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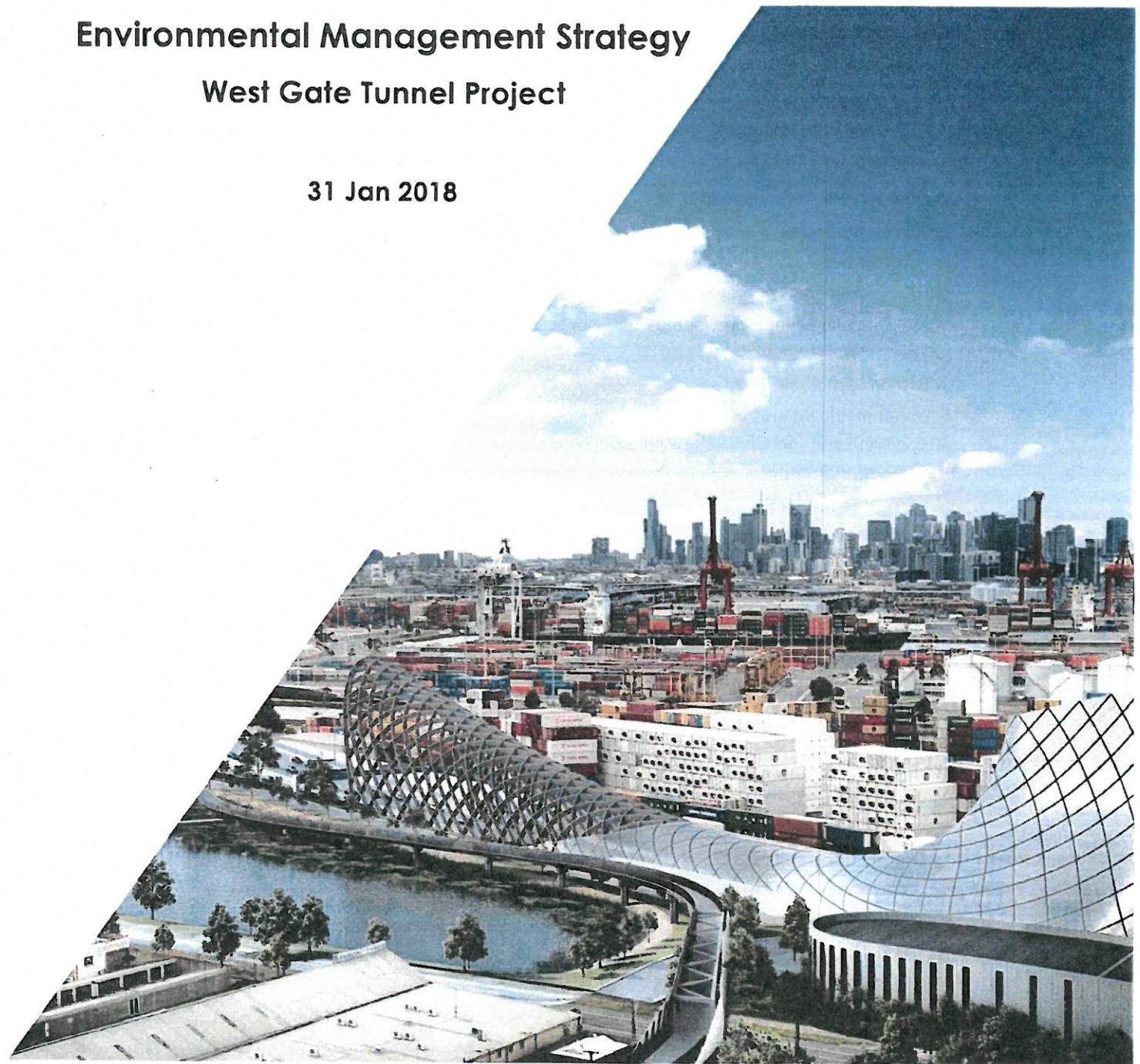
- 8 MAR 2018

A blue ink signature of the name "Richard Wynne" over a red rectangular border.

## Environmental Management Strategy

### West Gate Tunnel Project

31 Jan 2018



Transurban

CPB  
CONTRACTORS

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## DEFINITIONS AND ABBREVIATIONS

TERM/ABBREVIATION	DEFINITION
AS/NZS	Australian Standard/New Zealand Standard
CCEP	Communications and Community Engagement Plan
CEMP	Construction Environmental Management Plan
CHMP	Cultural Heritage Management Plan
CPBJH JV	CPB Contractors John Holland Joint Venture
D&C Subcontractor	Design and Construction Subcontractor (CPBJH JV)
DELWP	Department of Environment, Land, Water and Planning
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMS	Environmental Management System
Environmental Requirements	All environmental safeguards and measures reasonably necessary to avoid, reduce, minimise or mitigate the environmental impacts of the project activities, having regard to those environmental requirements set in the conditions and requirements identified in the EPRs.
EPA	Environment Protection Authority
EPR	Environmental Performance Requirement The West Gate Tunnel Environmental Performance Requirements as referenced within the Incorporated Document approved by the Minister for Planning that set specific performance requirements for the Project and also include requirements to comply with regulations, policies and guidelines set by government and statutory authorities; achieve recognised thresholds and levels; adopt industry best-practice or well-tested construction approaches and methods; and/or adhere to a specific project commitment to achieve a particular objective.
IAC	Inquiry and Advisory Committee
Incorporated Document	Document called 'West Gate Tunnel Project Incorporated Document' (December 2017), incorporated into the Planning Schemes by Amendment GC65
IREA	Independent Reviewer and Environmental Auditor
ISO 14001	AS/NZS ISO 14001:2015 Environmental management systems – Requirements with guidance for use.
Key Approvals	Planning Scheme Amendment, Works Approval and Cultural Heritage Management Plan
KPI	Key Performance Indicator
MIRRA	Monitoring, Inspections, Reporting, Review, Audit
OEMP	Operations Environmental Management Plan
OpCo	Transurban Vic Op Co Pty Limited ACN 621 893 945
PD	Project Director
Planning Schemes	Brimbank, Hobsons Bay, Melbourne, Port of Melbourne, Maribyrnong and Wyndham planning schemes
Planning scheme amendment(PSA)	The amendments made to the Planning Schemes by Amendment GC65.
PPP	Public Private Partnership
Project	West Gate Tunnel Project
Project Land	Means land which can be used and developed for the purposes of the Project under the Planning Schemes
Project Co	Transurban
PSR	Project Scope and Requirements
The State	Victorian Government Project representative (Western Distributor Authority)
Strategy	Environmental Management Strategy (this document)
Subcontractor	Any company, body or person who is contracted to the D&C Subcontractor or OpCo for the purpose of supplying plant and/or services
WDA	Western Distributor Authority
WEMP	Worksite Environmental Management Plan

# Part A: Background

## 1. INTRODUCTION

### 1.1. Structure of Environmental Management Strategy

This Strategy provides an overarching framework to address the requirements of the Incorporated Document and EPR EM1. It is divided into two parts:

1. Part A is an overview of the Project and summarises the Environmental Requirements.
2. Part B describes the Environmental Management System, consistent with ISO 14001, for the Project.

### 1.2. Statutory Context

This document is the Environmental Management Strategy (Strategy) for the West Gate Tunnel Project (Project).

The use and development of land for the purpose of the Project is authorised and regulated by the West Gate Tunnel Project Incorporated Document (December 2017) (**Incorporated Document**) that has been incorporated into the Planning Schemes of the Melbourne, Port of Melbourne, Hobson Bay, Maribyrnong, Wyndham and Brimbank. Clause 4.6 of the Incorporated Document sets out the requirements of the Strategy for the Project.

Clause 4.6 requires that:

'Prior to the commencement of development (excluding preparatory buildings and works under clause 4.8), an Environmental Management Strategy must be approved by the Minister for Planning. The Environmental Management Strategy must be prepared in consultation with Brimbank City Council, Hobsons Bay City Council, Maribyrnong City Council, Melbourne City Council and Wyndham City Council (councils).'

The Strategy must:

- a) Outline how the Environmental Performance Requirements will be implemented.
- b) Set out the process and timing for development of the Construction Environmental Management Plan, Work Site Environmental Management Plans, Operations Environmental Management Plan, Communications and Community Engagement Plan and other plans and procedures required by the Environmental Performance Requirements, including the process and timing for consultation with councils, Roads Corporation, Melbourne Water and Environment Protection Authority as relevant; and
- c) Be prepared consistent with the Environmental Management Framework contained in the Environment Effects Statement and the Environmental Performance Requirements.

Clause 4.6.3 states that 'The Environmental Management Strategy must be reviewed by the IREA prior to submission to the Minister for Planning for approval under clause 4.6.1.'

Clause 4.6.4 states that the Strategy 'submitted to the Minister for Planning for approval under clause 4.6.1 must be accompanied by:

- a) a description of the form and extent of consultation undertaken with councils;
- b) any written comments from councils and the Independent Reviewer Environmental Auditor (IREA);
- c) a written response to comments from councils and the IREA.'

At Clause 4.6.5 of the Incorporated Document, it is stated that 'The Strategy may be prepared and approved in stages (including separately for construction and operation) but the Strategy must be approved before the commencement of development (excluding preparatory buildings and works under clause 4.8) for that stage.'

Clause 4.6.6 states that 'the EMS may be amended with the approval of the Minister for Planning', and at Clause 4.6.7 that 'The use and development must be carried out in accordance with the approved EMS.'

The Strategy must be audited by the IREA on a six monthly basis (or more frequently as required) and audit reports provided to the Minister for Planning.

Any amendments to the West Gate Tunnel Project Development and Urban Design Plans, December 2017 and the West Gate Tunnel Project Environmental Performance Requirements, December 2017 must be made with the approval of the Minister for Planning in accordance with the Incorporated Document.

The EPRs define project-wide environmental outcomes that must be achieved during the design, construction and operational phases of the Project. They are the outcome of the project development and approval process described in Section 1.5.

One of the EPRs, EMP1, includes further requirements for this Strategy. EMP1 requires the preparation of:

[a] Prepare an Environmental Management Strategy to provide an overarching framework to address environmental requirements including relevant environmental laws, key approvals, approval conditions, the environmental performance requirements (EPRs). The Environmental Management Strategy covers the construction and operations phases of the project and is to be prepared to the satisfaction of the Minister for Planning under the Incorporated Document applicable to the project.

The Environmental Management Strategy must incorporate an Environmental Management System that complies with AS/NZS ISO 14001: Environmental management systems – requirements with guidance for use for construction and operation.

The approved Environmental Management Strategy must be made publicly available on a clearly identifiable website for at least five years after the commencement of operation of the project.

This Strategy is based on, and closely mirrors, the description of the Strategy contained in the Environmental Management Framework (EMF) set out in Chapter 8 of the Project Environment Effects Statement (EES). Attachment A describes how this Strategy responds to the requirements of clause 4.6 of the Incorporated Document, EPR EMP1 and Chapter 8 of the EES. The EPRs are reproduced in Attachment B of this Strategy.

The use and development of Project Land for the Project must be carried out in accordance with the approved Strategy.

### 1.3. Purpose and Scope

The purpose of this Strategy is to provide an overarching framework to address all environmental requirements, including relevant environmental laws, project approvals, approval conditions, the EPRs and the technical requirements of the Project Agreement in relation to environmental management.

The Strategy:

- Provides a structured approach to managing environmental outcomes during the construction and operation stages of the Project
- Incorporates an Environmental Management System consistent with AS/NZS ISO 14001
- Outlines the environmental management plans (EMPs) which are subordinate to this Strategy and cover specific components of the project work.

This Strategy is consistent with the EMF (see Attachment A) and responds to the final EPRs for the Project (Attachment B).

This Strategy applies to Project Co, its consultants, contractors and suppliers throughout the design, construction and operation phases of the Project.

### 1.4. Project Overview

The Project includes tunnels and an elevated motorway connecting the West Gate Freeway with the Port of Melbourne, CityLink and the city. It provides an alternative crossing of the Maribyrnong River to the West Gate Bridge. The Project also involves the widening of the West Gate Freeway (from the M80 Ring Road and Princes Freeway to Williamstown Road) and upgrades to the road connections.

The Project has three components, shown in Figure 1.1:

- West Gate Freeway – connection of the M80 and Princes Freeway to the southern portals of the tunnels, including connections to Grieve Parade, Millers Road, Williamstown Road, Hyde Street and the West Gate Bridge

- Twin tunnels – southern portals, connecting to the West Gate Freeway, and the northern portal, which connects to the new bridge over the Maribyrnong River
- Port, CityLink and city connections – connects from the northern tunnel portal to the city and includes the Maribyrnong River crossing, connections to the Port of Melbourne, elevated roads along Footscray Road, and connections to CityLink and the city, including the Wurundjeri Way extension.

The Project also includes improvements to the shared use path network, including the extension of the Federation Trail to Hyde Street, an elevated 'veloway' for cyclists above Footscray Road, a link to the Moonee Ponds Creek Trail and a new cycling bridge adjacent to Dynon Road.

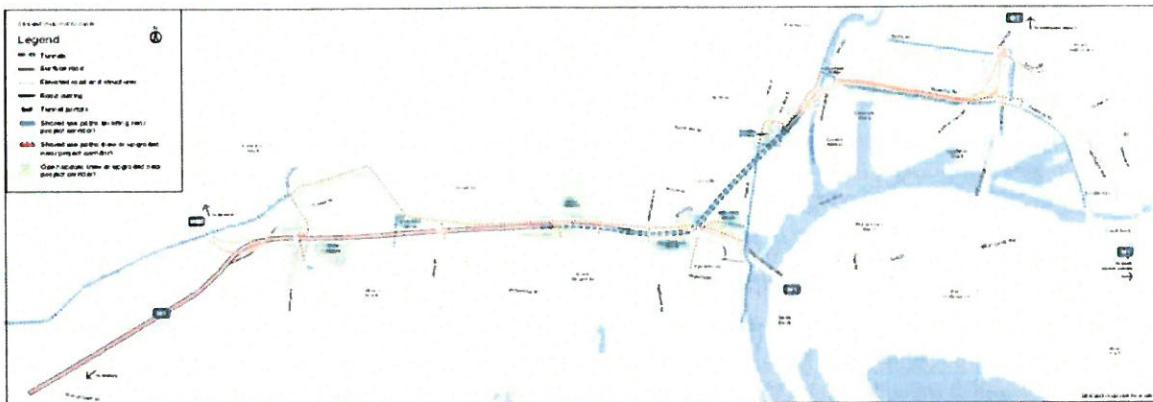


FIGURE 1.1: OVERVIEW OF PROJECT INFRASTRUCTURE

## 1.5. Project Development and Approval

The Project was assessed through an EES undertaken by the Western Distributor Authority (WDA). The EES process was managed by the Victorian Government's Department of Environment, Land, Water and Planning (DELWP) on behalf of the Minister for Planning, in accordance with the *Environment Effects Act 1978*.

The EES assessed potential impacts in 17 areas including transport, air quality, noise, landscape and visual amenity, vibration, business, ecology, social and human health. It was publicly exhibited and public submissions were sought. A draft Planning Scheme Amendment and Works Approval application were also exhibited alongside the EES.

The Minister for Planning appointed an independent Inquiry and Advisory Committee (IAC) to consider the EES and public submissions. The IAC held public hearings over a five-week period in 2017.

Following receipt of the IAC's report, the Minister for Planning issued an assessment and subsequently the Planning Scheme Amendments, Works Approval and Cultural Heritage Management Plan (CHMP) were issued, as the Key Approvals for the Project.

The Minister for Planning has also declared the Project to be a declared project to which the delivery powers apply under the *Major Transport Projects Facilitation Act 2009*.

## 1.6. Project Delivery

This section outlines the contract structure and procurement strategy for the Project, which is structured around a Public Private Partnership (PPP) model. The governance framework established under these contracts will, together with the statutory obligations and requirements of the Incorporated Document, ensure implementation of this Strategy.

Figure 1.2 is an overview of the main project parties relevant to the Strategy.

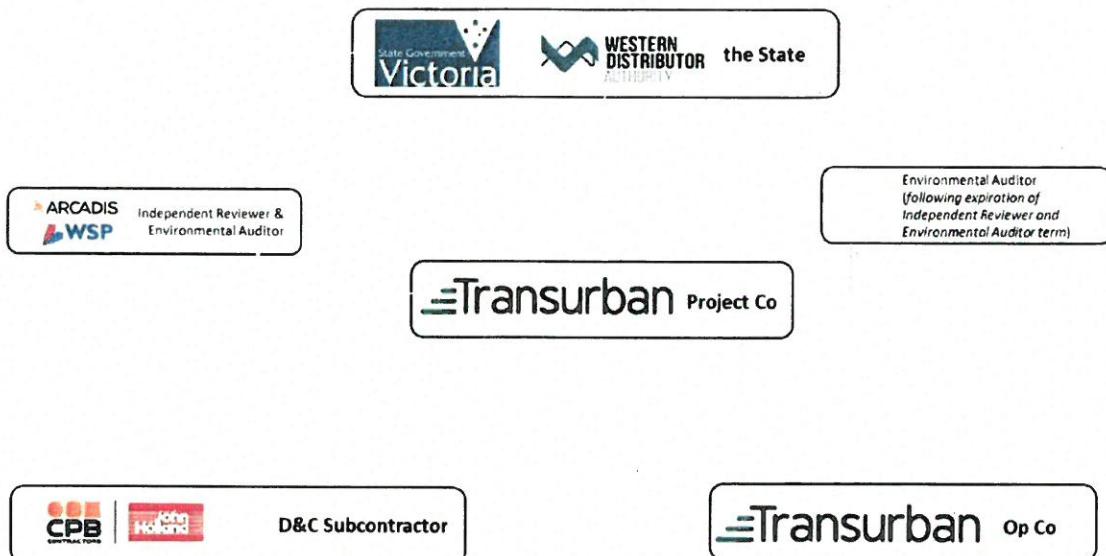


FIGURE 1.2: PROJECT PARTIES

## 1.7. Environmental Requirements

Under the PPP contracting and procurement arrangements for the Project, the State has entered into a Project Agreement with Project Co to design and construct the Project and to operate and maintain the Project for an agreed term of approximately 23 years. The Project Agreement includes the Project Scope and Requirements (PSR), which includes the Environmental Requirements for the Project.

Under the Project Agreement, Environmental Requirements means:

- All environmental safeguards and measures reasonably necessary to avoid, reduce, minimise or mitigate the environmental impacts of the project activities, having regard to those environmental requirements set in the conditions and requirements identified in the EPRs.

Project Co is responsible to the State for ensuring the Project is designed, constructed and operated in accordance with the Environmental Requirements under the Project Agreement. Project Co has subcontracted the design and construction of the relevant works for the Project to the D&C Subcontractor, CPB Contractors John Holland Joint Venture (CPBJH JV), and subcontracted the operation and maintenance of the Project to OpCo. As part of these arrangements, D&C Subcontractor and OpCo has also been contracted to prepare and implement various environmental plans (as described in Section 8).

The State and Project Co have jointly engaged an Independent Reviewer and Environmental Auditor (IREA) to:

- Review the design and construction activities of the Project
- Review and approve the D&C Subcontractor's Construction Environmental Management Plan (CEMP) and the Operations Environmental Management Plan (OEMP)
- Monitor compliance with the PSR set out in the Project Agreement
- Conduct environmental audits of compliance with the approved Construction Environmental Management Plan (CEMP), OEMP and approval requirements.

Upon expiry of the term of the IREA, Project Co will appoint an independent Environmental Auditor to conduct regular audits of compliance with the OEMP.

## 1.8. Stakeholder Consultation Strategy

Clause 4.6 of the Incorporated Document requires the Environmental Management Strategy to be prepared in consultation with Melbourne City Council, Hobsons Bay City Council, Wyndham City Council, Brimbank City Council and Maribyrnong City Council.

Clause 4.6.2 (b) of the Incorporated Document requires the Strategy to Set out the process and timing for development of the Construction Environmental Management Plan, Work Site Environmental Management Plans (WEMPS), Operations Environmental Management Plan (OEMP), Communications and Community Engagement Plan (CCEP) and other plans and procedures required by the Environmental Performance Requirements, including the process and timing for consultation with councils, Roads Corporation, Melbourne Water and the Environment Protection Authority as relevant . The process for and timing for development of the plans is set out in Section 8 below. This section describes the process and timing for stakeholder consultation.

Attachment C summarises the consultation specified in the Environmental Requirements relevant to plans and procedures. Where there are any inconsistencies, the requirements set out in the Incorporated Document and EPRs take precedence. As required by the EPRs, consultation will be conducted prior to the initial approval of the relevant document or implementation of the relevant management action, unless otherwise stated in Attachment C or agreed with the relevant stakeholder.

Consultation will occur:

- For the Strategy – has been completed and the comments received have actively influenced document.
- CEMP – prior to the commencement of any works other than preparatory works
- For the OEMP – prior to the commencement of operations
- For other activities – prior to the commencement of the relevant activity or as required by the EPR or as stated in Section 8.2, 8.3 and Attachment C.

Project Co, the D&C Subcontractor and OpCo have met with all stakeholders and have provided a consultation program. Project Co, the D&C Subcontractor and OpCo have been through three rounds of consultation on 'the Strategy' and the CEMP and sub plans will move through the same process.

The consultation process comprises:

- Project Co, the D&C Subcontractor or OpCo will (as relevant) have made a presentation to the stakeholder, including an explanation of the consultation program as part of 'the Strategy's' consultation process.
- The stakeholder will be given a reasonable opportunity to comment on the materials presented, with a minimum of 10 business days to provide comment where practicable. Where comments are provided verbally, Project Co, the D&C Subcontractor and OpCo will document the stakeholder's comments. Project Co, the D&C Subcontractor or OpCo will summarise the consultation conducted, the stakeholders' comments received and Project Co's, the D&C Subcontractor's or OpCo's response to the comments.
- As required by Clause 4.6.4 of the Incorporated Document, 'the Strategy' submitted to the Minister for Planning for approval will be accompanied by:
  - a description of the form and extent of consultation undertaken with councils;
  - Any written comments from councils and the IREA.
  - a written response to comments from councils and the IREA
- The components of the consultation summary, comments and response relevant to that stakeholder will be made available to the stakeholder, if requested, following approval of the documentation.

EPR EMP2 requires councils, VicRoads, Melbourne Water, EPA Victoria and other authorities as relevant to be consulted on the CEMP, Strategy, WEMPs and OEMP. The CEMP contains a number of sub-plans and other documents. In the initial consultation, the D&C Subcontractor will communicate the CEMP's structure and content to stakeholders and seek their views as to which components of the CEMP they wish to be further consulted on.

In consulting on the draft Environmental Management Strategy and the draft CEMP, Attachment C will be updated to reflect any additional consultation agreed to by Project Co or CPBjh.

All the key outcomes of the consultation process that is now complete have been incorporated within the Environmental Management Strategy.

## 2. ENVIRONMENTAL MANAGEMENT FRAMEWORK OVERVIEW

The EMF for the Project is set out in Chapter 8 of the EES. It outlines accountabilities for the delivery of the EPRs and compliance with all relevant environmental and planning laws, approvals, approval conditions and environmental management plans and procedures to ensure that the environmental effects of the Project and any hazards associated with its construction and operation are effectively managed.

The EMF also specifies the need for an Environmental Management Strategy to be adopted during construction and operation of the Project, and the processes to be followed in the preparation, review, approval and implementation of environmental management plans and procedures.

As required by the Incorporated Document, the Strategy must be consistent with the EMF as set out in Chapter 8 of the EES (except where a change has been considered and approved by the Minister for Planning).

The documentation to implement the EMF comprises a number of key documents from WDA (on behalf of the Victorian Government), Project Co (or its contractors) as well as relevant environmental legislation, approvals and approval conditions that must be complied with. Figure 2.1 outlines the key documents that comprise the EMF.

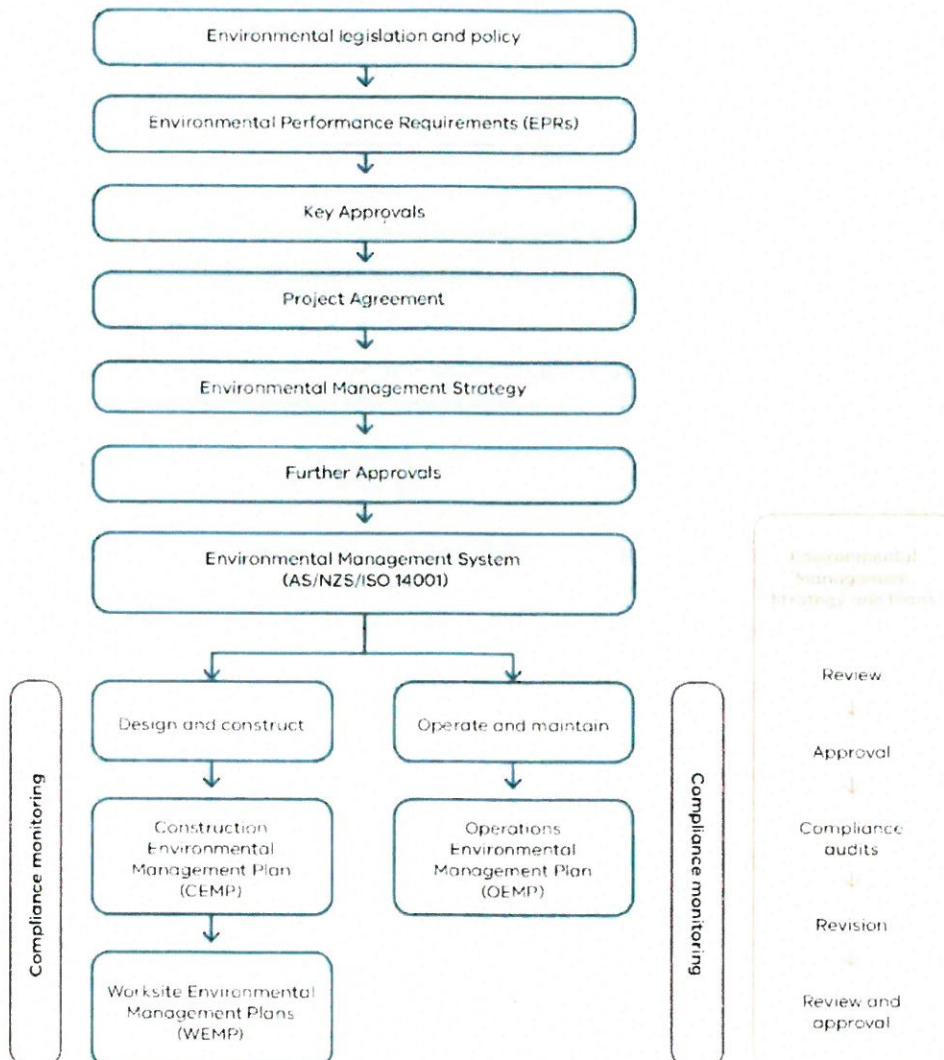


FIGURE 2.1: ENVIRONMENTAL MANAGEMENT DOCUMENTATION

As set out in the EMF, there are three levels of environmental management documentation, listed in Table 2.1. The documentation is described in the remaining parts of this section. This Strategy is a Level 1 strategic document.

TABLE 2.1: LEVELS OF ENVIRONMENTAL MANAGEMENT DOCUMENTATION

DESCRIPTION	PLANS OR DOCUMENTS
<b>LEVEL 1: STRATEGIC PLANS AND DOCUMENTS</b>	
Plans that set the strategic direction and governance for the project	Environmental Management Framework Environmental Performance Requirements Environmental Management Strategy
<b>LEVEL 2: MANAGEMENT OF PROJECT IMPACTS</b>	
Plans to manage project impacts	Construction Environmental Management Plan Operations Environmental Management Plan Related Documentation: Construction Traffic Management Plan Communications and Community Engagement Plan
<b>LEVEL 3: MANAGEMENT OF DISCRETE ISSUES OR COMPONENTS</b>	
Plans to manage localised or specific issues	Worksite Environmental Management Plans Specific plans required by the EPRs

## 2.1. Environmental Management Strategy

As explained in Section 1.3, this Strategy provides an overarching framework to address Environmental Requirements including environmental legislation, approvals and the EPRs.

The Environmental Performance Requirements (EPRs) as set out in the West Gate Tunnel Incorporated Document set specific performance requirements for the Project and also include requirements to comply with regulations, policies and guidelines set by government and statutory authorities; achieve recognised thresholds and levels; adopt industry best-practice or well-tested construction approaches and methods; and/or adhere to a specific project commitment to achieve a particular objective.

The Environmental Management Strategy responds to the EPRs and incorporates an environmental management system that complies with AS/NZS ISO 14001. The Project Agreement includes requirements to prepare a range of environmental management plans and procedures including:

- A Construction Environmental Management Plan (CEMP) and separate Worksite Environmental Management Plans (WEMPs) for the management of discrete issues, components or stages of the works
- An Operation Environmental Management Plan (OEMP) to govern the operational phase of the project.

