archaeological supervision will be undertaken during excavations below 400mm at Kurnell within the Foreshore Midden – Captain Cook's Landing Place (AHIMS ID 52-3-0219). If archaeological material is identified, further archaeological investigations may be required following review and assessment of the archaeological resources identified. | McConnell Dowell | Pre-construction and construction | HMP |
| NAH1 | Detailed design will consider opportunities to avoid impacts to significant heritage values and known/discovered intact archaeological remains in consultation with Heritage NSW. Options to consider during the detailed design include:<br>a) Excavating the utility trench at Kurnell underneath the buried portion of the course stone sea wall near the wharf tie-in instead of removing a section of the sea wall<br>b) Excavating the utility trench at Kurnell underneath the archaeological remains of the former sea wall near the wharf tie-in instead of impacting the archaeological remains<br>c) Limiting the impact depth of landscape works at La Perouse to reduce impacts to the archaeological remains of the former wharf approach road<br>d) Avoiding impact to remnant Coast Banksia community at La Perouse. Where impact cannot be avoided, offset planting of native vegetation at La Perouse and Kurnell will be provided. | Transport for NSW | Detailed design | N/A |
| NAH2 | During detailed design, elements of design such as finishes and treatments as well as heritage interpretation, such as displays and panels, will be informed by the non-Aboriginal cultural heritage principles in the following policies and plans:<br>Kamay Botany Bay National Park Kurnell Master Plan (NSW DPIE, 2019).<br>Kamay Botany Bay National Park Plan of Management (NSW DPIE, 2020a)<br>Meeting Place Precinct: Botany Bay National Park – Kurnell. Conservation Management Plan (Context Pty Ltd, 2008).<br>La Perouse Headland Conservation Management Plan (Jill Sheppard Heritage Consultants, 2009). | Transport for NSW | Detailed design | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| NAH3 | Non-Aboriginal heritage management measures will be included as part of the Construction Heritage Management Plan (HMP). The HMP will include:<br>a) Construction measures and procedures to minimise and manage impacts on non-Aboriginal cultural heritage<br>b) Sensitive area maps that identify non-Aboriginal heritage values, culturally and archaeologically sensitive areas and constraints within the study area<br>c) Identification of heritage protection zones and protection requirements for heritage items within and in the vicinity of the construction boundary<br>d) An outline of the required archaeological management strategies<br>e) A heritage register to document the location, condition, significance, storage requirements of any memorials, monuments and interpretive panels which need temporarily relocating and storing during construction including The Captain Cook watering well, The Landing Place Memorial and interpretative panels on the extant wharf.<br>f) Unexpected Heritage Items Procedure (NSW Roads and Maritime Services, 2015d)<br>g) Consultation with National Parks and Wildlife Service, Heritage NSW, Randwick City Council and Sutherland Shire Council. | McConnell Dowell | Pre-construction and construction | HMP |
| NAH4 | An Archaeological Research Design (ARD) will be prepared before work starts. The ARD will confirm the areas within the construction boundaries requiring archaeological investigation, management and any salvage requirements, following detailed design. It will outline the archaeological investigation method. Archaeological Work Method Statements (AWMS) will be prepared prior to construction to support the ARD. | Transport for NSW<br>McConnell Dowell | Pre-construction | HMP |
| NAH5 | Where any archaeological investigations identify remains, opportunities should be considered for leaving archaeological remains exposed and incorporating them into the visual landscape. Consultation with Heritage NSW and National Parks and Wildlife Service will be undertaken to determine the long-term repository for any retrieved objects. | Transport for NSW | Pre-Construction<br>Construction | N/A |
| NAH6 | Non-Aboriginal Heritage Awareness Inductions will be given to all workers during site inductions. This will ensure they are aware of their obligations under the NSW *Heritage Act 1977* and best practice as outlined in The Burra Charter (Australia ICOMOS 2013). Updates will be provided based on stakeholder feedback and following any unexpected finds and the outcome of the ARD. | McConnell Dowell | Construction | HMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| NAH7 | A Photographic Archival Recording Program will be undertaken in accordance with the *How to Prepare Archival Recording of Heritage Items* (NSW Heritage Office 1998) and *Photographic Recording of Heritage Items Using Film or Digital Capture* (NSW Heritage Office 2006). Photographic archival recording will be carried out for heritage items that are directly impacted within the construction boundaries and record the setting and views of the heritage items within the study area that will be subject to minor or greater visual impacts based on Table 8-4 of the EIS. The impacted elements include but are not limited to:<br>a) The former sea wall at Kurnell<br>b) The former wharf approach road at La Perouse<br>c) The archaeological potential areas at La Perouse<br>d) Nearby heritage items subject to minor visual impacts including; Kurnell Peninsula Headland, Kamay Botany Bay National Park (North and South) and Towra Point Reserve, Kurnell Historic Site (in Kamay Botany Bay National Park), Kurnell monuments (in Kamay Botany Bay National Park) and Captain Cook monument. | McConnell Dowell | Pre-construction | HMP |
| NAH8 | Monument Track will be reinstated in the same location following construction. This will ensure that the historical circulation pattern is maintained in accordance with the policies outlined in Section 5.5: Landscape of the Meeting Place Precinct CMP. Specifically:<br>a) The existing concrete slabs will be temporarily removed and reinstated rather than being replaced. If this is not poss ble, replaced sections will match the existing track<br>b) Care will be taken to remove sections with interpretive text and ensure that they are returned to their original location. | Contactor | Construction | HMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
|---|---|---|---|---|
| UH1 | Underwater heritage management measures will be included as part of the Construction Heritage Management Plan (HMP). The HMP will include:<br>a) Construction measures and procedures to minimise and manage impacts on underwater heritage<br>b) Sensitive area maps that identify areas of underwater heritage sensitivity and constraints in the study area<br>c) Artefact management procedures, including identification of approved submerged reburial locations<br>d) Relevant work method requirements, including the installation and removal of the construction platform at La Perouse, temporary causeway at Kurnell and any other temporary structures<br>e) Maritime heritage inductions tailored for underwater work activities including, but not limited to anchoring or trenching<br>f) Restricted zones to be established for the following heritage items; First Slipway at La Perouse, Remains of the sandstone block causeway for La Perouse wharf, Paragon Restaurant / Boat Davits, Holt Jetty / Isaac Smith memorial/ Captain Cook's Landing Site which limit activities and movements i.e. no tracked machines.<br>g) Archival, baseline and periodic monitoring protocols (before and during construction, including a final site inspection within three months of completion of works) for the heritage items identified in UH1(g)<br>h) Unexpected Heritage Items Procedure (NSW Roads and Maritime Services, 2015d)<br>i) Consultation requirements with National Parks and Wildlife Service, Heritage NSW, Randwick City Council and Sutherland Shire Council. | McConnell Dowell | Pre-construction and construction | HMP |
| UH2 | An archaeological dive inspection will be carried out within the footprint of the wharves. Where a culturally significant heritage item is present, any movable heritage items will be relocated away from the impact area before starting work. | McConnell Dowell | Pre-construction | HMP |
| UH3 | Unidentified seabed anomalies will be avoided through the use of a five metre no-anchoring exclusion zone. If these areas are required for anchoring or mooring, a dive inspection will determine if the item is of low cultural heritage sensitivity to enable these activities to occur. | McConnell Dowell | Pre-construction | HMP |
| MB1 | Design and lighting opportunities will be considered during the detailed design, including:<br>• Use of light permeable materials for the wharves to minimise shading impacts to marine habitats<br>• Measures in the National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds, and Migratory Shorebirds (Australian Government Department of Environment and Energy, 2020). | Transport for NSW | Detailed design | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| MB2 | A Construction Biodiversity Management Plan (BMP) will be prepared in accordance with the Biodiversity Assessment Method (NSW DPIE, 2020h). It will be implemented under the CEMP. The BMP will detail the measures and procedures to minimise and manage construction impacts on marine biodiversity. The BMP will include:<br>• Sensitive area maps that identify sensitive habitats, protection areas, no anchoring zones, and exclusion zones to protect seagrass and threatened species<br>• Define procedures addressing relevant matters specified in the NSW DPI Fisheries Policy and guidelines for fish habitat conservation and management (NSW Department of Primary Industries, 2013).<br>• Include measures to prevent and monitor:<br>– Water pollution<br>– Sediment disturbance during construction<br>– Construction vessel/barge movements, anchoring, and shading<br>– Impact on known Black Rockcod habitat where possible<br>– Biosecurity risks<br>– Vessel str ke by maintaining safe distances and approaches as identified in Section 2.3 and 2.5 of the Biodiversity Conservation Regulation 2017 and limiting speeds.<br>• Define and implement marine ecology induction to all workers during site inductions<br>• Consultation with DPI Fisheries, NSW Environment, Energy and Science Group, Randwick City Council, Sutherland Shire Council, National Parks and Wildlife Service for the preparation of the BMP. | McConnell Dowell | Pre-construction and construction | FFMP |
| MB3 | Establish no anchoring zones to minimise impacts from anchor points within seagrass meadows of *Posidonia Australis* at Kurnell and La Perouse. | McConnell Dowell | Pre-construction and construction | FFMP |
| MB4 | Avoid fixed location of barges at locations of *Posidonia australis* outside of the marine habitat impact area within the construction boundary to minimise shading impacts. | McConnell Dowell | Pre-construction and construction | FFMP |
| MB5 | Implement biosecurity management measures applicable and relevant to the project in accordance with relevant NSW DPI Fisheries policies and procedures and National biofouling management guidelines for marinas, slipways, boat maintenance and recreational boating facilities (DAWE, 2021). | McConnell Dowell (Construction)<br><br>Transport for NSW (Operations) | Pre-construction, construction and operation | FFMP |
| MB6 | Establish suitable navigation channels to avoid areas of listed species habitat, including:<br>Kurnell<br>• Watts reef (l kely Black Rockcod habitat)<br>• Large TEC seagrass meadow of Posidonia Australis<br>La Perouse<br>• Avoid accessing near reef habitat<br>• No access over patch of Posidonia Australis to the east of the wharf. | McConnell Dowell (Construction)<br><br>Transport for NSW (Operations) | Pre-construction, construction and operation | FFMP/Marine Works Management Navigational Management Plan |
| MB7 | Vessels are to maintain safe distances and approaches as identified in Section 2.3 and 2.5 of the Biodiversity Conservation Regulation 2017. | Transport for NSW | Operation | FFMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| MB8 | Where possible, areas of known Black Rockcod habitat will be identified in detailed design and avoided during construction and within the ferry swept path during operation. | Transport for NSW | Detailed design, construction and operation | FFMP |
| MB9 | Establish areas of no wash zones in consultation with Port Authority NSW, NSW DPI Fisheries and Transport for NSW at:<br>• La Perouse to minimise wash effects on the coastal subtidal and intertidal reef areas<br>• Watts Reef near Kurnell to minimise wash effects on the subtidal habitat on the reef<br>• Near both wharves to minimise excess wash from the ferry and recreational vessel access. | Transport for NSW | Construction and operation | FFMP |
| MB10 | A Marine Biodiversity Offset Strategy (MBOS) will be prepared in consultation with NSW DPI Fisheries. As a minimum the MBOS will include:<br>a) Pre and post construction seagrass monitoring program to validate construction impacts<br>b) A seagrass translocation and rehabilitation plan<br>c) Investigation of other offset opportunities which may include artificial marine fauna habitat such as seahorse habitat structures, environmentally friendly moorings or research trials on environmentally friendly moorings. | Transport for NSW | Pre-construction, construction and operation | MBOS |
| B1 | Measures to further avoid and minimise the construction footprint, native vegetation or habitat removal will be considered during the detailed design stage and implemented where practicable and feasible. Measures to avoid and minimise impacts should be prioritised in the following order:<br>a) Critical habitat<br>b) Threatened species, endangered ecological communities or their habitat<br>c) Native vegetation and habitat supporting flora and fauna connectivity and/or that supports other environmental objectives such as protecting water quality, hydrology or erosion and sediment controls<br>d) Native vegetation of higher quality condition<br>e) Other native vegetation. | Transport for NSW | Detailed design | N/A |
| B2 | As a part of detailed design, opportunities to minimise disturbance of foreshore and forested habitats as a result of light spill are to be investigated. This will include:<br>a) Minimising the number of proposed permanent lights and optimising their locations where possible so as to provide maximum setbacks to adjacent habitats<br>b) Where lights cannot be avoided, use of lower impact globes, directional shields, timers, sensors or motion detectors. | Transport for NSW | Detailed design | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| B3 | Terrestrial biodiversity management measures will be included as part of the Construction Biodiversity Management Plan (BMP). As a minimum the BMP will include:<br>a) Sensitive area maps that identify native vegetation, flora and fauna habitat, threatened species and endangered ecological communities<br>b) Maps showing areas to be cleared and areas to be protected, including exclusion zones, protected habitat features (e.g. hollow-bearing trees), and areas for rehabilitation or re-establishment of native vegetation<br>c) Site inductions and training to ensure awareness of requirements of the BMP and relevant statutory responsibilities. Site-specific training will be given to personnel when working in the vicinity of areas of identified biodiversity value that are to be protected.<br>d) Requirements set out in the Roads and Traffic Authority (RTA) Landscape Guideline<br>e) Procedures addressing relevant matters specified in the Biodiversity Guidelines - Protecting and managing biodiversity on RTA Projects (NSW Roads and Traffic Authority, 2011a) including but not limited to:<br>• Pre-clearing, including the outcomes of final flora and fauna species checks, establishment of exclusion zones and on-ground identification of specific habitat features to be retained (such as hollow-bearing trees)<br>• Vegetation clearing and bushrock removal, including staged habitat removal and any specified seasonal limits on clearing activities<br>• Fauna handling and unexpected threatened species finds<br>• Rehabilitation, revegetation, re-use of soils, woody debris and bushrock, and other habitat management actions<br>• Weed and pathogen management<br>• Unexpected finds procedure.<br>f) Monitoring during construction and post-construction<br>g) Adaptive management measures to be applied if monitoring indicates unexpected adverse impacts. | McConnell Dowell | Pre-construction and construction | FFMP |
| B4 | A consulting arborist is to carry out an assessment of all trees within the construction boundary that are proposed for retention in accordance with Australian Standard 4970: Protection of Trees on Development Sites. The arborist is to provide a report with recommendations on the viable retention of all native trees within the construction boundary of the mapped PCTs, and include recommendations for amending design or using alternate construction methods to reduce any impacts on retained trees. | McConnell Dowell | Pre-construction | FFMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| B5 | A Terrestrial Biodiversity Offset Strategy will be prepared in accordance with the NSW Biodiversity Offset Scheme (NSW Department of Planning, Industry and Environment (DPIE), 2020i). Biodiversity credits are required to be obtained for the following PCTs and fauna species:<br>PCT 1823 – Coastal headland cliff line scrub<br>PCT 661 – Coastal sand littoral forest (Kurnell Dune Forest in the Sutherland Shire and City of Rockdale)<br>• PCT 772 - Coastal foredune wattle scrub<br>• Potential foraging habitat for Large-eared Pied Bat<br>• Potential foraging habitat for Eastern Cave Bat<br>• Potential foraging/breeding habitat for Pied Oystercatcher<br>• Potential foraging/breeding habitat for Sooty Oystercatcher. | Transport for NSW | Pre-construction, construction and operation | BOS |
| T1 | A Traffic Management Plan (TMP) will be prepared in accordance with Traffic Control at Work Sites - Technical Manual (Transport for NSW, 2020h). It will be implemented under the CEMP. The TMP will focus on maintaining general traffic flow, specifying appropriate site accesses, construction parking and construction traffic routes. The TMP will be prepared in consultation with National Parks and Wildlife Service, Randwick City Council and Sutherland Shire Council. | McConnell Dowell | Pre-construction and construction | TMP |
| T2 | Transport for NSW will continue to liaise with National Parks and Wildlife Services to support its delivery of additional car parking within the Kamay Botany Bay National Park at Kurnell prior to operations. | Transport for NSW<br>National Parks and Wildlife Service | Pre-construction and construction | TMP |
| T3 | Construction worker parking along Anzac Parade at La Perouse will be avoided during peak periods (weekends). Consideration of a temporary parking facility at La Perouse will be considered during development of the TMP. | McConnell Dowell | Pre-construction | TMP |
| T4 | Interaction between cyclists and construction related vehicles will be managed and proposed alternative routes provided within the TMP. | McConnell Dowell | Pre-construction | TMP |
| T5 | Where disruption or closure of pedestrian routes is required during construction, alternate pedestrian routes, appropriate signage and safe access will be provided in consultation with Randwick City Council, Sutherland Shire Council and National Parks and Wildlife Services. | McConnell Dowell | Pre-construction | TMP |
| T6 | Emergency vehicle access will be maintained during construction. Any site-specific requirements will be determined in consultation with the relevant emergency services agency. | McConnell Dowell | Construction | TMP |
| T7 | A Marine Works Management Plan (MWMP) will be prepared in consultation with the Port Authority NSW (including Harbour Master), Transport for NSW, and other relevant stakeholders. The plan will define exclusion zones, methods of marking the zones, clearance distances, mooring plans, communication protocol, emergency and incident response procedures, vessel movements, contact details of all parties and respons ble persons, and transit routes. The MWMP will be consistent with the Biodiversity Management Plan. | McConnell Dowell | Pre-construction and construction | TMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| T8 | Maritime exclusion zones will be established to prevent unauthorised vessels entering the area. These zones will be clearly defined to communicate access for other water users and will be lit to account for the measures in National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds, and Migratory Shorebirds (Australian Government Department of the Environment and Energy, 2020). | McConnell Dowell | Construction | TMP |
| T9 | Moorings that conflict with construction or the operational ferry swept path will be relocated outside of the construction boundary in accordance with Transport for NSW standard mooring relocation processes. Mooring relocation will be undertaken in consultation with Port Authority NSW and notify any affected stakeholders. | Transport for NSW | Pre-construction | TMP |
| T10 | Consultation and notification will be carried out before the commencement of operations to ensure the surrounding maritime operations, including recreational boating, are informed about the project. | Transport for NSW | Operation | N/A |
| L1 | The design will be developed in consultation with National Parks and Wildlife Service, the La Perouse Local Aboriginal Land Council, Registered Aboriginal Parties, Port Authority NSW and Transport for NSW's Maritime and Urban Design Divisions. These reviews will follow Beyond the Pavement (Transport for NSW, 2020a) and Connecting with Country (Government Architect, 2020). | Transport for NSW | Detailed design | N/A |
| L2 | The lighting will be designed in accordance with AS/NZS 1158:2005 Lighting for Roads and Public Spaces (Australian and New Zealand Standard, 2005), AS/NZS 4282:2019 Control of Obtrusive Effects of Outdoor Lighting (Australian and New Zealand Standard, 2019) and to be guided by the National Light Pollution Guidelines for Wildlife (Australian Government, Department of the Environment and Energy, 2013). | Transport for NSW | Detailed design | N/A |
| L3 | The Urban Design and Landscape Plan (UDLP) will be implemented under the CEMP to ensure:<br>a. The design objectives and principles are met<br>b. A sampling process will be carried out in consultation with Transport for NSW and the design team to ensure these outcomes are achieved<br>c. Any further consultation requirements are carried out with National Parks and Wildlife Service, Local Aboriginal Land Council, and Registered Aboriginal Parties<br>d. With regard to implementing the art strategy, prototyping will be carried out and signed off by Transport for NSW to ensure quality standards and the design intent is met<br>e. The planting as outlined in the UDLP is implemented and maintained for the specified duration<br>• f. Any deviation from the design, as documented in the UDLP, will be in consultation with Transport for NSW to ensure the quality and design intent is met. | Transport for NSW | Detailed design | N/A |
| L4 | Transport for NSW will continue to consult with National Parks and Wildlife Service to inform the final landscape design at Kurnell.<br><br>Any changes required to be made to the landside layout of seating at Kurnell, proposed landscaping and proposed lighting will be coordinated by Transport for NSW in collaboration with National Parks and Wildlife Service. | Transport for NSW | Construction | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| L5 | All areas and activities in the construction boundary will be managed to ensure the appropriate storage of equipment, parking, stockpile screening and arrangements for the storage and removal of rubbish and waste materials. | McConnell Dowell | Construction | CEMP |
| L6 | Delivery of the cultural artwork on site shall be completed in close collaboration with the selected Aboriginal artists and the Gujaga Foundation to ensure the artist intent is achieved. Any deviation from the design will be considered in consultation with Transport for NSW to ensure the project design objectives are met. | Contractor<br>Transport for NSW | Construction | Aboriginal Participation Plan |
| L7 | The ongoing maintenance of urban design and landscaping for the project shall remain Transport for NSW's responsibility unless satisfactory arrangements are put in place for the transfer of ownership to another authority.<br>The landscaping outlined in the UDLP will be maintained to the standards established in the UDLP, unless and until landscaping items have been transferred to another authority. | Transport for NSW | Operation | N/A |
| S1 | Transport for NSW will consult with Aboriginal land claimants that will impacted by the project to resolve any outstanding claims. | Transport for NSW | Pre-construction | CCS |
| S2 | Private property access will be maintained. If any temporary access restrictions are needed, those affected will be consulted in accordance with the CLIP. | McConnell Dowell | Construction | TMP |
| S3 | A Skills and Employment Strategy will be prepared setting out how the project will promote opportunities for upskilling and training of the local workforce during construction and operation. The strategy will promote and include employment particularly for people with a disability, Aboriginal people, the unemployed and other vulnerable groups. The strategy will include a target for local employment and skills attainment that could be used to monitor success of implementation. The strategy will align with the NSW Government Procurement Board Direction Skills, training and diversity in construction and the NSW Government Policy on Aboriginal Participation in Construction. | McConnell Dowell | Pre-construction, construction and operation | Skills and Employment Strategy |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| SN1 | A Construction Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the CEMP. The plan will generally follow the approach of the Interim Construction Noise Guideline (NSW DECC, 2009) and provide details of construction management measures and procedures. The plan will include:<br>a) An Out of Hours Works Protocol and provision to cover working outside of the standard hours set by the Construction Noise and Vibration Strategy (ST-157/4.1, Transport for NSW, 2020j)<br>b) Identify all potential significant noise and vibration generating activities<br>c) Noise and vibration management measures such as restrictions on working hours, staging, placement and operation of work compounds, parking and storage areas, temporary noise barriers, haul road maintenance, equipment selection and controlling the location and use of vibration generating equipment<br>d) A monitoring and reporting program to assess performance against relevant noise and vibration criteria<br>e) Consultation arrangements with affected neighbours and sensitive receivers, including notification and complaint handling procedures<br>f) Consultation with NSW EPA, Randwick City Council, Sutherland Shire Council and National Parks and Wildlife Service for preparation of the NVMP<br>g) Contingency measures in the event of non-compliance with noise and vibration criteria. | McConnell Dowell | Pre-construction and construction | NVMP |
| SN2 | A pre-construction building condition assessment of Aboriginal and non-Aboriginal heritage items within 70 metres of the construction boundary will be carried out by a suitably qualified person prior to construction. During construction, inspections of the construction activities and work areas will be undertaken to monitor and review the construction methodology and confirm the integrity of the nearby significant structural elements. For heritage items identified at risk during the pre-construction condition assessment, minimum safe working distances will be established and v bration monitoring be carried out prior to the commencement of construction and monitored throughout construction to identify any construction-related impacts. If impacts are detected, work in the area will stop and appropriate environmental management measures will be implemented such as using alternative construction techniques or installing protection structures in collaboration with a heritage consultant. | McConnell Dowell | Pre-construction and construction | NVMP |
| SN3 | Any noise or vibration affected sensitive receivers will be notified at least five days before starting work. The notification will include details of:<br>a) Construction periods and working hours<br>b) Contact information for project management staff<br>c) Complaint and incident reporting<br>d) How to obtain further information.<br>This excludes emergency works which will be covered under the CLIP. | McConnell Dowell | Construction | NVMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| UN1 | Underwater noise management measures will be included as part of a Construction Noise and V bration Management Plan (CNVMP). The CNVMP will include:<br>a) Identification of potential significant underwater noise and vibration generating activities<br>b) Management measures that will be guided by Section 5 of the SA Underwater Piling Noise Guidelines (Government of South Australia, 2012). This will include:<br>• Investigating the use bubble curtains to reduce the severity of the energy of the sounds caused by the driving of the piles.<br>• Carrying out observations for 30 minutes before starting work in all zones.<br>• A slow-start process for the piling works that would last for 10 minutes.<br>• Implement a stand-by and shut down process.<br>• Prepare and maintain a compliance and siting report while piling takes place.<br>• Notify the recreational user groups in the area and post notices at the key beaches warning people of the ongoing piling works so that can expect potential underwater noise.<br>• Aim to avoid piling on weekends and during public holidays. | McConnell Dowell | Pre-construction and construction | NVMP |
| UN2 | Public communication, including website updates and notices at the project areas, will be carried out before any piling starts. This will be included as part of the CLIP. | McConnell Dowell | Pre-construction and construction | NVMP |
| UN3 | Underwater noise monitoring may be carried out before the main construction works starts. This will be used to define three zones in accordance with Section 5.2 of the Underwater Piling Noise Guidelines (Government of South Australia, 2012):<br>a) Zone 1: stop work<br>b) Zone 2: introduce work restrictions<br>c) Zone 3: use marine spotters.<br>A specialist marine spotter will be responsible for observing and implementing the three zones during piling activities. | McConnell Dowell | Construction | NVMP |
| SW1 | All new paved areas will be designed to drain freely. | Transport for NSW | Detailed design | N/A |
| SW2 | All new footpaths will be designed to drain to grassed areas to promote infiltration and cleansing of pollutants. | Transport for NSW | Detailed design | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| SW3 | A Soil and Water Management Plan (SWMP) will be prepared. It will be implemented under the CEMP. The SWMP will:<br>a) Identify all reasonably foreseeable risks relating to soil erosion, soil contamination, asbestos, acid sulfate soils and water pollution associated with undertaking the activity<br>b) Descr be how these risks will be managed and minimised including the management of potential acid sulfate soils and potential contamination<br>c) Include the required processes/procedures for excavation, handling, storage, and transport of sediment and arrangements for managing pollution risks associated with spillage or contamination.<br>d) Consultation with NSW EPA, NSW Environment, Energy and Science Group, Sydney Water, Randwick City Council, Sutherland Shire Council and National Parks and Wildlife Service. | McConnell Dowell | Pre-construction and construction | SWMP |
| SW4 | An Erosion and Sediment Control Plan (ESCP) will be prepared in accordance with Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2 (Blue Book, Landcom, 2004). It will be implemented under the SWMP. The ESCP will include:<br>a) Detailed measures and controls to minimise erosion and manage sediment control risks to prevent pollution of waterways<br>b) Arrangements for managing wet weather events, including monitoring of potential high-risk events (such as storms) and specific controls and follow-up measures to be applied in the event of wet weather. | McConnell Dowell | Pre-construction and construction | SWMP |
| SW5 | Equipment, plant and machinery refuelling and maintenance will be carried out in impervious bunded areas. Vessels and associated plant and equipment will be maintained and refuelled at appropriate facilities offsite or adhere to industry standards, Port Authority NSW and pollution prevention regulations during refuelling, transfer, storage and handling of hazardous materials. Refuelling will always be attended. Machinery will be checked daily to ensure that there are no oil, fuel, or other liquid leaks. | McConnell Dowell | Construction | SWMP |
| SW6 | Vehicle wash-downs will be carried out offsite or within a designated bunded area with an impervious surface. | McConnell Dowell | Construction | SWMP |
| SW7 | Shallow groundwater will be managed in accordance with the Technical Guideline for Environmental Management of Construction Site Dewatering (NSW Roads and Traffic Authority, 2011b). | McConnell Dowell | Construction | SWMP |
| CP1 | If a temporary causeway is constructed at Kurnell, temporary causeway armour (i.e. sandbags, rock) will be selected to account for and withstand the local wave climate. | McConnell Dowell | Construction | SWMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| CP2 | If construction of the temporary causeway at Kurnell is to occur, a turbidity monitoring specification will be developed and implemented to achieve the limits in the Turbidity Water Quality Standards Criteria Summaries; A Compilation of State/Federal Criteria (USEPA, 1988) and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality Volume 1 (ANZECC& ARMCANZ, 2000). Should the monitoring record an exceedance, measures such as stopping work and rectifying the exceedances will be carried out. | McConnell Dowell | Pre-construction and construction | SWMP |
| CP3 | Operational restrictions to control approaching, berthing and departing from the wharves will be enforced for all vessels using the wharves to limit scour. These measures will be agreed in consultation with Port Authority NSW (including Harbour Master). | Transport for NSW | Operation | N/A |
| CC1 | The wharves will be designed to account for impacts of climate change, such as sea level rise and severe weather events. | Transport for NSW | Detailed design | N/A |
| CC2 | The wharves will be maintained in accordance with the Transport for NSW operational management system to ensure the weather protection measures remain effective over time. | Transport for NSW | Operation | N/A |
| A1 | Air quality management measures will be incorporated into the CEMP. This will include:<br>a) Dust mitigation and suppression measures such as spraying or covering exposed surfaces, providing vehicle clean down areas, covering of loads, street cleaning, use of dust screens, maintenance of plant in accordance with manufacturer's instructions<br>b) Methods to manage works during strong winds or other adverse weather conditions<br>c) A progressive rehabilitation strategy for exposed surfaces. | McConnell Dowell | Pre-construction and construction | SWMP |
| GG1 | The wharf design will include materials that have low embodied carbon, are durable (to reduce maintenance), and/ or are highly efficient such as LED lighting. | Transport for NSW | Detailed design | N/A |
| GG2 | Where practicable and feasible, construction materials will be managed to:<br>a) Maximise onsite materials reuse<br>b) Reuse recycled aggregates<br>c) Manage waste to maximise recycling and minimise the percentage sent to landfill<br>d) Incorporate fly ash in concrete<br>e) Procure prefabricated materials to eliminate offcuts onsite<br>f) Reduce use of reinforcement bar/steel. | Transport for NSW<br>McConnell Dowell | Detailed design and construction | N/A |
| GG3 | The ferry vessels will be operated and maintained in accordance with the Transport for NSW operational management system to ensure optimal operational conditions to minimise fuel use. | Transport for NSW | Operation | N/A |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| SU1 | The project will implement sustainability objectives driven by the Environmental Sustainability Strategy 2019-2023 (NSW Roads and Maritime Services, 2019) throughout all stages. | Transport for NSW<br><br>McConnell Dowell | Detailed design, construction and operation | N/A |
| W1 | A Waste and Energy Management Plan (WEMP) will be prepared in accordance with the Environmental Procedure - Management of Wastes on Roads and Maritime Services Land (NSW Roads and Maritime Services, 2014). It will be implemented under the CEMP. The WEMP will include:<br>a) Measures and controls to minimise the amount of waste<br>b) Measures to store, test, handle, transport, recovery, reuse, dispose of waste. It will also address any recovered material imported to site<br>c) Waste management classification measures<br>d) Measures to ensure organic waste is covered and stored onsite to prevent birds being attracted to the area<br>e) Measure to ensure no construction generated waste is placed in public or residential bins.<br>f) Monitoring, record keeping and reporting, including any documentation management obligations arising from resource recovery exemptions<br>g) Sampling and waste management measures in accordance with the Roads and Maritime Services Environmental Fact Sheet EFS-706 (NSW Roads and Maritime Services, 2015b)<br>h) Measures to reuse and mulch cleared vegetation | McConnell Dowell | Pre-construction and construction | WEMP |
| W2 | A Pre-Construction Land Condition Assessment will be carried out in accordance with the Environmental Procedure - Management of Wastes on Roads and Maritime Services Land (NSW Roads and Maritime Services, 2014) before starting work. This will also identify any pre-existing wastes. | McConnell Dowell | Pre-construction | WEMP |
| W3 | A Post-Construction Land Condition Assessment will be carried out in accordance with the Environmental Procedure - Management of Wastes on Roads and Maritime Services Land (NSW Roads and Maritime Services, 2014). This will ensure the site condition is reinstated and suitable for handback in accordance with wider contractor specifications. | McConnell Dowell | Construction | WEMP |
| W4 | Onsite effluent will either be discharged to the local sewage system or temporarily stored in septic or portable facilities. These facilities will be of sufficient capacity and located away from environmentally sensitive areas such as waterways. The effluent will be regularly collected and disposed of to an appropriately licenced facility. Pit toilets will not be permitted. | McConnell Dowell | Construction | WEMP |
| W5 | Recycling and general waste bins will be installed at the wharves. Note: operational waste will be incorporated into existing management systems operated by Transport for NSW, National Parks and Wildlife Service, Randwick City Council and Sutherland Shire Council. | Transport for NSW | Operation | N/A |
| HZ1 | All equipment used onsite will not exceed the maximum obstacle limit survey height of 50 metres Above Height Datum (mAHD) at La Perouse and 50 to 70 mAHD at Kurnell. Equipment used on site will also not exceed the PAN-OPS limit of 126.4mAHD. | McConnell Dowell | Construction | CEMP |

