



**West**

# **West Stage 1 – Phasing Report**

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**Author:** Matthew Marrinan, Senior Environment Manager  
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Revision	Revision Date	Status	Brief Reason for Version	Author Company/ Position	Approver Company/ Position
1.0	Apr 2021	Final	Initial Release	Senior Manager Environment, Metro West	SM Director of Planning, Environment & Sustainability, Metro West
1.1	Aug 2021	Final	Revised to update information on Phase C and E	Senior Manager Environment, Metro West	SM Director of Planning, Environment & Sustainability, Metro West
1.2	Oct 2021	Final	Revised to update scope of Phase C to include demolition activities at Westmead and archaeological salvage and excavation at Clyde and Parramatta. Phase D was removed. Details were included on Phase 1	Senior Manager Environment, Metro West	SM Director of Planning, Environment & Sustainability, Metro West
1.3	Mar 2022	Final	Phase C1 scope revised to include removal of asbestos impacted topsoil (0.1m) at Westmead	Senior Manager Environment, Metro West	SM Director of Planning, Environment & Sustainability, Metro West
1.4	May 2022	Draft	Revised to update information for Phase B2, Phase E and Phase F. Updates to reflect commencement of Phases A and C.	Senior Manager Environment, Metro West	SM Director of Planning, Environment & Sustainability, Metro West

# 1 Definitions and Abbreviations

All terminology in this report is taken to mean the generally accepted or dictionary definition, except where defined in any applicable planning approvals. Relevant acronyms, abbreviations and terms used throughout this report are explained in Table 1.

**Table 1: Acronym, Abbreviation and Term Explanations**

Acronym term/ term	Term
AA	Acoustic Advisor
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
Construction	As per the definition provided in the Planning Approval (SSI 10038)
CSSI	Critical State Significant Infrastructure
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
ER	(Independent) Environmental Representative
Low Impact Works	As per the definition provided in the Planning Approval (SSI 10038)
MSF	Maintenance and Services Facility
Phase	A component of the delivery strategy for Sydney Metro West that represents the scope of work undertaken by one delivery partner.
REMM	Revised Environmental Mitigation Measure
SM	Sydney Metro
Stage	A component of the Planning Approval Strategy for Sydney Metro West that represents the scope of each Environmental Impact Statement required to deliver the project.
TBM	Tunnel Boring Machine
TfNSW	Transport for New South Wales

## 2 Introduction

### 2.1 Purpose of this Report

This report has been prepared and structured to address the Phasing Report requirements of the Conditions of Approval (CoA) for the Sydney Metro West Stage 1 Planning Approval (SSI 10038). Updates to this report will be made to include all other Phases of Stage 1 following changes to the delivery strategy and any modifications to the planning approval. Where the Phasing Report is amended it will be provided to the Department of Planning and Environment (DPE) for Information.

Table 2 cross-references sections in this report that address each CoA requirement relating to the Phasing Report.

**Table 2: Relevant Phasing Report requirements from SSI 10038**

Planning Approval Condition	Requirement	Staging Report Section
A10	Stage 1 of the CSSI may be constructed in phases. Where phased construction is proposed, a Phasing Report must be prepared and submitted to the Planning Secretary for information. The Phasing Report must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction of the first of the proposed phases of construction.	This Document, but only to the extent of Phase A
A11	<p>The Phasing Report must:</p> <ul style="list-style-type: none"> <li>(a) set out how construction of the whole of Stage 1 of the CSSI will be phased, including details of work and other activities to be carried out in each phase and the general timing of when construction of each phase will commence and finish;</li> <li>(b) specify the relevant conditions that apply to each phase and how compliance with conditions will be achieved across and between each of the phases of Stage 1 of the CSSI;</li> <li>(c) set out mechanisms for managing any cumulative impacts arising from the proposed phasing; and</li> <li>(d) for the purposes of informing Conditions C2, C7, C18, include an assessment of the predicted level of environmental risk and potential level of community concern posed by the construction activities required to construct each phase of Stage 1 of the CSSI.</li> </ul> <p>With respect to (d) above, the risk assessment must use an appropriate process consistent with AS/NZS ISO 31000: 2009; Risk Management - Principles and Guidelines and must be endorsed by the ER.</p>	<ul style="list-style-type: none"> <li>a) Section 3</li> <li>b) Appendix B and C</li> <li>c) Section 3.4</li> <li>d) Section 3</li> </ul> <p>ER Endorsement - Appendix D</p>
A10	Stage 1 of the CSSI may be constructed in phases. Where phased construction is proposed, a Phasing Report must be prepared and submitted to the Planning Secretary for information. The Phasing Report must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction of the first of the proposed phases of construction.	This Document, but only to the extent of Phase A
A12	Stage 1 of the CSSI must be phased in accordance with the Phasing Report, as submitted to the Planning Secretary for information.	Section 3.1
A13	Where phasing is proposed, the conditions of this approval that apply or are relevant to the work or activities to be carried out in a specific phase must be complied with at the relevant time for that phase.	Appendix B and C
A14	Where changes are proposed to the phasing of construction, a revised Phasing Report must be prepared and submitted to the Planning Secretary for information before the commencement of changes to the phasing of construction.	Section 3.1

Planning Approval Condition	Requirement	Staging Report Section
A18	With the exception of a Site Establishment Management Plan relating to the Silverwater ancillary facility referred to in Condition A19 below and any other Site Establishment Management Plan expressly nominated by the Planning Secretary to be endorsed by the ER, all Site Establishment Management Plans must be submitted to the Planning Secretary for approval one (1) month before the establishment of any ancillary facilities.	Section 3.2.1
A19	Site Establishment Management Plan relating to the Silverwater ancillary facility and any other Site Establishment Management Plan expressly nominated by the Planning Secretary must be submitted to the ER for endorsement one (1) month before the establishment of that ancillary facility or as otherwise agreed with the ER.	Section 3.2.1
C2	With the exception of any CEMPs expressly nominated by the Planning Secretary to be endorsed by the ER, all CEMPs must be submitted to the Planning Secretary for approval.	Section 3.2.1
C3	The CEMP(s) not requiring the Planning Secretary's approval must be submitted to the ER for endorsement no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase. That CEMP 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 of this schedule.	Section 3.2.1
C4	Any CEMP to be approved by the Planning Secretary must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Section 3.2.1
C7	With the exception of any CEMP Sub-plans expressly nominated by the Planning Secretary to be endorsed by the ER, all CEMP Sub-plans must be submitted to the Planning Secretary for approval.	Section 3.2.1
C8	The CEMP Sub-plans not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the Conditions of Approval and all relevant undertakings made in the documents listed in Condition A1 of this schedule. Any of these CEMP Sub-plans must be submitted to the ER with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Section 3.2.1
C9	Any of the CEMP Sub-plans to be approved by the Planning Secretary must be submitted to the Planning Secretary with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Section 3.2.1
C18	With the exception of any Construction Monitoring Programs expressly nominated by the Planning Secretary to be endorsed by the ER, all Construction Monitoring Programs must be submitted to the Planning Secretary for approval.	Section 3.2.1
C19	The Construction Monitoring Programs not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the Conditions of Approval and all undertakings made in the documents listed in Condition A1 of this schedule. Any of these Construction Monitoring Programs must be submitted to the ER for endorsement at least one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Section 3.2.1

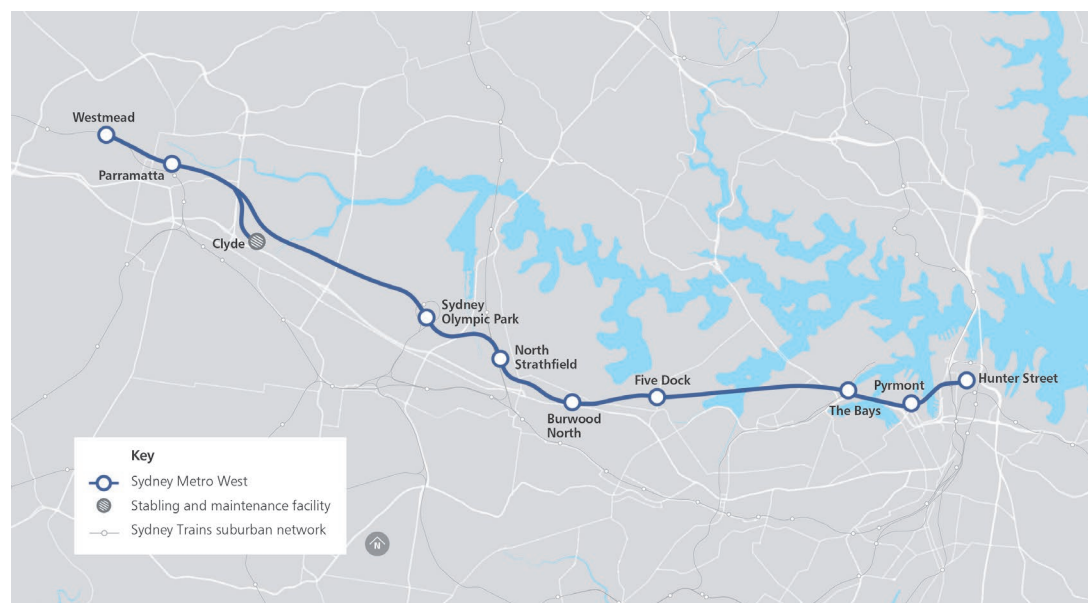
This Phasing Report has been reviewed and Endorsed by the Environmental Representative for Sydney Metro West Stage 1 and meets the requirements of Condition A11 from SSI 10038. The ER's letter of endorsement is attached in Appendix D.

## 2.2 Background

Sydney Metro West (the Concept) involves the construction and operation of a metro rail line, around 24 kilometres long, between Westmead and Sydney CBD. The key components include:

- About 24 kilometres of twin tunnels between Westmead and Hunter Street.
- New metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street.
- A turn-up-and-go metro service operating early morning to late at night, between Westmead and Hunter Street.
- Pedestrian links and connections to other modes of transport (such as the existing suburban rail network and other parts of the metro network) and surrounding land uses.
- Modifications to existing suburban stations and associated rail infrastructure (such as overhead wiring, signalling, access tracks/paths and rail corridor fencing) at Westmead and North Strathfield.
- Services within each of the metro stations, including mechanical and fresh air ventilation equipment and electrical power substations to supply power for operation.
- A stabling and maintenance facility at Clyde, including associated aboveground and belowground tracks to connect to the mainline tunnels.
- Services facilities at Rosehill (within the Clyde stabling and maintenance facility construction site) for fresh air ventilation and emergency evacuation.
- Alterations to pedestrian and traffic arrangements, and cycling and public transport (e.g. bus) infrastructure around the metro stations.
- Subdivision of station sites to support integrated station and precinct development and ancillary facilities.
- Ancillary facilities to support construction.

**Figure 1 - Sydney Metro West Alignment**



## 2.3 Planning Approval Strategy

The planning process for Sydney Metro West is being assessed as a staged infrastructure application under section 5.20 of the *Environment Planning and Assessment Act 1979* (EP&A Act).

The Sydney Metro West Concept and major civil construction work for Sydney Metro West between Westmead and The Bays (Stage 1 of the planning approval process for Sydney Metro West), application number SSI-10038, were approved on 11 March 2021.

The Concept includes:

- Construction and operation of new passenger rail infrastructure between Westmead and the central business district of Sydney, including:
  - Tunnels, stations (including surrounding areas) and associated rail facilities
  - Tunnels, stations (including surrounding areas) and associated rail facilities
  - Stabling and maintenance facilities (including associated underground and overground connections to tunnels)
- Modification of existing rail infrastructure (including stations and surrounding areas)
- Ancillary development.

Major civil construction work for Sydney Metro West between Westmead and The Bays includes:

- Tunnel excavation including tunnel support activities between Westmead and The Bays
- Station excavation for new metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays
- Shaft excavation for services facilities
- Civil work for the stabling and maintenance facility at Clyde.

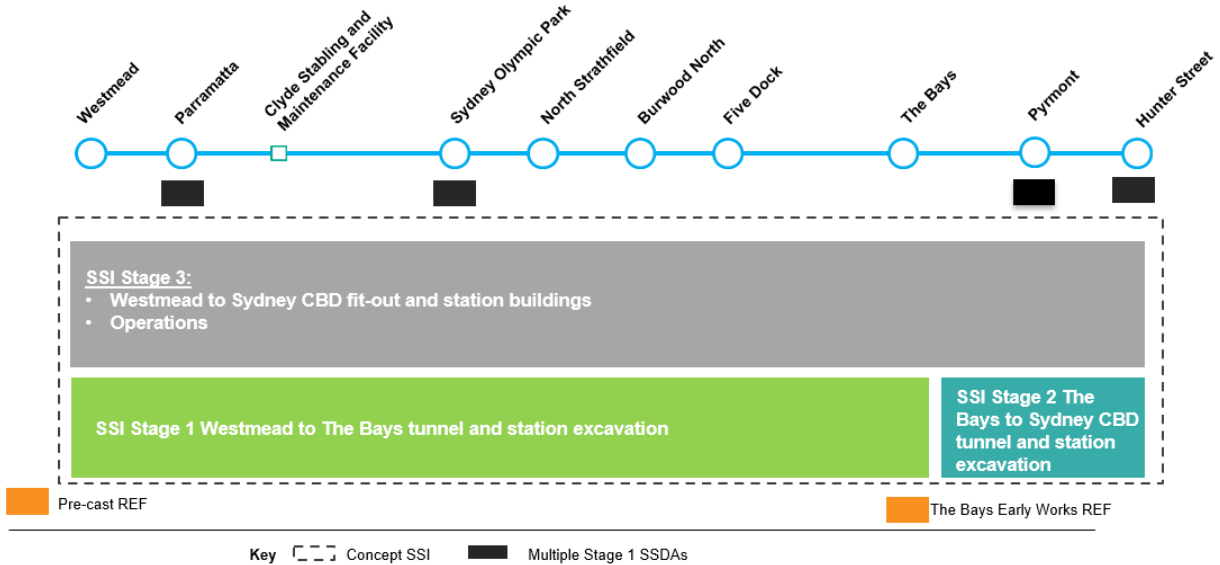
Stage 2 of the planning approval process includes all major civil construction work including station excavation and tunnelling between The Bays and Sydney CBD.

Future planning applications for Sydney Metro West will include tunnel fit-out, station building and fit-out and operation of the line between Westmead and Sydney CBD.

This Phasing Report relates to Stage 1 of the planning approval process.



**Figure 2 - Sydney Metro West Planning Approval Strategy**



### 2.3.1 Stage 1 of Sydney Metro West Scope

The Sydney Metro West Concept and major civil construction work for Sydney Metro West between Westmead and The Bays (Stage 1 of the planning approval process for Sydney Metro West), application number SSI-10038, were approved on 11 March 2021. This includes:

- Enabling works such as demolition, utility supply to construction sites, utility adjustments and modifications to the existing transport network;
- Tunnel excavation including tunnel support activities;
- Station excavation for new metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays;
- Shaft excavation for services facilities at Rosehill (within the Clyde stabling and maintenance facility construction site).
- Civil work for the stabling and maintenance facility at Clyde including earthworks and structures for crossings of A'Becketts Creek and Duck Creek; and
- Excavation of a tunnel dive structure and associated tunnels at Rosehill to support a connection between the Clyde stabling and maintenance facility and the mainline metro tunnels.

## 3 Phases

### 3.1 Overview

Sydney Metro West will be delivered by multiple delivery partners (Principal Contractors) and under multiple planning approvals. This delivery strategy outlines how Sydney Metro will engage with the market to deliver the project in consideration of sequencing, timing and duration, geographic presence, funding, risk, construction methodology and market-related constraints.

Each delivery partner and Sydney Metro are responsible for complying with relevant requirements of any planning approvals that apply to the project and an allocation of responsibilities is defined in contracts between Sydney Metro and delivery partners.

On this basis, Sydney Metro West's Phases are based upon the individual contracts that comprise the Delivery Strategy and this Phasing Report is the first Phasing Report produced for Sydney Metro West covered by the scope of Stage 1 of the planning approval process approved under SSI 10038 outlined in Section 2.3.1.

This version (version 1.4) of the Phasing Report specifically addresses the requirements of the planning approval for Phase A, B1, B2, C1, C2, E and F and provides detailed information on the extent to which requirements apply to these Phases.

Table 3 shows the project wide summary of both the Delivery Strategy and the Planning Approval Strategy.

**Table 3 – Overall Planning Approval and Delivery Strategy for Sydney Metro West**

Planning Approvals	Phased Delivery	Construction Commencement Date	Anticipated Completion Date
Stage 1 of the planning approval process – SSI 10038	Phase A - Power Enabling Works	Jul 2021	Oct 2022
	Phase B1 - Central Tunnelling Early Works	Jan 2022	Jan 2025
	Phase B2 - Central Tunnelling Main Works	Jul 2022*	Jan 2025
	Phase C1 – Parramatta, Westmead and Clyde Demolition Works	Dec 2021	Aug 2022
	Phase C2 – Parramatta and Clyde Archaeological Works	Mar 2022	Oct 2022
	Phase D – Greater Sydney Road Works	This Phase is removed	
	Phase E – Existing Rail Corridor Enabling Works	Low Impact Works Commence Oct 2021	Mar 2023
	Phase F - Western Tunnelling	June 2022*	Aug 2025
Stage 2 of the planning approval process – TBA	To be detailed in the Phasing Report for Stage 2 of the planning approval process for Sydney Metro West		
Stage 3 of the planning approval process – TBA	To be detailed in the Phasing Report for Stage 3 of the planning approval process for Sydney Metro West		

\* Indicative

As Sydney Metro West progresses it is possible that the delivery strategy will change such that the Phases outlined in Table 3 also change. Where this occurs, Sydney Metro will undertake a reallocation exercise to redefine how planning approval

requirements apply to new or modified Phases and subsequently update this Phasing Report.

Where the Phasing Report is updated, new versions will be provided to the ER for endorsement and resubmitted to the Department of Planning and Environment for information.

## 3.2 Management System Risk Assessments

Each Phase in the Delivery Strategy for Sydney Metro West is considered with respect to which requirements from the Planning Approval and subsequent modifications, the Amendment Report, and the Sydney Metro CEMF should apply. The resulting allocations are captured in Table 14, Appendix B and C to this Phasing Report.

With respect to Conditions of Approval that relate to the development of environmental management systems a detailed risk assessment is undertaken in this Phasing Report to demonstrate the appropriateness of management system controls. In Section 3.3 this Phasing Report describes the scope of work to be carried out during each Phase and is followed by a risk assessment to consider to what extent a corresponding management document or monitoring program should apply. This risk assessment is based upon the Sydney Metro Risk Management Standard and is consistent with AS/NZS ISO 31000: 2009; Risk Management - Principles and Guidelines.

While the EIS and Amendment Report that formed part of the Stage 1 planning approval have already considered environmental and community risks broadly and established mitigation measures which will be complied with during the delivery of Sydney Metro West, this risk assessment specifically focuses upon applying appropriate management system controls and approval processes with respect to the level of risk posed in the absence of any of these controls. During delivery, Principal Contractors will manage environmental risk generally and are required to document this under the Sydney Metro CEMF in their CEMP. This will further reduce the residual risk.

For example, a Principal Contractor carrying out a Phase of Sydney Metro West, whose activities have a high inherent risk in relation to groundwater drawdown, would be required to implement a Groundwater Management Plan to minimise and manage those impacts.

Where there is an unacceptable inherent risk it is controlled by allocating and implementing the respective Conditions of Approval, a requirement of the Sydney Metro CEMF, and/or additional quality assurance processes via an Environmental Representative Endorsement or DPE approval of the documentation prior to the commencement of Construction.

To achieve this each area of environmental management covered in the Sydney Metro CEMF is examined with respect to the scope of work in each Phase and evaluated against a Risk Statement. These risk statements examine the likelihood and consequence of delivering each Phase in the absence of any management systems leading to an undesirable outcome that contravenes the objectives of the CEMF for each area.

Please refer to Appendix A for the risk assessment matrix and consequence table.

### 3.2.1 Risk Based DPE Approval Recommendations

Conditions A18, A19, C2, C3, C4, C7, C8, C9, C18 and C19 describe a process by which CEMP, Sub-plans and monitoring programs are endorsed by the ER/AA or approved by DPE. This process relies upon the Department of Planning and Environment nominating deliverables for which they would require their approval.

This Phasing Report proposes that DPE should hold an approval role where the inherent risk in the detailed risk assessments in Section 3.3 resulting in a risk rating that is High or Very High would have its associated management documentation required under SSI 10038 approved by DPE.

This mechanism only applies to any document required under SSI 10038 that is a:

- Site Establishment Management Plan (SEMP);
- Construction Environmental Management Plan (CEMP);
- Sub plan to the CEMP; or
- Construction Monitoring Program.

## 3.3 Construction Phases

### 3.3.1 Phase A - Power Enabling Works

Excavation of the tunnels and underground stations will be undertaken by a combination of Road-Headers and Tunnel Boring Machines both of which have high electrical power demands. The power demands are of a magnitude that can only be provided to each worksite via a High Voltage (HV) feeder.

Phase A works involve installing this HV feeder via new conduits and cables from the Ausgrid Rozelle Zone substation located in Manning St, Rozelle to The Bays Station construction site just off Robert St Rozelle. The route is approx. 2km in length includes the following activities:

- The construction and commissioning at The Bays Station construction site of 33kV pad-mounted kiosk substations or High Voltage Connections (HVC) to supply power to the Tunnel Boring Machine and Road header;
- A proposed Horizontal Directional Drilling under-bore under Victoria Rd;
- The removal of decommissioned Ausgrid 132kV oiled filled cable;
- Relocation of utility assets; and
- Trenching to install additional conduits in various sections of the cable alignment including:
  - Installation, jointing and commissioning of 2 cross linked polyethylene high voltage cables to supply the 33kV HVC for the Tunnel Boring Machine and Road header.
  - Conduits for Transport for NSW's Western Harbour Tunnel project

Conduits for future power provision by Ausgrid and Port Authority of NSW from the Rozelle sub-transmission substation to the local area including to The Bays Precinct and locality. Construction activity commenced on 13 July 2021 with an expected completion date in October 2022.

The tables below provide consideration and assessment of the level of risk for specific risk areas during Phase A.

**Table 4 - Risk Assessment Context for Power Enabling Works**

Risk Areas	Risk Context
General Environmental Management	Work would be carried out over a 15 month period with multiple work fronts in close proximity to residential areas. There would be a range of environmental and community responsibilities managed by the Principal Contractor including the implementation, maintenance, surveillance and improvement of environmental controls. Training regimes and workforce competency in managing environmental impacts would be required to reduce the potential for material harm. The duration of the Phase provides some opportunities to iterate and continually improve management systems.
Spoil Management	Relatively small volumes of spoil will be excavated from trenching activities along the Power Enabling Works route in Rozelle. Some spoil will be reused onsite to refill trenches with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy (Chapter 24, Table 24-4 of the Sydney Metro Stage 1 EIS).
Groundwater Management	Shallow excavations for trenching works are not expected to encounter groundwater.
Construction Noise and Vibration Management	Power Enabling Works have a high potential to cause noise and vibration impacts on the surrounding community without controls due to the proximity of plant and equipment to residential areas particularly in Rozelle.
Heritage Management	It is not expected that trenching activities will impact upon areas of potential for Aboriginal or Non-Aboriginal heritage except where traversing outlet canals for the White Bay Power Station and may result in adverse direct impacts; remainder of power supply route would not impact any known non-Aboriginal archaeological resources.
Flora and Fauna Management	It is not expected that any vegetation clearance is required to carry out the Power Enabling Works.
Visual Amenity Management	It is not expected that the high voltage utilities would create any permanent visual impacts as the majority of the infrastructure is underground. Minor temporary visual impacts would occur with respect to construction sites and the visibility of plant and equipment in residential areas.
Soil and Water Management	Power Enabling Works will progressively expose and backfill soil along the power route, limiting the risk of water quality impacts. While soil is exposed, rainfall has the potential to cause sedimentation to enter into adjacent stormwater systems.
Air Quality Management	The use of plant and light vehicles could mobilise dust in work areas, due to the proximity of these works to residential receivers it is likely dust impacts would occur without controls. However, progressive work fronts as trenches are opened and backfilled allow dust impacts to be managed efficiently with simple controls.
Waste Management	Waste generated as part of Power Enabling Works would undergo waste classification prior to transportation and disposal. Other materials would be classified into waste streams, recycled or transported off-site for disposal.
Community and Business Management	While construction activities for Phase A will be temporary, there will be localised noise and vibration, traffic impacts, loss of parking and property access impacts. It is also likely that excavation activities could generate dust in certain weather conditions if excavated soils are not managed appropriately. These occurrences may lead to complaints being made in relation to Phase A.