## 2.2. Environmental Management System

This Strategy incorporates an Environmental Management System (EMS) consistent with the international environmental management system standard AS/NZS ISO 14001. Attachment A sets out how the elements of ISO 14001 are addressed in this Strategy.

## 2.3. Environmental Management Plans

As set out in Figure 2.1 and Table 2.1, there are environmental management plans that are subsidiary to this Strategy that must be consistent with the Strategy and the EMS. These are identified in Section 8 below.

Project Co has sub-contracted the responsibility to prepare and implement the CEMP and OEMP to the D&C Subcontractor and OpCo respectively.

### 3. LEGISLATIVE FRAMEWORK OVERVIEW

This section summarises the key statutory approvals for the Project, and the other plans and programs that will help the Project achieve the Environmental Requirements.

In December 2015, the Minister for Planning determined that an EES was required to assess the potential environmental effects of the Project. Through the EES process, the EPRs were developed and evolved, based on the outcomes of the technical risk and impact assessments and stakeholder comments. Subsequently, the Planning Scheme Amendments, which include the Incorporated Document, were approved by the Minister for Planning. The EPRs were approved by the Minister for Planning as part of the Amendment GC65. The EPRs approved in December 2017 are referenced in the Incorporated Document and can be amended under the Incorporated Document.

A Works Approval under the Environment Protection Act 1970 was issued (see Section 3.1.3) and CHMP under the Aboriginal Heritage Act 2009 (see Section 3.1.2) was also approved.

The Project Agreement identifies three Key Approvals for the Project (see Section 3.1) which the State was required to obtain. Section 3.2 identifies the other environment-related approvals required for the Project, which are the responsibility of Project Co under the Project Agreement, and which Project Co requires the D&C Subcontractor and OpCo to obtain and comply with in accordance with the subcontracts for the construction and operation phases of the Project.

#### 3.1. Key Approvals

Key approval documents below can all be accessed via this link:

<http://westgatetunnelproject.vic.gov.au/keyapprovals/>

Table 3.1 summarises the Key Approvals for the Project. Key approval documents below can all be accessed via this link:

<http://westgatetunnelproject.vic.gov.au/keyapprovals/>

TABLE 3.1: KEY APPROVALS

ACT / REQUIREMENT	RESPONSIBLE AUTHORITY	PURPOSE
Planning and Environment Act 1987: <ul style="list-style-type: none"><li>▪ Planning scheme amendment to regulate the Project under the Planning Schemes.</li><li>▪ The Planning scheme amendment included an Incorporated Document setting out requirements for the Project's delivery.</li></ul>	Minister for Planning	Permit the use and development of Project Land for the purposes of the Project
Aboriginal Heritage Act 2006: <ul style="list-style-type: none"><li>▪ Prepare and comply with a Cultural Heritage Management Plan</li></ul>	Aboriginal Victoria	Manage and protect Aboriginal cultural heritage during Project activities that may disturb Aboriginal cultural heritage places within the activity area
Environment Protection Act 1970: <ul style="list-style-type: none"><li>▪ Works approval application for the tunnel ventilation system as scheduled premises under the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007</li></ul>	EPA Victoria	Authorises the construction of the tunnel ventilation system, which is a scheduled premise under the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007 Following close out of the Works Approval, Project Co (or OpCo as delegated) will seek a licence under Section 20 of the Environment Protection Act 1970
Minister for Planning's assessment report under the EES	Minister for Planning	This is a key approval under the Project Agreement

The West Gate Tunnel Project (formerly known as the Western Distributor Project) was declared on 15 September 2016 under the Major Projects Facilitation Act 2009 by the Governor in Council. The project was declared for the purpose of applying the delivery powers under the Act (i.e.; excluding parts 3 and 8 of the Act). Plans of the project area were gazetted on the 8th December 2017.

### 3.1.1. Planning Scheme Amendment and Incorporated Document

Amendment GC65 amended the Planning Schemes of Brimbank, Hobsons Bay, Maribyrnong, Melbourne, Port of Melbourne and Wyndham by incorporating the West Gate Tunnel Incorporated Document into those Schemes, and giving legal effect to the Incorporated Document through clause 52.03 of the Planning Schemes. The purpose of the Incorporated Document is to permit the use and development of Project Land for the purposes of the Project.

The Incorporated Document is the planning control for the Project under the *Planning and Environment Act 1987*, and prevails over any contrary or inconsistent provision of the Planning Schemes.

The use and development permitted by the Incorporated Document is subject to being carried out in accordance with the EPRs and the EMS and generally in accordance with the Project Development and Urban Design Plans.

The gazettal of the Planning Scheme Amendment GC65 occurred on 7th December 2017.

#### 3.1.1.1. Development and Urban Design Plans and Environmental Performance Requirements

Clause 4.4.1 of the Incorporated Document requires that 'The use and development must be carried out generally in accordance with West Gate Tunnel Project Development and Urban Design Plans, December 2017 or amended Development and Urban Design Plans approved by the Minister for Planning...', while Clause 4.5.1 requires that 'The use and development must be carried out in accordance with West Gate Tunnel Project Environmental Performance Requirements, December 2017 or amended Environmental Performance Requirements approved by the Minister for Planning...'

Importantly, this Report includes the EPRs that are reproduced at Attachment B.

#### 3.1.1.2. Environmental Performance Requirements

The EPRs set specific performance requirements for the Project and also include requirements to comply with regulations, policies and guidelines set by government and statutory authorities; achieve recognised thresholds and levels; adopt industry best-practice or well-tested construction approaches and methods; and/or adhere to a specific project commitment to achieve a particular objective.

As part of developing this Strategy, Project Co, together with the D&C Subcontractor and OpCo, has analysed the EPRs and identified where in the environmental management documentation the EPRs will be addressed and the relevant areas and activities for each EPR. Attachment B summarises this analysis. Attachment B will be used to ensure the management plans address all the relevant EPRs during the development, review and approval process. The development, review and approval process and timing is described in Section 8 below.

The EPRs are presented in Attachment B, together with the project stages to which they apply and the plans applied to implement them. In the event of any inconsistency, the EPRs expressed in the 'West Gate Tunnel Project Environmental Performance Requirements' take precedence over the EPRs in Attachment B.

Clause 4.5.2 the Incorporated Document allows that 'The Environmental Performance Requirements may be amended with the approval of the Minister for Planning'.

In the case where the EPRs are amended, this Strategy will also be amended and submitted to the Minister for Planning for approval, consistent with Clause 4.6.6 of the Incorporated Document.

#### 3.1.2. Cultural Heritage Management Plan

A mandatory CHMP has been approved under Section 46 of the Aboriginal Heritage Act 2006. Section 49 of the Act requires a mandatory CHMP to be prepared if an EES is required for the Project.

The CHMP requires the management and protection of Aboriginal cultural heritage during project activities that may disturb Aboriginal cultural heritage places within the activity area. In addition, the CHMP provides

contingency arrangements for managing the discovery of any further Aboriginal cultural heritage places identified during construction works associated with the development.

The CHMP was approved on the 6th September

### 3.1.3. Works Approval

A Works Approval has been approved for the Project. It is required under the *Environment Protection Act 1970* for the tunnel ventilation system, as it is a scheduled premise under the *Environment Protection (Scheduled Premises and Exemptions) Regulations 2007*. Notice of the Works Approval application was advertised jointly with the EES, in accordance with Section 20AA of the *Environment Protection Act 1970*.

The Works Approval was approved on the 8th December.

## 3.2. Environmental Approvals

Table 3.2 outlines the Project's environmental approvals (including the Key Approvals) to be prepared and implemented by Project Co under the Project Agreement, and through its subcontracts, Project Co will ensure OpCo and the D&C Subcontractor will prepare, comply with and implement the environmental approvals.

TABLE 3.2: ENVIRONMENT APPROVALS

ACT / REQUIREMENT	TIMING	PREPARATION	RESPONSIBLE AUTHORITY	IMPLEMENTATION	PROJECT STAGE	PROJECT ACTIVITIES	PROJECT AREAS (SEE FIGURE 1.1)
Planning and Environment Act 1987: Planning scheme amendment to permit use and development of the Project under the Melbourne, Hobsons Bay, Maribyrnong, Port of Melbourne, Brimbank and Wyndham Planning Schemes. Includes Incorporated Document	Required prior to Project commencement	The State	Minister for Planning	Project Co, D&C Subcontractor and OpCo to comply with Incorporated Document	Construction Operations	All activities	Project-wide Westgate Freeway Tunnels Port, CityLink and city connections Mechanical, Electrical and Intelligent Transport Systems Buildings – Balston Street Control Centre and Alternative Freeway Control Centre
Minister's Assessment of the Environment Effects Statement including the Inquiry and Advisory Committee's report	The State	The State	Minister for Planning	NA except for Chapter 8 Environmental Management Framework  As per relevant approvals determined, subsequent to the Minister's Assessment	Construction Operations	All activities	Project-wide Westgate Freeway Tunnels Port, CityLink and city connections Mechanical, Electrical and Intelligent Transport Systems Buildings – Balston Street Control Centre and Alternative Freeway Control Centre
Aboriginal Heritage Act 2006: Prepare and comply with a Cultural Heritage Management Plan (CHMP)	Required prior to Project commencement	The State	Aboriginal Victoria	D&C Subcontractor to comply with the CHMP	Construction Operations	Clearing; earthworks and excavations	Westgate Freeway Tunnels Port, Citylink and city connections
Environment Protection Act 1970: Works approval application for the tunnel ventilation system as scheduled premises under the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007	Required prior to Project commencement	The State	EPA Victoria	D&C Subcontractor to comply with Works Approval	Construction	Design / Tunnel ventilation	Tunnels
Environment Protection Act 1970: Environmental discharge licence for the operation of the tunnel ventilation system	Application for the discharge licence to be made following	OpCo	EPA Victoria	OpCo to comply with licence	Operations	Tunnel ventilation	Tunnels

ACT / REQUIREMENT	TIMING	PREPARATION	RESPONSIBLE AUTHORITY	IMPLEMENTATION	PROJECT STAGE	PROJECT ACTIVITIES	PROJECT AREAS (SEE FIGURE 1.1)
Flora and Fauna Guarantee Act 1988: Permit for the removal of listed flora and fauna from public land	construction of the tunnel ventilation system.	Permit required prior to removal.	Project Co D&C Contractor	DELWP	D&C Subcontractor to comply with the permit	Construction	Clearing; earthworks and excavations
Heritage Act 2017: Consent to disturb an archaeological site Permit to disturb Historic Shipwreck Permit to impact a place on Victorian Heritage Register	Consent required prior to planned disturbance	Project Co D&C Contractor	Heritage Victoria	D&C Subcontractor to comply with the consents	Construction	Clearing; earthworks and excavations; works within or adjacent to waterways	Project-wide Westgate Freeway Tunnels Port, Citylink and city connections
Road Management Act 2004: Consent is required for the connection of the Project to existing freeways	Obtain Road Management Act consents, prior to construction.	Project Co D&C Contractor	VicRoads	D&C Subcontractor to comply with requisite Road Management Act consents	Construction	All activities	Tunnels
Water Act 1989: Approvals are required for works to be undertaken in relation to groundwater and waterways:	Obtain permits and licences under the Water Act, prior to works in relation to groundwater and waterways.	Project Co D&C Contractor	N/A	D&C Subcontractor to comply with permits and licences under the Water Act	Construction	Clearing; earthworks and excavations; works within or adjacent to waterways; tunnelling	Westgate Freeway Port, Citylink and city connections
▪ Licence for groundwater recharge bore	Licence prior to injecting water into an aquifer	Minister for Environment		Construction	Tunnelling	Tunnels	
▪ Works on Waterways Permit	Permit required prior to works on waterways	Melbourne Water		Construction	Works within or adjacent to waterways;	Westgate Freeway Tunnels Port, Citylink and city connections	
▪ Bore construction/ decommission licence	Licence required prior to groundwater bore works	Southern Rural Water		Construction	Utilities	Westgate Freeway Tunnels Port, Citylink and city connections	

ACT / REQUIREMENT	TIMING	PREPARATION	RESPONSIBLE AUTHORITY	IMPLEMENTATION	PROJECT STAGE	PROJECT ACTIVITIES	PROJECT AREAS (SEE FIGURE 1.1)
							Tunnels
▪ Groundwater extraction licence			Southern Rural Water City West Water	Construction	Dewatering	Utilities	Tunnels
▪ Trade waste agreement for discharge to sewer	Agreement required prior to groundwater/ surface water being disposed to sewer		DELWP	Construction Operations			
Wildlife Act 1975: Permit to take wildlife	Permit required prior to taking wildlife	Project Co D&C Contractor	D&C Subcontractor to comply with the permit	Construction	Clearing; earthworks and excavations	Westgate Freeway Port, Citylink and city connections	Tunnels
Conservation, Forests and Lands Act 1987: Submission of plan of works for waterway crossing	Permit required for waterway crossings prior to construction	Project Co D&C Contractor	DELWP	D&C Subcontractor to comply with the permit	Construction	Works within or adjacent to waterways	Westgate Freeway Port, Citylink and city connections
Pipelines Act 2005: Consent to alter the route of and/or decommission part of an oil pipeline or high pressure gas pipeline	Permit required prior to alteration	Project Co D&C Contractor	Department of Economic Development, Jobs, Transport and Resources	D&C Subcontractor to comply with the permit	Construction	Utilities	Westgate Freeway Tunnels Port, Citylink and city connections
Land Act 1958 and Crown Land (Reserves) Act 1978: Lease of unreserved and reserved Crown land outside of the Major Transport Projects Facilitation Act 2009	Lease required prior to occupation of relevant Crown land	Project Co D&C Contractor	Minister for the Environment, Climate Change & Water	D&C Subcontractor to comply with the permit	Construction	Various	n/a
Coastal Management Act 1995	Permit required prior to works on or over the Maribynong River	Project Co D&C Contractor	DELWP	D&C Subcontractor to comply with the permit	Construction	Activities on Crown land within 200 metres of high water mark of the coastal waters of Victoria (Maribynong, River crossing)	Port, Citylink and city connections

# Part B: Environmental Management System

## 4. ENVIRONMENT MANAGEMENT SYSTEM INTRODUCTION

This EMS has been tailored to ensure compliance with the Environmental Requirements. The key elements of the Environmental Requirements are explained in Section 1.7 and 5.3. These provide the background for the development of the EMS documentation described in Section 8, and for the EMS described in this Part B.

Project Co has developed the EMS in the context of the Project development, approval and delivery described in Section 1.

The EMS is consistent with AS/NZS ISO 14001:2015 Environmental management systems – Requirements with guidance for use. This EMS will be implemented to ensure a consistent approach to project delivery.

Project Co has selected competent parties and has subcontracted the design/construction and operation of the Project to the D&C Subcontractor and OpCo respectively.

The environmental governance arrangements set out in this Strategy are designed to ensure the D&C Subcontractor and OpCo carry out their respective phases of the Project in accordance with the Environmental Requirements. To help achieve this, the D&C Subcontractor and OpCo must report to Project Co and provide Project Co access to all:

- EMPS and associated documentation
- Documents and records relevant to environmental management.

Continual improvement in environmental performance is achieved through constant measurement and evaluation, audit and review of the effectiveness of environmental management measures, and adjusting and improving project environmental outcomes and the EMS itself, as required.

### 4.1. Purpose and Scope

The purpose of the EMS is to establish a plan-do-check-act system to identify and manage environmental risks and impacts across the Project, and ensure comprehensive and integrated identification and management of environmental risks and issues through project design, construction, operation and maintenance.

### 4.2. Environmental Policy

The Transurban (Project Co) Health, Safety and Environment Policy is publicly available on the Transurban website.

The D&C Subcontractor will establish and maintain an environmental policy consistent with ISO 14001. It will be appended to the CEMP.

### 4.3. Objectives and Targets

The environmental objectives for the Project are to:

- Establish and maintain an EMS in accordance with AS/NZS ISO 14001
- Comply with the Environmental Requirements
- Seek to prevent pollution, reduce waste, energy and water use and commit to recovery and recycling.

To ensure consistency in approach, a set of targets and Key Performance Indicators (KPIs) that focus on environmental aspects of the Project will be established and included in the CEMP. These KPIs will be used for internal tracking to ensure the Project remains on track to meet the EPRs.

## **5. LEGAL AND OTHER REQUIREMENTS**

This section explains the processes for identifying and complying with legislative requirements and the requirements of relevant statutory authorities, including approvals, permits, consents and licences.

### **5.1. Environmental Approvals**

The environmental approvals for the Project are described in Sections 3.1 and 3.2 (including Table 3.2).

The D&C Subcontractor and OpCo will each establish and maintain an Environmental Requirements Register.

### **5.2. Legislation and Guidelines**

The D&C Subcontractor and OpCo will establish and maintain access to applicable environmental legislation, guidelines and standards.

### **5.3. Environmental Performance Requirements**

EPRs have been developed to address the identified risks and impacts of the Project. The EPRs are performance-based and expressed in terms of outcomes to be achieved. By enabling (where appropriate) consideration of specific design alternatives to achieve a particular outcome, the EPRs facilitate innovation in ongoing design development and project implementation.

The D&C Subcontractor and OpCo are required to comply with and implement all EPRs, except where responsibility for their implementation resides with the State.

Consistent the Incorporated Document (see Section 1.2), Attachment B outlines how the EPRs will be implemented during project delivery.

### **5.4. Environmental Requirements Register**

The Environmental Requirements, including the EPRs, are obligations on the Project. These are implemented generally through the CEMP and OEMP.

The CEMP and OEMP will describe how the D&C Subcontractor and OpCo respectively will achieve the EPRs, legislative requirements and approval conditions (the Environmental Requirements)

The Environmental Requirements Register will identify:

- Relevant Project Agreement requirements, legislative requirements, approval conditions and other environmental obligations not captured in the legislation register
- Relevant EPRs
- The obligation's relevance to the Project (e.g. geographic area and/or project activity)
- Which environmental management documentation the obligation is addressed in
- The means by which the requirement will be complied with
- The evidence by which the D&C Subcontractor or OpCo will demonstrate compliance with the requirement.

The Environmental Requirements Registers will be contained in the CEMP and OEMP. It will be consistent with Attachment B.

## 6. RISK ASSESSMENTS

Environmental risk assessment is a fundamental component of the EMS and associated environmental management documentation, as explained in this section.

### 6.1. EES Risk Assessment

Environmental risk assessment has been central to the development of the EES for the Project. The EES risk assessment enabled the key environmental risks to be identified and prioritised in the specialist impact assessments. An iterative process was adopted for the risk and impact assessments for the EES to identify, assess and refine the EPRs. The various environmental Technical Reports prepared by specialists incorporate comprehensive risk and impact assessments.

Each specialist investigation conducted for the EES followed five main phases: existing conditions, consultation, risk assessment, impact assessment and the development of EPRs (to be adopted during design, construction and operation of the Project to ensure acceptable environmental outcomes).

### 6.2. Ongoing Risk Assessments

The D&C Subcontractor and OpCo will develop and implement a risk management process to identify, assess, control and review environmental risks throughout project delivery. The risk and impact assessments conducted during the EES phase will inform the risks and impacts for the delivery phase of the Project.

The D&C Subcontractor and OpCo will each maintain an environmental risk register. A risk assessment is conducted as part of the development of the EMP and OEMP and will be kept as a live register.

The objectives of risk assessment are to:

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

Risk assessments for the Project consider AS/NZS ISO 31000:2009: Risk management – Principles and guidelines. The general process for identifying potential environmental risks and impacts for the Project involves the following:

- Preparation – Check the available project information, such as the EES, Technical Reports, EPRs, construction documents, as well as information from similar infrastructure projects where available. The information is used to develop a draft list of activities, risks, impacts and controls.
- Workshops – Conduct risk assessment workshops with subject matter experts from various groups such as engineers, stakeholder management, construction, design and environment. The purpose of the workshop is to review the activities and potential risks, assign risk rating scores and allocate controls to manage risks and impacts. The process considers legislative requirements and the requirements of relevant statutory authorities, including approvals, permits, consents and licences, as well as information available from the EES and associated documents:

Identifying environmental risks and opportunities: environmental risks and opportunities associated with activities, products and services of the Project will be identified, recorded and tracked. This will include consideration of normal, abnormal (e.g. start-up and shut-down) and potential incidents and emergencies. Analysing environmental risks and opportunities: each environmental risk and opportunity will be evaluated and assigned a rating, which is determined using the consequence and likelihood criteria in the Risk Management Procedure.

Identifying adequate controls.

- Documentation – Disseminate activities, risks and controls identified during the workshop in the relevant environmental documentation such as the CEMP, OEMP and WEMPs.
- Communication – Communicate identified controls to relevant personnel:

Communications in line with planning: environmental risks, controls and accountabilities identified are communicated to all relevant personnel. This is achieved through the preparation and communication of the CEMP, OEMP and subsidiary documentation.

Regular environmental communications: environmental risks, controls and accountabilities are communicated through project communications, including relevant workforce committee meetings, toolbox talks and pre-start meetings.

Communication through training: nominated administrative controls, including procedures and training, will be communicated through the delivery of training in their requirements.

- Implementing controls – Controls are implemented by the accountable person as specified in the CEMP or WEMPs (during construction phase) or OEMP (during operations phase) by the due date.
- Risk review – The relevance and adequacy of environmental risks and controls identified in the CEMP, OEMP, risk registers and other environmental management documentation are reviewed and updated.

Through the risk assessment processes described above, environmental risks have been identified for the Project and will be managed through implementation of the CEMP and OEMP.

## 7. ROLES, RESPONSIBILITIES AND AUTHORITIES

Project Co's environmental accountabilities are formalised through a Project Agreement between the State and Transurban.

WDA administers the Project Agreement on behalf of the Victorian Government (the State).

Project Co and the State have jointly engaged an Independent Reviewer and Environmental Auditor (IREA).

The Strategy requires the preparation of a range of environmental management plans and procedures including:

- The CEMP and separate WEMPs for the management of discrete issues, components or stages of the works
- The OEMP to govern the operational phase of the Project.

These plans will be submitted to the State and the IREA for review and, in the case of the CEMP and OEMP, approval prior to implementation and the commencement of activities relevant to the plans.

The IREA will carry out independent reviews of activities and documentation and audit compliance with environmental management documents. Following expiration of the term of the IREA approximately two years after completion, the role of reviewing and approving revisions to the OEMP, conducting compliance audits and producing audit reports will be undertaken by an independent Environmental Auditor to be engaged by Project Co.

Figure 7.1 below summarises the governance framework for the Project.

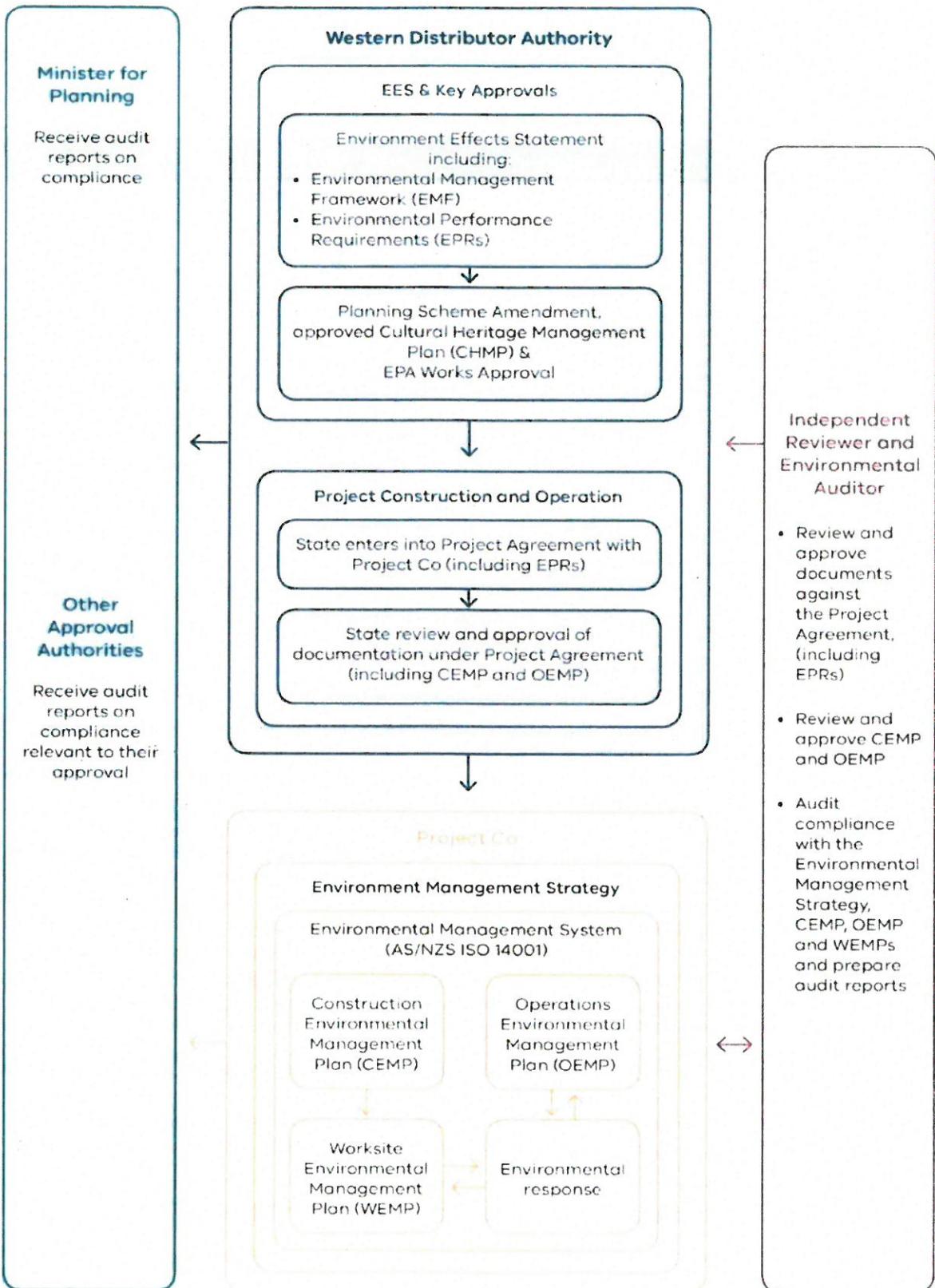


FIGURE 7.1: GOVERNANCE FRAMEWORK

## 7.1. External Stakeholders

Table 7.1 lists the responsibilities of the groups/organisation (other than Project Co and its contractors) involved in the environmental governance and strategic management of the Project, including reviews, audits and approvals.

TABLE 7.1: GROUP GOVERNANCE ROLES AND RESPONSIBILITIES

GROUP	RESPONSIBILITY
Minister for Planning	<ul style="list-style-type: none"> <li>▪ Review and approve the Strategy under the Incorporated Document</li> <li>▪ Receive six-monthly audit reports about compliance with the Strategy and other management plans, or as otherwise agreed</li> <li>▪ Administer and enforce the approved Strategy as the responsible authority for the administration and enforcement of the Incorporated Document</li> </ul>
Approval Authorities	<ul style="list-style-type: none"> <li>▪ Administer and enforce relevant approvals</li> <li>▪ Receive audit reports (or sub-reports) as to compliance with relevant approval</li> </ul>
The State (WDA)	<ul style="list-style-type: none"> <li>▪ Obtain Key Approvals comprising the Planning Scheme Amendment, Minister's Assessment EPA Works Approval, approved CHMP and project area designation declaration under the Major Transport Projects Facilitation Act 2009</li> <li>▪ Finalise the EPRs as part of the EES assessment process and before the Planning scheme amendment are made, including the Incorporated Document into the planning schemes</li> <li>▪ Mandate compliance with the EMF and EPRs as a condition of the Project</li> <li>▪ Jointly engage the IREA with Project Co</li> <li>▪ Ensure that the requirements of the EMF and the EPRs have been addressed and are complied with in the environmental management documentation</li> <li>▪ Prior to the commencement of work, verify that the contractor has complied with relevant EPRs</li> <li>▪ Review, evaluate and approve the CEMP and all revisions to the CEMP</li> <li>▪ Review and comment on the WEMPs, and receive all finalised WEMPs prior to the commencement of works covered by the WEMPs</li> <li>▪ Receive audit reports from the IREA as to compliance with the approved Strategy, CEMP, WEMPs and OEMP and take corrective action as necessary</li> <li>▪ Provide six-monthly audit reports about compliance with the Strategy and other management plans to the Minister for Planning and sub-reports to other approval authorities as appropriate, or as otherwise agreed by the Minister for Planning or approval authority</li> <li>▪ Liaise with regulators and other agencies as required</li> <li>▪ Prepare annual environmental reports to the Minister for Planning</li> <li>▪ Conduct stakeholder engagement and community consultation activities as required</li> <li>▪ Review and approve the OEMP and all revisions to the OEMP</li> </ul>
IREA	<ul style="list-style-type: none"> <li>▪ As stated below in Table 7.2</li> </ul>
Environmental Auditor (operations phase following expiration of term of IREA))	<ul style="list-style-type: none"> <li>▪ Conduct audits of compliance with the OEMP and provide audit reports to the State and Project Co</li> <li>▪ Produce six-monthly audit reports to the State for the provision to the Minister for Planning and sub-reports to other approval authorities as appropriate</li> </ul>

## 7.2. Independent Reviewer and Environmental Auditor

The auditing of Project Co and the D&C Subcontractor will be done independently, as is typical for a PPP procurement model, and as summarised below:

- The Project Agreement requires an IREA to be appointed by the State and jointly engaged by the State and Project Co.
- The role of the IREA will be to review the design and construction activities of the Project, review and approve the D&C Subcontractor's documentation and the OEMP and to monitor compliance with the PSR. The IREA will also undertake environmental audits of compliance with the approved Strategy, CEMP, WEMPs and OEMP.