| ID | Revised Environmental Management Measures | Responsibility | Phase | Evidence |
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| HZ2 | A gradual start-up of noise generating construction activities will be introduced each day onsite. | McConnell Dowell | Construction | NVMP |
| HZ3 | An exemption certificate will be obtained from the Port Authority NSW to allow construction vessels to anchor within the 200-metre exclusion zone of the submerged Ausgrid power cable. Vessels will not be allowed to anchor on the cable or environmentally sensitive areas. | McConnell Dowell | Construction | CEMP |
| HZ4 | An Emergency Spill Management Plan (ESMP) will be prepared in accordance with the Code of Practice for Water Management (NSW Roads and Traffic Authority, 1999) and relevant NSW EPA guidelines. It will be implemented under the WEMP. The ESMP will measures to be implemented in the event of a spill, including initial response, containment/cleaning up, and emergency services and relevant authority notifications including Transport for NSW, Port Authority NSW and NSW EPA. | McConnell Dowell | Pre-construction and operation | WEMP |
| HZ5 | Spill kits will be kept onsite, on vessels and held within all vehicles. Training will be provided in the use and correct disposal of kits. | McConnell Dowell | Construction | WEMP |
| HZ6 | Any significant spill not contained onsite, whether it occurred in water or on land and subsequently entered the water, will be immediately reported to the Harbour Master and Sydney Vessel Traffic Service (VTS). | McConnell Dowell | Construction | WEMP |
| HZ7 | Operational spill management environmental mitigation measures will be included in the standard operating procedure for ferries in Sydney managed by Transport for NSW and required by the Harbour Master. | Transport for NSW | Operation | N/A |
| CU1 | Collaboration and engagement will take place with the proponents of any new approved projects that will be built or start to operate at the same time as the Kamay Ferry Wharves. This will be used to minimise the cumulative impacts. | Transport for NSW | Construction | CEMP |
| CU2 | Consultation will continue with National Parks and Wildlife Service on the development of Stage 1 of the Kamay Botany Bay National Park Kurnell Master Plan that will occur through the development of the project to manage any cumulative impacts. | Transport for NSW | Pre-construction and construction | CEMP |
| CU3 | Consultation will continue with Sutherland Shire Council, Randwick City Council and Port Authority NSW through the development of the project to manage any unforeseen cumulative impacts. | Transport for NSW | Pre-construction and construction | CEMP |

