



# CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN

## Western Outer Ring Main Project

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## TABLE OF REVISIONS

Rev.	Section	Description
9	11.1.2	Move first internal audit from Q4 2022 to Q1 2023 to reflect weather-delayed work schedule
9	11.3	Differentiation and clarification of Environmental Incidents and Reportable Environmental Incidents
9	Appendix F EMM C1	Correct reference to imported 'Fill Material' criteria in Table 3 of EPA Publication 1828.2, rather than Table 2.
10	all	Replace DELWP with DEECA
10	Appendix F EMM B21	Update required FMP method for pre-construction inspections for growling grass frogs
11	Appendix I	Updated Environment and Heritage Policy
12	11.3.2 11.1.1 11.3.1	Clarification on release of drilling fluid to land trigger grammar fix grammar fix
13	Table 10.1	Added strike-through to weekly construction report as requirement complete.

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## Abbreviations and terminology

AH Act	<i>Aboriginal Heritage Act 2006 (Vic)</i>
AASS	Actual Acid Sulfate Soils
APZ	Asset Protection Zone
AQ	Air Quality
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999
ANZECC	Australian and New Zealand Environment and Conservation Council
API	American Petroleum Institute
B	Biodiversity
BPEM	Best Practice Environmental Management
BTEX	benzene, toluene, ethylbenzene, xylene
C	Contamination
CaLP Act	<i>Catchment and Land Protection Act 1994</i>
CEMP	Construction Environment Management Plan
CHMP	Cultural Heritage Management Plan
CM	Commissioning
Construction Area	The defined workspace area for the construction activities
CPESC	Certified Professional in Erosion and Sediment Control
Cth	Commonwealth of Australia
DEECA	Department of Energy, Environment and Climate Action
DELWP	Victorian Department of Environment, Land, Water and Planning (now DEECA)
DSS	Drainage Services Scheme
D & SH	Demobilisation & site rehab
EE Act	<i>Environment Effects Act 1978</i>
EES	Environment Effects Statement
ELL	Environmental Line List
EMMs	Environmental Management Measures
ERS	Environment Reference Standard
EOLSS	End of line scraper station
EPA	Environment Protection Authority

EP Act	<i>Environment Protection Act 2017</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESC	Erosion and Sediment Control
ESV	Energy Safe Victoria
EVCs	Ecological Vegetation Classes
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i>
FMRP	Flood Management and Response Plan
FPSR	First Peoples – State Relations
GDE	Groundwater dependent ecosystems
GED	General Environmental Duty
GEWVV	Grassy Eucalypt Woodland of the Victorian Volcanic Plain
GM	Ground movement and land stability
GS Act	<i>Gas Safety Act 1997 (Vic)</i>
HDD	Horizontal directional drilling
Heritage Act	<i>Heritage Act 2017 (Vic)</i>
HSE	Health, Safety and Environment
HSEMS	Health, Safety and Environment Management System
ICCP	impressed current cathodic protection system
IECA	International Erosion Control Association
IWR regulations (or IWRGs)	Industrial Waste Resource Regulations or Guidelines
LMS	Learning Management System
LV	Landscape and visual
MLV	Mainline valves
MSA	Melbourne Strategic Assessment
MSA Act	<i>Melbourne Strategic Assessment (Environmental Mitigation Levy) Act 2020 (Vic)</i>
M&SE	Mobilisation and site establishment
MWC	Melbourne Water Corporation
NEPM	National Environment Protection Measure
NT Act	<i>Native Title Act 1993</i>
NTGVVP	Natural Temperate Grassland of the Victorian Volcanic Plain



NV	Noise and Vibration
OEMP	Operating Environmental Management Plan
OCP	organochlorine pesticides
PAH	polycyclic aromatic hydrocarbons
PASS	Potential Acid Sulfate Soil
PE Act	<i>Planning and Environment Act 1987</i>
PFAS	per- and polyfluorinated alkyl substances
Pipelines Act	<i>Pipelines Act 2005 (Vic)</i>
PIW	Prescribed industrial waste
Pipelines Regulations	<i>Pipelines Regulations 2017 (Vic)</i>
Project activities/works	Activities proposed by APA to undertake the required scope of work
PSP	Precinct Structure Plan
P&E	Pipe construction
ROW	Right of Way
Site	A location or part of the construction area
SG+	Safeguard+, APA incident reporting system
TECs	Threatened Ecological Communities
TMP	Traffic Management Plan
VAHR	Victorian Aboriginal Heritage Register
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register
Vic	Victoria
VRO	Victorian Resources Online
VTS	Victorian Transmission System
WICA	Works in Conservation Area
WCS UP	Wollert compressor station upgrade
WoNS	Weeds of National Significance
WORM	Western Outer Ring Main
WWCHAC	Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation

# 1. Introduction

## 1.1 Purpose

The purpose of this Construction Environment Management Plan (CEMP) is to establish and maintain effective environmental management processes for the construction phase of the Western Outer Ring Main Project (WORM), herein after referred to as the Project. APA Victorian Transmission System (VTS) (Operations) Pty Ltd (APA) is the licensee of the Pipeline Licence.

This CEMP has been prepared under the provisions of the *Pipelines Act 2005* and the *Pipelines Regulations 2017*. The CEMP is prepared by APA to establish the processes and methods by which the environmental aspects of the Project is managed.

This CEMP identifies aspects of the pipeline construction activities that have the potential to impact on the physical, biological, social and cultural aspects of the environment.

## 1.2 Scope

This CEMP applies to construction activities proposed as part of the Project works, as well as to any construction or rectification activities required during the rehabilitation monitoring period. The works covered by the CEMP are summarised in Section 2.6, 2.7 and 2.8. Operation activities after the 24-month rehabilitation and monitoring period will be managed through the APA VTS Operating Environmental Management Plan (VTS OEMP) (870-PL-HSE-0037).

The CEMP identifies actions required to comply with the requirements of applicable legislation, licences, Australian Standards and Industry Codes of Practice. Activities performed in accordance with this CEMP must comply with the relevant acts, regulations, standards and codes of practice of regulatory authorities having jurisdiction over the activities. When conflict exists between various applicable documents, the following decreasing order of precedence applies:

- Acts of law or other legislation
- Government licenses and permits
- APA Standards
- Local standards

Discrepancies between this CEMP and the above are to be reported to the document owner for remedy. Where APA requirements are more stringent, they will take precedence.

If reading a hard copy of this document, it is considered uncontrolled.

This CEMP outlines the Project's environmental requirements to be met by APA and the Contractor. The Contractor will prepare a separate CEMP compliant with this CEMP. The Contractor's CEMP will also include site-specific environmental management documentation, inclusive of procedures, protocols and Safe Work Method statements (SWMS).

APA is committed to responsible environmental management and has formalised this commitment in an Environment and Heritage Policy). APA Environment and Heritage Policy can be found in Appendix I.

The scope of activities covered by the CEMP includes:

- Environmental performance objectives, standards and monitoring requirements
- Measurement and evaluation including auditing and reporting of progress against the environmental objectives
- Statutory requirements – licences and subsequent approvals required
- Organisational structure and responsibility for environmental management of the Project
- Training of personnel in environmental awareness
- Requirements for emergency preparedness and response
- Complaints procedure, incident reporting and corrective actions for non-conformance
- Reporting and notifications to appropriate authorities and affected stakeholders
- Review and transition to management of activities under the VTS OEMP at the conclusion of the rehabilitation monitoring period.

### 1.3 Key Objectives

The key objectives of this CEMP are to:

- Describe the overall approach to environmental management which is applied by APA and contractors during project work;
- Set the environmental management performance requirements for activities;
- Describe the relationship between APA's Management Systems, this CEMP and subordinate procedures; and
- Identify and assign responsibilities for environmental management and activities.

### 1.4 Document references

Work performed in accordance with this CEMP must conform to the current issue, including amendments, of these national and international standards, codes of practice, guidelines and APA documents listed in Table 1.1.

**Table 1.1 Project key reference documents**

Item	Definition
PL-HEL-0015, 0016, 0017 & 0018	Victorian Operating Environment Management Plan
APA HSE EP 13.01.03	Management Plan Process and Design (Environmental Procedure)
APA HSE GP 06.01 T01	Workplace Risk Assessment and Control Tool
APA HSE GP 07.01	Incident Reporting Procedure
APA HSE GP 07.02	Incident Investigation and Analysis Procedure
18035-PL-A-0005	WORM Project Management Plan
WPT.2373-DBM-A-0001	WORM Project Design Basis Manual
18035-PL-HSE-0003	WORM Project Health & Safety Management Plan
18035-PL-LH-0001	WORM Project Consultation Plan
CHMP 16593	WORM Project Cultural Heritage Management Plan for the area from KP8 to KP33
CHMP 16594	WORM Project Cultural Heritage Management Plan for the area from KP0 to KP8.2
CHMP 18496	WORM Project Cultural Heritage Management Plan for the area from KP33 to KP51

## 2. Project overview

### 2.1 Overall Project

The Project comprises three key operational components:

- **New pipeline:** Approximately 51 kilometres in length and fully buried
- **Mainline valves:** Three mainline valves located along the pipeline alignment within the proposed easement
- **Wollert compressor station upgrade:** The construction of a new Solar Centaur 50 compressor, an end of line scraper station and a regulating station within the existing APA facility at Wollert.

### 2.2 Pipeline and mainline valves

An approximately 51km long underground high pressure gas transmission pipeline will be installed to transport gas between APA's existing Plumpton Regulating Station (approximately 38 kilometres North West of Melbourne's CBD) and Wollert Compressor Station (approximately 26 kilometres north east of Melbourne's CBD). The pipeline will address a key capacity constraint in the VTS by providing a new high pressure connection between existing sources of natural gas supply in the north and east with those in the west of the State.

The pipeline will deliver improved network reliability by increasing the amount of natural gas that can be stored underground in Port Campbell for times of peak demand and ensuring sufficient volumes of natural gas can be moved where it is needed most. In addition, the pipeline will help to deliver sufficient natural gas to Victorian homes for heating and cooking on very cold days, as well as supplying natural gas for power generation during times of peak electricity demand.

The project also provides the opportunity to supply with natural gas to new growth suburbs on Melbourne's urban fringe.

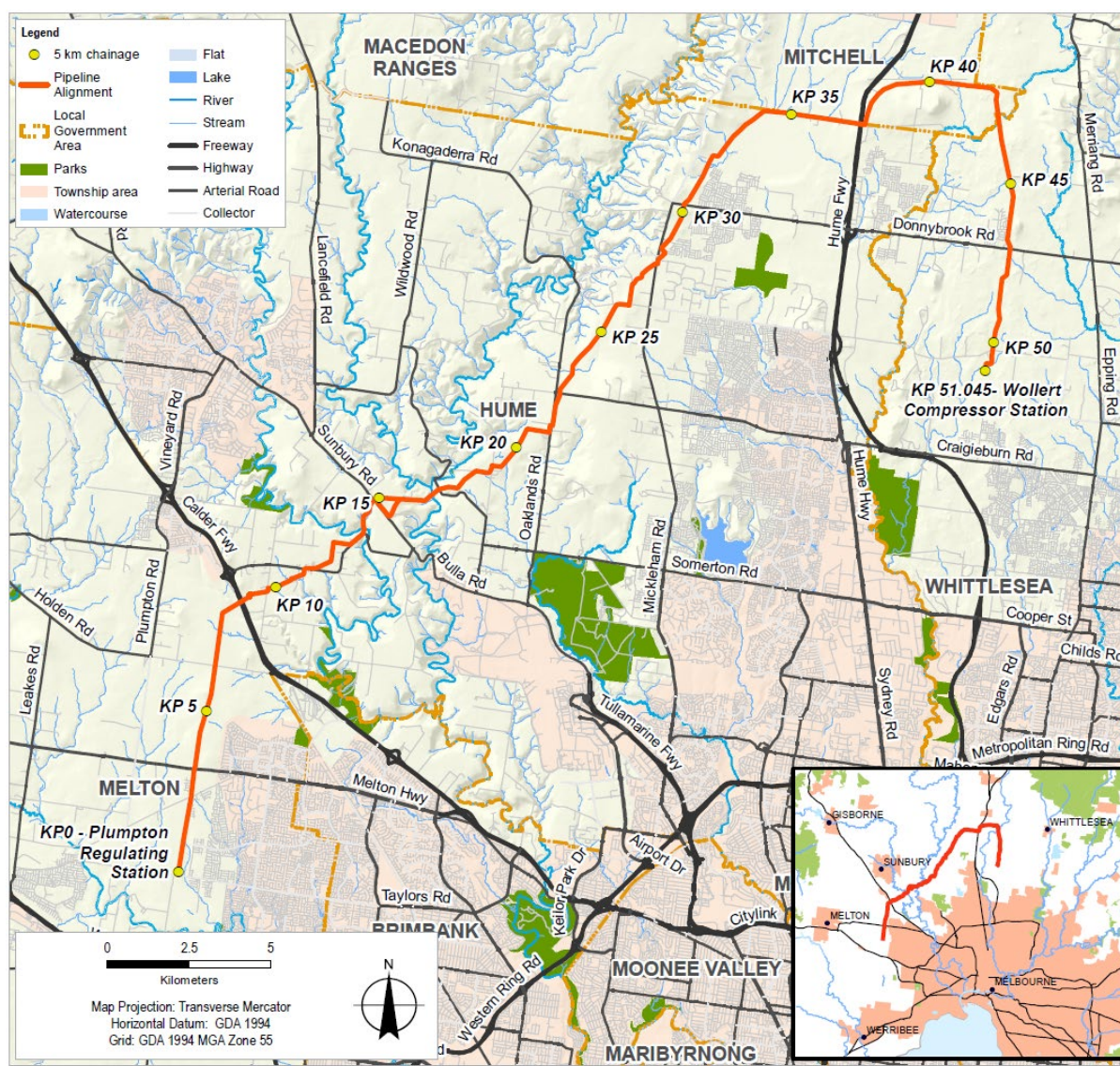
A summary of key pipeline components is provided in Table 2.1. Once operational, the WORM will form part of the Victorian Transmission System (VTS) owned by APA, operated by the Australian Energy Market Operator (AEMO). The operation and maintenance of the WORM will be undertaken in accordance with the VTS OEMP.

**Table 2.1 Summary of key components**

Pipeline key components	
Pipeline length	51 km
Pipe material	American Petroleum Institute (API) Specification 5L X52 high strength steel pipe. Internally lined with epoxy and externally coated with dual layer fusion bonded epoxy with field applied joint coating
Nominal diameter	500 mm
Nominal capacity	Approximately 750 TJ/day
Maximum allowable operating pressure	10,200 kPa
Pipeline contents	Gaseous hydrocarbons (natural gas)
Pipe wall thickness	10.31 mm standard wall thickness 12.7 mm heavy wall thickness
Pipe segment length	18 m
Depth of cover (depth below ground surface)	Minimum of 750 mm to the top of the pipeline (deeper at crossing of third-party infrastructure, road crossings and waterways). The final depth will be determined as an outcome of the Safety Management Study
Easement	Nominal 30 wide construction right-of-way (ROW) and a permanent 15 m wide operations easement
Design principles	Strictly in accordance with the latest version of AS2885 <i>Pipelines – Gas and liquid petroleum</i>
Design life	60 years
Mainline valves (MLV)	Three remotely actuated MLVs spaced at intervals of approximately 15 kilometres along the pipeline alignment within the proposed easement, to allow for isolation of the pipeline in an emergency.
Scraper station	Located at APA's existing Wollert Compressor Station.

The pipeline route is depicted in Figure 2.1.

**Figure 2.1 Pipeline Route**



Data source: APA, 2020; GHD, 2020; DELWP, Vicmap, 2020 Created by: kgardner

### 2.3 Wollert Compressor Station upgrade

Upgrades to the existing Wollert Compressor Station will include:

- New Solar Centaur C50 turbine and C33 compressor package
- Extension of the existing WCSB suction and discharge headers as common headers
- Installation of separate discharge flow control skids for VNI and WORM
- Installation of a new pressure reduction station for flows from the WORM to the Pakenham pipeline header
- New pig trap at Wollert
- New control equipment building

- Upgraded power supply.

## 2.4 Management of Change

APA's change management processes for new and existing assets are undertaken in accordance with APA's Asset Change Management Framework Manual (Document No. 530-MAN-A-0003) and Infrastructure Development Change Management Process (500-PR-0001).

The purpose of the change management process is to ensure changes to the asset and its management processes are captured and recorded such that:

- Risks and impacts of proposed change are assessed and well understood
- Decision making and approval responsibilities and trails are evident
- The right people are involved and notified of the change
- Actions required to deliver the change are managed
- Asset and management system information and records are accurate
- Impacts are managed and tracked to completion.

Proposed changes are managed through the Project change committee. Proposed changes are presented to the change committee who assess the impact of the change on the project. The Project change committee consists of the following disciplines:

- Project managers (pipeline and facilities)
- Regional and project engineering leads
- Existing APA asset leads, and operations and maintenance
- Health, Safety and Environment (HSE), approvals and land access leads.

Changes to this CEMP will be in accordance with APA's change management process. Administrative changes will be provided to the Minister for Energy within 5 business days. Other changes require the prior written approval by the Minister for Energy.

## 2.5 Timelines

Construction works will commence in Quarter 3 2022 over a period of approximately 9-months. Following completion of construction, a 24-month rehabilitation monitoring period will apply during which any defects will be rectified in accordance with this CEMP.

## 2.6 Key Pipeline construction works

The pipeline will be constructed and operated in accordance with the requirements of the Australian Standard 'AS2885: Pipelines – Gas and Liquid Petroleum'. The pipeline will be bi-directional, to allow gas to flow in both directions as required.

Key pipeline construction activities include:

- Surveying to mark the location of construction



- Clearing and grading to remove trees, shrubs, surface rocks and groundcover vegetation
- Pipe stringing whereby pipe segments are laid out along the construction area.
- Pipe welding to join the 18 m pipe lengths
- Trenching to a minimum depth of 750 mm
- Pipe lowering into the trench
- Trench backfill and grading
- Pipeline testing and commissioning
- Construction area rehabilitation

Heavy wall pipes will be used where the pipeline traverses near urban environments, sensitive locations, special crossings and possible future urban development as an additional protection measure.

Alternative pipeline construction techniques such as horizontal directional drilling (HDD) or horizontal boring methods will be used at major watercourse, utility and infrastructure crossings as well as in environmentally sensitive areas to protect surface environmental values

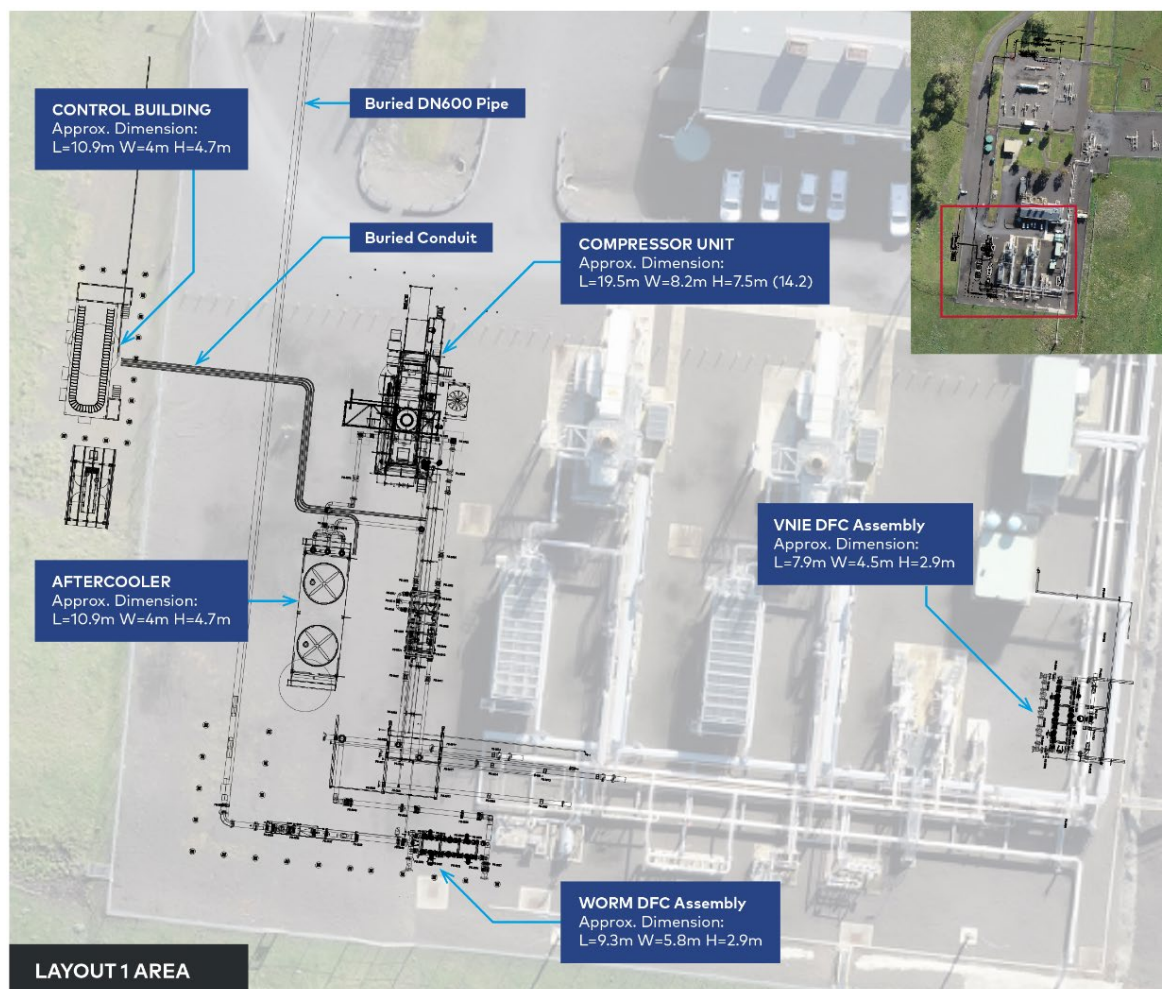
Access to the construction ROW will be via the existing road network. Temporary access points are required to provide safe entry/exit for construction traffic during construction works. Where possible and feasible existing private access tracks will be used. Access tracks are less than 10 m wide and usually constructed out of gravel. Access to land owned by the State/Crown Land will follow conditions of the relevant State government agencies, including the Department of Transport.

Where construction is to occur on private land, access will be negotiated with the Landholders. Access to Council land and road reserves will follow conditions of Council access agreements and road opening requirements.

## **2.7 Wollert compressor station upgrade works**

The Project includes the addition of a Solar Centaur 50 compressor to the site, an end of line scraper station and associated valves and pipework. Figure 2.2 depicts the general layout for the new compressor.

**Figure 2.2 Wollert compressor site key upgrades**



Key construction activities include:

- Earthworks including excavations and removal of unwanted soils
- Civil works to install slabs and footings for equipment
- Assembly and erection of facilities and pipework
- Testing and commissioning of equipment and piping
- Site completion and fencing.

## 2.8 Rehabilitation

Rehabilitation will aim to minimise adverse impacts of the pipeline on existing land uses and control the occurrence and extent of soil erosion. The rehabilitation of the construction area and temporary facilities and areas will begin as soon as practicable after the completion of construction. Rehabilitation of the construction footprint will reinstate existing topography, infrastructure and appropriate vegetation in consultation with the landholder.

Key rehabilitation activities will include:

- Re-establishing topsoil cover
- Installation of pipeline signage
- Reinstating roadways and road reserves in accordance with the requirements of local councils
- Reinstating fencing and access tracks in accordance with the requirements of landowners
- Reinstating natural drainage patterns
- Application of seed or revegetation, where appropriate
- Installing any erosion control measures in prone areas
- Reinstating waterways to meet Melbourne Water requirements

Revegetation of the construction area will be consistent with the original vegetation and in consultation with landowners. Deep-rooted vegetation will generally not be reinstated, due to the potential to interfere with the pipeline coating and impede operational access requirements.