The IREA's term is for the design, construction and commissioning of the Project, and for at least two years after completion.

Upon expiry of the term of the IREA, an independent environmental auditor will also be appointed by Project Co to conduct regular audits of compliance with the OEMP prior to implementation, at the frequency specified in relevant laws, approvals or the EPRs.

The environmental auditor will have the VicRoads minimum Environmental Auditing (Construction) qualifications which includes;

- Tertiary qualifications in science or engineering or another relevant field;
- Demonstrated ability to meet qualification criteria stated in ISO 19011:2003 Guidelines for quality and/or environmental management systems auditing or an industrial facilities auditor appointed pursuant to the Victorian Environment Protection Act 1970
- Demonstrated experience in environmental auditing road construction projects
- Understanding of relevant Federal and State environmental legislation, policies and guidelines; VicRoads policies and guidelines; and construction industry best practice environmental management guidelines.

Table 7.2 summarises the responsibilities of the independent auditors.

TABLE 7.2: INDEPENDENT AUDITOR ROLES AND RESPONSIBILITIES

GROUP	ENGAGEMENT TERM	APPOINTED BY	RESPONSIBILITY
Independent Reviewer and Environmental Auditor (IREA)	Design, construction and commissioning of the Project, and for at least two years after completion	Jointly engaged by the State and Project Co	<ul style="list-style-type: none"> <li>Review and approve the proposed CEMP and OEMP prior to implementation to ensure compliance with the Environmental Management Strategy and Environmental Requirements in accordance with EPR EM3</li> <li>Review and approve amendments to the CEMP and OEMP</li> <li>Review and comment on each proposed WEMP</li> <li>Carry out the following audits: <ul style="list-style-type: none"> <li>Six-monthly audits of compliance with the Environmental Management Strategy</li> <li>Quarterly audits of compliance with the CEMP</li> <li>Monthly environmental audits of implemented WEMPs including auditing the effectiveness of WEMPs</li> </ul> </li> <li>Produce six-monthly audit reports and sub-reports to the State for provision to the Minister for Planning and other approval authorities as appropriate</li> </ul>
Independent Environmental Auditor (IEA)	Following expiration of the term of IREA for the remaining duration of the operations phase	Project Co	<ul style="list-style-type: none"> <li>Review and approve amendments to the OEMP prior to implementation.</li> <li>Conduct regular audits of compliance with the OEMP at least at the frequency as specified in the Environmental Requirements</li> <li>Produce six-monthly audit reports and sub-reports to the State for provision to the Minister for Planning and other approval authorities as appropriate</li> </ul>

Six monthly audit reports are made public as required by the EPR EMP3.

### 7.3. Project Co and its Subcontractors

Project Co has sub-contracted the performance of the project activities, including environmental management, to the Project Co, D&C Subcontractor and OpCo. Therefore, the day-to-day management of environmental issues on the Project are managed by these organisations.

Organisation charts for relevant stages of the Project will be available at offices and referred to in inductions for Project Co, the D&C Subcontractor and OpCo.

All organisation charts will be reviewed and updated on an as-needs basis to reflect any changes to the management structure. In the event of absences, delegation of authority is to the next upward level as shown on the chart, unless specifically agreed otherwise by the relevant Project Director.

Relevant managers are responsible for defining and communicating relevant environmental responsibilities and accountabilities for employees within their area of responsibility.

All employees and subcontractors are responsible for performing and managing their activities and operations according to the requirements in this Strategy, the CEMP and OEMP as applicable. Individual responsibilities will vary with the work performed and its potential impact on the environment.

During the design and construct phase of the Project, Project Co (and the D&C Subcontractor in accordance with the D&C Subcontract) will be required to:

- Carry out the design and construction of the Project in accordance with Environmental Requirements, which include laws, approvals and the EPR.
- Obtain all approvals relating to the environment required for the design and construction of the Project other than the Key Approvals, which are obtained by the State. The Key Approvals are discussed in Section 3.1 and the other approvals are listed in Part 3.2 of this Strategy.
- Prepare, implement and update project-specific Project Plans relating to environmental management including the CEMP and Groundwater Management Plan, and separate WEMPs for the environmental management of discrete stages or components of the works which could have an adverse effect on the environment.
- Prepare, implement and update a Communications and Community Engagement Plan (CCEP).

During the operations phase of the Project, Project Co (and OpCo in accordance with the Operating Services Agreement) will be required to:

- Carry out the operation and maintenance of the Project in accordance with Environmental Requirements
- Obtain all approvals relating to the environment required for the operation and maintenance of the Project other than the Key Approvals listed above, which are obtained by the State. A list of the operational approvals can be found at Section 3 of this Strategy.
- Prepare, implement and update project-specific Project Plans relating to environmental management including an OEMP
- Prepare, implement and update a Communications and Community Engagement Plan.

Project Co has subcontracted the design and construction of the relevant works for the Project to the D&C Subcontractor, and subcontracted the operation and maintenance of the Project to OpCo. As part of these arrangements, D&C Subcontractor and OpCo has also been contracted to prepare and implement various environmental plans.

Table 7.3 below sets out the responsibility for undertaking environmental tasks as required of Project Co and its contractors. Statutory compliance and implementation is legally the responsibility of all parties

TABLE 7.3: PROJECT CO, D&C SUBCONTRACTOR AND OPCO ROLES AND RESPONSIBILITIES

RESPONSIBILITY	PROJECT CO	D&C SUBCONTRACTOR (CONSTRUCTION PHASE)	OPCO (OPERATIONS PHASE)
▪ Obtain all other project approvals and comply with all approval conditions and obtain necessary consents	Sub-contracted	Yes	Yes
▪ Prepare and implement the Strategy as approved by the Minister for Planning	Sub-contracted	Yes	Yes
▪ Jointly engage the IREA with the State	Yes		
▪ Engage a dedicated Environmental Representative with authority and responsibility for environmental management	Yes	Yes	
▪ Comply with all legislative requirements, approvals, approval conditions, the Strategy and EPRs for the duration of the concession period	Sub-contracted	Yes	Yes
▪ Ensure that all contractors similarly comply with such requirements and take corrective action as necessary	Yes	Yes	Yes
▪ Prepare and implement the CEMP as approved by the State and the IREA	Sub-contracted	Yes	
▪ Prepare and implement the WEMPs responding to the comments made by the State and the Independent Reviewer and as approved by the Environmental Representative	Sub-contracted	Yes	
▪ Prepare and implement the OEMP as approved by the State and the IREA	Sub-contracted		Yes
▪ Attend to reviews of the CEMP and the OEMP and submit revised plans to the State and IREA for review and approval	Sub-contracted	Yes	Yes
▪ Assist in the conduct of compliance audits by the IREA of each of the Strategy, CEMP, OEMP and WEMPs	Sub-contracted	CEMP and WEMPs	OEMP
▪ Appoint an independent Environmental Auditor to review and approve revisions to the OEMP and conduct compliance audits, following expiration of the term of the IREA	Yes		
▪ Assist in the conduct of compliance audits by the independent Environmental Auditor	Subcontracted		OEMP
▪ Assist the State in the provision of six-monthly audit reports for submission to the Minister for Planning and sub-reports to other approval authorities as appropriate	Subcontracted	Yes.	Yes
▪ Take any necessary corrective action required to address issues raised in the audit reports of the IREA or independent Environmental Auditor (as the case may be), to the satisfaction of the State and IREA or independent Environmental Auditor as appropriate	Yes	Yes	Yes
▪ Prepare monthly environmental reports to the State as set out in section 8.8.1 of the EMF	Yes	Yes, via Project Co	Yes, via Project Co
▪ Conduct stakeholder engagement and community consultation activities in consultation with the State	Sub-contracted	Yes	Yes

### 7.3.1. Project Co

Project Co will appoint an Environmental Representative for the delivery phase to:

- Be responsible for environmental management issues during construction and operation on behalf of Project Co
- Review all environmental audit reports and ensure issues identified are addressed
- Approve WEMPs after responding to items raised by the State and IREA.

### 7.3.2. D&C Subcontractor and OpCo

Key construction and operational roles with environmental responsibilities for the Project include:

- All project personnel
- Project director
- Environment managers
- Environmental team.

A description of the environmental responsibilities and levels of authority of each of these positions is to be provided in the CEMP and OEMP.

The D&C Subcontractor and OpCo are responsible for:

- Defining, documenting and communicating roles, responsibilities and authorities in order to facilitate effective environmental management
- Appointing a manager accountable for maintaining the CEMP and OEMP respectively, including preparing reports for submission to Project Co
- Making resources available to establish, implement, maintain and improve the CEMP and OEMP as relevant.

The D&C Subcontractor and OpCo Project Directors are responsible for establishing, approving and communicating an organisation structure that is best suited for the delivery of the Project's environmental objectives. Detailed environment organisational charts for the construction and operations phases will be contained in the CEMP and OEMP respectively.

## 8. ENVIRONMENTAL MANAGEMENT DOCUMENTATION: APPROVALS, AUDITS AND AMENDMENTS

Project Co has developed the Strategy (incorporating the EMS) to fulfil the Environmental Requirements and to satisfy Clause 4.6 of the Incorporated Document.

Following contract award and prior to commencement of construction, the D&C Subcontractor will be required to develop a CEMP to meet the requirements of the Key Approvals and the other Environmental Requirements. Project Co and OpCo will also be required to develop an OEMP to meet the requirements of the approvals and Environmental Requirements for the operations phase. The CEMP and OEMP will describe the manner in which the D&C Subcontractor and OpCo will meet the approved EPRs and approvals and identify the processes for identifying and managing environmental risks.

### 8.1. Required Management Plans

Table 8.1 sets out the environmental management documentation for the Project.

TABLE 8.1: PROJECT ENVIRONMENTAL MANAGEMENT DOCUMENTATION HIERARCHY

DOCUMENTATION LEVEL	RESPONSIBILITY	DOCUMENTATION ELEMENTS
State requirements	The State	<ul style="list-style-type: none"><li>▪ Project Agreement and PSRs incorporating the requirements of:<ul style="list-style-type: none"><li>- EPRs approved as a result of the EES process</li><li>- Regulatory requirements</li></ul></li></ul>
Environmental Management Strategy	Project Co	<ul style="list-style-type: none"><li>▪ This document</li><li>- Setting out Environmental Management Strategy</li><li>- Incorporating environmental management system</li><li>- Setting out the framework for development of specific environmental management plans by the D&amp;C Subcontractor and OpCo</li></ul>
Construction Environmental Management Plan	D&C Subcontractor	<ul style="list-style-type: none"><li>▪ Describes how the D&amp;C Subcontractor will achieve the Environmental Requirements for the construction phase of the Project</li><li>▪ Details the environmental management, control and contingency measures to be implemented in association with construction activities required for the Project to manage the works so as to minimise adverse impacts on the environment</li></ul>
Worksite Environmental Management Plans	D&C Subcontractor	<ul style="list-style-type: none"><li>▪ Details the management of discrete construction stages or components of construction that may have an adverse impact on the environment</li></ul>
Additional plans required under the Environmental Requirements	D&C Subcontractor	<ul style="list-style-type: none"><li>▪ Additional plans required under the EPRs – Groundwater Management sub-plan, Ecology Management Plan, which includes a Tree Protection Sub-plan, Construction Noise and Vibration Management Plan, Spoil and Soil Management Plan, Air Quality Management and Monitoring Plan, Communications and Community Engagement Plan, Archaeological Management Plan, Landscaping Plan, Surface Water Management, Traffic Management Plan</li><li>▪ See Table 8.3</li></ul>
Operations Environmental Management Plan	OpCo	<ul style="list-style-type: none"><li>▪ Describes how OpCo will achieve the Environmental Requirements for the operations phase of the Project</li><li>▪ Details the environmental management, control and contingency measures which are to be implemented in association with operations activities required for the Project to manage the works so as to minimise adverse impacts on the environment</li></ul>

The CEMP and OEMP will set out other specific documentation required, such as:

- Attachments to the management plans, including:

Risk register, Environmental Requirements register, monitoring schedule; Sub-plans; and

- Records and checklists, including:

Monitoring and inspection records; and Reports.

## 8.2. Management Plan Development and Initial Approval

The process and timing for preparing and approving the primary environmental management documents is summarised in Table 8.2. It includes the process and timing of consultation with relevant parties. Section 1.8 and Attachment C include further details on the consultation process.

TABLE 8.2: DEVELOPMENT AND INITIAL APPROVAL OF ENVIRONMENTAL MANAGEMENT DOCUMENTATION

DOCUMENT	PREPARATION	REVIEWERS	CONSULTATION WITH	APPROVAL	REQUIRED TIMING
Environmental Management Strategy	Project Co	The State IREA	Councils, VicRoads, Melbourne Water, EPA, DELWP	the State, Minister for Planning	Prior to commencing construction
Construction Environmental Management Plan	D&C Subcontractor	Project Co, IREA, the State	Councils, VicRoads, Melbourne Water, EPA, DELWP	the State	Prior to commencing construction
Worksite Environmental Management Plans	D&C Subcontractor	Project Co, IREA, the State	Councils, VicRoads, Melbourne Water, EPA, DELWP	Environmental Representative	Prior to specific works commencing
Operations Environmental Management Plans	OpCo	Project Co, IREA, the State	Councils, Melbourne Water, VicRoads, EPA, DELWP	IREA, the State	Prior to completion

The CEMP and OEMP, and any amendments to them, must be approved by the IREA before being provided to the State for review and approval.

## 8.3. Environmental Requirements addressed in management plans

Appendix B provides a summary of all EPRs, where the EPR is likely to be addressed by reference to the relevant management plan or project document, and how compliance against these requirements will be demonstrated (at a high level). Some EPRs will be addressed through multiple documents.

To facilitate consistent implementation of EPRs through environmental management and design documentation, and clarity in how compliance will be demonstrated, Project Plans (as defined in section 2 of Part F1 of the PSR) will provide additional information on matters such as (where relevant):

- Supporting documentation or processes to be applied (eg. to define environmental limits) where this is not stated in the EPR
- Dependencies between EPRs where compliance with an EPR is reliant on implementation of another EPR
- Linkages between documentation relevant to an EPR and processes for demonstrating compliance where an EPR is addressed across multiple documents or procedures
- Geographical scope, phasing or other factors which limit the application of the EPR, or inform the definition of roles and responsibilities.

Consistent with Appendix B, relevant Project Plans will be required to contain a compliance matrix in the introductory section to demonstrate how the relevant EPRs have been addressed. It is expected that as a

minimum this will include specific cross-references to the sections of the plan which address each relevant EPR.

How each EPR will be implemented, and compliance demonstrated, will be further developed by Project Co, the D&C Contractor and Op Co as the plans and procedures in Appendix B are developed, and will be reviewed by the IREA and the State.

#### 8.4. Additional Plans required by the EPR's

Table 8.3 lists the additional plans required by the Environmental Requirements, and a summary of the process and timing for developing and implementing these plans. While the D&C Subcontractor is responsible for preparing most of these plans, Project Co will be consulted on all plans that form part of the CEMP or CCEP.

TABLE 8.3: ADDITIONAL DOCUMENTS REQUIRED BY THE EMF/EPRS

EPR NO. / DOC. NAME	PREPARATION	TIMING	CONSULTATION	APPROVAL	IMPLEMENTATION (BY)
EPR EMP4 Complaints Management System	D&C Subcontractor	Prepared prior to construction Implemented prior to and during construction	D&C Subcontractor	The State	Managed through the Communications and Community Engagement Plan (CCEP) (D&C Subcontractor)
The Complaints Management System is part of the CCEP and includes processes for the recording, management and resolution of complaints from affected stakeholders. It is prepared by the D&C Subcontractor, developed in consultation with Project Co, and approved by the State prior to construction commencing.					
EPR AQP4 Ambient Air Quality Monitoring Program	D&C Subcontractor	Prepared prior to and implemented during construction	EPA	Approved as part of EPR AQP6	Managed through the CEMP and OEMP (D&C Subcontractor) (OpCo)
Develop and undertake an ambient air quality monitoring program in consultation with EPA to measure the air quality impacts of West Gate Tunnel Project, including monitoring during construction, and five years post opening of the Project, or such lesser period as agreed with EPA Victoria at nominated air quality monitoring station locations It is prepared as part of the Air Quality Management and Monitoring Plan (EPR AQP6).					
EPR AQP6 Air Quality Management and Monitoring Plan	D&C Subcontractor	Prepared prior to and implemented during construction	As per CEMP consultation (Section 1.8 and Attachment C)	As per CEMP approval (Section 8.2)	Managed through the CEMP (D&C Subcontractor)
The Air Quality Management and Monitoring Plan is included in the CEMP to minimise impacts of dust, odour and vehicle emissions during construction. It is prepared as part of the CEMP.					
EPR AQP7 Roadside air quality mitigation strategy	OpCo	Prepared if post-construction monitoring shows a significant deterioration of air quality as a result of the Project at specific locations	As per OEMP consultation (Section 1.8 and Attachment C)	To the satisfaction of the EPA	Managed through the OEMP (OpCo)
The Roadside Air Quality Mitigation Strategy would be developed and implemented for specific locations where post-construction monitoring shows a significant deterioration of air quality as a result of the Project.					

EPR NO. / DOC. NAME	PREPARATION	TIMING	CONSULTATION	APPROVAL	IMPLEMENTATION (BY)
	It would be prepared as part of the OEMP.				
EPR BP5 Business Involvement Plan (part of CCEP)	D&C Subcontractor	Prepared prior to and implemented during construction	Local councils and other affected stakeholders	The State	Managed through the CCEP (D&C Subcontractor)
	As part of the CCEP, a Business Involvement Plan is to be prepared, in consultation with local councils and other affected stakeholders, in advance of works commencing, to inform stakeholders about progress of construction activities, including significant milestones, potential impacts, mitigation measures, changed traffic conditions and other matters which are of interest or concern to them. It is prepared prior to construction commencement.				
EPR CSP 2 Contaminated soil and spoil management sub plan	D&C Subcontractor	Prepared prior to and implemented during construction	As per CEMP consultation (Section 1.8 and Attachment C)	To the satisfaction of the EPA	D&C Subcontractor
	The CEMP must include a sub-management plan that sets out the requirements and methods for contaminated soil and spoil management developed to the satisfaction of in consultation with EPA Victoria. The contaminated soil and spoil management plan must include undertaking a detailed assessment prior to any excavation of potentially contaminated areas to identify location, types and extent of any contaminated land and properties within or adjacent to the Project boundary, and sensitive land uses affected by construction activity outside the Project boundary, and assessing the potential impact for human health, environmental risk and odour. This assessment must include but not be limited to consideration of the following: <ul style="list-style-type: none"><li>• Potential contamination risks, including landfill gas migration at the former quarry locations and landfills in accordance with Landfill BEPM publication 788</li><li>• Potential contamination risks in accordance with Landfill BEPM publication 788 associated with any alteration of the 220kV power lines and any other utilities</li><li>• Potential contamination risks associated with any works to the North Yarra Main Sewer</li><li>• Potential contamination risks and waste classification of the sediments in the Maribyrnong River and Moonee Ponds Creek</li><li>• Potential impacts posed by contamination sources adjacent to the northern portal area</li><li>• Presence of soil contamination where excavations are proposed in the South Dynon rail yards</li><li>• Potential contamination risks in locations where public open spaces are proposed.</li></ul>				
EPR CHP1 Cultural Heritage Management Plan (CHMP) (See Section 3.1.2)	The State	Prepared by Project Co / the State prior to construction Implemented by D&C Subcontractor during construction	N/A	Aboriginal Affairs Victoria	The CHMP is a separate document that must be complied with by Project Co / D&C Subcontractor
	As explained in Section 3.1.2, under the Aboriginal Heritage Act 2006, a CHMP is to be developed, implemented and complied with. It is prepared prior to construction and implemented and complied with during				

EPR NO. / DOC. NAME	PREPARATION	TIMING	CONSULTATION	APPROVAL	IMPLEMENTATION (BY)
construction.					
EPR CHP3 Archaeological Management Plan	D&C Subcontractor	Prepared prior to and implemented during construction	To the satisfaction of the Executive Director, Heritage Victoria	Executive Director, Heritage Victoria	Managed through the CEMP (D&C Subcontractor)
An Archaeological Management Plan is to be developed and implemented, detailing measures to avoid, minimise, mitigate and manage disturbance of archaeological sites and values affected by the works. It is developed and approved prior to construction commencement.					
EPR CHP7 Heritage Interpretation Strategy	D&C Subcontractor	Prepared prior to construction	Local councils Aboriginal community	The State	Managed through the CEMP (D&C Subcontractor)
A Heritage Interpretation Strategy for the Project is to be developed and implemented, seeking to explore historical and Aboriginal cultural heritage themes. It is to be prepared prior to construction and will involve consultation with Melbourne City Council, Hobsons Bay City Council, Wyndham City Council, Brimbank City Council and Maribyrnong City Council and the Aboriginal community.					
EPR SP5 Community Involvement and Participation Plan (CIPP)	The State	Prepared by Project Co / the State prior to construction Implemented by D&C Subcontractor during construction	Local Councils	The State	The CIPP is a separate document that must be complied with by Project Co / D&C Subcontractor
Develop and implement a CIPP in consultation with Council's and representatives of communities affected negatively by the impacts of the Project in order to improve community connectedness and cohesiveness. Social legacy outcomes and tasks that could be considered for funding under the CIPP include: community partnership programs; community support grants; running of community events and festivals; sponsorships of local sporting clubs; small capital works targeting community, sporting and recreation facilities; a wide range of other 'community led' initiatives.					
EPR EP2 Tree Protection Plan	D&C Subcontractor	Prepared prior to and implemented during construction	As per CEMP consultation (Section 1.8 and Attachment C)	As per CEMP approval (Section 8.2)	Managed through the CEMP (D&C Subcontractor)
A Tree Management Plan is to be developed as part of the CEMP; for protection of retained trees based on the recommendations of Australian Standard 4970-2009 Protection of Trees on Development Sites. It is to be included with the CEMP, and is to be prepared and approved prior to construction.					
EPR EP6 Landscaping Plan	D&C Subcontractor	The plan must be prepared in consultation with Councils	Local councils City West Water Melbourne Water	The State	Referred to in the CEMP; however, is a separate document, managed by the Design Team

EPR NO. / DOC. NAME	PREPARATION	TIMING	CONSULTATION	APPROVAL	IMPLEMENTATION (BY)
			IREA		(D&C Subcontractor)
		A Landscaping Plan is to be prepared and implemented, which includes plans for replacement of affected planted vegetation to achieve a canopy of equal (or greater) size of healthy, mature examples of the species.  It is to be prepared in consultation with Melbourne City Council, Hobsons Bay City Council, Wyndham City Council, Brimbank City Council, and Maribyrnong City Council and reviewed by the IREA.			
EPR GWPI Groundwater Management Plan	D&C Subcontractor	Prepared prior to and implemented prior to and during construction	As per CEMP consultation (Section 1.8 and Attachment C)	As per CEMP approval (Section 8.2)	Managed through the CEMP and OEMP (D&C Subcontractor) (OpCo)
		A Groundwater Management Plan is to be prepared and implemented that sets out the measures for management, monitoring, reuse and disposal of groundwater inflows during construction and operation that comply with relevant legislation and guidelines.  The Groundwater Management Plan must include the monitoring programs as required by EPR GMP5 and EPR GWP5.  It is to be prepared as part of the CEMP in consultation with EPA, and must be approved with the CEMP prior to construction.			
EPR NVP7 Construction Noise and Vibration Management Plan	D&C Subcontractor	Prepared prior to and implemented prior to and during construction	As per CEMP consultation (Section 1.8 and Attachment C)	As per CEMP approval (Section 8.2)	Managed through the CEMP (D&C Subcontractor)
		A Construction Noise and Vibration Management Plan is to be prepared and implemented to monitor, manage and mitigate construction noise and vibration.  It is to be prepared as part of the CEMP, and must be approved with the CEMP prior to construction.			
EPR SP2 Communications and Community Engagement Plan (CCEP)	D&C Subcontractor	Prepared prior to and implemented prior to and during construction	Local councils	The State	Managed through the CCEP (D&C Subcontractor)
		A CCEP is to be developed and implemented in consultation with affected local councils to engage and consult the community and potentially affected stakeholders and discuss progress of construction activities and operation.  The CCEP need to refer to the Workforce development Plan and the Local Industry Development Plan.  It is to be prepared and approved prior to construction, and includes consultation with Melbourne City Council, Hobsons Bay City Council, Wyndham City Council, Brimbank City Council and Maribyrnong City Council.  The CCEP will be reviewed and updated for the operations phase			
EPR TP1 Public Transport Strategy	D&C Subcontractor	Prepared during detailed design	As per Attachment C	The State	Not included in the CEMP.  Separate document, managed by D&C Subcontractor

EPR NO. / DOC. NAME	PREPARATION	TIMING	CONSULTATION	APPROVAL	IMPLEMENTATION (BY)
	A Public Transport Strategy is to be prepared with Public Transport Victoria to minimise impacts on buses, trams and rail.				
EPR SWP 7 Surface Water Management Plan	D&C Subcontractor	Prepared prior to and implemented prior to and during construction	Victorian EPA and Melbourne Water	Project Co, the State	Managed through the CEMP (D&C Subcontractor)
	<p>The CEMP must include a sub-management plan that sets out the Surface Water Management requirements and methods for:</p> <ul style="list-style-type: none"> <li>• Best practice sediment and erosion control and monitoring, in accordance with EPA Victoria publications 275 (1991), 480 (1996), and 960 (2004)</li> <li>• Management of potential surface water run-off impacts and any disturbance of contaminated bed soil associated with construction</li> <li>• Maintenance of existing flow paths, drainage lines and floodplain storage</li> <li>• Location and bunding of any contaminated material (including tunnel spoil and stockpiled soil) to the 1% AEP flood level and to the satisfaction of EPA Victoria and the relevant drainage authority</li> <li>• A flood emergency management plan including consideration of scheduling works</li> <li>• Bunding of the tunnel portals to an appropriate level during the construction phase.</li> </ul>				
EPR TP3 Traffic Management Plan	D&C Subcontractor	Prepared prior to and implemented during construction	Relevant road management authorities	the State	Not included in the CEMP. Separate document, managed by the Construction Team. (D&C Subcontractor)
	A Traffic Management and Worksite Traffic Management Plan is to be developed and implemented, with measures to minimise disruption to motor vehicle traffic, parking, bicycle and pedestrian movements during construction, in consultation with relevant road management authorities. It is prepared and approved prior to construction.				

## 8.5. Review and Amendment

Table 8.4 summarises the reviews to be performed for the environmental documents. This process applies should there be a change to the approved EPRs.

Additionally, Sections 8.6, 9.9, 9.10, 9.11, and 9.12 provide further details on the auditing, review and improvement process.

TABLE 8.4: ENVIRONMENTAL DOCUMENTATION – REVIEW AND AMENDMENTS PROCESS

NAME	AMENDMENTS BY	DESCRIPTION	REVIEWS REQUIRED*
Strategy	D&C Subcontractor OpCo	The Strategy may be amended from time to time to the satisfaction of the Minister for Planning.  Amendments to the Strategy require formal reviews and approval	<ul style="list-style-type: none"> <li>▪ Project Co and the State – review, evaluate and approve</li> <li>▪ Minister for Planning – must approve the Strategy under the Project Incorporated Document</li> <li>▪ Written comments from Councils and IREA</li> </ul>
CEMP	D&C Subcontractor	The CEMP must be reviewed at least every six months and necessary amendments made to clarify or improve environmental management practices  Based on the results of audits, the CEMP may be updated	<ul style="list-style-type: none"> <li>▪ IREA – review, evaluate and approve</li> <li>▪ Project Co and the State – review, evaluate and approve</li> </ul>
WEMPs	D&C Subcontractor	Based on the results of audits, the WEMPS may be updated	Ongoing audits form part of the WEMP review process.
OEMP	OpCo	The OEMP must be reviewed at least every 12 months and necessary amendments made to clarify or improve environmental management practices  Based on the results of audits, the OEMP may be updated	<ul style="list-style-type: none"> <li>▪ IREA until the expiry of its term – review, evaluate and approve</li> <li>▪ Environmental Auditor following the expiry of the IREA term – review, evaluate and approve</li> <li>▪ Project Co and the State – review, evaluate and approve</li> </ul>

\* Note: where minor amendments to documents are made, such as administrative changes or changes that do not alter environmental risk, the documents may be revised and updated internally without formal review by other entities. However, any changes to the Strategy must be to the satisfaction of the Minister for planning (see clause 4.6.6 of the Incorporated Document).