# APPENDIX D: ENVIRONMENTAL ASPECTS AND IMPACTS RISK REGISTER

## Environmental Risk Register - Water Quality

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **1** | **WATER QUALITY - (Spills to the Sea / Land)** | | | | | | | | | | | | | | | | | | | |
| 1.1 | | All areas | General activities including: Concrete cutting, breaking and lifting/ removing | Equipment failure, human error during operation of equipment (generators, motors for diamond saws, cranes, refuelling equipment) | Hydrocarbons, slurry released to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan<br>Chemical Hydrocarbon Spill Procedure<br>Waste & Eneregy Management Plan | Likely | Moderate | Moderate | Maintenance and inspections; spill trays/ drains (where applicable); self-bunded machinery; refuelling procedures for in situ refuelling. Emergency and Spill Response Plan; Monitoring; Spill kits; hydrocarbon booms. Trained response personnel. | | | | X | X | | Possible | Moderate | Moderate |
| 1.2 | | Marine vessels | Vessel movements<br><br>Support vessel / tug operations | Equipment failure, human error during towing operations or activities on deck (crane, generators, crib facilities personnel, chemical toilet with tanks, air compressors).<br><br>Bunkering failure | Hydrocarbons released to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan<br>Chemical Hydrocarbon Spill Procedure<br>Marine Works Management Plan<br>Vessel Traffic Management Plan<br>Anchor handling and placement EWMS<br>Refuelling EWMS | Possible | Moderate | Moderate | Vessel certification. Competent Master and crew. Maintenance and pre-mobilisation inspections; spill trays/ drains (where applicable); self-bunded machinery. Operational procedures. Emergency and Spill Response MP; Monitoring; Spill kits; hydrocarbon booms. Trained response personnel.<br>Biodegradable oils where possible. | | | | X | X | | Possible | Moderate | Moderate |
| 1.3 | | All areas | Equipment | Mechanical failure of vehicle / plant | Hydrocarbons released to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan<br>Chemical Hydrocarbon Spill Procedure<br>Marine Works Management Plan | Possible | Moderate | Moderate | Inspection and assessment of structure. Coordination and operational procedures - max. axle load and configuration. Trained personnel. Emergency and Spill Response MP; Monitoring; Spill kits; hydrocarbon booms. Trained response personnel. | | | | X | X | | Possible | Moderate | Moderate |
| 1.4 | | All areas | Mobile equipment | Equipment failure, human error during operation or refuelling of mobile equipment | Hydrocarbons released to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan<br>Chemical Hydrocarbon Spill Procedure | Possible | Moderate | Moderate | Maintenance and inspections; spill trays; self-bunded; refuelling procedures for in situ refuelling, refueling to occur from bunded fuel cell, refueling to be monitored at all times by personnel and spill pads on hand to catch any drips. Emergency and Spill Response MP; Monitoring; Spill kits; hydrocarbon booms. Trained response personnel. Avoid mesh floor in high risk areas. | | | | X | X | | Possible | Moderate | Moderate |
| 1.5 | | All areas | Site sheds/ crib rooms | Equipment failure, human error during operation | Chemicals / septic released to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan<br>Chemical Hydrocarbon Spill Procedure<br>Site Establishment EWMS | Possible | Moderate | Moderate | Maintenance and inspections; self-bunded / temporary bunding; refuelling procedures for in situ refuelling. Emergency and Spill Response MP; Monitoring; Spill kits; hydrocarbon booms. Trained response personnel.<br>Grey water tank on barge emptied onto spply barge and returned to shore for disposal | | | X | X | X | | Unlikely | Moderate | Low |
| 1.6 | | Land based activities | Mobile equipment and fuel/oil storage (excavator, crane, trucks, generators, light vehicles) operating on foreshore | Equipment failure, human error during operation or refuelling of mobile/storage equipment | Hydrocarbons released to the terrestrial environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Plant Management Plan | Likely | Low | Low | Maintenance and inspections; spill trays; self-bunded / bunding; dedicated hydrocarbon/hazardous substances storage areas; refuelling procedures for in situ refuelling, refuling on sealed surface. Emergency and Spill Response MP; Monitoring; Spill kits; Trained response personnel.<br>Designated hazardous goods storage location on land.<br>Biodegradable oils, hose sheathing to contain and protect hoses | | | | X | X | | Possible | Low | Low |

## Environmental Risk Register - Biosecurity

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **2** | **BIOSECURITY - (Including Invasive Marine Species)** | | | | | | | | | | | | | | | | | | | |
| 2.1 | | Marine vessels | Marine vessel movements to location (within defined project boundary) - towed from at risk port location | Human error, procedural failure during transportation | Invasive marine species introduced to marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan | Possible | Serious | High | IMS Assessment prior to mobilisation. - history of vessel to be provided including location of last port and previous antifouling applications | | | | X | X | | Unlikely | Serious | Moderate |
| 2.2 | | Land based excavations | Operational activities on land / vehicle movements | Soil disturbance, relocation of seeds/weeds | Introduction/spreading of weed species | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan<br>Plant Management Plan | Possible | Moderate | Moderate | Inspection of machinery prior to mobilising to check for contaminants/weeds - machine to be confirmed clean prior to mobilisation | | | | X | X | | Possible | Moderate | Moderate |
| 2.3 | | All areas | Receival of imported materials and packaging / dunnage | Imported weeds, seeds, species or pathogens present in imported materials | Invasive species / pathogens introduced to environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Weed and Pest Management Procedure | Possible | Moderate | Moderate | Inspection of goods received upon arrival to site to check for contaminants; quarantine area and procedure; inspection paperwork of major items fabricated / shipped from overseas (Government Gov requirements); use of reputable inspection and shipping agent | | | | X | X | | Unlikely | Moderate | Low |

## Environmental Risk Register – Air Quality

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **3** | **AIR QUALITY - (Dust, Particulate Emissions, Odour)** | | | | | | | | | | | | | | | | | | | |
| 3.1 | | All areas | Concrete cutting, breaking and lifting/ removing, abrasive blasting (on concrete deck) | Mechanical & abrasive cutting of concrete | Wind-borne dust particles (nuisance at sensitive receptors) | Environment | Contractor's Environmental Management Plan (CEMP)<br>Dust Management and Monitoring Procedure<br>Waste & Energy Management Plan<br>Weekly Environmental Inspection | Likely | Moderate | Moderate | Wet vacuum removal &/or water dust suppression.<br>Special Industry land use.Dust monitoring.<br>Investigate wet blasting of concrete instead of dry (to confrim) / alternatives to blasting? | | | | X | X | | Possible | Moderate | Moderate |
| 3.2 | | All areas | Equipment and vehicle use | Fuel burning equipment | Excessive and non-compliant emissions | Environment | Contractor's Environmental Management Plan (CEMP)<br>Waste and Energy Management Plan<br>Weekly Environmental Inspection | Possible | Low | Low | Cleaning operation prior to work commencing.<br>Maintenance / periodic cleaning works where practicable.<br>Removal of old or malfuntioning equipment | | | | X | X | | Possible | Low | Low |
| 3.3 | | Marine Sediments | Extraction from piles and storing in bins | Odour | Community complaint | Environment | Contractor's Environmental Management Plan (CEMP)<br>Soil and Water Sub-Plan | Possible | Moderate | Moderate | Remove spoil direct to bins and remove. Monitor odour and remove as soon as practicable | | | | | X | | Unlikely | Moderate | Low |
| 3.4 | | Earthworks | excavation and loading into trucks, stockpiling, access roads | Dust | Community complaints, dust leaves site boundary | Environment | Contractor's Environmental Management Plan (CEMP)<br>Landside Civils Works EWMS<br>Soil and Water Sub-Plan | Likely | Low | Low | Water cart for dust suppression, schedule works in low winds, low fines material for haul roads / tracks | | | | | X | | Possible | Low | Low |
| 3.5 | | Wharf works | Concrete blasting and painting | Overspray of paint, concrete fines | Release of contaminents to air then to water | Environment | Contractor's Environmental Management Plan (CEMP)<br>Dust Management and Monitoring Procedure<br>Waste and Energy Management Plan<br>Weekly Environmental Inspection | Possible | Moderate | Moderate | Use of inert garnet as blast medium. ongoing inspection during blast to ensure no blow outs; collection of spent blast medium and waste imminvestigate wet blasting of concrete instead of dry (to confrim) / alternatives to blasting?ediately after works in sealed bags. | | | | X | X | | Possible | Moderate | Moderate |

## Environmental Risk Register - Noise & Vibration

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **4** | **NOISE - (Noise and Vibration)** | | | | | | | | | | | | | | | | | | | |
| 4.1 | | All areas | Concrete cutting, breaking and lifting / removing | Mechanical cutting and breaking of concrete, equipment operations | Air-borne noise and transmission of vibration (nuisance at sensitive receptors) | Environment | Contractor's Environmental Management Plan (CEMP)<br>Noise and Vibration Management Plan | Likely | Moderate | Moderate | Equipment maintenance and inspection. Use of noise monitoring equipment for indicative noise levels at sensitive receptor boundary (if applicable). Construction noise criteria and requirements compliance. Hours of operation agreed for certain activities.<br>works within normal / approved hours | | | | X | X | | Possible | Moderate | Moderate |
| 4.2 | | Marine vessels | Activities on deck (crane, generators, air compressors) | Mechanical cutting and breaking of concrete, equipment operations | Air-borne noise and transmission of vibration (nuisance at sensitive receptors) | Environment | Contractor's Environmental Management Plan (CEMP)<br>Noise and Vibration Management Plan | Possible | Moderate | Moderate | Equipment maintenance and inspection. Use of noise monitoring equipment for indicative noise levels at sensitive receptor boundary (if applicable). Construction noise criteria and requirements compliance. Hours of operation agreed for certain activities.<br>works within normal / approved hours | | | | X | X | | Possible | Moderate | Moderate |
| 4.3 | | Piling | Piling (includes using hammer, drill) | High noise and vibration generating activity | Air-borne noise and transmission of vibration (nuisance at sensitive receptors, including marine mammals) | Environment | Contractor's Environmental Management Plan (CEMP)<br>Noise and Vibration Management Plan<br>Terrestrial and Marine Management Sub-Plan<br>Community Communication Strategy | Likely | Moderate | Moderate | Equipment maintenance and inspection. Use of noise monitoring equipment for indicative noise levels.<br><br>Pre-start visual observations from shore or jetty by trained MMO; exclusion zone implemented; soft start procedures | | | | X | X | | Possible | Moderate | Moderate |
| 4.4 | | All areas | Marine and landbased activities - Out of Hours | Noise from equipment | Complaints, breach of approvals conditions | Environment | Contractor's Environmental Management Plan (CEMP)<br>Noise and Vibration Management Plan<br>Community Communication Strategy | Likely | Moderate | Moderate | Out of hours work approval<br>Out of hours works plan contained within Noise and Vibration Sub-Plan<br>Noise monitoring to validate noise levels against modelled predictions | | | | X | X | | Possible | Moderate | Moderate |
| 4.5 | | Foreshore works | Activities on foreshore (crane, cutting and breaking equipment, generators, air compressors) | Mechanical cutting and breaking of concrete, equipment operations | Air-borne noise and transmission of vibration (nuisance at sensitive receptors, including heritage structures), community complaints | Environment | Contractor's Environmental Management Plan (CEMP)<br>Noise and Vibration Management Plan<br>Terrestrial and Marine Management Sub-Plan<br>Community Communication Strategy | Likely | Moderate | Moderate | Equipment maintenance and inspection. Use of noise monitoring equipment for indicative noise levels at sensitive receptor boundary (if applicable). Construction noise criteria and requirements compliance. Hours of operation agreed for certain activities.<br>Vibration Monitoring | | | | X | X | | Possible | Moderate | Moderate |