Where it does not pose a risk to pipeline integrity, trees in public places or those that provide screening for residences will be replaced if requested and in consultation with affected landholders. Tree plantings will to meet requirements of the Asset Protection Zone and relevant bushfire management overlays.

Within roadways, surfaces will be reinstated in accordance with the requirements of the local Council. Vegetated road reservations will also be restored in consultation with the local Council. Waterways will be reinstated to meet Melbourne Water requirements.

Monitoring within the construction area will be undertaken for 24 months post-construction and will include easement surveillance and rehabilitation works where required. In particular, the following would be undertaken:

- Inspection of native vegetation coverage
- Inspection of pasture establishment
- Inspection of weeds
- Inspection of subsidence or gully erosion
- Observations of watercourse re-establishment
- Monitoring post any major flooding event
- Any specific requirements agreed upon with the landowner.

APA will prepare a rehabilitation close out report which will be submitted to the Minister for Energy within one month of the end of the monitoring period.

## 2.9 Operation and maintenance

The pipeline will commence operations in Quarter 2 of 2023 and this CEMP will remain in place for the first 24 months of operational activity. During this 24-month period the completed pipeline construction and rehabilitation works will be monitored to identify and correct defects. After this 24-month period, it is intended to seek regulatory approval that the continued operation of the pipeline will be undertaken in accordance and maintenance with the VTS OEMP.

### 3. Environmental setting

This section provides a brief context on the environmental setting of the project. Further details are provided in the Project Environmental Effects Statement (EES).

The Project is located within the Port Phillip Basin and traverses sections of the Werribee River, Yarra River and Maribyrnong River catchments. It spans the Victorian Volcanic Plain bioregion and a small area of the Central Victorian Uplands bioregion. Landscapes within the Project study area are highly modified by past land use including agricultural, infrastructure and urban development.

Native vegetation within the construction area is generally degraded and fragmented, reflecting the area's long history of agricultural land use, and more recently urban development.

For the most part, vegetation is dominated by pasture grasses and in some areas, extensive tracts of noxious weeds. Shelterbelts and windbreaks are common and mostly consist of species that are not indigenous to Victoria.

Native vegetation mapped within the construction area consists of scattered native trees, remnant grassy woodland and grassland on private property and along public road reserves.

Some areas of grassland habitat within the construction area is known to provide suitable habitat for threatened species including Striped Legless Lizard, Golden Sun Moth and Tussock Skink.

The alignment intersects three major streams (Deep Creek, Jacksons Creek and Merri Creek), with riparian and aquatic vegetation mapped at each these waterways. These provide suitable wetland habitat for common and threatened aquatic species including Growling Grass Frog.

#### 3.1 Environmental sensitivities

An Environmental Line List (ELL) was prepared for the proposed pipeline identifying key environmental (including heritage and community) features. The ELL is based on the findings of the technical studies undertaken as part of the project. The ELL was updated during the EES hearings and in accordance with the recommendations made by the Inquiry and Minister for Planning. This is contained in Appendix E– Environmental Line List.

The purpose of the ELL is to identify community facilities, sensitive receptors, heritage values and threatened flora and fauna that may occur along the pipeline route and that require management measures to mitigate potential risks during pipeline construction, operation and maintenance.

The following sections present an overview of key environmental sensitivities.

##### 3.1.1 Conservation areas (MSA)

The Project area traverses two Biodiversity Conservation Strategy conservation areas:

- Conservation Area 34a - Northern Growth Corridor: Growling Grass Frog Corridor (between KP 42.5 and KP 43.2)
- Conservation Area 28b - Summerhill Road (East), Wollert (between KP 48.5 and KP 49.1)

Works in Conservation Area (WICA) approval has been granted for the planned works in a Conservation Area, with the conditions of approval addressed in the EMMs (Appendix F).

### **3.1.2 Matters of national environmental significance**

Eight EPBC Act listed species and ecological communities were found during assessments of the Project Area:

- Five are expected to be directly or indirectly impacted by the Project (Natural Temperate Grassland of the Victorian Volcanic Plain, Grassy Eucalypt Woodland of the Victorian Volcanic Plain, Golden Sun Moth, Striped Legless Lizard and Growling Grass Frog)
- Impacts to most species are expected to be minor with the project only expected to trigger a significant impact in relation to two species, the Striped Legless Lizard, based on the loss of 39.33 hectares of known and assumed habitat (including area where 6 individuals were found), and the Golden Sun Moth, based on the loss of 19.93 hectares of habitat (including area where 66 individuals were found)
- Two threatened ecological communities (Natural Temperate Grassland of the Victorian Volcanic Plain, Grassy Eucalypt Woodland of the Victorian Volcanic Plain) are also expected to be significantly impacted by construction of the Project based on three criteria for NTGVVP and five criteria for GEWVV

### 3.2 Aboriginal Cultural heritage

Areas of cultural heritage sensitivity are defined in the *Aboriginal Heritage Regulations 2018* and relate to registered cultural heritage places and landforms and soil types where Aboriginal places are more likely to be located. These include land within 50 metres of registered Aboriginal cultural heritage places. Aboriginal cultural heritage places occur within the construction area.

Three Cultural Heritage Management Plans (CHMPs) have been prepared for the project: CHMP 16594 (for KP 0 – 8.2); CHMP 16593 (for KP 8.2 – 33); and CHMP 18496 (for KP 33 – 51). The CHMP process determined the extent, nature and significance of Aboriginal places within the Activity area and how the Project can be undertaken in a way that minimises harm. Where Aboriginal cultural heritage has been identified, the CHMPs specify the management and mitigation measures, such as a salvage, that are required prior to, during and after construction works.

The management conditions were prepared in consultation with Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) (CHMP 16593, 18496) and First Peoples State Relations (FPSR) with WWCHAC input (CHMP 16594).

The three CHMPs have been approved and it is a legal requirement that works occur in accordance with these plans.

## 4. Regulatory setting

A summary of key environmental legislation and its applicability to the Project is presented in Table 4.1.

**Table 4.1 Key legislation and applicability**

Legislation	Applicability
<p><i>Aboriginal Heritage Act 2006 (Vic) (AH Act)</i></p> <p>Aboriginal Heritage Regulations 2018</p>	<p>This Act provides for the protection of tangible and intangible Aboriginal cultural heritage in Victoria and empowers traditional owners to protect and manage their heritage.</p>
<p><i>Crown Land (Reserves) Act 1978 (Vic)</i></p>	<p>This Act provides for the reservation of Crown land for certain public purposes by the Governor in Council and sets out the administrative and legal framework for managing reserved Crown land and the processes for revoking Crown land reservation.</p>
<p><i>Country Fire Authority Act 1958 (Vic)</i></p>	<p>Outlines the requirements for hot works permits within the Fire Danger Period and on a Total Fire Ban Day.</p>
<p><i>Fire Rescue Victoria Act 1958</i></p>	<p>This Act provide for fire safety, fire suppression and fire prevention services and emergency response services in the Fire Rescue Victoria fire district.</p>
<p><i>Environment Protection Act 2017 (Vic) (EP Act)</i></p> <p>Environment Protection Regulations 2021 (Vic) (EP Regulations)</p> <p>Other subordinate regulations, policies and EPA publications</p>	<p>This Act regulates environmental risk, pollution, waste and contamination in Victoria.</p> <p>The EP Act includes a general environmental duty (GED) minimise risks of harm to human health or the environment from pollution or waste so far as reasonably practicable.</p> <p>The CEMP reflect the EP Act, EP Regulations and relevant EPA publications.</p>
<p><i>Flora and Fauna Guarantee Act 1988 (Vic) (FFG Act)</i></p> <p>Flora and Fauna Guarantee Regulations 2020</p>	<p>Protection of FFG-Act listed communities and listed threatened fauna and aquatic species.</p>
<p><i>Fisheries Act 1995 (Vic) (Fisheries Act)</i></p> <p>Fisheries Regulations 2019</p>	<p>Protects listed aquatic biota by preventing the taking, injuring, damaging, destroying, and obstructing passage of biota without authorisation.</p>
<p><i>Gas Safety Act 1997 (Vic) (GS Act)</i></p> <p>Gas Safety (Safety Case) Regulations 2018</p>	<p>Protection of public and asset safety through development of an approved Safety Case from Energy Safe Victoria (ESV).</p>

Legislation	Applicability
<p><i>Heritage Act 2017 (Vic)</i> (Heritage Act)  Heritage Regulations 2017</p>	<p>This Act provides for the protection and conservation of heritage in Victoria, including the establishment of the Victorian Heritage Register (VHR) for places and objects, and the Victorian Heritage Inventory (VHI) for archaeological sites.</p> <p>Any impacts to VHR or VHI sites as part of the Project will require a permit or permit exemption under the Heritage Act.</p> <p>A Consent application under Section 124 is required from Heritage Victoria for the VHI site Holden Cobbled Stone Road (H7822-2283).</p>
<p><i>Land Acquisition and Compensation Act 1986 (Vic)</i>  Land Acquisition and Compensation Regulations 2010</p>	<p>This Act allows for and manages the acquisition of land and compensation payable where land is acquired.</p> <p>The Act allows for acquisition and compensation.</p>
<p><i>Livestock Disease Control Act 1994</i></p>	<p>This Act provides for the prevention, monitoring and control of livestock diseases</p>
<p><i>Pipelines Act 2005 (Vic)</i> (Pipelines Act)  Pipelines Regulations 2017</p>	<p>The primary act and regulations governing the construction and operation of high pressure pipelines in Victoria.</p>
<p><i>Planning and Environment Act 1987 (Vic)</i> (PE Act)  Planning and Environment Regulations 2015</p>	<p>This Act provides the framework for planning, land use and development within Victoria. Planning schemes prepared under the provisions of the Act apply to each municipality in Victoria. PE Act matters are considered as part of the Pipeline Licence application process.</p>
<p><i>Rail Safety (Local Operations) Act 2006 (Vic)</i></p>	<p>A works permit is required for construction across or beneath a railway.</p>
<p><i>Road Management Act 2004 (Vic)</i>  Road Management (General) Regulations 2016</p>	<p>Consent is required from the relevant road management authority to carry out works within road reserves.</p>
<p><i>Water Act 1989 (Vic)</i>  Water (General) Regulations 2021</p>	<p>This Act provides a legal framework for managing Victoria's water resources, including water supply catchments and groundwater and is relevant as the Project crosses several waterways. Melbourne Water's approval is required to undertake construction activities on or near all waterways.</p>



Legislation	Applicability
Wildlife Act 1975 Wildlife Regulations 2013	A Wildlife Authorisation under the Wildlife Act is required to take or destroy (including removal or relocation) protected or threatened wildlife.
Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)	Governs the protection of Matters of National Environmental Significance and works within Conservation Areas.
Native Title Act 1993 (Cth) (NT Act)	The alignment impacts three Crown allotments where native title rights exist. The proposed pipeline has been determined to be a facility providing services to the general public. Given this, the issue of the proposed licence (and all related works) is a valid future act under section 24KA of the NT Act. APA have undergone and are currently proceeding through the process required under S24KA of the NT Act.
Climate Change Act 2017 (VIC)	This Act provides legislative foundation for Victoria to manage climate change risks. It also drives Victoria's transition to a climate-resilient community and economy with net-zero emissions by 2050. Impacts to climate change have been considered during the project to date and will continue to be considered by APA.

The key policies and guidelines are summarised in Table 4.2. They refer to environmental control guidelines that limit the impact of noise, dust, clearing of native vegetation, impact on waterways and impact on the environmental amenity of local businesses, residences and road users.

**Table 4.2: Applicable policies and guidelines**

Category	Title
Environment Standard	Reference <i>Ambient Air, Ambient Sound, Land, Water</i>
EPA Publications	<i>655.1 Acid Sulphate Soil and Rock</i>  Industrial Waste Resource Guidelines: <i>IWRG300: Waste avoidance and reduction</i> <i>IWRG600.2: Waste categorisation</i> <i>IWRG702: Soil sampling</i> <i>IWRG701: Sampling and analysis of waters, wastewaters, soils and wastes</i>

Category	Title
	788 <i>Best Practice Management: Siting, design, operation and rehabilitation of landfills</i>
	824 <i>Protocol for Environmental Management: Greenhouse Gas Emissions and Energy Efficiency in Industry 2001</i>
	1669.4 <i>Interim position statement on PFAS</i>
	1739 <i>Urban Stormwater Management Guidance</i>
	1820.1 <i>Construction guide to preventing harm to people and the environment</i>
	1826.4 <i>Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues</i>
	1827.2 <i>Waste Classification Assessment Protocol</i>
	1828.2 <i>Waste disposal categories – characteristics and thresholds</i>
	1834 <i>Civil construction, building and demolition guide (November 2020)</i>
	1836 <i>PFAS and EPA: A quick reference guide from Victoria's environmental regulator</i>
	1856 <i>Reasonably practicable</i>
	1894 <i>Manage soil disturbance</i>
	1895 <i>Managing Stockpiles</i>
	1896 <i>Manage how you work within or adjacent to waterways</i>
	1897 <i>Manage truck and other vehicle movement</i>
	1915 <i>Contaminated land policy</i>
	1940 <i>Contaminated land: Understanding section 35 of the Environment Protection Act 2017</i>
	1955 <i>Ambient air quality monitoring (To be published in Sept. 2021)</i>

Category	Title
	<p><i>1961 Guideline for assessing and minimising air pollution in Victoria - Framework for air quality management and monitoring for construction and operation</i></p> <p><i>1968.1 Guide to classifying industrial waste</i></p> <p><i>1977 Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land</i></p> <p><i>1991 Responding to harm caused by pollution</i></p> <p><i>2008.1 Notifiable contamination guideline: Duty to notify of contaminated land</i></p>
DEECA	<p><i>Guidelines for the removal, destruction or lopping of native vegetation (2017)</i></p> <p><i>Biosecurity Guidelines for Movement of Equipment AG1171 (2009)</i></p>
Department of Environment (Commonwealth)	<p><i>Australian and New Zealand Environment and Conservation Council (ANZECC) Australia and New Zealand Guidelines for Fresh and Marine Water Quality (2000)</i></p> <p><i>Guidelines for Water Quality Monitoring and Reporting (ANZG Australia 2018)</i></p> <p><i>Australian Standard AS/NZS 2885 The Standard for Gas and Liquid Petroleum Pipelines</i></p> <p><i>Australian Standard AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting</i></p> <p><i>Australian Standard AS 4482.1:2005 Guide to the investigation and sampling of sites with potentially contaminated soil</i></p> <p><i>Australian Standard AS 1940:2004: The storage and handling of flammable and combustible materials</i></p> <p><i>Australian Standard AS 2187.2 – 2006 Explosives-storage</i></p> <p><i>Australian Standard AS 4970 Protection of trees on development sites</i></p> <p><i>National Pollution Guidelines for Wildlife 2020</i></p>

Category	Title
other	<p><i>A Guide for Machinery Hygiene for Civil Construction (Civil Contractor's Federation, 2011).</i></p> <p><i>Platypus Management Guidelines (Australian Platypus Conservancy)</i></p> <p><i>Code of Practice: Excavation Work (Safe Work Australia 2018)</i></p> <p><i>Compliance Code: Excavation (WorkSafe Victoria 2019)</i></p> <p><i>Best Practice Erosion and Sediment Control (International Erosion Control Association 2008)</i></p>

The performance objectives of this CEMP have been developed to be consistent with the *Australian Pipelines and Gas Association Code of Environmental Practice – Onshore Pipelines, 2022*.

Where legislation requires a specific management action or response, these requirements are included within the CEMP as environmental controls, environmental limits or environmental monitoring programs.

Compliance with legal and other relevant requirements will be evaluated in accordance with Section 11.1 of this CEMP. Performance monitoring is referred to in Section 11.2, and regulatory incident reporting is discussed in Section 11.2.2.

## 5. Environmental framework

APA business tools and systems used to manage and maintain all information relating to asset operations include:

- Maximo – Asset maintenance system (Work Order/Job Plan/Work Instruction)
- Safeguard+ (SG+) - Risk, auditing and reporting system
- Inspections
- Learning Management System (LMS) – Training system used to capture APA staff information and learning materials (e.g. localised and corporate inductions)

APA is committed to responsible environmental management and has formalised this commitment in a Environment and Heritage Policy (refer to Appendix I). All personnel are required to work in line with the Environment and Heritage Policy, which will be displayed in the site offices during the activities.

This CEMP describes the environmental management implementation strategy for this Project. This CEMP is part of APA's HSE Management System, known as Safeguard. Safeguard is designed to ensure that information on environmental requirements is provided to personnel in a relevant, accessible and understandable form.

As part of Safeguard, APA has an environmental procedure for Management Process and Design (APA HSE EP 13.01.03), which defines the requirements for environmental management planning for project activities.

The broad relationships and linkages between the Project's environmental management plans and APA's HSE Management System are represented diagrammatically in Figure 5.1. This CEMP sets out the plans, roles, responsibilities, and specific commitments required to carry out the proposed activities in accordance with APA's Environment and Heritage Policy (Appendix I) and the environmental management objectives and standards outlined for the Project (refer to Section 8).

Figure 5.1 Safeguard risk management system



## 5.1 Environmental Procedures

As part of Safeguard, APA has a suite of procedures for environmental management. There are eighteen procedures across eight environment areas. These procedures provide guidance to all APA staff and contractors for applying management process and considerations to minimise harm to the environment. The key Safeguard procedures that inform this CEMP These procedure are outlined in Table 3 below.

**Table 3 - APA'S Environmental Procedures and Key Objectives**

Environment Area	Objectives
Approvals and Planning	<ul style="list-style-type: none"> <li>• Ensure all required approvals have been obtained prior to works; and</li> <li>• All required EMPs or equivalent are developed in line with legislative and risk requirements.</li> </ul>
Vegetation and Fauna	<ul style="list-style-type: none"> <li>• Avoid and minimize negative impacts to native vegetation;</li> <li>• Protect flora, fauna and conservation areas; and</li> <li>• Zero material breaches associated with permits, approvals or laws which govern native vegetation.</li> </ul>
Pest, Weeds, Disease	<ul style="list-style-type: none"> <li>• No spread of existing pests, diseases, declared/listed weeds or Weeds of National Significance (WONS);</li> <li>• No introduction of new populations/species of pests, diseases and declared/listed weeds;</li> <li>• Effectively control and manage weeds onsite;</li> <li>• Humane pest eradication methods by competent personal; and</li> <li>• Meet biosecurity and land access requirements of public and private landholders.</li> </ul>
Emissions	<ul style="list-style-type: none"> <li>• Minimise potential for unplanned emissions to the atmosphere including dust;</li> <li>• Avoid and minimise noise and vibration emissions;</li> <li>• Prevent the generation of dust in preference to applying dust suppression measures; and</li> <li>• Minimise noise pollution impacts.</li> </ul>
Chemicals and Contamination	<ul style="list-style-type: none"> <li>• Prevent release of fuels, oils or chemicals to the environment;</li> <li>• Chemical spill events are reported immediately; and</li> <li>• Ensure effective cleanup where release of fuels, oils or chemicals occurs.</li> </ul>
Waste	<ul style="list-style-type: none"> <li>• Minimise risk of contamination, particularly to water ways;</li> <li>• Ensure that waste is managed in accordance with EPA requirements; and</li> <li>• Manage waste using the principles of avoidance and minimisation and following the waste management hierarchy.</li> </ul>
Soil and Water	<ul style="list-style-type: none"> <li>• To minimise the impact on the receiving environment and surrounding waterways from sediment laden or contaminated water entering the storm water drains; and</li> <li>• Minimise the transfer of sediment from access roads to the storm water drain and being transported to receiving environment.</li> </ul>
Heritage	<ul style="list-style-type: none"> <li>• Protect and respect items or places of Aboriginal cultural heritage and / or natural and built heritage.</li> </ul>
Data and Reporting	<ul style="list-style-type: none"> <li>• All required data is collected and stored in line with requirement.</li> </ul>





## 6. Organisational structure and responsibility

### 6.1 APA

APA, as the licensee under the Pipelines Act, is accountable for the implementation of this CEMP including responsibilities delegated to construction contractors. This CEMP includes or is supported by other statutory plans to be prepared by APA as described in Appendix D.

Project Managers are accountable for coordinating activities relating to the CEMP and other management plans, and providing adequate resources to meet performance objectives (refer to Section 8).

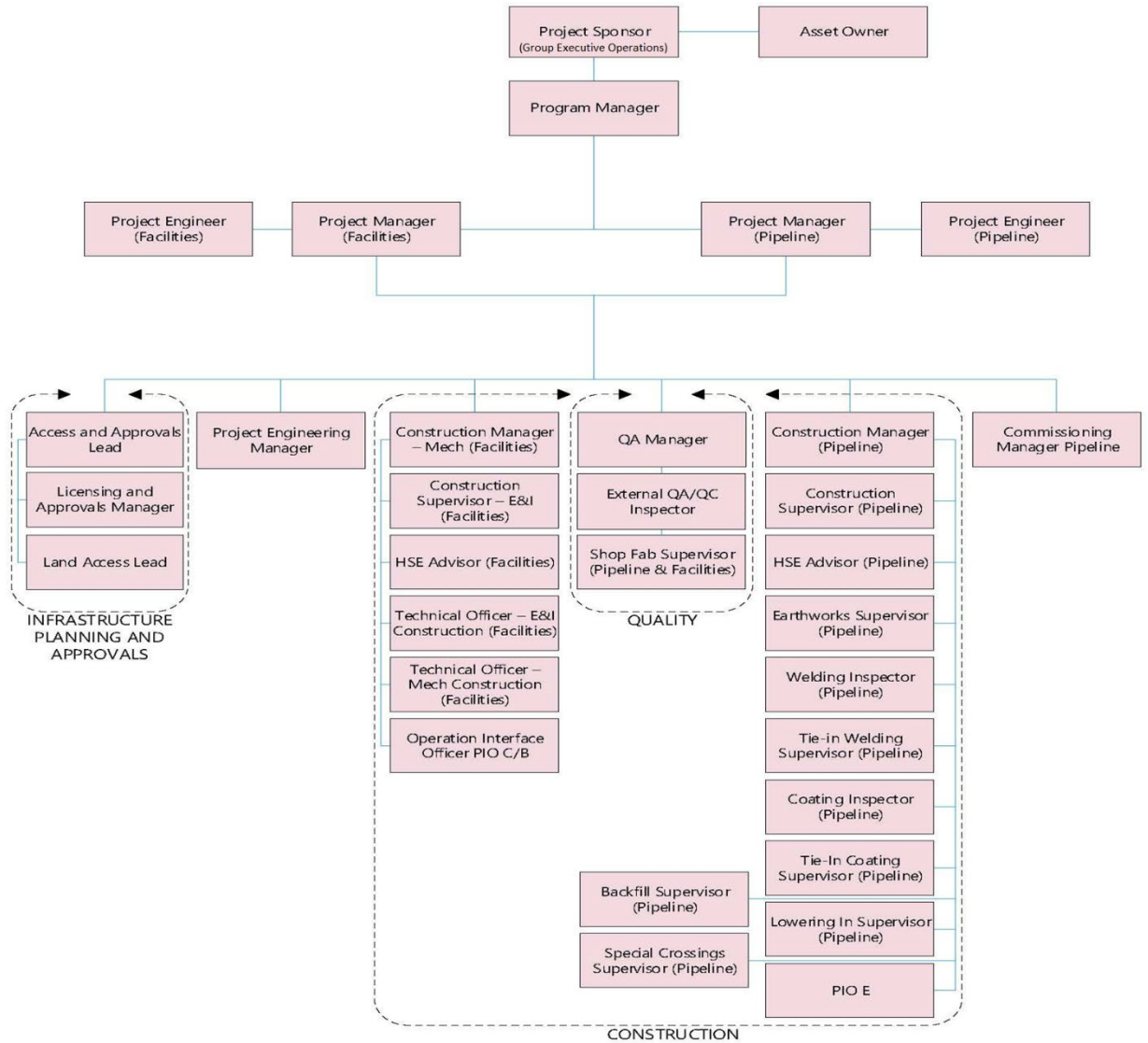
Project Managers are accountable for ensuring that APA personnel and contractor(s) engaged in the delivery of the project are aware of the GED and other responsibilities in implementing the CEMP.