## 8.6. Implementation and External Audits

Once approved, the environmental management plans described in Section 8 are implemented to manage environmental risks. As part of the performance management process, regular audits are required in accordance with the EMS.

Table 8.5 summarises the audits required for the environmental management plans, and the relevant parties that will undertake those audits. Sections 9.9, 9.10, 9.11, and 9.12 provide further details on the auditing, review and improvement process.

TABLE 8.5: ENVIRONMENTAL DOCUMENTATION – IMPLEMENTATION AND EXTERNAL AUDITS

NAME	IMPLEMENTATION	DESCRIPTION	AUDITS REQUIRED
Strategy	D&C Subcontractor OpCo	The approved Strategy is to be implemented prior to carrying out all but preparatory works and audited for compliance	<ul style="list-style-type: none"> <li>▪ IREA – conduct 6 monthly audits and produce audit reports to the Minister for Planning during the construction phase</li> <li>▪ Project Co Environmental Representative – review audit reports and action as necessary</li> </ul>
CEMP	D&C Subcontractor	Approved CEMP is to be implemented prior to carrying out works, and audited for compliance	<ul style="list-style-type: none"> <li>▪ IREA – conduct quarterly compliance audits and produce audit reports</li> <li>▪ D&amp;C Subcontractor – review audit report and action as necessary</li> <li>▪ Project Co Environmental Representative – review audit reports and action as necessary</li> </ul>
WEMPs	D&C Subcontractor	WEMPs as approved by the Environmental Representative must be implemented and audited for effectiveness	<ul style="list-style-type: none"> <li>▪ IREA – conduct monthly audits of WEMPs and produce audit reports</li> <li>▪ D&amp;C Subcontractor - review audit report and action as necessary</li> <li>▪ Project Co Environmental Representative – review audit reports and action as necessary</li> </ul>
OEMP	OpCo	Approved OEMP is to be implemented upon completion of construction and audited for compliance	<ul style="list-style-type: none"> <li>▪ IREA until the expiry of its term and thereafter the Environmental Auditor – conduct regular compliance audits and produce audit reports</li> <li>▪ Project Co Environmental Representative – review audit reports and action as necessary</li> </ul>

## 8.7. Construction Environmental Management Plan

The CEMP will outline how D&C Subcontractor will achieve the Environmental Requirements for the construction phase of the Project. The CEMP will be consistent with and meet the requirements of the EPRs and Environmental Requirements, and include procedures for environmental management measures and controls for implementation during the construction phase to minimise or avoid environmental impacts in carrying out the construction activities. The EPRs specify a number of sub plans which are required and the CEMP may also include other sub plans to address specific environmental topics or activity areas. The CEMP and relevant sub plans must be approved before the commencement of the associated activities.

The D&C Subcontractor will also prepare an Environmental Requirements Register included in the CEMP (see Section 5.4). The Register is a D&C Subcontractor spreadsheet used by the Environment Team to track and ensure compliance with the Environmental Requirements. The spreadsheet includes the following sections:

- Legislation
- EPRs
- Ongoing permits and secondary approvals
- Monitoring, inspection, reporting, review and audit schedule.

Each EPR is included in the Register, along with the identified method for implementing the EPR. The delivery group responsible for addressing the EPR, and compliance checks are also included, to ensure that each EPR is being met.

### 8.7.1. Content requirements for CEMP

Consistent with Section 8.7.3 of the EMF, this section sets out the requirements for the CEMP.

The CEMP must be consistent with, and meet as a minimum, the requirements of all relevant environmental laws, approvals, approval conditions, the Environmental Management Strategy and the EPRs.

The CEMP will set out roles and responsibilities for ongoing development and implementation of the CEMP, verifying compliance before construction commences and monitoring its effectiveness during construction.

The CEMP will also contain detailed procedures and actions for meeting the EPRs for works, and include procedures for:

- Satisfying the EPRs and the requirements of approvals and approval conditions
- Assessing risk to inform management requirements for activities covered by the CEMP
- Managing specific activities and risks including controls and mitigation measures to be implemented
- Conducting site induction and training and the process for identifying environmental training needs based on identified competency requirements for relevant project personnel
- Conducting emergency/incident response training
- Monitoring, reporting and auditing including conduct of:

Quarterly audits of compliance with the CEMP by the IREA

Monthly environmental audits of implementation of the WEMPs, including auditing the effectiveness of the WEMPs, by the IREA

- Providing information to assist in the conduct of audit reports including compliance reports by the IREA
- Developing, implementing, reviewing, updating and monitoring of site- or activity-specific WEMPs
- Managing environmental incidents including incident reporting and investigation
- Managing non-conformances with the CEMP, approvals or environmental requirements including the EPRs
- Managing corrective and preventative action
- Reviewing and updating the CEMP at least every six months and more frequently (as necessary) to take account of events or circumstances which may affect the manner in which the project activities are to be carried out including in response to an audit finding or additional approval.

The CEMP would also incorporate any additional reasonable requirements of relevant approval authorities and be developed, implemented and maintained in accordance with AS/NZS ISO 14001.

### 8.7.2. Worksite Environmental Management Plans

WEMPs are subsidiary to the CEMP and are implemented at specific worksites to minimise potential impacts of construction activities on the environment and community. They provide localised site-specific information on environmental risks and controls. They must be prepared for the management of discrete construction stages or components of the construction that may have an adverse impact on the environment.

WEMPs include a relevant drawing (or similar) with the location and scope of works to be managed and include the environmental management measures (controls) required to be implemented. This enables ease of use by all site personnel, consultants and subcontractors.

The CEMP will specify when WEMPs are to be prepared. Typically they will be prepared to accompany all Construction Packages and Construction Procedures and will include:

- Identify specific measures included in the relevant construction procedure to prevent adverse environmental impacts

Include relevant drawings showing:

- Location and scope of works to be managed
- Location and nature of environmental controls

- Nature and frequency of monitoring for identified potential adverse impacts
- Procedures for notification of incidents or hazards.

A copy of each of the WEMPs will available for staff and are to be displayed at each of the site compound locations.

## 8.8. Operations Environmental Management Plan

The OEMP will be consistent with and set out the manner in which OpCo will meet the Environmental Requirements during the operations phase of the Project. The OEMP will identify the process for undertaking and documenting environmental risk assessments and for the development and implementation of environment management measures, including:

- Managing environmental incidents
- Monitoring and managing air quality
- Spill containment
- Site induction and training for personnel.

The OEMP will also contain detailed procedures and actions for meeting the EPRs for works, and include procedures for:

- Satisfying the EPRs and the requirements of approvals and approval conditions
- Assessing risk to inform management requirements for activities covered by the OEMP
- Managing specific activities and risks including controls and mitigation measures to be implemented
- Conducting site induction and training and the process for identifying environmental training needs based on identified competency requirements for relevant project personnel
- Conducting emergency/incident response training
- Monitoring, reporting and auditing including conduct of:

Quarterly audits of compliance with the OEMP by the IREA

Monthly environmental audits of implementation

- Providing information to assist in the conduct of audit reports including compliance reports by the IREA
- Managing environmental incidents including incident reporting and investigation
- Managing non-conformances with the OEMP, approvals or environmental requirements including the EPRs
- Managing corrective and preventative action
- Reviewing and updating the OEMP at least every six months and more frequently (as necessary) to take account of events or circumstances which may affect the manner in which the project activities are to be carried out including in response to an audit finding or additional approval.

### 8.8.1. Requirements for OEMP

Consistent with Section 8.7.3 of the EMF, this section sets out the requirements for the OEMP.

The OEMP must be consistent with and set out the manner in which environmental laws, approvals and approval conditions required by this Strategy and the EPRs will be met.

The OEMP will outline the regulatory framework under which the operation and maintenance activities will be undertaken and identify the process for undertaking and documenting risk assessments relating to sensitive areas identified by environmental laws and approvals. The OEMP will also identify processes for the development, implementation and monitoring of site- or activity-specific environmental management plans, including:

- Management of environmental incidents
- Monitoring and management of air quality
- A site induction and training plan to ensure all personnel are familiar with relevant plans and emergency response procedures
- The preparation and distribution of audit reports, including audit reports assessing compliance with the OEMP.

The OEMP will be developed, implemented and maintained in accordance with ISO 14001.

## **9. SPECIFIC ENVIRONMENTAL MANAGEMENT SYSTEM ELEMENTS**

Consistent with Section 8.7.1 of the EMF, this section sets out the processes and responsibilities for implementing particular Environmental Management System elements on the Project. Where these apply to the D&C Subcontractor or OpCo, they will be documented in the CEMP or OEMP or subsidiary documentation.

As set out in Section 8, both the D&C Subcontractor and OpCo are required to establish and implement environmental management plans that are consistent with the requirements of ISO 14001, using the plan-do-check-act implementation approach.

### **9.1. Training, Competency and Awareness**

As stated in Section 4, as part of establishing the Project, Project Co has selected appropriately competent subcontractors to construct and operate the Project.

#### **9.1.1. Training and competency**

##### **9.1.1.1. Project Co**

The Project Co Environmental Representative will be selected giving consideration to:

- Qualifications
- Experience in environmental management of infrastructure projects
- Knowledge of applicable environmental regulatory framework.

Project Co will retain appropriate documented information as evidence of competence.

##### **9.1.1.2. D&C Subcontractor and OpCo**

The D&C Sub Contractor Representative will be selected giving consideration to:

- Qualifications
- Experience in environmental management of infrastructure projects
- Knowledge of applicable environmental regulatory framework.

The D&C Subcontractor and OpCo are responsible for establishing and implementing environmental training and competence requirements.

The CEMP and OEMP and subsidiary documentation as relevant will set out how the D&C Subcontractor and OpCo respectively:

- Determine the necessary competence of person(s) doing work under its control that affects its environmental performance and its ability to fulfil the Environmental Requirements
- Ensure that these persons are competent on the basis of appropriate education, training or experience
- Determine training needs associated with its environmental aspects and its environmental management system
- Where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

The D&C Subcontractor and OpCo will retain appropriate documented information as evidence of competence.

##### **9.1.2. Awareness**

The CEMP and OEMP and subsidiary documentation as relevant will set out how the D&C Subcontractor and OpCo respectively make persons doing work under the organisation's control are aware of:

- The organisation's environmental policy
- The significant environmental aspects and related actual or potential environmental impacts associated with their work
- Their contribution to the effectiveness of the organisation's environmental management system

- The implications of not conforming to the environmental management system requirements, including not fulfilling the organisation's compliance obligations.

Project Co will also make its personnel aware of these items.

Records of awareness training (most likely through induction records) will be kept.

## 9.2. Communications and Reporting

This section addresses internal and external communications (including complaint management) and reporting.

### 9.2.1. Project Co

Communications and reporting regarding environmental issues and outcomes will include:

- Meetings with senior management
- Meetings with the D&C Subcontractor and OpCo, typically fortnightly during the construction phase and typically quarterly during the operations phase
- Meetings with the key stakeholders including the State
- Regular meetings with the IREA, typically monthly to quarterly during the D&C phase and typically annually during the operations phase
- Attendance at meetings of environmental agencies and key stakeholders as required
- Distribution of a monthly (or frequency as agreed with the State) environment performance report to the State that includes results of analysis of breaches of the Environmental Requirements. The report may be provided as part of an integrated report.
- Any statutory reporting required, including those required by the EPRs. These reports will be provided in the statutory timeframes required.

Project Co will not generally communicate specific details externally about its significant environmental aspects beyond the information included in the CEMP and OEMP, except in those circumstances when:

- Obligated by law
- Project Co deems it appropriate from time to time.

Any external types of communication, including responding to external interested parties, must be agreed with the State.

Records of formal meetings and reports will be retained.

### 9.2.2. D&C Subcontractor and OpCo

The D&C Subcontractor and OpCo are responsible for establishing and implementing communication and reporting in the CEMP and OEMP respectively.

Communications will include:

- Regular meetings including senior management, site and toolbox meetings
- Distribution of a monthly environment report to Project Co (construction phase)
- Internal communications to promote effective environmental performance.
- Any statutory reporting required, including those required by the EPRs. These reports will be provided in the statutory timeframes required.

### 9.2.3. Communications and Community Engagement Plan

For the construction and operational phase, the D&C Subcontractor will establish and implement a Communications and Community Engagement Plan.

The CCEP will outline how the D&C Subcontractor will engage and consult the community and potentially affected stakeholders and provide information on progress of construction activities. The CCEP will include:

- Community issues identification, management and resolution approach and procedures
- Enquiry management and record keeping approach and procedures

- Approach to mitigating community impacts including dust, noise and light and any relevant policies (e.g. relocations policy)
- Approach to changes to transport conditions for affected and potentially affected users, relevant stakeholders and relevant road authorities
- How it will evaluate the effectiveness of community impact mitigation measures, including through noise and vibration monitoring
- Incident and emergency communications, including notification methods and timeframes in the event of a major incident or overrun
- Approach and processes to ensure that the workforce has appropriate community awareness and sensitivity
- Approach to notifying community, business, road user and other stakeholders affected by construction activities about impacts
- The role and function of the Community Liaison Group (CLG) as developed by the State

For the operations phase, the CCEP will be updated and reviewed for the operations phase.

The D&C Subcontractor and OpCo will retain records of communication.

#### 9.2.4. Complaints management

Procedures for receiving, investigating and responding to complaints relating to environmental matters will be set out in the D&C Subcontractor and OpCo Communications and Community Engagement Plans.

Consistent with EPR EMP4, the process for the recording, management, and resolution of complaints from affected stakeholders must be consistent with Australian Standard AS/NZS 100002: 2014 Guidelines for Complaint Management in Organisations.

The process will include:

- Methods for contacting the Project
- Timeframes for response to and resolution of complaints
- Responsibilities for responding to and managing complaints
- KPIs for measuring performance
- Reporting protocols.

### 9.3. Control of Documented Information

All environmental documents and records required by this Strategy will be maintained for a minimum of seven years. All records are to be:

- Legible and clearly identifiable
- Traceable via filing or referencing to a specific requirement, procedure or EMP.

Records include:

- Environmental monitoring results
- Complaints and enquiries received
- Notifications received by regulators
- Audit reports
- Completed inspections and observations
- Waste tracking certificates
- Training records
- Environmental Requirements Register
- Environmental Risk Assessment
- Incident reports and corrective actions
- Calibration records for monitoring equipment
- Monthly Reports and meeting minutes
- Relevant EES documentation and other technical reports.

### **9.3.1. Project Co**

This Strategy will include its revision number and approval date to maintain version control. It will be maintained on Project Co's document management system and back-up protocols.

The current version of this Strategy will be available to all Project Co personnel, the D&C Subcontractor and OpCo. Project Co will issue controlled or uncontrolled copies to applicable external organisations where necessary.

### **9.3.2. D&C Subcontractor and OpCo**

The CEMP and OEMP will be controlled by a D&C Subcontractor and OpCo document control and records management procedure.

The D&C Subcontractor and OpCo will make the current version of the CEMP and OEMP respectively available to all D&C Subcontractor or OpCo personnel and issue controlled or uncontrolled copies to applicable external organisations where necessary.

Issue details will be recorded. When a new version is issued, it is the responsibility of the user to replace superseded material with the current issue.

## **9.4. Operational Control**

The key operational management controls for managing the environmental aspects of the Project are implemented through the management plans, or other relevant controls, of the CEMP and OEMP.

### **9.4.1. Project Co**

As set out in Section 8, Project Co has sub-contracted the D&C Subcontractor and OpCo to prepare, finalise, implement and update the CEMP (and associated plans) and the OEMP (and associated plans), including the operational controls, for the design, construct and operate phases of the Project. The CEMP and OEMP are reviewed and approved as set out in Section 8.

### **9.4.2. D&C Subcontractor and OpCo**

The D&C Subcontractor and OpCo will use a variety of operational controls to manage the environmental outcomes of the Project. These will comprise a host of management controls (e.g. theme-based environmental sub-plans, job safety and environmental analyses, construction packages, construction procedures, work method statements) and operational controls (e.g. sediment basins, deploying fauna spotters, providing spill kits etc.).

The CEMP and OEMP will identify the controls appropriate to their scope in a manner which enables project teams to easily understand and practically implement the controls wherever possible.

The operational controls will address the legal and other requirements and the outcomes of the risk assessment, to enable the Environmental Requirements to be achieved.

## **9.5. Management of Subcontractors and Suppliers**

### **9.5.1. Project Co**

Project Co's subcontractors and suppliers are the D&C Subcontractor and OpCo. This Strategy sets out how they will be managed.

### **9.5.2. D&C Subcontractor and OpCo**

Environmental management requirements and responsibilities for subcontractors and suppliers are to be included in the CEMP and OEMP and in the sub-contracts and supplier agreements. D&C Subcontractor and OpCo must meet the relevant requirements of the CEMP and OEMP, as relevant, as a minimum.

## 9.6. Contingency Management

This section addresses the identification and triggering of contingency measures to be implemented under each of the CEMP, OEMP and other environmental plans as appropriate to ensure that adverse effects are adequately controlled if monitoring demonstrates more significant adverse effects than predicted or permitted.

The CEMP and OEMP and subsidiary documentation will set out the process to be implemented should monitoring demonstrate more significant adverse effects than predicted or permitted.

This process will address:

- Controlling the activity leading to the adverse impact, including ceasing or restricting the particular activity in specified circumstances
- Further monitoring of the adverse impact, including more frequent monitoring
- Corrective action to rectify the adverse impact and prevent recurrence
- Communication of the issue and actions taken in a timely manner.

## 9.7. Emergency and Incident Preparedness and Response

### 9.7.1. Project Co

Project Co's direct activities are office-based and unlikely to result in an environmental incident. Significant environmental incidents and emergencies may occur as a result of the construction and (far less likely) operation of the Project.

The Environmental Representative will review environmental incident investigation reports and participate in managing, responding to and investigating incidents as set out in the D&C Subcontractor and OpCo emergency and incident response plans and procedures.

### 9.7.2. D&C Subcontractor and OpCo

The D&C Subcontractor and OpCo are responsible for establishing, implementing and testing environmental incident response and emergency preparedness and response.

The role of Project Co, including the Environmental Representative, in managing, responding to and investigating incidents will be documented in the relevant plans and procedures.

Potential environmental emergencies and incidents will be identified through a risk assessment process documented within the CEMP and OEMP respectively. The risk assessment will identify the preventative measures required to minimise the risk of incidents and emergencies.

The D&C Subcontractor and OpCo will develop plans and/or procedures which will provide:

- An assessment of the types of incidents and emergencies that might impact on the environment and their potential causes and consequences
- Preventative measures required to minimise the risk of incidents and emergencies which may be incorporated the relevant environmental management plan, procedure or process
- Processes for systematically notifying, responding to and managing environmental incident and emergency situations
- Contact information for emergency and regulatory authorities (e.g. telephone numbers for the Environment Protection Authority, Fire Brigade, and State Emergency Services etc.)
- Names of key project response personnel and contact details (including after-hours telephone numbers)
- Project personnel responsibilities, including to attend on site in the event of an emergency
- Location of on-site information on hazardous materials and dangerous substances, and spill containment equipment or structures
- Procedure to follow to minimise/control the emergency/incident (e.g. spill management) and contain the environmental damage
- Procedure for notifying the on-site staff, contractors and public if required

- Procedure for notification to regulatory agencies in accordance with the requirements of local, state and federal government regulations.
- Procedure for investigating and reporting environmental incidents and emergencies, including taking corrective action to prevent recurrence.

All personnel will have the responsibility to report any incident. Staff with specific responsibilities will be clearly identified in the relevant environmental management documentation. All incidents and complaints will be followed up and investigated to ensure that all agreed actions are appropriately followed up and closed-out, and that essential information is recorded.

All environmental incidents will be reported in accordance with the incident management processes for construction and operational stages respectively.

## 9.8. Monitoring Implementation

This section addresses monitoring implementation of the Strategy and environmental management plans and procedures including implementation of appropriate monitoring programs to measure performance.

### 9.8.1. Project Co

The responsibility for monitoring and measuring has been sub-contracted to the D&C Subcontractor and OpCo. Project Co will review audit and performance reports.

### 9.8.2. D&C Subcontractor and OpCo

The D&C Subcontractor and OpCo are responsible for implementing monitoring and measurement.

The respective CEMP and OEMP will include means for:

- Tracking progress of achieving objectives and targets
- Tracking the implementation of Environmental Requirements
- Inspecting the effectiveness of operational controls relevant to environmental management.

The D&C Subcontractor and OpCo will develop a monitoring, inspection, reporting and auditing schedule for inclusion in the CEMP and OEMP, consistent with the Environmental Requirements.

The schedule will include:

- Scope
- Frequency
- Responsibility
- Reporting procedure.

Procedures will be developed and implemented for each type of monitoring to be undertaken. These identify specific criteria that are to be monitored, their location, frequency, reporting requirements and associated responsibilities. A monitoring program of all environmental inspection and monitoring requirements will be maintained by the D&C Subcontractor and OpCo in the CEMP and OEMP respectively.

All environmental measurement or monitoring equipment used on the program will be calibrated and maintained in accordance with the manufacturers' specifications and as described in the specific monitoring and measuring procedures.

The results of all monitoring and measuring results will be reported in accordance with Section 9.2.

## 9.9. Auditing

Project Co, the D&C Subcontractor and OpCo will cooperate with and do all things reasonably necessary assist the IREA and Environmental Auditor to conduct the required environmental audits. Project Co, the D&C Subcontractor and OpCo will address findings included in final audit reports by the IREA and Environmental Auditor.

Results of all environmental audits will be provided to the State within five business days. Audit reports will be provided to the Minister for Planning and other statutory approval authorities as appropriate.

### **9.9.1. Project Co**

Project Co will engage the IREA (jointly with the State) and the Environmental Auditor (following the expiration of the IREA term) to audit compliance with the Strategy (construction phase, CEMP, OEMP and WEMPs and provide a report).

During operation, the Strategy will be regularly audited.

Table 7.2 sets out the frequency of the IREA's environmental audits.

Where an audit identifies any corrective actions that require modification to the Strategy, Project Co will modify the Strategy as described by Section 0.

### **9.9.2. D&C Subcontractor and OpCo**

The D&C Subcontractor and OpCo are responsible for conducting internal audits. The requirements will be documented in the CEMP and OEMP respectively.

The frequency of internal auditing will be risk-based, with all elements audited over an annual cycle, as a minimum. It will also take account of changes affecting the organisation and the results of previous audits.

The purpose of the audit program is to provide information on whether the CEMP and OEMP:

- Conforms to the Environmental Requirements and the requirements of ISO 14001
- Is effectively implemented and maintained.

The CEMP and OEMP will set out the frequency, audit criteria and scope, methods, responsibilities, planning requirements and reporting requirements for the internal audit program.

The CEMP and OEMP will contain or refer to an audit procedure that describes how audits will be conducted, and also define auditor competency requirements.

## **9.10. Evaluating Compliance with Legal and Other Requirements**

### **9.10.1. Project Co**

Compliance with legal and other requirements will be evaluated on an ongoing basis as part of preparing the monthly report and the management review.

In evaluating compliance with legal and other requirements, Project Co will consider the following:

- Reports
- Results of environmental audits
- Details of non-conformances and corrective/preventive actions/improvements
- Incident reports
- Environmental monitoring results
- Results of management reviews
- Outcomes of meetings and site visits.

### **9.10.2. D&C Subcontractor and OpCo**

The D&C Subcontractor and OpCo are responsible for evaluating compliance with their legal and other obligations

As described in Section 5 of this Strategy, the means by which the D&C Subcontractor and OpCo will comply with each Environmental Requirement is described within the corresponding EMP's Legislation Register and Environmental Requirements Register. These registers will also describe the means by which the D&C Subcontractor and OpCo will regularly demonstrate compliance with each relevant obligation, making specific reference to the inspections form, environmental programs or other checklist to be used in the field.

Inspections and reviews will occur on a frequency nominated in the CEMP and OEMP and described in a Monitoring, Inspection, Auditing, Review and Reporting Schedule as described in Section 9.8.

This outcomes from schedule will form the basis of the monthly reports that will be issued to Project Co. Non-conformances will be identified in the monthly report.

Where there is a non-conformance, it will be addressed as described in Section 9.12.

## 9.11. Management Review

The Strategy, CEMP, OEMP or associated controlled documents must be reviewed and updated if at any time they:

- Do not adequately address the matters they are intended to address
- Are causing non-conformity or is otherwise necessary to comply with the Project Agreement
- Have to be changed because of an audit or a new or amended approval
- No longer represent current or appropriate practice
- Are otherwise required by the Project Agreement to be updated.

### 9.11.1. Project Co

Management reviews are critical to the continual improvement process. They ensure the continuing suitability, adequacy and effectiveness of the Strategy and its implementation.

A management review will be conducted by a nominated management team including:

- Environmental Representative
- Project Co Executive Officer.

A documented management review is to be held annually as a minimum. It will include consideration of the following:

- The status of actions from previous management reviews
- Changes in:

External and internal issues that are relevant to the Strategy

Needs and expectations of interested parties, including compliance obligations

Significant environmental aspects

Risks and opportunities

- The extent to which environmental objectives have been achieved
- Information on Project Co's environmental performance, including trends in:

Nonconformities and corrective actions

Monitoring and measurement results

Fulfilment of its compliance obligations

Audit results

- Adequacy of resources
- Relevant communications from interested parties, including complaints
- Opportunities for continual improvement.

The management review will document:

- Conclusions on the continuing suitability, adequacy and effectiveness of the environmental management system
- Decisions related to continual improvement opportunities
- Decisions related to any need for changes to the environmental management system, including resources
- Actions, if needed, when environmental objectives have not been achieved
- Opportunities to improve integration of the environmental management system with other business processes, if needed.

### 9.11.2. D&C Subcontractor and OpCo

The D&C Subcontractor and OpCo are responsible for conducting management reviews. This will be documented in the CEMP and OEMP respectively.

A management review will be conducted by a nominated management team and is to be held six monthly (CEMP) or annually (OEMP) as a minimum. The review will be documented.

The management review will identify any necessary amendments to clarify or improve environmental management practices or to add new obligations and associated controls.

## 9.12. Identifying Non-conformances and Implementing Corrective and Preventative Actions

A non-conformance is an incident(s) that is a failure to comply with environmental legislation or with the Strategy and/or CEMP or OEMP requirements. Once a non-conformance has been identified, corrective and/or preventive action will be initiated. Also, any Strategy improvement opportunities, identified as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews, will be documented.

These may also lead to corrective or preventive actions. All employees have the authority to raise a non-conformance or preventative action should they occur.

Where appropriate, work on non-conforming activities on-site may be stopped by the D&C Subcontractor or OpCo environment managers, environment officers, managers or their nominees. This stoppage will remain in force until corrective actions are implemented or authority is given to continue.

### 9.12.1. Project Co

Non-conformances with this Strategy will be documented in a register to ensure all actions have been assigned to the responsible person(s) and actions have been tracked and closed out in the appropriate timeframe.

The register will include:

- Summary of the non-conformance
- How it was identified (e.g. audit)
- Actions required to address the non-conformance
- Time frame for action
- Status of actions
- Close out date of non-conformance.

Where a Project Co employee identifies a non-conformance or hazardous situation on site, this shall be promptly notified to the D&C Subcontractor or OpCo, as relevant.

### 9.12.2. D&C Subcontractor and OpCo

The D&C Subcontractor and OpCo are responsible for establishing and maintaining procedures for non-conformity, corrective and preventive actions. These are to be documented in the CEMP and OEMP respectively. Priorities for response will be determined based on the risk to the environment. As guidance, an extreme priority action should be allocated to prevent immediate risk to the environment. Low priority actions should be allocated to prevent long-term recurrence of the inappropriate situation.

All corrective actions from reviews, audits or incidents or new controls to be implemented will be recorded in a register to ensure all actions have been assigned to the responsible person(s) and actions have been tracked and closed out in the appropriate timeframe. The register will be used track and manage corrective actions and continuous improvements.