**Table 5 - Power Enabling Works Risk Assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	A lack of management systems in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L3	C3	High	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>ER Endorsement of SEMP and/or CEMP</li> </ul>	L5	C3	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L4	C4	Medium	<ul style="list-style-type: none"> <li>Spoil related risks covered in CEMP risk assessment where necessary</li> <li>ER Endorsement of CEMP</li> </ul>	L5	C4	Low
Groundwater Management	A lack of management systems in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L6	C3	Low	<ul style="list-style-type: none"> <li>Groundwater related risks covered in CEMP risk assessment where necessary</li> <li>ER Endorsement of CEMP</li> </ul>	L6	C3	Low
Construction Noise and Vibration Management	A lack of management systems in relation to Noise and Vibration management leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L1	C4	High	<ul style="list-style-type: none"> <li>Noise and Vibration Management Plan</li> <li>Noise and Vibration Monitoring Program</li> <li>DPE Approval</li> </ul>	L3	C4	Medium
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L4	C3	Medium	<ul style="list-style-type: none"> <li>Unexpected Finds Procedure</li> <li>Impacts on outlet canal for White Bay Power Station managed via CNVMP (D46) and other heritage requirements of the planning approval</li> </ul>	L5	C3	Medium
Flora and Fauna Management	A lack of management systems in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L6	C3	Low	<ul style="list-style-type: none"> <li>Flora and Fauna related risks covered in CEMP risk assessment where necessary</li> <li>ER Endorsement of CEMP</li> </ul>	L6	C3	Low
Visual Amenity Management	A lack of management systems in relation to visual amenity management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.	L6	C4	Low	<ul style="list-style-type: none"> <li>Visual Amenity related risks covered in CEMP risk assessment where necessary</li> <li>ER Endorsement of CEMP</li> </ul>	L6	C4	Low

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L3	C3	High	<ul style="list-style-type: none"> <li>Soil and Water Management Plan</li> <li>ER Endorsement of SWMP</li> </ul>	L4	C3	Medium
Air Quality Management	A lack of management systems in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Air Quality related risks covered in CEMP risk assessment where necessary</li> <li>ER Endorsement of CEMP</li> </ul>	L5	C4	Low
Waste Management	A lack of management systems in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Waste Classification procedure</li> <li>ER Endorsement of CEMP</li> </ul>	L5	C4	Low
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L2	C2	Very High	<ul style="list-style-type: none"> <li>Overarching Community Communications Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>CICG (see Section 3.4)</li> </ul>	L3	C3	High

### 3.3.2 Phase B - Central Tunnelling

The Central Tunnelling Package involves major civil construction works between the Bays and Sydney Olympic Park, including station excavation for new metro stations at Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

Tunnel boring machines would be used to excavate twin tunnels which have a circular cross-section with an internal lined diameter of about six metres and an excavated diameter of about seven metres. Cross passages between the two tunnels at intervals of about 240 metres would also be excavated using road-headers and rock hammers to allow for emergency access.

The centre lines of the two tracks would typically be about 14 metres apart, however this would depend on specific geological constraints and the need to avoid building basements. The tunnels would be lined with precast concrete segments to ensure the long term life of the asset and minimise groundwater inflow into the tunnel. The depth of the tunnels would vary from about 15 to 90 metres deep due to changes in topography. The shallower tunnel sections would generally be near cut-and-cover stations.

Submission of the CEMP, Sub-plans and monitoring programs for Phase B will be staged in two sub Phases B1 and B2.

This approach is based on the preparation of initial documentation to address all work during the civils construction phase. This includes activities such as local traffic modifications, multiple concurrent utility relocations, demolition and site establishment.

Following approval of this (Phase B1) Civils CEMP these documents will be updated to include tunnelling activities in Phase B2, with each updated document being re-approved prior to the commencement of tunnelling activities. Where the amendments made to the CEMP or Sub-plans for Phase B2 are:

- minor or administrative in nature,
- do not result in increasing impacts to nearby sensitive receivers,
- and are consistent with the conditions of approval,

then the revised CEMP or Sub-plans may be endorsed by the ER in accordance with Condition of Approval A30(j) and in line with the risk assessment defined within this Phasing Report.

### 3.3.3 Phase B1 - Civil Works

The tables below provide consideration and assessment of the level of risk for specific risk areas during Phase B1.

**Table 6 - Risk Assessment Context for Civil Works**

Risk Areas	Risk Context
General Environmental Management	Work would be carried out over a 38 month period with multiple work fronts and minor road works in close proximity to commercial businesses and residential properties. There would be a range of environmental and community responsibilities managed by the Principal Contractor including the implementation, maintenance, surveillance and improvement of environmental controls. Without training regimes and a competent workforce the risk of environmental incidents would be higher. The work areas contains actual and potential heritage values that would require excavation and/or protection during construction, particularly at The Bays Station Site. The duration of the Phase provides significant opportunities to iterate and continually improve management systems.
Spoil Management	High volumes of spoil will be generated from station excavations and tunnel access shafts. Spoil would be reused onsite where possible but opportunities are limited due to site constraints, with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy. Spoil stockpiles will be present at some sites and would require management to prevent impacts.
Groundwater Management	Deep excavations for station boxes as well as tunnel access shafts are expected to encounter groundwater and could cause localised drawdown on the water table. Groundwater inflow into the shafts and station box excavations would require treatment prior to discharge via water treatment plants.
Construction Noise and Vibration Management	Civil works have a very high potential to cause noise and vibration impacts on surrounding commercial and residential receivers without controls at most sites. The Bays site is less likely to generate noise impacts due to the distance of nearest receivers, however vibration resulting from civils construction has the potential to impact the Heritage listed White Bay Power Station.
Heritage Management	The Bays Station Site is the focus for heritage management and consideration of impacts to the White Bay Power Station and areas of Aboriginal archaeological potential. Unexpected finds are also a possibility.
Flora and Fauna Management	Street trees would require protection and need to be retained wherever possible in establishing hoarding and scaffolding for station sites to avoid unnecessary clearance or harm. Some Groundwater Dependant Ecosystems may be impacted from groundwater drawdown in the vicinity of station excavations although this is considered unlikely.
Visual Amenity Management	Visual Amenity impacts are expected to occur particularly at station sites other than the Bays, where acoustic sheds are being erected.



Risk Areas	Risk Context
Soil and Water Management	During site establishment until sealed surfaces are established at station sites there is a potential for surface water run-off to cause pollution of stormwater systems. Some earthworks ancillary to the station box excavation will require ERSED controls.
Air Quality Management	Without controls, there is a high likelihood that air quality impacts would be experienced by adjacent commercial and residential receivers as a result of ground disturbance, stockpiling and demolition activities. Spoil receipt sites in particular will require careful management to minimise air quality issues.
Waste Management	Civils activities will generate a large volume of waste material that will be classified into waste streams, temporarily stockpiled onsite and recycled or transported off-site for disposal.
Community and Business Management	There will be localised noise and vibration, traffic impacts due to haulage routes and site vehicles, loss of parking and property access impacts at all locations, as site access and establishment works are undertaken.

**Table 7 - Civil Works Risk Assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	A lack of management systems in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L2	C3	High	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L2	C3	High	<ul style="list-style-type: none"> <li>Spoil Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Groundwater Management	A lack of management systems in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L4	C2	High	<ul style="list-style-type: none"> <li>Groundwater Management Plan</li> <li>Groundwater Monitoring Program</li> <li>ER Endorsement</li> </ul>	L5	C2	Medium
Construction Noise and Vibration Management	A lack of management systems in relation to Noise and Vibration management leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L1	C4	High	<ul style="list-style-type: none"> <li>Noise and Vibration Management Plan</li> <li>Noise and Vibration Monitoring Program</li> <li>DPE Approval</li> </ul>	L3	C4	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L2	C3	High	<ul style="list-style-type: none"> <li>Heritage Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Flora and Fauna Management	A lack of management systems in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Flora and Fauna Management Plan</li> <li>ER Endorsement</li> </ul>	L5	C4	Low
Visual Amenity Management	A lack of management systems in relation to visual amenity management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Visual Amenity Management Plan</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L1	C3	Very High	<ul style="list-style-type: none"> <li>Soil and Water Management Plan</li> <li>Surface Water Quality Monitoring Program</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Air Quality Management	A lack of management systems in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L1	C4	High	<ul style="list-style-type: none"> <li>Air Quality Management Plan</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium
Waste Management	A lack of management systems in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L2	C4	High	<ul style="list-style-type: none"> <li>Waste Management Plan</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L2	C2	Very High	<ul style="list-style-type: none"> <li>Overarching Community Communications Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>CICG (see Section 3.4)</li> </ul>	L3	C3	High

### 3.3.4 Phase B2 - Tunnelling Works

The tables below provide consideration and assessment of the level of risk for specific risk areas during Phase B2.

**Table 8. Risk assessment context for tunnelling works**

Risk Areas	Risk Context
General Environmental Management	Tunnelling would be carried out over a 24-month period. Tunnelling would commence from The Bays construction site with tunnelling support activities conducted at each of the stations. There would be a range of environmental and community responsibilities managed by the Principal Contractor including the implementation, maintenance, surveillance and improvement of environmental controls. The majority of surface impacts would be completed prior to tunnelling commencing and therefore aspects and impacts are expected to be confined to those related to tunnelling. The timing of the Phase provides significant opportunities to continue to build on, and continually improve the management systems already in place from Phase B1.
Spoil Management	High volumes of spoil will be generated from the tunnel excavations and removed from each tunnel support site. Spoil would be reused onsite where possible, but opportunities are limited due to site constraints, with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy. Spoil stockpiles will be present at some sites and would require continual management to prevent impacts.
Groundwater Management	Tunnel tube excavations are expected to encounter groundwater and could cause very minor localised drawdown on the water table during initial tunnel excavation. The tunnels are tanked structures and therefore groundwater inflow is expected to be limited to the area around the excavation face.  Any groundwater inflow into tunnel excavations would require treatment prior to discharge via water treatment plants, in the same manner as was described in the Phase B1 Groundwater Management Plan and Monitoring Program.
Construction Noise and Vibration Management	Tunnelling works have the potential to cause noise, ground borne noise and vibration impacts on surrounding commercial and residential receivers without controls at most sites. Ground borne noise is generally the main impact from tunnelling and has the potential of impacting receivers along the entire tunnel alignment as the TBM's progress.
Heritage Management	The Bays Station Site is the focus for heritage management and consideration of impacts to the White Bay Power Station during tunnelling. Other heritage impacts are unlikely during tunnelling due to the depth of tunnelling and the proximity to other heritage items.
Flora and Fauna Management	Tunnelling is not expected to impact flora and fauna.
Visual Amenity Management	Tunnelling is not expected to cause additional visual amenity impacts.
Soil and Water Management	Tunnelling is not expected to cause additional impacts on soil and surface water other than the impacts already described in Phase B1 of the Project.
Air Quality Management	Tunnelling is not expected to cause additional impacts on air quality other than the impacts already described in Phase B1 of the Project.

Risk Areas	Risk Context
Waste Management	Tunnelling activities will generate a substantial volume of waste material that will be classified into waste streams, temporarily stockpiled onsite and recycled or transported off-site for reuse or disposal. A large proportion of tunnel spoil is expected to be able to be reused. Waste management and mitigation measures are not expected to be required to be amended from those measures included in the Phase B1 Waste Management Sub-plan.
Community and Business Management	Localised noise and vibration impacts will continue to be experienced by community and businesses near the works. Traffic impacts on haulage routes and movements of site vehicles, loss of parking and property access impacts at all locations are also expected and will need to be mitigated.

**Table 9. Tunnelling works risk assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	Reliance on management systems implemented for Phase B1 in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L5	C3	Medium	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>Minor and administrative changes required to the approved Phase B1 CEMP.</li> <li>ER Approval</li> </ul>	L6	C3	Low
Spoil Management	Reliance on management systems implemented for Phase B1 in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L3	C3	High	<ul style="list-style-type: none"> <li>Changes required to the approved Phase B1 Spoil Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Groundwater Management	Reliance on management systems implemented for Phase B1 in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Groundwater Management Plan and Monitoring Program.</li> <li>ER Approval</li> </ul>	L4	C4	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Construction Noise and Vibration Management	Reliance on management systems implemented for Phase B1 in relation to Noise and Vibration management during tunnelling leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Changes required to the approved Phase B1 Noise and Vibration Management Plan and Monitoring Program.</li> <li>ER Approval</li> </ul>	L4	C4	Medium
Heritage Management	Reliance on management systems implemented for Phase B1 in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L4	C2	High	<ul style="list-style-type: none"> <li>Changes required to the approved Phase B1 Heritage Management Plan.</li> <li>DPE Approval</li> </ul>	L5	C2	Medium
Flora and Fauna Management	Reliance on management systems implemented for Phase B1 in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L5	C4	Low	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Flora and Fauna Management Plan</li> <li>ER Approval</li> </ul>	L6	C4	Low
Visual Amenity Management	Reliance on management systems implemented for Phase B1 in relation to visual amenity management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.	L5	C4	Low	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Visual and Amenity Management Plan</li> <li>ER Approval</li> </ul>	L6	C6	Low

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Soil and Water Management	Reliance on management systems implemented for Phase B1 in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L4	C4	Medium	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Soil and Water Management Plan and Surface Water Quality Monitoring Program</li> <li>ER Approval</li> </ul>	L5	C4	Low
Air Quality Management	Reliance on management systems implemented for Phase B1 in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Air Quality Management Plan</li> <li>ER Approval</li> </ul>	L5	C4	Low
Waste Management	Reliance on management systems implemented for Phase B1 in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Minor and administrative changes required to the approved Phase B1 Waste Management Plan</li> <li>ER Approval</li> </ul>	L4	C4	Medium
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L2	C2	Very High	<ul style="list-style-type: none"> <li>Overarching Community Communications Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>CICG (see Section 3.4)</li> </ul>	L3	C3	High

### 3.3.5 Phase C – Parramatta, Westmead and Clyde Enabling Works

Enabling work commenced at Westmead and the Clyde Maintenance and Stabling Facility (MSF) sites on 08 December 2021, and at Parramatta on 10 December 2021. The works include demolition, utilities and road works to address long lead-time activities and de-risk the Western Tunnelling Package.

A total of 34 buildings and a multi-level car park are being demolished at Parramatta and Westmead, with additional industrial buildings and associated structures on the northern and western portions of the Clyde MSF also being demolished. At Parramatta and Clyde, Phase C1 demolition scope is down to 'slab on ground' level. At Westmead, all buildings are to be demolished and below ground services and structures removed

to a depth of 1.5m (except at the old Service Station on the corner of Alexandra Avenue and Hassall Street which will remain sealed). Approximately 3000T of asbestos impacted soil shall be removed also.

Demolition works include the protection of adjacent (retained) properties and roads. Two heritage properties within and adjacent to the Parramatta work site (Kia Ora and Roxy Theatre) and a heritage wall along Unwin Street Clyde will also be protected and retained.

A number of relevant utilities within the Parramatta site will be removed or adjusted to prepare the site for demolition and subsequent excavation of the station box. This includes the removal and relocation of Telstra and Optus communication assets, cut over, decommissioning and removal of Endeavour Energy substations and associated assets, and commissioning of one switching station.

Road works will also be carried out at the Parramatta work site to preserve public access to buildings and adjacent properties. These road works will involve the construction of two public access roads to service the Smith Street and Church Street properties and another access road within the Sydney Metro West construction site boundary that will connect Macquarie Street to Smith Street.

Heritage excavation and salvage activities commenced on 09 March 2022 at Parramatta and Clyde for areas of archaeological potential. These works will involve the removal of approximately 27,000 tonnes of spoil. This work will provide clearance of the PAD area at Clyde and a portion of the Parramatta Site. The remainder of the area of archaeological potential at the Parramatta site will be cleared during Phase F.

Submission of the CEMP, Sub-plans and Monitoring Programs for Phase C was staged in two sub Phases C1 and C2.

Phase C1 included all works except archaeological works at Parramatta and Clyde, and Phase C2 incorporating the archaeological clearance work. Due to the minor nature of this scope split, amendments to the risk tables for Phase C1 is provided for Phase C2.

Following approval of the Phase C1 CEMP (Rev 3.0) on 12 November 2021 the documents were updated to include archaeological activities, and any additional documentation determined relevant via the risk assessment for Phase C2. This means that the relevant plans and risk mitigations of Phase C1 apply to Phase C2. The asbestos impacted soil removal scope added into Phase C1 were also managed through updates to plans approved for Phase C2.

### **3.3.6 Phase C1 – Parramatta, Westmead and Clyde Demolition Works**

The tables below provide consideration and assessment of the level of risk for specific risk areas during Phase C1.

**Table 10 - Risk Assessment Context for Parramatta, Westmead and Clyde Demolition Works**

Risk Areas	Risk Context
General Environmental Management	Work would be carried out over a 17 month period with multiple work fronts and minor road works in close proximity to commercial businesses at Parramatta and residential receivers at Westmead. There would be a range of environmental and community responsibilities managed by the Principal Contractor including the implementation, maintenance, surveillance and improvement of environmental controls. Without training regimes and a competent workforce the risk of environmental incidents would be higher. The work area contains actual and potential heritage values that would require protection during construction. The duration of the Phase provides limited opportunities to iterate and continually improve management systems.
Spoil Management	Relatively small volumes of spoil will be generated from trenching for utilities relocations. Limited spoil is expected to be generated from demolition activities at Parramatta and Clyde, with small volumes potentially generated at Westmead. Some spoil will be reused onsite to refill trenches with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy. If spoil is to be stockpiled onsite, it would require management.
Groundwater Management	Shallow excavations for utilities trenching and road works are not expected to encounter groundwater, nor is the removal of the surface asbestos impacted soil at Westmead. Demolition scope down to 'slab-on-the-ground' has no potential to encounter groundwater.
Construction Noise and Vibration Management	At Parramatta, works have a high potential to cause noise and vibration impacts on surrounding commercial receivers without controls due to demolition activities. Works at Westmead have a high potential to cause noise and vibration impacts on surrounding residential receivers. There are fewer sensitive receivers at Clyde, however uncontrolled airborne noise may affect horses at the Australian Turf Club stabling facilities.
Heritage Management	Archival Recording of state and local heritage structures within or adjacent to the site will be carried out at Parramatta. Several structures holding heritage significance will be retained in-situ and may be damaged by adjacent demolition activities if controls are not installed. The ARD and AMS will be revised during Phase C1 and inform excavation and salvage activities in Phase C2.
Flora and Fauna Management	Street trees would be protected and retained wherever possible in establishing hoarding and scaffolding along George Street, Church Street and Macquarie Street., however in some cases tree removal may be required. All vegetation at the Westmead site, and most at the Clyde site will be removed. Demolition of some structures at Clyde may impact bat roosting sites.
Visual Amenity Management	Completed road and utilities work is not expected to cause any visual impacts, demolition activities will cause temporary impacts managed by site hoarding and shade clothed scaffolding.
Soil and Water Management	There will be limited areas of exposed soil during Phase C1 at Parramatta and Clyde with most activities being conducted on or around sealed surfaces. At Westmead, the site shall be exposed except for the old service station on the corner of Alexandra Avenue and Hassall Street. Stormwater systems have the potential to be impacted by contaminated water during rainfall without controls.
Air Quality Management	Without controls, demolition activities at Westmead, Parramatta and Clyde are likely to cause Air Quality impacts on surrounding receivers.
Waste Management	Demolition activities will generate a large volume of waste material that will be classified into waste streams, temporarily stockpiled onsite and recycled or transported off-site for disposal. Waste reclamation and recycling is a core component of the demolition industry and unlikely to be poorly managed. Waste asbestos impacted soils will also be generated at Westmead.
Community and Business Management	While demolition activities for Phase C will be temporary, there will be localised noise and vibration, traffic impacts, loss of parking and property access impacts. It is also likely that demolition activities could generate dust in certain weather conditions if demolition rubble is not managed appropriately. These occurrences may lead to complaints being made in relation to Phase C.



**Table 11 – Parramatta, Westmead and Clyde Enabling Works Risk Assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	A lack of management systems in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>Site Establishment Management Plan</li> <li>ER Endorsement</li> </ul>	L5	C4	Low
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L5	C5	Low	<ul style="list-style-type: none"> <li>Spoil related risks covered in CEMP risk assessment where necessary</li> <li>Spoil Management Plan triggered by Phase C2</li> </ul>	L6	C5	Low
Groundwater Management	A lack of management systems in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L6	C6	Low	<ul style="list-style-type: none"> <li>No specific controls, note groundwater related risks assessed in ERA where necessary</li> </ul>	L6	C6	Low
Construction Noise and Vibration Management	A lack of management systems in relation to Noise and Vibration management leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L1	C4	High	<ul style="list-style-type: none"> <li>Noise and Vibration Management Plan</li> <li>Noise and Vibration Monitoring Program</li> <li>DPE Approval</li> </ul>	L3	C4	Medium
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L3	C3	High	<ul style="list-style-type: none"> <li>Heritage Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Flora and Fauna Management	A lack of management systems in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Flora and Fauna Management Plan</li> <li>Biodiversity offsets</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Visual Amenity Management	A lack of management systems in relation to visual amenity management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.	L5	C5	Low	<ul style="list-style-type: none"> <li>No specific controls, note Visual Amenity related risks assessed in ERA where necessary</li> </ul>	L5	C5	Low
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Progressive Erosion and Sediment Control Plan</li> <li>Unexpected Contaminated Finds Procedure</li> <li>ER Endorsement of CEMP</li> </ul>	L4	C4	Medium
Air Quality Management	A lack of management systems in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Air Quality Management Plan</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium
Waste Management	A lack of management systems in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L4	C3	Medium	<ul style="list-style-type: none"> <li>Waste Management Plan</li> <li>ER Endorsement</li> </ul>	L5	C3	Medium
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L3	C5	Medium	<ul style="list-style-type: none"> <li>Overarching Community Communication Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>CICG (see Section 3.4)</li> </ul>	L5	C5	Low

### 3.3.7 Phase C2 – Parramatta and Clyde Archaeological Clearance

The tables below provide consideration and assessment of the level of risk for specific risk areas during Phase C2.

**Table 12 - Risk Assessment Context for Parramatta and Clyde Archaeological Clearance**

Risk Areas	Risk Context
Spoil Management	Approximately 27,000 tonnes of spoil will be generated to facilitate archaeological clearance activities at Clyde and Parramatta. About 20,000 tonnes of spoil will be transported offsite at Parramatta and 7,000 tonnes of spoil will be stockpiled at Clyde and backfilled following clearance.
Heritage Management	Heritage excavation and salvage work within and adjacent to the station box footprint will be carried out at Parramatta and Clyde in accordance with the revised ARD and AMS. There is a potential to uncover state significant archaeology within the Parramatta station box footprint and archaeological clearance work will occur in this footprint to de-risk Phase F (Western Tunnelling).
Soil and Water Management	There will be areas of exposed soil at both Parramatta and Clyde during Phase C2, with activities at Clyde being adjacent to Duck Creek. Stormwater systems, and Duck Creek have the potential to be impacted by contaminated water during rainfall without controls.

**Table 13 - Parramatta and Clyde Archaeological Clearance Risk Assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Spoil Management plan</li> <li>ER Endorsement</li> </ul>	L4	C4	Medium
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L1	C3	Very High	<ul style="list-style-type: none"> <li>ARD and AMS revision</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Progressive Erosion and Sediment Control Plan</li> <li>Unexpected Contaminated Finds Procedure</li> <li>ER Endorsement of CEMP</li> </ul>	L4	C4	Medium

### 3.3.8 Phase D – Greater Sydney Road Works

The scope of work previously described as Phase D has been transferred to both Phase B and F to complete roadworks design, and construction activities at Westmead have been transferred to Phase F. There is no residual scope remaining for Phase D and it is removed from this Phasing Report.

As both Phase B and F previously involved roadworks construction activities there is no change in the risk profile contained within this report for these Phases and a reallocation exercise is not necessary.

### 3.3.9 Phase E – Existing Rail Corridor Enabling Works

Some work will be carried out within existing rail corridors at North Strathfield and Westmead prior to the major tunnelling packages commencing. Works within the rail corridor must be carried out under possession schedules maintained by Sydney Trains and therefore their early completion is required to de-risk the major tunnelling packages.

At North Strathfield, the scope of work involves relocation of the existing aerial high voltage cables adjacent to Queen Street to a Combined Services Route (CSR) positioned adjacent to the freight rail underpass within the rail corridor and removal of redundant assets. Works are expected to be completed in a mixture of regular working hours and rail weekend possession shifts. These works will require changes to traffic arrangements including road closures around existing Sydney Trains North Strathfield station and short duration road closures on Parramatta Road and M4.

At Westmead, works are required to relocate the existing aerial and buried High Voltage (HV) cables, existing train signalling and communication services and an Optus communications link away from the southern embankment along Alexandra Avenue to a new location closer to track and removal of redundant assets. These works will enable to safe excavation of the future station box. These works will require changes to traffic arrangements including road closures around existing Sydney Trains Westmead Station.

The duration of this phase is expected to take approximately 19 months, starting in September 2021.

**Table 14 - Risk Assessment Context for Existing Rail Corridor Enabling Works**

Risk Areas	Risk Context
General Environmental Management	Work would be carried out over an approximate 19 month period predominantly working under possession within the Sydney Trains rail corridor. There would be a range of environmental and community responsibilities managed by the Principal Contractor including the implementation, maintenance, surveillance and improvement of environmental controls. The activities are anticipated to be predominantly defined as Low Impact Works under SSI 10038, however, due to uncertainty in construction methodology, it is possible that construction works will be required at some point. There is a limited potential for material harm to occur. The duration of the Phase provides strong opportunities to iterate and continually improve management systems.
Spoil Management	Small volumes of spoil will be generated from trenching activities within the rail corridor to support the relocation of utilities at both Westmead and North Strathfield. This material will be reused onsite where possible with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy.
Groundwater Management	Shallow excavations for the Rail Corridor Enabling Works are not expected to encounter groundwater.
Construction Noise and Vibration Management	Rail Corridor Enabling Works will be undertaken predominantly within the rail corridor with some work occurring adjacent during standard working hours. Additionally, road closures are anticipated and works associated with this are likely to occur outside of standard working hours. Work within the rail corridor will be carried out during both possession and non-possession periods. Some plant and equipment will generate noise and vibration that could affect residential properties which are in proximity to the sites.