The organisational structure for key APA project roles is illustrated in Figure 6.1.



Figure 6.1 Project Organisation Chart – Delivery Phase

**Western Outer Ring Main (18035)  
Organisation Chart  
Delivery Stage**



In addition to the Infrastructure Development project team, an Environment Advisor reporting to the APA General Manager Health, Safety, Environment and Heritage (HSEH), will be appointed to undertake internal audits (Section 11.1.2).

Key APA positions and responsibilities are summarised in Table 6.1.

**Table 6.1 APA Project Responsibilities**

Position	General responsibilities
Project Manager	Project management. Health, safety and environment, including implementation of this CEMP.
Construction Supervisor	Field based personnel responsible for inspecting and checking construction activities for compliance with construction contracts and project objectives.
Infrastructure Development HSE Manager	Provides assistance in the case of incidents and investigations
HSE Advisor (Project)	Provides specialist advice to the Construction Manager on HSE matters on a day to day basis (expected to be a full-time role during construction). Arranges HSE induction training. Ensures personnel hold relevant experience and training. Monitoring and assessment of EMP compliance in accordance with Section 11.1.1
Environmental Advisor (APA HSEH) (Internal Auditor)	Internal auditing in accordance with Section 11.1.2 and the APA Safeguard Audit and Self Assessment Procedure APA HSE GP 15.01

## 6.2 Contractor management

The project will engage two principal contractors: a pipeline contractor and a facilities (Wollert Compressor Station) contractor.

Contractors will be required to prepare environmental management plans that meet the objectives of this CEMP. This will include preparation of detailed plans for management of specific sites, activities or issues. These are described further in Appendix D.

Contractor management plans will be reviewed and approved by APA and applicable statutory approval decision makers prior to construction works commencing.

## 7. Environmental risk assessment framework

### 7.1 Risk assessment

An Environmental Risk Assessment was carried out to inform this CEMP. The risk assessment methodology is consistent with *AS ISO 31000:2018: Risk Management – Principles and Guidelines* and *AS2885.1:2018: Pipelines-Gas and Liquid Petroleum-Design & Construction*. As a pre-licence step, risk pathways and levels were assessed in a risk meeting in January 2021 and reviewed by APA personnel from the WORM project team including design, approvals, project and construction management participants.

This risk identification and assessment process was updated to consider potential impacts to relevant environmental, cultural and social values that were identified through the Pipeline Licence application Panel process and associated assessment under the Environment Effects Act.

Risks have been incorporated into a Project risk register. The risk register was reviewed and updated in a pre-construction workshop at 12 pm on 18 August 2022, attended by design, approvals, land, environmental, project and construction management representatives from APA and the Principal Contractor. The register will also be regularly evaluated by APA as part of the assurance processes identified in Section 11.

Any proposed changes to the risk register will be approved by the APA Project Manager and APA HSE Advisor and are subject to approval by the Minister for Energy prior to taking effect.

In addition to the risk assessment process, task-based risk assessments (e.g. Job Safety and Environment Assessments) will be undertaken by contractors to identify and control workplace hazards.

### 7.2 Risk findings

A total of 31 risk pathways were identified being relevant to this CEMP. Following application of mitigation measures and controls, ten risk pathways have a residual risk rating of moderate. All other pathways are rated as low or negligible.

The moderate risk pathways relate to construction traffic, spoil management, transportation, emissions, amenity, and construction activities impacting biodiversity and aboriginal heritage values.

The complete CEMP risk assessment, as reviewed and updated on 18 August 2022, is provided in Appendix C.

## 8. Performance objectives and standards

Performance standards have been identified to address the environmental risks, effects and legal requirements for the Project and are presented in Appendix F. The standards and the environmental controls are informed by the environmental management measures identified as a part of the EES.

The performance objectives and standards in Appendix F include requirements relevant to:

- General project activities Table F.1
- Noise and vibration Table F.2
- Air Quality Table F.3
- Biodiversity Table F.4
- Cultural heritage Table F.5
- Contamination Table F.6
- Greenhouse gas Table F.7
- Ground movement Table F.8
- Land use Table F.9
- Landscape and visual impacts Table F.10
- Safety Table F.11
- Social Table F.12
- Surface water Table F.13
- Groundwater Table F.14
- Fuels and chemicals Table F.15
- Waste Table F.16
- HDD and thrust boring Table F.17
- Hot works Table F.18
- Hydrostatic testing Table F.19
- Site reinstatement Table F.20

## 9. Emergency preparedness and response

Potential environmental emergency events and risks arising from the Project generally relate to fires, chemical and fuel spills, and flood events. A complete list of potential events are provided in Appendix C.

APA's National Emergency Response Management Plan 320-PL-ER-0001 will be implemented for the project. The National Emergency Response Plan establishes the structure of emergency teams, the communication processes and the resources, which may be required for managing the emergency.

The priorities in managing an emergency are safety of personnel (on and off-site), minimising impact on the environment and minimising impact on property and assets.

An Emergency Response Plan will be developed by the principal contractors based on the outcome of a risk assessment of credible site emergencies and their impacts. The contractor's plan will be reviewed and is subject to APA approval.

For works taking place on existing APA facility assets or near existing APA pipeline assets, an Emergency Response Bridging Plan will be prepared to define the circumstances in which the National Emergency Response Management Plan (320-PL-ER-0001) or the Contractor's Emergency Response Plan take precedence and coordinate the response between the project and APA Operations..

Relevant personnel will be trained to understand roles and responsibilities and the use of emergency response resources.

Emergency response exercises/drills will be conducted in accordance with *Pipelines Regulations 2017*. This includes:

- when the response arrangements are introduced; and
- when the response arrangements are significant amended; and
- not later than 12 months after the most recent test.

## 10. Training and communication

### 10.1 Training and awareness

Relevant project personnel, sub-contractors, consultants and visitors will receive inductions prior to commencing work on site. This will include a standard APA HSE induction to cover overall business-wide requirements and a project specific induction.

The HSE/project induction will include as a minimum:

- APA's HSE Management System, Safeguard
- key requirements of this CEMP such as:
  - No go areas and locations of sensitive environmental communities and species, and the requirements for working in sensitive areas or with sensitive species
  - General environmental duty, duty to respond to harm, duty to notify of incidents and other environmentally related duties
  - Community awareness
  - Biosecurity
  - Operating hours including criteria for noise and vibration
  - Vehicle operation rules – speed limits, inspections, hygiene
  - Smoking, hot works and fire hazard awareness
  - General and regulated waste management.

A separate cultural heritage awareness induction will be delivered by a representative of the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation (CHMPs 16593 and 18496) or cultural heritage advisor (CHMP 16594) for all personnel who will be involved in ground disturbance works within the approved CHMP Activity Area.

Specific awareness training (or toolbox talks) in the implementation of the CEMP and other management plans will be undertaken for relevant personnel.

Where required, job specific competency training will be undertaken prior to the mobilisation of personnel to the site. Records of project personnel's qualifications and training will be maintained as per Section 11.6.



## 10.2 Communication

### 10.2.1 Consultation

APA has prepared a construction consultation plan for stakeholders that may be affected by the Project. The consultation plan provides the arrangements for consultation and engagement during pipeline construction, to inform stakeholders and to enable stakeholder views, requirements and relevant information held by the stakeholder to be considered when implementing this CEMP. The consultation plan is provided in Appendix H. The consultation undertaken to inform the preparation of this CEMP has been documented and transmitted to the Minister for Energy in accordance with the Pipelines Act (18035-RP-LH-0001).

#### *Internal communications and reporting*

Regular meetings will be held between APA and the Principle Contractor. Environmental management will be an agenda item at these meetings.

## 10.3 Regulatory reporting

### 10.3.1 DEECA

In order to inform DEECA as the regulatory authority for environmental compliance under the *Pipelines Act*, APA will report to DEECA in line with the reporting schedule identified in Table 10.1.

**Table 10.1 Regulatory reporting requirements**

Stage	Report	Timing
Pre-mobilisation requirements	Provide information to DEECA as required by this CEMP and conditions of approvals.	As per the specific information requirement.
Weekly construction status*	<p>Email report of the status of construction, including (but not limited to) the following:</p> <ol style="list-style-type: none"> <li>1. Summary of key activities undertaken in the reporting period (including photos as relevant) and planned activities in the following reporting period.</li> <li>2. Work status against planned schedule.</li> <li>3. Summary of environmental incidents, complaints and non-conformances identified in the performance monitoring.</li> <li>4. Results of any audits and status of implementation of corrective actions</li> </ol>	Weekly (Sunday to Sunday) and to be provided within 1 day of the end of the reporting period.



Stage	Report	Timing
	<del>identified in any corrective action plan.</del>	
Construction audit reports	Independent audit reports (refer Section 11.1.3)	To be publicly available 30 days after completion of the audit
Annual compliance report	Provide an annual report to the Minister for Energy and Energy Safe Victoria on the performance in protecting the environment from the pipeline construction and operations.	Within 3 months of 30 June for each year.
Completion of Reinstatement	Email confirmation of the date which reinstatement activities are concluded and the period from which the rehabilitation monitoring period applies with an associated report of activities completed.	Upon completion of reinstatement.
End of rehabilitation monitoring period	<p>Email confirmation of the end of the 24-month rehabilitation monitoring period (see Section 2.9).</p> <p>APA will prepare a reinstatement close out report which will be submitted to the Minister for Energy within one month of the end of the monitoring period. The close out report will include evidence that reinstatement objectives and targets (Appendix F2.19) have been met, including:</p> <ul style="list-style-type: none"> <li>• Site-specific reinstatement assessments and photos</li> <li>• Landowner acceptance letters</li> <li>• Environmental matters to be carried over to the APA Operating Environmental Management Plan</li> </ul>	<p>Email upon completion of rehabilitation monitoring period.</p> <p>Close out report within 1 month of the end of the rehabilitation monitoring period.</p> <p>The Close out report will identify remaining matters that will be addressed through the OEMP, such as specific requirement for Broom Control following three years from Close out.</p>

\* Table note: the requirement for weekly construction status is complete.

### 10.3.2 Other regulatory authorities

APA is responsible for external reporting to agencies in accordance with statutory requirements including approval and consent conditions.

Requirements for incident reporting are provided in section 11.2.2.

## 11. Assurance

### 11.1 APA assessment of compliance and performance

Inspections, monitoring and auditing will be used to ensure the controls outlined in this CEMP are in place and working effectively. . More specifically, it will serve to confirm:

- That management measures are being implemented
- That management measures have achieved their intended outcomes, or on track to achieve intended outcomes:
  - That identified environmental risks have been eliminated or minimised so far as reasonably practicable; and
  - That specified environmental performance objectives are met.
- Compliance with applicable statutory requirements

#### 11.1.1 Inspections and monitoring

APA will assess the conformance of the activities to this CEMP and applicable statutory requirements. Verification assessments will be completed by the project HSE Advisor and include field observations, site inspections and environmental record reviews.

The extent and frequency of verification assessments will be commensurate with risk and potential impact. As a minimum, assessments will occur weekly during construction.

Non-conformances identified during the verification assessments will be recorded, correction actions implemented (section 11.5), and reported in the weekly construction status report to DEECA as described in section 10.3.1.

#### 11.1.2 Audits

Internal environmental auditing will be undertaken in line with the APA Safeguard Audit and Self Assessment Procedure APA HSE GP 15.01. Internal auditing of this EMP will commence in Q1 2023 and will be undertaken quarterly thereafter until pipeline installation is complete. Suitably qualified and experienced Environment Advisors, from the APA HSEH team, undertake the EMP audits. The audits will be undertaken using the APA Environment Audit tool and focus on the risks identified in this CEMP.

Following an environmental audit, the audit report is circulated to relevant personnel detailing the audit findings, including any non-conformances, corrective actions or opportunities for improvement. A timeframe for addressing audit actions will be agreed to by the Project Manager, and audit actions are to be reviewed by the Environment Advisor to ensure they have been adequately addressed and closed out.

Following an environmental audit, the CEMP will be reviewed, updated and re-issued to reflect any findings, including regulatory and organizational changes. Dependent on the type of non-conformances, additional environmental training may be scheduled. Non-conformances may also be entered into Safeguard+.

### 11.1.3 External audits

APA will also appoint an independent auditor to the satisfaction of the Minister for Energy or authorised delegate. The auditor appointment, audit plan, schedule and scope is subject to regulatory approvals under the Pipelines Act. External audits will include:

1. Initial audit
2. Construction progress audit
3. Reinstatement completion audit
4. Close out audit

The initial external audit will be conducted prior to the commencement of mainline construction to verify that all required environmental management plans and procedures are in place and fit for purpose.

Reports on the audit will be publicly available on the project website 30 days after completion.

## 11.2 Contractor assurance

### 11.2.1 Performance monitoring

The Contractor is required to develop and implement environmental monitoring programs consistent with the performance standards in this CEMP, and the requirements listed in Appendix D. The monitoring programs developed by the Contractor will be reviewed and approved by APA. Specific monitoring requirements for relevant environmental aspects and construction activities are outlined in Project's Monitoring Plan (18035-PL-HSE-0009).

The Contractor will also conduct verification inspections to assess compliance with this CEMP and relevant statutory requirements.

At a minimum, weekly verification inspections of the construction works will include:

- Site access compliance (e.g. works contained within construction area boundaries and compliance with any landowner agreements)
- Adherence to work permits
- Adherence to Contractor's EMP, inclusive of:
  - Soil management and stockpiling
    - Sediment control
    - Dust and noise control
    - Waste management
    - Fauna and flora management (including weeds and pest management)
    - Cultural heritage
    - Air, noise and vibration monitoring
    - Surface water
    - Maintenance of controls (e.g. fencing, sediment and erosion controls etc.)

Contractor weekly inspection reports will be provided to APA.

## 11.2.2 Contractor verification

The construction contractor will complete an internal assessment of their CEMP implementation at least monthly. The contractor will prepare and implement corrective actions to address non-conformances.

The Contractor will provide APA with a monthly environmental performance report, at the end of each calendar month, that includes the results of monitoring, verification inspections, non-conformances with this CEMP, non-compliances with relevant statutory requirements, environmental incidents and corrective actions.

## 11.3 Environmental incidents

### 11.3.1 General

Environmental incidents may be identified during assurance and monitoring activities. All incidents will be investigated in accordance with APA's Incident Investigation and Analysis Procedure (APA HSE GP 07.02).

A summary of all environmental incidents will be included in the weekly Construction Status report to DEECA (Section 10.3.1).

### 11.3.2 Environmental incident reporting

In accordance with Regulation 20 of the Pipelines Regulations and APA's Incident Reporting Procedure (APA HSE GP 07.01), APA will notify the Minister for Energy (or his/her delegate) and Energy Safe Victoria of all reportable environmental incidents arising out of a pipeline operation. Reportable environmental incidents are those that:

- cause substantial damage to the environment; or
- have significant potential impact on the environment.

Environmental incidents include, but are not limited to:

- Spills to a watercourse, including drains as defined under the *Water Act 1989*
- Loss of hydrocarbons or chemicals greater than 20 L in volume to land
- Spills or releases, which have moved offsite and has a negative impact
- Unauthorised removal or destruction of native vegetation
- Death or injury of state and nationally listed threatened flora or fauna caused by the construction activities (excluding off-site incidents)
- Unauthorised impact to cultural heritage, refer to CHMP 16593, CHMP 16594 and CHMP 18496
- Interference with any previously undetected sites of cultural significance without obtaining the appropriate approval
- Fires causing damage to property outside the construction area
- Release of drilling fluids to land greater than 200 L where they occur:
  - outside of a forecast zone of release; and
  - outside of a controlled 'capture and return' system.
- Loss of any radioactive equipment, source or material

Notification will be undertaken as soon as practicable but no later than 2 hours after the incident occurs or 2 hours after APA becomes aware of the incident. Notification will be made in writing to [esvreports@energysafe.vic.gov.au](mailto:esvreports@energysafe.vic.gov.au) and by telephone to:

- ESV Duty Controller 1800 671 337

Notification will also be made to the Pipeline Regulation Unit via:

- Phone: 0439 799 598
- Email: [pipeline.regulation@delwp.vic.gov.au](mailto:pipeline.regulation@delwp.vic.gov.au)

A notification template for reportable incidents is included in Appendix A. Where verbal notification is provided, the level of information will be consistent with the reporting template. A written report on the incident will be provided to the Minister for Energy and Energy Safe Victoria within 7 days of the date of occurrence of the incident.

### 11.3.3 Pollution events & notifiable contamination

Section 32 of the EP Act requires a person to notify the EPA where a pollution event has occurred, and causes or threatens to cause 'material harm' to human health or the environment. Material harm, in relation to human health or the environment, is defined by the EP Act as '*harm that is caused by pollution or waste that -*

- *involves an actual adverse effect on human health or the environment that is not negligible; or*
- *involves an actual adverse effect on an area of high conservation value or of special significance; or*
- *results in, or is likely to result in, costs in excess of the threshold amount being incurred in order to take appropriate action to prevent or minimise the harm or to rehabilitate or restore the environment to the state it was in before the harm.'* The EP Regulations defines this threshold amount as \$10,000 or more.

Pollution incidents will be reported to the EPA by calling 1300 EPA VIC (1300 372 842).

In addition to the above, Section 40 of the EP Act requires "notifiable contamination" to be reported to the EPA as soon as practicable. Notifiable contamination is defined in part 2.1 of the EP Regulations as including:

- contamination of soil (including friable asbestos) that exposes a person to that contamination
- contamination of soil that is moving, has moved or is likely to move onto adjacent land
- contamination of any surface water and groundwater that is being used, or may be used
- contamination of soil or groundwater that causes vapour intrusion
- any presence of non-aqueous phase liquid (NAPL) in soil or groundwater
- contaminated soil sourced from that land that can be lawfully retained on site

The forms for notifying to the EPA are found at: <https://www.epa.vic.gov.au/about-epa/publications/2008-1>

Section 31 of the EP Act 2017 requires the restoration harm caused by an incident. The area must be restored to its original state so far as is reasonably practicable. Guidance on this requirement can be found in EPA Publication 1991: Responding to harm cause by pollution (June 2021).

#### **11.3.4 Other reportable incidents**

Incidents will also be reported to other statutory authorities as required by legislation and conditions of statutory approvals. This includes, as minimum:

- Notifications to the Registered Aboriginal Party and Aboriginal Victoria, if a potential Aboriginal site or artefact is identified
- Notification to Heritage Victoria and DEECA if a heritage artefact is discovered.

### **11.3.5 Contacts**

A current listing of key project contacts, regulatory agencies and emergency services details will be kept in a prominent location in the site office(s) for reporting of incidents and emergency situations.

Similarly, the Contractor will have key contacts and notification processes in their site offices. Contractor incidents will be reported to APA in accordance with APA prescribed methods and timelines for reporting of incidents.

### **11.4 Complaints procedure**

Project related complaints will be recorded in APA's enquiries/complaints app (FieldMaps) and further investigation will be undertaken in line with APA's Complaints Protocol. The complaint management process for the Project is outlined in Appendix B.

APA will notify, if necessary, the EPA and other relevant authorities in accordance with statutory requirements.

### **11.5 Corrective actions**

Where corrective or preventative action is required based on audits, verification assessments, monitoring, incident investigations or work site inspections, these actions will be documented in Safeguard+.

The APA Project Manager will issue a request for corrective action to the Contractor Project Manager who will action the request as appropriate and provide updates on progress.

### **11.6 Records**

A copy of this CEMP and any relevant approvals/permits obtained for the Project will be available, either in hardcopy or electronic form, at the site office(s) for the duration of construction and rehabilitation works, until the date that the site offices are demobilised.

Specific records relating to the systems, practices and procedures adopted to achieve compliance with the CEMP, as well as quantitative records of emissions and waste discharges will be maintained and will include as a minimum (where they occur):

- Induction records
- Daily inspection records, records of environmental monitoring, details of all reportable and non-reportable environmental incidents (including emergency situations) and notifications and relevant regulatory reporting (including information required to support reporting in accordance with section 10.3)
- Complaints and corrective action registers
- Records of meetings and interaction with external parties (e.g. regulatory authorities and owners/occupiers of land)
- Implementation of the emergency response procedures, emergency response testing, compliance with the emergency response plan and in the case of an emergency situation, effectiveness of the emergency response plan in eliminating as far as reasonably practicable any harm to the environment
- Records of Cultural Heritage unexpected finds
- Permitted clearing of native vegetation records
- Vehicle and machinery inspection and maintenance records
- EPA waste transport certificates for the transport of contaminated soil, solid wastes, spent absorbent materials, oils and lubricants and sullage and other wastes
- Landfill / receiving facility disposal acceptance approvals
- Letter / Certification of imported sands and crushed rock from approved natural source
- Agreements entered into with landowners/occupiers
- Register and copies of all safety data sheets
- Register of spill containment kits.

In maintaining records of compliance with the CEMP, information is to be kept digitally and data is preferably to be recorded spatially where relevant (in GDA 94/AHD). All relevant documentation demonstrating compliance with the CEMP is to be provided to the APA Operations and Environment Teams at the conclusion of the works.

Records shall be retained and disposed of in accordance with APA's Information and Records Management Policy and regulatory requirements.

## 11.7 Review

The CEMP is a controlled document that is subject to the change management process for any revisions. The need for changes to the CEMP will be reviewed and, if required, the CEMP updated in response to proposed or actual events including, but not limited to:

- Changes in project governance, e.g. revision of APA Environment and Heritage Policy
- Alteration of Project schedule





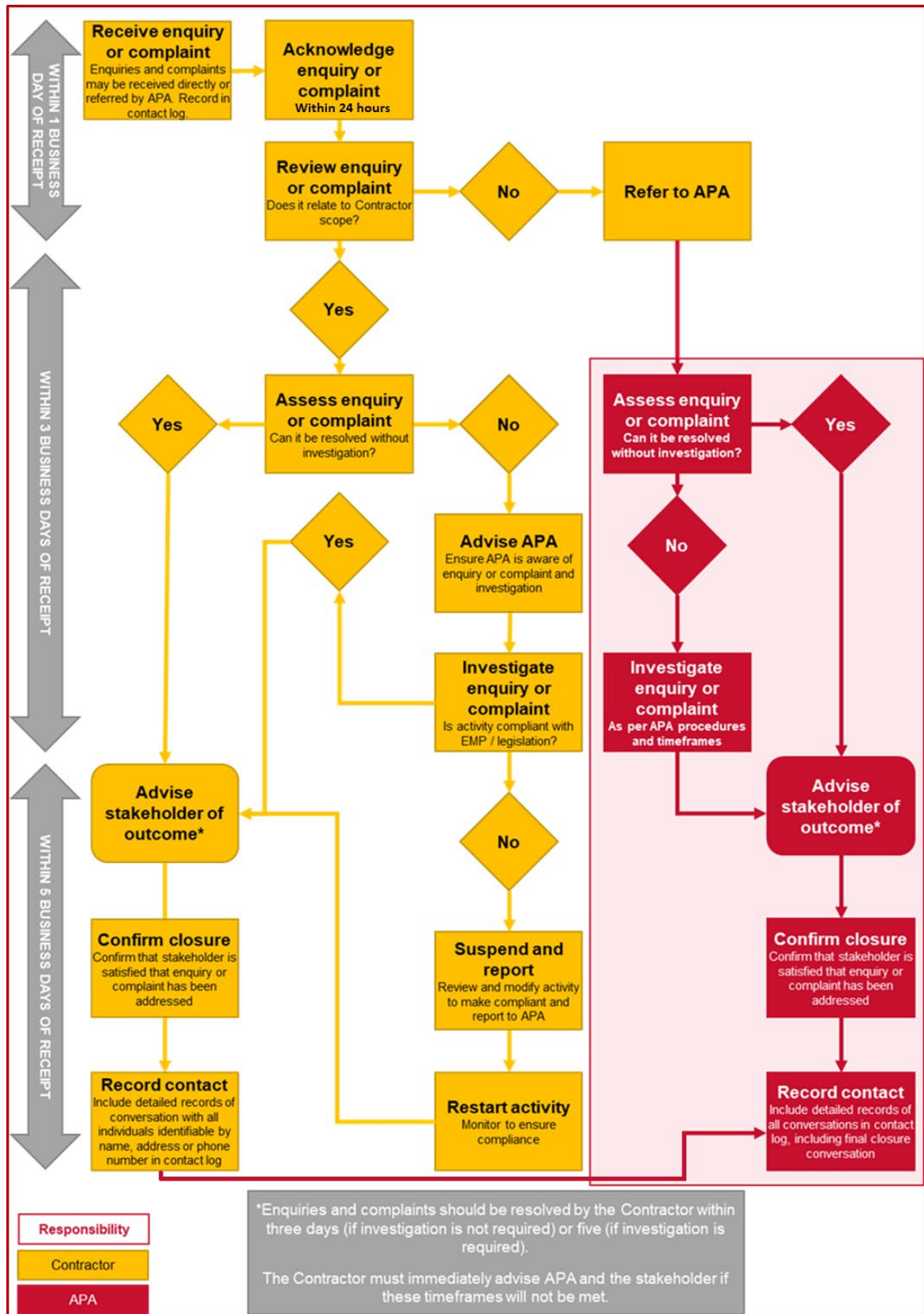
- Modification of work methods within approved scope
- Adjustment of environmental monitoring response levels
- Changes to Project description or work methods
- Environmental incidents, non-conformances, and audit findings
- Identified opportunities for continuous improvement.