# Attachment A: Compliance Matrix – Incorporated Document, Environmental Management Framework and ISO 14001

REF. NO.	REQUIREMENT	WHERE ADDRESSED
<b>INCORPORATED DOCUMENT</b>		
4.6	Prior to the commencement of development (excluding preparatory buildings and works under clause 4.8), an Environmental Management Strategy must be approved by the Minister for Planning. The Environmental Management Strategy must be prepared in consultation with Brimbank City Council, Hobsons Bay City Council, Maribyrnong City Council, Melbourne City Council and Wyndham City Council (councils).	1.1, 1.8, 2.1, 8.2
	The EMS must:	
4.6.1	a) Outline how the Environmental Performance Requirements will be implemented.	5.3, Attachment B
	b) Set out the process and timing for development of the Construction Environmental Management Plan, Work Site Environmental Management Plans, Operations Environmental Management Plan, Communications and Community Engagement Plan and other plans and procedures required by the Environmental Performance Requirements, including the process and timing for consultation with councils, Roads Corporation, Melbourne Water and Environment Protection Authority as relevant; and	1.8, 8.2
	c) Be prepared consistent with the Environmental Management Framework contained in the Environment Effects Statement and the Environmental Performance Requirements.	Refer to the EMF section of this table.
4.6.3	The Environmental Management Strategy must be reviewed by the IREA prior to submission to the Minister for Planning for approval under clause 4.6.1.	8.4
4.6.4	The Environmental Management Strategy submitted to the Minister for Planning for approval under clause 4.6.1 must be accompanied by: a) a description of the form and extent of consultation undertaken with councils; b) any written comments from councils and the IREA. c) a written response to comments from councils and the IREA.	8.4
4.6.5	The Environmental Management Strategy may be prepared and approved in stages (including separately for construction and operation) but the Environmental Management Strategy must be approved before the commencement of development (excluding preparatory buildings and works under clause 4.8) for that stage.	8.2
4.6.6	The Environmental Management Strategy may be amended with the approval of the Minister for Planning.	8.2
4.6.7	The use and development must be carried out in accordance with the approved Environmental Management Strategy.	1.1, 3.1
4.6.8	The Environmental Management Strategy must be audited by the IREA on a six monthly basis (or more frequently as required) and audit reports provided to the Minister for Planning.	8.5
<b>ENVIRONMENT MANAGEMENT FRAMEWORK (EMF)</b>		
8.1	The Incorporated Document will require the preparation and implementation of an Environmental Management Strategy prepared to the satisfaction of the Minister for Planning consistent with the EMF and which responds to the final EPRs for the Project.	1.1, 1.3, 8.2
8.2	An Environmental Management Strategy must be prepared that provides an overarching framework to address all environmental requirements including relevant environmental laws, project approvals, approval conditions, the EPRs and the technical requirements of the Project Agreement in relation to environmental management.  The Environmental Management Strategy would also need to be submitted to and approved by the Minister for Planning as a condition of the Incorporated Document,	This document 3. 5. 8.2, Attachment B

REF. NO.	REQUIREMENT	WHERE ADDRESSED
	prior to the commencement of any works other than preparatory works.	
8.3	<p>The Strategy must be consistent with the EMF, respond to the EPRs and incorporate an environmental management system that complies with AS/NZS ISO 14001. The Project Agreement would also include requirements to prepare a range of environmental management plans and procedures including:</p> <ul style="list-style-type: none"> <li>▪ A Construction Environmental Management Plan (CEMP) and separate Work Site Environmental Management Plans (WEMPs) for the management of discrete issues, components or stages of the works</li> <li>▪ An Operations Environmental Management Plan (OEMP) to govern the operational phase of the project.</li> </ul>	2, 8, Part B
8.4	<p>The CEMP and OEMP must also be regularly reviewed and updated with each revised plan submitted to and approved by the State and IREA prior to implementation. Updates to the CEMP are to occur at least every six months during construction and updates to the OEMP are to occur at least annually during the operation.</p> <p>Compliance audits with each of the Environmental Management Strategy, CEMP, OEMP and each of the WEMPs must also be carried out on a regular basis by the IREA, with results provided to the State.</p> <p>A dedicated Environmental Representative with authority and responsibility for environmental management must be appointed during construction and operation of the project, including for ensuring any issues identified in the environmental audits are adequately addressed. Audit reports assessing compliance with the Environmental Management Strategy and environmental management plans must also be provided to the Minister for Planning and other statutory approval authorities as appropriate.</p>	9.11, 9.12  7.2  7.3.1, 9.9
Table 8-1	Roles and responsibilities for environmental management.	7
8.5	Project Co must comply with the conditions of the statutory approvals and to obtain all other approvals, licences, permits and consents that may be required to deliver the Project.	3, 5
8.6	<p>As part of preparation of the CEMP and WEMPs, a detailed assessment of risks associated with the detailed design of the project and specific work methods would be carried out. This assessment would consider the ability to meet the EPRs, and approval conditions. This detailed assessment would consider the issues identified through the EES process and the risks associated with delivery of the project works, and be consistent with AS/NZS ISO 31000 Risk management – principles and guidelines.</p> <p>A current risk register will be required to be maintained, as a 'live' document to be updated through regular reviews, and in response to changes to activities, work methods, legislation and policy or the occurrence of incidents and complaints. The risk register would link risks to relevant EPRs that define the standard of management to be achieved to manage potential impacts associated with that risk.</p>	6.2
8.7	Project Co and their contractors would be required to comply with and implement all EPRs, except where responsibility for their implementation would reside with the State.	5.3
8.7.1	<p>The Project Agreement requires an Environmental Management Strategy to be prepared that provides an overarching framework to address all environmental requirements including relevant environmental laws, project approvals, approval conditions, the EPRs and the technical requirements of the Project Agreement in relation to environmental management. Preparation of the Environmental Management Strategy consistent with this EMF will also be a requirement of the West Gate Tunnel Project incorporated document.</p>	Refer to points below in this section 8.7.1.
	The Environmental Management Strategy would need to comply with the EMF and incorporate an Environmental Management System that is AS/NZS ISO 14001 compliant.	Part B Refer to points below in this section 8.7.1.
	The Environmental Management Strategy would need to be prepared to the approval and satisfaction of the Minister for Planning as a condition on the West Gate Tunnel Project incorporated document, prior to the commencement of any works other than preparatory works.	1.1, 1.3, 8.2

REF. NO.	REQUIREMENT	WHERE ADDRESSED
	<p>The Environmental Management Strategy would be required to address:</p> <ul style="list-style-type: none"> <li>▪ Processes and responsibilities for identifying environmental risks and potential impacts and managing environmental issues</li> <li>▪ The EPRs and the process for identifying the specific measures to be put in place to achieve each of the EPRs</li> <li>▪ A process for identifying and complying with all legislative requirements and the requirements of relevant statutory authorities, including approvals, permits, consents and licences</li> <li>▪ Roles, responsibilities and authorities for environmental management</li> <li>▪ An overview of environmental management documents for the project, including the CEMP, WEMPs, OEMPs and other management plans and procedures including a description of their purpose, required content and how they relate to the environmental management system, the Environmental Management Strategy and each other</li> <li>▪ Procedures for receiving, investigating and responding to complaints relating to environmental matters</li> <li>▪ Processes and responsibilities for: <ul style="list-style-type: none"> <li>- Training, competency and awareness</li> <li>- Communications and reporting</li> <li>- Control of documented information</li> <li>- Monitoring implementation of the Environmental Management Strategy and environmental management plans and procedures including implementation of appropriate monitoring programs to measure performance</li> <li>- Identifying and triggering contingency measures to be implemented under each of the CEMP, OEMP and other environmental plans as appropriate to ensure that adverse effects are adequately controlled if monitoring demonstrates more significant adverse effects than predicted or permitted</li> <li>- Auditing compliance with the Environmental Management Strategy, CEMP, OEMP and WEMPs, including by the IREA to audit compliance and provide reports on a regular basis</li> <li>- Reviewing, updating and obtaining approval for revisions to the approved Environmental Management Strategy, CEMP, OEMP and WEMPs</li> <li>- Management of subcontractors and suppliers</li> <li>- Auditing and evaluating compliance with legal and other requirements</li> <li>- Reporting and investigating environmental incidents</li> <li>- Identifying non-conformances and implementing corrective and preventative actions</li> <li>- Emergency and incident preparedness and response, including after-hours response, arrangements for containing environmental damage and attendance on-site in the event of an emergency</li> <li>- Any other project-specific requirements considered appropriate, including any new or revised EPRs resulting from the EES assessment process.</li> </ul> </li> </ul>	
8.7.2	Project Co would be required to operate in accordance with an environmental management system that complies with the current version of AS/NZS ISO 14001 Environmental management systems.	Part B
Table 8-4	The EPRs require the preparation and implementation of additional plans and procedures including the specific plans set out in Table 8-6.	8.6
8.7.3	The process and timing for development of the environmental management plans and the specific plans and procedures required by the EPRs is to be set out in the Environmental Management Strategy approved by the Minister for Planning. This is to include the process and timing for consultation with relevant persons including	1.8, 8.2

REF. NO.	REQUIREMENT	WHERE ADDRESSED
	Councils, statutory authorities such as Roads Corporation, Melbourne Water and the Environment Protection Authority or as required by the EPRs.	
8.7.3	The CEMP, OEMP and environmental plans will be required to include appropriate contingency measures to address the risk of adverse environmental effects occurring during construction or operation of the project.	6.2, 8.7, 9.4, 9.7, 8.8
8.7.4	The Environmental Management Strategy and Environmental Management Plans would be controlled documents and would be developed, approved, implemented, updated and revised in accordance with Table 8-5.	8.2, 8.4, 9.3
8.8	Compliance with the approved Environmental Management Strategy (which must be consistent with this EMF) and the EPRs will be required by the incorporated document for the project. Compliance would be monitored.	9.10
8.8.1	Project Co would be required to prepare environmental performance reports for Western Distributor Authority and the IREA monthly or as agreed by Western Distributor Authority.	9.2
<b>ENVIRONMENTAL PERFORMANCE REQUIREMENTS (EPRS)</b>		
EM1	Prepare an Environmental Management Strategy to provide an overarching framework to address environmental requirements including relevant environmental laws, key approvals, approval conditions, the environmental performance requirements (EPRs)	3, 5, Part B
EM1	The Environmental Management Strategy covers the construction and operations phases of the project and is to be prepared to the satisfaction of the Minister for Planning under the Incorporated Document applicable to the project.	1.3, 8.2
EM1	The Environmental Management Strategy must incorporate an Environmental Management System that complies with AS/NZS ISO 14001: Environmental management systems – requirements with guidance for use for construction and operation. The approved Environmental Management Strategy must be made publicly available on a clearly identifiable website for at least five years after the commencement of operation of the project.	Part B. See section of table addressing ISO 14001 below
EM2	Prepare and implement a Construction Environmental Management Plan (CEMP), Worksite Environmental Management Plans (WEMPs), Operations Environmental Management Plan (OEMP) and other plans as required by the Environmental Performance Requirements (EPRs) in accordance with the Environmental Management Strategy.	8
EM2	The development of the Environmental Management Strategy, the CEMP, the WEMPs and OEMP must include consultation with relevant councils, VicRoads, Melbourne Water, the EPA Victoria, and other authorities as relevant. These consultation processes must be described in the Environmental Management Strategy.	1.8
EM2	The CEMP must be prepared in accordance with EPA Victoria Publication 480, Environmental Guidelines for Major Construction Sites (EPA 1996). The CEMP and OEMP must be prepared to the satisfaction of the IREA.	7.2
<b>ISO 14001:2015 'ENVIRONMENTAL MANAGEMENT SYSTEMS - REQUIREMENTS WITH GUIDANCE FOR USE'</b>		
4	Context of the organisation	See items 4.1 to 4.4 below
4.1	Understanding the organisation and its context	1.4, 1.6
4.2	Understanding the needs and expectations of interested parties	1.5, 1.8
4.3	Determining the scope of the environmental management system	4.1
4.4	Environmental management system	Part iB
5	Leadership	See items 5.1 to 5.3 below
5.1	Leadership and commitment	4.2, 4.3, 7.3.1, 9.1, 9.11, 9.12

REF. NO.	REQUIREMENT	WHERE ADDRESSED
5.2	Environmental policy	4.2
5.3	Organisational roles, responsibilities and authorities	7
6	Planning	See items 6.1.1 to 6.2.2 below
6.1	Actions to address risks and opportunities	See items 6.1.1 to 6.1.4 below
6.1.1	General	13, 4.1,
6.1.2	Environmental aspects	6.2
6.1.3	Compliance obligations	3, 5
6.1.4	Planning action	8, 9
6.2	Environmental objectives and planning to achieve them	See items 6.2.1 to 6.2.2 below
6.2.1	Environmental objectives	4.3
6.2.2	Planning actions to achieve environmental objectives	8
7	Support	See items 7.1 to 7.5.3 below
7.1	Resources	7
7.2	Competence	9.1
7.3	Awareness	9.1
7.4	Communication	See below
7.4.1	General	7, 9.1
7.4.2	Internal communication	9.2
7.4.3	External communication	9.2
7.5	Documented information	See items 7.5.1 to 7.5.3 below
7.5.1	General	This document, 9.3
7.5.2	Creating and updating	8, 9.3
7.5.3	Control of documented information	9.3
8	Operation	See items 8.1 to 8.2 below
8.1	Operational planning and control	8, 9.4
8.2	Emergency preparedness and response	9.7
9	Performance evaluation	See items 9.1.1 to 9.3 below
9.1	Monitoring, measurement, analysis and evaluation	See items 9.1.1 to 9.1.2 below
9.1.1	General	9.8, 9.9, 9.10
9.1.2	Evaluation of compliance	9.10
9.2	Internal audit	See items 9.2.1 to 9.2.2 below
9.2.1	General	7.2, 9.9
9.2.2	Internal audit programme	9.9

REF. NO.	REQUIREMENT	WHERE ADDRESSED
9.3	Management review	9.11
10	Improvement	See items 10. To 10.3 below
10.1	General	9.11, 9.12
10.2	Nonconformity and corrective action	9.12
10.3	Continual improvement	9.11

## Attachment B: Approved EPRs

**RISK AREA** – Aspect to which the EPR applies

**GROUP RESPONSIBLE** - Project team that is responsible for compliance with the EPR

**DELIVERABLE / WHERE EPR IS ADDRESSED** - Document that provides the plan and management actions to address the EPR.

**IMPLEMENTATION TIMING** - when the management actions will be implemented

**CONSULTATION REQUIRED** – consultation stakeholders as required by the EPR

**TRAINING REQUIRED** – The training required to implement the EPR for Project Co's Team. It has been assumed use of specialist contractors who will have required capabilities.

**EVIDENCE TO DEMONSTRATE COMPLIANCE** – Documentation to supply evidence of compliance

**COMPLIANCE CHECK** – compliance checks to occur during the project

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
EMP1	<b>Environmental Management Strategy</b>  Prepare an Environmental Management Strategy to provide an overarching framework to address environmental requirements including relevant environmental laws, key approvals, approval conditions, the environmental performance requirements (EPRs). The Environmental Management Strategy covers the construction and operations phases of the project and is to be prepared to the satisfaction of the Minister for Planning under the incorporated Document applicable to the project.	General  Environment	1) EPR Strategy	All	Relevant Councils, VicRoads, Melbourne Water, EPA Victoria and other authorities as relevant	Described in the CEMP	Ministerial Approval Consultation records as supplied to the minister for approval  ISO 4001 audits	IREA Audits (public availability)  Internal Audits
EMP2	<b>Environmental Management Plans</b>  Prepare and implement a Construction Environmental Management Plan (CEMP), Worksite Environmental Management Plans (WEMPs), Operations Environmental Management Plan (OEMP) and other plans as required by the Environmental Performance Requirements (EPRs) in accordance with the Environmental Management Strategy.  The development of the Environmental Management Strategy, the CEMP, the WEMPs and OEMP must include consultation with relevant councils, VicRoads, Melbourne Water, EPA Victoria and other authorities as relevant. These consultation processes must be described in the Environmental Management Strategy.  The CEMP must be prepared in accordance with EPA Victoria Publication 480 Environmental Guidelines for Major Construction Sites (EPA 1996).	General  Environment Construction Teams	1) CEMP 2) WEMPs 3) CEMP and Stakeholder Management System 4) Environmental Management Strategy 5) EPA 480 Compliance table is included in the CEMP	All	Relevant Councils, VicRoads, Melbourne Water, EPA Victoria and other authorities as relevant	Described in the CEMP	Consultation records and Stakeholder Management Database  Refer to the approved Environmental Management Strategy, CEMP and WEMPs	IREA Audits  Internal Audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
EMP3	<b>Environmental compliance</b>  The CEMP and OEMP must be prepared to the satisfaction of the IREA.	General	Environment Op Co	1) CEMP 2) Auditing, Review and Improvement 3) MIRRA Schedule 4) Environmental Management Strategy	Pre-construction, construction, operation	Minister for Planning	n/a	Procurement Records show appointment of IREA Audit Reports show IREA audits Actions database shows actions assigned by IREA
EMP4	<b>Complaints management system</b>  Prior to the commencement of works, other than preparatory works as referred to in the Incorporated Document, develop and implement a process for the recording, management, and resolution of complaints from affected stakeholders consistent with Australian Standard AS/NZS 100002:2014 Guidelines for Complaint Management in Organisations.  The complaints management system must be consistent with the Communications and Community Engagement Plan required under EPR SP2.	General	Communications	1) CCEP 2) Complaints Management System	Pre-construction, construction	Complaints Management System Training	CCEP Stakeholder Management Database	IREA Audits Internal Audits Monthly Reporting of complaints and actions
AQP1	<b>Tunnel ventilation system design</b>  Design and construct a tunnel ventilation system to meet the requirements of the SEPP (AQM) and in accordance with the requirements of the EPA Victoria Works Approval including provision for retrofitting of tunnel ventilation pollution control equipment if subsequently required.	Air	Design	1) Design documentation 2) Air Quality Assessment Report, Attachment 8 to the EES Submission Volume 3a.2	Detailed design, operation	Victorian EPA	n/a	Detailed Design Calibration Records
AQP2	<b>Zero portal emissions</b>  Design and implement a tunnel ventilation system to achieve zero portal emissions.	Air	Design	1) Design documentation 2) Table 6 EES Submission Tender	Detailed design, operation	Victorian EPA	n/a	Compliance with achieving 'zero portal emissions' is

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	COMPLIANCE CHECK	
								EVIDENCE TO DEMONSTRATE COMPLIANCE	EVIDENCE TO DEMONSTRATE COMPLIANCE
AQP3	In tunnel air quality	Air	Design	1) Design documentation	Detailed design, operation	n/a	n/a	Detailed Design Calibration Records	IREA Audit Completion Records
								Measurement of tunnel air quality post construction	
AQP4	Ambient air quality monitoring	Air	Environment	1) Air Quality Management Plan	Construction, operation	Victorian EPA	Training on TEOM and BEIX canister changes and data review.	Air Quality Monitoring	IREA Audit
								Monitoring data, availability of instrumentation,	Monthly reporting from six permanent air

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		Victoria at the following air quality monitoring station locations:						validity of data, calibration of equipment Complaints Management System Calibration Records	monitoring sites Data displayed on EPA Victoria's Air Watch Database
AQP5	<b>In-tunnel air quality and ventilation structure emissions compliance</b>	Millers Road (north of the West Gate Freeway), Brooklyn Primula Avenue, Brooklyn Donald McLean Reserve, Spotswood Francis Street, Yarraville Woods Street, Yarraville Yarraville Gardens, Yarraville.						Air Quality Monitoring Forms Air Quality Monitoring Register Calibration Records	Air Quality Monitoring Quarterly Reporting
AQP6	<b>Air quality during construction</b>	Victoria at the following air quality monitoring station locations: • Millers Road (north of the West Gate Freeway), • Brooklyn • Primula Avenue, Brooklyn • Donald McLean Reserve, Spotswood • Francis Street, Yarraville • Woods Street, Yarraville • Yarraville Gardens, Yarraville. Results of the monitoring are to be made publicly available on a website related to the project, or through EPA Victoria's Air Watch website on a monthly basis.	Air	Design OEMP	Operation	Victorian EPA	Training on TEOM and BETX canister changes and data review.	Air Quality Monitoring Forms Air Quality Monitoring Register Calibration Records	Air Quality Monitoring Forms Air Quality Monitoring Register Complaints Management Calibration Records

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		pollutants							
AQP7		• Identifying the location of sensitive receptors • Monitoring Mitigation options to minimise impacts on local air quality • Procedures for record keeping and reporting.	Air	Op Co	1) OEMP 2) Contingency Strategy for air quality mitigation if a significant deterioration is shown	Operation	Victorian EPA	OEMP	IREA review and approval
BP1		<b>Damage or impacts on third party property and infrastructure</b> Develop and implement a roadside air quality mitigation strategy, to the satisfaction of the EPA, for specific locations where post-construction monitoring shows a significant deterioration of air quality as a result of the Project.	General	Design Communications	1) Design Documentation 2) Report 1a of the Concept Design Report – Civil and Structural provided in Submission Volume 3b.2 3) Communications and Community Engagement Plan	Detailed design, construction	With the property or asset owner.	n/a	Detailed Design Records Completion records
BP2		<b>Access and amenity for business and commercial facilities</b> Access to, and amenity of, potentially affected business and commercial facilities must be protected, where practicable, by responding to the Project urban design principles and vision and implementing the principles of Crime Prevention Through Environmental Design. Any reduction in the level of access, amenity or function of any business or commercial facility must	General	Design Communications	1) Design Documentation 2) Report 1a of the Concept Design Report – Civil and Structural 3) Package One: Vision, Understanding and Approach	Detailed design, construction	Agreed with relevant property owner	n/a	Design Records Completion records

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
BP3	<b>be minimised to the extent and duration necessary to carry out the relevant construction related works.</b> Potentially affected business and commercial facilities must be provided with adequate notification of potential impacts and temporary access arrangements. Emergency access must be maintained at all times.  All permanent access to business and commercial facilities affected by the works is to be restored, or relocated as agreed with the relevant property owner, including associated landscaping and restoration works, and temporary access arrangements put in place for the duration of construction must be removed when construction has ceased.		and Package Two: Urban Design Framework provided in Submission Volume 3b, <sup>4</sup> provides details regarding Crime Prevention Through Environmental Design 4) CCEP and stakeholder management database					
BP4	<b>Screening</b>  Screening must be erected at the boundary of construction sites that adjoin residential or commercial properties, consistent with the surrounding context, in consultation with the relevant local councils, affected property owners and occupiers.	General	Communications Construction Teams	1) CEMP - Air Sub-Plan 2) WEMPs 3) Construction Procedures 4) Construction Package 5) CCEP and stakeholder management database	Construction	With affected property owners	n/a	Visual checks during inspections Stakeholder Management Database Complaints Management System
BP5	<b>Impacts on operation of community, private recreation and council facilities and services</b>  Where the operation of community, private recreation and council facilities and services are directly impacted by the Project, mitigation and management measures must be implemented in consultation with the appropriate stakeholders including the relevant local council to minimise these impacts to the extent practicable.	General	Communications Traffic Management Op Co	1)CCEP	All	With affected property owners	n/a	Stakeholder Management Database Complaints Management System
	<b>Business Involvement Plan</b>  As part of the Communications and Community Engagement Plan (see EPR SP2), develop and	General	Communications	1)CCEP includes the Business Involvement	Pre-construction, construction	In consultation with affected local	n/a	Stakeholder Management Database

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
BP6	Implement a Business Involvement Plan, in consultation with affected local Councils, affected businesses, relevant local trader association, and other affected stakeholders, in advance of works commencing (other than preparatory works as referred to in the Incorporated Document).	Councils and affected stakeholders (including affected businesses and relevant local trader association) are to be consulted on progress of construction activities, including significant milestones, potential impacts, mitigation measures, changed traffic and parking conditions, and other matters which are of interest or concern to them. The plan must be published on the project website for the duration of construction and include but not be limited to:	Plan		Councils and other affected stakeholders		Complaints Management System	IREA Audits Monthly Reporting
	Identification of relevant stakeholders							
	Procedures to disseminate information regarding the construction schedule, construction progress, key milestones, changes in traffic and parking conditions and environmental management measures							
	Procedures to engage with stakeholders including affected businesses and relevant local trader associations, and through which affected businesses and relevant local trader associations can provide comment or feedback in relation to environmental management or delivery of the Project							
	Procedures that would be implemented to resolve any issues or disputes that may arise between parties relating to the environmental management or delivery of the Project							
	Procedures to minimise impact on access to business and commercial premises during construction and to restore permanent access (refer EPR BP2).							
	<b>Utility assets</b>	General	Design M&E Manager Construction Teams	1) Design CPGs and Construction Procedures	Detailed design, construction	Utilities providers Vic Roads	n/a	Design records Completion records

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		• Stormwater and sewer assets • Electricity transmissions assets (overhead and underground lines) • Gas and fuel pipelines • Communications lines (e.g. fibre optic cables and VicRoads trunk fibre).						Complaints Management System	
BP7		To the extent relocations are required to facilitate the Project, protect and where required, modify utility assets to the satisfaction of asset owners.	General	Design M&E Manager Construction Teams	1) Design 2) CPGs and Construction Procedures	Detailed design, construction	Utilities providers Vic Roads	n/a	IREA Audits Monthly Reporting Complaints Management System
	<b>Gas utilities</b>	Unless agreed otherwise with the asset owner, ensure that:  No works are undertaken within 3.0 metres of any licensed transmission gas pipeline or underground regulating station  Subject to the requirement below, clearances to all gas assets are as per the Conditions of Works as detailed in SP AusNet Technical Standards TS2607.1, TS2607.2 and TS2607.3, as amended or replaced from time to time  Risk assessments and safety studies detailing the impact on gas network infrastructure are completed in accordance with AS2885, which is the Standards Australia standard for the design, construction, testing, operations and maintenance of gas and petroleum pipelines that operate at pressure in excess of 1050 kPa, as amended or replaced from time to time.							
BP8	<b>Business disruption</b>	Minimise disruption to businesses to the extent practicable from temporary occupation of land	General	Design	1) Design 2) CPGs and Construction Procedures 3) Business Involvement Plan	Detailed design, construction	Local business owners	n/a	Complaints Management System Stakeholder Management Database Monthly Reporting
BP9	<b>Business acquisition process</b>	Minimise disruption to businesses to the extent practicable from the acquisition of interests in land, and work with business and land owners to endeavour to reach agreement on the terms for	General	Management	1) Business Involvement Plan	Detailed design, construction	Local Business Owners	n/a	Stakeholder Management Database Complaints Management

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
CHP1	possession of the land.	General	Environment Construction Teams	1) West Gate Tunnel Cultural Heritage Management Plan 2) CEMP Heritage Management Sub Plan 3) Construction Procedures 4) WEMPs 5) Cultural Heritage Manual	Aboriginal Victoria Local Traditional Owner Groups	Cultural Heritage Management Training Cultural Heritage Induction	WEMPs Induction records Interpretation Plan Consultation records with local TO groups	Internal Inspections and audits IREA audits
CHP2	<b>Design and construction to minimise impacts on heritage</b>  Undertake detailed design of the permanent and temporary works to minimise impacts where practicable, on the cultural heritage values of heritage places in consultation with Heritage Victoria and/or local councils (as applicable).  Prior to commencement of works that affect heritage structures, features or places, develop and implement in consultation with the relevant heritage authority:  Physical protection measures for heritage structures, features and places as appropriate  A methodology for any required dismantling, storage or reinstatement of heritage fabric (with reference to the ICOMOS Burra Charter 2013).  Note: The project must meet the requirements of the Heritage Act 2017 (formerly Heritage Act 1995)	Heritage	Design and Environment Construction Teams	1) Design 2) Western Distributor Cultural Heritage Management Plan 3) CEMP Heritage Management Sub Plan 4) Construction Procedures 5) WEMPs	In consultation with Heritage Victoria and relevant local councils Aboriginal Victoria Local Traditional Owner Groups	Described in the HMP	WEMPs Dilapidation surveys Photographic records	Internal Inspections and audits IREA audits
CHP3	<b>Archaeological Management Plan</b>  Develop an Archaeological Management Plan detailing measures to avoid, minimise, mitigate or manage disturbance of archaeological sites and values affected by the works. Undertake investigations in accordance with the Guidelines for	Heritage	Environment Heritage Sub consultant	1) CEMP Heritage Management Sub Plan 2) Investigations 3) WEMPs	Pre-construction, construction	To the satisfaction of the Executive Director Heritage Victoria	Described in the HMP	Heritage Management Plan Investigation