## Environmental Risk Register - Marine Ecology & Terrestrial Biodiversity

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **5** | **MARINE ECOLOGY AND TERRESTRIAL BIODIVERSITY - (Protected Species)** | | | | | | | | | | | | | | | | | | | |
| 5.1 | | Marine vessels | Vessel movements (within defined project boundary) | Impact of vessels with marine mammal | Marine mammal strike | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan | Possible | Serious | High | Low speed operation. Training and awareness. Day-time operations only. Crew observations. Demarcation of seagrass bed area and avoidance. Mooring / Anchor / vessel spuds plans to note location of sea grass to avoid | | | | X | X | | Unlikely | Serious | Moderate |
| 5.2 | | Marine works, bund constructio n | Piling, anchor, spuds, bund construction | Impact to protected flora and fauna | Breach of Approval conditions<br>Overclearing native seagrass and protected flora<br>Impact to Whites Seahorse and Black Rock Cod | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan<br>Marine Works Management Plan<br>Anchor Handling EWMS | Possible | Serious | High | Seagrass survey and relocation (TfNSW) prior to works<br>Pre clearance inspections for Black Rock Cod and White's Seahorse<br>MCD Vegetation Disturbance Permit implemented, approval sought from TfNSW to impact native flora<br>Sensitive Area Maps | | | | X | X | | Unlikely | Serious | Moderate |
| 5.3 | | Piling | Drilling out piles | Indirect disturbance from deposition of spoil material (turbidity) | Seagrass bed disturbance; localised turbidity | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan | Possible | Moderate | Moderate | Water quality monitoring, auger used to extract spoil and place on barge, use silt curtains | | | | X | X | | Unlikely | Moderate | Low |
| 5.4 | | Foreshore works | Activities on the foreshore area | equipment movement | TPZ encroachment / damage of trees | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan | Possible | Moderate | Moderate | Arborist involvement to inspect trees and TPZ during site establishment. No Go Zone delineation | | | | | | | Unlikely | Moderate | Low |
| 5.5 | | Foreshore works | Activities on the foreshore area | Personnel / equipment movement and wildlife presence in area | Fauna species impacts | Environment | Contractor's Environmental Management Plan (CEMP)<br>Terrestrial and Marine Management Sub-Plan | Possible | Low | Low | Trained and competent personnel, reporting of sightings and locations of birds/nests, identification and avoidance of sensitive sites<br>Sensitive Area Maps | | | | X | X | | Possible | Low | Low |

## Environmental Risk Register – Traffic Management

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **6** | **TRAFFIC MANAGEMENT - (Vehicle & Vessel Movements)** | | | | | | | | | | | | | | | | | | | |
| 6.1 | | Public Roads | Access into / out of site | Heavy vehicle movements | Disturbance of public vehicle movements, distruption to business | Environment | Contractor's Environmental Management Plan (CEMP)<br>Traffic Management Plan | Possible | Moderate | Moderate | Traffic Management Plan.<br>Loads covered<br>Dilapidation survey<br>Inductions to ensure no parking in public parking spaces, truck idling in designated areas off site | | | | X | X | | Unlikely | Moderate | Low |
| 6.2 | | Marine shipping | Vessels to and from site, relocation in project site, anchor, moorings | Tugs, barges, anchor wires, moorings | Collision / near-miss | Environment | Contractor's Environmental Management Plan (CEMP)<br>Traffic Management Plan<br>Vessel Traffic Management Plan<br>Anchor handling and placement EWMS<br>Marine Works Management Plan | Possible | Moderate | Moderate | Harbour master directions and advise, advance notification of movement within harbour<br>Delineation of anchors via buoys, lights | | | | | X | | Unlikely | Moderate | Low |

## Environmental Risk Register – Waste Management

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **7** | **WASTE MANAGEMENT - (Waste to Sea / Land)** | | | | | | | | | | | | | | | | | | | |
| 7.2 | | Wharf works | Concrete cutting, breaking and lifting/ removing | Equipment failure, human error during operation | Loss of concrete waste to marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Waste and Energy Management Plan | Possible | Moderate | Moderate | Qualified personnel. Certified and maintained equipment. Rigging concrete blocks to minimise risk of droppage to the ocean. Dropped object Register maintained to record dropped and falling objects. Concrete/steel are inert substances. Recovery of objects is based on a risk approach - ie items which cannot be safely recovered will be left in situ if they do not pose a risk to the environment | | | | X | X | | Unlikely | Moderate | Low |
| 7.3 | | Wharf works | Concrete / grout works | Slurry, concrete | Loss of material to water | Environment | Contractor's Environmental Management Plan (CEMP)<br>Waste and Energy Management Plan | Possible | Moderate | Moderate | Lift Plan in place. Complex lifts have an Engineered Lift Plan. Qualified personnel. Certified and maintained equipment. . Dropped object Register maintained to record dropped and falling objects. Concrete/steel are inert substances. Recovery of objects is based on a risk approach - ie items which cannot be safely recovered will be left in situ if they do not pose a risk to the enviroment<br>Line pump with taped connections / geofabric at connections (blow back onto land / into bins / into piles) | | | | X | X | | Unlikely | Moderate | Low |
| 7.4 | | Compound, barges | Portaloo | Weather conditions, human error, equipment failure | Loss of sewage / waste to the marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Waste and Energy Management Plan<br>Waste Management Plan | Possible | Moderate | Moderate | Secured appropriately. Regular maintenance/ pump out of tanks. | | | X | X | X | | Unlikely | Moderate | Low |
| 7.5 | | Marine vessels | Marine works, barges | Waste storage | Loss to marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Waste and Energy Management Plan | Possible | Moderate | Moderate | Covered bins, regularly emptied | | | | X | X | | Unlikely | Moderate | Low |
| 7.6 | | Compounds / laydown areas | Site sheds/ crib rooms near service platform or upper manifold platform | Weather conditions, human error, equipment failure | Loss of general waste to land / marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Marine Debris & Working over Water Sub-Plan<br>Waste and Energy Management Plan | Possible | Moderate | Moderate | Waste receptacles with lids; secured appropriately; segregation of hazardous and non-hazardous wastes; Implementation of waste management plan. Order only what we need | | | | X | X | | Unlikely | Moderate | Low |

## Environmental Risk Register - Heritage

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Substitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **8** | **HERITAGE - ABORIGINAL & NON-ABORIGINAL, INCLUDING MARITIME** | | | | | | | | | | | | | | | | | | | |
| 8.1 | | Site establishment, fencing, early works | Site fencing, vacuum trucks | Impact to Aboriginal and non-Aboriginal Heritage sites | Impact to Aboriginal and non-Aboriginal Heritage sites, loss of heritage value | Environment | Contractor's Environmental Management Plan (CEMP)<br>Heritage Management Plan | Possible | Serious | High | Sensitive Areas Maps<br>Unexpected Heritage Finds and Human Remains Procedure<br>RAP involvement<br>undertake a visual inspection before commencement of construction of AHIMS Site # 45-6-0650 (Site 3 - La Perouse) and AHIMS Site # 45-6-0651 (Site 4 - La Perouse and geotextile fabric (or similar) should be laid on the ground surface within the location of both sites (address mitigation in Heritage Plan, as outside of work zone).<br>Archaeological Research Design and Excavation Methodology and excavation program | | | | X | X | | Unlikely | Serious | Moderate |
| 8.2 | | Excavations | Trenching, earthworks, landscaping | Impact to Aboriginal and non-Aboriginal Heritage sites | Impact to Aboriginal and non-Aboriginal Heritage sites, loss of heritage value | Environment | Contractor's Environmental Management Plan (CEMP)<br>Heritage Management Plan | Possible | Serious | High | Sensitive Areas Maps<br>Unexpected Heritage Finds and Human Remains Procedure<br>RAP involvement<br>Supervision by an appropriately qualified and experienced archaeologist of AHIMS Site # 45-60653 (Site 6 - La Perouse) must be undertaken during ground penetrating works.<br>During construction works impacts to the exposed sandstone surrounding AHIMS Site # 45-60653 (Site 6 - La Perouse) must be avoided. Visual markers must be used to delineate these areas.<br>During construction works, monitoring of vibration impacts in the immediate area of AHIMS Site # 45-6-0653 (Site 6 - La Perouse) must be undertaken.<br>Supervision by an appropriately qualified and experienced archaeologist is required for any excavation near AHIMS Site #52-3-0219 (Foreshore Midden — Captain Cook's Landing Place) where it exceeds 400mm in depth. | | | | X | X | | Unlikely | Serious | Moderate |
| 8.3 | | Marine works, bund construction | Vessel movements and anchor / spuds, bund construction | Impact to Maritime Heritage | Impact to Maritime Heritage, loss of heritage value | Environment | Contractor's Environmental Management Plan (CEMP)<br>Heritage Management Plan | Possible | Moderate | Moderate | Sensitive Areas Maps<br>An archaeological dive inspection must be carried out within the footprint of the wharves by a suitably qualified heritage specialist.<br>Unidentified seabed anomalies must be avoided through the use of a five metre no-anchoring exclusion zone | | | | | X | | Unlikely | Moderate | Low |

## Environmental Risk Register - Soil & Water

| Likelihood (L) 1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain | | | | | | | | Consequence (C) A- Low, B- Moderate, C- Serious, D-Major, E-Critical | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Rating (R) | | | | LOW RISK Broadly acceptable - Manage by routine procedures. | | MODERATE RISK Tolerable – With identified controls fully implemented. | | SERIOUS RISK Undesirable risk – do not commence activity. | | | MAJOR RISK Intolerable risk – do not commence activity. | | | | | | | | | CRITICAL RISK Intolerable risk – do not |
| | | | | | | | | Primary Risk Assessment | | | Hierachy of Control | | | | | | | Residual Risk Assessment | | |
| Item No. | Work Process | Work Area | Activity / Job Step | Hazards (Potential For Harm) | Risks (Unwanted Event) | Risk Source (Health Safety Environment) | System Controls | Likelihood | Consequence | Risk Score | Additional Controls | Elimination | Subsitution | Isolation | Engineering | Adminstration | PPE | Likelihood | Consequence | Risk Score |
| **9** | **SOIL AND WATER** | | | | | | | | | | | | | | | | | | | |
| 9.1 | | Land based works | General earthworks | Contaminated soils (inc asbestos), erosion and sedimentation | human health exposure to contaminted soils, non-compliant disposal / reuse, pollution to waters | Environment | Contractor's Environmental Management Plan (CEMP)<br>Soil and Surface Water Sub-Plan<br>EWMS<br>Asbestos Management Plan | Possible | Moderate | Moderate | Classify soils prior to removal, locations identified<br>Contaminated land consultant<br>Sensitive Area Plans, erosion and sediment controls plans, use of sediment fencing, silt socks, silt curtains as per plans | | | | X | X | | Unlikely | Moderate | Low |
| 9.2 | | Marine | Piling operations | Acid sulfate soils, turbidity | Water quality impacts, acidic generation | Environment | Contractor's Environmental Management Plan (CEMP)<br>Soil and Surface Water Sub-Plan<br>EWMS | Possible | Moderate | Moderate | Direct placement of PASS into contained bins on barge, remove off-site for disposal<br>Use of silt curtains as appropriate, stop work where plumes observed migrated outside curtain, monitor seastate (shallow water) as more susceptible to plumes<br>Water quality monitoring<br>gefarbirc floor<br>Storage of ASS on land n designate dareas, cover | | | | X | X | | Possible | Moderate | Moderate |
| 9.3 | | Piling platform | Bund construction | Fines in rock | Turbidity entering marine environment | Environment | Contractor's Environmental Management Plan (CEMP)<br>Soil and Surface Water Sub-Plan<br>EWMS | Possible | Moderate | Moderate | Pre-wash rock prior to delivery<br>Use of silt curtains when placing?<br>Turbidity monitoring program | | | | X | X | | Unlikely | Moderate | Low |
| 9.4 | | Piling | Dewater Pile (B-type piles only) | Turbid water | Non complaint water discharge | Environment | Contractor's Environmental Management Plan (CEMP)<br>Soil and Surface Water Sub-Plan<br>EWMS | Possible | Moderate | Moderate | Water quality testing, turbidity monitoring program<br>MCD water discharge permit | | | | | X | | Unlikely | Moderate | Low |

# APPENDIX E: MCCONNELL DOWELL ENVIRONMENTAL GREEN RULES

## ENVIRONMENTAL GREEN RULES

These rules are in place to minimise our impact on the natural environment and local community.
They MUST be followed at all times. Any issues can be discussed with your environmental team at any time.

### 1. Spills

Spill kits appropriate for the location must be fully stocked, ready and available for use near all work fronts. Report and clean up any spills.

### 2. Soil & Erosion

Erosion and sediment controls must be in place before starting clearing or earthworks (or as soon as practical within the same shift) and stay in place (and maintained) until area is stabilised.

### 3. Plant & Equipment

Conduct premobilisation- and pre-start inspections each shift on all plant and equipment. Make sure drip trays or bunds are used for all stationary plant where practical. Refuelling must be carried out under supervised and controlled conditions.

### 4. Water & Wastewater

Make sure all waters are protected and know where nearby sumps drain to. No discharge to occur offsite unless it is within allowable limits and a water discharge permit is in place.

### 5. Archaeology & Heritage

Ensure all known heritage items are fully protected. Stop works, protect and notify immediately where a potential heritage site or object is found.

### 6. Noise & Vibration

Know where the nearest neighbours and sensitive receptors are. Keep loud and ongoing noise to a minimum, and get permission to work outside of normal hours. Minimise vibration intensive activities where possible.