Contractor plans and documentation will be prepared and approved by APA, and statutory approval decision makers where applicable, prior to the relevant works commencing, with changes also requiring APA approval. The contractor's CEMP will be updated as per APA's direction.

## Appendix A Reportable incident notification template

ENVIRONMENTAL INCIDENT – REPORTABLE INCIDENT	
Date of incident:	
Time of incident:	
Incident location (address, location within construction area boundary):	
Reporting person (name, position, company):	
Site supervisor (name, position, company)	
Brief description of incident:	
Reason for externally reportable:	
External party involvement:	
Immediate actions taken (including notification of police/ emergency services):	
Known/ suspected cause (immediate contributing factors):	

## Appendix B Complaint management process





## Appendix C      CEMP Risk Assessment

The Environmental Risk Assessment has been provided separately as document # 18035-REG-HSE-0006

## Appendix D Management plans

Management plans must be developed, approved and implemented as required in the table below consistent with the requirements of permits, approvals (including relevant specialist studies) legislation, regulations and applicable guidelines and standards. Specific environmental management measures (EMM) in Section 8 that must be addressed in the preparation of the management plans are also listed. Where APA is responsible for preparing a management plan, the construction contractor is responsible for implementing those plans within their scope.

### Management Plans

Management Plan	EMM ref.	Responsibility	Approval
<b>Contractor CEMP and sub plans</b>			
Contractors CEMP	ALL	Construction contractor	APA
Blast Management Plan	NV3, NV8	Construction contractor	APA
Construction Noise and Vibration Management Plan	NV1 – NV9	Construction contractor	APA
Emergency Response Plan (construction)	SA3, SA4	Construction contractor	APA
Environmental monitoring plans, including:			
Air quality monitoring plan	AQ1	Construction contractor	APA
Landfill gas monitoring plan	C5	Construction contractor	APA
Greenhouse gas monitoring plan	GG1	Construction contractor	APA
Noise and vibration management plan	NV1-NV2	Construction contractor	APA
Surface water monitoring plan (Merri Creek)	SW5	Construction contractor	APA
Planting and remediation plan (applicable to screening trees directly impacted by construction)	LV7, S21	Construction contractor	APA
Site Rehabilitation Plans(s) for revegetation of native vegetation)	B15	Construction Contractor	APA

Management Plan	EMM ref.	Responsibility	Approval
Site-specific environmental management plan(s), including:			
Jacksons Creek SSEMP including Flood Management Response Plan	SW8, SW9	Construction contractor	APA / Melbourne Water Corporation (MWC)
Merri Creek and Conservation area 34a SSEMP including: Flood Management Response Plan and Rehabilitation Plan	SW9, B15	Construction contractor	APA / MWC / DEECA
Conservation area 28b SSEMP including Rehabilitation Plan	B15	Construction contractor	APA / DEECA
Deep Creek SSEMP including Flood Management Response Plan	SW9	Construction contractor	APA / MWC
Minor designated waterways SSEMP including Flood Management Response Plan for Kalkallo Creek	SW9	Construction contractor	APA / MWC
Sediment and erosion control plan(s)	GM5	Construction contractor	APA
Sodic and Dispersive Soils Management Plan	GM7	Construction contractor	APA / The Minister for Energy
Soil Management Plan (including contaminated soil and PASS)	C1 – C9	Construction contractor	APA
Traffic management plan(s)	LU4, SA6, S3	Construction contractor	Relevant road management authority
<b>Other Plans</b>			
Bushfire Management Plan	SA5	APA (320-PL-ER-0016)	APA

Management Plan	EMM ref.	Responsibility	Approval
Consultation Plan	N/A	APA (18035-PL-LH-0001)	The Minister for Energy
Cultural Heritage Management Plans, including: CHMP 16593 (KP 33 to KP 51)	CH1	APA	Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation
CHMP 16594 (KP 0 to KP 8)	CH1	APA	First Persons – Start Relations
CHMP 18496 (KP 8 to KP 31)	CH1	APA	Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation
Heritage Management Plan(s) for heritage features e.g. VHI sites, sites of Geological and Geomorphological Significance	CH3, CH5, CH6	APA	APA
Fauna Management Plan, including:  Kangaroo Management Plan Threatened Fauna Species Handling and Relocation Protocol Golden Sun Moth Management Plan Striped Legless Lizard Management Plan	  B9 B9 B19 B20	APA	The Minister for Environment and Climate Change or DEECA Secretary



Management Plan	EMM ref.	Responsibility	Approval
Growling Grass Frog Salvage and Translocation Plan	B21		
National Emergency Response Management Plan 320-PL-ER-0001	Pipelines Act, SA3, SA4	APA (320-PL-ER-0001)	APA
Offset Management Plan(s)	B24	APA	DCCEEW
Project Health and Safety Management Plan	Pipelines Act, SA3, SA4	APA (18035-PL-HSE-0003)	ESV
Tree Management Plan	B4, B23	Construction contractor	APA





## Appendix E Environmental line list

ID	Approx KP Start*	Approx KP End*	Native Vegetation	Flora	Fauna	Watercourse	Conservation	Soil	Weed/ Pest	Historic heritage or aboriginal heritage	Landholder/ Community	Road and Rail	Groundwater	Constraint type	Description	Design Response	Site specific Management Standard	Management Standard Summary	Comment	Source Reference	Distance to construction footprint (approx. metres)
1	0.00	0.00												Sensitive Noise Receptor	C001		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		102
2	0.00	0.00												Sensitive Noise Receptor	C002		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		522
3	0.00	0.00												Sensitive Noise Receptor	C003		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		573
4	0.00	0.00												Sensitive Noise Receptor	C004		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		729
5	0.00	0.00												Sensitive Noise Receptor	C005		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		918
6	0.00	0.00												Sensitive Noise Receptor	C006		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		749
779	0.00	8.29								X				Heritage	CHMP 16594		CH1	Implement and comply with CHMP	CHMP 16594 - First Peoples - State Relations and WWVAHC as TO (now RAP)		
7	0.01	0.01												Sensitive Noise Receptor	C007		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		748
8	0.05	0.05												Sensitive Noise Receptor	C008		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		747
9	0.12	0.12												Sensitive Noise Receptor	C009		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		751
10	0.18	0.18												Sensitive Noise Receptor	C010		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		761
11	0.24	0.24												Sensitive Noise Receptor	C011		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		766
12	0.28	0.28												Sensitive Noise Receptor	C012		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		763
13	0.43	0.43												Sensitive Noise Receptor	C013		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		763
14	0.53	0.53												Sensitive Noise Receptor	C014		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		765
15	0.54	0.54												Sensitive Noise Receptor	C015		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		149
16	0.59	0.59												Sensitive Noise Receptor	C016		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		381







89	2.77	2.77												x			Sensitive Noise Receptor	C076			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	811
90	2.78	2.78												x			Sensitive Noise Receptor	C077			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	742
91	2.82	2.82												x			Sensitive Noise Receptor	C078			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	806
92	2.83	2.83												x			Sensitive Noise Receptor	C079			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	838
93	2.86	2.86												x			Sensitive Noise Receptor	C080			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	876
94	2.91	2.91												x			Sensitive Noise Receptor	C081			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	837
95	2.93	2.93												x			Sensitive Noise Receptor	C082			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	809
96	2.95	2.95												x			Sensitive Noise Receptor	C083			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	786
97	2.98	2.98												x			Sensitive Noise Receptor	C084			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	756
98	2.99	2.99												x			Sensitive Noise Receptor	C085			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	809
99	3.00	3.00												x			Sensitive Noise Receptor	C086			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	799
100	3.01	3.01												x			Sensitive Noise Receptor	C087			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	728
101	3.03	3.03												x			Sensitive Noise Receptor	C088			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	771
102	3.03	3.03												x			Sensitive Noise Receptor	C089			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	720
103	3.07	3.07												x			Sensitive Noise Receptor	C090			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	729
104	3.08	3.08												x			Sensitive Noise Receptor	C091			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	513
105	3.11	3.11												x			Sensitive Noise Receptor	C092			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	336
106	3.11	3.11												x			Sensitive Noise Receptor	C094			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	183
107	3.12	3.12												x			Sensitive Noise Receptor	C093			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	723
108	3.14	3.14												x			Sensitive Noise Receptor	C095			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	394
109	3.15	3.17										x					Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement	

110	3.17	3.17																		x		Sensitive Noise Receptor	C096			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			727	
111	3.17	3.17																		x		Sensitive Noise Receptor	C097			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			756	
112	3.17	3.17																		x		Sensitive Noise Receptor	C098			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			797	
113	3.17	3.17																		x		Sensitive Noise Receptor	C099			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			837	
114	3.18	3.18																			X	Road	MELTON HIGHWAY			LU4	Adhere to Traffic Management Plan	KP# Located in existing easement				
115	3.18	3.19												X									Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in existing easement			
116	3.26	3.26																		x		Sensitive Noise Receptor	C101			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			744	
117	3.26	3.26																		x		Sensitive Noise Receptor	C100			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			352	
118	3.28	3.28																		x		Sensitive Noise Receptor	C102			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			456	
119	3.28	3.28																		x		Sensitive Noise Receptor	C103			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			729	
120	3.31	3.31																		x		Sensitive Noise Receptor	C104			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			714	
121	3.34	3.34																		x		Sensitive Noise Receptor	C105			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			681	
122	3.35	3.35																		x		Sensitive Noise Receptor	C106			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			720	
123	3.36	3.36																		x		Sensitive Noise Receptor	C107			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			736	
124	3.37	3.37																		x		Sensitive Noise Receptor	C108			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			757	
125	3.39	3.39																		x		Sensitive Noise Receptor	C109			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			718	
126	3.42	3.42																		x		Sensitive Noise Receptor	C110			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			722	
127	3.44	3.44																		x		Sensitive Noise Receptor	C111			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			725	
128	3.46	3.46																		x		Sensitive Noise Receptor	C112			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			726	
129	3.48	3.48																		x		Sensitive Noise Receptor	C113			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			733	
130	3.51	3.51																		x		Sensitive Noise Receptor	C114			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			733	







Western Outer Ring Main  
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171	4.56	4.56														x			Sensitive Noise Receptor	C154			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		717
172	4.60	4.60														x			Sensitive Noise Receptor	C156			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		710
173	4.62	4.62														x			Sensitive Noise Receptor	C157			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		702
174	4.64	4.64														x			Sensitive Noise Receptor	C158			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		703
175	4.66	4.66														x			Sensitive Noise Receptor	C159			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		696
176	4.68	4.68														x			Sensitive Noise Receptor	C160			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		690
177	4.71	4.71														x			Sensitive Noise Receptor	C161			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		673
821	4.71	4.71														X			Heritage	Aboriginal Cultural Sensitivity			CH1	Implement and comply with CHMP - preconstruction surface salvage	7822-4440 Rutland Square LDAD 1		
178	4.72	4.72														x			Sensitive Noise Receptor	C162			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		674
179	4.77	4.77														x			Sensitive Noise Receptor	C163			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		669
180	4.80	4.80														x			Sensitive Noise Receptor	C164			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		682
181	4.82	4.82														x			Sensitive Noise Receptor	C165			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		705
182	4.84	4.84														x			Sensitive Noise Receptor	C166			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		708
183	4.86	4.86														x			Sensitive Noise Receptor	C167			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		728
184	4.89	4.89														x			Sensitive Noise Receptor	C168			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		750
185	4.91	4.91														x			Sensitive Noise Receptor	C169			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		761
186	4.92	4.92														x			Sensitive Noise Receptor	C170			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		783
187	4.94	4.94														x			Sensitive Noise Receptor	C171			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		789
188	4.95	4.95														x			Sensitive Noise Receptor	C172			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		802
822	5.52	5.75																	Heritage	Aboriginal Cultural Sensitivity			CH1	Implement and comply with CHMP - preconstruction surface salvage	7822-4440 Rutland Square LDAD 1		
189	5.84	5.88															X		Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement		
190	6.01	6.02															X		Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement		

191	6.40	6.42									X	X	Heritage	HOLDEN COBBLED STONE ROAD		CH3 and CH4	Implement management measures in Heritage Victoria consent and follow unexpected finds protocol.	KP# Located in existing easement		
192	6.41	6.41										X	Road	HOLDEN ROAD		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
193	6.80	6.80										x	Sensitive Noise Receptor	C173		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		965
194	7.18	7.18										x	Sensitive Noise Receptor	C174		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		985
788	7.401	7.502	0.101								X		Threatened Fauna	Striped Legless Lizard		B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
195	7.43	7.48									X		Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement		
196	7.50	7.50									X		Watercourse_stream			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP # Located in proposed easement		
811	8.017	8.031									X		Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction subsurface salvage	7822-4439 Rutland Square Artefact Scatter		
789	8.052	8.195	0.143								X		Threatened Fauna	Striped Legless Lizard		B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
781	8.220586	8.567224									X		Dispersion risk	Medium Risk		GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP# Located in existing easement		
197	8.26	8.33									X		Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction surface salvage	On access track		
198	8.26	8.44										X	Groundwater	Areas of groundwater impact		GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement		
807	8.29	33.05									X		Heritage	CHMP 16593 - Registered Aboriginal Party Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation (WWWCHAC)		CH1	Implement and comply with CHMP			
199	8.30	8.32									X	X	Contamination	Railway crossing / rail reserves		C1 and C2	Implementation of spoil management measures and compliance with CHMP	KP# Located in existing easement		
200	8.31	8.31										X	Railway	BENDIGO LINE		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
202	8.40	8.43									X		Contamination	Potential Acid sulphate soils (PASS)		C1, C2 and C3	Implementation of spoil management measures and compliance with CHMP. Adhere to unexpected finds protocol.	KP# Located in existing easement		
203	8.41	8.41									X		Watercourse_drain	TAME STREET DRAIN		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP # Located in proposed easement - high risk waterway		
790	8.535	8.585	0.05								X		Threatened Fauna	Striped Legless Lizard		B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
204	8.54	8.54									X		Threatened Flora	Arching Flax-lily - Dianella longifolia var. grandis		B3, B7, B15, B16, B18 and B24	Relocate, or otherwise protect, the individual Arching Flax-lily - Dianella longifolia var. grandis, if it persists and can be located on site. Site rehabilitation after construction.	KP # Located in proposed easement		
205	8.56	8.58									X		Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement		
206	8.69	8.69										X	Road	CALDER FREEWAY		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
207	8.72	8.72										x	Sensitive Noise Receptor	C175		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		762
208	8.75	8.75										X	Road	CALDER FREEWAY		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
209	8.78	8.79									X		Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
210	8.81	8.81										X	Road	DILLON COURT		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
211	8.81	8.81										x	Sensitive Noise Receptor	C176		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		799
212	8.83	8.83										x	Sensitive Noise Receptor	C177		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		237
213	8.85	8.85										x	Sensitive Noise Receptor	C178		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		519
214	8.93	8.93										x	Sensitive Noise Receptor	C179		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		197



235	9.75	9.75																	x		Sensitive Noise Receptor	C198			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			874
236	9.75	9.75																	x		Sensitive Noise Receptor	C199			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			823
237	9.75	9.75																	x		Sensitive Noise Receptor	C200			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			609
238	9.75	9.75																	x		Sensitive Noise Receptor	C194			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			157
239	9.75	9.75																	x		Sensitive Noise Receptor	C195			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			662
240	9.75	9.75																	x		Sensitive Noise Receptor	C196			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			451
241	9.75	9.75																	x		Sensitive Noise Receptor	C197			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			310
242	9.84	9.84																	x		Sensitive Noise Receptor	C201			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			235
243	9.85	9.85												X							Watercourse_stream				SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP # Located in proposed easement			
792	9.921	9.989	0.068											X							Threatened Fauna	Striped Legless Lizard			B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement			
244	9.94	9.94																	x		Sensitive Noise Receptor	C202			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			674
245	9.94	9.95												X							Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
246	9.95	10.13													X				X		Contamination	Rural property storing wrecked cars			C1 and C2	Implementation of spoil management measures and compliance with CHMP	KP # Located in proposed easement			
247	10.00	10.00																	x		Sensitive Noise Receptor	C203			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			83
248	10.09	10.09																	x		Sensitive Noise Receptor	C204			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			454
249	10.10	10.10																	x		Sensitive Noise Receptor	C205			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			644
250	10.17	10.17																	x		Sensitive Noise Receptor	C206			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			508
251	10.17	10.17																	x		Sensitive Noise Receptor	C207			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			427
252	10.24	10.24																	x		Sensitive Noise Receptor	C208			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			888
793	10.242	10.769	0.527											X							Threatened Fauna	Striped Legless Lizard			B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement			
253	10.26	10.34												X							Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
254	10.28	10.28																	x		Sensitive Noise Receptor	C209			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			428

255	10.33	10.33														x		Sensitive Noise Receptor	C210			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			271
256	10.34	10.34														x		Air quality sensitive receptor	AQ_R458			AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement			52
257	10.34	10.34														x		Sensitive Noise Receptor	C211			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			47
258	10.42	10.46									X							Native vegetation	Central Victorian Uplands - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement			
259	10.43	10.43														x		Sensitive Noise Receptor	C212			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			163
260	10.44	10.44														x		Sensitive Noise Receptor	C213			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			715
261	10.47	10.47														x		Sensitive Noise Receptor	C214			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			461
262	10.49	10.49														x		Sensitive Noise Receptor	C215			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			38
263	10.50	10.50														x		Air quality sensitive receptor	AQ_R456			AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement			45
264	10.55	10.55									X							Watercourse_stream				SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP # Located in proposed easement			
265	10.57	10.59									X							Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
266	10.58	10.58														x		Sensitive Noise Receptor	C219			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			208
267	10.58	10.58														x		Sensitive Noise Receptor	C218			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			472
268	10.58	10.58														x		Sensitive Noise Receptor	C220			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			829
269	10.58	10.58														x		Sensitive Noise Receptor	C216			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			528
270	10.58	10.58														x		Sensitive Noise Receptor	C217			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			304
271	10.58	10.58														x		Sensitive Noise Receptor	C221			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			927
272	10.59	10.76									X							Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
824	10.66	10.73														X		Heritage	Aboriginal Cultural Sensitivity			CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) items 3-16			
273	10.71	10.71														x		Sensitive Noise Receptor	C222			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			261
274	10.76	10.76														x		Sensitive Noise Receptor	C223			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			131
275	10.77	10.77														x		Sensitive Noise Receptor	C224			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			141

794	10.769	11.126	0.357	X														Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
276	10.79	10.79													X			Road	MOREFIELD COURT	LU4 and GM6	Adhere to Traffic Management Plan. Further confirmation of ground risk required at location.	KP # Located in proposed easement		
277	10.82	10.86		X														Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
825	10.89	10.89									X							Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) items 17		
278	10.91	11.00		X														Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
782	10.97337	11.1237									X							Dispersion risk	Medium Risk	GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
279	11.04	11.04													X			Sensitive Noise Receptor	C225	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		112
280	11.07	11.07													X			Sensitive Noise Receptor	C226	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		70
281	11.13	11.13													X			Sensitive Noise Receptor	C227	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		242
282	11.15	11.15													X			Road	BULLA-DIGGERS REST ROAD	LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
283	11.17	11.17													X			Sensitive Noise Receptor	C228	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		134
284	11.18	11.18													X			Sensitive Noise Receptor	C229	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		863
285	11.18	11.18													X			Sensitive Noise Receptor	C233	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		862
286	11.18	11.18													X			Sensitive Noise Receptor	C232	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		618
287	11.18	11.18													X			Sensitive Noise Receptor	C231	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		611
288	11.18	11.18													X			Sensitive Noise Receptor	C230	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		729
289	11.22	11.22													X			Sensitive Noise Receptor	C234	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		77
290	11.23	11.23													X			Sensitive Noise Receptor	C235	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		141
291	11.30	11.33		X														Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
292	11.34	11.34													X			Sensitive Noise Receptor	C236	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		122
293	11.37	11.37													X			Road	UNNAMED	LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
294	11.49	11.49													X			Sensitive Noise Receptor	C237	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		136
295	11.50	11.50													X			Sensitive Noise Receptor	C238	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		107

296	11.57	11.57																x		Sensitive Noise Receptor	C239	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		357
297	11.59	11.59																x		Sensitive Noise Receptor	C240	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		237
298	11.68	11.70					X													Native vegetation	Victorian Volcanic Plains - Aquatic Herbland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
299	12.01	12.01																x		Sensitive Noise Receptor	C242	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		831
300	12.01	12.01																x		Sensitive Noise Receptor	C241	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		489
301	12.28	12.28																x		Sensitive Noise Receptor	C243	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		447
302	12.32	12.32																x		Sensitive Noise Receptor	C244	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		106
303	12.49	12.49																x		Sensitive Noise Receptor	C245	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		538
304	12.58	12.58																x		Sensitive Noise Receptor	C247	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		888
305	12.58	12.58																x		Sensitive Noise Receptor	C246	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		704
306	12.86	12.86																x		Sensitive Noise Receptor	C248	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		235
795	12.872	13.638	0.766				X													Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
307	12.90	12.90																x		Sensitive Noise Receptor	C249	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		179
308	13.02	13.02																x		Sensitive Noise Receptor	C250	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		405
309	13.09	13.23					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
310	13.18	13.18																x		Sensitive Noise Receptor	C251	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		101
311	13.23	13.25					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
312	13.25	13.25																X		Road	UNNAMED	LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
313	13.32	13.34					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
314	13.34	13.34																x		Sensitive Noise Receptor	C252	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		117
315	13.34	13.35					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
316	13.35	13.36					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
317	13.36	13.37					X													Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		