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
	Investigating Historical Archaeological Artefacts and Sites. Heritage Victoria 2014 and to the satisfaction of the Executive Director, Heritage Victoria.						WEMPs Protocols and Master Plans	
	The Management Plan must include:							
	Requirements for background historical research, excavation methodology, research design, reporting and artefact management and analysis							
	The incorporation of strategies relating to the protection of sites of archaeological interest in relevant master plans							
	• Protocols for managing previously unidentified historical archaeological sites discovered during the works.							
CHP4	<b>Monitoring of heritage sites and places</b>  Undertake vibration monitoring during demolition, excavation and construction within an appropriate distance (as determined by a technical assessment) of heritage sites and places in the Victorian Heritage Register (VHR) at risk of impact and monitor their condition during and post construction for settlement and structural integrity disturbance as a result of the proposed works. Report the results to the Executive Director, Heritage Victoria and take remedial action, if required, to the satisfaction of the Executive Director, Heritage Victoria.  (Also refer to EPR GMP3 and NVP11)	Heritage	Environment	1) CEMP Heritage Management Sub Plan 2) CNVMP	Construction  To the satisfaction of the Executive Director, Heritage Victoria.	n/a	Vibration Monitoring Form  Vibration Monitoring Register  Dilapidation Surveys	Internal Inspections and audits  IREA audits  Monthly Reporting
CHP5	<b>Archival photographic records</b>  Prior to construction, undertake archival photographic recording (interior and exterior) of all heritage buildings, streetscapes or places disturbed by the works in accordance with Heritage Victoria's specification for the archival photographic recording of heritage places	Heritage	Environment Heritage Sub Consultant	1) CEMP Heritage Management Sub Plan	Pre-construction  n/a	n/a	Photographic records	Internal Inspections and audits  IREA audits
CHP6	<b>Port Phillip Monument</b>  Develop and implement an approach to maintain a link between the Port Phillip Monument and the Maribyrnong River, including establishing an appropriate setting in consultation with the City of	Heritage	Design	1) Design 2) CEMP Heritage Management Sub Plan	Detailed design, construction  In consultation with the City of Melbourne  n/a	Consultation records  Design reports	Internal Inspections and audits  IREA audits  Dilapidation	Environmental Management Strategy Stage 65 of 122 Management System - Uncontrolled Document - when stored Date reviewed: 31/12/2018

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
CHP7	Melbourne which allows for interpretation, either on the existing or an alternative site.	Heritage	Environment Cultural Heritage sub consultant	1) CEMP Heritage Management Sub Plan 2) CCEP	Pre-construction, construction	In consultation with the relevant local councils, councils, local TO groups and Aboriginal Victoria	n/a	Consultation records and Stakeholder Database Heritage interpretation strategy Signage.
CHP8	<b>Heritage Interpretation strategy</b>  In consultation with the relevant local councils and Aboriginal community develop and implement a heritage interpretation strategy for the Project which seeks to explore historical and Aboriginal cultural heritage themes. The strategy must include an audit of existing heritage interpretation. The strategy may include installation of signage regarding local heritage places and is to have a particular focus on the Kororoit Creek area, Footscray/Maribyrnong River area, and the Moonee Ponds Creek area.	Heritage			Pre-construction, construction	Management measures in consultation with Heritage Victoria	n/a	Sonar results Report from archaeologist Heritage Management Plan
CHP9	<b>Shipwrecks</b>  To confirm the presence of shipwrecks at the Maribyrnong River crossing, including the Hilaira (S331) which is thought to be located on the west bank of the river, undertake preliminary high-resolution sonar scan of river environments within the area to be affected by the works and targeted diving for sub-surface anomalies within the area affected by the works. Based on the results of investigations, as appropriate develop management measures in consultation with Heritage Victoria; these could include consideration in the detailed design and a detailed program of archaeological investigation.  If the Edina (S199) is affected by works, record appropriately and relocate, if practicable, to a more secure location within the Maribyrnong riverine landscape, or include as part of an interpretation strategy for display in the local area, to the satisfaction of Heritage Victoria.  Engage a suitably qualified and experienced maritime archaeologist to undertake these tasks.	Heritage		1) Sonar scans and investigation prior to construction 2) WEMPs and Construction procedure for the scan 3) Marine archaeologist reports 4) CEMP Heritage Management Sub Plan	Detailed design	n/a	Detailed Design Records	Internal Inspections and audits IREA audits Dilapidation

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
									Surveys
CHP10	<b>Bluestone bridge</b> Undertake any works at and/or in the immediate vicinity of the bluestone bridge over Kororait Creek (HO 259) in a manner which avoids to the extent practicable disturbing surviving evidence of early road surfacing, including to the approaches to the bridge.	Heritage	Design	1) Design 2) Heritage Management Plan 3) Construction Procedure and WEMPs	Construction	n/a	n/a	Construction Procedure Integrity investigations	Internal Inspections and audits IREA audits Dilapidation Surveys
CHP11	<b>Rail turntables</b> Through detailed design, avoid impacts to rail turntables to the extent practicable. Make every effort to maintain rail turntables in situ. If it is necessary to remove one of the rail turntables, develop and implement a methodology for the salvage and storage of one of the turntables to provide the opportunity for future reinstatement at an alternative site.	Heritage	Design	1) Design 2) Heritage Management Plan 3) Salvage methodology 4) Construction Procedure and WEMPs	Detailed design	n/a	n/a	Detailed Design Records	Internal Inspections and audits IREA audits Dilapidation Surveys
CHP12	<b>Flinders Street</b> Undertake any works in the vicinity of the two VHR heritage places (No. 2 Goods Shed and the Flinders Street Retaining Wall) in a manner which avoids disturbance to the extent practicable.	Heritage	Design	1) Design 2) Construction Procedures and WEMPs 3) CEMP Heritage Management Sub Plan	Construction	n/a	n/a	Completion records	Internal Inspections and audits IREA audits Dilapidation Surveys
CSP1	<b>Contaminated soil requirements</b> The CEMP must include processes and measures to manage contaminated soil (including paste) that comply with relevant standards, guidelines, statutory requirements and best practice including but not limited to: <ul style="list-style-type: none"><li>• SEP – Prevention and Management of Contaminated Land, 2002</li><li>• SEP – Air Quality Management, 2001 (in respect of odour)</li><li>• Environment Protection (Industrial Waste Resource) Regulations 2009</li></ul>	Soil	Environment Construction Teams Logistics Manager	1) CEMP Soil and Spoil Management Plan 2) WEMPs	Construction	Victorian EPA	Induction and toolboxes	Soil tracking forms EPA waste tracking certificates Soil sampling data EPA auditor Reports Complaints Management System	Internal Inspections and audits IREA audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EFR IS ADDRESSED	IMPLEMENTATION IN TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
	<ul style="list-style-type: none"> <li>Industrial Waste Management Policy (Waste Acid Sulphate Soils) 1999</li> <li>National Environment Protection (Assessment of Site Contamination) Measures 2013</li> <li>Environment Protection (Scheduled Premises) Regulations 2017</li> <li>WorkSafe Occupational Health and Safety Regulations 2007 (Asbestos)</li> <li>Relevant Industrial Waste Resource Guidelines.</li> </ul>						<ul style="list-style-type: none"> <li>Internal Inspections and audits</li> <li>IREA audits</li> <li>EPA Auditor Reports</li> </ul>	
CSp2	<p><b>Contaminated soil and spoil management</b></p> <p>The CEMP must include a sub-management plan that sets out the requirements and methods for contaminated soil and spoil management developed to the satisfaction of EPA Victoria.</p> <p>The contaminated soil and spoil management plan must include undertaking a detailed assessment prior to any excavation of potentially contaminated areas to identify location, types and extent of any contaminated land and properties within or adjacent to the Project boundary, and sensitive land uses affected by construction activity outside the Project boundary, and assessing the potential impact for human health, environmental risk and odour.</p> <p>This assessment must include but not be limited to consideration of the following:</p> <ul style="list-style-type: none"> <li>Potential contamination risks, including landfill gas migration at the former quarry locations and landfills in accordance with Landfill BEPM publication 788</li> <li>Potential contamination risks associated with any alteration of the 220kV power lines and any other utilities</li> <li>Potential contamination risks associated with any works to the North Yarra Main Sewer</li> <li>Potential contamination risks and waste classification of the sediments in the Manbymong River and Mooree Ponds Creek</li> </ul>	<p>Environment Construction Directors Logistics Manager</p> <p>1) Soil and Spoil Management Plan 2) WEMPs</p>	<p>Victorian EPA</p>	<p>Induction and toolboxes</p>	<p>Soil tracking forms EPA waste tracking certificates Soil sampling data</p>			

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		<ul style="list-style-type: none"> <li>Potential impacts posed by contamination sources adjacent to the northern portal area</li> <li>Presence of soil contamination where excavations are proposed in the South Dynon rail yards</li> <li>Potential contamination risks in locations where public open spaces are proposed.</li> <li>The CEMP via the contaminated soil and spoil management plan must also include requirements and methods for:</li> <li>Characterising soil prior to disposal or reuse including PFAS chemicals</li> <li>EPA waste classification to enable reuse, transport and temporary storage</li> <li>Identifying, and where practicable adopting, options for the reuse of spoil in accordance with the Environment Protection Act 1970 waste management hierarchy</li> <li>Identifying soil containing asbestos and if present, developing management strategies in accordance with the WorkSafe Regulations</li> <li>Assessing geological formations with naturally enriched metals and applicable spoil management options and/or off-site disposal to the satisfaction of EPA Victoria, in particular, tunnel spoil and the West Gate Freeway embankment material</li> <li>Identifying suitably licensed facilities for the disposal or treatment of contaminated soil</li> <li>Management of wastewater</li> <li>Management of dust, potential stormwater run-off and seepage from stockpiled materials, including the enclosure of the spoil handling facility at the former pivot site near the northern portal</li> <li>Assessing potential for accumulation of potentially harmful gases and vapours during tunnelling from soil and groundwater contamination zones</li> <li>Undertaking a baseline site assessment of areas</li> </ul>							

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
CSP3	<b>Acid sulphate soil</b>  proposed for construction laydown prior to use • Management of any air pollutants released as a result of disturbance of contaminated land, in accordance with requirements of SEPP (AGM) • Minimising cut and cover construction techniques in areas containing asbestos contamination • Protection of the beneficial uses of land, associated with current and planned future use.	Soil	Environment Construction Directors Logistics Manager	1) Soil and Spoil Management Plan 2) WEMPs	Pre-construction, construction	Victorian EPA	Induction and toolboxes	Soil tracking forms EPA Certificates EPA Auditor Reports Waste Disposal Records	Internal Inspections and audits IREA audits
CSP4	<b>Odour management</b>  The CEMP must include requirements and methods for the management of waste acid sulphate soil material in accordance with EPA Victoria publication IWRC 2009, EPA Victoria Publication 655.1 Acid Sulfate Soil and Rock 2009, Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soil.  This will include undertaking an acid sulphate soils risk identification process in accordance with the Victorian Coastal Acid Sulphate Soil Strategy, if soil and rock within the Project boundary are suspected to be acid sulphate soil and rock.	Soil and Air	Environment Construction Directors Logistics Manager	1) Soil and Spoil Management Plan 2) WEMPs	Construction	n/a	Odour Monitoring training	WEMPs Odour Records (VDI standard if required) Complaints Management System Induction and toolboxes as per the Soil Management Plan	Internal Inspections and audits IREA Audits Odour Monitoring Records
EP1	<b>Minimise vegetation removal and disturbance</b>  Develop and implement measures to avoid, where practicable, and otherwise minimise to the extent	Flora and Fauna	Design and Environment	1) Design 2) CEMP Flora and Fauna Construction	Detailed pre-construction,	Relevant Councils	Tree Protection and No Go	Design Reports	Internal Inspections and audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EFR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
	practicable impacts on native vegetation and fauna habitat through detailed design and construction, including:	Teams	Management Sub Plan 3) Tree Protection Plan 3) Arboriculture Assessment 4) Pre-construction Assessment 5) Post-construction assessment 6) WEMPs	construction	Zone Areas	Arboriculture Assessment	IREA Audits Arborist and ecology survey Reports	Pre-construction Assessment Post-construction assessment
EP2	<b>Vegetation protection measures</b> The CEMP must include a sub-management plan	Flora and Fauna	Environment Construction	1) CEMP Flora and Fauna	Pre-construction.	Fencing should be to	Tree Protection	Land manager Internal Inspections

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
EP2	that sets out the requirements and methods for: <ul style="list-style-type: none"> <li>• Identification of areas of important flora and fauna habitat to be protected during construction</li> <li>• Fencing protected areas and no go zones to prevent access during construction. Fencing should be to a standard agreed with the relevant land manager</li> <li>• Pre-construction site assessment to confirm that vegetation and trees to be retained have been adequately protected from impact vegetation clearing controls and protection measures</li> <li>• Development and implementation of a Tree Protection Plan for protection of retained trees based on the recommendations of Australian Standard AS/NZS 4970-2009 Protection of Trees on Development Sites. The Tree Protection Plan must respond to the detailed design and construction methodology and identify all trees to be retained, their condition, significance, and measures to protect them from the impact of construction activities including identification of the tree protection zone</li> <li>• Implementation of appropriate measures to manage the risk of the spread and introduction of weeds and pathogens during construction</li> <li>• Procedures if unexpected endangered ecological communities or threatened species are identified.</li> </ul>	Teams	Management Sub Plan (including Tree Management Plan)	construction	a standard agreed with the relevant land manager	and No Go Zone Areas	agreement Pre-Construction Assessment	and audits IREA Audits Monthly Reporting
EP3	<b>Reinstatement</b> Areas affected by temporary works must be reinstated and appropriate vegetation selected for planting to tolerate the microclimate conditions including under new road structures, such as the elevated structure over Footscray Road, in consultation with the relevant council and the land manager.	Flora and Fauna	Environment Landscape Designers Construction Teams	1)CEMP Flora and Fauna Management Sub Plan 2)Landscaping Plan	Construction	In Consultation with the relevant council and the land manager	n/a	Land manager agreement Landscaping Plan CEMP Flora and Fauna Management Internal Inspections and audits IREA Audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
EP4	<b>Fauna management measures</b>  The CEMP must include requirements and methods for: Managing native fauna that may be displaced due to tree removal, in compliance with the Wildlife Act 1975 and in consultation with public land managers where relevant. The strategy should be prepared by a qualified wildlife ecologist prior to vegetation clearance. <ul style="list-style-type: none"><li>• Undertaking pre-clearing surveys and inspections to confirm the on-site location of native fauna immediately prior to tree removal</li><li>• Minimising lighting impacts in known fauna habitats</li><li>• Immediate reporting of incidental or unanticipated threatened flora and fauna finds with any clearing works in the vicinity stopped until an evaluation and appropriate response can be established.</li><li>• The surveys, inspections and management actions must be undertaken by a qualified wildlife ecologist with all necessary authorisations obtained prior to removal of relevant habitat. All management actions and any accidental fauna injuries or deaths must be reported to the IREA</li></ul>	Flora and Fauna	Environment Ecologist sub consultant	1) CEMP Flora and Fauna Management Sub Plan 2) Pre-clearance surveys 3) Lighting Sub-Plan 4) WEMPs	Pre-construction, construction	DELPW Victorian EPA	Induction and toolbox Fauna handling training (as required)	Pre-clearing inspection checklist Permit to Clear Environment Inspection checklist Threatened flora and fauna records	Internal Inspections and audits IREA Audits Monthly reports
EP5	<b>Works on waterways</b>  Through detailed design and construction, design, locate and construct structures to minimise, to the extent practicable, short and long-term impacts on riparian, riverbed and aquatic habitat in Kororoit Creek, Stony Creek, Maribyrnong River and Moonee Ponds Creek, in consultation with Melbourne Water and relevant authorities.	Flora and Fauna	Design	1) Design 2) CPGs and Construction Procedures 3) WEMPs	Detailed design, construction	n/a	Cultural Heritage Induction Erosion and Sediment control training	Design Package WEMPs Melbourne Water Permits	Internal Inspections and audits IREA Audits Surface Water Monitoring Data
EP6	<b>Landscape Plan</b>  Prepare and implement the Landscaping Plan that includes replacement of affected planted vegetation to achieve a canopy of equal (or greater) size of healthy, mature examples of the	Flora and Fauna	Design and Environment Landscaping sub consultant	1) Landscaping Plan 2) CCEP	Detailed design, pre-construction, construction	n/a	The plan must be developed in consultation with the Stakeholder	Landscape Plan Stakeholder	Internal Inspections and audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
	species.		The plan must ensure the reinstatement of soils is of sufficient quality and volumes to support the long-term viability of replacement plantings. Ensure ongoing supply of water to tree root zones, especially during their establishment stage. Employ water sensitive urban design principles (WSUD) where possible.		relevant council with regard to local policies and strategies City West Water Melbourne Water	database	IREA Audits	

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EER IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
Master Plan	<ul style="list-style-type: none"> <li>City of Maribyrnong Yarraville Gardens Conservation Plan</li> <li>City of Melbourne Draft Urban Ecology and Biodiversity Strategy</li> <li>City of Melbourne's Tree Retention and Removal policy, Urban Forest Strategy, and Nature in the City Strategy</li> <li>The relevant City of Melbourne Urban Forest Precinct Plan.</li> </ul>							
EP7	<b>Vegetation Offsets</b> Native vegetation offsets must be provided in accordance with the Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines (Department of Environment and Primary Industries, September 2013), except as otherwise agreed by the Secretary to the Department of Environment, Land, Water and Planning.	Flora and Fauna State	1) CEMP Flora and Fauna Management Plan	Construction	n/a	n/a	Offset records and inspection.	Internal Inspections and audits IREA Audits
GGP1	<b>Greenhouse gas emissions</b> Integrate sustainable design practices into the design process to minimise, to the extent practicable, greenhouse gas emissions arising from construction, operations and maintenance of the West Gate Tunnel Project. Include mandatory actions under the Protocol for Environmental Management (Greenhouse Gas Emissions and Energy Efficiency in Industry) for selection of best practice energy usage for the tunnel ventilation and lighting systems.	Energy	Design	1) Design	Detailed design	n/a	Energy and Greenhouse gas training	Design Records Embodied Energy calculations Internal Inspections and audits IREA Audits
GGP2	<b>Emissions reduction</b> In detailed design, consider the selection of materials and monitor energy and carbon during construction, to target reductions for GHG emission impacts of materials and energy consumption in accordance with Mat-1 (Level 2) and Ene-1 (Level 2) credits of the Infrastructure Sustainability (IS) rating tool (v1.2). Investigate opportunities to use green power sourced from renewable energy and bio diesel where practicable.	Energy	Environment	1) CEMP Energy Sub-Plan 2) Design 3) Sustainability Management Plan	Detailed design, construction	n/a	Design Records ISCA sustainability assessment Sustainability Management Plan	Internal Inspections and audits IREA Audits ISCA certification reviews

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GMP1	Target Ene-1 (Level 2.7) credits of the Infrastructure Sustainability (IS) rating tool (v1.2), above the minimum Project requirement of Level 2.	Ground Movement	Design and Environment	1) CEMP Groundwater Management Sub Plan 2) CEMP Ground Movement Sub-Plan 3) Geotechnical model	Pre-construction, construction	n/a	Collection of ground movement and vibration data	Inspections and audits
GMP2	<b>Geotechnical model and assessment</b>  Prepare a geotechnical model of representative geological and groundwater conditions prior to excavation and tunnelling in subject area(s) to identify geological structures and groundwater features. This model must include details of proposed excavations and tunnels, construction staging, and identify surface (including road and rail infrastructure) and sub-surface structures and infrastructure (including utilities) which could be impacted by the Project, including the specific attributes of those structures. This model must be used to assess the predicted settlement, ground movement, stress redistribution and horizontal strain profiles caused by excavation and tunnelling on adjacent property and infrastructure.  Maintain the predictive model throughout the construction period and review against monitoring data (EPR GMPS), to regularly assess potential ground movement impacts.	Ground Movement	Design and Environment	1) CEMP Groundwater Management Sub Plan 2) CEMP Ground Movement Sub-Plan 3) Geotechnical model	Pre-construction	n/a	Vibration and Ground movement data Monitoring CEMP Ground Movement Sub Plan	IREA audits
GMP3	<b>Tunnel and portal drainage</b>  Through detailed design and construction, design tunnel and portal drainage and adopt construction methods which minimise adverse changes to groundwater levels during construction and operation to prevent or manage the effects of ground subsidence.  In addition to the above, for the northern and southern portal areas design and implement engineering control measures to ensure dewatering does not result in adverse ground movement impact on property or infrastructure.	Ground Movement	Design and Environment	1) Design 2) CEMP Groundwater Management Sub Plan 3) CEMP Ground Movement Sub-Plan 4) Geotechnical model	Detailed design, construction	n/a	n/a	Design records
GMP3	<b>Condition surveys and determination of settlement criteria for property and infrastructure</b>  Before works commence, and subject to receiving landowner consent on suitable terms, undertake condition surveys of property and infrastructure identified in the geotechnical model and	Ground Movement	Design and Environment Communications Op Co	1) CEMP Ground Movement Sub-Plan 2) Conditions Surveys	Pre-construction, construction, operation	n/a	Subject to receiving landowner consent on suitable terms	Condition surveys Modelling results Complaints Management

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		assessment (EPR GMP1) as being at risk of damage by an independent qualified professional.		4) CCEP 5) OEMP		Where potential for ground movement impacts could occur, consult with affected stakeholders		System OEMP CEMP CEMP Ground Movement sub Plan	
		Condition surveys are to include property, land, ground or infrastructure reasonably accessible and within 50 metres of project activities or other property, land, ground or infrastructure that may be affected by project activities. Post-construction condition surveys of those properties and infrastructure must be undertaken after construction of the Project is completed.		The results of the condition surveys and the modelling undertaken under GMP1 must be used to determine appropriate settlement criteria for the relevant property and infrastructure. Condition surveys must be forwarded to the property owner within four weeks of the survey being undertaken. Where potential for ground movement impacts could occur, consult with affected stakeholders. Any damage caused to property or infrastructure as a result of the Project must be rectified or the landowner or asset owner compensated.					
				Establish an independent mediation process for the assessment of claims for property and infrastructure damage to operate up to three years post opening of the Project.					
				Ensure all stakeholder engagement activities are undertaken in accordance with the project's Communications and Community Engagement Plan (EPR SP2).					
GMP4	<b>Settlement criteria for utilities</b>	Ground Movement	Design Construction Teams	1) CEMP Ground Movement Sub-Plan 2) Ground Movement Monitoring 3) Conditions Surveys 4) CCEP	Pre-construction	Utilities Providers Melbourne Water City West Water	n/a	Detailed Design	Inspections and audits
GMP5	<b>Ground movement monitoring</b>	Ground Movement	Design and Environment Construction	1) CEMP Ground Movement Sub-Plan	Pre-construction, construction, operation	n/a	Ground Movement Monitoring Training	Incident records	Inspections and audits

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GMP6	<b>Mitigation of ground movement impact</b> Implement appropriate mitigation measures should the geotechnical model (EPR GMP1), predictive groundwater model (EPR GWP4), or subsequent monitoring program identify exceedances of criteria identified in EPR GMP3 and EPR GMP4.	monitor subsidence and lateral movement during construction activities and during operation. Implement a baseline ground movement monitoring plan, including provision for monitoring of water table and soil moisture interactions, prior to commencement of construction, in locations where construction activities with the potential to cause ground movement will occur, to assess background fluctuations.	Teams Op Co	2) Ground Movement Monitoring 3) Conditions Surveys 4) CCEP				Monitoring records	IREA audits Monthly Reporting
GWP1	<b>Groundwater management measures</b> Prepare and implement a CEMP and an OEMP including a sub-management plan which sets out the measures for management, monitoring, reuse and disposal of groundwater inflows during construction and operation that comply with relevant legislation and guidelines, including but not limited to: <ul style="list-style-type: none"><li>• State Environment Protection Policy Groundwaters of Victoria 1997 (Vic)</li><li>• State Environment Protection Policy Waters of Victoria 2003 (Vic)</li><li>• State Environment Protection Policy Prevention and Management of Contaminated Land 2002 (Vic)</li><li>• Water Industry Regulations 2006 (Vic).</li><li>• The groundwater sub-management plan, developed in consultation with EPA Victoria, must include details of:<ul style="list-style-type: none"><li>• Hydrogeological conceptual model</li><li>• Baseline conditions</li></ul></li></ul>	Ground Movement	Design and Environment Construction Teams Op Co	1) CEMP Ground Movement Sub-Plan 2) Ground Movement Monitoring 3) Conditions Surveys 4) CCEP	Construction, operation	n/a	n/a	Incident records Complaints Management System Ground Movement Monitoring data.	Inspections and audits IREA audits Monthly Reporting
		Groundwater	Environment Construction teams Op Co	1) CEMP Groundwater Management Sub Plan 2) CPGs, Construction Procedures and WEMPs	Pre-construction, construction, operation	Victorian EPA Southern Rural Water Melbourne Water	Groundwater Monitoring	Groundwater monitoring results Verification of the hydrogeological model	Inspections and audits IREA audits Monthly Reporting

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		<ul style="list-style-type: none"> <li>• Beneficial uses</li> <li>• Monitoring plan</li> <li>• Management, mitigation and performance measures</li> <li>• Disposal of groundwater</li> <li>• Triggers for action</li> <li>• Reporting.</li> </ul>							
GWP2		<b>Protection of groundwater quality</b>	Groundwater	Environment Tunnelling construction teams	1) CEMP Groundwater Management Sub Plan 2) CPGs, Construction Procedures and WEMPs	Victorian EPA Southern Rural Water Melbourne Water	Groundwater Monitoring	Groundwater monitoring results Verification of the hydrogeological model	Inspections and audits IREA audits Monthly Reporting
GWP3		<b>Tunnel drainage design and construction methods</b>	Groundwater	Design	1) Design 2) CEMP Groundwater Management Sub Plan	Victorian EPA Southern Rural Water Melbourne Water	Groundwater Monitoring	Groundwater monitoring results Detailed Design Hydraulic testing of Stony Creek (low Flow)	Inspections and audits IREA audits Monthly Reporting

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		including terrestrial ecosystems							
		<ul style="list-style-type: none"> <li>Avoid any other adverse impacts of groundwater level changes such as subsidence.</li> </ul> <p>Design contingency measures and/or controls as required to:</p> <ul style="list-style-type: none"> <li>Ensure maintenance of the base flow associated with a reduction or loss of groundwater discharge to Stony Creek or loss of water availability for terrestrial ecosystems.</li> <li>Limit acidification should monitoring indicate a potential adverse impact to water levels or quality.</li> </ul> <p>Design contingency measures and/or controls as required should movement of contamination be identified. Contingency measures to include consideration of:</p> <ul style="list-style-type: none"> <li>Improvements to barrier system and ground treatments at the portal to reduce inflows and drawdowns</li> <li>Hydraulic control of the movement of the contaminated groundwater.</li> <li>Implement engineering control measures and/or ground treatment to minimise to the extent practicable groundwater inflow during excavation, construction and operation of tunnels, cross passages and subsurface excavations.</li> <li>Implement measures to limit groundwater inflow during construction to excavations and drawdown should monitoring indicate acidification is occurring.</li> <li>Develop and implement a plan to mitigate and manage potential future displacement of contaminated groundwater in the vicinity of the NYM sewer, in accordance with State Environment Protection Policy Groundwaters of Victoria 1997 (Vic) and State Environment Protection Policy Prevention and Management of Contaminated Land 2002 (Vic), including:</li> <li>Investigate the properties identified as</li> </ul>							

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	potentially contaminated and likely to be influenced by the changed groundwater conditions							
GWP4	<b>Predictive groundwater model</b> Assess the influence of changed conditions on potentially contaminated groundwater at these properties • Assess the risk posed to human health and the environment, including the potential for vapour intrusion to indoor air of buildings • Develop contingency measures to control any adverse risks.	Groundwater	Environment	1) CEMP Groundwater Management Sub Plan	Pre-construction, construction	Victorian EPA Southern Rural Water Melbourne Water	n/a	Groundwater model CEMP Groundwater Management Sub Plan Groundwater Monitoring results
GWP5	<b>Groundwater monitoring</b> Develop and maintain a predictive groundwater model throughout the construction period to assess the potential impacts of dewatering during construction and develop potential contingency measures.	Groundwater	Environment Op Co	1) CEMP Groundwater Management Sub Plan 2) OEMP	Pre-construction, construction, operation	Victorian EPA Southern Rural Water Melbourne Water	n/a	Groundwater model Monitoring results Monitoring spreadsheet