Risk Areas	Risk Context
Heritage Management	There are no items with Heritage Value that are expected to be impacted during the Rail Corridor Enabling Works, except a possibility that minor pruning of Street Trees adjacent to the North Strathfield Station would occur to facilitate aerial HV disconnections. These trees have local heritage significance.
Flora and Fauna Management	Flora or Fauna impacts are minor for the Existing Rail Corridor Enabling Works. Works at Westmead are limited to the removal of midstory and groundcover vegetation. Works at North Strathfield require the removal of mature trees, shrubs and groundcover, and possible tree trimming. A pre-clearance inspection is to be conducted by an ecologist of all areas prior to clearing works commencing. Street vegetation would require flagging to avoid unnecessary clearance or harm. No threatened species or threatened ecological communities (within the meaning of the BC Act) are affected by the works.
Visual Amenity Management	There are only expected to be minor temporary visual impacts resulting from the Existing Rail Corridor Enabling Works where works occur outside the rail corridor.
Soil and Water Management	Existing Rail Corridor Enabling Works will progressively expose and backfill soil to install new utilities within the rail corridor, however the footprint of exposed areas are relatively small thereby limiting the risk of water quality impacts. While soil is exposed, rainfall has the potential to cause sedimentation to enter into adjacent stormwater drainage systems.
Air Quality Management	Brownfield Rail Works are not expected to cause significant Air Quality impacts as there will be large areas of disturbed soil. Some activities such as ballast handling and trenching activities may generate dust which would be managed efficiently with standard controls.
Waste Management	The main waste streams that will be generated will be old galvanised steel troughing, cement from old ground troughing and old cable that would be recycled where possible (i.e. copper wiring). Excavated soil that cannot be reused onsite would undergo waste classification prior to transportation and disposal.
Community and Business Management	While construction activities for Phase E will be temporary, there will be localised noise and vibration impacts. It is also likely that excavation activities could generate dust in certain weather conditions if excavated soils are not managed appropriately. These occurrences may lead to complaints being made in relation to Phase E.

**Table 15 - Existing Rail Corridor Enabling Works Risk Assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	A lack of management systems in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L3	C5	Medium	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>ER Endorsement</li> </ul>	L6	C5	Low

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L4	C5	Low	<ul style="list-style-type: none"> <li>Spoil related risks covered in CEMP risk assessment where necessary</li> </ul>	L5	C5	Low
Groundwater Management	A lack of management systems in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L6	C6	Low	<ul style="list-style-type: none"> <li>No specific controls, note groundwater related risks assessed in ERA where necessary</li> </ul>	L6	C6	Low
Construction Noise and Vibration Management	A lack of management systems in relation to Noise and Vibration management leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L3	C4	Medium	<ul style="list-style-type: none"> <li>DNVIS covering Westmead and North Strathfield</li> <li>Out-of-Hours Work Protocol</li> <li>DPE Approval of OOHWP</li> </ul>	L4	C4	Medium
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L5	C5	Low	<ul style="list-style-type: none"> <li>Unexpected Finds Procedure</li> </ul>	L5	C5	Low
Flora and Fauna Management	A lack of management systems in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L6	C3	Low	<ul style="list-style-type: none"> <li>No specific controls, note Flora and Fauna related risks assessed in ERA where necessary</li> </ul>	L6	C3	Low

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Visual Amenity Management	A lack of management systems in relation to visual amenity management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.	L6	C4	Low	<ul style="list-style-type: none"> <li>No specific controls, note Visual Amenity related risks assessed in ERA where necessary</li> </ul>	L6	C4	Low
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L4	C5	Low	<ul style="list-style-type: none"> <li>Progressive Erosion and Sediment Control Plan</li> <li>Unexpected Contaminated Finds Procedure</li> </ul>	L5	C5	Low
Air Quality Management	A lack of management systems in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L3	C4	Low	<ul style="list-style-type: none"> <li>No specific controls, note Air Quality related risks assessed in ERA where necessary</li> </ul>	L5	C4	Low
Waste Management	A lack of management systems in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L3	C4	Low	<ul style="list-style-type: none"> <li>Procedures for the testing, excavation, classification, handling and reuse of spoil in the CEMP</li> </ul>	L5	C4	Low
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L3	C4	Medium	<ul style="list-style-type: none"> <li>Overarching Community Communications Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>CICG (see Section 3.4)</li> </ul>	L5	C4	Low

### 3.3.10 Phase F - Western Tunnelling

The Western Tunnelling Package involves major civil construction works between Westmead and Sydney Olympic Park, including station excavation for new metro stations at Westmead, Parramatta, and Sydney Olympic Park. Additionally, there will be shaft excavations for services facilities at Rosehill within the Clyde stabling and maintenance facility construction site.

Civil work will be carried out for a stabling and maintenance facility at Clyde including earthworks and structures for crossings of A'Becketts Creek and Duck Creek, including excavation of a tunnel dive structure and associated tunnels at Rosehill to support a connection between the Clyde stabling and maintenance facility and the mainline metro tunnels.

Tunnelling work will involve nine kilometres of twin railway tunnels between Sydney Olympic Park and Westmenad.

Tunnel boring machines would be used to excavate twin tunnels which have a circular cross-section with an internal lined diameter of about six metres and an excavated diameter of about seven metres. The following underground features would also be excavated using road-headers and rock hammers:

- Cross passages between the two tunnels at intervals of about 240 metres to allow for emergency access; and
- Stub tunnels from the twin tunnels near Westmead metro station to safeguard a potential future extension to the metro network.

The tunnels would be lined with precast concrete segments to ensure the long-term life of the asset and minimise groundwater inflow into the tunnel. The depth of the tunnels would vary from about 15 to 90 metres deep due to changes in topography. The shallower tunnel sections would generally be near the tunnel portal at Rosehill and near cut-and-cover stations.

**Note:** Risk assessment and context tables will be included in a resubmission to the ER for endorsement and the Department of Planning and Environment for information prior to the commencement of Construction for Phase F.

**Table 16. Risk assessment context for Western Tunnelling Package**

Risk Areas	Risk Context
General Environmental Management	Works would be carried out over a 46-month period with multiple work sites in close proximity to commercial businesses, residential receivers and other sensitive receivers. There would be a range of environmental and community responsibilities that are to be managed by the Principal Contractor, including the implementation, maintenance, surveillance, and improvement of environmental controls. Without training regimes and a competent workforce, the risk of environmental incidents would be higher. The duration of Phase F provides numerous opportunities to iterate and continually improve management systems.
Spoil Management	Large volumes of spoil will be generated from site establishment, piling, surface construction, tunnelling and excavation. Some spoil is to be reused onsite where possible, with the remainder transported offsite for reuse in accordance with the Spoil Reuse Hierarchy. Spoil stockpiles will be present at some sites and would require management to prevent impacts.
Groundwater Management	Deep excavation for tunnels and piling is expected to encounter groundwater and could cause localised drawdown of the water table. The tunnels are tanked structures and therefore groundwater inflow is expected to be limited to the area around the excavation face. Groundwater inflow into the shafts and tunnel excavations would require treatment prior to discharge via water treatment plants.



Risk Areas	Risk Context
Construction Noise and Vibration Management	Works at Westmead have a very high potential to cause noise and vibration impacts to surrounding commercial businesses, residential receivers, and other sensitive receivers. Works at Parramatta have fewer residential receivers, however, have high potential to cause noise and vibration impacts to nearby commercial businesses. There are fewer sensitive receivers at Clyde, however, uncontrolled airborne noise may affect horses at the Australian Turf Club stabling facilities. WTP works at Sydney Olympic Park are to comprise of TBM retrieval, where impacts will be minimal.
Heritage Management	The work areas contain actual and potential heritage values that would require protection during construction. The Parramatta Site is the focus for heritage management and consideration of impacts to the nearby state and local heritage structures during tunnelling. Other heritage impacts are unlikely during tunnelling due to the depth of tunnelling and the proximity to other heritage items. Unexpected finds are a possibility for other planned activities.
Flora and Fauna Management	Some Groundwater Dependent Ecosystems may be impacted from groundwater drawdown in the vicinity of tunnelling excavations, particularly at Westmead and Clyde, although this is considered unlikely. The majority of potential flora and fauna impacts are centred around the Clyde site. Street trees will be protected and retained wherever possible in establishing hoarding and scaffolding at the Parramatta site along George, Church and Macquarie Streets.
Visual Amenity Management	Visual amenity impacts are expected to occur at sites other than Westmead, where an acoustic shed is being erected. There are no expected additional visual amenity impacts resulting from tunnelling works.
Soil and Water Management	<p>During site establishment until sealed surfaces are established at station sites there is a potential for surface water runoff to cause pollution of stormwater systems. Some earthworks ancillary to the station box excavation will require ERSED controls.</p> <p>Tunnelling is not expected to cause any additional impacts on soil and surface water.</p> <p>Additionally, there are known and suspected contaminants at all WTP site locations, but particularly at Clyde stabling and maintenance facility construction site. Detailed Site investigations and potential remediation will need to be undertaken as part of these works.</p>
Air Quality Management	Without controls, there is a high likelihood that air quality impacts would be experienced by nearby commercial and residential receivers as a result of spoil from ground disturbances, tunnelling, and stockpiling. Spoil receiptal sites will require careful management to minimise air quality issues.
Waste Management	Works will generate a large volume of waste material that will be classified into waste streams, temporarily stockpiled on site and recycled or transported offsite for disposal.
Community and Business Management	Localised noise and vibration impacts, traffic impacts along haulage routes and movements of site vehicles, loss of parking and property access impacts at all locations. There are expected to be significant impacts requiring consultation and monitoring to an adjacent stakeholder (ATC) at the Clyde site. There are limited residential receivers surrounding the Clyde and Parramatta, with the sites being of predominately industrial and commercial receivers respectively.

**Table 17. Western Tunnelling Package works risk assessment**

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
General Environmental Management	A lack of management systems in relation to general environmental management leads to Material Harm and frequent non-compliance with the Planning Approval.	L2	C3	High	<ul style="list-style-type: none"> <li>Construction Environmental Management Plan (CEMP)</li> <li>DPE Approval (CEMP)</li> <li>Site Establishment Management Plan (SEMP)</li> <li>ER Endorsement (Rosehill SEMP)</li> </ul>	L4	C3	Medium
Spoil Management	A lack of management systems in relation to spoil management leads to excessive spoil generation, poor spoil reuse outcomes, increased traffic and community impacts, and inappropriate spoil handling and management.	L2	C3	High	<ul style="list-style-type: none"> <li>Spoil Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Groundwater Management	A lack of management systems in relation to groundwater management leads to groundwater drawdown, groundwater pollution and impacts of groundwater dependant ecosystems.	L3	C3	High	<ul style="list-style-type: none"> <li>Groundwater Management Plan</li> <li>Groundwater Monitoring Program</li> <li>ER Approval</li> </ul>	L4	C3	Medium
Construction Noise and Vibration Management	A lack of management systems in relation to Noise and Vibration management leads to unreasonable impacts on residents and businesses, and structural damage to buildings or heritage items.	L1	C3	Very High	<ul style="list-style-type: none"> <li>Noise and Vibration Management Plan</li> <li>Noise and Vibration Monitoring Program</li> <li>DPE Approval</li> </ul>	L4	C3	Medium
Heritage Management	A lack of management systems in relation to Heritage management leads to poor integration of heritage values in design and unreasonable impacts on heritage items.	L1	C2	Very High	<ul style="list-style-type: none"> <li>Heritage Management Plan</li> <li>DPE Approval</li> </ul>	L4	C2	High
Flora and Fauna Management	A lack of management systems in relation to Flora and Fauna management leads to unreasonable impacts to flora and fauna, spread of weeds and pathogens, and unintended vegetation clearance.	L2	C3	High	<ul style="list-style-type: none"> <li>Flora and Fauna Management Plan</li> <li>DPE Approval</li> </ul>	L4	C3	Medium

Risk Areas	Risk Statements	L	C	Inherent Risk Rating	Control	L	C	Residual Risk Rating
Visual Amenity Management	A lack of management systems in relation to visual amenity <ul style="list-style-type: none"> <li>management leads to unreasonable visual impacts on the surrounding community, landscape features and poor landscape design outcomes.</li> </ul>	L3	C4	Medium	<ul style="list-style-type: none"> <li>Visual Amenity Management Plan</li> <li>ER Approval</li> </ul>	L5	C4	Low
Soil and Water Management	A lack of management systems in relation to soil and water management leads to unexpected pollution events, water quality impacts on adjacent water bodies, and soil erosion.	L2	C2	Very High	<ul style="list-style-type: none"> <li>Soil and Water Management Plan</li> <li>Surface Water Quality Monitoring Program</li> <li>DPE Approval</li> </ul>	L3	C2	High
Air Quality Management	A lack of management systems in relation to air quality management leads to unreasonable particulate pollutant emissions from construction activities.	L2	C4	High	<ul style="list-style-type: none"> <li>Air Quality Management Plan</li> <li>ER Approval</li> </ul>	L3	C4	Medium
Waste Management	A lack of management systems in relation to waste management leads to excessive waste generation, and inappropriate waste classification and disposal.	L3	C3	High	<ul style="list-style-type: none"> <li>Waste Management Plan</li> <li>ER Approval</li> </ul>	L4	C3	Medium
Community and Business Management	A lack of management systems in relation to community management results in community concern.	L1	C3	Very High	<ul style="list-style-type: none"> <li>Community Communications Strategy</li> <li>Complaints Management System</li> <li>Small Business Owners Engagement Plan</li> <li>Communications Interface Coordination Group (CICG)</li> </ul>	L3	C4	Medium

### 3.4 Cumulative Impacts

There is limited potential for cumulative impacts resulting from the Phasing of Sydney Metro West as contract packages are mostly geographically or chronologically separated. To manage any potential cumulative impacts Sydney Metro will establish a Communications Interface Coordination Group (CICG) prior to the start of construction work at each site where there is an interface with another Phase. The CICG will provide a forum to exchange information and coordinate communication and engagement activities between Principal Contractors and Sydney Metro.

The objective of the CICG is to assist in presenting a single Sydney Metro approach and combine engagement activities, newsletters, and notifications where feasible. The

CICG will meet at least fortnightly throughout the duration of the interfacing activities and construction look ahead schedules, community engagement plans, complaint management, and the coordination of community notifications will be discussed and managed to reduce the impact of our activities on the surrounding environment.

Furthermore, Sydney Metro either embed staff in contractors' teams or work closely with those teams to manage community impacts and develop strong local knowledge of community needs and concerns. Our objective is to provide detailed information about of project and be available to address any concerns they may have and identify issues before they arise.

## 4 Requirement Allocation

The applicability of the Conditions of Approval and Revised Environmental Mitigation Measures to each Phase outlined in this Phasing Report are tabled in Appendix B and Appendix C respectively. Where a requirement is shown to be applicable this means that Sydney Metro, in collaboration with the relevant delivery partner for that Phase, will comply with that requirement during the delivery of work under that Phase.

In some cases requirements may be partly complied with during one Phase and partly complied with in one of more other Phases. These requirements are allocated partially to each Phase involved in meeting the overall Condition of Approval or Revised Environmental Mitigation Measure and the extent of each allocation is also specified in Appendix A and B.

Consistency in environmental management across each stage of the project will be achieved through the implementation of the *Sydney Metro West Construction Environmental Management Framework* (CEMF). The CEMF formed part of the Sydney Metro West Stage 1 planning approval documents and provides a linking document to CEMPs and Sustainability Management Plans (produced by Principal Contractors).

The CEMF details the environmental, stakeholder and community management systems and processes to be implemented throughout construction of the project. More specifically, it details Sydney Metro's minimum requirements for:

- CEMPs, Sub-Plans and associated procedures;
- Sustainability Management Plan (SMP);
- Roles, responsibilities and training requirements;
- Compliance and assurance processes;
- Workforce Development and Industry Participation Plans (WFDIPs), and
- Other supporting documentation for each environmental management category (e.g. noise and vibration, visual amenity, etc.).

### 4.1 Applicability to Phases

In the same manner that Conditions of Approval and Revised Environmental Mitigation Measures are allocated to Principal Contractors, so are the requirements of the CEMF. Sydney Metro West contractors are required to implement the CEMF to a degree that is appropriate for their scope of work and inherent level of environmental risk shown in Section 3 of this Phasing Report. Importantly, this allocation determines the extent of environmental management documentation that each Principal Contractor is required to develop and implement.

As a minimum, any work which is not Low Impact Works will be carried out under a CEMP that incorporates the allocated requirements of the Conditions of Approval for that Phase (Appendix B) and Section 3.4 of the CEMF.

The applicability of the CEMF to each Phase is based on the scope of work, relevant CoA and REMM requirements and the relevant environmental risks assessed in the Sydney Metro West Stage 1 EIS. Table 14 summarises this allocation showing the environmental management documentation from the CEMF that applies to each Principal Contractor.

**Table 16 - Key deliverables under the CEMF applicable to Phases**

Environmental Management Category	Phase A	Phase B1	Phase B2	Phase C1	Phase C2	Phase E	Phase F
Construction Environmental Management Plan	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable
Spoil Management Sub Plan	Objective Based allocation*	Applicable	Applicable	Objective Based allocation*	Applicable	Objective Based allocation*	Applicable
Groundwater Management Sub Plan	Objective Based allocation*	Applicable	Applicable	Objective Based allocation*	Objective Based allocation*	Objective Based allocation*	Applicable
Construction Noise & Vibration Management Sub Plan	Applicable	Applicable	Applicable	Applicable	Applicable	Substituted by Procedure (DNVIS)**	Applicable
Heritage Management Sub Plan	Substituted by Procedure*	Applicable	Applicable	Applicable	Applicable	Substituted by Procedure*	Applicable
Flora & Fauna Management Sub Plan	Objective Based allocation*	Applicable	Applicable	Applicable	Applicable	Applicable (in CEMP)	Applicable
Visual Amenity Management Sub Plan	Objective Based allocation*	Applicable	Applicable	Objective Based allocation*	Objective Based allocation*	Objective Based allocation*	Applicable
Soil & Water Management Sub Plan	Applicable	Applicable	Applicable	Substituted by Procedure*	Substituted by Procedure*	Substituted by Procedure*	Applicable
Air Quality Management Sub Plan	Objective Based allocation*	Applicable	Applicable	Applicable	Applicable	Objective Based allocation*	Applicable
Waste Management Sub Plan	Substituted by Procedure*	Applicable	Applicable	Applicable	Applicable	Substituted by Procedure*	Applicable
Noise and Vibration Monitoring Program	Applicable	Applicable	Applicable	Applicable	Applicable	Not Applicable	Applicable
Blasting Monitoring Program	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Surface Water Quality Monitoring Program	Not Applicable	Applicable	Applicable	Not Applicable	Not Applicable	Not Applicable	Applicable
Groundwater Monitoring Program	Not Applicable	Applicable	Applicable	Not Applicable	Not Applicable	Not Applicable	Applicable

\* An objective based allocation means that the objectives for that area of environmental management in the CEMF must be considered in the risk assessment.

\*\*Where a procedure is considered sufficient, then the associated sub plan is substituted by relevant procedure(s).

## 4.2 Training, Surveillance and Auditing

Through the requirements of the CEMF, Sydney Metro place contractual requirements on Principal Contractors for the implementation of training programs to develop competence in the management of environmental issues, to undertake regular onsite environmental inspections and confirm the adequacy of all environmental mitigation measures, and to conduct internal audits where appropriate. The extent and/or frequency of these activities may vary depending on the scale of the works being undertaken by the Principal Contractor but will be appropriate with respect to any relevant environmental risks.

Further to the Principal Contractors activities, onsite environmental inspections and audits led by the Independent Environmental Representative and Auditor respectively, are undertaken regularly across all phases of the project and involve key staff from the Principal Contractor and Sydney Metro.

All environmental issues and general compliance with the planning approval requirements is monitored collaboratively between Sydney Metro, independent parties, and the Principal Contractor through environmental management meetings chaired by Sydney Metro for each Phase in this report. These forums are the cornerstone for developing effective working relationships and sharing knowledge and ideas for improvement.

## 5 Appendix A – Risk Tables

Probability	One off event How likely?	Frequency	Repeated How often?	Likelihood		Consequence					
						Insignificant	Minor	Moderate	Major	Severe	Catastrophic/ Transformational
						C6	C5	C4	C3	C2	C1
Probability	Expected to occur frequently during time of activity or project. Greater than a 90% chance of occurring.	Frequency	10 times or more every year	Almost certain	L1	Medium	High	High	Very High	Very High	Very High
	Expected to occur occasionally during time of activity or project. A 75-90% chance of occurring.		1-10 times every year	Very Likely	L2	Medium	Medium	High	High	Very High	Very High
	More likely to occur than not occur during time of activity or project. A 50-75% chance of occurring.		Once each year	Likely	L3	Low	Medium	Medium	High	High	Very High
	More likely not to occur than occur during time of activity or project. A 25-50% chance of occurring.		Once every 1 to 10 years	Unlikely	L4	Low	Low	Medium	Medium	High	High
	Not expected to occur during the time of activity or project. A 10-25% chance of occurring.		Once every 10 to 100 years	Very Unlikely	L5	Low	Low	Low	Medium	Medium	High
	Not expected to ever occur during time of activity or project. Less than 10% chance of occurring.		Less than once every 100 years	Almost Unprecedented	L6	Low	Low	Low	Low	Medium	Medium

	CONSEQUENCES					
	Insignificant	Minor	Moderate	Major	Severe	Catastrophic
	C6	C5	C4	C3	C2	C1
<b>Environment</b>	No appreciable changes to environment and/or highly localised event.	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries.	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Impacts external ecosystem and considerable remediation is required.	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.	Irreversible large-scale environmental impact with loss of valued ecosystems.
<b>Regulatory or Legal Breach</b>	Low-level non-compliance with legal and/or regulatory requirement or duty by individuals or TNSW.	Minor non-compliance with legal and/or regulatory requirement or duty. Investigation and/or report to authority.	Moderate non-compliance. Subject to comment and monitoring from applicable regulator. Small fine and no disruption to services.	Systemic non-compliance/Major breach resulting in enforcement action and/or prohibition notices. Substantial fine and no disruption to services.	Substantial breach resulting in prosecution, fines and/or litigation. Licence or accreditation restricted or conditional affecting ability to operate.	Prosecution leading to imprisonment of TNSW executive. Loss of operating licence.
<b>Customer Experience and Satisfaction</b>	Infrequent or unrelated written complaints.	A stream of written complaints for more than 3 months.	A stream of written complaints for more than a year.	A substantial and sustained uplift in the rate of complaints.	A deluge of complaints for up to 6 months with normal background rates increasing by a factor of 3 or more.	A prolonged deluge of complaints for more than 6 months, with some normal background rates increasing by a factor of 10 or more.