318	13.38	13.38					X												Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
319	13.38	13.46					X												Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
320	13.47	13.51					X												Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
321	13.47	13.98								X									Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage and further testing	VAHR 7822-4610 (North Western Plains LDAD 1) items 18-35		
322	13.52	13.62					X												Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
812	13.594	13.712								X									Heritage	Aboriginal Cultural Sensitivity	HDD	CH1	Implement and comply with CHMP - preconstruction subsurface salvage	New place extent	
796	13.638	13.874					X												Threatened Fauna	Growling Grass Frog	B2, B3, B4, B5, B6 , B7, B9, B10, B11 and B21	Fauna fencing - both sides of ROW. Manage Chytrid Fungus and salvage and relocation of species in accordance with the Fauna Management Plan. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
783	13.67033	14.80672							X										Dispersion risk	High Risk	GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
323	13.68	13.83											X						Groundwater	Areas of groundwater impact	GW1 and C4	Minimise dewatering rates and potential contamination.	KP # Located in proposed easement		
324	13.73	13.75					X												Native vegetation	Victorian Volcanic Plains - Riparian Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
325	13.74	13.76							X										Contamination	PFAS impacts - source unknown	C1 and C2	Implementation of spoil management measures and compliance with CHMP	KP # Located in proposed easement		
326	13.75	13.75					X												Watercourse_stream	JACKSONS CREEK	HDD	SW1, SW2, SW5, SW9, SW11, B2, B4, B17, B22, C3, C9, and D1-D8, GM5	• Site Specific Environmental Management Plan to be accepted by MWC Implement surface water management measures and apply biosecurity measures. HDD performance standards to be followed.	KP # Located in proposed easement - high risk waterway	
813	13.783	13.841								X									Heritage	Aboriginal Cultural Sensitivity	HDD	CH1	avoid - HDD	7822-4631 Jacksons Creek Artefact Scatter	
328	13.84	13.84					X												Watercourse_stream	Unnamed gully tributary to Jacksons Creek	HDD	SW1, SW2, SW9, C9 and D1-D8, GM5	Implement surface water management measures. HDD performance standards to be followed.	KP # Located in proposed easement - high risk waterway	
329	13.95	13.95					X												Watercourse_stream			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway	
826	14.41	14.74								X									Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage and further testing	VAHR 7822-4610 (North Western Plains LDAD 1) items 18-35		
331	14.64	14.64												x					Sensitive Noise Receptor	C253		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	63
330	14.64	14.64												x					Air quality sensitive receptor	AQ_R423		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement	64
332	14.73	14.73												x					Sensitive Noise Receptor	C255		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	638
333	14.73	14.73												x					Sensitive Noise Receptor	C254		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	727
334	14.79	14.79											X						Road	SUNBURY ROAD		LU4 and GM6	Adhere to Traffic Management Plan. Further confirmation of ground risk required at location.	KP # Located in proposed easement	
335	14.82	14.86					X												Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
336	15.03	15.03												x					Sensitive Noise Receptor	C256		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail	61
337	15.10	15.30					X												Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
809	15.12	16.38																	Contamination	Bulla Landfill	C5	Assess, monitor and manage intrusive vapour, including potentially flammable or explosive conditions, in enclosed spaces, spoil and groundwater within 500 metres of the Bulla Landfill	No direct interaction wirth Bulla Landfill		
338	15.40	15.62					X												Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		

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339	15.54	15.54																x			Sensitive Noise Receptor	C257		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		261
340	15.64	15.64																X			Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
341	15.79	15.79																			Sensitive Noise Receptor	C258		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		239
342	15.96	15.96																			Sensitive Noise Receptor	C259		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		249
343	15.97	15.97																			Sensitive Noise Receptor	C260		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		231
344	16.25	16.25																			Sensitive Noise Receptor	C261		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		205
784	16.38777	16.58439									X										Dispersion risk	High Risk		GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
814	16.418	16.436																			Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction subsurface salvage	7822-4630 Deep Creek Artefact Scatter 1		
345	16.45	16.88																			Heritage	Aboriginal Cultural Sensitivity		CH1	nil	Outside existing easement		100
346	16.49	16.52										X									Native vegetation			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
347	16.62	16.62											X								Native vegetation			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
348	16.62	16.62												X							Native vegetation	Central Victorian Uplands - Riparian Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
349	16.62	16.68												X							Native vegetation	Central Victorian Uplands - Riparian Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
350	16.65	16.65													X						Watercourse_stream	DEEP CREEK	HDD	SW1, SW2, SW4, SW9, SW11, GM5, C9, and D1-D8	• Site Specific Environmental Management Plan to be accepted by MWC Implement surface water management measures and unexpected find of groundwater actions. HDD performance standards to be followed.	KP # Located in proposed easement - high risk waterway		
351	16.84	16.84																			Sensitive Noise Receptor	C269		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		750
815	16.904	16.92																			Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction subsurface salvage	7822-4629 Deep Creek Artefact Scatter		
352	16.96	16.96																			Sensitive Noise Receptor	C262		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		128
353	16.98	16.98																			Road	WILDWOOD ROAD		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
354	17.03	17.03																			Sensitive Noise Receptor	C263		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		44
355	17.03	17.03																			Air quality sensitive receptor	AQ_R418		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		57
356	17.29	17.29																			Sensitive Noise Receptor	C265		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		398
357	17.29	17.29																			Sensitive Noise Receptor	C264		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		828
827	17.29	17.32																			Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Items 69-71		
358	17.33	17.35													X						Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
359	17.39	17.39																			Sensitive Noise Receptor	C266		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		652

360	17.40	17.40																x			Sensitive Noise Receptor	C270		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		716
828	17.44	17.69											X								Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Items 72-87		
361	17.48	17.48																			Sensitive Noise Receptor	C268		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		382
362	17.51	17.76											X								Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
363	17.60	17.60																			Sensitive Noise Receptor	C267		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		683
364	17.76	17.76											X								Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
365	17.76	17.88											X								Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
366	17.86	17.86																			Sensitive Noise Receptor	C271		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		878
829	18.15	18.15																X			Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Items 88		
367	18.17	18.17																			Sensitive Noise Receptor	C272		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		790
368	18.22	18.22																			Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
369	18.39	18.39																			Sensitive Noise Receptor	C273		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		165
370	18.55	18.55																			Sensitive Noise Receptor	C274		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		620
371	18.57	18.57																			Sensitive Noise Receptor	C275		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		494
372	18.64	18.64																			Sensitive Noise Receptor	C277		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		162
373	18.64	18.64																			Sensitive Noise Receptor	C278		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		706
374	18.64	18.64																			Sensitive Noise Receptor	C276		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		394
375	18.88	18.88																			Sensitive Noise Receptor	C279		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		337
376	18.88	18.88																			Sensitive Noise Receptor	C280		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		509
797	18.8781	19.1681	0.29										X								Threatened Fauna	Striped Legless Lizard		B3, B5, B6, B7, B9 and B20	Fauna Fencing - Right. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
377	18.90	18.90																			Road	ST JOHNS ROAD		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
378	18.91	19.10											X								Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement		
379	18.98	18.98																			Sensitive Noise Receptor	C281		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		85

380	19.01	19.01														x		Sensitive Noise Receptor	C282		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		201
381	19.14	19.14														x		Sensitive Noise Receptor	C283		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		172
382	19.16	19.16														x		Sensitive Noise Receptor	C284		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		48
383	19.16	19.16														x		Air quality sensitive receptor	AQ_R411		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		57
385	19.17	19.17														x		Sensitive Noise Receptor	C285		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		36
384	19.17	19.17														x		Air quality sensitive receptor	AQ_R410		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		46
386	19.40	19.40														x		Sensitive Noise Receptor	C286		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		298
387	19.41	19.41																Watercourse_stream			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
388	19.59	19.62																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
389	19.67	19.67														x		Sensitive Noise Receptor	C287		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		382
390	19.70	19.73																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
391	19.74	19.79																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
392	19.80	19.87																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
393	19.89	19.93																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
394	19.91	19.91																Watercourse_channel_drain			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
395	19.95	19.97																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
396	19.98	20.03																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
397	20.07	20.11																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
398	20.13	20.23																Native vegetation	Victorian Volcanic Plains - Plains Grassland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
399	20.49	20.49														x		Sensitive Noise Receptor	C291		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		469
400	20.87	20.87														x		Sensitive Noise Receptor	C289		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		251
401	20.87	20.87														x		Sensitive Noise Receptor	C290		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		162
402	20.87	20.87														x		Sensitive Noise Receptor	C288		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		332

798	20.8661	21.5711	0.705		X													Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - both. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
403	21.08	21.08											x					Sensitive Noise Receptor	C292	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		132
404	21.27	21.27											x					Sensitive Noise Receptor	C293	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		496
405	21.31	21.34			X													Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
406	21.38	21.48			X													Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
407	21.53	21.53												X				Road	OAKLANDS ROAD	LU4 and GM6	Adhere to Traffic Management Plan. Further confirmation of ground risk required at location.	KP # Located in proposed easement		
830	21.70	21.70											X					Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Items 91-95		
799	21.9911	22.5261	0.535		X													Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - both. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
408	22.03	22.58			X													Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	GEWVVP and FFG - KP# located in proposed easement		
831	22.07	22.07											X					Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Items 96		
409	22.07	22.07			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
410	22.13	22.13			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
411	22.13	22.13			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
412	22.14	22.14			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
413	22.25	22.25			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
414	22.25	22.25			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
415	22.28	22.28			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
416	22.30	22.30			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
417	22.32	22.32			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
418	22.37	22.37			X													Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		

419	22.41	22.41			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
420	22.43	22.43			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
421	22.44	22.44			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
422	22.46	22.46			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
423	22.47	22.47			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
424	22.48	22.48			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
425	22.49	22.49			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
426	22.53	22.53																	X	Groundwater	Borehole - 302688	GW1 and GW3	Minimise dewatering rates and complete additional groundwater analysis.	Non-groundwater - KP# located in proposed easement		
427	22.54	22.54			X															Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
428	22.59	22.59																	X	Road	CRAIGIEBURN ROAD	LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
429	22.59	22.59			X															Threatened Flora	Matted Flax-lily - Dianella ameaona	B3, B7, B15, B16, B18 and B24	Flora Fencing - right Install and maintain temporary fencing along the construction footprint boundary in areas adjacent to sensitive environmental values. The Matted Flax Lily would be protected by temporary fencing (e.g. star pickets and wire fencing or galvanized temporary construction fencing). Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement		
430	22.59	22.61			X															Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	GEWVVP and FFG - KP# located in proposed easement		
431	22.61	22.80			X															Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	GEWVVP and FFG - KP# located in proposed easement		
432	22.72	22.72																	x	Sensitive Noise Receptor	C295	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		780
433	22.80	22.86			X															Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	GEWVVP and FFG - KP# located in proposed easement		
434	22.83	22.83																	x	Sensitive Noise Receptor	C294	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		57
435	22.84	22.84																	x	Air quality sensitive receptor	AQ_R401	AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		58
436	22.91	22.91																	x	Sensitive Noise Receptor	C296	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		419
437	22.97	22.97																	X	Groundwater	Borehole - 302670	GW1 and GW3	Minimise dewatering rates and complete additional groundwater analysis.	Non-groundwater - KP# located in proposed easement		
816	23.335	23.371																	X	Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction subsurface salvage	7822-4632 Konagaderra Road Artefact Scatter		

438	23.42	23.42																	x		Watercourse_stream		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement			
439	23.56	23.56																		x	Sensitive Noise Receptor	C298	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		450	
440	23.56	23.56																		x	Sensitive Noise Receptor	C297	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		296	
441	23.86	23.86																		x	Sensitive Noise Receptor	C299	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		883	
442	24.46	24.89																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
443	24.89	25.05																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
444	25.05	25.07																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
445	25.07	25.24																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
446	25.08	25.08																			x	Sensitive Noise Receptor	C300	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		912
447	25.24	25.43																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
448	25.52	25.52																			x	Sensitive Noise Receptor	C301	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		524
449	25.65	25.65																			x	Sensitive Noise Receptor	C302	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		580
450	25.67	25.67																			x	Sensitive Noise Receptor	C303	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		409
451	25.69	25.72																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
452	25.81	25.81																			x	Sensitive Noise Receptor	C304	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		704
453	25.82	25.82																			x	Sensitive Noise Receptor	C305	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		828
454	25.89	25.89																			x	Sensitive Noise Receptor	C309	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		485
455	25.89	25.89																			x	Sensitive Noise Receptor	C308	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		883
456	25.89	25.89																			x	Sensitive Noise Receptor	C307	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		323
457	25.89	25.89																			x	Sensitive Noise Receptor	C306	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		214
458	26.05	26.05																			x	Sensitive Noise Receptor	C310	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		115
459	26.08	26.10																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			

**Western Outer Ring Main  
Environmental Line List  
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460	26.10	26.28			X															Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
461	26.22	26.22			X															Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
462	26.27	26.27											X							Sensitive Noise Receptor	C316		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		762
463	26.27	26.27											X							Sensitive Noise Receptor	C312		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		652
464	26.27	26.27											X							Sensitive Noise Receptor	C311		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		209
465	26.27	26.27											X							Sensitive Noise Receptor	C313		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		557
466	26.27	26.27											X							Sensitive Noise Receptor	C315		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		840
467	26.27	26.27											X							Sensitive Noise Receptor	C314		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		673
468	26.30	26.30											X							Road	MT RIDLEY ROAD		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
469	26.30	26.30											X							Road	MT RIDLEY ROAD		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
470	26.38	26.38											X							Sensitive Noise Receptor	C317		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		203
471	26.39	26.39											X							Sensitive Noise Receptor	C318		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		569
472	26.49	26.49											X							Sensitive Noise Receptor	C319		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		49
473	26.49	26.49											X							Air quality sensitive receptor	AQ_R390		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		57
474	26.49	26.49											X							Sensitive Noise Receptor	C320		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		41
475	26.50	26.50											X							Air quality sensitive receptor	AQ_R391		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		52
476	26.52	26.52											X							Sensitive Noise Receptor	C321		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		654
477	26.65	26.65											X							Sensitive Noise Receptor	C322		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		128
478	26.66	26.66											X							Sensitive Noise Receptor	C323		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		56
479	26.76	26.76											X							Air quality sensitive receptor	AQ_R387		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		43
480	26.77	26.77											X							Sensitive Noise Receptor	C324		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		34
481	26.80	26.80											X							Sensitive Noise Receptor	C325		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		435



482	26.90	26.90																	x	Sensitive Noise Receptor	C326	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		117	
483	26.90	26.90																	x	Sensitive Noise Receptor	C331	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		577	
484	26.90	26.90																	x	Sensitive Noise Receptor	C332	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		824	
485	26.90	26.90																	x	Sensitive Noise Receptor	C327	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		356	
486	26.90	26.90																	x	Sensitive Noise Receptor	C329	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		568	
487	26.90	26.90																	x	Sensitive Noise Receptor	C328	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		896	
488	26.90	26.90																	x	Sensitive Noise Receptor	C330	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		773	
489	26.91	26.91																	X	Road	PARKLAND CRESCENT	LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			
490	26.93	26.93																	x	Sensitive Noise Receptor	C333	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		476	
491	26.97	26.97																	x	Sensitive Noise Receptor	C334	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		35	
492	26.98	26.98																	x	Air quality sensitive receptor	AQ_R384	AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		47	
493	27.02	27.02											X														
494	27.07	27.07											X														
495	27.08	27.08											X														
496	27.12	27.12																	x	Sensitive Noise Receptor	C335	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		588	
497	27.13	27.13																	x	Sensitive Noise Receptor	C337	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		56	
498	27.13	27.13																	x	Sensitive Noise Receptor	C336	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		471	
500	27.13	27.13																	x	Sensitive Noise Receptor	C338	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		223	
499	27.13	27.13																	x	Air quality sensitive receptor	AQ_R380	AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		74	
501	27.28	27.28																	x	Sensitive Noise Receptor	C339	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		305	
502	27.39	27.39																	x	Sensitive Noise Receptor	C340	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		765	

503	27.39	27.39																x	Sensitive Noise Receptor	C341			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		919
504	27.47	27.47																x	Sensitive Noise Receptor	C342			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		755
505	27.51	27.51																x	Sensitive Noise Receptor	C343			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		586
506	27.62	27.62																x	Sensitive Noise Receptor	C344			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		497
507	27.63	27.63																x	Sensitive Noise Receptor	C345			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		355
508	27.72	27.72																x	Sensitive Noise Receptor	C346			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		176
509	27.72	27.72																x	Sensitive Noise Receptor	C347			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		798
510	27.91	27.91																x	Sensitive Noise Receptor	C348			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		128
511	27.92	27.93											X								Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
512	27.95	27.95																X	Road		MICKLEHAM ROAD		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
513	27.96	27.98											X								Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
514	28.01	28.04											X								Victorian Volcanic Plains - Plains Grassy Woodland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
515	28.03	28.03																x	Sensitive Noise Receptor	C349			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		27
516	28.03	28.03																x	Air quality sensitive receptor		AQ_R378		AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		37
517	28.20	28.20																X	Groundwater		Borehole - 79258		GW1 and GW3	Minimise dewatering rates and complete additional groundwater analysis.	Stock - KP# located in proposed easement		
518	28.61	28.61																x	Sensitive Noise Receptor	C350			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		261
519	28.61	28.61																x	Sensitive Noise Receptor	C351			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		94
520	28.74	28.74																x	Sensitive Noise Receptor	C352			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		419
521	28.77	29.08															X	Heritage		Aboriginal Cultural Sensitivity		CH1	nil	7822-3408 Tamboore 20			
522	28.84	28.84																x	Sensitive Noise Receptor	C354			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		481
523	28.84	28.84																x	Sensitive Noise Receptor	C353			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		85
524	28.92	28.92																X	Road		POPPY STREET		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
525	29.00	29.00																x	Sensitive Noise Receptor	C355			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		238

526	29.03	29.03																		x		Sensitive Noise Receptor	C356			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			255			
527	29.03	29.03																		x		Sensitive Noise Receptor	C359			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			309			
528	29.03	29.03																		x		Sensitive Noise Receptor	C358			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			293			
529	29.03	29.03																		x		Sensitive Noise Receptor	C357			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			269			
530	29.17	29.17																		x		Sensitive Noise Receptor	C360			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			476			
531	29.27	29.27																		x		Sensitive Noise Receptor	C361			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			508			
532	29.32	29.32																		x		Sensitive Noise Receptor	C362			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			521			
817	29.48	29.48																		X		Heritage	Aboriginal Cultural Sensitivity						CH1	Implement and comply with CHMP - preconstruction surface salvage	VAHR 7822-4610 (North Western Plains LDAD 1) Item 102			
533	29.49	29.49																		x		Sensitive Noise Receptor	C363			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			700			
534	29.55	29.55																		x		Sensitive Noise Receptor	C364			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			554			
535	29.95	29.95																		x		Sensitive Noise Receptor	C365			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			639			
536	29.96	29.96																		x		Sensitive Noise Receptor	C366			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			633			
537	29.98	29.98																		x		Sensitive Noise Receptor	C367			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			523			
538	30.15	30.15																			X		Road	DONNYBROOK ROAD			LU4 and GM6	Adhere to Traffic Management Plan. Further confirmation of ground risk required at location.	KP # Located in proposed easement					
785	30.14912	34.08582																				Dispersion risk	Medium Risk					GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement				
539	30.19	30.19																		x		Sensitive Noise Receptor	C368			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			818			
540	30.39	30.39																		x		Sensitive Noise Receptor	C374			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			622			
541	30.40	30.40																		x		Sensitive Noise Receptor	C373			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			618			
542	30.41	30.41																		x		Sensitive Noise Receptor	C372			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			613			
543	30.42	30.42																		x		Sensitive Noise Receptor	C376			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			311			
544	30.43	30.43																		x		Sensitive Noise Receptor	C371			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			608			













645	31.39	31.39															x		Sensitive Noise Receptor	C474	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			215
646	31.41	31.41															x		Sensitive Noise Receptor	C475	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			177
647	31.42	31.42															x		Sensitive Noise Receptor	C476	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			206
800	31.4251	31.6381	0.213								X								Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - both. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement			
648	31.43	31.64									X								Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
649	31.44	31.44																x	Sensitive Noise Receptor	C477	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			232
650	31.45	31.45																x	Sensitive Noise Receptor	C478	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			204
651	31.47	31.47																x	Sensitive Noise Receptor	C480	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			229
652	31.47	31.47																x	Sensitive Noise Receptor	C479	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			163
653	31.48	31.48																x	Sensitive Noise Receptor	C481	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			206
654	31.50	31.50																x	Sensitive Noise Receptor	C482	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			227
655	31.52	31.52									X								Watercourse_stream		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement			
656	31.52	31.52																x	Sensitive Noise Receptor	C484	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			203
657	31.52	31.52																x	Sensitive Noise Receptor	C483	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			202
658	31.54	31.54																x	Sensitive Noise Receptor	C485	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			226
659	31.54	31.54																x	Sensitive Noise Receptor	C486	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			205
660	31.55	31.55																x	Sensitive Noise Receptor	C487	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			162
661	31.55	31.55																x	Sensitive Noise Receptor	C488	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			207
662	31.59	31.59																x	Sensitive Noise Receptor	C489	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			207
663	31.65	31.65									X								Watercourse_stream		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement			
664	31.69	31.69									X								Watercourse_stream		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement			

665	31.74	31.74																	x						Sensitive Noise Receptor	C490	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		81
666	31.91	31.91																	x						Sensitive Noise Receptor	C494	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		596
667	31.91	31.91																	x						Sensitive Noise Receptor	C495	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		784
668	31.91	31.91																	x						Sensitive Noise Receptor	C492	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		458
669	31.91	31.91																	x						Sensitive Noise Receptor	C493	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		554
670	31.91	31.91																	x						Sensitive Noise Receptor	C491	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		340
671	32.11	32.22																				X			Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
672	32.16	32.16																							Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement		
674	32.49	32.49																				X			Watercourse_stream		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
675	32.84	32.84																	x						Sensitive Noise Receptor	C496	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		811
676	32.92	32.92																	x						Sensitive Noise Receptor	C497	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		779
780	33.05	51.03																							Heritage	CHMP 18496 - Registered Aboriginal Party Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation (WWWCHAC)	CH1	Implement and comply with CHMP			
677	33.36	35.47																							Contamination	Retarding basin	C1 and C2	Implementation of spoil management measures and compliance with CHMP	KP # Located in proposed easement		
678	33.52	33.56																				X			Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement		
679	33.53	33.53																							Watercourse_channel_drain		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
680	33.55	33.55																							Watercourse_channel_drain		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement		
681	33.75	33.75																							Watercourse_channel_drain	Unnamed tributary constructed drains (x3) to Kalkallo Creek	SW1, SW2, SW3, SW4, SW9, SW10 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway		
682	33.84	33.84																							Watercourse_channel_drain	Unnamed tributary constructed drains (x3) to Kalkallo Creek	SW1, SW2, SW3, SW4, SW9, SW10 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway		
683	33.93	33.93																							Watercourse_channel_drain	Unnamed tributary constructed drains (x3) to Kalkallo Creek	SW1, SW2, SW3, SW4, SW9, SW10 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway		
684	34.11	34.11																							Sensitive Noise Receptor	C498	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		424
686	34.41	34.41																							Watercourse_channel_drain	KALKALLO CREEK	SW1, SW2, SW3, SW4, SW9, SW10 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway		
688	34.54	34.54																							Sensitive Noise Receptor	C499	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		118