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GWP6	<ul style="list-style-type: none"> <li>• Areas considered a high contamination risk</li> <li>• Groundwater Dependent Ecosystems (e.g. Stony Creek, Yarraville Gardens)</li> <li>• North Yarra Main Sewer</li> <li>• Acid Sulphate Soils</li> <li>• Compressible materials</li> <li>• Portal, tunnel, and cross passage construction</li> <li>• Can be used to determine the requirement for intervention, and assess the effectiveness of mitigation measures proposed or implemented to protect groundwater</li> <li>• Can be used to calibrate and verify a predictive numerical model developed as part of the Project</li> <li>• Groundwater sampling undertaken consistent with EPA Victoria Publications 668 (2006) Hydrogeological Assessment (Groundwater Quality) Guidelines and 669 (2000) Groundwater Sampling Guidelines.</li> </ul>	Groundwater	Environment	1) CEMP Groundwater Management Sub Plan	Construction	Maribyrnong City Council Victorian EPA Southern Rural Water Melbourne Water	Dewatering training	Inspections and audits IREA audits Monthly reporting
GWP7	<p><b>Interception of groundwater</b></p> <p>The CEMP must include requirements and methods for management of groundwater interception during construction, including:</p> <ul style="list-style-type: none"> <li>• Identification, treatment, disposal and handling of contaminated seepage water and/or slurries including vapours in accordance with relevant legislation and guidelines</li> <li>• Assessment of barrier/damming effects</li> <li>• Subsidence management</li> <li>• Dewatering and potential impacts on acid sulphate soils, including both unconsolidated sediments and lithified sedimentary rock</li> <li>• Protection of waterways and potential groundwater dependent ecosystems including Yarraville Gardens</li> <li>• Contingency actions when interventions are required.</li> </ul>	Groundwater	Design and Environment	1) CEMP Groundwater	Pre-construction,	Southern Rural Water	n/a	Review of groundwater
	<b>Impacts on groundwater users</b>	Groundwater						Inspections and audits

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LPP1		potential use of extraction bores within the estimated construction drawdown area. Develop and implement if required a plan to maintain water supply to identified groundwater users.	Communications Management	Sub Plan 2)CCEP	construction			users and any impact. Incident reporting Complaints database CEMP Groundwater Management Sub Plan	IREA audits
LPP2	<b>Minimise design footprint</b>	Through detailed design, minimise the permanent footprint of the Project to the extent practicable to reduce adverse impacts on potentially affected land uses in consultation with the relevant local Council, particularly:	General	Design	1) Design documentation	Detailed design	n/a	Detailed Design records Completion records	Inspections and audits IREA audits
LPP3	<b>Recreation facilities</b>	Through detailed design and construction, minimise to the extent practicable any impacts on users of recreational facilities including Westgate Public Golf Course, Crofts Reserve, Hyde Street Reserve, Donald McLean Reserve, Moonee Ponds Creek (Capital City Trail), Railway Place and Miller Street Reserve, Yarraville Gardens, and McIvor Reserve. Access to, and amenity and function of recreation facilities is to be maintained to the extent practicable in consultation with the land manager.	General	Design	1) Design documentation	Detailed design, construction	In consultation with the land manager and local Councils	Design records Completion records Complaints database	Inspections and audits IREA audits
LPP3	<b>Future development opportunities</b>	Do not preclude the possibility of a future road connection between Precinct 15 (Hobsons Bay City Council) and Bradmill Precinct (Maribyrnong City Council).	General	Design	1) Design documentation	Detailed design	In consultation with City of Melbourne. Maribyrnong	Design records Completion records Consultation	Inspections and audits IREA audits

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LPP4	<b>Pedestrian and bicycle connections</b> Do not preclude the possibility of high amenity, accessible and convenient future pedestrian and bicycle connections between: <ul style="list-style-type: none"><li>• North and West Melbourne, E-Gate and Docklands to Moonee Ponds Creek (the Moonee Ponds Creek Trail/Capital City Trail)</li><li>• Digital Harbour and West Melbourne by upgrading pedestrian crossings at the intersection of Wurundjeri Way and Dudley Street.</li></ul>	General	Design	1) Design documentation	Detailed design	Relevant local authorities	n/a	Design records Completion records	Inspections and audits IREA audits
LPP5	<b>Public Land</b> Through detailed design and construction reduce the disruption to the extent practicable, to current uses of public and council land resulting from temporary occupation. Reinstate public land upon completion of temporary occupation as per LVP2.	General	Design	1) Design documentation	Detailed design, construction	n/a	n/a	Design records Completion records	IREA Audits
LVP1	<b>Urban design approach</b> Detailed design development must respond to the West Gate Tunnel Project urban design principles and vision.  The design response must minimise, to the extent practicable, landscape and visual impacts, and maximise opportunities for enhancement of public amenity, open space and facilities, resulting from the Project, in consultation with relevant stakeholders, particularly in relation to: <ul style="list-style-type: none"><li>• Landmark elements</li></ul>	General	Design	1) Design documentation	Detailed design, construction	Relevant Local Authorities Heritage Victoria Melbourne Water	n/a	Design records Completion records	IREA Audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION IN TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		Heritage values and assets							Inspections and audits
		Bridges and structures							
		Existing and proposed roads, streets, cycle paths, trails and footpaths							
		Existing and proposed landmark natural and urban elements across the Project, including CityLink							
		Significant views from the public domain							
		Existing and proposed vegetation including street trees and vegetation along waterways							
		Open space including, Yarraville Gardens, Hyde Street Reserve, Donald McLean Reserve, Railway Place and Millers Street Reserve, and along Maribyrnong River and Moonee Ponds Creek and proponent-proposed new open spaces							
		Community and recreational assets including the Yarraville Community Centre, Yarraville Gardens, Westgate Golf Club, Spotswood Cricket/Football Oval, W.L.J. Crofts Reserve, shared paths along Kororait Creek, Maribyrnong River, Stony Creek, and Moonee Ponds Creek, various bowls and tennis clubs in the vicinity of the Project							
		Residential interfaces							
		Business interfaces							
		Crime Prevention Through Environmental Design, including effects on safe movements of pedestrians and cyclists; including within undercroft and open spaces areas							
		Detailed design to minimise overshadowing by noise walls of residential properties, community facilities, open spaces, waterways and valuable natural habitats							
		Design of acoustic sheds, used during construction, to have regard to the character of the area.							
		<b>Reinstatement following temporary works</b>	General	Design Construction Teams	1) Design documentation	Detailed design, construction	n/a	Design records	
		Avoid direct impacts on the Yarraville Gardens unless agreed by the City of Maribyrnong.							

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION / WHERE EPR IS ADDRESSED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
LVP3	<b>Light spillage</b> Detailed design of the works must minimise light spillage to protect the amenity of adjacent land uses and any known significant native fauna habitat to the extent practicable. The CEMP must include requirements and methods to minimise light spillage, to the extent practicable, during construction to protect the amenity of adjacent surrounding neighbourhoods, parks and community facilities including urban environments, in consultation with relevant stakeholders.	Light	Design and Environment	1)CEMP Lighting Sub-Plan 2)WEMPs	Detailed design, construction	Relevant Local Authorities	n/a	Visual checks during inspections Complaints Management Database Light monitoring data
LVP4	<b>Vegetation screening</b> As part of the Landscaping Plan (refer EPR EP 6), implement vegetation screening for visually impacted residential areas, public realm areas, public open spaces and the Altona Memorial Park. The plan must be prepared in consultation with the relevant Councils and include measures to ensure vegetation screening is used where practicable if Project infrastructure would be visible from residential areas and public open spaces.	General	Design and Environment	1)Landscaping Plan 2)Construction Procedures 3)WEMP	Construction	Relevant Local Authorities	n/a	Visual checks during inspections
LVP5	<b>Design review</b> WDA must refer urban design plans to the OVGA for review against the relevant EPRs and the Project's urban design principles and vision.	General	The State	1)Urban design plans	Detailed design	OVGA Relevant local authority	n/a	Detailed design
NVP1	<b>Traffic noise limits</b> Design and construct the works to meet the following limits on traffic noise levels.	Noise and Vibration	Environment Construction Teams Design	1)CNVMP 2)Design Packages	Detailed design, construction	Victorian EPA Vic Roads	Noise Monitoring Training	Inspections and audits IREA audits Monthly reporting
	Aspect	External Traffic Noise Levels						
	External traffic noise levels	External traffic noise levels from the freeway* and Local Roads+ at Category A Buildings and Category B Buildings\ facing the traffic noise, being those adjacent						

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		to or with a direct line of sight to the freeway*, must be no greater than:							
		i 63dB(A) L10(18h) measured between 6am and midnight for Category A Buildings; and ii 63dB(A) L10(12h) measured between 6am and 6pm for Category B Buildings.		External traffic noise levels from the freeway* and Local Roads+ at Category A Buildings and Category B Buildings* which do not fall within paragraph (a) above and which are adjacent to an identified section of Local Road+, must be no greater than the predicted traffic noise level under a 'no project' scenario. The 'no project' scenario must also assume that the road traffic noise attributable to the West Gate Freeway (without the project) is:	<ul style="list-style-type: none"> <li>• 63dB(A) L10(18h) measured between 6am and midnight for the relevant Category A Buildings; and</li> <li>• 63dB(A) L10(12h) measured between 6am and 6pm for the relevant Category B Buildings.</li> </ul>			Applies at	The noise criteria in paragraphs (a) and (b) above are to apply to the lowest habitable level of Category A Buildings and Category B Buildings existing and occupied or capable of being occupied at the time of announcing the design on 29 May 2017.

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
NVP1	In some cases off-site noise attenuation may be required to meet the noise criteria at any Category A or Category B Building. This may include implementation of noise attenuation measures in consultation with the owner of the relevant building to ensure that an equivalent internal level of attenuation is provided to the building.	Freeway means the primary road connecting the West Gate Freeway (from the M80 interchange) with the Port of Melbourne, CityLink and the city to be constructed as a result of the Project and excludes:	<ul style="list-style-type: none"> <li>• The sections of the West Gate Freeway east of the Williamstown rail line, but includes the Hyde Street ramps; and</li> <li>• The sections of the Project which comprise widening of arterial roads, but includes:</li> </ul>	<ul style="list-style-type: none"> <li>• The Dynon Road eastbound exit ramp and Dynon Road westbound entry ramp to the western abutment of the existing Dynon Road bridge over the railway lines; and</li> <li>• The Wurundjeri Way Extension from Dynon Road to the point at which the elevated section of the road ties into Wurundjeri Way south of Dudley Street.</li> </ul> <p>+ Local Road means</p> <ul style="list-style-type: none"> <li>• The sections of Grieve Parade, Millers Road, Williamstown Road/Melbourne Road, Hyde Street, MacKenzie Road, Simcock Avenue and Dynon Road which extend 100 metres from the interchange of the relevant road with the freeway; and</li> <li>• The sections of Footscray Road between the intersection of Footscray Road with the</li> </ul>				

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
NVP1	Footscray Road ramps and the Sims Street loop intersection with Footscray Road.	<ul style="list-style-type: none"> <li>Category A Buildings and Category B Buildings means</li> <li>Category A Buildings - Residential dwellings, aged persons homes, hospitals, motels, caravan parks and other buildings of a residential nature</li> <li>Category B Buildings - Schools, kindergartens, libraries and other noise-sensitive community buildings.</li> </ul>							
NVP2	<b>Traffic noise reduction at open space</b> Construct noise barriers to reduce noise levels at the following open space areas: • Crofts Reserve: extend the 8.25 metre high barrier on the south of the freeway, to the west for approximately 85 metres • Precinct 15 (frontage): provision of an additional 3 metre high barrier on the south of the freeway, approximately 210 metres extending to the west • McIvor Reserve: extend the 8.75 metre high barrier opposite McIvor Reserve, on the north side of the freeway, to the west for approximately 150 metres • Hyde Street Reserve: a 4.5 metre high noise barrier along the Hyde Street off ramp and shared use path adjacent to the Hyde Street Reserve for approximately 440 metres..	Noise and Vibration	Construction Teams Design	1) Design Packages	Detailed design, construction	Relevant Local Authority	n/a	Design Reports Completion Reports	Inspections and audits IREA audits Monthly reporting
NVP3	<b>Maintenance of noise mitigation measures</b> Traffic noise mitigation measures must be maintained to ensure that the traffic noise levels in EPR NVP1 are not exceeded for 20 years after opening of the Project for the same sensitive receptors used at the time of the design	Noise and vibration	Op Co	1) OEMP	Operation	Victorian EPA Vic Roads	n/a	Noise Monitoring Form Vibration Monitoring Form Noise and Vibration Monitoring Calibration Records	Inspections and audits IREA audits Monthly reporting

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
NVP4	<b>Traffic noise reduction at Millers Road north of West Gate Freeway</b>  Subject to the timely agreement of the relevant property owners prior to opening of the Project, agreed noise mitigation measures must be implemented, during construction, at the residential properties that front Millers Road between the West Gate Freeway and Geelong Road (to the extent EPR NVP 1 is not otherwise applicable to such properties). Relevant property owners are to be consulted and provided with:	Design	1) Acoustic report 2) Detailed Design	Pre-operation	Victorian EPA & Vic Roads Relevant Property Owners	Noise Monitoring Training	Report of Agreed Noise Mitigation Measures Acoustic Report Noise Monitoring Calibration Records	Inspections and audits IREA audits Monthly reporting
NVP5	<b>Construction of noise barriers</b>  Permanent noise attenuation must, where feasible, be installed in advance of adjacent works.	Noise and Vibration	Environment Construction Teams	1) CNVMP 2) Construction Procedures 3) CPG 4) WEMP	Construction	Relevant Local Authority Vic Roads Victorian EPA	n/a	CNVMP Noise Monitoring CPG WEMP
NVP6	<b>Traffic noise monitoring</b>  Traffic noise must be measured prior to and upon opening of the Project and during operation of the freeway, in accordance with the VicRoads Traffic Noise Measurement Requirements for Acoustic Consultants – September 2011, to verify conformance with the external traffic noise performance requirements set out in EPR NVP1 above.	Noise and Vibration	Environment Op Co	1) CNVMP 2) CCEF Operation	Vic Roads	Noise Monitoring Training	Noise Monitoring Form Traffic noise monitoring (publicly available) Out of hours works permit	Inspections and audits IREA audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
NVP7	Remedial action must be taken as soon as practicable in the event that the measured traffic noise levels demonstrate that the external traffic noise performance requirements set out in EPR NVP1 are not met.	Noise and Vibration	Environment	1)CNVMP 2)Construction Procedures 3)ICPG 4)WEMP	Pre-construction, construction	Victorian EPA	Included in CNVMP	Noise Monitoring Form Vibration Monitoring Form IREA audits Noise and vibration Monitoring Out of hours works permit Calibration Records

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION / N TIMING WHERE EPR IS ADDRESSED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
C	Vibration	Temporary structures to attenuate noise impacts at the tunnel portals if required to achieve Noise and Vibration EPRs.						
		Detail of practicable measures that will be adopted to manage noise and vibration impacts that exceed the targets or values set out in the EPRs and CNVMP including:						
		Engagement and notification measures						
		Off-site measures (eg temporary relocation or respite offers)						
D	Blasting	Procedures for condition surveys to be undertaken with the prior approval of the relevant property owner and/or occupier, for property, land, ground and infrastructure that is reasonably accessible and that may be affected by the project activities						
		Any alternative vibration guideline values identified under EPR NVP11 (refer Note 2 of NVP11).						
E	Monitoring	If blasting is proposed, the values and management measures as defined in EPRs NVP9, 16 and 17.						
F	Community consultation	Noise and vibration monitoring commitments (including real time monitoring in high risk areas) and response protocols for managing noise complaints and remedial action (with reference to procedures required by EPR EMP4).						
G	Unavoidable works	Details of the communication plan to be adopted throughout construction as part of EPR SP2 including any specific measures related to particular locations or activities						
		Detail of the complaints management system for noise complaints, consistent with the requirements under EPR EMP4.						
	A qualification rationale or list of planned works							

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
NVP8		that constitute 'unavoidable works'; and response strategies best suited to mitigation of the impacts of those unavoidable works, consistent with EPA Publication 1254 – Noise Control Guidelines.							
		Prior approval must be obtained from the IREA for planned unavoidable work to be undertaken (except for emergency works to avoid the loss of life or damage to property, or to prevent environmental harm).							
		<b>Construction noise targets</b>	Noise and Vibration	Environment 1) CNVMP	Construction	Victorian EPA Vic Roads	Included in CNVMP	Noise Monitoring Form Vibration Monitoring Form Noise and Vibration Monitoring Out of hours works permit Calibration Records	Inspections and audits IREA audits Monthly reporting

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION / TIMING WHERE EPR IS ADDRESSED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
Active recreation areas characterised by sporting activities and activities which generate their own noise, making them less sensitive to external noise intrusion	External noise level 65 dB(A)							
Passive recreation areas characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion, for example reading, meditation	External noise level 60 dB(A)							
Community centres	Depends on the intended use of the centre. Refer to the recommended maximum internal levels in AS/NZS 2107:2016 for specific uses.							
Industrial premises	External noise level 75 dB(A)							
Offices, retail outlets	External noise level 70 dB(A)							
Other noise sensitive land uses as identified in AS/NZS 2107:2016	Refer to the noise levels in AS/NZS 2107:2016 for specific uses.							

Residential dwellings 2

For residential dwellings, implement management actions if construction noise is predicted to or does exceed the noise targets in EPA Victoria Publication



REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
1	The noise affected level represents the point above which there may be some community reaction to noise.						n/a	Noise Monitoring Form	Inspections and audits
2	The highly noise affected level represents the point above which there may be strong community reaction to noise.							Vibration Monitoring Form	IREA audits
3	For the purpose of predictive modelling, the noise level for consideration of inaudibility should be based on background +0							Noise and Vibration Monitoring	Monthly reporting
NVP9	<b>Blasting trials and assessment</b> Where blasting is proposed, a series of initial trials at reduced scale must be conducted prior to production blasting to determine site-specific blast response characteristics and to define allowable blast sizes to meet air blast overpressure and ground vibration limits. If blasting is required, an assessment of the potential noise and vibration impacts, and a strategy to minimise and manage those impacts, to the targets set out in EPRs NVP10-13 and NVP16-17, must be prepared, including preparation of an appropriate community information program.	Environment	1) CNVMP 2) CCEP	Construction	n/a			Out of hours works permit Calibration Records	Calibration Records
NVP10	<b>Construction vibration targets (amenity)</b> Implement management actions if the following guideline target levels for continuous vibration from construction activity to protect human comfort of occupied buildings [including heritage buildings] are not achieved (levels are calculated from the British Standard BS4721:2008).	Noise and Vibration	Environment	1) CNVMP 2) CCEP	Construction	Victorian EPA Impacted residences Heritage Victoria	Vibration Monitoring Training	Vibration Monitoring Form	Inspections and audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
<b>Vibration Dose Values (m/s<sup>2</sup>)</b>									
Day (8am to 10pm)      Night (11pm to 7am)									
Type of space occupancy									
Preferred Maximum Preferred Maximum Value Value Value Value									
Resident									
12      0.4      1      0.2									
Offices, studios, laboratories and visitors areas of the RSTC									
14      0.5      1.4      0.6									
Workshop									
18      1.5      1.8      1.6									
Notes									
<p>1. The Guideline Targets are non-mandatory; they are goals that should be sought to be achieved through the application of practicable mitigation measures. If exceeded then management actions would be required</p> <p>1. 2. The VDVs may be converted to PPVs within a noise and vibration construction management plan.</p>									
NVP11	<b>Construction vibration targets (structures)</b>  Construction vibration targets for structures are summarised in the tables below.	Noise and vibration	Environment	1) CNVMP 2) CCEP	Construction	Victorian EPA Impacted residences Heritage Victoria	Vibration Monitoring Training	Vibration Monitoring Form	Inspections and audits
								Noise and vibration Monitoring	IREA audits
								Out of hours work permit	Monthly reporting
								Calibration Records	

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
<b>Guideline values for velocity (mm/s)</b>									
<u>Vibration at the foundation at a frequency of</u>									
<u>1 to 10 Hz</u> <u>10 to 50 Hz</u> <u>50 to 100 Hz*</u> <u>All frequencies</u>									
<u>Vibration at the horizontal plane of highest floor</u>									
<u>All</u>									
<b>Type of structure</b>									
1. Buildings used for commercial purposes and buildings of similar design	20	20 to 40	40 to 50		40				
2. Dwellings and buildings of similar design and/or occupancy	5	5 to 15	15 to 20		15				
3. Structures that, because of their particular sensitivity to vibration, cannot be classified under items 1 and 2 and are of intrinsic value (e.g. Heritage buildings)	3	3 to 8	8 to 10		8				
*At frequencies > 100 Hz, the values given in this column may be used as a minimum.									
<b>Notes</b>									
1. Vibration levels marginally exceeding those vibration levels in the table would not necessarily mean that damage would occur and further investigation would be required to determine if higher vibration levels can be accommodated without risk of damage.									
2. For civil engineering structures (e.g. with reinforced concrete constructions used as abutments or foundation pads) the values for Type 1 buildings may be increased by a factor of 2									
3. Short-term vibration is defined as vibration which does not occur often enough to cause structural fatigue and which does not produce resonance in the structure being evaluated.									
<b>Guideline values for the vibration velocity to be used when evaluating the effects of long term vibration on structures</b>									

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		<b>Ground-borne vibration from Victoria (e.g.)</b> Vibration at horizontal plane of highest frequencies							
		<b>Type of structure</b>							
		Buildings used for commercial purposes: industrial buildings etc buildings of similar design	10						
		Dwellings and buildings of similar design and/or occupancy	5						
		<b>Structures that because of their particular sensitivity to vibration, cannot be classified under levels 1 and 2 may be of particular value (e.g. Heritage buildings)</b>	25						
		<b>Notes</b>							
		1. Vibration levels marginally exceeding those in the table would not necessarily mean that damage would occur and further investigation would be required to determine if higher vibration levels can be accommodated without risk of damage							
		2. Targets in the above table may need to be adjusted where deemed necessary and/or appropriate to protect the structural integrity of structures based on a pre-construction condition survey and/or modelling							
		3. Vibration relates to events that may result in a resonant structural response.							
		Implement management actions if, due to construction activity, the DIN 4150.3 Guideline targets for structural damage to buildings (for short-term vibration or long-term vibration) are not achieved.							
NVP12	<b>Ground-borne (internal) noise targets</b>	Noise and vibration	Environment Construction teams	1) CNVMP 2) CCEP	Construction	Victorian EPA	Noise Monitoring Training	Noise Monitoring Form Noise and Vibration Monitoring Out of hours reporting	Inspections and audits IREA audits Monthly reporting

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK												
NVP13	Internal noise levels measured at the centre of the most affected ambient room						works permit Calibration Records													
	<table border="1"> <tr> <td>Time of Day</td> <td></td> </tr> <tr> <td>Evening (5pm to 10pm)</td> <td>Leq [15 minutes] = 40dB(A)</td> </tr> <tr> <td>Night (11pm to 6am)</td> <td>Leq [15 minutes] = 35dB(A)</td> </tr> </table> <p>Notes</p> <ol style="list-style-type: none"> <li>1. Levels are only applicable when ground borne noise levels are higher than airborne noise levels.</li> <li>2. Management actions include community consultation to determine acceptable level of disruption and provision of respite accommodation in some circumstances.</li> </ol>	Time of Day		Evening (5pm to 10pm)	Leq [15 minutes] = 40dB(A)	Night (11pm to 6am)	Leq [15 minutes] = 35dB(A)	<p><b>Utility asset protection</b></p> <p>Prior to construction undertake condition assessments of above and below ground utility assets and establish construction vibration limits in consultation with asset owners to maintain asset integrity. Where construction vibration limits are not agreed with the asset owner, the guideline values in the table below apply.</p> <p><b>Guideline values for velocity</b></p> <p>measured in the top</p> <table border="1"> <tr> <td>PIPE Material</td> <td></td> </tr> <tr> <td>Steel (including welded glass)</td> <td>100mm/s</td> </tr> <tr> <td>Clay, concrete, reinforced concrete, pre stressed concrete, metal (with or without flange)</td> <td>80mm/s</td> </tr> <tr> <td>Plastic,</td> <td>50mm/s</td> </tr> </table> <p>Notes</p> <ol style="list-style-type: none"> <li>1. These values may be reduced by 50% when evaluating the effects of long-term vibration on buried pipework</li> <li>2. It is assumed pipes have been manufactured and laid using current technology.</li> </ol> <p>Monitor vibration limits during construction to demonstrate compliance with agreed vibration limits. Identify contingency measures to be</p>	PIPE Material		Steel (including welded glass)	100mm/s	Clay, concrete, reinforced concrete, pre stressed concrete, metal (with or without flange)	80mm/s	Plastic,	50mm/s	<p>Vibration Monitoring Form</p> <p>Noise and Vibration Monitoring</p> <p>Out of hours works permit</p> <p>Calibration Records</p>	<p>Vibration Monitoring Training</p> <p>Victorian EPA Utility Providers</p>	<p>Vibration Monitoring</p> <p>Inspections and audits</p> <p>IREA audits</p> <p>Monthly reporting</p>	
Time of Day																				
Evening (5pm to 10pm)	Leq [15 minutes] = 40dB(A)																			
Night (11pm to 6am)	Leq [15 minutes] = 35dB(A)																			
PIPE Material																				
Steel (including welded glass)	100mm/s																			
Clay, concrete, reinforced concrete, pre stressed concrete, metal (with or without flange)	80mm/s																			
Plastic,	50mm/s																			

RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	REF
NVP14	implemented if limits are not met. Where necessary rectify any defects that are attributable to the Project.	Noise and vibration	Environment Design	1) CNVMP 2) CCEP 3) Detailed Design Packages	Construction Victorian EPA Noise Monitoring Training Noise and Vibration Monitoring Calibration Records Detailed Design packages Out of hours works permit	Inspections and audits IREA audits Monthly reporting
NVP15	<b>Tunnel ventilation system noise design</b> Design and implement the tunnel ventilation system in accordance with the Works Approval and to achieve compliance with State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1 (SEPP N-1). Provide detailed design to the satisfaction of EPA Victoria prior to commencement of the works permitted by the Works Approval.	Noise and vibration	Op Co	1) OEMP	Construction Victorian EPA OEMP Noise monitoring data Monthly reports Calibration Records	IREA audits
NVP16	<b>Amenity – Blast Vibration</b> Implement management actions if the following vibration values are not achieved. Blasting activities must comply with Australian Standard AS2187.2-2006 Explosives – Storage and use Part 2 – Use of explosives for all blasting.	Noise and vibration	Environment Construction Teams	1) CNVMP 2) CCEP	Construction Victorian EPA Vibration Monitoring Training Noise and Vibration Monitoring Spreadsheet Out of hours works permit Calibration Records	Inspections and audits IREA audits Monthly Reporting

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING REQUIRED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
Sensitive site	Type of blasting operations lasting longer than 12 months or more than 20 blasts	Peak current particle velocity (mm/s)							
Sensitive site	Operations lasting longer than 12 months or more than 20 blasts	5mm/s for 50% blasts per year. 10mm/s maximum unless agreement is reached with the occupier that a higher limit may apply.							
Group 1 non-sensitive sites such as factories and commercial premises	All Blasting	Operators lasting less than 12 months or less than 20 blasts	10mm/s maximum unless agreement is reached with occupier that a higher limit may apply						
			25mm/s maximum value unless agreement is reached with occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be test below manufacturer's specification or levels that can be shown to adversely affect the equipment operation.						
Note	1. Sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.								
NVP17	<b>Amenity - Blast Overpressure Implement</b> Management actions if the following overpressure values are not achieved. Blasting activities must comply with Australian Standard AS2187.2-2006. Explosives – Storage and use Part 2 – Use of explosives for all blasting.	Noise and Vibration	Environment Construction Teams	1) CNVMP 2) CCEP	Construction	Victorian EPA	Vibration Monitoring Training	Vibration Monitoring Form Noise and Vibration Monitoring Spreadsheet Out of hours works permit Calibration Records	Inspections and audits IREA audits Monthly Reporting

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
	Type of blasting operations	Peak Overpressure Value [dB]:							
Sensitive Site	Operations lasting longer than 12 months or more than 20 blasts	115 dB for 95% blasts per year unless agreement is reached with occupier that a higher limit may apply							
	Operations lasting less than 12 months or less than 20 blasts	120dB for 95% blasts per year, 115 dB maximum unless agreement is reached with occupier that a higher limit may apply							
Occurred non-sensitive sites such as factories and commercial premises:	All blasting	115 dB, maximum value unless agreement is reached with occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturers specification or levels that can be shown to inherently affect equipment operation							
	Note	1. Sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.							
NVP18	<b>Construction noise management</b>	Noise and Vibration	Environment Construction Teams	Victorian EPA	Vibration Monitoring Training	Acoustic Report Noise and Vibration Monitoring Out of hours works permit Calibration Records	Inspections and audits IREA audits Monthly Reporting	Acoustic Report Noise and Vibration Monitoring Out of hours works permit Details of noise reduction	Inspections and audits IREA audits Monthly Reporting
NVP19	<b>Traffic noise at Hyde Street, south of Francis Street</b>	Noise and Vibration	Environment Construction Teams	Victorian EPA	Vibration Monitoring Training	Acoustic Report Noise and Vibration Monitoring Out of hours works permit Details of noise reduction	Inspections and audits IREA audits Monthly Reporting	Acoustic Report Noise and Vibration Monitoring Out of hours works permit Details of noise reduction	Inspections and audits IREA audits Monthly Reporting