### 7. Hazardous Materials

Store hazardous substances in a secure bunded and segregated area. Return them after use and understand the SDS requirements. Any decanting must be carried out over a bunded area, and the containers must be properly labelled.

### 8. Dust & Emissions

Make sure no dust, smoke or odour leaves the site boundaries - notify immediately if it does occur. Reduce emissions from plant and equipment by turning them off when not in use.

### 9. Fauna & Flora

Do not harm or kill animals. Protect all vegetation unless there is a vegetation disturbance permit in place. Prevent the spread or introduction of weeds, pests and diseases.

### 10. Waste and Recycling

Think about what you can reuse or recycle before disposing of it. Place waste in the correct bins and notify if recycling is not available. Use recycled water or materials where possible and permitted.

REF-HSEQ-ENV-GUID001-GEN-GRP REV3 30JUN2021

# APPENDIX F: ENVIRONMENTAL PROTECTION INSTRUCTION (EPI)

The following Environmental Protection Instructions have been developed for the project where environmental mitigation measures have not been addressed in an issue specific sub plan.

- Environmental Protection Instruction – Air Quality Management

# ENVIRONMENTAL PROTECTION INSTRUCTION (EPI)

## Air Quality Management

Kamay Ferry Wharves Rev0

### OBJECTIVES

- **Minimise** the impact of dust, offensive odour, and other air pollutants on the surrounding environment, including adjacent properties and sensitive places
- **Avoid**, or minimise, the generation of dust and vehicle emissions
- **Report** all dust, odour, or emissions incidents

Environment & Sustainability Lead

**Mitch Jones**
0411 076 046

Supervisor

**Colin Ford**
0427 680 338

Project Manager

**Adam Adamczewski**
0403 002 296

### WHAT IS AIR QUALITY MANAGEMENT?

Air Quality Management is using best practice to make sure that our stockpiles, haul roads and exposed surfaces aren't generating unnecessary dust during high winds and that our plant and equipment are used and maintained correctly to avoid.

### WHY IS AIR QUALITY MANAGEMENT IMPORTANT?

Dust, odour and emissions are pollutants that can led to poor air quality and health impacts, be a nuisance to local residents and collect on nearby buildings and structures requiring them to be cleaned.

It is also important to remember our project is located near Sydney Airport and we must manage dust to allow the Airport to safely operate.

### HOW CAN YOU LIMIT IMPACTS TO AIR QUALITY?

- Make sure all your plant and equipment is well serviced and not emitting visible emissions,
- Make sure no dust, smoke or odour leaves the site boundaries and notify your supervisor or environmental advisor immediately if it does,
- Make sure all bins are regularly serviced and cleaned out,
- Spray down haul roads and exposed services, especially in hot and windy weather,
- Ensure all stockpiled material and exposed soil is to be covered or stabilised within 10 days to avoid dust being generated.

### EMISSIONS SPOT TEST

If there is black smoke coming from the exhaust for more than 10 seconds this is not acceptable.

# APPENDIX G: TRANSPORT FOR NSW ENVIRONMENTAL INCIDENT AND CLASSIFICATION PROCEDURE

Transport for NSW Environmental Incident Procedure (nsw.gov.au)

# APPENDIX H: SITE ENVIRONMENTAL PLAN

The following Site Environmental Plans have been developed for construction and will be updated accordingly as works progress.

- KFW02-MCD-BPW-EN-ECM-000005 - Site Environmental Plan - Kurnell
- KFW02-MCD-BPW-EN-ECM-000006 - Site Environmental Plan – La Perouse

# SITE ENVIRONMENTAL PLAN (SEP)



## Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005_Rev2

McCONNELL DOWELL
CREATIVE CONSTRUCTION™

### 1. SPILLS

- Spills are to be cleaned up immediately with spill kits & reported to the Environment & Sustainability Lead
- Spill kits are to be available at each work location and fully stocked
- Marine spill kits to be readily available in the event of any spills on water

### 2. SOIL & EROSION

**Refer to the Progressive Erosion and Sediment Control Plan for Kurnell (PESCP – KFW02-MCD-ALL-EN-DRG-000001) for all ERSED controls and requirements.**

- Erosion and sediment controls must be in place before starting clearing or earthworks (or as soon as practical within the same shift) and stay in place (and maintained) until area is stabilised.

### 3. PLANT & EQUIPMENT

- Conduct pre-mobilisation and pre-start inspections each shift on all plant and equipment.
- Make sure drip trays or bunds are used for all stationary plant where practical.
- Refuelling must be carried out under supervised and controlled conditions and in accordance with the **Environmental Work Method Statement (EWMS) for Refueling**.

### 4. WATER & WASTEWATER

- Make sure waters are protected at all times.
- Dewatering is a controlled action that must be accompanied by a **Discharge Permit** from the Environment & Sustainability Lead (or delegate).
- All dewatering activities are to be supervised directly

### 5. ARCHAEOLOGY & HERITAGE

- Ensure all known heritage items are fully protected.
- If an unexpected heritage item is discovered on site, stop works immediately, report to supervisor and do not re-commence works in area until given the all clear
    - Establish a no-go zone & do not recommence works in the area until instructed by supervision

### 6. NOISE & VIBRATION

- Know where the nearest sensitive receptors are
- Keep loud and ongoing noise to a minimum
- Minimise vibration intensive activities where possible
- **Standard Construction Hours** are:
    - Monday – Friday 0700hrs – 1800hrs
    - Saturday – 0800hrs – 1300hrs
    - No Work on Sundays or Public Holidays
- All work outside of standard construction hours must be accompanied by an Out of Hours Work Approval (OOHWA)

### 7. HAZARDOUS MATERIALS

- Store hazardous substances in a secure bunded and segregated area and return them after use and understand the SDS requirements
- A SDS register is to be maintained on Site at all times.
- Storage of fuels and chemicals at least 50m from Botany Bay or drainage lines and on an impervious surface flatter than a 10% grade

### 8. DUST & EMISSIONS

- Make sure no dust, smoke or odour leaves the site boundaries - notify immediately if it does occur
- Reduce emissions from plant and equipment by turning them off when not in use
- Undertake dust suppression such as regularly watering all exposed surfaces, including access roads, using water sprays or sprinkler systems

### 9. FAUNA & FLORA

- Tree protection measures must be implemented to ensure the protection of all trees planned to be retained on site.
- Any vegetation removal must be accompanied by a **Clearing Permit**
- Prevent the spread or introduction of weeds, pests and diseases
- Report any fauna interactions to the Supervisors and Environmental and Sustainability Lead
- Sensitive Marine environments – **abide by No Anchoring Zones**

### 10. WASTE & RECYCLING

- Think about what you can reuse or recycle before disposing of it
- Unsure all waste segregated and placed into the correct bins and notify the supervisor if recycling is not available.
- Use recycled water or materials where possible and permitted.

### General Notes

Activities covered in this SEP

- Operation of site compounds
- Demolition of the Kurnell Jetty
- Construction Works

**Revision 2 – 13/06/2023**

| Environment & Sustainability Lead | Construction Manager | Construction Manager |
|---|---|---|
| **Mitch Jones** | **James Fruh** | **Adam Adamczewski** |
| [redacted] | [redacted] | [redacted] |

# SITE ENVIRONMENTAL PLAN (SEP)

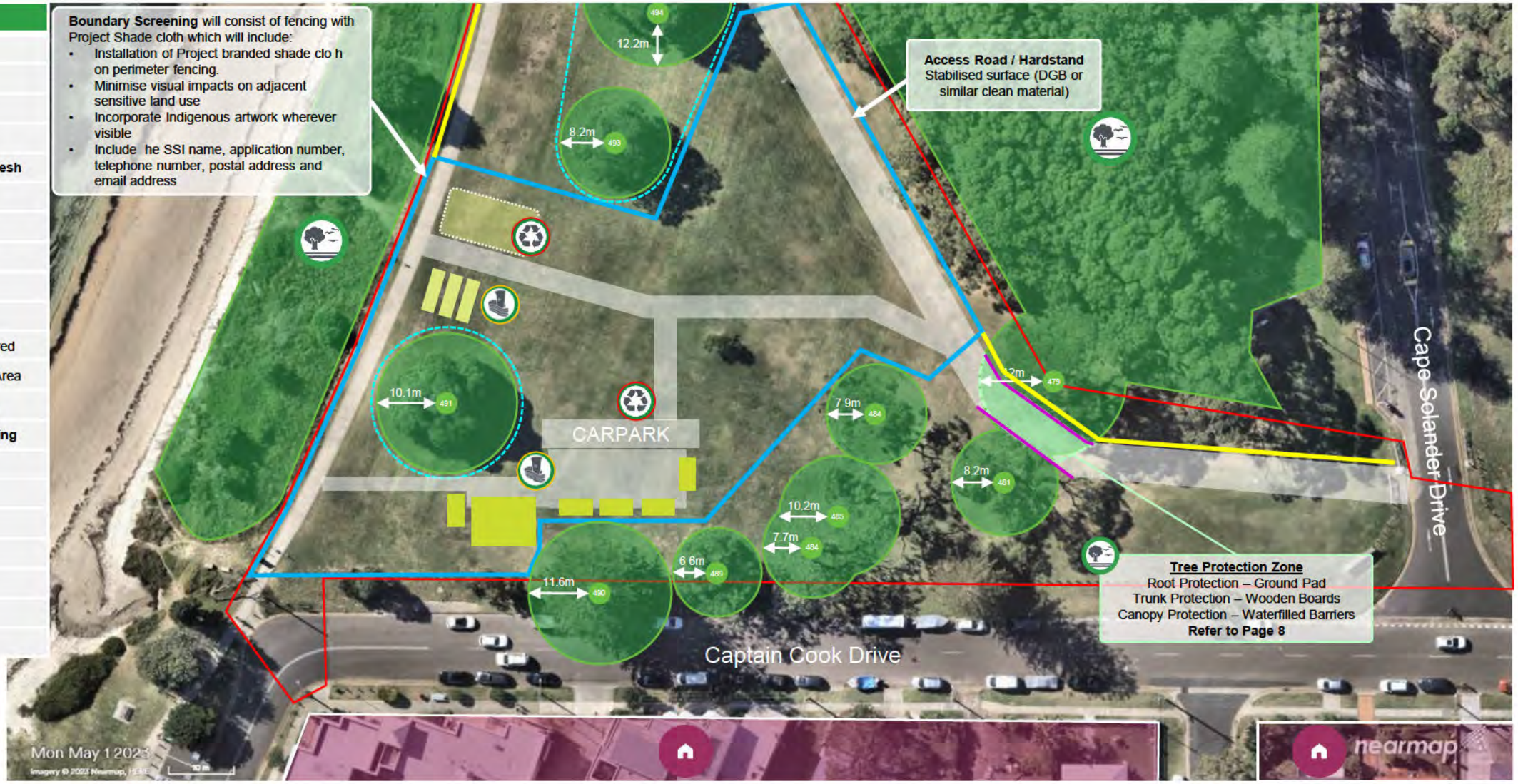
## Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005_Rev2



McCONNELL DOWELL 'RUCTION™

| Icon | Description |
|---|---|
| | Project Boundary |
| | Boundary Fencing |
| | Waterfilled Barriers |
| | Pedestrian / Traffic Delineation |
| | Tree Protection Control – **Barrier Mesh** |
| | Sensitive Receiver – Residential |
| | Sensitive Receiver – Commercial |
| | Flora (Terrestrial) – **No Entry** |
| XX | Retained Tree – Tree ID No. |
| 11.6m | Tree Protection Zone (TPZ) |
| XX | Tree to be removed – Permit Required |
| | Terrestrial Vegetation Disturbance Area |
| | Works within TPZ – Controls Apply |
| | Seagrass (*Posidonia*) – **No Anchoring** |
| | Heritage Area |
| | Stockpile / Laydown Area |
| | Demolition Area |
| | Site Compound / Crib Shed |
| | Storage Container |
| | Waste Bins |
| | Spill Kits |



# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005_Rev2



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

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# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005_Rev2



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

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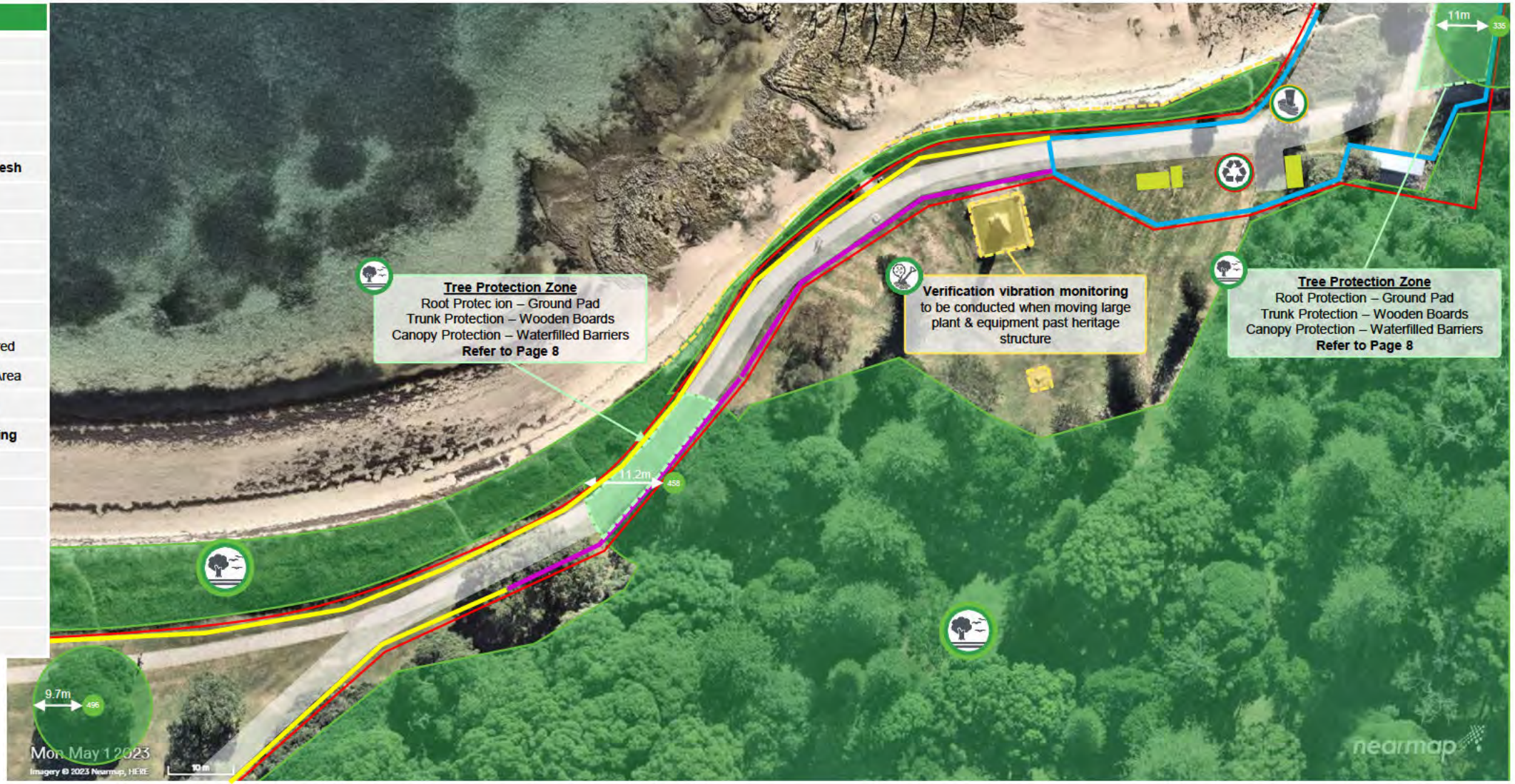

# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005_Rev2



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
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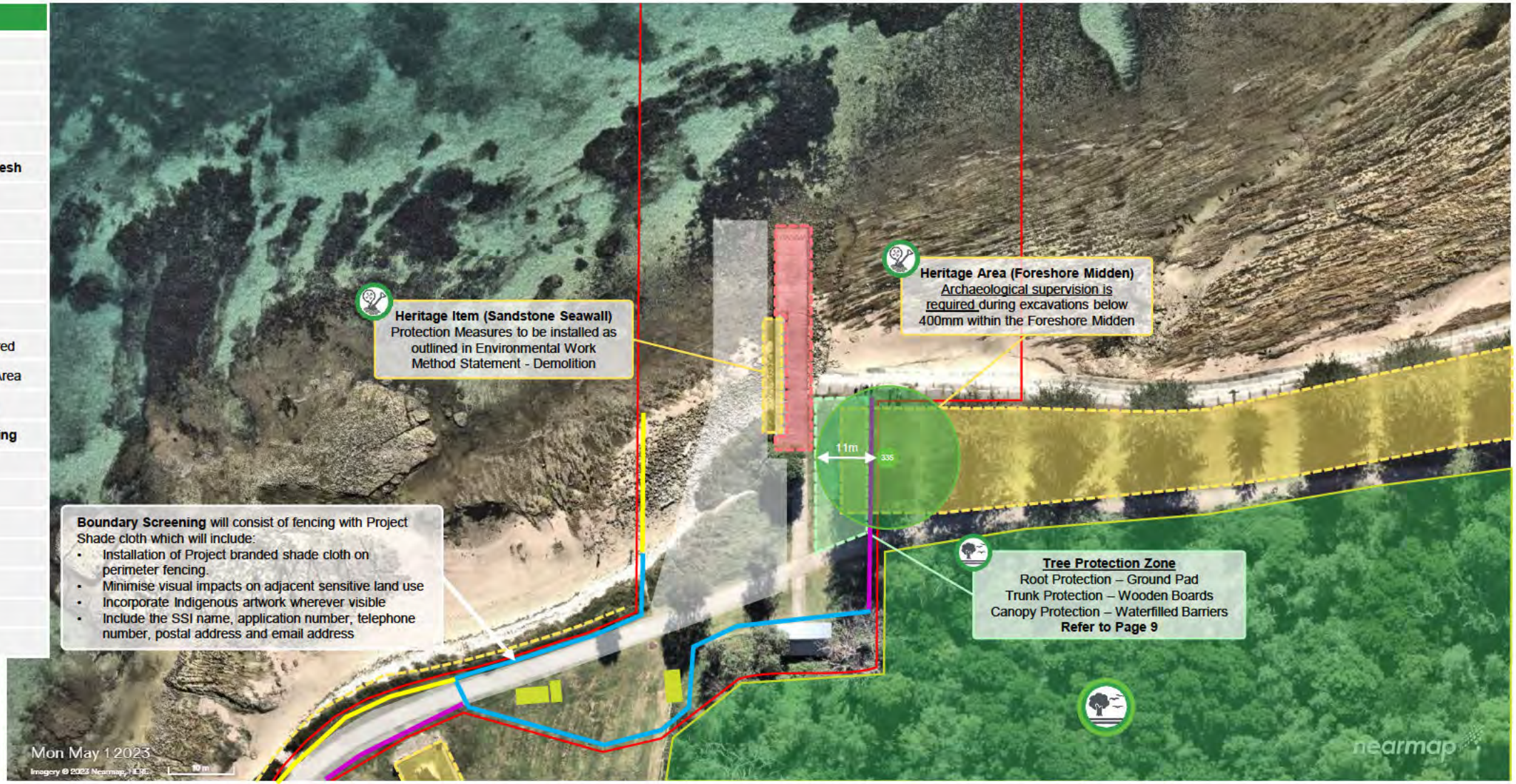

McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
|---|---|
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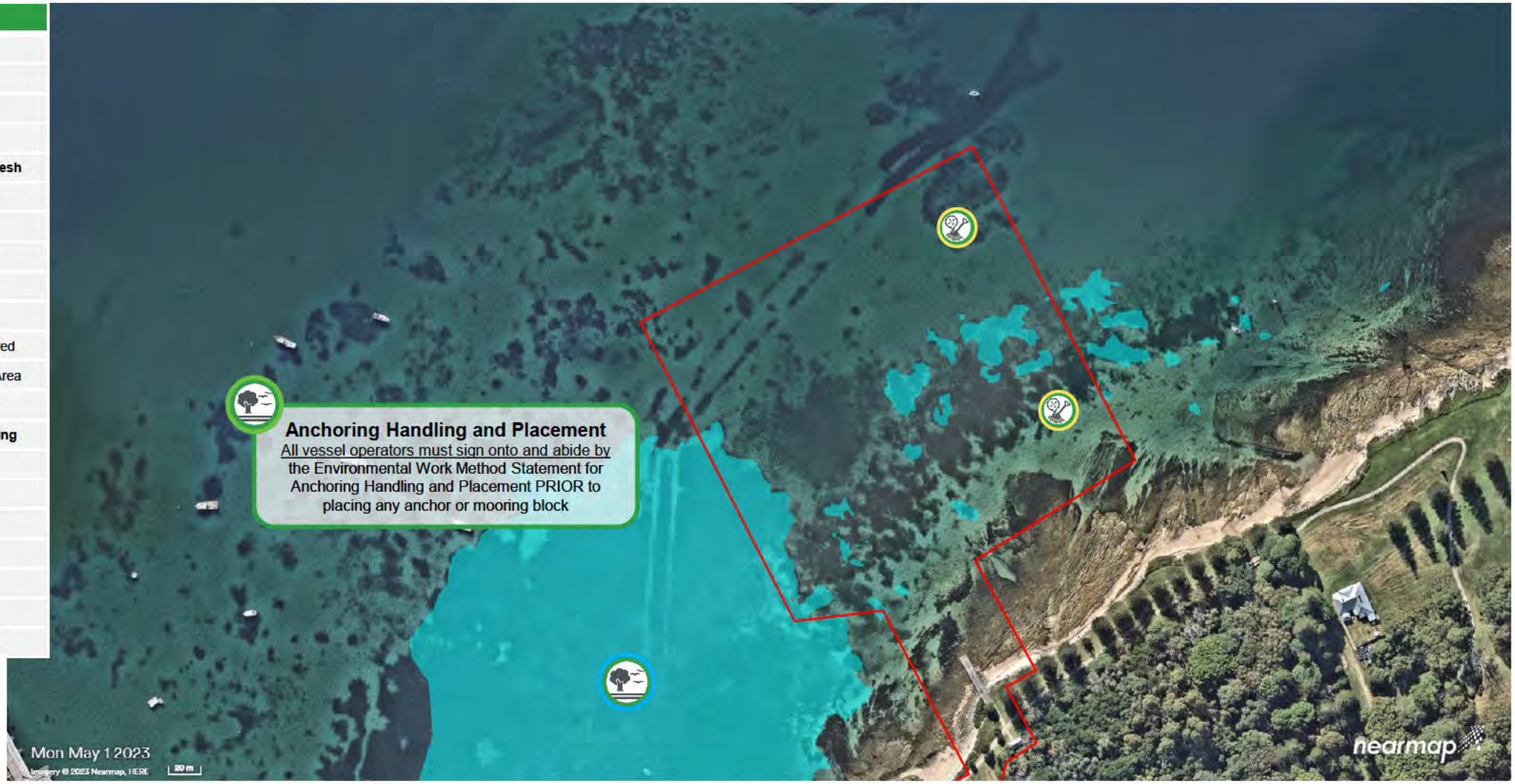


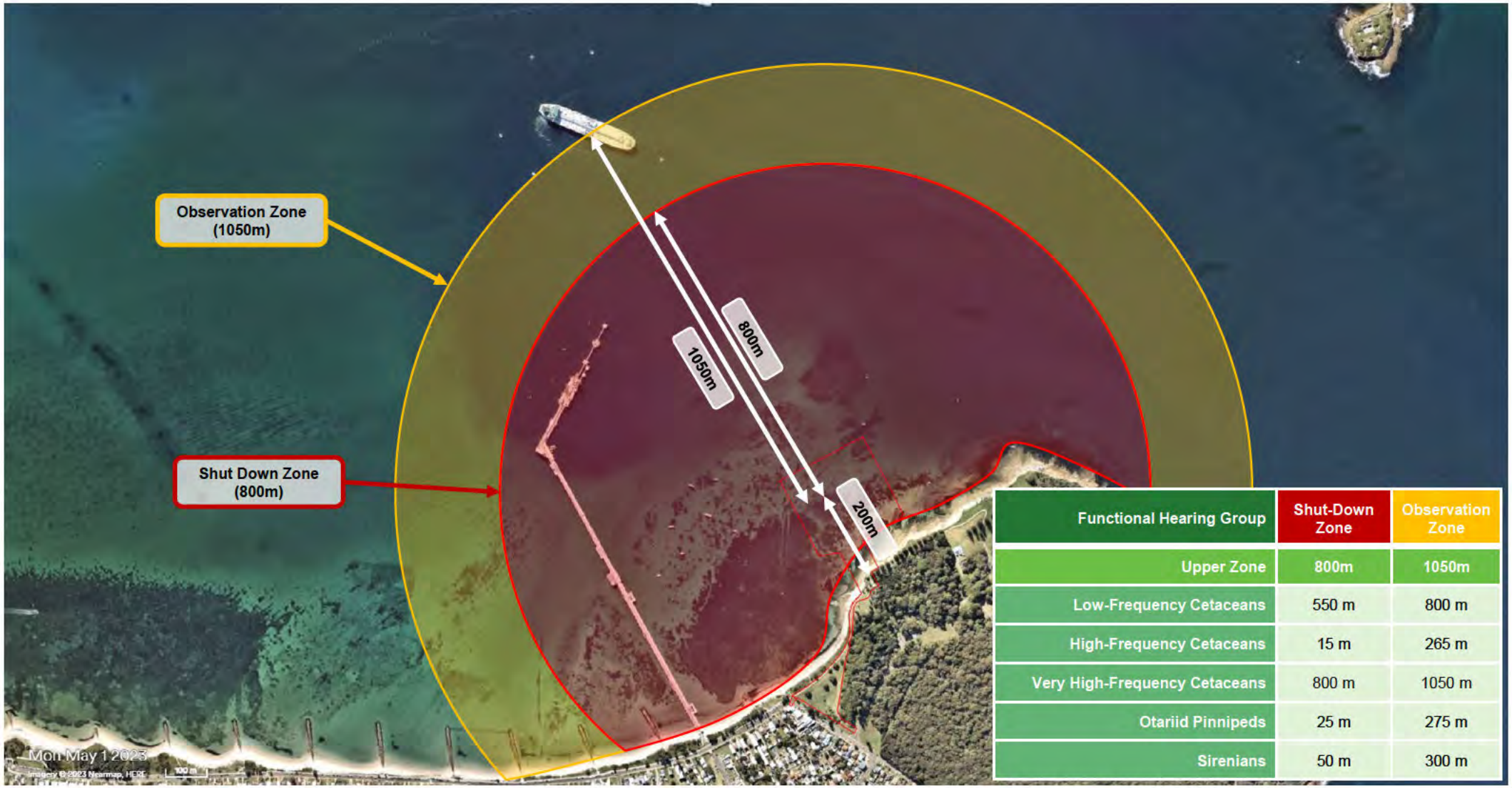
McCONNELL DOWELL
CREATIVE CONSTRUCTION™

## Marine Mammal Monitoring

Monitoring to be conducted in accordance with the Biodiversity Management Plan (Appendix G - Marine mammal monitoring procedure)

Environment & Sustainability Lead


**Mitch Jones**
0411 076 046


| Functional Hearing Group | Shut-Down Zone | Observation Zone |
|---|---|---|
| Upper Zone | 800m | 1050m |
| Low-Frequency Cetaceans | 550 m | 800 m |
| High-Frequency Cetaceans | 15 m | 265 m |
| Very High-Frequency Cetaceans | 800 m | 1050 m |
| Otariid Pinnipeds | 25 m | 275 m |
| Sirenians | 50 m | 300 m |