689	34.73	34.73												X						Watercourse_channel_drain	Unnamed tributary constructed drain to Kalkallo Creek			SW1, SW2, SW3, SW4, SW9, SW10 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway			
690	34.90	34.98												X						Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
691	35.01	35.27												X						Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement			
692	35.28	35.28											X							Community Facility	Broadhanger Equestrian			S1 S2 S3	Implement surface water management measures	Open space and natural area - KP# Located in proposed easement			
693	35.41	35.41												X						Watercourse_channel_drain	Unnamed tributary constructed drain to Kalkallo Creek			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway			
694	35.45	35.45											X							Sensitive Noise Receptor	C500			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		313	
695	35.54	35.54																X		Road	UNNAMED			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			
696	35.54	35.54											X							Sensitive Noise Receptor	C501			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		125	
697	35.77	35.77																X		Road	UNNAMED			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			
698	36.02	36.02												X						Watercourse_channel_drain	Unnamed tributary constructed drain to Kalkallo Creek			SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway			
699	36.29	36.29											X							Sensitive Noise Receptor	C502			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		193	
700	36.44	36.44																X		Road	UNNAMED			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			
701	36.45	36.45																	X	Sensitive Noise Receptor	C503			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		38	
702	36.45	36.45																	X	Sensitive Noise Receptor	C504			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		80	
703	36.47	36.47																	X	Air quality sensitive receptor	AQ_R014			AQ1, AQ3, LU1, LU2, GG1, LV3 and S1	Construction dust management controls and monitoring as required. Management of greenhouse gas emissions through EMMs in GG1. Management of impacts to land use and visual impacts.	Sensitive receptor outside of easement		68	
704	36.57	36.57																	X	Sensitive Noise Receptor	C505			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		134	
705	36.58	36.58																	X	Sensitive Noise Receptor	C506			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		116	
706	36.59	36.65																	X	Native vegetation	Victorian Volcanic Plains - Plains Grassland			B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in proposed easement			
707	36.84	36.84																	X	Sensitive Noise Receptor	C507			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		290	
708	36.96	36.96																	X	Sensitive Noise Receptor	C508			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		71	
709	37.02	37.02																X		Road	GUMS LANE			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			
710	37.06	37.06																	X		Road	HUME FREEWAY			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
711	37.08	37.08																	X		Road	GUMS LANE			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
712	37.10	37.10																	X		Road	HUME FREEWAY			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement		
713	37.22	37.22																	X	Sensitive Noise Receptor	C509			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		369	
714	37.72	37.72																	X	Groundwater	Borehole - 79167			GW1 and GW3	Minimise dewatering rates and complete additional groundwater analysis.	Domestic - KP# located in proposed easement			
715	38.25	38.25																	X	Sensitive Noise Receptor	C510			NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		14	
716	38.30	38.30																	X	Road	UNNAMED			LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement			

717	38.33	38.33																	x	Sensitive Noise Receptor	C511		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			471		
718	39.12	39.12																	x	Sensitive Noise Receptor	C512		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			292		
719	39.65	39.65																	X	Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement					
720	39.95	39.95																		x	Sensitive Noise Receptor	C513		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			105	
721	40.08	41.11																		X	Groundwater	Areas of groundwater impact		GW1 and C4	Minimise dewatering rates and potential contamination.	KP # Located in proposed easement				
722	40.37	40.37																		X	Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement				
723	40.76	40.76																			Unnamed tributary to Merri Creek		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement - high risk waterway					
724	40.85	40.85																		x	Sensitive Noise Receptor	C514		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail			287	
725	40.92	40.96																	X	Native vegetation	Victorian Volcanic Plains - Stony Knoll Shrubland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in proposed easement					
808	40.928	40.949																		X	Heritage	172-200 Denovans Lane		CH5	Investigate the significance and treatment of the drystone wall intersected by the pipeline at 170-200 Donovans Lane, Beveridge, before construction commences in the vicinity of this site.					
726	40.97	40.97																		X	Watercourse_stream	NORTH EASTERN		SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures .Implement specific actions if unexpected groundwater is identified during construction.	KP # Located in proposed easement				
727	41.03	41.05																		X	Contamination	Railway crossing / rail reserves		C1 and C2	Implementation of spoil management measures and compliance with CHMP	KP # Located in proposed easement				
728	41.04	41.04																		X	Railway	NORTH EASTERN		LU4	Adhere to Traffic Management Plan	KP # Located in proposed easement				
729	41.06	41.13																		X	Native vegetation	Victorian Volcanic Plains - Plains Grassy Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	FFG - KP# located in proposed easement				
730	42.04	42.04																		X	Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement				
731	42.30	42.30																		X	Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP # Located in proposed easement				
801	42.5071	43.2231																		X	Conservation Area	CA34a		B1, B2, B15, B16 and C6	<ul style="list-style-type: none"> <li>Site Specific Environmental Management Plan and Restoration Plan to be accepted by DELWP and MWC</li> <li>Temporary fencing must be installed and maintained along the boundary of the approved construction footprint - see B1 for specs</li> <li>Weed and seed</li> <li>Biosecurity washdowns</li> </ul>	KP# Located in existing easement				
802	42.6151	42.8661																		X	Threatened Fauna	Growling Grass Frog		B2, B3, B4, B5, B6, B7, B9, B10, B11 and B21	Fauna fencing - both sides of ROW. Manage Chytrid Fungus and salvage and relocation of species in accordance with the Fauna Management Plan. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement				
734	42.69	42.78																			X	Groundwater	Areas of groundwater impact		GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement			
819	42.696	42.71																			X	Heritage	Aboriginal Cultural Sensitivity			Walkover and collect after C&G, compliance inspection of LDADs	7822-4628 Wollert Artefact Scatter			
786	42.70823	42.84214																			X	Dispersion risk	Medium Risk		GM4 and GM7	Preparation and implementation of sodic and dispersive soil management measures. Implement specific actions if unexpected groundwater is identified during construction.	KP# Located in existing easement			
787	42.7151	42.9101																			X	Heritage	VRO35		CH3 and CH4	Determine appropriate protection and restoration measures for the geological and geomorphological values of the site.	KP# Located in existing easement			
735	42.72	42.75																			X	Native vegetation	Victorian Volcanic Plains - Riparian Woodland		B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	KP # Located in existing easement			
736	42.72	42.74																			X	Contamination	Potential Acid sulphate soils (PASS)		C1, C2 and C3	Implementation of spoil management measures and compliance with CHMP. Ahere to unexpected finds protocol.	KP# Located in existing easement			
737	42.73	42.73																			X	Watercourse_stream	MERRI CREEK	Open cut	SW1, SW2, SW3, SW4, SW5, SW9, SW10, SW11, B2, B4, B17, C3 and CH6	Assess and manage impacts to GDE. Salvage aquatic and terrestrial fauna during open cut dewatering activities. Manage impacts to geological and geomorphological significance (VRO site 35). Implement surface water management measures and apply biosecurity measures.	KP# Located in existing easement - high risk waterway			
739	42.734	43.039																			X	Heritage	Aboriginal Cultural Sensitivity		CH1	Implement and comply with CHMP	7822-4634 Merri Creek Artefact Scatter			

803	43.2231	43.4141	0.191	X												Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - Left. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
741	43.303	43.431								X						Heritage	Aboriginal Cultural Sensitivity	CH1	Walkover and collect after C&G, compliance inspection of LDADs	7822-3650 Donnybrook Road Aboriginal Place 2		
742	43.509	43.597								X						Heritage	Aboriginal Cultural Sensitivity	CH1	Walkover and collect after C&G, compliance inspection of LDADs	7822-3760 Donnybrook Road Aboriginal Place 4		
804	43.7451	43.8351	0.09	X												Threatened Fauna	Striped Legless Lizard	B3, B5, B6, B7, B9 and B20	Fauna Fencing - Left. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
743	44.81	44.81		X												Threatened Fauna	Golden Sun Moth	B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
758	44.98	44.98								X						Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction surface salvage	7822-4582 (North Western Plains LDAD 3)		
744	46.20	46.20									x					Sensitive Noise Receptor	C515	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		560
745	46.58	47.60											X			Groundwater	Areas of groundwater impact	GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement		
746	46.58	46.58									x					Sensitive Noise Receptor	C516	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		242
747	46.66	46.66									x					Sensitive Noise Receptor	C517	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		780
748	46.66	46.66									x					Sensitive Noise Receptor	C518	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		801
749	46.74	46.74									x					Sensitive Noise Receptor	C519	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		70
750	46.96	46.96											X			Road	DONNYBROOK ROAD	LU4 and GM6	Adhere to Traffic Management Plan. Further confirmation of ground risk required at location.	KP# Located in existing easement		
810	46.97	46.97											X			Watercourse_channel_drain	Donnybrook Road Drain	SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP# Located in existing easement		
751	47.00	47.00									x					Sensitive Noise Receptor	C520	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		101
752	47.00	47.00									x					Sensitive Noise Receptor	C521	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		218
753	47.00	47.00									x					Sensitive Noise Receptor	C522	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		371
754	47.10	47.10											X			Watercourse_stream	Darebin Creek	SW1, SW2, SW3, SW4 and SW11	Implement surface water management measures	KP# Located in existing easement		
755	47.14	47.14												x		Sensitive Noise Receptor	C523	NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		804
757	48.23	48.31		X												Native vegetation	Victorian Volcanic Plains - Plains Grassland	B1, B3, B7, B15, B16, B18, B23 and B24	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Site rehabilitation after construction.	NTGVVP and FFG - KP# located in existing easement		
805	48.5281	49.0741												X		Conservation Area	CA28b	B1, B2, B15, B16 and C6	<ul style="list-style-type: none"> <li>Site Specific Environmental Management Plan and Restoration Plan to be accepted by DELWP</li> <li>Temporary fencing must be installed and maintained along the boundary of the approved construction footprint - see B1 for specs</li> <li>Weed and seed</li> <li>Biosecurity washdowns</li> </ul>	KP# Located in existing easement		
759	49.08	50.08												X		Groundwater	Areas of groundwater impact	GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement		
760	49.52	49.542												X		Heritage	Aboriginal Cultural Sensitivity	CH1	Implement and comply with CHMP - preconstruction subsurface salvage	7822-4597 Summerhill Road Artefact Scatter		
762	49.66	49.66												X		Groundwater	Borehole - 68906	GW1 and GW3	Minimise dewatering rates and complete additional groundwater analysis.	Not known - KP# located in existing easement		

**Western Outer Ring Main  
Environmental Line List  
Appendix E - 18035-PL-HSE-004 CEMP Rev12**

763	50.02	50.02																	X		Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
764	50.03	50.03																		X	Sensitive Noise Receptor	C524		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		176
765	50.08	50.10																			Groundwater	Areas of groundwater impact		GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement		
766	50.10	50.59																			Groundwater	Areas of groundwater impact		GW1 and C4	Minimise dewatering rates and potential contamination.	KP# Located in existing easement		
767	50.17	50.17																			Road	SUMMERHILL ROAD		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
768	50.20	50.20																			Road	SUMMERHILL ROAD		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
769	50.27	50.27																			Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
770	50.38	50.38																		X	Sensitive Noise Receptor	C525		NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10 and LU2	Construction Noise and Vibration Management Plan and Blast Management Plan (AS2187.2-2006 Explosives storage and use). Land use mitigation measures.	Sensitive receptor outside of easement - refer to Technical report F - Noise and vibration for detail		463
771	50.49	50.49																	X		Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
772	50.75	50.75																			Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
773	50.76	50.76																			Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
775	50.84	50.84																			Road	UNNAMED		LU4	Adhere to Traffic Management Plan	KP# Located in existing easement		
776	50.85	50.85																		X	Watercourse_stream	Curly Sedge Creek		SW1, SW2, SW3, SW4 and SW11	If the depth below the Tributary of Curly Sedge Creek culvert cannot achieve 2 meter clearance, Melbourne Water require that the crossing be constructed generally in accordance with our 'guideline for utility crossings under pipes' <a href="https://www.melbournewater.com.au/building-and-works/work-or-build-near-our-assets-or-easements/utility-installation-guidelines">https://www.melbournewater.com.au/building-and-works/work-or-build-near-our-assets-or-easements/utility-installation-guidelines</a> i.e. minimum 1 meter cover with protection/encasement. Implement surface water management measures and specific actions if unexpected groundwater is identified during construction.	KP# Located in existing easement		
777	50.99	50.99																			Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
778	50.99	50.99																			Threatened Fauna	Golden Sun Moth		B1, B3, B5, B6, B7, B8, B9 and B19	Demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing. Where lighting is required, avoid unnecessary light spill into surrounding areas. Site rehabilitation after construction.	KP# Located in existing easement		
806	51.0041	51.0041																		X	Threatened Flora	Tuff Scurf Pea	176.3063727	B1, B2, B15, B16 and B24	Install and maintain temporary fencing along the construction footprint boundary in areas adjacent to sensitive environmental values. The Tough Scurf-Pea would be protected by temporary fencing (e.g. star pickets and wire fencing or galvanized temporary construction fencing). Site rehabilitation after construction.	Outside existing easement		



## Appendix F Performance Objectives and Standards

### F.1 General requirements

**Table F.1 Performance standards (general)**

Performance standard – overview		
<b>Objective</b>	To plan for, manage and minimise risks of environmental harm associated with the proposed construction activities.	
<b>Target</b>	Conformance with the relevant limits and controls specified in this performance standard.	
<b>Application</b>	The duration of the proposed works across all areas, unless otherwise stated.	
A4	Construction drawings must clearly delineate the construction area, access points and sensitive areas (e.g. native vegetation) in or adjacent to the construction area. A Site plan must form part of the project induction and be available to site supervisors at all times during construction.	Construction
A5	Comply with construction drawings	Construction
A6	Provide evidence to the satisfaction of the DEECA of the following plan, prior to the works that are relevant to the plans listed in Appendix D	Construction
A7	Provide current property management plan prior to the use of mechanical equipment on the relevant private property.	Construction



## F.2 Environmental management measures

### F.2.1 Noise and vibration

**Table F.2 Environmental management measures (Noise and vibration management)**

NOISE AND VIBRATION MANAGEMENT		
Ref.	Environmental controls	Project phase
NV1	<p>Manage construction noise and vibration in accordance with Chapter 4 (Noise and vibration) of EPA Publication 1834 Civil Construction, building and demolition guide.</p> <p>Prepare and implement a Construction Noise and Vibration Management Plan (CNVMP) that includes the following measures to eliminate or minimise the emission of noise to the extent reasonably practicable:</p> <ul style="list-style-type: none"> <li>• Undertake preparatory work offsite where there is low potential for risks of harm impacting people.</li> <li>• Limit noise caused by people onsite, including the use of amplified systems such as radios.</li> <li>• Use the lowest-noise and vibration work practices and equipment that meet the requirements of the job.</li> <li>• Use broadband reversing alarms on construction vehicles and machinery in preference to 'beeper' reversing alarms. The construction area will be planned to minimise the need for reversing of vehicles.</li> <li>• Turn off equipment and vehicles when not being used.</li> <li>• Take care not to drop spoil and construction materials that cause peak noise events.</li> <li>• Ensure equipment is operated and maintained in accordance with manufacturer's requirements.</li> <li>• Ensuring good working condition of mufflers and loose parts that may rattle are secured.</li> </ul>	Construction





NOISE AND VIBRATION MANAGEMENT		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>Limit works to the 'normal working hours' (as defined in EPA Publication 1834) as far as reasonably practicable.</li> <li>Minimise use of loud equipment, generation of unnecessary noise and vibration, and the movement of vehicles on the construction area as far as reasonably practicable.</li> <li>Outline designated vehicle routes, parking locations and delivery hours to minimise risks of harm from noise on sensitive receptors.</li> <li>Adopting engineering noise controls at the source (e.g. silencer, mufflers, enclosures) by all reasonably practicable means using current technology.</li> <li>Selection of quieter equipment.</li> <li>Installation of onsite barriers such as hoardings or temporary screens at any specific locations, where necessary to provide a noise barrier between particularly noisy construction works and nearby sensitive receptors.</li> <li>Limit the duration of sensitive receptors' exposure to continuous noise from very noisy activities (and provide respite periods to affected persons). Periodically review sensitive receptor locations to identify any new receptors.</li> <li>To the extent reasonably practicable, ensure noise emissions do not exceed the construction noise and vibration levels as identified in EMM NV10.</li> </ul>	
NV2	<p>The CNVMP must include a detailed noise assessment report, to be prepared by a suitably qualified acoustic consultant. The acoustic report must respond fully to the requirements of the Environment Protection Act 2017, including the GED and Environment Protection Regulations 2021, and include:</p> <ul style="list-style-type: none"> <li>Details of specific construction activities once schedules are known, including the number and type of noise-producing plant working in each area, their respective sound power levels and the duration of activities in each area</li> <li>Nomination of specific noise mitigation measures, including a description of the level of attenuation that they would provide, either by stating manufacturer data, or by</li> </ul>	Construction



NOISE AND VIBRATION MANAGEMENT		
Ref.	Environmental controls	Project phase
	<p>undertaking measurements of the proposed mitigation measures prior to their implementation at site</p> <ul style="list-style-type: none"> <li>• Confirmation that all reasonably practicable noise mitigation controls have been implemented and that GED has been met</li> <li>• Assessment of the residual noise levels, in the context of criteria listed in NV10, once all reasonable and practicable noise mitigation controls have been implemented, at affected noise-sensitive receivers and nearby natural areas, in accordance with the Noise Protocol and Environmental Reference Standard respectively.</li> </ul>	
NV3	Develop a detailed Blast Management Plan in accordance with AS 2187.2 – 2006 <i>Explosives- storage and use</i> and other relevant documents to confirm blasting impacts and implement any further management measures required. Blasting is to be undertaken to the satisfaction of a qualified shot firer.	Construction
NV4	As far as reasonably practicable, increase the distance between a sensitive receptor and the noise/vibration source to reduce impacts. This can be achieved through strategic placement of stationary equipment (e.g. generators used for specific works) within the construction area to maximise the distance between source and receptor.	Construction
NV5	<p>As far as reasonably practicable limit works to the 'normal working hours' (as defined in EPA Publication 1834). Identify activities required to be undertaken outside of normal working hours.</p> <p>The Construction Noise and Vibration Plan must include a clear rationale for defining works as 'low-noise', 'managed impact', or 'unavoidable' (as defined in EPA Publication 1834) and response strategies to minimise the risk of harm from noise emissions as far as reasonably practicable having regard to EPA Publication 1834 "Civil construction, building and demolition guide".</p> <p>Activities that are anticipated to occur outside normal working hours are limited to horizontal drilling and hydrostatic testing due to continuous nature of these activities. These</p>	Construction



NOISE AND VIBRATION MANAGEMENT		
Ref.	Environmental controls	Project phase
	specific activities will be treated as "managed impact works" as per the EPA publication 1834. For these activities, the pipeline contractor will prepare a Noise and Vibration Management Plan, which will be verified by an independent acoustic consultant or independent Health Safety and Environment (HSE) specialist, or other person with skills and expertise in risk/safety assessment.	



<p>NV6</p>	<p>Where the residual noise and vibration impact (after mitigation measures are being implemented) exceeds the recommended construction noise and vibration criteria or construction works are planned close to the sensitive receptors, notify residents in advance about upcoming construction works.</p> <p>Send notification letters to residents of noise affected dwellings prior to the commencement of works which include information on:</p> <ul style="list-style-type: none"> <li>• Date and time of the noise intensive works</li> <li>• Expected durations of the noisiest activities</li> <li>• Use and provision of individual protective measures (for short duration impacts on a case-by-case basis).</li> </ul> <p>Implement a complaints management register that documents:</p> <ul style="list-style-type: none"> <li>• Name of persons receiving complaint</li> <li>• Name of person making the complaint</li> <li>• Date and time of complaint</li> <li>• Nature of the complaint</li> <li>• Actions taken to rectify the issue</li> <li>• Actions to minimise risk of repeated occurrence</li> <li>• Name of person responsible for undertaking the required actions</li> <li>• Communication of response to the complaint</li> </ul> <p>Implement a complaint system that includes the following measures:</p> <ul style="list-style-type: none"> <li>• Establish a community liaison phone number and permanent project contact number so that noise related complaints can be received and addressed in a timely manner</li> <li>• Determine whether any unusual activities were taking place at the time of the complaint that may have generated higher noise levels than usual and whether they may be attributed to the construction activities</li> <li>• Implement additional mitigation measures where required and reasonably practicable.</li> </ul>	
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NOISE AND VIBRATION MANAGEMENT		
Ref.	Environmental controls	Project phase
NV7	Where the residual impact is predicted to exceed the recommended noise or vibration criterion for an extended period (after other mitigation measures have been implemented), discuss information on the risk of harm with affected residents. Depending on the circumstances, off-site measures to minimise risk of harm from noise must be considered including alternative temporary accommodation or other respite option.	Construction
NV8	Where required, condition/dilapidation surveys will be offered to owners of buildings where high blast charges are required and the detailed blast study and impact management plan identifies possible impact to buildings.	Construction
NV9	Liaise with the MWC Bald Hill to Yan Yean pipeline and Major Road Projects Victoria Sunbury Road upgrade project teams to assess cumulative construction noise impacts in accordance with Regulation 119 of the EP Regulations. If the Project and MWC construction works are scheduled simultaneously, review the CNVMP for this section of the Project to identify if additional noise mitigation measures may be necessary in order to minimise the risk of harm from noise emissions so far as reasonably practicable.	Construction
NV10	Minimise the risk of harm from noise emissions from construction noise in accordance with the CNVMP by utilising the mitigation measures, where reasonably practicable, listed in EMM NV1. Ensure the following noise levels are not exceeded as far as reasonably practicable:	Construction



Sensitive receptor	Period	Noise criteria, LAeq
<b>Residential</b>	EPA normal working hours	75
<b>Educational institutions</b>	hours:	60
<b>Parks and recreational areas</b>	Mon-Fri: 7am - 6pm	65
<b>Community and commercial buildings</b>	Sat: 7am - 1pm	70
<b>Residential</b>	Evening and weekend Mon-Fri: 6pm - 10pm Sat: 1pm - 10pm Sundays and public holidays 7 am to 10 pm	Noise level at any residential premises not to exceed background (LA90, dB) noise by: <ul style="list-style-type: none"> <li>• 10 dBA or more for up to 18 months</li> </ul>
<b>Residential</b>	Night-time Mon-Sun and public holidays: 10pm - 7am	Noise inaudible within a habitable room of any residential premises. Background +0 dB(A) (external)

Implement management measures if vibration from construction is predicted to exceed the standards for structural damage as identified in the following:

Type of structure	Vibration velocity (PPV) in mm/s			
	At foundation at a frequency of			Vibration at horizontal plane of highest floor (all frequencies)
	< 10 Hz	10 Hz-0 Hz	50 Hz-100 Hz	
1 Buildings used for commercial purposes, industrial buildings and buildings of similar design	20	20-40	40-50	40
2 Dwellings and buildings of similar design and/or occupancy	5	5-15	15-20	15
3 Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g. heritage-listed)	3	3-8	8-10	8



NOISE AND VIBRATION MANAGEMENT										
Ref.	Environmental controls	Project phase								
	<p>Implement management measures if vibration from construction is predicted to exceed the standards for structural damage to existing underground pipelines:</p> <table border="1"> <thead> <tr> <th>Pipe material</th> <th>Guideline value on pipe (mm/s)</th> </tr> </thead> <tbody> <tr> <td>Steel (including welded pipes)</td> <td>100</td> </tr> <tr> <td>Clay, concrete, reinforced concrete, pre-stressed concrete, metal (with/without flanges)</td> <td>80</td> </tr> <tr> <td>Masonry, plastic</td> <td>50</td> </tr> </tbody> </table> <p>Implement management measures if vibration from construction exceeds the human perception of 0.3 mm/s at sensitive receptors.</p>	Pipe material	Guideline value on pipe (mm/s)	Steel (including welded pipes)	100	Clay, concrete, reinforced concrete, pre-stressed concrete, metal (with/without flanges)	80	Masonry, plastic	50	
Pipe material	Guideline value on pipe (mm/s)									
Steel (including welded pipes)	100									
Clay, concrete, reinforced concrete, pre-stressed concrete, metal (with/without flanges)	80									
Masonry, plastic	50									

### F.2.2 Air quality

**Table F.3 Environmental management measures (Air quality)**

AIR QUALITY		
Ref.	Environmental controls	Project phase
AQ1	<p><b>Construction dust management</b></p> <p>At the commencement of clear and grade work on each property, review sensitive receptor locations to identify any new receptors, having particular regard to new residential development.</p> <p>Implement management and control measures during construction activities to minimise dust including:</p> <ul style="list-style-type: none"> <li>Water carts to be used on unsealed work areas as required</li> </ul>	Construction