## **6 Appendix B – Applicability of SMW CoA to each Phase for Stage 1**

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Scope:	Sydney Metro West - Stage 1 SSI 10038								
Approval Name:									
Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	
MCoA	General	C-A1	Approval is granted to the 'Concept' as described in Schedule 1 and in Chapter 6 and in Chapter 7 of the <i>Sydney Metro West – Westmead to The Bays and Sydney CBD Environmental Impact Statement</i> dated 15 April 2020, as amended by the following: (a) Sydney Metro West – Westmead to The Bays and Sydney CBD Amendment Report dated 20 November 2020; and (b) Sydney Metro West – Westmead to The Bays and Sydney CBD Submissions Report dated 20 November 2020.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	C-A2	The Proponent must carry out the CSSI Concept in accordance with the conditions of this approval and the documents listed in <b>Condition C-A1</b> of this schedule unless otherwise specified in, or required under, the conditions of this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	C-A3	In the event of an inconsistency between: (a) the conditions of this approval and any document listed in Condition C-A1 of this schedule inclusive, the conditions of this approval will prevail to the extent of the inconsistency; and (b) any document listed in Condition C-A1 of this schedule, the most recent document will prevail to the extent of the inconsistency.  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.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	C-A4	Except to the extent described in any document listed in <b>Condition C-A1</b> of this schedule, any over station development, including any future uses, does not form part of this CSSI and will be subject to the relevant assessment pathway prescribed by the EP&A Act.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	Place and Design	C-B1	To ensure that a high-quality urban design response is achieved, the CSSI must have regard to, and be generally consistent with, the place and design principles for each location outlined in the documents listed in <b>Condition C-A1</b> of this schedule, unless expressly specified in the conditions of this approval.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Place and Design	C-B2	For the relevant future stage application, the following must be considered at the Clyde Maintenance and Stabling Facility site: (a) publicly-accessible active transport corridors immediately around the site adjoining James Ruse Drive that connects to existing and future links and open spaces; (b) public spaces for recreational use on residual land to offset the loss of the private recreational land, or any alternate and commensurate opportunity that achieves the objective and provides value for money, developed in consultation with City of Parramatta Council; (c) renaturalisation of parts of Duck Creek and A'Becketts Creek and rehabilitation of the riparian corridor; and (d) integration with strategic planning for the precinct.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Place and Design	C-B3	The delivery of the section of the future Parramatta Civic Link located on the Parramatta metro station construction site must be facilitated to enable completion before operation of the CSSI.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B4	The relevant future stage application relating to the design of stations must include a <b>Heritage Interpretation Strategy</b> , prepared in consultation with Heritage NSW, which outlines how key Aboriginal and non-Aboriginal heritage values and stories of Heritage Items will be interpreted in the project design, including station and precinct urban design. The <b>Heritage Interpretation Strategy</b> must include procedures for how to include results of archaeological findings (historical and Aboriginal archaeological results) when they become available.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B5	The <b>Heritage Interpretation Strategy</b> must be prepared in accordance with the <i>NSW Heritage Manual</i> , the <i>NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005)</i> , and the <i>NSW Heritage Council's Heritage Interpretation Policy</i> .	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B6	The <b>Heritage Interpretation Strategy</b> must include, but not be limited to: (a) a discussion of key interpretive themes, stories and messages proposed to interpret the history and significance of archaeological excavation, the affected Heritage items and sections of heritage conservation areas (if applicable); (b) options for the re-purposing of archaeological finds (results and artefacts), heritage features or listed items salvaged or protected during construction stages of the CSSI, and how they will be integrated into the final project design; (c) Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken (or any interim results of any archaeological investigations that have commenced but have yet to be completed) and key socio-cultural values identified in the Aboriginal Cultural Heritage Assessment Report referred to in Condition C-A1 of this schedule, and those of any future stages of the CSSI; (d) details of the audience, potential devices to be employed in interpretation, possible locations for interpretation and how this will be incorporated into design; (e) engagement with the Relevant Council(s) and regard for any relevant council heritage interpretation guidelines; and (f) with respect to the Parramatta construction site and (a) above, any discussion must include how the heritage interpretation of the CSSI relates to the heritage interpretations of other projects in Parramatta, including State Significant Development projects and other SSI projects.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Sustainability	C-B7	The CSSI must achieve a minimum Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating of 75 (Version 1.2) (or equivalent level of performance using a demonstrated equivalent rating tool) or a 5-Star Green Star rating (or equivalent level of performance using a demonstrated equivalent rating tool).	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	
MCoA	Biodiversity and Trees	C-B8	As many mature trees as practicable must be retained. In addition, within ten (10) years of the date of this approval or no later than the commencement of operation of the CSSI (whichever is earlier) there must be a net increase in the number of mature trees provided at a ratio of 2:1.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	Biodiversity and Trees	C-B9	The CSSI must result in an increase in tree canopy coverage.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	Biodiversity and Trees	C-B10	Parts of Duck Creek and A'Becketts Creek that remain open channels at the Clyde Stabling and Maintenance Facility site must be rehabilitated and / or renaturalised before operation of the CSSI commences. Only species that are representative of PCT 920 (Mangrove Forests in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion) must be used in the revegetation of the riparian zone along the open channels to Duck Creek and A'Becketts Creek.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
MCoA	Climate Change	C-B11	The CSSI must be designed to withstand known impacts associated with climate change to year 2100.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	
MCoA	General	A1	The Proponent must carry out Stage 1 of the CSSI in accordance with the conditions of this approval and generally in accordance with the: (a) Sydney Metro West – Westmead to The Bays and Sydney CBD Environmental Impact Statement dated 15 April 2020; (b) Sydney Metro West – Westmead to The Bays and Sydney CBD Submissions Report dated 20 November 2020; and (c) Sydney Metro West – Westmead to The Bays and Sydney CBD Amendment Report dated 20 November 2020.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	A2	Stage 1 of the CSSI 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 <b>Condition A1</b> of this schedule unless otherwise specified in, or required under, this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	A3	In the event of an inconsistency between: (a) the conditions of this approval and any document listed in Condition A1 of this schedule, the conditions of this approval will prevail to the extent of the inconsistency; and (b) any document listed in Condition A1 of this schedule, the most recent document will prevail to the extent of the inconsistency.  Note: For the purpose of this condition, there is 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.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	
MCoA	General	A4	In the event that there are differing interpretations of the conditions of this approval, including in relation to a condition of this approval, the Planning Secretary's interpretation is final.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	General	A5	The Proponent must comply with all written requirements or directions of the Planning Secretary, including in relation to: (a) the environmental performance of Stage 1 of the CSSI; (b) any document or correspondence in relation to Stage 1 of the CSSI; (c) any notification given to the Planning Secretary under the conditions of this approval; (d) any audit of Stage 1 of the CSSI; (e) the conditions of this approval and compliance with the conditions of this approval (including anything required to be done under this approval); (f) the carrying out of any additional monitoring or mitigation measures; and (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 the conditions of this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	General	A6	Where the conditions of this approval require a document or monitoring program to be prepared, or a review to be undertaken, in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval; (b) a log of the dates of engagement or attempted engagement with the identified party and a summary of the issues raised by them; (c) documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that the party(s) has none or has failed to provide feedback after repeated requests; (d) outline of the issues raised by the identified party(s) and how they have been addressed; and (e) a description of the outstanding issues raised by the identified party(s) and the reasons why they have not been addressed.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	General	A7	This approval lapses five (5) years after the date on which it is granted, unless work has physically commenced on or before that date.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	General	A8	References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, standards or policies in the form they are in as at the date of this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	General	A9	Any document that must be submitted or action taken within a timeframe specified in or under the conditions 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 under <b>Condition A43</b> of this schedule.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A10	Stage 1 of the CSSI may be constructed in phases. Where phased construction is proposed, a <b>Phasing Report</b> must be prepared and submitted to the Planning Secretary for information. The <b>Phasing Report</b> must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction of the first of the proposed phases of construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A11	The <b>Phasing Report</b> must: (a) set out how construction of the whole of Stage 1 of the CSSI will be phased, including details of work and other activities to be carried out in each phase and the general timing of when construction of each phase will commence and finish; (b) specify the relevant conditions that apply to each phase and how compliance with conditions will be achieved across and between each of the phases of Stage 1 of the CSSI; (c) set out mechanisms for managing any cumulative impacts arising from the proposed phasing; and (d) include an assessment of the predicted level of environmental risk and potential level of community concern posed by the construction activities required to construct each phase of Stage 1 of the CSSI.  With respect to (d) above, the risk assessment must use an appropriate process consistent with AS/NZS ISO 31000: 2009; Risk Management - Principles and Guidelines and must be endorsed by the ER.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A12	Stage 1 of the CSSI must be phased in accordance with the <b>Phasing Report</b> , as submitted to the Planning Secretary for information.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A13	Where phasing is proposed, the conditions of this approval that apply or are relevant to the work or activities to be carried out in a specific phase must be complied with at the relevant time for that phase.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A14	Where changes are proposed to the phasing of construction, a revised <b>Phasing Report</b> must be prepared and submitted to the Planning Secretary for information before the commencement of changes to the phasing of construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Phasing	A15	With the approval of the Planning Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis within each phase of Stage 1 of the CSSI.  Notes: 1. While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing activities on site are covered by suitable strategies, plans or programs at all times; and 2. If the submission of any strategy, plan or program is to be submitted on a progressive basis, then the relevant strategy, plan or program must clearly describe the activities to which the strategy, plan or program applies, the relationship of this activity to any future activities within the phase, and the trigger for updating the strategy, plan or program.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Ancillary Facilities	A16	Ancillary facilities that are not identified by description and location in the documents listed in <b>Condition A1</b> of this schedule can only be established and used in each case if: (a) they are located within or immediately adjacent to the Construction Boundary; and (b) 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; and (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 conditions of this approval; and (d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the conditions of this approval, including in relation to environmental, social and economic impacts.  Note: This condition does not apply to any ancillary facilities or work that are exempt or complying development, established before the commencement of construction under this approval or minor ancillary facilities established under <b>Condition A21</b> of this schedule.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A17	Before establishment of any ancillary facility (excluding exempt or complying development, minor ancillary facilities determined by the ER to have minimal environmental impact and those established under <b>Condition A21</b> of this schedule, and those considered in an approved CEMP), the Proponent must prepare a <b>Site Establishment Management Plan</b> which outlines the environmental management practices and procedures to be implemented for the establishment of the ancillary facilities. The <b>Site Establishment Management Plan</b> must be prepared in consultation with the Relevant Council(s) and relevant government agencies. The <b>Site Establishment Management Plan</b> must include: (a) a description of activities to be undertaken during establishment of the ancillary facility (including scheduling and duration of work to be undertaken at the site); (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s); (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 before the commencement of site establishment work; (d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to: (i) meet the performance outcomes stated in the documents listed in <b>Condition A1</b> of this schedule, and (ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and (e) a program for monitoring the performance outcomes, including a program for construction noise monitoring, where appropriate or required.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A18	Nothing in this condition prevents the Proponent from preparing individual <b>Site Establishment Management Plans</b> for each ancillary facility. With the exception of a <b>Site Establishment Management Plan</b> relating to the Silverwater ancillary facility referred to in <b>Condition A13</b> below and any other <b>Site Establishment Management Plan</b> expressly nominated by the Planning Secretary to be endorsed by the ER, all <b>Site Establishment Management Plans</b> must be submitted to the Planning Secretary for approval one (1) month before the establishment of any ancillary facilities.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Site Establishment Work	A19	A <b>Site Establishment Management Plan</b> relating to the Silverwater ancillary facility and any other <b>Site Establishment Management Plan</b> expressly nominated by the Planning Secretary must be submitted to the ER for endorsement one (1) month before the establishment of that ancillary facility or as otherwise agreed with the ER.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A20	The use of an ancillary facility for construction must not commence until the <b>CEMP</b> required by <b>Condition C1</b> of this schedule, relevant <b>CEMP Sub-plans</b> required by <b>Condition CS</b> of this schedule and relevant <b>Construction Monitoring Programs</b> required by <b>Condition C14</b> of this schedule have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable).  Note: This condition does not apply to Condition A21 of this schedule or where the use of an ancillary facility is Low Impact Work or for Low Impact Work.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A21	Lunch sheds, office sheds, portable toilet facilities, and the like, can be established and used where they have been assessed in the documents listed in <b>Condition A1</b> of this schedule or satisfy the following criteria: (a) are located within or adjacent to the Construction Boundary; and (b) have been assessed by the ER to have - (i) minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the ICNG, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and (ii) minimal environmental impact with respect to waste management and flooding, and (iii) no impacts on biodiversity, soil and water, and Heritage items beyond those already approved under other conditions of this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A22	Boundary screening must be erected around ancillary facilities that are adjacent to sensitive land user(s) for the duration that the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Site Establishment Work	A23	Boundary screening required under <b>Condition A22</b> of this schedule must minimise visual impacts on adjacent sensitive land user(s).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Appointments	A24	All <b>Independent Appointments</b> required by the conditions of this approval must hold current membership of a relevant professional body, unless otherwise agreed by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Appointments	A25	The Planning Secretary may at any time commission an audit of how an <b>Independent Appointment</b> has exercised their functions. The Proponent must: (a) facilitate and assist the Planning Secretary in any such audit; and (b) make a term of their engagement of an Independent Appointment that the Independent Appointment facilitate and assist the Planning Secretary in any such audit.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Appointments	A26	Upon completion of an audit under <b>Conditions A25</b> above, the Planning Secretary may withdraw its approval of an <b>Independent Appointment</b> should they consider the <b>Independent Appointment</b> has not exercised their functions in accordance with this approval.  Note: <b>Conditions A25</b> and <b>A26</b> of this schedule apply to all <b>Independent Appointments</b> including the ER, AA and Independent Auditor.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Environment Representative	A27	Work must not commence until an <b>Environmental Representative (ER)</b> has been nominated by the Proponent and approved by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Environment Representative	A28	The proposed ER must be a suitably qualified and experienced person(s) who was not involved in the preparation of the documents listed in <b>Condition A1</b> of this schedule, and is independent from the design and construction personnel for the CSSI and those involved in the delivery of it.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Environment Representative	A29	The Proponent may engage more than one ER for Stage 1 of the CSSI, in which case the functions to be exercised by an ER under the conditions of this approval may be carried out by any ER that is approved by the Planning Secretary for the purposes of Stage 1 of the CSSI. The ER must meet the requirements of the Department's <i>Environmental Representative Protocol</i> (DPE, 2018).  The appointment of the ER must have regard to the Department's guideline <i>Seeking approval from the Department for the appointment of independent experts</i> (DPIE, 2020).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Environment Representative	A30	For the duration of the work or as agreed with the Planning Secretary, the approved ER must: (a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of Stage 1 of the CSSI; (b) consider and inform the Planning Secretary on matters specified in the conditions of this approval; (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; (d) review documents identified in Conditions A10, A17, A19, C1, C5 and C14 of this schedule 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: (i) endorse the documents before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or (ii) endorse the documents before the implementation of such documents (if those documents are only required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary / Department); (e) for documents that are required to be submitted to the Planning Secretary / Department for information under (d)(ii) above, the documents must be submitted as soon as practicable to the Planning Secretary / Department after endorsement by the ER, unless otherwise agreed by the Planning Secretary; (f) regularly monitor the implementation of the documents listed in Conditions A10, A17, A19, C1, C5 and C14 of this schedule to ensure implementation is being carried out in accordance with the document and the conditions of this approval; (g) 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 A39 of this schedule; (h) as may be requested by the Planning Secretary, assist in the resolution of community complaints received directly by the Department; (i) consider or assess the impacts of minor ancillary facilities comprising lunch sheds, office sheds and portable toilet facilities as required by Condition A21 of this schedule; and (j) consider any minor amendments to be made to the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction monitoring programs without increasing impacts to nearby sensitive receivers, and are consistent with the conditions of this approval and the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction 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 conditions of this approval; (k) 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 (7) days following the end of each month for the duration of the ER's engagement for Stage 1 of the CSSI, or as otherwise agreed by the Planning Secretary; and (l) assess the impacts of activities as required by the Low Impact Work definition.  With respect to (d) above, the ER is not required to endorse the specialist content in documents requiring specialist review and / or endorsement.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Environment Representative	A31	The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in <b>Condition A30</b> of this schedule (including preparation of the ER monthly report), as well as: (a) the Complaints Register (to be provided on a weekly basis or as requested); and (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).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Acoustics Advisor	A32	A suitably qualified and experienced <b>Acoustics Advisor(s) (AA)</b> in noise and vibration management, who is independent of the design and construction personnel, must be nominated by the Proponent and engaged for the duration of work (as required by <b>Condition A35</b> of this schedule) and for no less than six (6) months following completion of construction of Stage 1 of the CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Acoustics Advisor	A33	Work must not commence until an <b>AA</b> has been nominated by the Proponent and approved by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Acoustics Advisor	A34	The Proponent must cooperate with the AA by: (a) providing access to noise and vibration monitoring activities as they take place; (b) providing access to the Complaints Register if requested; (c) providing for review of noise and vibration documents required to be prepared under the conditions of this approval; and (d) considering any recommendations to improve practices and demonstrating, to the satisfaction of the AA, why any recommendation is not adopted.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Acoustics Advisor	A35	The Proponent may nominate additional suitably qualified and experienced persons to assist the lead AA for the Planning Secretary's approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Acoustics Advisor	A36	The approved AA must: (a) receive and respond to communication from the Planning Secretary in relation to the performance of Stage 1 of the CSSI in relation to noise and vibration; (b) consider and inform the Planning Secretary on matters specified in the conditions of this approval relating to noise and vibration; (c) consider and recommend, to the Proponent, improvements that may be made to avoid or minimise adverse noise and vibration impacts; (d) review all proposed night-time works (with the exception of low risk activities) to determine if sleep disturbance would occur and recommend measures to avoid sleep disturbance or appropriate additional alternative mitigation measures; (e) review all noise and vibration documents required to be prepared under the conditions of this approval and, should they be consistent with the conditions of this approval, endorse them before submission to the Planning Secretary (if required to be submitted to the Planning Secretary) or before implementation (if not required to be submitted to the Planning Secretary); (f) regularly monitor the implementation of all noise and vibration documents required to be prepared under the conditions of this approval to ensure implementation is in accordance with what is stated in the document and the conditions of this approval; (g) review the Proponent's notification of incidents in accordance with Condition A43 of this schedule; (h) in conjunction with the ER (where required), the AA must: (i) as may be requested by the Planning Secretary or Community Complaints Mediator (required by Condition B8 of this schedule), help plan, attend or undertake audits of noise and vibration management of Stage 1 of the CSSI including briefings, and site visits, (ii) in the event that conflict arises between the Proponent and the community in relation to the noise and vibration performance of Stage 1 of the CSSI, follow the procedure in the Overarching Community Communication Strategy referenced in Condition C-B1 of this schedule to attempt to resolve the conflict, and if it cannot be resolved, notify the Planning Secretary, (iii) if requested by the ER, consider relevant minor amendments made to the Site Establishment Management Plan, CEMP, relevant sub-plans and noise and vibration monitoring programs that require updating or are of an administrative nature, and are consistent with the conditions of this approval and the management plans and monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, endorse the amendment, (this does not include any modifications to the conditions of this approval), (iv) if requested by the ER, review the noise impacts of minor ancillary facilities, and (v) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, a Monthly Noise and Vibration Report detailing the AA's actions and decisions on matters for which the AA was responsible in the preceding month. The Monthly Noise and Vibration Report must be submitted within seven (7) days following the end of each month for the duration of the AA's engagement for Stage 1 of the CSSI, or as otherwise agreed by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Notification of Commencement	A37	The Department must be notified in writing of the date of commencement of construction before the commencement of construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Notification of Commencement	A38	If construction of Stage 1 of the CSSI is to be phased, the Department must be notified in writing before the commencement of each phase, of the date of the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Environmental Audit	A39	Independent Audits of Stage 1 of the CSSI must be conducted and carried out in accordance with the <i>Independent Audit Post Approval Requirements</i> (DPIE, 2020).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Environmental Audit	A40	Proposed independent auditors must be approved by the Planning Secretary before the commencement of an <b>Independent Audit</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Environmental Audit	A41	The Planning Secretary may require the initial and subsequent <b>Independent Audits</b> to be undertaken at different times to those specified in the <i>Independent Audit Post Approval Requirements</i> (DPIE, 2020), upon giving at least four (4) weeks' notice (or timing as stipulated by the Planning Secretary) to the Proponent of the date upon which the audit must be commenced.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Independent Environmental Audit	A42	<b>Independent Audit Reports</b> and the Proponent's response to audit findings must be submitted to the Planning Secretary within two (2) months of undertaking the independent audit site inspection as outlined in the <i>Independent Audit Post Approval Requirements</i> (DPIE, 2020), unless otherwise agreed by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Incident and Non-compliance Notification and Reporting	A43	The Planning Secretary must be notified via phone or in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. Any notification via phone must be followed up by a notification in writing via the Major Projects website within 24 hours of the initial phone call. The written notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and general nature of the incident.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Incident and Non-compliance Notification and Reporting	A44	Subsequent notification must be given and reports submitted in accordance with the requirements set out in <b>Appendix A</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Incident and Non-compliance Notification and Reporting	A45	The Planning Secretary must be notified in writing via the Major Projects website within seven (7) days after the Proponent becomes aware of any non-compliance with the conditions of this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Incident and Non-compliance Notification and Reporting	A46	A non-compliance notification must identify the CSSI (including the application number for it), set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be undertaken to address the non-compliance.  Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Identification of workforce	A47	All Heavy Vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application number to enable immediate identification by a person viewing the Heavy Vehicle standing 20 metres away.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Identification of workforce	A48	The CSSI name, application number, telephone number, postal address and email address required under <b>Condition B3</b> of this schedule must be available on site boundary fencing / hoarding at each ancillary facility before the commencement of construction. This information must also be provided on the website required under <b>Condition B11</b> of this schedule.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Community Information, Consultation and Involvement	B1	The <b>Overarching Community Communication Strategy</b> as provided in the documents listed in <b>Condition A1</b> of this schedule must be implemented for the duration of the work.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B2	A <b>Complaints Management System</b> 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 Stage 1 of the CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B3	The following information must be available to facilitate community enquiries and manage complaints before the commencement of work and for 12 months following the completion of construction: (a) a 24-hour telephone number for the registration of complaints and enquiries about the CSSI; (b) a postal address to which written complaints and enquiries may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved.  This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Complaints Management System	B4	A <b>Complaints Register</b> must be maintained recording information on all complaints received about the CSSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The <b>Complaints Register</b> must record the: (a) number of complaints received; (b) date and time of the complaint; (c) number of people in the household affected in relation to a complaint, if relevant; (d) method by which the complaint was made; (e) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (f) issue of the complaint; (g) means by which the complaint was addressed and whether resolution was reached, with or without mediation; and (h) if no action was taken, the reason(s) why no action was taken.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B5	Complainants must be advised of the following information before, or as soon as practicable after, providing personal information: (a) the <b>Complaints Register</b> may be forwarded to government agencies, including the Department (Department of Planning Industry and Environment, 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150), to allow them to undertake their regulatory duties; (b) by providing personal information, the complainant authorises the Proponent to provide that information to government agencies; (c) the supply of personal information by the complainant is voluntary; and (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).  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.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B6	The <b>Complaints Register</b> must be provided to the Planning Secretary upon request, within the timeframe stated in the request. Note: Complainants must be advised that the <b>Complaints Register</b> may be forwarded to Government agencies to allow them to undertake their regulatory duties.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B7	A <b>Community Complaints Mediator</b> that is independent of the design and construction personnel must be engaged by the Proponent, upon the referral of the complainant by the ER in accordance with the <b>Overarching Community Communication Strategy</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B8	The role of the <b>Community Complaints Mediator</b> is to provide independent mediation services for any reasonable and unresolved complaint referred by the ER where a member of the public is not satisfied by the Proponent's response. Where a <b>Community Complaints Mediator</b> is required, a mediator accredited under the National Mediator Accreditation System (NMAS), administered by the Mediator Standards Board must be appointed.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B9	<b>Community Complaints Mediation</b> will: (a) review any unresolved disputes, referred by the ER in accordance with the <b>Overarching Community Communication Strategy</b> ; (b) make recommendations to the Proponent to satisfactorily address complaints, resolve disputes or mitigate against the occurrence of future complaints or disputes.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Complaints Management System	B10	<b>Community Complaints Mediation</b> will not be enacted before the <b>Complaints Management System</b> required by <b>Condition B2</b> of this schedule has been executed for a complaint and will not consider issues such as property acquisition, where other dispute processes are provided for in this approval or clear government policy and resolution processes are available, or matters which are not within the scope of this CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Provision of Electronic Information	B11	A website or webpage providing information in relation to the CSSI must be established before commencement of work and maintained for the duration of construction, and for a minimum of 24 months following the completion of all phases of construction of Stage 1 of the CSSI. Up-to-date information (excluding confidential, private, commercial information or other documents as agreed to by the Planning Secretary) must be published before the relevant work commencing and maintained on the website or dedicated pages including: (a) information on the current implementation status of Stage 1 of the CSSI; (b) a copy of the documents listed in Condition A1 of this schedule, and any documentation relating to any modifications made to the CSSI or the conditions of this approval; (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 conditions), and copies of any approval granted by the Minister to a modification of the conditions of this approval, or links to the referenced documents where available; (d) a copy of each statutory approval, licence or permit required and obtained in relation to Stage 1 of the CSSI, or where the issuing agency maintains a website of approvals, licences or permits, a link to that website; (e) a current copy of each document required under the conditions of this approval, which must be published within one (1) week of its approval or before the commencement of any work to which they relate or before their implementation, as the case may be; and (f) a copy of the audit reports required under this approval. 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.  All information required in this condition is to be provided on the website or webpage, and easy to navigate.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C1	<b>Construction Environmental Management Plans (CEMPs)</b> and <b>CEMP Sub-plans</b> must be prepared in accordance with the <b>Construction Environmental Management Framework (CEMF)</b> included in the documents listed in <b>Condition A1</b> of this schedule to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in <b>Condition A1</b> of this schedule will be implemented and achieved during construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C2	With the exception of any <b>CEMPs</b> expressly nominated by the Planning Secretary to be endorsed by the ER, all <b>CEMPs</b> must be submitted to the Planning Secretary for approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C3	The <b>CEMP(s)</b> not requiring the Planning Secretary's approval must be submitted to the ER for endorsement no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase. That <b>CEMP</b> 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 <b>Condition A1</b> of this schedule.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C4	Any <b>CEMP</b> to be approved by the Planning Secretary must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C5	Of the <b>CEMP Sub-plans</b> required under <b>Condition C1</b> of this schedule, the following <b>CEMP Sub-plans</b> must be prepared in consultation with the relevant government agencies identified for each <b>CEMP Sub-plan</b> . Details of issues raised by a government agency during consultation must be included in the relevant <b>CEMP Sub-plan</b> , including copies of all correspondence from those government agencies as required by <b>Condition A6</b> of this schedule. Where a government agency (ies) request(s) is not included, the Proponent must provide the Planning Secretary / ER (whichever is applicable) justification as to why: (a) Noise and vibration Sub-plan; consult with SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (b) Flora and fauna Sub-plan; consult with DPIE EES, DPI Fisheries, SOPA (in respect of Sydney Olympic Park) and Relevant Council(s) (c) Soil and water Sub-plan; consult with DPIE EES, Relevant Council(s), SOPA (in respect of Sydney Olympic Park) and Sydney Water (if Sydney Water's assets are affected) (d) Heritage (Non-Aboriginal and Aboriginal) Sub-plan; consult with Heritage NSW, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (e) Spoil Sub-plan; consult with Relevant Council(s) and SOPA (in respect of Sydney Olympic Park)	Full Compliance, except for (b), (d) and (e).	Full Compliance	Full Compliance Except in relation to C5 (c)	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Construction Environmental Management Plan	C6	The <b>CEMP Sub-plans</b> must state how: (a) the environmental performance outcomes identified in the documents listed in Condition A1 of this schedule will be achieved; (b) the mitigation measures identified in the documents listed in Condition A1 of this schedule will be implemented; (c) the relevant conditions of this approval will be complied with; and (d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through <b>SMART principles</b> .	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C7	With the exception of any <b>CEMP Sub-plans</b> expressly nominated by the Planning Secretary to be endorsed by the ER, all <b>CEMP Sub-plans</b> must be submitted to the Planning Secretary for approval.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C8	The <b>CEMP Sub-plans</b> not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the conditions of approval and all relevant undertakings made in the documents listed in <b>Condition A1</b> of this schedule. Any of these <b>CEMP Sub-plans</b> must be submitted to the ER with, or subsequent to, the submission of the <b>CEMP</b> but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C9	Any of the <b>CEMP Sub-plans</b> to be approved by the Planning Secretary must be submitted to the Planning Secretary with, or subsequent to, the submission of the <b>CEMP</b> but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C10	Construction must not commence until the <b>CEMP</b> and all <b>CEMP Sub-plans</b> have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable), unless otherwise agreed by the Planning Secretary. The <b>CEMP</b> and <b>CEMP Sub-plans</b> , as approved by the Planning Secretary or endorsed by the ER (whichever is applicable), including any minor amendments approved by the ER, must be implemented for the duration of construction. Where construction of Stage 1 of the CSSI is phased, construction of a phase must not commence until the <b>CEMP</b> and <b>CEMP Sub-plans</b> for that phase have been approved by the Planning Secretary or certified by the ER upon nomination by the Planning Secretary (whichever is applicable).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Construction Environmental Management Plan	C11	In addition to the relevant requirements of the <b>CEMP</b> , the <b>Flora and fauna CEMP Sub-plan</b> must include, but not be limited to: (a) site specific mitigation measures to manage impacts (including proposed techniques, timing, frequency and responsibility of implementing); (b) measures to minimise disturbance to habitat associated with <i>Myotis macropus</i> / Southern Myotis, including demolition inspections by a suitably qualified ecologist of any vegetation to be cleared and any buildings or structures identified as potential roosting habitat for microbats that are to be demolished or refurbished; (c) measures to minimise and mitigate disturbance to mangrove forests at the Clyde Maintenance and Stabling construction site to the extent necessary; and (d) details for undertaking and mitigating vegetation clearance through improved environmental outcomes.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C12	In addition to the relevant requirements of the <b>CEMP</b> , the <b>Soil and Water CEMP Sub-plan</b> must include, but not be limited to: (a) details of construction activities and their locations which have the potential to expose areas known to contain, or potentially contain, contaminated soils and / or materials; (b) measures for the handling, treatment and management of hazardous and contaminated soils and materials including measures to manage and / or minimise worker and public health and safety with regards to exposure to contamination; and (c) a description of how the effectiveness of the actions and measures for managing contamination impacts would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, and how the results of the monitoring would be recorded and reported.	Full Compliance	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Construction Environmental Management Plan	C13	In addition to the relevant requirements of the <b>CEMP</b> , the <b>Heritage CEMP Sub-plan</b> must include, but not be limited to: (a) be prepared in consultation with a suitably qualified and experienced heritage expert; and (b) identify exclusion zones, archival recording requirements, baseline and periodic monitoring protocols (including before and during construction); (c) identify and assess the heritage significance of the ancillary structures proposed to be demolished or significantly impacted that are within the curtilage of White Bay Power Station and other items identified as retaining 'potential heritage significance' in the documents listed in Condition A1 of this schedule and which will be impacted by the CSSI; (d) in association with Condition D61 of this schedule, set out the final site inspections to be conducted within three (3) months of completion of construction for the following heritage sites unless otherwise agreed by the Planning Secretary: (i) the Roxy Theatre (SHR I00711); (ii) White Bay Power Station (SHR I01015); (iii) the former State Abattoirs (State Environmental Planning Policy (State Significant Precincts) 2005 Item 141); and (iv) the RTA Depot facade fronting Unwin Street (Parramatta Local Environmental Plan 2011 I576); and (e) set out means of rectification of any damage by the CSSI to Heritage Items (d)(i) to (d)(iv) above within six (6) months of the completion of construction at the construction site identified in the relevant Heritage CEMP Sub-plan. This rectification work must be in consultation with a suitably qualified and experienced heritage consultant to ensure the use of appropriate materials, appropriate conservation practices and in accordance with existing heritage management documents (for example, conservation management plans or strategies) to protect and conserve the heritage significance of the items.  The Heritage CEMP Sub-plan must include Aboriginal cultural heritage management and mitigation measures (that may include conservation, archaeological salvage excavation and community collection) based on the Aboriginal Cultural Heritage Excavation Report and continuing Aboriginal community consultation.	Not Applicable	Full Compliance with respect to the White Bay Power Station and former State Abattoirs	Full Compliance except for in relation to archival recording requirements, (c.) (d) (i), (ii)	Not Applicable	Full Compliance, except with respect to White Bay Power Station and former State Abattoirs
MCoA	Construction Monitoring Programs	C14	The following <b>Construction Monitoring Programs</b> must be prepared in consultation with the relevant government agencies identified for each to compare actual performance of construction of Stage 1 of the CSSI against the performance predicted in the documents listed in <b>Condition A1</b> of this schedule or in the <b>CEMP</b> : (a) Noise and vibration Monitoring program; consult with EPA, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (b) Blasting Monitoring program; consult with SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (c) Surface water quality Monitoring program; consult with DPIE Water, Relevant Council(s) and Sydney Water (if any Sydney Water assets are impacted) (d) Groundwater Monitoring program; consult with DPIE Water and SOPA (in respect of Sydney Olympic Park)  Note: The Blasting Construction Monitoring Program is only required to be prepared if blasting is proposed to be conducted during construction.	Full Compliance, except for (b), (c) and (d)	Full Compliance, except for (b)	Full Compliance only in relation to C14 (a).	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C15	Each <b>Construction Monitoring Program</b> must provide: (a) details of baseline data available including the period of baseline monitoring; (b) details of baseline data to be obtained and when; (c) details of all monitoring of the project to be undertaken; (d) the parameters of the project to be monitored; (e) the frequency of monitoring to be undertaken; (f) the location of monitoring; (g) the reporting of monitoring results and analysis results against relevant criteria; (h) details of the methods that will be used to analyse the monitoring data; (i) procedures to identify and implement additional mitigation measures where the results of the monitoring indicated unacceptable project impacts; (j) a consideration of SMART principles; and (k) any consultation to be undertaken in relation to the monitoring programs; and (l) any specific requirements as required by Conditions C16 to C17 of this schedule.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Construction Monitoring Programs	C16	The <b>Noise and Vibration Construction Monitoring Program</b> and <b>Blasting Construction Monitoring Program</b> must include: (a) noise and vibration monitoring determined in consultation with the AA to confirm the best-achievable construction noise and vibration levels with consideration of all reasonable and feasible mitigation and management measures that will be implemented; (b) for the purposes of (a), noise monitoring must be undertaken during the day, evening and night-time periods and within the first month of work as well as throughout the construction period and cover the range of activities being undertaken at the sites; and (c) a process to undertake real time noise and vibration monitoring. The results of the monitoring must be readily available to the construction team, the Proponent, ER and AA. The Planning Secretary and EPA must be provided with access to the results on request.	Full Compliance, except for a Blast Construction Monitoring Program	Full Compliance, except in relation to a Blasting Monitoring Program	Full Compliance except in relation to the Blasting Construction Monitoring Program.	Not Applicable	Full Compliance, except in relation to a Blasting Monitoring Program
MCoA	Construction Monitoring Programs	C17	<b>Groundwater Construction Monitoring Program</b> must include: (a) groundwater monitoring networks at each construction excavation site; (b) detail of the location of all monitoring bores with nested sites to monitor both shallow and deep groundwater levels and quality; (c) define the location of saltwater interception monitoring where sentinel groundwater monitoring bores will be installed between the saline sources of the estuary or river and that of the stations or shafts; (d) results from existing monitoring bores; (e) monitoring and gauging of groundwater inflow to the excavations, appropriate trigger action response plan for all predicted groundwater impacts upon each noted neighbouring groundwater system component for each excavation construction site; (f) trigger levels for groundwater quality, salinity and groundwater drawdown in monitoring bores and / or other groundwater users; (g) daily measurement of the amount of water discharged from the water treatment plants; (h) water quality testing of the water discharged from treatment plants; (i) management and mitigation measures and criteria; (j) groundwater inflow to the excavations to enable a full accounting of the groundwater take from the Sydney Basin Central Groundwater Source; and (k) reporting of groundwater gauging at excavations, groundwater monitoring, groundwater trigger events and action responses; and (l) methods for providing the data collected to Sydney Water where discharges are directed to their assets.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C18	With the exception of any <b>Construction Monitoring Programs</b> expressly nominated by the Planning Secretary to be endorsed by the ER, all <b>Construction Monitoring Programs</b> must be submitted to the Planning Secretary for approval.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C19	The <b>Construction Monitoring Programs</b> not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the conditions of approval and all undertakings made in the documents listed in <b>Condition A1</b> of this schedule. Any of these <b>Construction Monitoring Programs</b> must be submitted to the ER for endorsement at least one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C20	Any of the <b>Construction Monitoring Programs</b> which require Planning Secretary approval must be endorsed by the ER and then submitted to the Planning Secretary for approval at least one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C21	Unless otherwise agreed with the Planning Secretary, construction must not commence until the Planning Secretary has approved, or the ER has endorsed (whichever is applicable), all of the required <b>Construction Monitoring Programs</b> and all relevant baseline data for the specific construction activity has been collected.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C22	The <b>Construction Monitoring Programs</b> , as approved by the Planning Secretary or the ER has endorsed (whichever is applicable), 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 or the ER (whichever is applicable), whichever is the greater.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Construction Monitoring Programs	C23	The results of the <b>Construction Monitoring Programs</b> must be submitted to the Planning Secretary, ER and relevant regulatory agencies, for information in the form of a <b>Construction Monitoring Report</b> at the frequency identified in the relevant <b>Construction Monitoring Program</b> .	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Air Quality	D1	Note: Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan. All reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Biodiversity and Trees	D2	The clearing of native vegetation must be minimised to the greatest extent practicable with the objective of reducing impacts to threatened ecological communities and threatened species habitat.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Biodiversity and Trees	D3	Impacts to plant community types must not exceed those identified in the documents listed in <b>Condition A1</b> of this schedule, unless otherwise approved by the Planning Secretary. In requesting the Planning Secretary's approval, an assessment of the additional impact(s) to plant community types and an updated ecosystem and / or species credit requirement under <b>Condition D4</b> below, if required, must be provided.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D4	Before any vegetation clearing or tree removal that must be offset, credits specified in Table 3 below must be purchased and retired. The retirement of credits must be carried out in accordance with the offset rules of the BC Act.  Mangrove Forests in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion (Plant Community Type 920) - Poor: 3 Ecosystem Credits  <i>Myotis macropus</i> / Southern Myotis (Fauna): 3 Species Credits for Threatened Species  Note: Credits have been calculated using the Biodiversity Assessment Method.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D5	The requirement to retire credits in <b>Condition D4</b> above may be satisfied by payment to the Biodiversity Conservation Fund of an amount equivalent to the class and number of species credits, as calculated by the Biodiversity Offsets Payment Calculator.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D6	The Proponent must submit evidence of the retirement of credits required by <b>Condition D4</b> above to the Planning Secretary for information within one (1) month of receiving evidence of the retirement of credits and / or a certificate confirming payment under <b>Condition D5</b> above before any vegetation clearing or tree removal that must be offset.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D7	Before the removal or clearing of any vegetation, or the demolition of structures identified as potential roosting sites for microbats at the Clyde Stabling and Maintenance Facility site commences, pre-clearing / demolition inspections for the threatened species must be undertaken. The inspections, and any subsequent relocation of fauna and associated management / offset measures, must be undertaken under the guidance of a suitably qualified and experienced ecologist. Survey and relocation methodologies and management / offset measures must be included in the <b>Flora and Fauna CEMP Sub-plan</b> required under <b>Condition C5</b> of this schedule or the relevant <b>Site Establishment Management Plan</b> required by <b>Condition A17</b> of this schedule.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D8	In the event roosting sites have been identified under <b>Condition D7</b> above, bat boxes must be provided or suitable habitat built within the Clyde Stabling and Maintenance Facility site.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Biodiversity and Trees	D9	As many mature trees and as much urban canopy as practicable must be retained during construction. Canopy trimming should be considered where practicable prior to any mature tree removal.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Flooding	D10	Stage 1 of the CSSI must be designed and constructed to not worsen flooding characteristics within and in the vicinity of the CSSI. Not worsen existing flooding characteristics means the following: (a) a maximum increase in inundation time of one hour in a one (1) per cent Annual Exceedance Probability (AEP) flood event; (b) a maximum increase of 10 mm in inundation at properties where floor levels are currently exceeded in a one (1) per cent AEP flood event; (c) a maximum increase of 50 mm in inundation of land at properties where floor levels would not be exceeded in a one (1) per cent AEP flood event; and (d) no inundation of floor levels which are currently not inundated in a one (1) per cent AEP flood event.  Measures identified in the documents listed in Condition A1 of this schedule to not worsen flooding characteristics or measures that achieve the same outcome must be incorporated into the detailed design of Stage 1 of the CSSI. The incorporation of these measures must be reviewed and endorsed by a suitably qualified and experienced person in consultation with directly affected landowners, DPIE Water, DPI Fisheries, DPI EES, NSW State Emergency Service (SES), SOPA (in respect of Sydney Olympic Park) and Relevant Council(s).	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance (In relation to Clyde)



Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Flooding	D11	Where flooding characteristics exceed the levels identified in <b>Condition D10</b> above the Proponent must undertake the following: (a) consult with property owners for properties adversely flood affected as a result of Stage 1 of the CSSI and mitigate where necessary; and (b) consult with the NSW State Emergency Service (SES), SOPA (in respect of Sydney Olympic Park) and Relevant Council(s) regarding the management of any residual flood risk beyond the 1 per cent AEP flood event and up to the probable maximum flood.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Flooding	D12	Flood information including flood reports, models and geographic information system outputs must be provided to the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES in order to assist in preparing relevant documents and to reflect changes in flood behaviour as a result of Stage 1 of the CSSI. The Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES must be notified in writing that the information is available no later than one (1) month following the completion of construction.  Information requested by the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES or the SES must be provided no later than six (6) months following the completion of construction or within another timeframe agreed with the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES. The project flood models and data must be uploaded to the NSW Flood Data Portal and access must be provided to the Relevant Council(s), DPIE EES, SES and SOPA (in respect of Sydney Olympic Park) no later than one (1) month following the completion of construction.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Heritage	D13	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in <b>Condition A1</b> of this schedule. Unexpected heritage finds identified by Stage 1 of the CSSI must be managed in accordance with the <b>Unexpected Finds Protocol</b> outlined in <b>Conditions D31 to D33</b> of this schedule. Consideration of avoidance and redesign to protect state significant unexpected finds must be addressed where this condition applies.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D14	Before installing protective site boundary hoarding or equipment used for vibration and noise monitoring at any Heritage item identified in the documents listed in <b>Condition A1</b> of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. The installation must also consider and avoid impacts to potential historical archaeology and seek advice from the Excavation Director approved under <b>Condition D27</b> below.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D15	Before commencement of any excavation at the Parramatta metro station construction site, a detailed investigation must be undertaken to precisely locate the Parramatta Convict Drain. All options available to retain the Parramatta Convict Drain <i>in situ</i> must be considered. If retention of any part of the Parramatta Convict Drain located <i>in situ</i> is not feasible, the Proponent must satisfactorily demonstrate to the Planning Secretary why its removal is appropriate. If it is not feasible to retain the Parramatta Convict Drain <i>in situ</i> , archival recording must be undertaken on the affected section of the item in accordance with Heritage Council of NSW guidelines.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D16	During construction, the Proponent must implement protective measures to prevent adverse impacts on the heritage significance of the Victorian Regency terraced shops at 41-45 George Street, Parramatta and Kia Ora Georgian House at 64 Macquarie Street, Parramatta. Before installing such measures, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. Protection measures must also consider and avoid potential impacts to significant historical archaeology and seek the advice from the Excavation Director approved under <b>Condition D27</b> below.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D17	The Roxy Theatre, White Bay Power Station, the former State Abattoirs and the former RTA Depot facade fronting Unwin Street, must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in <b>Condition A1</b> of this schedule.	Full Compliance with respect to the White Bay Power Station	Full Compliance with respect to the White Bay Power Station and former State Abattoirs	Full Compliance except in relation to the White Bay Power Station, and the former State Abattoirs.	Not Applicable	Full Compliance except in relation to the White Bay Power Station, and the former State Abattoirs.
MCoA	Heritage	D18	Where Heritage items, or items assessed to be of local heritage significance in the documents listed in <b>Condition A1</b> of this schedule, are proposed to be fully or partially destroyed, heritage salvage must occur in consultation with a suitably qualified heritage specialist. The Proponent must develop a salvaged materials and moveable heritage register. The register must identify significant items to be salvaged. Salvage must occur where significance is retained and / or the potential for re-use, reinstatement or re-sale has been identified. The salvage from any State-listed items must be undertaken in consultation with Heritage NSW.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D19	All reasonable steps must be taken not to harm, modify or otherwise impact Aboriginal objects except as authorised by this approval.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D20	The Registered Aboriginal Parties (RAPs) must be kept informed about Stage 1 of the CSSI. The RAPs must continue to be provided with the opportunity to be consulted about the Aboriginal cultural heritage management requirements of Stage 1 of the CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D21	Aboriginal archaeological test excavation must be undertaken at those areas identified in Table 25 of the revised Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by Artefact Heritage and dated November 2020.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D22	An <b>Aboriginal Archaeological Test Excavation Methodology(s)</b> must be prepared and appropriately integrated with the revised <b>Archaeological Research Design and Excavation Methodology</b> . The <b>Aboriginal Archaeological Salvage Excavation Methodology(s)</b> must be prepared after analysis of the test excavation results.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D23	At the completion of Aboriginal cultural heritage test and salvage excavations, an <b>Aboriginal Cultural Heritage Excavation Report(s)</b> , prepared by a suitably qualified expert, must be prepared in accordance with the <i>Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW</i> , OEH 2011 and the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> , DECCW 2010. The <b>Aboriginal Cultural Heritage Excavation Report(s)</b> must document the results of the archaeological test excavations and any subsequent salvage excavations. The RAPs must be given a minimum of 28 days to consider the report and provide comments before the report is finalised. The final report must be provided to Heritage NSW within 24 months of the completion of the Aboriginal archaeological excavations (both test and salvage).	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D24	Where previously unidentified Aboriginal objects are discovered, all work must immediately stop in the vicinity of the affected area and a suitably qualified and experienced Aboriginal heritage expert must be contacted to provide specialist heritage advice, before construction recommences. The measures to consider and manage this process must be specified in the <b>Heritage CEMP Sub-plan</b> required by <b>Condition CS</b> of this schedule and, where relevant, include registration in the <b>Aboriginal Heritage Information Management System (AHIMS)</b> .	Full Compliance, except measures to consider and manage the process will be specified in the CEMP	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D25	Before the commencement of any work at Parramatta and The Bays metro station construction sites, a revised <b>Archaeological Research Design and Excavation Methodology(s)</b> must be prepared in accordance with Heritage Council of NSW guidelines and with reference to the detailed design of Stage 1 construction of the CSSI to guide archaeological excavation. The revised <b>Archaeological Research Design and Excavation Methodology(s)</b> must be prepared by the <b>Excavation Director</b> (approved under <b>Condition D27</b> below) and must include: (a) site specific research for the Parramatta and The Bays metro station construction sites which is conducted by a professional historian to clearly articulate the historical development of the allotments to assist with the reassessment of potential and significance; (b) comparative analysis from archaeological investigations in Parramatta (including theses, publications and grey literature reports); (c) preparation of research questions based on the additional site-specific research required by this condition, and relevant research agendas from previously excavated early historical occupation in Parramatta including recovered artefact assemblages; and (d) a reconsideration of archaeological methods to manage the sites based on this additional assessment.  The revised Archaeological Research Design and Excavation Methodology(s) must apply to both Parramatta and The Bays metro station construction sites and be prepared in consultation with Heritage NSW and Place Management NSW (in respect of The Bays) and submitted to the Planning Secretary for approval.  The revised Archaeological Research Design and Excavation Methodology(s) must be implemented throughout the archaeological excavation programs.  Note: Nothing in these conditions prevents the Archaeological Research Design and Excavation Methodology to be separate procedures.	Full Compliance, only in relation to the Bays Metro Station Construction Site and the White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel.	Full Compliance except in relation to Parramatta	Full Compliance	Not Applicable	Not Applicable
MCoA	Heritage	D26	The revised <b>Archaeological Research Design and Excavation Methodology(s)</b> must include provision for early physical investigation of areas of impact identified as likely to contain State significant archaeology or subterranean heritage items in the research design to inform excavation in these areas. This must include the Parramatta and The Bays metro station sites, including Parramatta Convict Drain, Parramatta Sand Body, White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel.	Full Compliance, only in relation to the Bays Metro Station Construction Site and the White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel.	Full Compliance	Full Compliance	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Heritage	D27	Before commencement of archaeological excavation, the Proponent must nominate a suitably qualified <b>Excavation Director</b> , who complies with Heritage Council of NSW's <i>Criteria for Assessment of Excavation Director</i> (September 2019), to oversee and advise on matters associated with historical archaeology for the approval of the Planning Secretary, in consultation with Heritage NSW. The <b>Excavation Director</b> 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 approved <b>Archaeological Research Design and Excavation Methodology(s)</b> required under <b>Condition D25</b> of this schedule. Aboriginal archaeological excavations must be conducted by a suitably qualified person in accordance with the requirements of the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW 2010). More than one <b>Excavation Director</b> may be engaged for Stage 1 of the CSSI to exercise the functions required under the conditions of this approval.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D28	Following completion of archaeological excavation programs, a <b>Final Excavation Report</b> and an <b>Aboriginal Cultural Heritage Excavation Report</b> must be prepared that includes further detailed and site-specific historical research undertaken to enhance the final reporting, and results of archaeological excavations. The report must include details of any significant artefacts recovered (salvaged), where they are located and details of their ongoing conservation. The <b>Final Excavation Report</b> must document significant results and artefacts which may be re-used in future stages of the CSSI. The <b>Final Excavation Report</b> must be prepared in accordance with guidelines and standards required by Heritage Council of NSW.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D29	The <b>Final Excavation Report</b> and <b>Aboriginal Cultural Heritage Excavation Report</b> must be submitted to the Planning Secretary, Heritage NSW and the Relevant Council for information no later than 24 months after the completion of the archaeological excavation.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D30	In the event the CSSI salvages state significant historical archaeology associated with early convict occupation at the Parramatta metro station construction site for which retention and future conservation is not possible: (a) the key findings of the archaeological investigations must be documented which explain their significance within the context of Parramatta and NSW no later than two (2) years after the completion of the archaeological excavations; and (b) provide for the curation, display and public access of artefacts, site records and final reports.  Note: In reference to (b) above, this may involve partnerships with museums, local heritage centres and/or universities.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Heritage	D31	An <b>Unexpected Heritage Finds and Human Remains Procedure</b> must be prepared to manage unexpected heritage finds (heritage items and values) in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D32	The <b>Unexpected Heritage Finds and Human Remains Procedure</b> must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW (with respect to non-Aboriginal cultural heritage) and in relation to Aboriginal cultural heritage, in accordance with the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW 2010) and submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Heritage	D33	The <b>Unexpected Heritage Finds and Human Remains Procedure</b> , as submitted to the Planning Secretary, must be implemented for the duration of construction.  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. Management of human remains in NSW is subject to requirements set out in the Public Health Act 2010 (NSW) and Public Health Regulation 2012 (NSW). Nothing in these conditions prevents separate procedures for the Unexpected Heritage Finds and Human Remains Procedure.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D34	A detailed land use survey must be undertaken to confirm sensitive receivers (including critical working areas such as operating theatres and precision laboratories) potentially exposed to construction noise and vibration and construction ground-borne 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 noise, vibration or ground-borne noise in that area. The results of the survey must be included in the <b>Noise and Vibration CEMP Sub-plan</b> required under <b>Condition C5</b> of this schedule.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D35	Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 6:00pm Saturdays; and (c) at no time on Sundays or public holidays.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D36	Except as permitted by an EPL, highly noise intensive work that results in an exceedance of the applicable NML at the same receiver must only be undertaken: (a) between the hours of 8:00 am to 6:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday; and (c) if continuously, then not exceeding three (3) hours, with a minimum cessation of work of not less than one (1) hour.  For the purposes of this condition, 'continuously' includes any period during which there is less than one (1) hour between ceasing and recommencing any of the work.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D37	Notwithstanding <b>Conditions D35</b> and <b>D36</b> of this schedule work may be undertaken outside the hours specified in the following circumstances: (a) Safety and Emergencies, including: (i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (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. On becoming aware of the need for emergency work in accordance with (a)(i)(ii) above, the AA, the ER, the Planning Secretary and the EPA must be notified of the reasons for such work. The Proponent must use best endeavours to notify as soon as practicable all noise and/or vibration affected sensitive land user(s) of the likely impact and duration of those work. (b) Low impact, including: (i) construction that causes LAeq(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); and (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: - 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). (c) By Approval, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or (ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition D38 of this schedule; or (iii) negotiated agreements with directly affected residents and sensitive land user(s). (d) By Prescribed Activity, including: (i) tunnelling (excluding cut and cover tunnelling and surface works) are permitted 24 hours a day, seven days a week; or (ii) concrete batching at the Clyde construction site is permitted 24 hours a day, seven days a week; or (iii) delivery of material that is required to be delivered outside of standard construction hours in Condition D35 of this schedule to directly support tunnelling activities, except between the hours 10:00 pm and 7:00 am to / from the Five Dock and Westmead construction sites and to / from Burwood North construction site using any roads / streets other than directly from Parramatta Road; or (iv) haulage of spoil except between the hours of 10:00 pm and 7:00 am to / from the Five Dock and Westmead construction sites and to / from Burwood North construction site using any roads / streets other than directly from Parramatta Road; or (v) work within an acoustic shed where there is no exceedance of noise levels under Low impact circumstances identified in (b) above, unless otherwise agreed by the Planning Secretary.  Note: Some of the above conditions may be subject to the following conditions:	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Noise and Vibration	D38	<p>An <b>Out-of-Hours Work Protocol</b> must be prepared to identify a process for the consideration, management and approval of work which are outside the hours defined in <b>Conditions D35 and D36</b> of this schedule. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours work. The Protocol must be prepared in consultation with the <b>ER, AA and EPA</b>. The Protocol must provide:</p> <p>(a) identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where:</p> <p>(i) the ER and AA review all proposed out-of-hours activities and confirm their risk levels;</p> <p>(ii) low risk activities can be approved by the ER in consultation with the AA; and</p> <p>(iii) high risk activities that are approved by the Planning Secretary;</p> <p>(b) a process for the consideration of out-of-hours work against the relevant NML and vibration criteria;</p> <p>(c) a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of Condition D50 of this schedule. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events;</p> <p>(d) procedures to facilitate the coordination of out-of-hours work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and</p> <p>(e) notification arrangements for affected receivers for all approved out-of-hours works and notification to the Planning Secretary of approved low risk out-of-hours works.</p> <p>This condition does not apply if the requirements of Condition D37(b) of this schedule are met.</p> <p>Note: Out-of-hours work is any work that occurs outside the construction hours identified in Condition D35 and D36 of this schedule.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D39	<p>All reasonable and feasible mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration criteria:</p> <p>(a) construction 'Noise affected' noise management levels established using the Interim Construction Noise Guideline (DECC, 2009);</p> <p>(b) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure);</p> <p>(c) Australian Standard AS 2187.2 - 2006 "Explosives - Storage and Use - Use of Explosives" (for human exposure);</p> <p>(d) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and</p> <p>(e) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage for structurally unsound heritage items).</p> <p>Any work identified as exceeding the noise management levels and / or vibration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan.</p> <p>Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction Noise Management Level.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D40	<p>All reasonable and feasible mitigation measures must be applied when the following residential ground-borne noise levels are exceeded:</p> <p>(a) evening (6:00 pm to 10:00 pm) — internal LAeq(15 minute): 40 dB(A); and</p> <p>(b) night (10:00 pm to 7:00 am) — internal LAeq(15 minute): 35 dB(A).</p> <p>The mitigation measures must be outlined in the Noise and Vibration CEMP Sub-plan, including in any Out-of-Hours Work Protocol, required by Condition D38 of this schedule.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D41	<p>Noise generating work in the vicinity of potentially-affected community, religious, educational institutions and noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) resulting in noise levels above the NMLs must not be timetabled within sensitive periods, unless other reasonable arrangements with the affected institutions are made at no cost to the affected institution.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D42	<p>Industry best practice construction methods must be implemented where reasonably practicable to ensure that noise levels are minimised around sensitive land user(s). Practices must include, but are not limited to:</p> <p>(a) use of regularly serviced low sound power equipment;</p> <p>(b) temporary noise barriers (including the arrangement of plant and equipment) around noisy equipment and activities such as rock hammering and concrete cutting; and</p> <p>(c) use of alternative construction and demolition techniques.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D43	<p><b>Detailed Noise and Vibration Impact Statements (DNVIS)</b> must be prepared for any work that may exceed the NMLs, vibration criteria and / or ground-borne noise levels specified in <b>Conditions D39 and D40</b> of this schedule at any residence outside construction hours identified in <b>Condition D35</b> of this schedule, or where receivers will be highly noise affected. The <b>DNVIS</b> must include specific mitigation measures identified through consultation with affected sensitive land user(s) and the mitigation measures must be implemented for the duration of the works. A copy of the <b>DNVIS</b> must be provided to the <b>AA and ER</b> before the commencement of the associated works. The Planning Secretary and the EPA may request a copy (ies) of the <b>DNVIS</b>.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D44	<p><b>DNVIS</b> must be prepared for each construction site before construction noise and vibration impacts commence and include specific mitigation measures identified through consultation with affected sensitive land users.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D45	<p>Owners and occupiers of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before works that generate 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. <b>These properties must be identified and considered in the Noise and Vibration CEMP Sub-plan.</b></p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D46	<p>Vibration testing must be conducted 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 vibration testing and attended monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures. Such measures must include, but not be limited to, review or modification of excavation techniques.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D47	<p>The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring at Heritage items.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D48	<p>Before conducting at-property treatment at any Heritage Item identified in the documents listed in <b>Condition A1</b> of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D49	<p>If a Heritage item is found to be structurally unsound (following inspection) a more conservative cosmetic damage criterion of 2.5 mm/s peak component particle velocity (from DIN 4150) must be applied.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D50	<p>All work undertaken for the delivery of Stage 1 of the CSSI, including those undertaken by third parties (such as utility relocations), must be coordinated to ensure respite periods are provided. The Proponent must:</p> <p>(a) reschedule any work to provide respite to impacted noise sensitive receivers so that the respite is achieved in accordance with Condition D51 of this schedule; or</p> <p>(b) consider the provision of alternative respite or mitigation to impacted noise sensitive receivers; and</p> <p>(c) provide documentary evidence to the AA in support of any decision made by the Proponent in relation to respite or mitigation.</p> <p>The consideration of respite must also include all other approved Critical SSI, SSI and SSD projects which may cause cumulative and / or consecutive impacts at receivers affected by the delivery of Stage 1 of the CSSI.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Noise and Vibration	D51	In order to undertake out-of-hours work outside the work hours specified under <b>Condition D35</b> of this schedule, appropriate respite periods for the out-of-hours work must be identified in consultation with the community at each affected location on a regular basis. This consultation must include (but not be limited to) providing the community with: (a) a progressive schedule for periods no less than three (3) months, of likely out-of-hours work; (b) a description of the potential work, location and duration of the out-of-hours work; (c) the noise characteristics and likely noise levels of the work; and (d) likely mitigation and management measures which aim to achieve the relevant NMLs under Condition D39 (including the circumstances of when respite or relocation offers will be available and details about how the affected community can access these offers).  The outcomes of the community consultation, the identified respite periods and the scheduling of the likely out-of-hour work must be provided to the AA, EPA and the Planning Secretary.  Note: Respite periods can be any combination of days or hours where out-of-hours work would not be more than 5 dB(A) above the RBL at any residence.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Noise and Vibration	D52	Sensitive land uses located along local roads used to divert traffic from the closure of Alexandra Avenue in Westmead that will be affected by additional road traffic noise from the diverted traffic in excess of the criteria identified in the <i>NSW Road Noise Policy</i> (the RNP criteria) during construction of Stage 1 of the CSSI (the Affected Properties) are eligible to receive at-property noise mitigation treatments.  Owners of Affected Properties must be advised of the range of noise mitigation options that can be installed at or in their property and given a choice as to which of these they agree to have installed. A copy of all noise mitigation guidelines and procedures that will be used to determine at-property treatment at each Affected Property must be provided to the property owner.  At property mitigation measures and packages must be determined based on the measured exceedance levels above the RNP criteria. Road traffic noise levels must be measured before and after the altered traffic flow detail.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Noise and Vibration	D53	Blasting associated with Stage 1 of the CSSI must only be undertaken during the following hours: (a) 9:00am to 5:00pm, Monday to Friday, inclusive; (b) 9:00am to 1:00pm on Saturday; and (c) at no time on Sunday or public holidays; or (d) as authorised through an EPL.  This condition does not apply in the event of a direction from the NSW Police Force or other relevant authority for safety or emergency reasons to avoid loss of life, property loss and / or to prevent environmental harm.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Noise and Vibration	D54	A <b>Blast Management Strategy</b> must be prepared and must include: (a) sequencing and review of trial blasting to inform blasting; (b) regularity of blasting; (c) intensity of blasting; (d) periods of relief; and (e) blasting program.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Noise and Vibration	D55	The <b>Blast Management Strategy</b> must be endorsed by a suitably qualified and experienced person.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Noise and Vibration	D56	The <b>Blast Management Strategy</b> must be prepared in accordance with relevant guidelines in order to ensure that all blasting and associated activities are carried out so as not to generate unacceptable noise and vibration impacts or pose a significant risk to sensitive land user(s).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Noise and Vibration	D57	The <b>Blast Management Strategy</b> must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of blasting. The <b>Blast Management Strategy</b> as submitted to the Planning Secretary, must be implemented for all blasting activities.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Socio-economic, Land Use and Property	D58	Stage 1 of the CSSI must be designed and constructed with the objective of minimising impacts to, and interference with, third party property and infrastructure, and that such infrastructure and property is protected during construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D59	The utilities and services (hereafter "services") potentially affected by construction must be identified to determine requirements for diversion, protection and / or support. Alterations to services must be determined by negotiation between the Proponent and the service providers. Disruption to services resulting from construction must be avoided, wherever possible, and advised to customers where it is not possible.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D60	A suitably qualified and experienced person must undertake condition surveys of all buildings, structures, utilities and the like identified in the documents listed in <b>Condition A1</b> of this schedule as being at risk of damage before commencement of any work that could impact on the subject surface / subsurface structure. The results of the surveys must be documented in a <b>Pre-construction Condition Survey Report</b> for each item surveyed. Copies of <b>Pre-construction Condition Survey Reports</b> must be provided to the relevant owners of the items surveyed in the vicinity of the proposed work, and no later than one (1) month before the commencement of the work that could impact on the subject surface / subsurface structure.