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING ADDRESSED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
SP1	<b>Urban design principles and vision</b> Detailed design to protect and, where practicable, improve access to and amenity and safety for potentially affected residents, open space, social and community infrastructure and commercial facilities by responding to the urban design principles and vision and implementing the principles of Crime Prevention Through Environmental Design.	General	Design and Environment	1) Design	Detailed design	Relevant Local Authorities	n/a	Design records	Inspections and audits
SP2	<b>Communications and Community Engagement Plan (CCEP)</b> Develop and implement a Communications and Community Engagement Plan in consultation with affected local councils to engage and consult the community and potentially affected stakeholders and discuss progress of construction activities and operation. The plan must be published on the project website prior to and for the duration of construction and include: <ul style="list-style-type: none"><li>• Community issues identification, complaints management and resolution approach and procedures in accordance with EPR EMP4</li><li>• The BIP in accordance with EPR BP5</li><li>• Approach to stakeholder identification</li><li>• Enquiry management and record keeping approach and procedures including making</li></ul>	General	Communications	1) CCEP 2) OEMP	Pre-construction, construction, operation	Relevant Local Authorities Victorian EPA Local Residents	n/a	Stakeholder Management Database Complaints Management System Outcomes of stakeholder engagement	Inspections and audits IREA audits Monthly Reports

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		available a 24 hour telephone number, postal address, and an email address and publishing these on the project website							
		Approach to mitigating community impacts including dust, noise and light and any relevant policies (e.g. relocations policy)							
		Approach to changes to transport conditions for affected and potentially affected users, relevant stakeholders and relevant road authorities							
		How it will evaluate the effectiveness of community impact mitigation measures, including through noise and vibration monitoring							
		Identification of how stakeholders can access environmental monitoring data that is to be made publicly available							
		Incident and emergency communications, including notification methods and timeframes in the event of a major incident or overrun							
		Approach and processes to ensure that the workforce has appropriate community awareness and sensitivity							
		Any innovative communications tools and methods in the CCEP which would enhance the Project's ability to effectively communicate with the community and stakeholders							
		Approach to notifying community, business, road user and other stakeholders affected by construction activities about impacts							
		Approach to making relevant project information available to the community							
		The role and function of the Community Liaison Group (CLG) as developed by the State.							
		The CCEP must address matters of interest or concern to the following stakeholders:							
		Municipalities							
		Recreation, sporting and community groups							
		Potentially affected residents and property owners							

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
SP3	<ul style="list-style-type: none"> <li>Potentially affected business</li> <li>Other public facilities in proximity</li> <li>Religious and worship groups.</li> </ul> <p><b>Community Liaison Group participation</b></p> <p>Participate in the Community Liaison Group (CLG) that has been established by the State to facilitate community and stakeholder involvement for the construction phase of the Project. Participation must include:</p> <ul style="list-style-type: none"> <li>Attendance at meetings</li> <li>Regular reporting of design and construction activities</li> <li>Timely provision of relevant information, including response to issues raised by the group</li> <li>Regular reporting and monitoring of community feedback, impacts and discussion of mitigation measures and their effectiveness.</li> </ul>	General	The State	1) CCEP	Construction	Community and Stakeholder Engagement	n/a	Stakeholder Management Database Meeting attendance minutes	Inspections and audits IREA audits
SP4	<p><b>Social and local procurement</b></p> <p>Develop and implement a Workforce Development Plan and a Local Industry Development Plan to provide:</p> <ul style="list-style-type: none"> <li>Opportunities for graduates, non-engineering cadets and upskilling short courses for the project workforce</li> <li>Opportunities for young people such as scholarships, and structured workplace learning placements</li> <li>Opportunities for local businesses such as forums to inform local businesses about potential procurement opportunities</li> </ul>	General	Communications	1) Workforce Development Plan and a Local Industry Development Plan	Pre-construction, construction	Local workforce and businesses	As required for roles on the project.	HR records Monthly Reports Procurement records	Inspections and audits IREA audits
SP5	<p><b>Community Involvement and Participation Plan (CIPP)</b></p> <p>Develop and implement a CIPP in consultation with Hobsons Bay City Council and Maribyrnong City Council and representatives of communities affected negatively by the impacts of the Project, including Altona North, Brooklyn, South Kingsville, Spotswood and Yarraville, in order to improve community connectedness and cohesiveness.</p>	General	Management	1) Community Involvement and Participation Plan (CIPP)	Pre-construction, construction and operation	Hobsons Bay City Council and Maribyrnong City Council	n/a	Stakeholder Management Database	Inspections and audits IREA audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		The plan should apply for the period of project construction. Social legacy outcomes and tasks that could be considered for funding under the CIPP include; community partnership programs; community support grants; running of community events and festivals; sponsorships of local sporting clubs; small capital works targeting community, sporting and recreation facilities; a wide range of other 'community led' initiatives.							
SWP1	<b>Design of discharges and runoff</b>  Meet State Environment Protection Policy (Waters of Victoria) for discharge and run-off from the Project to Kororoit Creek, Stony Creek, Maribyrnong River, Moonee Ponds Creek.	Water	Design	1) Design 2) CEMP Surface Water Monitoring sub plan	Detailed design	Victorian EPA Melbourne Water Relevant Local Authorities Vic Roads	Surface Water Sampling	Design Records Surface Water Monitoring records	Inspections and audits IREA audits
SWP2	<b>Water sensitive road design</b>  Integrate the stormwater treatment system into the design of the works in accordance with VicRoads Integrated Water Management Guidelines (June 2013) and the EPA Victoria Best Practice Environmental Management Guidelines for Urban Stormwater (2006).	Water	Design	1) Design 2) CEMP Surface Water Monitoring sub plan	Detailed design	Victorian EPA Vic Roads Melbourne Water	n/a	Design Records	Inspections and audits IREA audits
SWP3	<b>Tunnel waste water</b>  Any proposed discharge of tunnel waste water from the site must be approved by the relevant authority prior to discharges occurring.	Water	Environment	1) CEMP Surface Water Management sub Plan 2) Permit to Dewater 3) Trade Waste Agreement (if discharging to sewer)	Pre-construction	City West Water Melbourne Water	Induction and toolbox	Permit to Dewater Water Quality Monitoring Form	Inspections and audits IREA audits
SWP4	<b>Water quality monitoring</b>  Develop and implement a baseline surface water monitoring program prior to commencement of construction to assess background water quality in all receiving waters. This should be developed in consultation with the EPA Victoria and Melbourne Water. The baseline surface water monitoring program is to be used to inform the surface water	Water	Environment	1) CEMP Surface Water Management Plan	Pre-construction	In consultation with the EPA Victoria and Melbourne Water.	Surface Water sampling	Water Quality Monitoring Form Water Quality Spreadsheet	Inspections and audits IREA audits
								Monthly Reporting	

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		sub-management plan (SWP7)					Calibration records Consultation records with EPA and Melbourne Water	
SWP5	<b>Spill containment design</b>  Design the capacity of the stormwater drainage system for all new roads and ramps to contain hazardous spills at or prior to every stormwater outlet, to the satisfaction of EPA Victoria, and develop procedures to be implemented in response to a hazardous spill.	Water and Hazardous Substances	Design	1) Design Package 2) CEMP Hazardous Substances Sub-Plan 3) Emergency Risk Management Plan	Detailed design	to the satisfaction of EPA Victoria	Induction and toolbox	Design records EPA approval ERMP
SWP6	<b>Management of chemicals, fuels, and hazardous materials</b>  Minimise chemical and fuel storage on site and store hazardous materials and dangerous goods in accordance with the relevant guidelines and requirements. Comply with the Victorian WorkCover Authority and Australian Standard AS1940 Storage Handling of Flammable and Combustible Liquids and EPA Victoria publications 480 Environmental Guidelines for Major Construction Sites and 347 Bunding Guidelines Develop and implement management measures for dangerous substances, including: <ul style="list-style-type: none"><li>• Creating and maintaining a dangerous goods register</li><li>• Disposing of any hazardous materials, including asbestos, in accordance with Industrial Waste Management Policies, regulation and relevant guidelines.</li><li>• Implementing requirements for the installation of bunds and precautions to reduce the risk of spills</li><li>• Developing contingency and emergency response plans to handle fuel and chemical</li></ul>	Hazardous Substances	Environment and Safety	1) CEMP Hazardous Substances Sub-Plan 2) CEMP Surface Water Management sub Plan 3) Dangerous Goods Register 4) Emergency Risk Management Plan	Construction	n/a	Induction and toolbox Bunds EPA waste certificates	Dangerous Goods Register Bunds IREA audits

REF	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EFR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
SWP7	spills, including availability of on-site hydrocarbon spill kits.	Water Environment	1) CEMP Surface Water Management Sub Plan 2) Flood Emergency Management Plan	Construction	To the satisfaction of EPA Victoria and the relevant drainage authority	Induction and toolbox	Water Quality Monitoring Form Water Quality Spreadsheet	Inspections and audits IREA audits
SWP8	<b>Surface Water Management during construction</b>  The CEMP must include a sub-management plan that sets out the Surface Water Management requirements and methods for: <ul style="list-style-type: none"><li>• Best practice sediment and erosion control and monitoring, in accordance with EPA Victoria publications 275 (1991), 480 (1996), and 960 (2004)</li><li>• Maintenance of existing flow paths, drainage lines and floodplain storage</li><li>• Location and bunding of any contaminated material (including tunnel spoil and stockpiled soil) to the 1% AEP flood level and to the satisfaction of EPA Victoria and the relevant drainage authority</li><li>• A flood emergency management plan including consideration of scheduling works</li><li>• Bunding of the tunnel portals to an appropriate level during the construction phase.</li></ul> The sub-management plan is to be informed by SWP4.	Water Environment	1) CEMP Surface Water Management sub Plan	Construction	n/a	Induction and toolbox	Water Usage Form Water Usage Spreadsheet	Inspections and audits IREA audits
SWP9	<b>Use of non-potable water</b>  Where available and practicable, of suitable quality, and meets health and safety requirements, stormwater, recycled water, groundwater inflow to tunnels or other water sources must be used in preference to potable water for construction activities, including concrete mixing and dust control.	Water Design	1) Detailed Design 2) CPGs, Construction Procedures, WEMPs	Construction	To the satisfaction of Melbourne Water and in consultation with relevant local councils.	n/a	CPGs and Construction Procedures Visual inspections	Inspections and audits IREA audits
SWP10	<b>Waterway modifications</b>	Water Design	1) Detailed	Detailed	To the	n/a	CPGs and	Inspections

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SW11	Design and undertake modifications to all waterways in a way to mitigate the effects of changes to flow and minimise, to the extent practicable, the potential for erosion, sediment plumes and exposure of contaminated material during construction to the satisfaction of Melbourne Water and in consultation with relevant local councils.		Design 2) CPGs, Construction Procedures, WEMPs	design, construction	Satisfaction of Melbourne Water and in consultation with relevant local councils.	Construction Procedures Visual inspections	Construction Procedures IREA audits	and audits	IREA audits
SWP12	Maximise the visual and aesthetic amenity of the waterways having regard to relevant strategies, policies and plans for that waterway and in consultation with Melbourne Water and relevant Councils.  <b>Flood levels, flows and velocities</b> Permanent works and associated temporary construction works must not increase flood risk (considering flood levels, flows and velocities) associated with overland flow paths to the requirements and satisfaction of Melbourne Water and in consultation with any other relevant drainage authority.Undertake modelling of the design of permanent and temporary works to demonstrate the resultant flood levels and risk profile to the requirements and satisfaction of Melbourne Water and in consultation with any other relevant drainage authority. Consider potential effects of climate change and sea level rise of 0.8m by 2100, with and without the works for both existing and proposed scenarios (for example future redevelopment in relation to Moonee Ponds Creek within the Arden – Macaulay Structure Plan area) in consultation with local councils ensure that surface water from West Gate Tunnel Project does not encroach into underground SP AusNet electricity or gas assets.	Water	Design	1) Detailed Design 2) CPGs, Construction Procedures, WEMPs	Detailed design, pre- construction, construction	To the satisfaction of Melbourne Water and in consultation with relevant local councils.	n/a	CPGs and Construction Procedures Visual inspections	Inspections and audits IREA audits
	<b>Floodplain storage capacity</b> Maintain existing floodplain storage capacity for overland flow paths potentially impacted by the Project in consultation with Melbourne Water and any other relevant drainage authority.	Water	Design	1) Detailed Design 2) CPGs, Construction Procedures, WEMPs	Detailed design	To the satisfaction of Melbourne Water and in consultation with relevant local	n/a	CPGs and Construction Procedures Visual inspections	Inspections and audits IREA audits

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SWP13	<b>Tunnel portal flood risk</b> Design tunnel portals to exclude surface flows from external catchments during the probable maximum flood. Develop and implement measures and plans to manage flood risk to the tunnel portals. Develop operation and maintenance plans for flood protection works.	Water	Design	1) Design 2) Flood Emergency Management Plan	Detailed design, operation	n/a	Emergency response	Design records
SWP14	<b>Maintenance of Melbourne Water and other drainage assets</b> Provide adequate clearances and access for ongoing maintenance of Melbourne Water and other drainage authority assets to the satisfaction of the relevant drainage authority.	Water	Design	1) Design	Detailed design	To the satisfaction of the relevant drainage authority	Clearance and access records	Inspections and audits IREA audits
SWP15	<b>North Yarra Main Sewer</b> Design any proposed realignment to the North Yarra Main Sewer to the satisfaction of Melbourne Water.	Water	Design	1) Design	Detailed design	To the satisfaction of Melbourne Water.	n/a	Design records
TP1	<b>Optimise design performance</b> Optimise the design of the works in consultation with appropriate road management authorities, Melbourne Water and local councils as part of the detailed design process to:	General	Design	1) Design 2) Traffic and Intersection Analysis Report 3) Traffic Management Plan	Detailed design	In consultation with appropriate road management authorities	n/a	Design records
	<ul style="list-style-type: none"> <li>Maintain and where practicable reduce travel times for all transport modes, including walking, cycling and public transport</li> <li>Maintain, and where practicable, enhance the existing traffic movements at interchanges</li> <li>Design interchanges and intersections to achieve a level of service of D or degree of saturation of 0.9, where practicable within the available land, or as otherwise approved by the relevant road and transport authority</li> <li>Maintain, and where practicable, enhance pedestrian movements, bicycle connectivity, and shared use paths</li> </ul>							Inspections and audits IREA audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	IMPLEMENTATION TIMING WHERE EPR IS ADDRESSED	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
TP2	<ul style="list-style-type: none"> <li>Provide evidence that functional and generous pedestrian linkages between North Melbourne Station, West Melbourne and the E-gate urban renewal site will be facilitated to support pedestrian flows to/from North Melbourne, E-gate and Docklands</li> <li>Develop a strategy with Public Transport Victoria to minimise impacts on buses, trams and rail and, where practicable, enhance public transport facilities and services that cross or run parallel to the alignment of the Project or are in any way affected by traffic using the Project</li> </ul>	General	Traffic	1) Traffic Management Plan 2) Traffic monitoring	Pre-construction, construction, operation	n/a	Traffic Management Plans Traffic monitoring results	Monitoring Inspections and audits IREA audits
TP3	<b>Traffic monitoring</b> Undertake traffic monitoring in selected streets identified in consultation with the relevant Road Authority and local council pre-construction, at six monthly intervals during construction, and up to two years after construction is complete. Implement local area traffic management works in consultation with the local relevant councils. Develop and implement traffic performance management to monitor conditions along the West Gate Freeway during construction. Real time traffic information must be provided to drivers on the approach to the West Gate Freeway.	General	Traffic	1) Traffic Management Plans 2)           Communications Strategy as set out in CCEP	Pre-construction, construction	n/a	Traffic Management Plans	Inspections and audits IREA audits
	<b>Traffic Management Plans</b> Develop and implement Traffic Management Plans with measures to minimise disruption, to the extent practicable, to motor vehicle traffic including on road public transport, parking, bicycle and pedestrian movements during construction in consultation with relevant road management authorities on all roads affected by the Project, including:	General	Traffic	1) Traffic Management Plans 2)           Communications Strategy as set out in CCEP	In consultation with relevant road management authorities Vic Roads			

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		and shared path users		<ul style="list-style-type: none"> <li>• CityLink traffic lanes and ramps</li> <li>• M1, M80 and Footscray Road</li> <li>• Hyde Street, Francis Street, Whitehall Street</li> <li>• Management of any temporary diversion of pedestrian or cycle paths to provide a safe, well-sign-posted alternative route and minimise impact on commuter travel times for cyclists as far as practicable</li> <li>• A strategy for maintaining the current capacity (number of lanes) during peak periods for works on the following key State roads – West Gate Freeway, Princes Freeway, M80, Footscray Road, Wurundjeri Way, Dudley Street, Williamstown Road, Millers Road, Grieve Parade, Melbourne Road, Douglass Parade and Hyde Street</li> <li>• Restrict the number of local roads to be used for construction-related transportation to minimise impacts on amenity, in consultation with the relevant road authorities</li> <li>• Measures to minimise construction traffic on New Street, including the provision of access to the Southern Portal Compound from the freeway or alternative routes approved by the road authority</li> <li>• Reinstate access to open space, community facilities, commercial premises and dwellings if disrupted, as soon as practicable</li> <li>• Provide suitable parking arrangements to accommodate the construction workforce while minimising traffic impacts on local and arterial roads, preventing construction-related parking on local and arterial roads or use of public car parks</li> <li>• Provide safe access points to laydown areas and site compounds</li> <li>• Implement a communications strategy (as set out in the CCEP) to advise affected users, relevant potentially affected users, relevant</li> </ul>					

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		<p>stakeholders and the relevant road authorities of any changes to transport conditions</p> <ul style="list-style-type: none"> <li>• Maintain, where practicable, current local area traffic management measures during construction or reinstate upon completion in consultation with the relevant local councils</li> <li>• Haulage of bulk material to and from the construction areas to within a two km range of the works must be via roads operated by VicRoads, CityLink or the Port Manager or, subject to obtaining prior agreement by the relevant road authority, other parts of the road network.</li> </ul> <p>The Traffic Management Plan may include</p> <ul style="list-style-type: none"> <li>• Worksite Traffic Management Plans (WTMP) for discrete components or stages of the works having the potential to impact on roads, shared used paths, pedestrian paths or public transport infrastructure.</li> <li>• WTMP must address, as applicable:</li> <li>• Vehicle, bicycle and pedestrian movements</li> <li>• Public transport movements</li> <li>• Lane, road and public transport route closures</li> <li>• Major traffic control devices</li> <li>• Traffic signal operation</li> <li>• Vertical and horizontal alignment</li> <li>• Drainage</li> <li>• Barrier placement</li> <li>• Operating conditions including speed limits</li> <li>• Safety of the public and workers</li> <li>• Peak flows and road traffic capacity, including catering for special events</li> <li>• Signing and line marking</li> <li>• Lighting</li> <li>• Property access</li> <li>• Stakeholder communication and media advertising</li> </ul>							

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
		<ul style="list-style-type: none"> <li>Timing</li> <li>Replacement public transport services</li> <li>Utility infrastructure access</li> <li>Any interface between the responsibilities and requirements of Project Co, its Subcontractors and any other Authority</li> <li>Incident management.</li> </ul>							
TP4		<p><b>Public transport</b></p> <p>Develop and implement measures to minimise to the extent practicable disruption during construction to all impacted railway lines, tram and bus routes in consultation with VicTrack, Yarra Trams and Metro Trains Melbourne and to the satisfaction of Public Transport Victoria.</p>	General	Traffic	1) Traffic Management Plans 2) CPGs and Construction Procedures 3) CCEP	Pre-construction, construction	n/a	Consultation with VicTrack, Yarra Trams and Metro Trains Melbourne and to the satisfaction of Public Transport Victoria	Stakeholder Management Database  Inspections and audits  IREA audits
TP5		<p><b>Rail operations</b></p> <p>Minimise disruption to the rail infrastructure and operations in consultation with the relevant rail infrastructure stakeholders.</p>	General	Traffic And Communication	1) Traffic Management Plans 2) CCEP	Detailed design, construction	To the satisfaction of the relevant rail infrastructure stakeholders.	n/a	Stakeholder Management Database  Inspections and audits  IREA audits
TP6		<p><b>Design standards</b></p> <p>Design new works (including shared use facilities) in accordance with applicable design standards and undertake independent road safety audits after each stage of detailed design and pre-opening and immediately following the opening of the works.</p> <p>The Veloway design must be prepared in consultation with VicRoads, the City of Melbourne, Maribyrnong City Council and Bicycle Network and</p>	General	Design	1) Design 2) Safety Audits	Detailed design, construction	n/a	Design records Safety Audit Reports	Design records Safety Audit Reports  Inspections and audits  IREA audits

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TP7	<b>Traffic Management Liaison Group</b> A Traffic Management Liaison Group (TMLG) must be established and convene prior to the commencement of any works that may impact on existing roads, paths or public transport infrastructure. The TMLG must include representatives from the State, VicRoads and Project Co. Other relevant agencies as nominated by the State may be included as required including relevant local councils.  The TMLG will be a forum for exchange of information and discussion of issues associated with Traffic Management Plans.  The TMLG must be provided with the Traffic Management Plans, details as to timing of implementation, information about construction traffic monitoring conducted by Project Co, and other reports as relevant.  The TMLG must meet at least monthly until the completion of construction.	General	Communications and Traffic Plans	1) Traffic Management Plans	Pre-construction, construction	n/a	Traffic management meeting minutes	Inspections and audits IREA audits
TP8	<b>River navigation</b> Navigational channel of Maribyrnong River must not be impeded without approval of the relevant authority.	General	Communications and Traffic	1) CCEP 2) CPGs and Construction Procedures	Approval by relevant authority Melbourne Ports	n/a	Stakeholder Management Database Approval	Inspections and audits IREA audits
TP9	<b>Melbourne Metro Rail Authority Interface</b> Consult and coordinate with Melbourne Metro Rail Authority to manage and where possible minimise, cumulative impacts of construction vehicles.	General	Communications and Traffic	1) Traffic Management Plans 2) CCEP 3) CPGs and Construction Procedures	Construction MRA	n/a	Stakeholder Management Database	Inspections and audits IREA audits
WMP1	<b>Waste management</b> Develop and implement management measures for waste (excluding soils) minimisation during construction and operation in accordance with the Environment Protection Act 1970 waste management hierarchy and management options.	Waste	Environment	1) CEMP Waste Management Sub-Plan 2) WEMPs	Construction n/a	Induction and toolbox	Waste tracking register# EPA waste certificates	Inspections and audits IREA audits

REF	EPR	RISK AREA	GROUP RESPONSIBLE	DELIVERABLE / WHERE EPR IS ADDRESSED	IMPLEMENTATION TIMING	CONSULTATION REQUIRED	TRAINING REQUIRED	EVIDENCE TO DEMONSTRATE COMPLIANCE	COMPLIANCE CHECK
to address:		Litter management Construction and demolition wastes including, but not limited to, washing residues, slurries and contaminated water Organic wastes Inert solid wastes.							

## Attachment C: Consultation required as set out in clause 4.6.2 of the Incorporated Document



ENVIRONMENTAL MANAGEMENT DOCUMENTATION		EPR					
MELBOURNE CITY COUNCIL	Business Involvement Plan (as part of CCEP under EPR S2)	EMF 8.4 EPR BPS	Y	Y	Y	Y	Y
HOBSONS BAY CITY COUNCIL	Cultural Heritage Management Plan	EMF 8.4 EPR CHP1	Y	Y	Y	Y	Y
WYNNDHAM CITY COUNCIL	Archaeological Management Plan	EMF 8.4 EPR CHP3	Y	Y	Y	Y	Y
BIRMINGHAM CITY COUNCIL	Heritage Interpretation Strategy	EMF 8.4 EPR CHP7	As relevant	As relevant	As relevant	As relevant	Y
SHIRE OF MARYBOROUGH	Shipwrecks management measures	EPR CHP8					
MELBOURNE WATER	Tree Management Plan (as part of CEMP)	EMF 8.4 EPR EP2	Y	Y	Y	Y	Y
VICROADS	Landscaping Plan	EMF 8.4 EPR EP6 EPR LVP4					Yes (where appropriate)

ENVIRONMENTAL MANAGEMENT DOCUMENTATION		EPR	MELBOURNE CITY COUNCIL	WYNDHAM CITY COUNCIL	BIRMINGHAM CITY COUNCIL	MARIBYRNONG CITY COUNCIL	AFFECTED BUSINESSES	RELEVANT LOCAL TRADE ASSOCIATIONS	PUBLIC TRANSPORT VICTORIA	VICROADS	MELBOURNE WATER	ENVIRONMENT PROTECTION AUTHORITY	ABORIGINAL VICTORIA	OTHER AUTHORITIES	LANDOWNER/ DEVELOPER	POTENTIALLY AFFECTED LANDOWNERS	ASSET OWNERS	DRAINAGE AUTHORITIES	VICTRACK / YARRA TRAMS / MTM	RAIL INFRASTRUCTURE STAKEHOLDERS	TRAFFIC MANAGEMENT LIAISON GROUP	MELBOURNE METRO RAIL AUTHORITY		
Railway Place and Miller Street Reserve Concept Plan		EPR LPP3																						
Future development opportunities – 48-54 Digital Drive, Digital Harbour		EPR NPP8																						
Ground-borne (internal) noise management actions where targets are exceeded during construction																								
Utility asset protection – construction vibration limits		EPR NPP9																						
Baseline surface water monitoring program		EPR SWP4																						
Surface Water Management Sub Plan		EPR SWP7																						

ENVIRONMENTAL MANAGEMENT DOCUMENTATION		EPR								
		Construction Noise and Vibration Management Plan	EMF 8.4 EPR SP2	EMF 8.4 EPR TP1	EMF 8.4 EPR TP3	EPR EP2	EPR	EPR LPP3	Future development opportunities –	
MELBOURNE CITY COUNCIL	HOBSONS BAY CITY COUNCIL	Y	Y	Y	Y	Y	Y	Y		
WENDHAM CITY COUNCIL	BIRMINGHAM CITY COUNCIL	Y	Y	Y	Y	Y	Y	Y		
MARIBYRNONG CITY COUNCIL	AFFECTED BUSINESSES	Y	Y	Y	Y	Y	Y	Y		
PUBLIC TRANSPORT VICTORIA	RELIEVANT LOCAL TRADER ASSOCIATIONS	Y	Y	Y	Y	Y	Y	Y		
VICROADS	BIKECLUE NETWORK	Y	Y	Y	Y	Y	Y	Y		
MELBOURNE WATER	ENVIRONMENTAL PROTECTION AUTHORITY	Y	Y	Y	Y	Y	Y	Y		
HERITAGE VICTORIA	ABORIGINAL VICTORIA	Y	Y	Y	Y	Y	Y	Y		
OTHER AUTHORITIES	LANDOWNER/ DEVELOPER	Y	Y	Y	Y	Y	Y	Y		
POTENTIALLY AFFECTED LANDOWNERS	ASSET OWNERS	Y	Y	Y	Y	Y	Y	Y		
DRAINAGE AUTHORITIES	VICTRACK/ YARRA TRAMS/ MTM	Y	Y	Y	Y	Y	Y	Y		
RAIL INFRASTRUCTURE STAKEHOLDERS	TRAFFIC MANAGEMENT GROUP	Y	Y	Y	Y	Y	Y	Y		
MELBOURNE METRO RAIL AUTHORITY	MELBOURNE METRO RAIL AUTHORITY	Y	Y	Y	Y	Y	Y	Y		

ENVIRONMENTAL MANAGEMENT DOCUMENTATION						
EPR	EPR SW9	As relevant	As relevant	As relevant	As relevant	AFFECTED STAKEHOLDERS
Bank stability	EPR SW9	As relevant	As relevant	As relevant	As relevant	MARIBYRNONG CITY COUNCIL
Waterway modifications	EPR SW10	As relevant	As relevant	As relevant	As relevant	BIRMINGHAM CITY COUNCIL
Flood levels, flows and velocities	EPR SWP11	Y	Y	Y	Y	WENDHAM CITY COUNCIL
Floodplain storage capacity	EPR SWP12	Y	Y	Y	Y	HOBSONS BAY CITY COUNCIL
Optimise [transport] design performance	EPR TP1	Y	Y	Y	Y	MELBOURNE CITY COUNCIL
Traffic monitoring	EPR TP2	Y	Y	Y	Y	MELBOURNE CITY COUNCIL
Traffic Management Plans	EPR TP3 EPR TP7	Y	Y	Y	Y	MELBOURNE CITY COUNCIL
Public Transport measures	EPR TP4					MELBOURNE METRO RAIL AUTHORITY INTERFACE
Rail operations	EPR TP5					MELBOURNE METRO RAIL AUTHORITY INTERFACE
Design standards	EPR TP6					MELBOURNE METRO RAIL AUTHORITY INTERFACE
Melbourne Metro Rail Authority Interface	EPR TP9					MELBOURNE METRO RAIL AUTHORITY INTERFACE