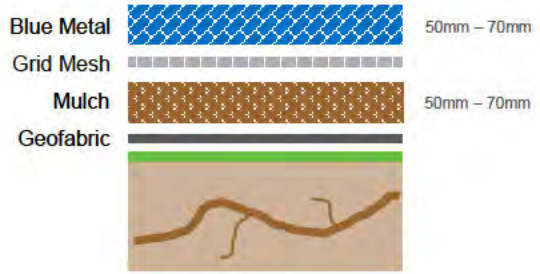
# SEP – TREE PROTECTION ZONE



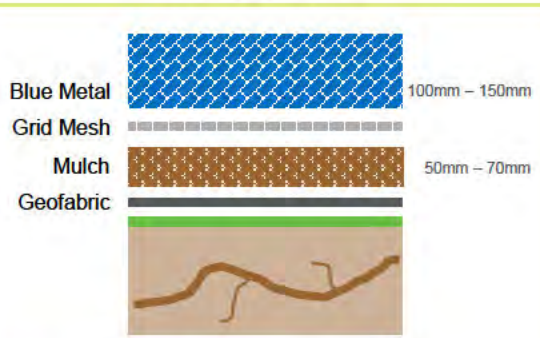
## Protection Measure Types

### Root Protection

#### CRANE PAD

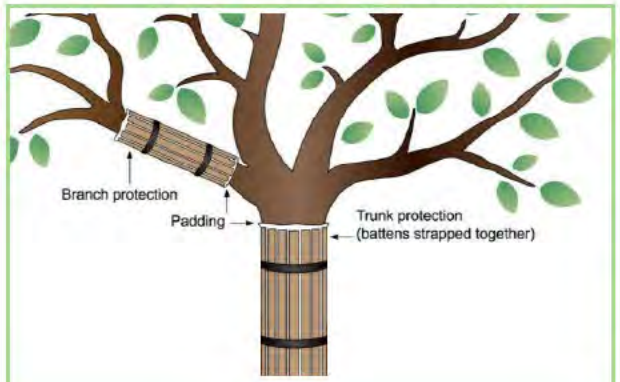



#### HAULROAD




### Trunk Protection

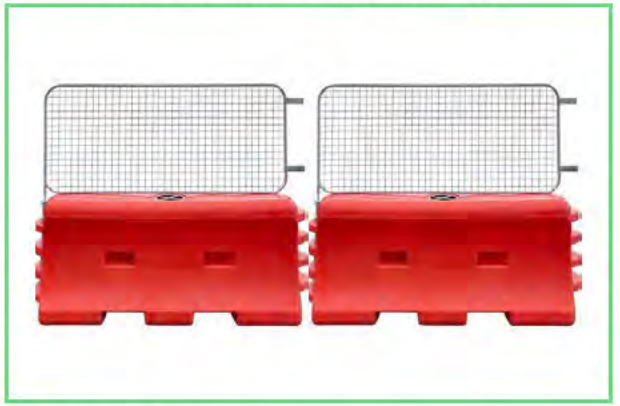
#### WOODEN BOARDS




### Canopy Protection

#### BARRIER MESH


#### WATERFILLED BARRIERS



#### LOW CONCRETE BLOCKS

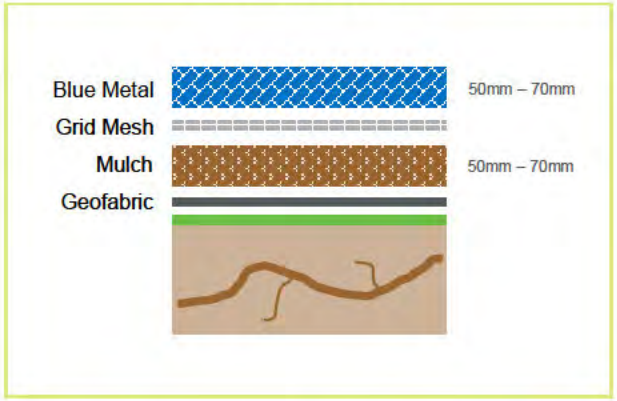
# SEP – TREE PROTECTION ZONE

## Protection Measure – Tree 335



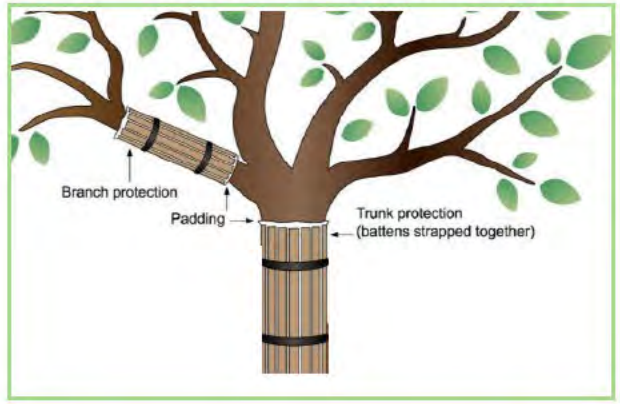
### Root Protection

**GROUND PAD**



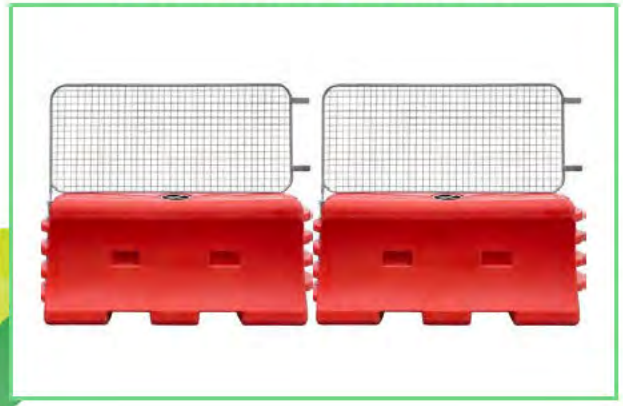

### Trunk Protection

**WOODEN BOARDS**

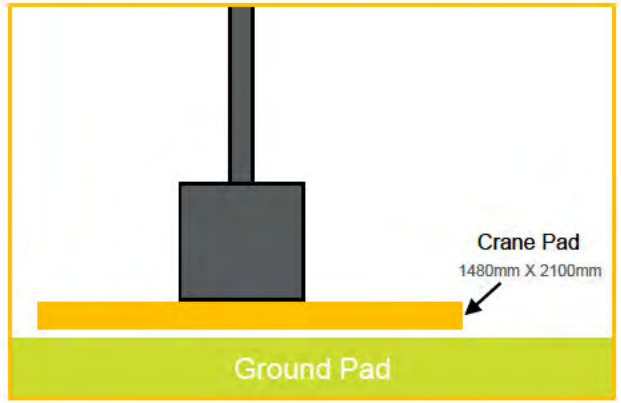



### Canopy Protection

**WATERFILLED BARRIERS**



### Crane Pad Controls




# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0

McCONNELL DOWELL
CREATIVE CONSTRUCTION™

### 1. SPILLS

- Spills are to be cleaned up immediately with spill kits & reported to the Environment & Sustainability Lead
- Spill kits are to be available at each work location and fully stocked
- Marine spill kits to be readily available in the event of any spills on water

### 2. SOIL & EROSION

**Refer to the Progressive Erosion and Sediment Control Plan for La Perouse (PESCP – KFW02-MCD-ALL-EN-DRG-000002) for all ERSED controls and requirements.**

- Erosion and sediment controls must be in place before starting clearing or earthworks (or as soon as practical within the same shift) and stay in place (and maintained) until area is stabilised.

### 3. PLANT & EQUIPMENT

- Conduct pre-mobilisation and pre-start inspections each shift on all plant and equipment.
- Make sure drip trays or bunds are used for all stationary plant where practical.
- Refuelling must be carried out under supervised and controlled conditions and in accordance with the **Environmental Work Method Statement (EWMS) for Refueling**.

### 4. WATER & WASTEWATER

- Make sure waters are protected at all times.
- Dewatering is a controlled action that must be accompanied by a **Discharge Permit** from the Environment & Sustainability Lead (or delegate).
- All dewatering activities are to be supervised directly

### 5. ARCHAEOLOGY & HERITAGE

- Ensure all known heritage items are fully protected.
- If an unexpected heritage item is discovered on site, stop works immediately, report to supervisor and do not re-commence works in area until given the all clear
    - Establish a no-go zone & do not recommence works in the area until instructed by supervision

### 6. NOISE & VIBRATION

- Know where the nearest sensitive receptors are
- Keep loud and ongoing noise to a minimum
- Minimise vibration intensive activities where possible
- **Standard Construction Hours** are:
    - Monday – Friday 0700hrs – 1800hrs
    - Saturday – 0800hrs – 1300hrs
    - No Work on Sundays or Public Holidays
- All work outside of standard construction hours must be accompanied by an Out of Hours Work Approval (OOHWA)

### 7. HAZARDOUS MATERIALS

- Store hazardous substances in a secure bunded and segregated area and return them after use and understand the SDS requirements
- A SDS register is to be maintained on Site at all times.
- Storage of fuels and chemicals at least 50m from Botany Bay or drainage lines and on an impervious surface flatter than a 10% grade

### 8. DUST & EMISSIONS

- Make sure no dust, smoke or odour leaves the site boundaries - notify immediately if it does occur
- Reduce emissions from plant and equipment by turning them off when not in use
- Undertake dust suppression such as regularly watering all exposed surfaces, including access roads, using water sprays or sprinkler systems

### 9. FAUNA & FLORA

- Tree protection measures must be implemented to ensure the protection of all trees planned to be retained on site.
- Any vegetation removal must be accompanied by a **Clearing Permit**
- Prevent the spread or introduction of weeds, pests and diseases
- Report any fauna interactions to the Supervisors and Environmental and Sustainability Lead
- Sensitive Marine environments – **abide by No Anchoring Zones**

### 10. WASTE & RECYCLING

- Think about what you can reuse or recycle before disposing of it
- Unsure all waste segregated and placed into the correct bins and notify the supervisor if recycling is not available.
- Use recycled water or materials where possible and permitted.

### General Notes

Activities covered in this SEP

- Operation of site compounds
- Archeological Salvage Excavation Works

**Revision 0 – 21/02/2023**

| Environment & Sustainability Lead | Supervisor | Project Manager |
|---|---|---|
| **Mitch Jones** | **Colin Ford** | **Adam Adamczewski** |
| [redacted] | [redacted] | [redacted] |

# SITE ENVIRONMENTAL PLAN (SEP)

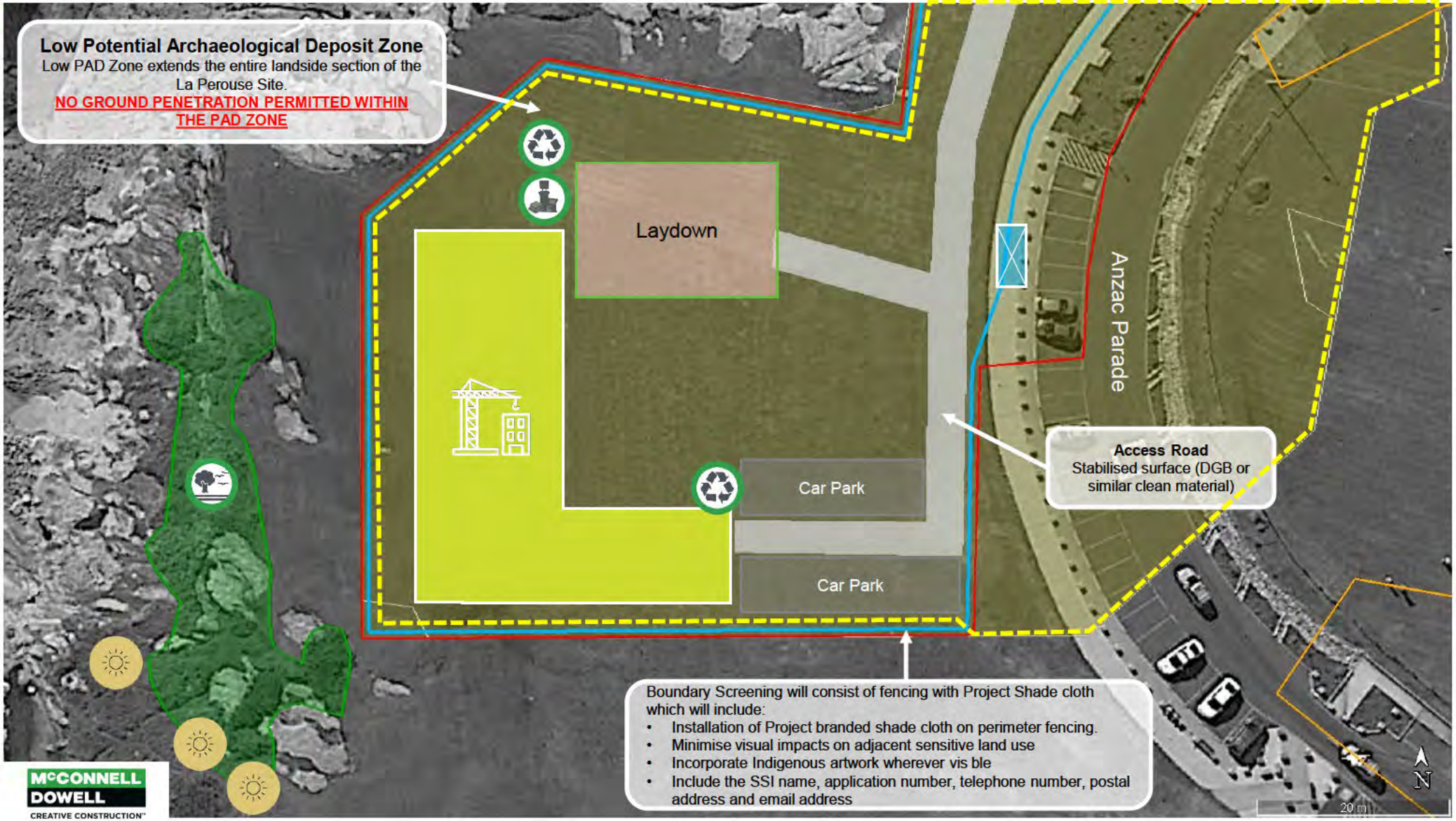
## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
|---|---|
| | Project Boundary |
| | Project Boundary (Temporary) |
| | Fencing (Project Shade Clo h) |
| | Fencing (Generic Shade Cloth) |
| | Environmental Protection Area - Flagging |
| | 5m **No Anchoring Zone** |
| | Temporary Acoustic Barrier |
| | Access Gate |
| | Sensitive Receiver – Residential |
| | Sensitive Receiver – Commercial |
| | Construction Site Office / Shed |
| Car Park | Construction Vehicle Parking |
| | Protected Flora (Terrestrial) |
| | Protected Seagrass (Posidonia) |
| | Demolition Works |
| | Heritage Item |
| | Low PAD Zone – No Ground Penetration |
| | Archeological Salvage Excavation Zone |
| | Skip Bins |
| | Spill Kits |
| | Environmental Protection Area |
| | Heritage Item |
| | Heritage Item – AHIMS Site |

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CREATIVE CONSTRUCTION™

# SITE ENVIRONMENTAL PLAN (SEP)

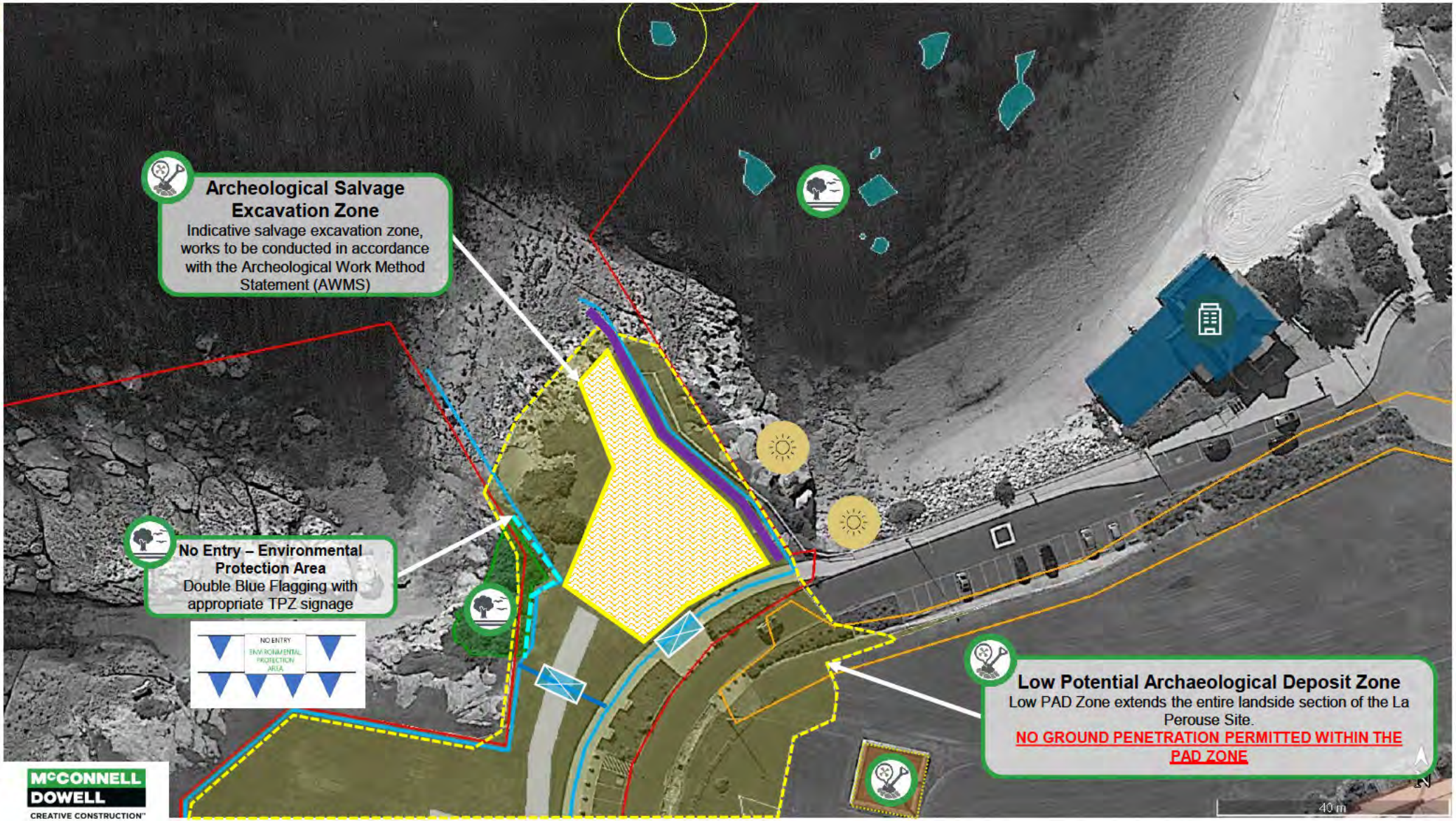
## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
|---|---|
| | Project Boundary |
| | Project Boundary (Temporary) |
| | Fencing (Project Shade Clo h) |
| | Fencing (Generic Shade Cloth) |
| | Environmental Protection Area - Flagging |
| | 5m **No Anchoring Zone** |
| | Temporary Acoustic Barrier |
| | Access Gate |
| | Sensitive Receiver – Residential |
| | Sensitive Receiver – Commercial |
| | Construction Site Office / Shed |
| Car Park | Construction Vehicle Parking |
| | Protected Flora (Terrestrial) |
| | Protected Seagrass (Posidonia) |
| | Demolition Works |
| | Heritage Item |
| | Low PAD Zone – No Ground Penetration |
| | Archeological Salvage Excavation Zone |
| | Skip Bins |
| | Spill Kits |
| | Environmental Protection Area |
| | Heritage Item |
| | Heritage Item – AHIMS Site |