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D61	Condition surveys of all items for which condition surveys were undertaken in accordance with <b>Condition D60</b> of this schedule must be undertaken by a suitably qualified and experienced person after completion of the work identified in <b>Condition D60</b> of this schedule. The results of the surveys must be documented in a <b>Post-construction Condition Survey Report</b> for each item surveyed. Copies of <b>Post-construction Condition Survey Reports</b> must be provided to the landowners of the items surveyed, and no later than three (3) months following the completion of the work that could impact on the subject surface / subsurface structure unless otherwise agreed by the Planning Secretary.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D62	The Proponent, where liable, must rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the work at no cost to the owner. Alternatively, the Proponent may pay compensation for the property damage as agreed with the property owner. Rectification or compensation must be undertaken within 12 months of completion of the work identified in <b>Condition D60</b> of this schedule unless another timeframe is agreed with the owner of the affected surface or sub-surface structure or recommended by the IPIAP.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D63	Appropriate equipment to monitor areas in proximity of construction sites and the tunnel route during construction must be installed with particular reference to at risk buildings, structures and utilities identified in the condition surveys required by <b>Condition D60</b> of this schedule and / or geotechnical analysis as required. If monitoring during construction indicate exceedance of the vibration criteria identified in the <b>DNVIS</b> prepared under <b>Condition D43</b> of this schedule, then all construction affecting settlement must cease immediately and must not resume until fully rectified or a revised method of construction is established that will ensure protection of affected buildings.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D64	An <b>Independent Property Impact Assessment Panel (IPIAP)</b> must be established. The Planning Secretary must be informed of the members of the <b>IPIAP</b> and the <b>IPIAP</b> must comprise geotechnical and engineering experts independent of the design and construction team. The <b>IPIAP</b> will be responsible for independently verifying condition surveys undertaken under <b>Conditions D60 and D61</b> of this schedule, the resolution of property damage disputes and the establishment of ongoing settlement monitoring requirements.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D65	Either the affected property owner or the Proponent may refer unresolved disputes arising from potential and/or actual property impacts to the <b>IPIAP</b> for resolution. All costs incurred in the establishing and implementing of the panel must be borne by the Proponent regardless of which party makes a referral to the <b>IPIAP</b> . The findings and recommendations of the <b>IPIAP</b> are final and binding on the Proponent.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Socio-economic, Land Use and Property	D66	Settlement must be monitored for any period beyond the minimum timeframe requirements of <b>Condition D63</b> of this schedule if directed so by the <b>IPIAP</b> following its review of the monitoring data from the period not less than six (6) months after settlement has stabilised, consistent with <b>Condition D63</b> of this schedule. The results of the monitoring must be made available to the Planning Secretary upon request.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Socio-economic, Land Use and Property	D67	<p>A <b>Community Benefit Plan(s)</b> must be prepared, by a suitably qualified and experienced person, to guide the delivery of measures identified in the documents listed in <b>Condition A1</b> of this schedule relating to social impacts and the development of community benefit initiatives. The <b>Community Benefit Plan(s)</b> must aim to:</p> <ul style="list-style-type: none"> <li>(a) make a positive contribution to the potentially affected community;</li> <li>(b) respond to community priorities and needs;</li> <li>(c) create positive community or environmental outcomes; and</li> <li>(d) prioritise consideration of achieving outcomes for enhancing community character, community culture and the local surroundings.</li> </ul> <p>Nothing in this condition prevents the preparation of individual Community Benefit Plans for each station precinct.</p>	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Socio-economic, Land Use and Property	D68	<p>The <b>Community Benefit Plan(s)</b> must be submitted to the Planning Secretary for information before construction. The <b>Community Benefit Plan(s)</b> must be implemented for the duration of construction.</p>	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Socio-economic, Land Use and Property	D69	<p>Potential impacts on the operation of festivals or events at Parramatta, Sydney Olympic Park or Five Dock must be limited as reasonably practicable.</p>	Not Applicable	Full Compliance, except in relation to Parramatta	Full Compliance	Not Applicable	Full Compliance, except in relation to Five Dock
MCoA	Socio-economic, Land Use and Property	D70	<p><b>Small Business Owners Engagement Plan(s)</b> must be implemented in accordance with the <b>Overarching Community Communication Strategy</b> to minimise impact on small businesses adjacent to major construction sites during construction of Stage 1 of the CSSI. These plans must be prepared and submitted to the Planning Secretary for information before construction at the relevant construction site.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D71	<p>Before commencement of any construction that would result in the disturbance of moderate to high risk contaminated sites as identified in the documents identified in <b>Condition A1</b> of this schedule, <b>Detailed Site Investigations</b> (for contamination) must be conducted to determine the full nature and extent of the contamination. The <b>Detailed Site Investigation Report(s)</b> and the subsequent report(s), 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. The <b>Detailed Site Investigations</b> must be undertaken in accordance with guidelines made or approved under section 105 of <i>Contaminated Land Management Act 1997</i> (NSW). The <b>Detailed Site Investigation</b> for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA.</p> <p>Note: Nothing in this condition prevents the Proponent from preparing individual Detailed Site Investigation Reports (for contamination) for separate sites.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D72	<p>Should remediation be required to make land suitable for the final intended land use, a <b>Remedial Action Plan</b> 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. The <b>Remedial Action Plan</b> must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the <i>Contaminated Land Management Act 1997</i> (NSW) and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the <b>Remedial Action Plan</b> is implemented. The <b>Remedial Action Plan</b> for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA.</p> <p>Note: Nothing in this condition prevents the Proponent from preparing individual Remedial Action Plans for separate sites.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D73	<p>Before commencing remediation, a <b>Section B Site Audit Statement(s)</b> must be prepared by an NSW EPA-accredited Site Auditor that certifies that the <b>Remedial Action Plan(s)</b> is/are appropriate and that the site can be made suitable for the proposed use. The <b>Remedial Action Plan(s)</b> must be implemented and any changes to the <b>Remedial Action Plan(s)</b> must be approved in writing by the NSW EPA-accredited Site Auditor.</p> <p>Note: Nothing in this condition prevents the Proponent from engaging an NSW EPA-accredited Site Auditor to prepare individual Site Audit Statements for Remedial Action Plans for separate sites.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D74	<p><b>Validation Report(s)</b> must be prepared in accordance with <i>Consultants Reporting on Contaminated Land: Contaminated Land Guidelines</i> (EPA, 2020) and relevant guidelines made or approved under section 105 of the <i>Contaminated Land Management Act 1997</i> (NSW).</p> <p>Note: Nothing in this condition prevents the Proponent from preparing individual Validation Reports for separate sites.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D75	<p>A <b>Section A1 or Section A2 Site Audit Statement</b> (accompanied by an <b>Environmental Management Plan</b>) and its accompanying <b>Site Audit Report</b>, which state that the contaminated land disturbed by the work has been made suitable for the intended land use, must be submitted to the Planning Secretary, SOPA (in respect of Sydney Olympic Park) and the Relevant Council(s) after remediation and before the commencement of operation of the CSSI.</p> <p>Note: Nothing in this condition prevents the Proponent from obtaining Section A Site Audit Statements for individual parcels of remediated land.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D76	<p>A copy of <b>Detailed Site Investigation Report(s)</b>, <b>Remedial Action Plan(s)</b>, <b>Validation Report(s)</b>, <b>Site Audit Report(s)</b> and <b>Site Audit Statement(s)</b> must be submitted to the Planning Secretary, SOPA (in respect of Sydney Olympic Park) and the Relevant Council(s) for information.</p>	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D77	<p>An <b>Unexpected Contaminated Land and Asbestos Finds Procedure</b> must be prepared before the commencement of construction and must be followed should unexpected contaminated land or asbestos (or suspected contaminated land or asbestos) be excavated or otherwise discovered during construction.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Soils and Contamination	D78	<p>The <b>Unexpected Contaminated Land and Asbestos Finds Procedure</b> must be implemented throughout construction.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Sustainability	D79	<p>A <b>Water Reuse Strategy</b> must be prepared, which sets out options for the reuse of collected stormwater and groundwater during Stage 1 of the CSSI. The Water Reuse Strategy must include, but not be limited to:</p> <ul style="list-style-type: none"> <li>(a) evaluation of reuse options;</li> <li>(b) details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required;</li> <li>(c) measures to avoid misuse of recycled water as potable water;</li> <li>(d) consideration of the public health risks from water recycling; and</li> <li>(e) time frame for the implementation of the preferred reuse option(s).</li> </ul> <p>The Water Reuse Strategy must be prepared based on best practice and advice sought from relevant agencies, as required. The Strategy must be applied during construction.</p> <p>Justification must be provided to the Planning Secretary if it is concluded that no reuse options prevail.</p> <p>A copy of the Water Reuse Strategy must be made publicly available.</p> <p>Nothing in this condition prevents the Proponent from preparing separate Water Reuse Strategies for the construction phases of Stage 1 of the CSSI.</p>	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D80	<p>Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D81	<p>Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access must be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.</p>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D82	<p>Construction vehicles (including light vehicles) must not use Robert Street, Rozelle to access The Bays metro station construction site, unless required in the event of an emergency or in association with the delivery of the Rozelle power supply from the Rozelle sub-transmission substation to The Bays metro station construction site.</p>	Full Compliance	Full Compliance	Not Applicable	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Traffic and Transport	D83	The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D84	The primary egress routes for spoil haulage trucks at Sydney Olympic Park metro station construction site must be determined in consultation with SOPA.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D85	<b>Construction Traffic Management Plans (CTMPs)</b> must be prepared in accordance with the Construction Traffic Management Framework. A copy of the <b>CTMPs</b> must be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed within the relevant <b>CTMP</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D86	Local roads proposed to be used by Heavy Vehicles to directly access construction sites that are not identified in the documents listed in <b>Condition A1</b> of this schedule must be approved by the Planning Secretary and be included in the <b>CTMPs</b> . All requests to the Planning Secretary for approval to use local roads under <b>Condition D86</b> above must include the following: (a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) 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; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to (d) of this condition.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D87	(a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) 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; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to (d) of this condition.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D88	Before any local road is used by a Heavy Vehicle for the purposes of construction of Stage 1 of the CSSI, a <b>Road Dilapidation Report</b> must be prepared for the road. A copy of the <b>Road Dilapidation Report</b> must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of Stage 1 of the CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D89	If damage to roads occurs as a result of the construction of Stage 1 of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D90	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queuing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive land user(s); (d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the <b>CTMPs</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D91	A <b>Construction Parking and Access Strategy</b> must be prepared to identify and mitigate impacts resulting from on- and off-street parking changes during construction. The <b>Construction Parking and Access Strategy</b> must include, but not necessarily be limited to: (a) achieving the requirements of Condition D90 above; (b) confirmation and timing of the removal of on- and off-street parking associated with construction of Stage 1 of the CSSI; (c) parking surveys of all parking spaces to be removed or occupied by the project workforce to determine current demand during peak, off-peak, school drop off and pickup, weekend periods and during special events; (d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction; (e) assessment of the impacts to on- and off-street parking stock taking into consideration, occupation by the project workforce, outcomes of consultation with affected stakeholders and considering the impacts of special events; (f) identification of reasonable and practicable mitigation measures to manage impacts to stakeholders as a result of on- and off-street parking changes including, but not necessarily limited to, staged removal and replacement of parking, provision of alternative parking arrangements, managed staff parking arrangements and working with relevant council(s) to introduce parking restrictions adjacent to work sites and compounds or appropriate residential parking schemes; (g) where residential parking schemes already exist, off-road parking facilities must be provided for the project workforce; (h) mechanisms for monitoring, over appropriate intervals (not less than 6 months), to determine the effectiveness of implemented mitigation measures; (i) details of shuttle bus service(s) to transport the project workforce to construction sites from public transport hubs and off-site car parking facilities (where these are provided) and between construction sites; (j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and (k) provision of reporting of monitoring results to the Planning Secretary and Relevant Council(s) at six (6) monthly intervals.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D92	The <b>Construction Parking and Access Strategy</b> must be submitted to the Planning Secretary for approval at least one (1) month before the commencement of any construction that reduces the availability of existing parking. The approved <b>Construction Parking and Access Strategy</b> must be implemented before impacting on on-street parking and incorporated into the <b>CTMPs</b> .	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D93	During construction, all reasonably practicable measures must be implemented to maintain pedestrian, cyclist 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, cyclist and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D94	A <b>Traffic and Transport Liaison Group(s)</b> must be established in accordance with the Construction Traffic Management Framework to inform the development of <b>CTMPs</b> .	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Traffic and Transport	D95	Supplementary analysis and modelling as required by TfNSW and / or the <b>Traffic and Transport Liaison Group(s)</b> must be undertaken to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the <b>CTMPs</b> .	Full Compliance except in relation to operational traffic.	Full Compliance except in relation to operational traffic.	Full Compliance except in relation to operational traffic.	Full Compliance except in relation to operational traffic.	Full Compliance
MCoA	Traffic and Transport	D96	The permanent road works at Clyde / Rosehill must be designed, constructed and operated with the objective of integrating with existing and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and, accessibility of the networks, and avoid deterioration in peak period levels of service in relation to permanent and operational changes. Design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken: (a) in consultation with, and to the reasonable requirements of the relevant Traffic and Transport Liaison Group; (b) in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements; (c) to minimise and manage local area traffic impacts; (d) to ensure access is maintained to property and infrastructure; and (e) to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards, and TfNSW requirements.  Copies of civil, structural and traffic signal design plans shall be submitted to the Relevant Road Authority for consultation during design development and before completion of construction of Stage 1 of the CSSI.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D97	Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the relevant <b>Traffic and Transport Liaison Group</b> before the completion and use of the subject infrastructure and must be made available to the Planning Secretary upon request.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D98	Safe pedestrian and cyclist access must be maintained around construction sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Traffic and Transport	D99	Opportunities to maximise spoil material removal by non-road methods must be investigated and implemented where reasonably practicable to minimise movements by road.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Traffic and Transport	D100	The Proponent must maintain emergency vehicle access, in consultation with TfNSW, emergency services and NSW Health, to Westmead Hospital at all times throughout Stage 1 of the CSSI. Measures must be outlined in the <b>Construction Parking and Access Strategy</b> required under <b>Condition D91</b> above.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Utilities Management	D101	Utilities, services and other infrastructure potentially affected by construction must be identified before works affecting the item, to determine requirements for access to, diversion protection, and / or support. The relevant owner(s) and / or provider(s) of services must be consulted to make suitable arrangements for access to diversion, protection, and / or support of the affected infrastructure as required. The Proponent must ensure that disruption to any service is minimised and be responsible for advising local residents and businesses affected before any planned disruption of service.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Utilities Management	D102	A <b>Utility Coordination Manager</b> must be appointed for the duration of work associated with Stage 1 of the CSSI. The role of the <b>Utility Coordination Manager</b> must include, but not be limited to: (a) the management and coordination of all utility work associated with the delivery of Stage 1 of the CSSI, to ensure respite is provided to the community; (b) providing advice to the Sydney Metro Place Manager regarding upcoming utility work, including the scope of the work and the responsibility for the work; and (c) investigating complaints received from the Community Complaints Mediator or the Project communication team relating to utility work and providing a response as required.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Urban Design and Visual Amenity	D103	Wayfinding information must be incorporated on temporary hoardings to guide pedestrians around ancillary facilities and enhance their understanding and experience of the locality and space.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Urban Design and Visual Amenity	D104	Nothing in this approval permits advertising on any element of Stage 1 of the CSSI.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Urban Design and Visual Amenity	D105	The Proponent must undertake temporary placemaking initiatives for the benefit of the community, such as commercial "pop up" spaces, information booths, art installations, around the perimeter or in the vicinity of construction sites at Parramatta and Five Dock with the objective of temporarily enhancing visual amenity, providing gathering places in the local area and creating temporary active frontages to construction sites during Stage 1 of the CSSI.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Urban Design and Visual Amenity	D106	The acoustic shed at the Five Dock metro station eastern construction site must be designed and constructed in a manner that minimises visual amenity, solar access and overshadowing impacts to the residential apartments at 110 Great North Road, Five Dock facing the acoustic shed. The potential visual amenity, solar access and overshadowing impacts of the acoustic shed on the affected residential apartments must be assessed in a <b>Visual Amenity, Solar Access and Overshadowing Report</b> prepared by the Proponent.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Urban Design and Visual Amenity	D107	The <b>Visual Amenity, Solar Access and Overshadowing Report</b> must include: (a) visual amenity impact assessments from the relevant residential apartments to the acoustic shed at the Five Dock metro station eastern construction site; (b) solar access assessments of the relevant residential apartments, with consideration for the relevant development controls in the City of Canada Bay Development Control Plan (Version 4, 21 October 2020) and the Apartment Design Guide; and (c) a consultation plan to detail how potential impacts and mitigation measures will be discussed and negotiated with potentially affected property owners.  The Visual Amenity, Solar Access and Overshadowing Report must be provided to the Planning Secretary for approval within (1) month prior to the installation of the acoustic shed at the Five Dock metro station eastern construction site.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable
MCoA	Urban Design and Visual Amenity	D108	Where the acoustic shed causes a moderate (or greater) adverse visual amenity impact and / or unreasonable overshadowing and solar access impacts to any of the subject residential apartments, the Proponent must consult with the relevant affected property owners and occupiers to identify appropriate mitigation measures and an agreed implementation program. A copy of agreed implementation programs must be provided to the Planning Secretary for information.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Urban Design and Visual Amenity	D109	Stage 1 of the CSSI must be constructed with the objective of minimising light spill to surrounding properties including from headlights of construction vehicles. All lighting associated with the construction of Stage 1 of the CSSI must be consistent with the requirements of <i>Australian Standard 4292-1997 Control of the obtrusive effects of outdoor lighting</i> and relevant Australian Standards in the series <i>AS/NZ 1158 – Lighting for Roads and Public Spaces</i> . Additionally, mitigation measures must be provided to manage any residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Urban Design and Visual Amenity	D110	Stage 1 of the CSSI must be constructed in a manner that minimises visual impacts of construction sites including, providing temporary landscaping and vegetative screening, minimising light spill, minimising impacts to identified significant view lines in respect of The Bays metro station construction site and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located, wherever practicable.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Waste	D111	Waste generated during construction and operation must be dealt with in accordance with the following priorities: (a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced; (b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.	Full Compliance except for operation	Full Compliance except for operation	Full Compliance except for operation	Full Compliance except for operation	Full Compliance except for operation
MCoA	Waste	D112	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of the current EPL for Stage 1 of the CSSI, or be done in accordance with a Resource Recovery Exemption or Order issued under the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> , as the case may be.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Waste	D113	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 <i>Protection of the Environment Operations (Waste) Regulation 2014</i> , or to any other place that can lawfully accept such waste.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Waste	D114	All waste must be classified in accordance with the EPA's <i>Waste Classification Guidelines</i> , with appropriate records and disposal dockets retained for audit purposes.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Water	D115	Work on waterfront land must be carried out in accordance with controlled activity guidelines.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance
MCoA	Water	D116	Before undertaking any works and during maintenance or construction activities, erosion and sediment controls must be implemented and maintained to prevent water pollution consistent with LandCom's <i>Managing Urban Stormwater</i> series (The Blue Book).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance
MCoA	Water	D117	Stage 1 of the CSSI must be designed and constructed so as to maintain the <i>NSW Water Quality Objectives</i> (NSW WQO) where they are being achieved as at the date of this approval, and contribute towards achievement of the NSW WQO over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the NSW WQO, in which case those requirements must be complied with.	Full Compliance	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Water	D118	Unless an EPL is in force in respect to Stage 1 of the CSSI and that licence specifies alternative criteria, discharges from wastewater treatment plants to surface waters must not exceed: (a) the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018 (ANZG (2018)) default guideline values for toxicants at the 95 per cent species protection level; (b) for physical and chemical stressors, the guideline values set out in Tables 3.3.2 and 3.3.3 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC/ARMCANZ); and (c) for bioaccumulative and persistent toxicants, the ANZG (2018) guidelines values at a minimum of 99 per cent species protection level.  Where the ANZG (2018) does not provide a default guideline value for a particular pollutant, the approaches set out in the ANZG (2018) for deriving guideline values, using interim guideline values and/or using other lines of evidence such as international scientific literature or water quality guidelines from other countries, must be used.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Water	D119	If construction stage stormwater discharges are proposed, a <b>Water Pollution Impact Assessment</b> will be required 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.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F
MCoA	Water	D120	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.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Water	D121	Make good provisions for groundwater users must be provided in the event of a material decline in water supply levels, quality or quantity from registered existing bores associated with groundwater changes from construction.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance
MCoA	Water	D122	The Proponent must submit a revised <b>Groundwater Modelling Report</b> in association with Stage 1 of the CSSI to the Planning Secretary for information before bulk excavation at the relevant construction location. The <b>Groundwater Modelling Report</b> must include: (a) for each construction site where excavation will be undertaken, cumulative (additive) impacts from nearby developments, parallel transport projects and nearby excavation associated with the CSSI; (b) predicted incidental groundwater take (dewatering) including cumulative project effects; (c) potential impacts for all latter stages of the CSSI or detail and demonstrate why these later stages of the CSSI will not have lasting impacts to the groundwater system, ongoing groundwater incidental take and groundwater level drawdown effects; (d) actions required after Stage 1 to minimise the risk of inflows (including in the event latter stages of the CSSI are delayed or do not progress) and a strategy for accounting for any water taken beyond the life of the operation of the CSSI; (e) saltwater intrusion modelling analysis, from estuarine and saline groundwater in shale, into The Bays metro station site and other relevant metro station sites; and (f) a schematic of the conceptual hydrogeological model.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance



## **7 Appendix C – Applicability of SMW REMM to each Phase for Stage 1**

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Project: ETS: Sydney Metro West - Stage 1 SSI 10038		Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	Location
REMM	Traffic and transport	TT1	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community liaison.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT2	In the event of a traffic related incident, coordination would be carried out with Transport for NSW, including Transport Coordination and/or the Transport Management Centre's Operations Manager.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT3	Access to properties for emergency vehicles would be provided at all times.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT4	Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasions, police presence.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT5	Additional enhancements for pedestrian, cyclist and motorist safety near the construction sites would be implemented during construction. This would include measures such as: <ul style="list-style-type: none"> <li>Assessing the suitability of construction haulage routes through sensitive land use areas with respect to road safety</li> <li>Deployment of speed awareness signs in conjunction with variable message signs near construction sites to provide alerts to drivers</li> <li>Providing community education and awareness about sharing the road safely with heavy vehicles</li> <li>Specific construction driver training to understand route constraints, safety and environmental considerations such as sharing the road safely with other road users and limiting the use of compression braking</li> <li>Requiring technology and equipment to improve vehicle safety, eliminate heavy vehicle blind spots, and monitor vehicle location and driver behaviour.</li> </ul>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT6	All trucks would enter and exit construction sites in a forward direction, where feasible and reasonable.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT7	Construction site traffic would be managed to minimise movements during peak periods.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT8	Construction site traffic immediately around construction sites would be managed to minimise vehicle movements through school zones during pick up and drop off times.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	WMS, PMS, BMS, FDS
REMM	Traffic and transport	TT9	Opportunities to minimise impacts at the Alexandra Avenue/Bridge Road intersection would be determined in consultation with Transport for NSW.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	WMS
REMM	Traffic and transport	TT10	Where existing parking is removed to facilitate construction activities, consultation would occur with the relevant local council to investigate opportunities to provide alternative parking facilities.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT11	Construction sites would be managed to minimise the number of construction workers parking on surrounding streets by: <ul style="list-style-type: none"> <li>Encouraging workers to use public or active transport</li> <li>Encouraging ride sharing</li> <li>Provision of alternative parking locations and shuttle bus transfers where feasible and reasonable.</li> </ul>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT12	Any temporary closure or relocation of bus stops and kiss-and-ride facilities would be carried out in consultation with Transport for NSW including Transport Coordination (for relevant locations), the relevant local council and bus operators. Wayfinding and customer information would be provided to notify customers of relocated bus stops.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	WMS, PMS, BMS, TBS
REMM	Traffic and transport	TT13	Opportunities to improve bus priority along the temporary detour at Westmead metro station construction site would be investigated during detailed design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	WMS
REMM	Traffic and transport	TT14	Pedestrian and cyclist access would be maintained during the temporary closure of Alexandra Avenue. Wayfinding and customer information would be provided to guide pedestrians and cyclists to alternative routes.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	WMS
REMM	Traffic and transport	TT15	Where existing cyclist facilities (e.g. bicycle parking) would be temporarily unavailable to facilitate construction activities, suitable replacement facilities would be provided for this duration.	Not Applicable	Not Applicable	Full Compliance	Full Compliance	Full Compliance	WMS, PMS
REMM	Traffic and transport	TT16	Any relocation of taxi ranks would be carried out in consultation with Transport for NSW, the relevant local council and taxi operators. Wayfinding and customer information would be provided to notify customers of relocated taxi ranks.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	SOPMS
REMM	Traffic and transport	TT17	During major special events, impacts to the transport and traffic network would be reduced by (as necessary): <ul style="list-style-type: none"> <li>Minimising the level of construction activity, and if necessary, ceasing all construction activity</li> <li>Maintaining appropriate access to all areas within the event precinct</li> <li>Erection of hoardings, site fencing and gates at key locations within the construction site boundary to permit pedestrian movements adjacent to the construction site and separate pedestrians from construction vehicles</li> <li>Scheduling deliveries to the construction site outside of event periods.</li> </ul> For special events that require specific traffic measures, those measures would be developed in consultation with Transport for NSW, including Transport Coordination (for relevant locations) and the organisers of the event.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	PMS, CSMF, SOPMS
REMM	Traffic and transport	TT18	Access to existing properties and buildings would be maintained in consultation with property owners.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Traffic and transport	TT19	Traffic control measures required at the Parramatta metro station construction site access on George Street would be determined in consultation with Transport for NSW.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	PMS
REMM	Traffic and transport	TT20	Adjustments to site access arrangements and the local road network would be explored during detailed design to minimise conflicts with heavy vehicle movements.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	NSMS, FDS
REMM	Traffic and transport	TT21	Construction site traffic generated at the Five Dock Station construction site would be managed to avoid or minimise travel during the evening peak period.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	FDS
REMM	Traffic and transport	TT22	Construction site traffic generated at the Five Dock Station construction site would be managed to minimise movements during church service times at St Albans Anglican Church.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	FDS
REMM	Traffic and transport	TT23	Opportunities to provide vehicle access and egress directly to Parramatta Road and minimise the use of Loftus Street at the Burwood North Station construction site would be explored during detailed design.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	BMS
REMM	Traffic and transport	TT24	Co-ordination of traffic management arrangements between major construction projects would occur in consultation with Transport for NSW including Transport Coordination.	Full Compliance	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Traffic and transport	TT25	If barging of spoil is progressed, a Marine Traffic Management Plan would be developed by the construction contractor. The plan would outline the general operational plan for the movement and management of barging vessels in accordance with TT27, TT28 and TT29. The plan would also outline the process for consultation in accordance with TT26.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Traffic and transport	TT26	If barging of spoil is progressed, clubs which operate watercraft would be consulted about potential barging and potential changes to courses for watercraft such as yachts before the start of barging.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Traffic and transport	TT27	If barging of spoil is progressed, barging vessel movements would be scheduled to avoid times and locations of high recreational marine traffic where feasible and reasonable in consultation with Transport for NSW.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Traffic and transport	TT28	If barging of spoil is progressed, barging vessel movements would be managed to not interfere with port operations or the navigation of seagoing ships and ferries, unless prior approval has been obtained from the Harbour Master.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Traffic and transport	TT29	If barging of spoil is progressed, barging vessel movements would not be undertaken during special events when navigation restrictions are in place.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Construction and operation of vehicular traffic	TT30	The design of the temporary traffic arrangements at Westmead metro station construction site would consider construction traffic, alternate bus routes and bus stops, local vehicular traffic and pedestrian safety. The design of the temporary traffic arrangements would be undertaken in consultation with Transport for NSW, Schools Infrastructure, Health Infrastructure, relevant local councils and bus operators.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	WMS
REMM	Potential parking impacts as a result of partial and full road closures required to facilitate construction works	TT31	Where existing parking is removed to facilitate construction activities for The Bays Station construction site power supply route, consultation would occur with the relevant local council, local businesses, the community and schools (where appropriate) to investigate opportunities to provide alternative parking facilities.	Full Compliance	Not Applicable	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Potential access and parking impacts as a result of partial and full road closures	TT32	Provision of assistance to carry shopping, luggage and other heavy or large goods between the alternative parking area at Ausgrid Rozelle sub-transmission substation (subject to final agreement between Sydney Metro and Ausgrid) and residences during times when access is limited.	Full Compliance	Not Applicable	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Noise and vibration	NOV1	Further engagement and consultation would be carried out with: <ul style="list-style-type: none"> <li>The affected communities to understand their preferences for mitigation and management measures.</li> <li>'Other sensitive' receivers such as schools, medical facilities or places of worship to understand periods in which they are more sensitive to impacts.</li> </ul> Based on this consultation, appropriate mitigation and management options would be considered and implemented where feasible and reasonable to minimise the impacts.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	Location
REMM	Noise and vibration	NV02	Alternative construction methodologies and measures that minimise noise and vibration levels during noise intensive works would be investigated and implemented where feasible and reasonable. This would include consideration of: • The use of hydraulic concrete shears in lieu of hammers/rock breakers • Sequencing works to shield noise sensitive receivers by retaining building wall elements • Locating demolition load out areas away from the nearby noise sensitive receivers • Providing respite periods for noise intensive works • Minimising structural-borne noise to adjacent buildings including separating the structural connection prior to demolition through saw-cutting and propping, using hand held splitters and pulverisers or hand demolition • Installing sound barrier screening to scaffolding facing noise sensitive neighbours • Using portable noise barriers around particularly noisy equipment, such as concrete saws • Modifying demolition works sequencing / hours to minimise impacts during peak pedestrian times and / or adjoining neighbour outdoor activity periods.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV03	Appropriate respite would be provided to affected receivers in accordance with the Sydney Metro Construction Noise and Vibration Standard. This would include consideration of impacts from Stage 1 utility and power supply works when determining appropriate respite periods for affected receivers. When determining appropriate respite, the need to efficiently undertake construction would be balanced against the communities' preferred noise and vibration management approach.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV04	The use of noise intensive equipment at construction sites with 'moderate' and 'high' out-of-hours noise management level exceedances would be scheduled for standard construction hours, where feasible and reasonable. Where this is not feasible and reasonable, the works would be undertaken as early as possible in each work shift.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV05	Air brake silencers would be used on heavy vehicles that access construction sites multiple times per night or over multiple nights.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV06	Perimeter site hoarding would be designed with consideration of on-site heavy vehicle movements with the aim of minimising sleep disturbance impacts.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV07	Long term construction site support equipment and machinery would be low noise emitting and suitable for use in residential areas, where feasible and reasonable. Examples include: • Low noise water pumps for use in water treatment facilities • Low noise generators and compressors • Low noise air conditioner units for use of amenities buildings.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV08	For all sites where acoustic sheds are proposed, the sheds would be designed and constructed to minimise noise emissions. This would likely include the following considerations: • All significant noise producing equipment that would be used during the night-time would be inside the shed, where feasible and reasonable • Noise generating ventilation systems such as compressors, scrubbers, etc, would also be inside the shed and external air intake/discharge ports would be appropriately acoustically treated • The door of the acoustic shed would be kept closed during the night-time period, where feasible and reasonable. Where night-time vehicle access is required, the doors would be designed and constructed to minimise noise breakout.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, SOPMS, BNS, FDS, TBS
REMM	Noise and vibration	NV09	Feasible and reasonable measures would be implemented to minimise ground-borne noise where exceedances are predicted. This may require implementation of less ground-borne noise and less vibration intensive alternative construction methodologies.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV10	The proximity of cross passages to nearby receivers and the corresponding construction ground-borne noise and vibration impacts during the excavation works would be considered when determining locations. Relocation of cross passages to be further away from sensitive receivers to mitigate potential construction impacts would be considered, where feasible and reasonable.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	Metro rail tunnels
REMM	Noise and vibration	NV11	An activity specific Construction Noise and Vibration Impact Statement (in accordance with the requirements of the Construction Noise and Vibration Standard) would be developed for rockbreaking in the tunnel and at cross passages, specifically addressing the activity where it is required between 10pm-7am.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	Metro rail tunnels
REMM	Noise and vibration	NV12	Blasting would be planned during hours that would cause the least disruption and disturbance to the nearest receivers. Notification protocols prior to blasting for the nearest sensitive receivers would be established.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, SF, SOPMS, NSMS, BMS, FDS, TBS
REMM	Noise and vibration	NV13	Vibration and overpressure measurements would be completed at the start of any blasting activities to confirm that vibration levels are within the blasting criteria.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, SF, SOPMS, NSMS, BMS, FDS, TBS
REMM	Noise and vibration	NV14	Further assessment of construction traffic would be completed during detailed design, including consideration of the potential for exceedances of the NSW Road Noise Policy base criteria (where greater than 2 dB increases are predicted). The potential impacts would be managed using the following approaches, where feasible and reasonable: • On-site spoil storage capacity would be maximised to reduce the need for truck movements during sensitive times • Vehicle movements would be redirected away from sensitive receiver areas and scheduled during less sensitive times • The speed of vehicles would be limited and the use of engine compression brakes would be avoided • Heavy vehicles would not be permitted to site near sensitive receivers	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV15	Consultation with the owners and operators of the horse stables near the Clyde stabling and maintenance facility construction site would be carried out so that potential impacts to horses are appropriately managed.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	CSMF
REMM	Noise and vibration	NV16	Where vibration levels are predicted to exceed the screening criteria, a more detailed assessment of the structure (in consultation with a structural engineer) and vibration monitoring would be carried out to ensure vibration levels remain below appropriate limits for that structure. For heritage items, the more detailed assessment would specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV17	Condition surveys of buildings and structures near to the tunnel and excavations would be undertaken prior to the commencement of excavation at each site, where appropriate. For heritage buildings and structures the surveys would consider the heritage values of the structure in consultation with a heritage specialist.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV18	The likelihood of cumulative construction noise impacts would be reviewed during detailed design when detailed construction schedules are available. Co-ordination would occur between potentially interacting projects to minimise concurrent or consecutive works in the same areas, where possible. Specific mitigation strategies would be developed to manage impacts. Depending on the nature of the impact, this could involve adjustments to construction program or activities of Sydney Metro West or of other construction projects.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Noise and vibration	NV19	Further assessment of operational road traffic noise mitigation would be undertaken for receivers identified as being eligible for consideration of treatment. The mitigation would likely include at-property treatment. Receivers that are identified as requiring at-receiver noise mitigation would be identified and, where possible, offered treatment prior to the start of construction works which have the potential to affect them.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	WMS
REMM	Non-Aboriginal heritage	NAH1	Archival recording and reporting of the following heritage items would be carried out in accordance with the NSW Heritage Office's How to Prepare Archival Records of Heritage Items (1998), and Photographic Recording of Heritage Items Using Film or Digital Capture (2006): • Shops (and potential archaeological site) (Parramatta LEP Item No. 1703) • Kia Ora (and potential archaeological site) (Parramatta LEP Item No. 1716) • RTA Depot (Parramatta LEP Item No. 1576) • State Abattoirs (SEPP Listing No. A) • White Bay Power Station (SHR Listing No. 01015)	Not Applicable	Full Compliance in relation to the State Abattoirs (SEPP Listing No. A) and White Bay Power Station (SHR Listing No. 01015)	Full Compliance	Not Applicable	Full Compliance except in relation to the State Abattoirs (SEPP Listing No. A) and White Bay Power Station (SHR Listing No. 01015)	PMS, CSMF, SOPMS, TBS
REMM	Non-Aboriginal heritage	NAH2	A method for the demolition of existing buildings and/or structures at specified construction sites would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	PMS, CSMF, SOPMS, TBS
REMM	Non-Aboriginal heritage	NAH3	Prior to commencement of demolition of heritage elements at White Bay Power Station within The Bays construction site, significant heritage fabric would be identified for salvage and reuse opportunities for salvaged fabric considered.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Non-Aboriginal heritage	NAH4	The policies of the White Bay Power Station Conservation Management Plan would be considered in regard to visual impacts of the Stage 1 works, particularly the acoustic shed (or other acoustic measures) and any temporary structures. Significant view lines would be retained during Stage 1 works.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Non-Aboriginal heritage	NAH5	Where heritage items, including significant archaeology are impacted by Stage 1 works, consideration would be given to their inclusion in the Heritage Interpretation Plan for future stages. The archaeological research design would be implemented.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Non-Aboriginal heritage	NAH6	Significant archaeological findings would be considered for inclusion in heritage implementation (as per NAH5) for the project and be developed in consultation with the relevant local council.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Non-Aboriginal heritage	NAH7	An Archaeological Excavation Report would be prepared by the Excavation Director and be provided to the NSW Heritage Division within two years of the completion of archaeological excavations specified in the archaeological research design(s).	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	Location
REMM	Non-Aboriginal heritage	NAH8	In the event that State significant archaeology associated with early convict occupation is located at Parramatta metro station: <ul style="list-style-type: none"> <li>In situ conservation would be considered. If in situ conservation is not feasible and reasonable, a strategy to mitigate impacts would be prepared in consultation with the NSW Heritage Council (or delegate)</li> <li>An Archaeological Method Statement would be prepared in consultation with the NSW Heritage Council (or delegate) for management of the archaeological remains, whether for conservation or archaeological investigation and recording</li> <li>An accessible publication would be prepared within two years of archaeological excavations to document the archaeological investigations</li> <li>Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities.</li> </ul>	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	PMS
REMM	Non-Aboriginal heritage	NAH10	An assessment of significance would be prepared in consultation with the relevant local council for the following potential unlisted heritage items: <ul style="list-style-type: none"> <li>220 Church Street, Parramatta</li> <li>48 Macquarie Street, Parramatta</li> <li>Pine Inn at 19 Parramatta Road, Concord</li> <li>338-340 Parramatta Road, Burwood</li> <li>Former warehouse shed, Glebe Island.</li> </ul> If the assessment of significance confirms these items have local heritage value, an archival recording would be undertaken.	Not Applicable	Full Compliance in relation to: <ul style="list-style-type: none"> <li>Pine Inn at 19 Parramatta Road, Concord</li> <li>338-340 Parramatta Road, Burwood</li> <li>Former warehouse shed, Glebe Island.</li> </ul>	Full Compliance in relation to: <ul style="list-style-type: none"> <li>220 Church Street, Parramatta</li> <li>48 Macquarie Street, Parramatta</li> </ul>	Not Applicable	Not Applicable	PMS, BNS, TBS
REMM	Aboriginal heritage	AH1	Aboriginal stakeholder consultation would be carried out in accordance with the Heritage NSW, Department of Premier and Cabinet's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DEC CW, 2010).	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Aboriginal heritage	AH2	Archaeological test excavation (and salvage when required) would be carried out where intact natural profiles with the potential to contain significant archaeological deposits are encountered at the specified construction sites and the Parramatta power supply route. Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report.	Not Applicable	Full Compliance	Full Compliance	Full Compliance, except in relation to the Parramatta Power Supply Route.	Full Compliance	PMS, CSMF, TBS and PSR
REMM	Aboriginal heritage	AH3	If Aboriginal archaeological remains are recovered during Stage 1, results would be incorporated into Aboriginal heritage interpretation for the Concept in consultation with registered Aboriginal parties.	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Aboriginal heritage	AH4	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Sydney Metro Exhumation Management Plan would be implemented.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Property and land use	LU1	Except where required for subsequent construction activities associated with future stages of the Concept, temporary use areas for construction purposes would be stabilised and appropriately rehabilitated as soon as feasible and reasonable following completion of construction. This would be carried out in consultation with the relevant landowner.	Full Compliance for areas that will not be used by subsequent construction contractors for Stage 1	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Landscape and visual amenity	LV1	Where feasible and reasonable, the elements within construction sites would be located to minimise visual impacts (for example storing materials and machinery behind fencing).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV2	The design and maintenance of construction site hoardings would aim to minimise visual amenity and landscape character impact.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV3	Graffiti would be removed promptly from hoardings and any other aspects of construction sites.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV4	All structures (including acoustic sheds or other acoustic measures, site offices and workshop sheds) would be finished in a colour which aims to minimise their visual impact, if visible from areas external to the construction site. This finish is to be applied to all visible fixtures and fittings (including exposed downpipes).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	WMS, PMS, SOPMS, NSMS, BNS, FDS
REMM	Landscape and visual amenity	LV5	Lighting of construction sites would be orientated to minimise glare and light spill impacts on adjacent receivers.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV6	Construction site hoardings would be designed in accordance with Sydney Metro Brand Design Guidelines and opportunities for public art on hoardings would be considered in high pedestrian locations.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV7	Works would be coordinated with the Department of Planning, Industry and Environment to manage the potential impact of construction on sporting events in other areas of Sydney Olympic Park.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	SOPMS
REMM	Landscape and visual amenity	LV8	Works would be coordinated with City of Canada Bay Council to manage the potential impact of construction on sporting events at Concord Oval.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	BNS
REMM	Landscape and visual amenity	LV9	Where feasible and reasonable the location and height of the acoustic shed at the Five Dock Station (if required) would be designed to minimise overshadowing of Fred Kelly Place between 10am and 3pm in mid-winter.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	FDS
REMM	Landscape and visual amenity	LV10	Opportunities to provide temporary activation in the vicinity of the Five Dock Station western construction site during construction would be explored in consultation with the City of Canada Bay Council.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	FDS
REMM	Landscape and visual amenity	LV11	Opportunities for the retention and protection of existing street trees and trees within the site would be identified during detailed construction planning.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV12	Existing trees to be retained would be protected prior to the commencement of construction in accordance with Australian Standard AS470 The Australian Standard for Protection of Trees on Development Sites and Adjoining Properties.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV13	Trees removed by Stage 1 would be replaced to achieve no net loss to tree numbers and/or canopy in proximity to the site as a minimum in the long term (and part of future stages of Metro West).	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Landscape and visual amenity	LV14	Opportunities would be investigated with the relevant local council to provide plantings in proximity to the impacted areas prior to construction commencing where feasible and reasonable.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Business impacts	B11	Small business owner engagement would be undertaken to assist small business owners adversely impacted by construction.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Business impacts	B12	Planned power and utility interruptions would be scheduled to before or after typical business hours where feasible and reasonable. Prior notice would be provided to all affected business owners of the interruptions.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Business impacts	B13	Hoardings and screening impacting the visibility of business would be minimised where feasible and reasonable, without compromising public safety or the effective management of construction airborne noise. Clear pathways and signage would be implemented around construction sites to maximise visibility of retained businesses, including sufficient lighting along pedestrian footpaths during night time where relevant.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Social impacts	S1	Consultation would be carried out with managers of social infrastructure located near construction sites about the timing and duration of construction works and management of potential impacts, with the aim of minimising potential disruptions to the use of the social infrastructure from construction activity.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	WMS, PMS, CSMF, SSF, SOPMS, NSMS, BNS, FDS, TBS
REMM	Social impacts	S2	Engagement would be carried out with Parramatta City Council to identify alternative locations for the Parramatta Artist Studios to provide opportunities for facilitating local creative and cultural activities.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	PMS
REMM	Social impacts	S3	A Community Benefit Plan would be developed to guide the development of community benefit initiatives (by Principal Contractors) during construction of Stage 1 to make a positive contribution to the potentially affected community. The key objectives of the plan would include: <ul style="list-style-type: none"> <li>Identify opportunities to create environmental and community benefits and provide positive social outcomes</li> <li>Respond to community priorities and needs in the locality of each relevant construction site.</li> </ul>	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, SOPMS, NSMS, BNS, FDS, TBS
REMM	Social impacts	S4	In addition to mitigation measure TT17, consultation would be carried out with festival and event organisers in proximity to construction sites to mitigate potential impacts on the operation of the festival or event.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	PMS, FDS
REMM	Social impacts	S5	In addition to mitigation measure LV6, consultation would be carried out with stakeholders to identify opportunities for public art to reflect community values, culture and identity of the local community.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, SOPMS, NSMS, BNS, FDS
REMM	Social impacts	S6	In addition to mitigation measure LV10, potential temporary activation in the vicinity of the Five Dock Station western construction site would include opportunities to provide spaces and places for the community to gather and meet each other, culture and identity.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	FDS
REMM	Social impacts	S7	In addition to mitigation measure S1, ongoing engagement would be undertaken with NSW Department of Education to continue to investigate feasible and reasonable mitigation measures related to construction traffic, pedestrian safety, construction noise and vibration, and air quality.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	WMS, PMS, BNS, FDS
REMM	Groundwater and ground movement	GW1	Site inspection would be carried out on private domestic supply bore GW305646 to confirm the current viability of that bore. If found to be viable, and predicted to be significantly impacted, make good measures would be implemented if a loss of yield were to occur.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	BNS
REMM	Groundwater and ground movement	GW2	A review of additional geotechnical and hydrogeology data would be undertaken to confirm the geological and groundwater conditions and determine, based on these local conditions, whether predicted groundwater drawdown from Stage 1 is likely to occur in the vicinity of these creeks. Where the additional data review shows local conditions and predicted groundwater drawdown are likely to cause surface water/groundwater interaction, then additional site investigations (in accordance with GW3) would be undertaken for those creeks or surface water bodies.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, CSMF, SOPMS, NSMS
REMM	Groundwater and ground movement	GW3	Additional site investigations would be carried out at creeks or surface water bodies where the additional data review in GW2 shows there is a likely surface water/groundwater interaction. This would involve baseline monitoring of creek flows (streamflow gauging) prior to construction, and baseflow streamflow analysis to confirm the existing groundwater baseflow contribution to streamflow for each creek. Where a significant reduction in baseflow is predicted due to Stage 1, design responses would be implemented at station and shaft excavations to reduce potential baseflow loss.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, CSMF, SOPMS, NSMS