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# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0



McCONNELL DOWELL
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| Icon | Description |
|---|---|
| | Project Boundary |
| | Project Boundary (Temporary) |
| | Fencing (Project Shade Clo h) |
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| | Environmental Protection Area - Flagging |
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| | Access Gate |
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| | Sensitive Receiver – Commercial |
| | Construction Site Office / Shed |
| Car Park | Construction Vehicle Parking |
| | Protected Flora (Terrestrial) |
| | Protected Seagrass (Posidonia) |
| | Demolition Works |
| | Heritage Item |
| | Low PAD Zone – No Ground Penetration |
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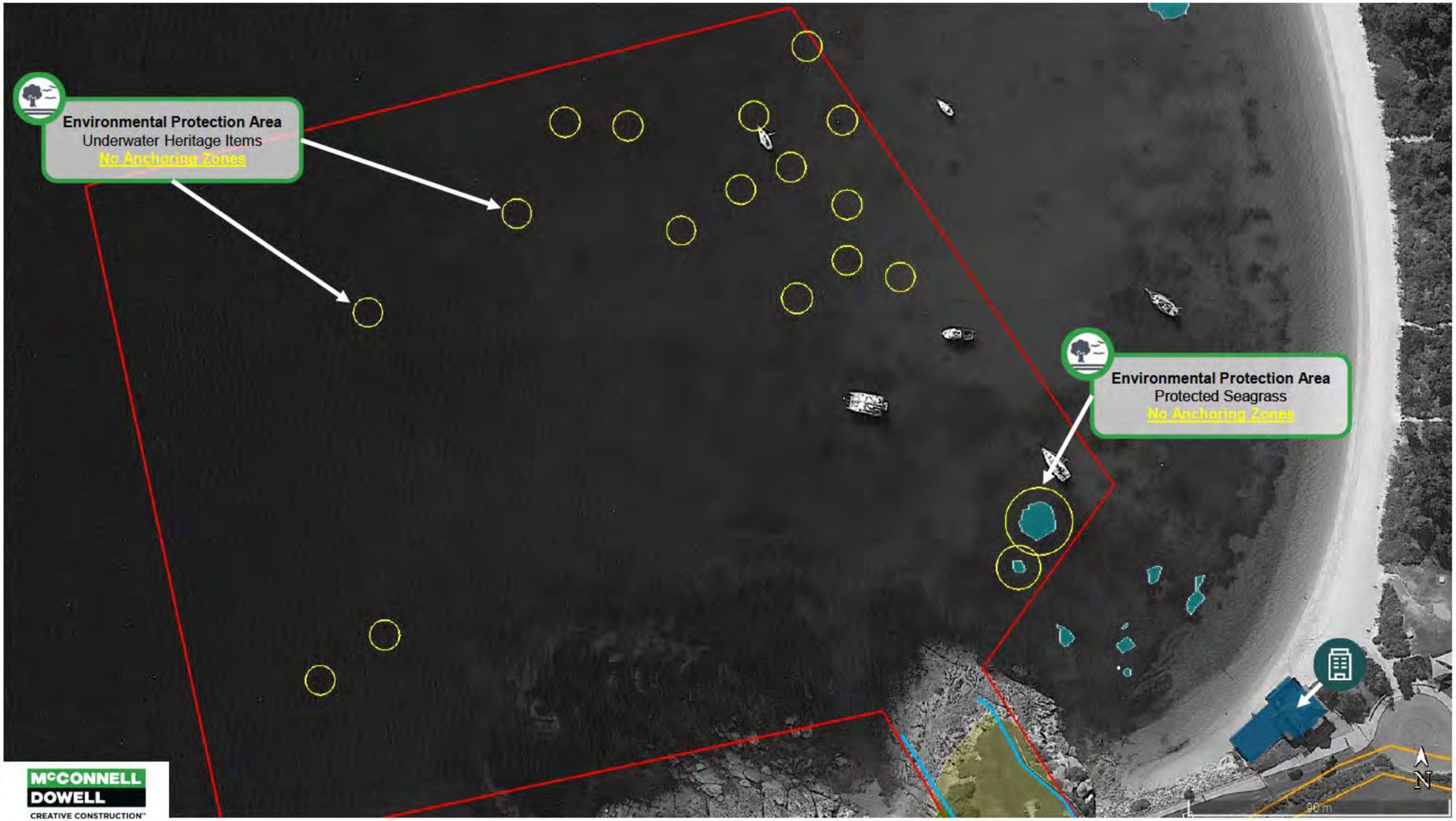


McCONNELL DOWELL
CREATIVE CONSTRUCTION™

# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
|---|---|
| | Project Boundary |
| | Project Boundary (Temporary) |
| | Fencing (Project Shade Clo h) |
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| | Heritage Item – AHIMS Site |


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# SITE ENVIRONMENTAL PLAN (SEP)

## Kamay Ferry Wharves – La Perouse

KFW02-MCD-BPW-EN-ECM-000006_Rev0



McCONNELL DOWELL
CREATIVE CONSTRUCTION™

| Icon | Description |
|---|---|
| | Project Boundary |
| | Project Boundary (Temporary) |
| | Fencing (Project Shade Clo h) |
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| | Spill Kits |
| | Environmental Protection Area |
| | Heritage Item |
| | Heritage Item – AHIMS Site |


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# SITE ENVIRONMENTAL PLAN (SEP)

Kamay Ferry Wharves – Kurnell

KFW02-MCD-BPW-EN-ECM-000005 _Rev0



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## Marine Mammal Monitoring

Monitoring to be conducted in accordance with the Biodiversity Management Plan (Appendix G - Marine mammal monitoring procedure)

Environment & Sustainability Lead

**Mitch Jones**
0411 076 046


| Functional Hearing Group | Shut-Down Zone | Observation Zone |
|---|---|---|
| Upper Zone | 800m | 1050m |
| Low-Frequency Cetaceans | 550 m | 800 m |
| High-Frequency Cetaceans | 15 m | 265 m |
| Very High-Frequency Cetaceans | 800 m | 1050 m |
| Otariid Pinnipeds | 25 m | 275 m |
| Sirenians | 50 m | 300 m |

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# APPENDIX I: ENVIRONMENT & SUSTAINABILITY INSPECTION TEMPLATE

Below is the template Environment & Sustainable Inspection, note inspection checklist will be further refined prior to and during construction to reflect site specific environmental requirements.

# ENVIRONMENT & SUSTAINABILITY
# INSPECTION CHECKLIST

## KAMAY FERRY WHARVES (6058)

SSI 10049

| | |
|---|---|
| Inspection Lead | |
| Inspection Attendees | |
| Date & Time of Inspection | |
| Area of Inspection | |

| | | | | |
|---|---|---|---|---|
| Inspection Type | General ☐ | Pre / Post Rainfall ☐ | Pre-Shutdown ☐ | Other ☐ |
| Weather Observation | | | | |
| | | | | |

## 1. SPILL MANAGEMENT

| No. | Environmental Protection Measure | Compliance | Comment |
|---|---|---|---|
| 1.1 | Are spill kits ready and available for use near all work fronts? | | |
| 1.2 | Are spill kits fully stocked with sufficient and appropriate material to clean up a range of spill sizes? | | |
| 1.3 | Any other comments as relevant | | |

## 2. SOIL AND EROSION

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 2.1 | Controls are placed and maintained as per the Progressive Erosion and Sediment Control Plan (PESCP)? | | |
| 2.2 | ERSED controls have capacity for rain events and do not require maintenance | | |

| | | | |
|---|---|---|---|
| 2.3 | All clean water is being diverted away from disturbed areas | | |
| 2.4 | All clean water diversion drains are stable | | |
| 2.5 | Sediment fence is installed correctly and there are no gaps | | |
| 2.6 | Disturbed areas where no works are undertaken are properly covered or stabilised | | |
| 2.7 | Geotextile linings (or similar) are used to provide temporary surface protection in areas where appropriate (e.g. batter drains, culvert construction) | | |
| 2.8 | Stockpiles are sited in low-hazard areas clear of watercourses and flood prone lands | | |
| 2.9 | Stockpiles are less than 2m in height | | |
| 2.10 | Shakers, rubble pads or wash down areas have been installed | | |
| 2.11 | There is no mud on the roads outside of the project boundary | | |
| 2.12 | Where applicable, is concrete washout being used correctly? | | |
| 2.13 | All discharges are undertaken in accordance with Dewatering Permits | | |
| 2.14 | Any other comments as relevant | | |

## 3. MARINE WORKS

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 3.1 | Is the water quality affected by construction works | | |
| 3.2 | Marine refuelling is in accordance with project guidelines | | |
| 3.3 | No visible hydrocarbon / contamination sheens? | | |
| 3.4 | Is a Marine Flora and Fauna Spotter present for the works? | | |
| 3.5 | Any other comments as relevant | | |

## 4. PLANT AND EQUIPMENT

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 4.1 | Have pre-start inspections been carried out on all plant and equipment? | | |
| 4.2 | Is stationary plant protected by a drip tray/ bund? | | |

| | | | |
|---|---|---|---|
| 4.3 | Are all plant, vehicles and equipment free of:<br>• leaks<br>• excessive exhaust fumes<br>• excessive noise<br>• signs of damage or deterioration<br>• excess mud and vegetation? | | |
| 4.4 | Any other comments as relevant | | |

## 5. ARCHAEOLOGY & HERITAGE

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 5.1 | Are locations of heritage/ archaeological importance clearly marked and protected as required? | | |
| 5.2 | | | |
| 5.3 | Any other comments as relevant | | |

## 6. NOISE & VIBRATION

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 6.1 | Is loud and ongoing noise kept to a minimum? | | |
| 6.2 | Is there screening or enclosures around fixed plant with noise sensitive receptors nearby? | | |
| 6.3 | Are generators and other fixed machines situated to minimise noise disturbance to local residents/ environment and the general public? | | |
| 6.4 | If required, are vibration mitigation measures in place? | | |
| 6.5 | Any other comments as relevant | | |

## 7. HAZARDOUS MATERIALS

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 7.1 | Are hazardous materials stored correctly segregated in a secure bunded area, away from watercourses/ drains? | | |
| 7.2 | Are HAZCHEM signs displayed as necessary? | | |

| | | | |
|---|---|---|---|
| 7.3 | Are all containers carrying chemicals clearly and correctly labelled? | | |
| 7.4 | Is contaminated material (including soil and water) being stockpiled/ contained and/ or treated appropriately and as per the requirements of the CEMP and associated documents? | | |
| 7.5 | Any other comments as relevant | | |

## 8. DUST & EMISSIONS

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 8.1 | Are dust, smoke or emissions minimised and kept within site boundaries? | | |
| 8.2 | Are visible exhaust gases continuous for less than 10 seconds from any of the vehicles or plant? | | |
| 8.3 | Have work areas, access roads and stockpiles been sufficiently watered (where safe, and where appropriate) to prevent the generation of dust? | | |
| 8.4 | Any other comments as relevant | | |

## 9. FAUNA & FLORA, INCL. PEST, WEEDS & DISEASES

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 9.1 | Are all fauna and flora controls in place as required and as outlined in CEMP and associated documents (i.e. flagging, bunting, fencing etc)? | | |
| 9.2 | Are vehicles, plant and equipment parked and / or stored outside of tree driplines and protected vegetation zones? | | |
| 9.3 | Where vegetation is to be, or has been cleared, is there clear delineation of extent of clearing? | | |
| 9.4 | Clearing limits and work boundaries are established and well defined | | |
| 9.5 | Exclusion fencing / tree protection around trees and sensitive areas is intact | | |
| 9.6 | Are appropriate weed, pest and disease hygiene practices being maintained? | | |
| 9.7 | Any other comments as relevant | | |

## 10. RECYCLING & WASTE MANAGEMENT

| No. | Item | Compliance | Comment |
|---|---|---|---|
| 10.1 | Are site compounds and storage areas kept tidy? | | |
| 10.2 | Wastes are segregated in designated containers | | |
| 10.3 | Contaminated soil/asbestos/PASS storage areas are fenced off and signposted | | |
| 10.4 | Concrete washouts are properly set-up and signposted | | |
| 10.5 | Any other comments as relevant | | |

## ACTIONS

| | | |
|---|---|---|
| Date Raised | | AFFIX PHOTOGRAPH HERE |
| Action | | |
| Date Due | | |

| | | |
|---|---|---|
| Date Raised | | AFFIX PHOTOGRAPH HERE |
| Action | | |
| Date Due | | |

## INSPECTION SIGN OFF

Sign off by Inspection Lead

| | |
|---|---|
| Name | |
| Date | |
| Signed | |

Reviewed by Environment & Sustainability Lead

| | |
|---|---|
| Name | |
| Date | |
| Signed | |

# APPENDIX J: LAYOUT OF ANCILLARY FACILITIES

Proposed Construction Ancillary Facilities location and compound setup has been provided to TfNSW for review as the Kamay Ferry Wharves Site Compound Plan (KFW02-MCD-ALL-MB-PLN-000001). An overview of this plan is outlined below for reference only.


Site Compound Plan - La Perouse
Legend
Google Earth
N
200 m

# Kurnell

*Site Compound Plan*