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	Location
REMM	Groundwater and ground movement	GW4	Monitoring of groundwater levels and quality at the site area would occur before, during and after construction. This would also include monitoring of potential contaminants of concern. Groundwater level data would be regularly reviewed during and after construction by a qualified hydrogeologist. Groundwater monitoring data would be provided to the NSW Environment Protection Authority and Department of Planning, Industry, Environment, Water and the Natural Resources Access Regulator for information prior to commencement of construction.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, CSMF, SSF, SOPMS, NSMS, BNS, FDS, TBS
REMM	Groundwater and ground movement	GW5	A detailed geotechnical and hydrogeological model for Stage 1 would be developed and progressively updated during design and construction. The detailed geotechnical and hydrogeological model would include: <ul style="list-style-type: none"> <li>Assessment of the potential for damage to structures, services, basements and other sub-surface elements through settlement or strain</li> <li>Predicted groundwater inflows, groundwater take and changes to groundwater levels, including at nearby water supply works.</li> </ul> Where building damage risk is rated as moderate or higher (as per the CIRIA 1996 risk-based criteria), a structural assessment of the affected buildings/structures would be carried out and specific measures implemented to address the risk of damage. Where a significant exceedance of target changes to groundwater levels are predicted at surrounding land uses and nearby water supply works, an appropriate groundwater monitoring program would be developed and implemented. The program would aim to confirm no adverse impacts on groundwater levels or to appropriately manage any impacts. Monitoring at any specific location would be subject to the status of the water supply work and agreement with the landowner.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	Where required
REMM	Groundwater and ground movement	GW6	Condition surveys of buildings and structures in the vicinity of the tunnel and excavations would be carried out prior to the commencement of excavation at each site.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	Where required
REMM	Soils and surface water quality	SSWQ1	Prior to ground disturbance in areas of potential acid sulfate soil occurrence, testing would be carried out to determine the presence of actual and/or potential acid sulfate soils. If acid sulfate soils are encountered, they would be managed in accordance with the Acid Sulfate Soil Manual (ASSMAC, 1998)	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance	PMS, CSMF, TBS
REMM	Soils and surface water quality	SSWQ2	Prior to ground disturbance in high probability salinity areas, testing would be carried out to determine the presence of saline soils. If salinity is encountered, excavated soils would not be reused or it would be managed in accordance with Book 4 Dryland Salinity: Productive Use of Saline Land and Water (NSW DECC 2008). Erosion controls would be implemented in accordance with Blue Book (Landcom, 2004).	Full Compliance	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Soils and surface water quality	SSWQ3	Erosion and sediment measures would be implemented at all construction sites in accordance with the principles and requirements in Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom 2004) and Volume 2D (NSW Department of Environment, Climate Change and Water 2008), commonly referred to as the 'Blue Book'. Additionally, any water collected from construction sites would be appropriately treated and discharged to avoid any potential contamination or local stormwater impacts. Temporary sediment basins would be designed in accordance with Managing Urban Stormwater: Soils and Construction and Managing Urban Stormwater, Volume 2B: Main Road Construction (DECC, 2008).	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Soils and surface water quality	SSWQ4	Works in waterways and surrounding low lying areas would be carried out in accordance with progressive erosion and sediment control plans.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	CSMF
REMM	Soils and surface water quality	SSWQ5	The water treatment plants would be designed so that wastewater is treated to a level that is compliant with the ANZECC/ARMCANZ (2000) and ANZG (2018) and draft ANZG (2020) default guidelines for 95 per cent species protection and 99 per cent species protection and 99 per cent species protection for toxicants unless other discharge criteria are agreed with relevant authorities.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	All
REMM	Soils and surface water quality	SSWQ6	A surface water monitoring program would be implemented to observe any changes in surface water quality that may be attributable to Stage 1 and inform appropriate management responses. The program would be developed in consultation with the EPA and relevant Councils. The program would consider monitoring being undertaken as part of other infrastructure projects such as the WestConnex M4 East monitoring. Monitoring would occur during pre-construction and during construction at all waterways with the potential to be impacted. Monitoring sites could be located upstream and downstream of the potential discharges and would include sampling for key indicators of concern.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	All
REMM	Soils and surface water quality	SSWQ7	Further design development would confirm the local stormwater system capacity to receive construction water treatment plant inflows. In the event there is a stormwater infrastructure capacity issue with existing infrastructure, mitigation measures such as storage detention to control water outflow during wet weather events would be implemented.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	All
REMM	Contamination	C1	For sites where potential contamination risk is moderate, high or very high, a further review of data would be performed. Where the additional data review provides sufficient information to confirm that contamination is likely to have a very low or low risk, the site would then be managed in accordance with the Soil and Water Management Plan. This would typically occur where there is minor, isolated contamination that can be readily remediated through standard construction practices such as excavation and off-site disposal.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Contamination	C2	Where data from the additional data review (mitigation measure C1) is insufficient to understand the risk of contamination, a Detailed Site Investigation would be carried out in accordance with the National Environment Protection Measure (2013) and other guidelines made or endorsed by the NSW EPA. The sites requiring a Detailed Site Investigation would be confirmed following the additional data review (mitigation measure C1), however on the basis of the Stage 1 assessment, it is anticipated that Detailed Site Investigations would be required at the specified application locations.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	CSMF, SSF, SOPMS, TBS
REMM	Contamination	C3	Where data from the additional data review (mitigation measure C1) or the Detailed Site Investigation (mitigation measure C2) confirms that contamination would have a moderate, high or very high risk, a Remediation Action Plan would be developed for the area of the construction footprint. Each Remediation Action Plan would detail the remediation works required to mitigate risks from contamination throughout and following completion of construction. The Remediation Action Plan would be prepared in accordance with relevant NSW EPA guidelines and where applicable, detail remediation methodologies in accordance with Australian Standards and other relevant government guidelines and codes of practice. Remediation would be performed as an integrated component of construction and to a standard commensurate with the proposed end use of the land. The sites requiring Remediation Action Plans and remediation would be confirmed following the additional data review (mitigation measure C1) and Detailed Site Investigation (mitigation measure C2), however on the basis of the Stage 1 assessment, it is anticipated that Remediation Action Plans and remediation could be required at the specified application locations.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	CSMF, SSF, SOPMS, TBS
REMM	Contamination	C4	Where contamination is highly complex, such as significant groundwater contamination; contamination associated with vapour; contamination that requires specialised remediation techniques; or contamination that requires ongoing active management during and beyond construction, an accredited Site Auditor would review and approve the Remediation Action Plan, and would develop a Site Audit Statement and Site Audit Report upon completion of remediation. The sites requiring Site Audit Statements would be confirmed following the preparation of Remediation Action Plans (mitigation measure C3), however on the basis of the Stage 1 assessment, it is anticipated that Site Audit Statements would be required at the specified application locations.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	CSMF, SOPMS, TBS, and as applicable
REMM	Contamination	C5	Ongoing management and monitoring measures would be documented in an appropriate form and implemented for any areas where minor, residual contamination remains following construction. Detailed construction planning would consider flood risk at construction sites. This would include: <ul style="list-style-type: none"> <li>Identification of measures to not worsen flood impacts on the community and on other property and infrastructure during construction up to and including the one per cent AEP flood event</li> <li>Provide flood-proofing to excavations at risk of flooding or coastal inundation during construction, where feasible and reasonable, such as raised entry into shafts and/or pump-out facilities to minimise ingress of floodwaters into shafts and the dive structure</li> <li>Review of site layout and staging of construction works to avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required. This includes design of site hoardings to minimise disruption to flow paths (if possible).</li> </ul> Not worsen is defined as: <ul style="list-style-type: none"> <li>A maximum increase in flood levels of 50mm in a one per cent AEP flood event</li> <li>A maximum increase in time of inundation on one hour in a one per cent AEP flood event</li> <li>No increase in potential soil erosion and scouring from any increase in flow velocity in a one per cent AEP flood event.</li> </ul>	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	As applicable
REMM	Hydrology and flooding	HF1	Further design refinement at the Clyde stabling and maintenance facility construction site would occur during detailed design to mitigate the identified potential impacts including: <ul style="list-style-type: none"> <li>The increases in flood levels of up to 0.03 metres in Duck Creek and adjacent properties in the one per cent AEP flood event</li> <li>Increases in flow velocities and the potential increased risk of scour at the proposed creek crossings and in the downstream channels</li> <li>The potential flooding impacts from filled features</li> </ul>	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	PMS, CSMF, SSF, NSMS, TBS
REMM	Hydrology and flooding	HF3	Further design refinement at the Clyde stabling and maintenance facility construction site would occur during detailed design to mitigate the identified potential impacts including: <ul style="list-style-type: none"> <li>The increases in flood levels of up to 0.03 metres in Duck Creek and adjacent properties in the one per cent AEP flood event</li> <li>Increases in flow velocities and the potential increased risk of scour at the proposed creek crossings and in the downstream channels</li> <li>The potential flooding impacts from filled features</li> </ul>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	CSMF

Condition Type	Condition Classification	Condition Reference	Description	Phase A	Phase B	Phase C	Phase E	Phase F	Location
REMM	Hydrology and flooding	HF4	Drainage at construction sites would be designed, where feasible and reasonable, to mitigate potential alterations to local runoff conditions due to construction activities.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Hydrology and flooding	HF5	Detailed construction planning for The Bays Station construction would aim to minimise changes to existing levels in relation to potential impacts on flood behaviour, along the north-western side of site adjacent to low-lying property, to minimise reduction in floodplain storage.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Hydrology and flooding	HF6	Consultation would occur with the proponent of the Camellia Town Centre redevelopment to understand potential flood impacts from the redevelopment on Stage 1 and to identify any additional flood protection (if required).	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	PMS
REMM	Hydrology and flooding	HF7	Construction planning regarding flooding matters would be carried out in consultation with the NSW State Emergency Service and the relevant local council.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	PMS, CSMF, TBS
REMM	Hydrology and flooding	HF8	Detailed construction planning for The Bays Station construction site would aim to avoid conflicts with the potential construction of flood mitigation works in Robert Street, in consultation with Inner West Council.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Not Applicable	TBS
REMM	Biodiversity	B1	During construction, sufficient flow and fish passage would be maintained similar to current conditions during in-stream works where feasible and reasonable.	Not Applicable	Not Applicable	Full Compliance	Not Applicable	Full Compliance	CSMF
REMM	Biodiversity	B2	The A'Becketts Creek and Duck Creek crossings would be designed to: <ul style="list-style-type: none"> <li>• Provide sufficient fish passage in accordance with Policy and guidelines for fish habitat conservation and management Update 2013 (DPI Fisheries NSW 2013)</li> <li>• Incorporate suitable scour protection</li> <li>• Avoid worsening existing flow velocities downstream from the crossing locations</li> <li>• Incorporate a vegetated riparian zone within the realigned open channel sections where feasible and reasonable.</li> </ul>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	CSMF
REMM	Biodiversity	B3	Additional investigations and assessment would be completed to confirm the potential for impacts to groundwater dependant ecosystems due to groundwater drawdown, and to identify any required mitigation through design.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	WMS, PMS, CSMF, NSMS, BNS, FDS
REMM	Air quality	AQ1	The following best-practice dust management measures would be implemented during all construction works: <ul style="list-style-type: none"> <li>• Regularly wet-down exposed and disturbed areas including stockpiles, especially during dry weather</li> <li>• Adjust the intensity of activities based on measured and observed dust levels and weather forecasts</li> <li>• Minimise the amount of materials stockpiled and position stockpiles away from surrounding receivers</li> <li>• Regularly inspect dust emissions and apply additional controls as required</li> <li>• Consider all relevant measures listed in the UK IAQM corresponding to the highest level of risk determined around each Stage 1 construction site.</li> </ul>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Air quality	AQ2	Plant and equipment would be maintained in a proper and efficient manner. Visual inspections of emissions from plant would be carried out as part of preacceptance checks.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Air quality	AQ3	The following best-practice odour management measures would be implemented during relevant construction works: <ul style="list-style-type: none"> <li>• The extent of opened and disturbed contaminated soil at any given time would be minimised</li> <li>• Temporary coverings or odour suppressing agents would be applied to excavated areas where appropriate</li> <li>• Regular monitoring would be conducted during excavation to verify that no offensive odours are detected beyond the site boundary.</li> </ul>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Spoil, waste management and resource use	WR1	All waste would be assessed, classified, managed, transported and disposed of in accordance with the Waste Classification Guidelines and the Protection of the Environment Operations (Waste) Regulation 2014.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Spoil, waste management and resource use	WR2	A hazardous material survey would be completed for those buildings and structures suspected of containing hazardous or special waste materials (particularly asbestos) prior to their demolition. If hazardous waste or special waste (e.g. asbestos) is encountered, it would be handled and managed in accordance with relevant legislation, codes of practice and Australian standards.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Spoil, waste management and resource use	WR3	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Spoil, waste management and resource use	WR4	Waste streams would be segregated to avoid cross-contamination of materials and maximise reuse and recycling opportunities.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Reuse on Sydney Metro West sites	WR5	A materials tracking system would be implemented for material transferred between Sydney Metro West sites and to offsite locations such as licensed waste management facilities.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Hazards	HA1	The method for delivery of explosives would be developed prior to the commencement of blasting (if proposed) in consultation with the Department of Planning, Industry and Environment and be timed to avoid the need for on-site storage.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Full Compliance	All
REMM	Hazards	HA2	Dial before you dig searches and non-destructive digging would be carried out to identify the presence of underground utilities.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Hazards	HA3	Ongoing consultation would be carried out with utility providers for high pressure gas or petroleum pipelines to identify appropriate construction methodologies to be implemented. Any interaction with high pressure gas or petroleum pipelines would comply with the relevant standards, including AS 2885 Pipelines – Gas and Liquid Petroleum.	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Sustainability and climate change	SCC1	Sustainability initiatives would be incorporated into the detailed design and construction to support the achievement of the Sydney Metro West sustainability objectives.	Not Applicable	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All
REMM	Sustainability and climate change	SCC2	Best practice level of performance would be achieved using market leading sustainability rating tools during design and construction.	Not Applicable	Full Compliance, except that the Tunnelling Contractor is required to obtain a design and as built rating only	Not Applicable except for the provision of data for follow on contractor rating requirements.	Not Applicable	Full Compliance	All
REMM	Sustainability and climate change	SCC3	Climate change risk treatments would be confirmed and incorporated into the detailed design.	Not Applicable	Full Compliance	Not Applicable	Not Applicable	Full Compliance	All
REMM	Sustainability and climate change	SCC4	An iterative process of greenhouse gas assessments and design refinements would be carried out during detailed design and construction to identify opportunities to minimise greenhouse gas emissions. Performance would be measured in terms of a percentage reduction in greenhouse gas emissions from a baseline inventory calculated at the detailed design stage.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Sustainability and climate change	SCC5	25 per cent of the greenhouse gas emissions associated with consumption of electricity during construction would be offset.	Not Applicable	Full Compliance	Full Compliance	Not Applicable	Full Compliance	All
REMM	Occurrence of cumulative impacts	C1	Co-ordination and consultation with the following stakeholders would occur where required to manage the interface of projects under construction at the same time: <ul style="list-style-type: none"> <li>• Other parts of Transport for NSW including Transport Coordination</li> <li>• Department of Planning, Industry and Environment</li> <li>• Sydney Trains</li> <li>• NSW Trains</li> <li>• Sydney Buses</li> <li>• Sydney Water</li> <li>• Port Authority of NSW</li> <li>• Sydney Motorways Corporation</li> <li>• Emergency service providers</li> <li>• Utility providers</li> <li>• Construction contractors.</li> </ul> Co-ordination and consultation with these stakeholders would include: <ul style="list-style-type: none"> <li>• Provision of regular updates to the detailed construction program, construction sites and haul routes</li> <li>• Identification of key potential conflict points with other construction projects</li> <li>• Developing mitigation strategies in order to manage conflicts. Depending on the nature of the conflict, this could involve: <ul style="list-style-type: none"> <li>• Adjustments to the Sydney Metro construction program, work activities or haul routes; or adjustments to the program, activities or haul routes of other construction projects</li> <li>• Co-ordination of traffic management arrangements between projects.</li> </ul> </li> </ul>	Full Compliance	Full Compliance	Full Compliance	Full Compliance	Full Compliance	All

# 8 Appendix D – ER Endorsement

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Stuart Hodgson  
Director Environment, Sustainability and Planning  
Metro West  
Sydney Metro  
PO Box K659  
HAYMARKET NSW 1240

17 May 2022

Ref: 201208 PHASINGRPT R1.4

Dear Stuart

**RE: Endorsement of the Phasing Report Revision 1.4– Sydney Metro West, Stage 1**

Thank you for providing the *Sydney Metro West Stage 1 – Phasing Report, Rev 1.4, May 2022* for Environmental Representative (ER) as required by the Condition of Approval A11 (d) of the Sydney Metro West – Concept and Stage 1 Construction Approval (SSI 10038, 11 March 2021). This revision is an update to the previous Revision 1.3 submitted to the Secretary on 31 March 2022. The revision includes additional risk assessments related to the scope of work proposed for:

- Phase B2: Central Tunnelling Main Works
- Phase E: Existing Rail Corridor Enabling Works
- Phase F: Western Tunnelling

As ER approved under the SSI 10038 Approval, I have provided comment on the revised Phasing Report with respect to the risk assessment relevant to the additional work scope as required under A11(d). The review for the previous version of the Phasing Report assessed the risk assessment and how it influenced the nominated allocation of project requirements, namely the Conditions of Approval (CoA), the Revised Environmental Mitigation measures (REMMs). It was noted that key deliverables under the Construction Environmental Management Framework (CEMF) apply unless otherwise demonstrated that a specific element is either not relevant to the project works or the residual risk associated with an aspect is low and can be managed within the CEMP (ie: a procedure or equivalent may be generated). This was noted as being generally consistent with the approach taken previously on other Sydney Metro projects.

It should be noted that the ER recommends the construction noise and vibration management risk assessment for Phase B2 – Tunnelling Works (Table 9) be revised to High due to the risks associated with rock hammering at Cross Passages at regular intervals along the alignment as well as TBM related ground borne noise.

This ER review of risks and the allocation of requirements for this update to the Phasing Report is based on information known to the ER at the time of review and may be subject to update as the project evolves. I consider this update appropriate for submission to the Planning Secretary for information as required by CoA A10.

Yours sincerely



Greg Byrnes  
Environmental Representative – Sydney Metro – Stage 1 West