AIR QUALITY		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Crushed rock to be placed on existing permanent unsealed access tracks where agreed with relevant stakeholders – especially in areas where housing abuts, or may abut by the time construction occurs, the construction area.</li> <li>• Water spray units to be used, where required, on soil stockpiles and during the loading and unloading of dust generating materials, i.e. Soil/sand/fill and aggregates.</li> <li>• Vehicle loads to be covered when carrying dust (or litter) generating material.</li> <li>• Vehicle speed within the construction area must be restricted to 30 km/hr.</li> <li>• Dust suppression activities must consider weather patterns, ground cover, ground conditions e.g. type and moisture content of soil present, and type of activities being conducted as well as proximity to sensitive receptor locations.</li> <li>• Undertake a sufficient level of compaction on stockpile surfaces to minimise dust.</li> </ul> <p>If all available methods of dust stabilisation fail to suppress dust and dust emissions are evident beyond the construction area boundary at identified sensitive receptor locations (as identified by real-time reactive monitoring, as required), the contractor must temporarily modify or suspend dust generating activities until conditions subside.</p> <p>Controls must be implemented if dust is observed to be causing a hazard (such as a wind barrier where directly impacted residences are located immediately adjacent to the construction area). If dust levels cannot be contained works must be modified or stopped until dust hazard is reduced to a manageable level, such that it can be controlled using the standard measures.</p> <p><b>Construction dust management monitoring</b></p> <p>Dust monitoring for adaptive management must be undertaken during construction where isolated rural residences or rows of housing that abut the construction area are within the impact 'footprint' distances identified in Table 23 of Technical Report G Air Quality. Instruments must be consistent with EPA 1961 and relating to taking measures to minimise emissions as far as reasonably practicable. Dust management monitoring must be</p>	





AIR QUALITY		
Ref.	Environmental controls	Project phase
	deployed for each workday subject to where the daily work front is in relation to the specific areas where sensitive receptors are located.	
AQ3	<p><b>Odorous soils management</b></p> <p>In the event that odorous soils (as a result of contamination or acid sulfate soils) are uncovered during construction, standard soil management measures must be undertaken, as outlined in EMM C1 (Implement spoil management measures).</p>	Construction



F.2.3 Biodiversity

**Table F.4 Environmental management measures (Biodiversity)**

BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B1 (i)	<p><b>Vegetation management (construction)</b></p> <p>Confine all vegetation clearing works to the defined construction area.</p> <p>Clearly demarcate all buffer zones, no-go zones, tree protection zones, and the boundary of the construction area prior to relevant works commencing.</p> <p>Install and maintain temporary fencing along the construction footprint boundary in areas adjacent to sensitive environmental values. The Matted Flax Lily and Tough Scurf-Pea would be protected by temporary fencing (e.g. star pickets and wire fencing or galvanized temporary construction fencing). See additional measures below specific for works within conservation areas of the MSA (i.e. KP 43 and 49).</p> <p>Clearly demarcate and identify on site all environmental features to be retained within or directly adjacent to the construction area, prior to relevant works commencing.</p> <p>Any necessary trimming of tree branches located on the edge of the construction area and, overhanging into construction areas must be carried out by a qualified arborist.</p> <p>Develop and implement a Tree Management Plan (B23).</p>	Construction
B1 (ii)	<p>Site Specific Management Plans to be prepared for Conservation Areas (refer to the ELL in Appendix E), including the following specific measures:</p> <ul style="list-style-type: none"> <li>• Temporary fencing must be installed and maintained along the boundary of the approved construction footprint within Conservation Areas.</li> <li>• The locations for the temporary fencing must be identified on site by a licensed land surveyor and recorded, with the recorded survey marks to be provided to DEECA.</li> <li>• The temporary fencing is to be star-picket and wire fencing, with pickets driven up to 300mm depth at 5 m intervals, continuous flagging and 'No Go Zone' signage at intervals not exceeding 30m.</li> </ul>	



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Construction works, vehicle traffic and placement or storage of structures or materials are not permitted beyond the approved construction area within the Conservation Area.</li> <li>• Biosecurity:                             <ul style="list-style-type: none"> <li>○ Complete weed and seed inspections of all vehicles and plants entering the Conservation Areas. Inspection records must remain with the vehicle at all times when working in Conservation Areas.</li> <li>○ Set up and maintain vehicle washdown locations adjacent to (but outside of) Conservation Areas to allow for washdown of vehicles as required following inspections. Vehicle washdown locations must include suitable bunding and waste management practices.</li> </ul> </li> </ul>	



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B2(i)	<p><b>Pest plant/animal/pathogen control (construction)</b></p> <p>Implement the following measures during construction to manage biosecurity risks and address Catchment and Land Protection Act 1994 (CaLP Act) obligations:</p> <ul style="list-style-type: none"> <li>• Locate CaLP Act listed weeds in the construction area and assess the risk of additional spread prior to relocating topsoil, implement measures to manage this risk during clear and grade, and reinstatement.</li> <li>• All vehicles and construction equipment, including third parties, must be free of weeds, seeds and soil material prior to arrival to the construction area, consistent with A Guide for Machinery Hygiene for Civil Construction (Civil Contractor's Federation, 2011).</li> <li>• Weed and seed inspections must be completed for all vehicles and plant on arrival, with a record of the inspection to remain with the vehicle.</li> <li>• During the clear and grade phase, ensure that vehicles and plant traversing between land parcels are managed to minimise the risk of additional spread of weeds as far as reasonably possible, and are free of soil clumps and sods prior to entry and exit from the construction area.</li> <li>• Evaluate disturbed areas post-construction and implement remedial measures as required within a reasonable timeframe.</li> <li>• Manage waste in accordance with EMM C7.</li> <li>• Apply specific measures for works in Conservation Areas (refer to the ELL in Appendix E) as per Site Specific Management Plans (EMM B1 (ii)).</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B2(ii)	<p>Pathogen control – Chytrid fungus</p> <ul style="list-style-type: none"> <li>• All vehicles and plant undertaking construction works directly in the watercourse (Merri Creek) must be cleaned, free of soil sods and sprayed with an appropriate disinfectant prior to entrance of each waterway and on exit if working between multiple waterways (excluding vehicles and plant using the constructed access route).</li> <li>• Manage Chytrid Fungus during fauna handling in accordance with the Fauna Management Plan.</li> </ul>	Construction
B2(iii)	<p>Pathogen control – <i>Phytophthora</i></p> <p>If working in any area where dieback is identified, the following measures will be implemented on exit from the area:</p> <ul style="list-style-type: none"> <li>• If conditions are dry, use dry cleaning methods (e.g. air blower &amp; brushes) to remove soil from tools, plant equipment and clothing, including boots. (Dust and grime on vehicles have a low risk of spreading dieback.)</li> <li>• Avoid using water wash-downs in dieback-affected areas where possible.</li> <li>• If a water based washdown is required in a dieback area, manually remove soil / mud prior to using water.</li> <li>• Contain any mud and do not allow run off to enter bushland.</li> <li>• Collect removed soil and mud into buckets or bags for off-site disposal.</li> <li>• Do not drive through runoff water or cleandown area after cleaning.</li> <li>• Apply a disinfectant following removal of soil. Disinfectants include:                         <ul style="list-style-type: none"> <li>– Methylated spirits: 70% spirits to 30% water;</li> <li>– Sodium hypochlorite (pool chlorine): 6mL of sodium hypochlorite to 10L of water;</li> <li>– Household bleach: 1 part bleach to 4 parts water.</li> <li>– Commercial products such as Phytoclean. Follow label directions.</li> </ul> </li> </ul>	Construction



<p>B2(iv)</p>	<p>Pathogen control – Foot and Mouth Disease</p> <ul style="list-style-type: none"> <li>• Ensure vehicles, plant and equipment are clean prior to arrival on construction area, inspected by a competent person and a register of inspected vehicles is kept for the duration of the project.</li> <li>• Minimise movement of vehicles, plant and equipment between projects.</li> <li>• On properties with livestock, restrict the access outside the construction area, particularly to livestock holding areas.</li> <li>• Promote good hygiene practices for vehicles, plant, clothing and equipment (e.g. at prestart meetings and Toolbox talks)</li> <li>• Monitor official information about the extent of disease infection and quarantine, including:             <ul style="list-style-type: none"> <li>– Foot-and-mouth disease - DAFF (agriculture.gov.au)  <a href="https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd">https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd</a></li> <li>– Outbreak   National pest &amp; disease outbreaks  <a href="https://www.outbreak.gov.au/">https://www.outbreak.gov.au/</a></li> <li>– Agriculture Victoria - Foot-and-mouth disease  <a href="https://agriculture.vic.gov.au/biosecurity/animal-diseases/foot-and-mouth-disease">https://agriculture.vic.gov.au/biosecurity/animal-diseases/foot-and-mouth-disease</a></li> </ul> </li> <li>• Ensure that anyone who has travelled to a high risk area does not come on site for at least 7 days.</li> <li>• Disinfect any vehicles, plant, clothing and equipment arriving from an identified high risk area.</li> <li>• Continually review risk and update biosecurity measures to meet any increased risk. This may include providing facilities to clean vehicle, plant or equipment on entry and exit to certain agricultural properties.</li> </ul> <p>Work in High Risk Areas</p>	<p>Construction</p>
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BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Review the Project Risk Assessment to consider this escalation.</li> <li>• Comply with control orders, prohibitions, restrictions and requirements for any relevant APA or government declared restricted area.</li> <li>• Obtain Agriculture Victoria permits if it is necessary to access a declared restricted area (Livestock Disease Control Act 1994 (Vic)). Comply with conditions of the permit, including specific entry and exit points, and decontamination requirements for vehicles/equipment that are on the property.</li> <li>• Notify potentially impacted landowners if vehicles, personnel, plant or equipment operating on their property have come from a site or location which has since been identified as high risk or contaminated.</li> </ul>	
B3	<p><b>Contractor awareness</b></p> <p>Before commencing site work, all Project personnel must attend an induction that outlines environmental management requirements. This must include:</p> <ul style="list-style-type: none"> <li>• No-go zones</li> <li>• Biodiversity values of the construction area, specifically areas of native vegetation and threatened species habitat</li> <li>• Habitat and fauna awareness</li> <li>• Location of other environmentally sensitive areas</li> <li>• Native vegetation removal regulations and penalties for non-compliance</li> <li>• EPBC Act and FFG Act regulations and penalties for non-compliance.</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B4	<p><b>GDE mitigation</b></p> <ul style="list-style-type: none"> <li>• Engage an arborist to assess the potential for long-term risk of harm to native trees based on the expected timeframe for dewatering, depth to which water is modelled to be drawn down, and the proximity of the trees to identified and potential GDEs</li> <li>• Develop and implement a Tree Management Plan (B23)</li> <li>• Salvage aquatic and terrestrial fauna during open cut dewatering activities within creeks. Salvage and relocation must be in accordance with the protocols outlined within the FMP, including:                             <ul style="list-style-type: none"> <li>– Within waterways, undertake checks for the species during dewatering to remove any individuals found.</li> <li>– At locations specified in the ELL (refer to the ELL in Appendix E), install fauna-proof fencing along the edge of the construction area once habitat has been made unsuitable and cleared of individuals to prevent individuals recolonising for the period between clearing and construction</li> <li>– Handling and relocation protocols, e.g. animal storage, hygiene controls</li> <li>– Locations of suitable habitat (within 100 m for terrestrial fauna and 200 m for fish) to relocate any individuals found</li> <li>– A protocol for any individuals found where appropriate release habitat is not available within 100 m (threatened species) or 150 m (non-threatened species) of capture.</li> <li>– Means of treatment or disposal for any individuals injured or killed by works.</li> </ul> </li> </ul> <p>Measures to manage risk of harm to GDEs are described in EMM GW1 and EMM GW2.</p>	Construction
B5	<b>Lighting impacts to fauna</b>	Construction





BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<p>Design and manage lighting in accordance with best practice lighting design as outlined within the National Light Pollution Guidelines for Wildlife (DAWE 2020) where these do not conflict with construction safety.</p> <p>Where lighting is required, avoid unnecessary light spill into surrounding areas that provide habitat for threatened fauna as far as reasonably practicable.</p>	
B6	<p><b>Noise impacts to fauna</b></p> <p>Construction noise and vibration must be managed in accordance with the requirements identified in EMM NV1 and NV2.</p>	Construction
B7	<p><b>Site rehabilitation after construction</b></p> <ul style="list-style-type: none"> <li>• Reinstatement of the construction area with consideration of native vegetation composition indigenous to the area as applicable to site conditions, adjacent ground surface levels, and in consultation with the landholder and in accordance with any agreement made as part of easement negotiations.</li> <li>• In known and assumed Golden Sun Moth and Striped Legless Lizard habitat that contain native patches of grassland, revegetate areas with appropriate native grass seed mix (e.g. Wallaby Grass, Spear Grass, Kangaroo Grass) that provide habitat and food sources. On private property this will be in consultation with landowners.</li> <li>• Rehabilitation of construction areas and all temporary facilities, temporary access tracks and extra works areas would begin as soon as practicable after the completion of the construction activities, with the aim of restoration of ground cover within six months. Rehabilitation activities are estimated to take approximately three months. Any applicable replanting will be undertaken within 12 months of construction completion (subject to seasonal requirements).</li> </ul> <p>Subject to landholder agreement the following requirements to return habitat features to the construction area will be considered:</p>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>Return habitat features removed during construction such as large hollow logs and large rocks or rock piles to the construction area during rehabilitation if consistent with rehabilitation objectives at a particular location.</li> <li>Rip soil surfaces that have been compacted due to construction activities, such as those subject to traffic or storage areas within the construction area, to allow the topsoil to bind with the subsoil and increase water filtration, as appropriate, prior to revegetation with indigenous native species. Do not rip areas that are either known or assumed Golden Sun Moth or Striped Legless Lizard habitat and contained patches of native vegetation prior to construction.</li> </ul> <p>Subject to MWC requirement, Merri Creek will take into consideration appropriate instream and terrestrial reinstatement of habitat with regard to Growling Grass Frog habitat.</p>	
B8	<p><b>Topsoil management</b></p> <p>Topsoil imported to construction area from external locations must be free of weeds and pathogens. Stockpiled topsoil removed from weed-infested sites for the Project must only be re-used, as far as reasonably practicable, in the location that it was originally sourced from. Stockpiled topsoil from weed-infested sites may be reused where soil is sourced from sites supporting Golden Sun Moth where larvae may be present.</p> <p>For impacted areas that are Golden Sun Moth habitat:</p> <ul style="list-style-type: none"> <li>In areas that are to be disturbed temporarily (i.e., reinstated after construction) and that require topsoil removal, the period between pre-trenching topsoil removal and post-trenching topsoil replacement must be minimised to the extent practicable.</li> <li>Where the removal of topsoil is unavoidable appropriate measures to remove, separate (from sub-soils) and replace topsoils in the construction area must be undertaken. As far as reasonably practicable, topsoil will be progressively reinstated.</li> <li>Stockpiled topsoil from weed-infested sites may be reused at the same location where the soil is sourced from if the site supports golden sun moth and where larvae may be present.</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>Manage dust during the Golden Sun Moth flying season (November to January) in properties that are known or assumed Golden Sun Moth habitat to minimise risk of harm from dust on flying individuals as per requirements in EMM AQ1.</li> </ul>	
B9	<p><b>Fauna management</b></p> <p>Measures to minimise risk of harm to native fauna must be developed and will be incorporated into a Fauna Management Plan for approval by DEECA (prior to clear and grade commencing). The Plan must include the species specific management plans for growling grass frog (as required by EMM B21), golden sun moth (as required by EMM B19), and striped legless lizard (as required by EMM B20). The Plan must include the following requirements:</p> <ul style="list-style-type: none"> <li>Woody vegetation, trees and hollows to be removed must be inspected for fauna by a suitably qualified wildlife handler immediately prior to removal. Measures to minimise risks of harm to fauna must include:                             <ul style="list-style-type: none"> <li>A walk-through/visual inspection of habitat to be removed immediately prior to clearance to flush out fauna and capture and relocate</li> <li>Wildlife handler to be present during hollow-bearing tree removal and habitat removal for Growling Grass Frog and Striped Legless Lizard</li> <li>Wildlife handler to provide advice, which must be implemented, that minimises risks of harm to fauna, and detailing appropriate measures to manage injured wildlife.</li> </ul> </li> <li>Keep records of all fauna interactions, listing the species encountered, date, nature and outcome of the interaction and GPS coordinates. All fauna records will be submitted to the Victorian Biodiversity Atlas.</li> <li>Trench management: Work areas, particularly excavations and trenches left open overnight, must be visually inspected for fauna at the start of each workday. Any trapped fauna to be removed prior to work commencing. Measures are to include egress points along the trench to allow fauna to escape the trench when unattended,</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<p>protocols for trapped fauna removal and provision of in-trench shelters for sections left open overnight</p> <ul style="list-style-type: none"> <li>Native fauna is to be captured, handled and relocated only by a qualified and authorised fauna handler. All fauna handling must be in line with a Wildlife Authorisation under the Wildlife Act and any conditions within. It is an offence under the Wildlife Act 1975 to handle or disturb fauna without authorisation</li> <li>Records of all fauna relocations must be kept</li> <li>Records of all fauna deaths or injuries to be kept and reported to DEECA</li> <li>Exposed pipe ends must be capped each night to prevent fauna entry</li> <li>Prepare and implement Kangaroo management for areas where connectivity for fauna movement will be restricted during construction</li> </ul> <p>Temporary strainer assemblies and gateways must be installed at every fence line that is intersected by the construction area in agreement with the landowner and in accordance with construction specifications. This must provide security for farmstock during construction. Temporary security fencing must be installed around the construction area in all public open spaces to prevent unauthorised access to the right of way (ROW) and for public safety. When it is determined that there is no further safety risk to members of the public all security fencing will be removed.</p> <p><b>For all threatened fauna:</b></p> <ul style="list-style-type: none"> <li>Any threatened species found within the construction area and needing relocation to avoid harm or death must be relocated to the nearest available suitable habitat. Details of suitable locations and a protocol for release for any locations where this is expected to be in excess of 100m from the point of capture is required.</li> </ul>	
B10	<p><b>Surface water sedimentation and runoff</b></p> <p>Manage surface water sedimentation and risks of harm in accordance with EMM SW4 and EMM SW5.</p>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B11	<p><b>Surface water contamination</b></p> <p>Manage chemicals fuels and hazardous materials in accordance with EMM C6 to minimise risks of harm on ecological values as far as reasonably practicable.</p>	Construction
B15	<p><b>Reinstate native vegetation</b></p> <p>Where natural regeneration of species in situ is not feasible, revegetate the area using seed or nursery stock obtained from within the local area, to support preservation of native vegetation values within the broader area.</p> <p>Prepare <a href="#">a</a> Site Rehabilitation Plan(s) for revegetation of native vegetation within the construction area, including:</p> <ul style="list-style-type: none"> <li>• the whole of the construction area within the southern paddock of Property 1/PS733045</li> <li>• Conservation Areas 34a and 28b (refer to the ELL in Appendix E).</li> </ul> <p>The plan(s) shall be prepared in consultation with each landholder and in accordance with any agreement made as part of easement negotiations. The plan(s) is to be verified by a qualified and experienced bushland restoration land management contractor. Revegetation with native vegetation is to be undertaken in accordance with the Site Rehabilitation Plan(s).</p> <p>The Site Rehabilitation Plan is to include any specific monitoring requirements and contingency measures for addressing potential rehabilitation issues such as weed invasion and sodic and dispersive soils, as they arise.</p> <p>Site Rehabilitation Plans for Conservation Areas must be submitted to and approved by DEECA.</p>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
B16	<p><b>Additional site assessment and management (construction)</b></p> <ul style="list-style-type: none"> <li>• Any removal or destruction of native vegetation outside the construction area that occurs accidentally or without prior approval must be reported as an incident. The task that caused the incident must cease immediately at that location.</li> <li>• The accidental clearing area must be subject to:                             <ul style="list-style-type: none"> <li>– Botanical surveys to assess and map the condition and extent of native vegetation.</li> <li>– If site-based information of the native vegetation can no longer be observed, DEECA mapped data must be used to determine offset requirements.</li> <li>– The extent and condition of accidental vegetation removal must be reported to the relevant authority as soon as reasonably practicable.</li> <li>– A qualified arborist must assess any damage to trees and must identify tree protection zones (TPZs) and SRZs.</li> </ul> </li> <li>• All native vegetation to be retained must be demarcated via fencing, so that no-go zones are clearly delineated and noted by workers, and any further accidental loss of vegetation is avoided</li> <li>• The task may recommence at the location subject to the completion of a root cause analysis and identification associated prevention controls.</li> </ul>	Construction
B17	<p><b>Barriers to fish passage and / or migration</b></p> <p>Minimise the creation of a barrier that impedes native fish passage and /or migration, and the time required for installation of the pipeline during open cut trenching across Merri Creek by using the following approaches:</p> <ul style="list-style-type: none"> <li>• Assemble and prepare the pipeline so it can be installed as soon as reasonably practicable once trenching through the watercourse is complete.</li> <li>• Remove all obstructions to flow and passage as soon as reasonably practicable after the pipeline has been laid and backfilled. That is, with the exception of the flume pipe at Merri Creek, which may not be immediately removed after the pipe has been laid.</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>Reinstate the exposed trench within the watercourse and riparian zones as soon as reasonably practicable following the installation of the pipeline.</li> <li>Works on a designated watercourse must be completed in accordance with MWC requirements.</li> </ul>	
B18	<p><b>Value-specific mitigation</b></p> <p>Develop and implement specific measures to protect EPBC Act and/or FFG Act communities that are impacted, including:</p> <ul style="list-style-type: none"> <li>Measures required by EMM B1</li> <li>Establishing no-go areas around plant populations</li> <li>Marking any significant values such as large old trees on site plans</li> <li>An arborist's assessment to establish no-go areas around retained large old trees close to the construction area</li> <li>On-site supervision by an environmental management specialist, botanist or arborist to avoid accidental damage to retained native vegetation during construction works in GEVVVP</li> <li>Retention of stockpiled vegetation to be used for site rehabilitation</li> <li>Rehabilitating disturbed areas as soon as reasonably practicable</li> <li>A Tree Management Plan must be prepared based on the construction area and surveyed tree locations (EMM B23)</li> <li>Relocate, or otherwise protect, the individual Arching Flax-lily - <i>Dianella longifolia</i> var. <i>grandis</i> (refer to the ELL in Appendix E), if it persists and can be located on site.</li> </ul>	Construction
B19	<p><b>Fauna Mitigation – Golden Sun Moth</b></p> <p>Prepare and implement a Golden Sun Moth Management Plan and obtain approval for the plan from DEECA. The plan must include details regarding:</p>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Location of Golden Sun Moth habitat and method for mitigation measures in these areas</li> <li>• Topsoil management (including as outlined within EMM B8)</li> <li>• Rehabilitation measures</li> <li>• Ongoing management and monitoring.</li> </ul>	
B20	<p><b>Fauna Mitigation – Striped Legless Lizard</b></p> <p>Prepare and implement a Striped Legless Lizard Management Plan and obtain approval for the plan from DEECA. The plan must include details of the location of striped legless lizard habitat and the following measures:</p> <ul style="list-style-type: none"> <li>• Methods for salvage of Striped Legless Lizards using the artificial shelter (roof tile grid) method, where permitted, including:                             <ul style="list-style-type: none"> <li>Timing for installation of artificial shelters</li> <li>Timing of artificial shelter checks</li> </ul> </li> <li>• Methods for salvage of Striped Legless Lizards in locations where the artificial shelter method is not permitted, including:                             <ul style="list-style-type: none"> <li>Active searches of areas identified as Striped Legless Lizard habitat (including rock rolling and lifting debris) prior to slashing</li> <li>• Slash areas of known and assumed habitat one week prior to active searches, to make them less suitable for lizards and encourage lizards to vacate the construction area. Slashing heights to be limited to no lower than 50 mm to minimise risk to individuals</li> <li>• Salvage protocol including:                                     <ul style="list-style-type: none"> <li>Maximum distance of relocation</li> <li>Procedures for instances where suitable habitat is not present within suitable relocation distances</li> </ul> </li> </ul> </li> </ul>	Construction





BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Any deviation of proposed salvage and relocation measures required in the event tussock skink or other species are also captured.</li> <li>• All salvage and relocation activities are to be undertaken by a suitably qualified wildlife handler</li> <li>• Install lizard-proof fencing along the construction area boundary (where it meets lizard habitat) to prevent individuals from recolonising the site during construction. Fencing must be a solid material (e.g. polyethylene sheeting or plastic) that is 400 mm high and dug into the ground at a depth of 100 mm</li> <li>• Develop a record-keeping, storage, and treatment or disposal protocol for killed or injured individuals, in accordance with DEECA advice. All such records will be reported to DEECA</li> <li>• Management of topsoil as per EMM B7 and B8 is also required.</li> </ul>	
B21	<p><b>Fauna Mitigation – Growling Grass Frog</b></p> <p>Prepare and implement a salvage and translocation plan for the Growling Grass Frog and obtain approval for the plan from DEECA. The salvage and translocation plan must include details regarding:</p> <ul style="list-style-type: none"> <li>• Making habitat unsuitable for Growling Grass Frog by slashing bank vegetation prior to construction to discourage individuals from remaining within the site.</li> <li>• Undertaking searches for the species, to remove any individuals in the area where habitat has been made unsuitable, on three days prior to further disturbance of the area.</li> <li>• For dams proposed for removal that have been identified as habitat, install fauna-proof fencing around the waterbodies once habitat has been made unsuitable and cleared of individuals to prevent individuals recolonising for the period between clearing and construction</li> <li>• For waterways identified as habitat, install fauna-proof fencing along the edge of the terrestrial works area once habitat has been made unsuitable and cleared of</li> </ul>	Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<p>individuals to prevent individuals recolonising for the period between clearing and construction.</p> <ul style="list-style-type: none"> <li>• Install fauna-proof fencing within 100 m of areas with habitat known or assumed to support Growling Grass Frog.</li> <li>• Handling and relocation protocols e.g. animal storage, hygiene controls</li> <li>• Locations of suitable habitat (within 100 m) to relocate any individuals found</li> <li>• A protocol for any individuals found where appropriate release habitat is not available within 100 m of capture</li> <li>• Means of treatment or disposal for any individuals injured or killed by works. All deaths or injuries to be recorded and reported to DEECA.</li> <li>• Fauna-proof fencing for Growling Grass Frog will be of a suitable structure and material to prevent frog movement from one side of the fence to the other</li> <li>• Minimise the risk of high flow events on Growling Grass Frog habitat through site-specific measures outlined in EMM SW7 and EMM SW9 including but not limited to timing of works, Flood Management Plan and Response Plans.</li> </ul>	
B22	<p><b>Fauna Mitigation – Platypus</b></p> <p>Protect Platypus at Jacksons Creek in accordance with the Platypus Management Guidelines (Australian Platypus Conservancy <a href="https://platypus.asn.au/management-guidelines/">https://platypus.asn.au/management-guidelines/</a>).</p> <ul style="list-style-type: none"> <li>•</li> </ul>	Construction
B23	<p><b>Remnant Trees</b></p> <p>Develop and implement a Tree Management Plan to identify all remnant native (non-planted) trees within 15 m of the construction area boundary, deemed “lost” through encroachment of their TPZs and specifies:</p> <ul style="list-style-type: none"> <li>• Trees to be impacted as part of the construction activities</li> <li>• The condition and arboricultural value of the trees.</li> </ul>	Design and Construction



BIODIVERSITY		
Ref.	Environmental controls	Project Phase
	<p>Maximise tree retention to the extent practicable through detailed design and selection of construction methods to minimise canopy loss including by retaining trees where practicable and minimising risk of harm to trees as far as reasonably practicable.</p> <p>Arboricultural assessments must inform the Tree Management Plan in order to maximise tree retention and long-term viability of individual trees including those deemed “lost” through encroachment of their TPZs or groundwater changes.</p> <p>The Tree Management Plan must be informed by a pre-construction site assessment to confirm the area and number of trees proposed to be impacted.</p> <p>The area and number of trees actually removed are to be confirmed through a post-construction arborist assessment.</p>	
B24	<p><b>Provide Offset Management Plan</b></p> <p>Provide offsets in accordance with the Guidelines for the removal destruction or lopping of native vegetation (DELWP, 2017).</p> <p>Develop and implement Offset Management Plans as required by DCCEEW conditions of approval (EPBC 2019/8569).</p>	Construction



F.2.4 Cultural and historic heritage

**Table F.5 Environmental management measures (Cultural heritage)**

CULTURAL AND HISTORIC HERITAGE		
Ref.	Environmental controls	Project phase
CH1	<p><b>Cultural Heritage Management Plans</b></p> <p>Implement and comply with the Cultural Heritage Management Plans (CHMP 16594, CHMP 16593 and 18496) management conditions and contingencies.</p>	Construction
CH3	<p><b>Listed historic heritage sites</b></p> <p>For any potential impact to VHI sites, obtain consent from Heritage Victoria in advance and implement management measures required in the consent, including fencing off the site during works, monitoring and recording.</p>	Construction
CH4	<p><b>Unlisted historic heritage sites</b></p> <p>Should an unknown historic heritage site, value or object be discovered during construction, follow the unexpected finds procedure, outlined in Appendix G of this CEMP.</p>	Construction
CH5	Investigate the significance and treatment of the drystone wall intersected by the pipeline at 170-200 Donovans Lane, Beveridge, before construction commences in the vicinity of this site.	Design and Construction
CH6	<p>Impacts on the Merri Creek Site of Geological and Geomorphological Significance (VRO Site 35)</p> <p>Determine appropriate protection and restoration measures for the geological and geomorphological values of the site based on the advice of an appropriately qualified geomorphologist.</p> <p>Ensure that disturbance to the natural geomorphology of Merri Creek is minimised during construction to the extent practicable, including disturbance from construction of the pipeline crossing as well as the construction and use of the temporary access crossing, through implementation of appropriate measures in:</p>	Design and Construction



	<ul style="list-style-type: none"><li>• the detailed design of the Merri Creek crossing</li><li>• the construction management plan for the Merri Creek crossing.</li></ul> <p>Ensure that rehabilitation of the construction area at this site restores the natural geomorphology of the site to the extent reasonably practicable.</p> <p>Consultation is to be undertaken with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation in regard to proposed protection and restoration measures.</p>	
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F.2.5 Contamination

Table F.6 Environmental management measures (Contamination)

CONTAMINATION		
Ref.	Environmental controls	Project phase
C1	<p><b>Implement spoil management measures</b></p> <ul style="list-style-type: none"> <li>Prepare and implement spoil management measures in accordance with relevant regulations, standards and guidelines including EPA Publication 1834 Civil construction, building and demolition guide. The spoil management measures must be developed in consultation with the EPA Victoria and include processes and measures to manage all spoil types i.e. all excavated material. The main spoil types would be uncontaminated soils and potentially small volumes of priority waste , including Category D waste or soil containing asbestos .</li> </ul> <p>The spoil management measures must define roles and responsibilities and include requirements and methods for:</p> <p><b>General</b></p> <ul style="list-style-type: none"> <li>Manage contaminated land to minimise risk of harm to human health or the environment, including identification, investigation and assessment and carrying out clean-up of that contamination to the extent reasonably practicable where the contamination presents a risk of harm.</li> <li>Persons in management or control should also provide adequate information to anyone who may be affected by the contamination or who may become a person in management or control.</li> <li>Leaving contaminated soils in-situ to the extent possible, while complying with the requirements of the duty to manage contamination specified above.</li> <li>Complying with applicable regulatory requirements including EPA Publication 1834 Civil construction, building and demolition guide and the ERS.</li> </ul>	Pre-construction and construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Investigations in accordance with the Australian Standard AS 4482.1:2005 Guide to the investigation and sampling of sites with potentially contaminated soil, the ASC NEPM and the EPA Victoria Industrial Waste Resource Guidelines (IWRGs)</li> <li>• Assessment of any material imported to the site for use as backfill in accordance with IWRG 702 and EPA Publication 1828.2. Imported material must meet the 'Fill Material' criteria as defined in Table 3 of EPA Publication 1828.2.</li> </ul> <p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>• Complete further testing to categorise soils in the vicinity of the railways for onsite re-use or offsite disposal.</li> <li>• Following these further investigations, update the Environmental Line List (refer to the ELL in Appendix E) and review risk register to include any new areas of potential contamination.</li> <li>• Identifying where any contaminated or hazardous material is exposed during construction and how it would be made safe for the site owner and the environment. Environmental values of land and ASC NEPM guidance on criteria protective of those environmental values must be considered for the land uses in these areas.</li> <li>• If non-aqueous phase liquid (e.g. oil, petrol, diesel and solvents) is present in soil or groundwater within the authorised project construction footprint and exposed during construction activities, it must be, so far as reasonably practicable: (a) cleaned up; and (b) if the source of the non-aqueous phase liquid is located on the land, the source of the liquid must be removed or controlled.</li> </ul> <p><b>Unexpected contamination</b></p> <ul style="list-style-type: none"> <li>• Identifying, containing and managing unexpected contamination in accordance with applicable regulatory requirements including EPA Publication 1828.2 and IWRG 702.</li> <li>• Notification of EPA and others who may be impacted by this contamination in accordance with the EP Act and the EP Regulations.</li> </ul> <p><b>Handling, stockpiling and transport</b></p>	



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Conducting all spoil handling and transport for offsite disposal or relocation within the Project boundary in accordance with the EP Regulations, EPA Publication 1828 and EPA IWRG 702, including completing any applicable Waste Tracking records (or Declaration of Use), ensuring transporters are registered with the EPA and that the offsite disposal site is to a Lawful Place.</li> <li>• Managing construction works which can lead to runoff of contaminated and uncontaminated soil from stockpiles and excavations into nearby waterways, in accordance with SW1 and SW4.</li> <li>• Regularly monitoring weather conditions and planning works accordingly to avoid or minimise risk of harm to sensitive receptors from works during adverse weather (i.e. runoff from rainfall) as far as reasonably practicable.</li> <li>• Implementing personal protective equipment and standard hygiene practices when handling contaminated spoil.</li> <li>• Separating stockpiles of trench spoil into contaminated and uncontaminated soil. As both of these waste types can adversely impact the environment (e.g. through runoff to waterways), all stockpiles must be managed in accordance with EPA Victoria Publication 1834 Civil construction, building and demolition guide and EPA Publication 1895 Managing Stockpiles, 2020.</li> <li>• Where it is necessary to excavate contaminated soils, stockpiling these separately, with containment and treatment measures appropriate to the type of contamination present. This must include.                      All stockpiles of potentially contaminated spoil must be appropriately secured, lined and bunded to prevent leaching                      All stockpiles of potentially contaminated spoil must be appropriately covered and bunded to limit rainwater ingress, dust generation and contact by fauna                      Stockpiling of contaminated soil must be kept to a minimum and removed to landfill or other use at the earliest opportunity</li> </ul>	





CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Handling and transport of contaminated spoil for off-site treatment/disposal in accordance with EP Regulations. Transport companies must be licensed by EPA Victoria to carry contaminated soil and Waste Tracker documentation must be completed.</li> <li>• Managing PFAS-impacted soil (if any) in accordance with the PFAS NEMP, and EPA guidance including EPA Publications 1669, 1836 and 1968.</li> <li>• Monitoring, recording and tracking spoil and other waste handling including but not limited to stockpile management, trucking and destination tracking, and sampling results.</li> </ul> <p><b>Reuse or Disposal</b></p> <ul style="list-style-type: none"> <li>• Assessing potentially contaminated spoil in accordance with NEPM ASC, NEMP v2.0 and EPA Publication 1828.2, IWRG 702 and other EPA guidance as appropriate.</li> <li>• Considering the waste management hierarchy which aims to reduce or eliminate wastes (to increase sustainability and reduce costs) the preference is to re-use spoil where practicable, with spoil that is unable to be reused to be disposed offsite as the last option.</li> <li>• Disposing drilling muds in accordance with EP Regulations and EPA guidelines, including Publication 1827 and 1968.</li> </ul>	



CONTAMINATION		
Ref.	Environmental controls	Project phase
C2	<p><b>Managing any unknown contamination</b></p> <p>Contamination that was not expected during construction may be identified by visual or olfactory observations, the presence of asbestos and other anthropogenic material.</p> <p>The responses must include, as a minimum:</p> <ul style="list-style-type: none"> <li>• Cease ground disturbance at the location of the unknown contamination and within the immediate vicinity.</li> <li>• Assess the contamination and identify appropriate management actions with reference to the management measures EMM C1 and GW3.</li> <li>• Following implementation of the identified management actions, recommence works at the location and continue to watch for signs of further contamination.</li> </ul>	Construction
C3	<p><b>Minimise risks of harm from disturbance of acid sulfate soil</b></p> <p>PASS may be present in saturated alluvium beneath and within close proximity to the creeks.</p> <p>Complete further acid sulfate soil assessment prior to dewatering at the Tame Street Drain and floodplain.</p> <p>The spoil management measures referenced in EMM C1 must include requirements and methods to minimise risks of harm from disturbance of acid sulfate soil as far as reasonably practicable, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Characterising acid sulfate soil and rock prior to excavation in accordance with EPA Publication 655.1 Acid sulfate soil and rock.</li> <li>• Developing appropriate stockpile areas including lining, covering and runoff collection to prevent release of acid to the environment.</li> <li>• Identifying suitable sites for re-use, management or disposal of acid sulfate soil.</li> <li>• Preventing oxidation that could lead to acid formation if practicable, through cover and scheduling practices, for example by minimising the length of time that acid sulfate</li> </ul>	Construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<p>soil is left in stockpiles as far as reasonably practicable, and/or the addition of neutralising compounds.</p> <p>Where PASS or AASS is identified, requirements and methods for managing soil must be in accordance with the Industrial Waste Management Policy (Waste Acid Sulfate Soils) (or any subsequently updated document issued by EPA), EPA Publication 1834 <i>Civil construction, building and demolition guide</i> and EPA Victoria Publication 655.1 Acid Sulfate Soil and Rock with consideration of the National Acid Sulfate Soils Guidance at <a href="https://www.waterquality.gov.au/issues/acid-sulfate-soils">https://www.waterquality.gov.au/issues/acid-sulfate-soils</a>).</p>	
C4	<p><b>Minimise risks from contaminated groundwater</b></p> <p>Develop and implement groundwater management measures in accordance with EMM GW3.</p>	Construction
C5	<p><b>Minimise risks from vapour and ground gas intrusion</b></p> <p>Relevant sections of the Project must consider vapours and gases associated with any construction that interfaces with landfill sites (within 500 metres of the boundary of the boundary of the waste) or contaminated areas. These include the sections of the alignment adjacent to the Bulla Landfill and Quarry (approx. KP 15 to KP 16).</p> <p>The spoil management measures referenced in EMM C1 must include requirements for assessment, monitoring and management of intrusive vapour, including potentially flammable or explosive conditions, in enclosed spaces within 500 metres of the Bulla Landfill and Quarry.</p> <p>The spoil management measures must address vapour risks associated with excavation of impacted soils, extraction of impacted groundwater, open excavations and stockpiles and gases.</p> <p>Specifically associated with the Bulla Landfill (KP 15-KP 16), this must include, where relevant:</p>	Construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Securing of the excavation and stockpile area from the public and livestock including signage warning of open excavations</li> <li>• Continuous monitoring of landfill gas conditions when any person is in the trench or during hot works or works that could potentially produce a spark within the trench.</li> <li>• Setting of trigger values that require action within areas being trenched and including any temporary structures within the vicinity of the landfill. These must be developed in accordance with EPA Victoria Publication 788 Best Practice Management: Siting, design, operation and rehabilitation of landfills (landfill BPEM) and relevant occupational health and safety regulations and compliance codes.</li> <li>• Contingencies to address any breaches of trigger values including temporary cessation of work until a reappraisal of risks is conducted, additional monitoring at a higher frequency, implementation of additional safety measures and or vapour extraction systems in response to the risk assessment.</li> </ul>	
C6	<p><b>Manage chemicals, fuels and hazardous materials</b></p> <ul style="list-style-type: none"> <li>• Minimise chemical and fuel storage on site and store hazardous materials and dangerous goods in accordance with the relevant guidelines and requirements.</li> <li>• No chemicals, fuels or hazardous materials can be stored within the Conservation Areas (refer to the ELL in Appendix E). Refuelling points must be located outside Conservation Areas where practical, or otherwise suitably bunded.</li> <li>• Comply with the Victorian WorkCover Authority and Australian Standard AS1940 Storage Handling of Flammable and Combustible Liquids and EPA Victoria publications 1834 Civil construction, building and demolition guide and Publication 1698: Liquid storage and handling guidelines – EPA Victoria.</li> <li>• Develop and implement management measures for dangerous substances, including:                             <ul style="list-style-type: none"> <li>- Creating and maintaining a dangerous goods register</li> </ul> </li> </ul>	Construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>- Disposing of any hazardous materials, including asbestos, in accordance with Industrial Waste Management Policies, regulations and relevant guidelines</li> <li>- Implementing requirements for the installation of bunds and precautions to reduce the risk of spills.</li> <li>• Develop and implement contingency and emergency response procedures to handle fuel and chemical spills, including availability of on-site hydrocarbon spill kits</li> <li>• Make spill kits available at all locations where machinery/plant are operating, refuelling points and fuel and chemical storage locations.</li> <li>• Limit the type and volume of liquid material (fuel, oil, lubricant) stored on-site for construction activities to only that which is required. Liquid material must not be stored within 50 metres of waterways.</li> </ul>	
C7	<p><b>Management of waste streams</b></p> <p>Implement the following measures to manage non-hazardous waste:</p> <ul style="list-style-type: none"> <li>• Manage wastes in accordance with the Part 6.4 of the EP Act and the EP Regulations. Undertake an assessment of potential wastes to be generated for the construction phase of the project that identifies waste elimination, reduction measures and opportunities for the re-use and recycle of construction waste.</li> <li>• Use appropriately designated/ designed facilities to handle the identified waste streams including necessary segregation and storage requirements. This must include dedicated and labelled on site disposal locations, which segregates wastes into streams for offsite disposal or recycling.</li> <li>• Locate waste facilities away from natural drainage systems and flood plains.</li> <li>• Priority waste (such as waste oils, oily water mixtures, oily rags and oil filters, etc) must be segregated, labelled and securely stored and transported to a facility authorised to receive these wastes (Lawful Place).</li> </ul>	Construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Classify and dispose of waste in accordance with the EPA Publication 1827.2 (Waste Classification Protocol), EP Regulations including by using a licensed waste contractor and completing Waste Tracker records for priority waste.</li> <li>• Carry out a toolbox meeting including specific awareness on chemical management/refuelling and differences between waste types to facilitate correct segregation, storage and disposal.</li> <li>• Sufficiently enclose putrescible wastes for odour control (e.g. use of suitable bins).</li> <li>• No priority waste shall be comingled with other waste streams.</li> <li>• Document and implement a detailed process for monitoring, recording and tracking waste handling.</li> </ul>	
C8	<p><b>Management of hydrostatic test water</b></p> <p>Implement measures for management of hydrostatic testing water including:</p> <ul style="list-style-type: none"> <li>• Manage hydrostatic test water in accordance with the Environmental Reference Standard - Part 5 Environmental values of waters.</li> <li>• Sample water to be used for hydrostatic testing to determine water quality prior to use.</li> <li>• Prior to hydrostatic testing, pre-clean the pipeline to remove weld debris, dust and surface scale.</li> <li>• Reuse water where practicable to minimise the number of discharge locations and conserve water.</li> <li>• Only discharge hydrostatic test water discharge where water designated for release into the environment is of a quality that is not a risk of impacting human health or the environment. Relevant landholder(s) must be consulted prior to any discharge of hydrostatic test water to land.</li> <li>• Any discharge of hydrostatic test water must not result in soil erosion or sedimentation of land or water. Sediment control devices to remove suspended solids such as geotextile fabric filters must be used.</li> </ul>	Construction



CONTAMINATION		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Direct discharge must not occur to watercourses or drains.</li> </ul>	
C9	<p><b>Management of drilling</b></p> <p>Implement measures for management of drilling to minimise the risk of contamination including:</p> <ul style="list-style-type: none"> <li>• Making spill kits or similar available to contain spills on land.</li> <li>• When HDD activities are in the vicinity of watercourses, ensure appropriate equipment (e.g. sediment curtains) is available to contain drilling fluids and prevent their migration downstream.</li> <li>• Disposing drilling fluids in accordance with EP regulations and Publications 1827 and 1968.</li> <li>• If HDD occurs through a potentially contaminated site, EPA Publications 1827.2 (Waste classification assessment protocol), 1828.2 (Waste disposal categories) and IWRG 702 must be followed for classification and offsite disposal, ensuring any waste consigned for offsite disposal is sent to a Lawful Place.</li> <li>• Selecting appropriate inert and non-toxic drilling fluids.</li> </ul>	Construction



F.2.6 Greenhouse gas

Table F.7 Environmental management measures (Greenhouse gas)

GREENHOUSE GAS		
Ref.	Environmental controls	Project phase
GG1	<p><b>Construction emissions</b></p> <p>Reduce greenhouse gas emissions during construction so far as reasonably practicable by:</p> <ul style="list-style-type: none"> <li>a Using low embodied energy materials where they are of comparable quality, utility, availability and cost</li> <li>b Using fuel efficient plant and equipment where practicable during construction</li> <li>c Using locally sourced materials, including those provided by suppliers, where they are of comparable quality, utility, availability and cost</li> <li>d Reducing the amount of vegetation removal along the pipeline alignment as far as reasonably practicable</li> <li>e Monitoring construction greenhouse gas emissions via assessment/monitoring processes</li> <li>f Mulching trees for recycling</li> <li>g Minimising as far as practicable the amount of fossil fuel-based explosives required during the construction phase.</li> </ul>	Construction





F.2.7 Ground movement

Table F.8 Environmental management measures (Ground movement)

GROUND MOVEMENT		
Ref.	Environmental controls	Project Phase
GM1	<p><b>Third party asset management</b></p> <p>Identify and prove all third party services prior to construction.</p> <p>Liaise with asset owners for any asset within the construction easement to confirm asset clearance and other mitigation, protection or contingency requirements, including possible settlement monitoring at the railway crossings.</p> <p>Design utility crossings in accordance with asset owner requirements and construct the crossing in accordance with the design and third party conditions.</p>	Design and Construction
GM2	<p><b>Design and construction to be informed by geotechnical and hydrogeological conditions</b></p> <p>Detailed design and construction must be informed by the geotechnical and hydrogeological investigations of ground and groundwater conditions including in relation to:</p> <ul style="list-style-type: none"> <li>• the soil and rock expected to be encountered during all excavations</li> <li>• the potential presence of reactive soils</li> <li>• the potential presence of sodic and dispersive soils</li> <li>• the potential locations and extent of groundwater drawdown</li> </ul> <p>Additional investigations must be undertaken if existing investigations are insufficient.</p>	Design and Construction



GROUND MOVEMENT		
Ref.	Environmental controls	Project Phase
GM3	<p><b>Management of trench stability: support and duration</b></p> <p>Carry out trench excavation works in accordance with the requirements of the Safe Work Australia Code of Practice: Excavation Work (2018) and WorkSafe Victoria Compliance Code: Excavation (2019).</p> <p>Where potentially unstable ground may compromise the stability of the trench, management measures are to be developed by a suitably qualified geotechnical engineer.</p> <p>In addition, the time that trenches and bell holes remain open will be minimised as far as reasonably practicable. As a general rule, trenches should not remain open for longer than 3 months and should comply with SafeWork Australia (2018). For some excavations (for example for main line valves, hydrostatic test sections and tie-in locations) this time period may be exceeded and trench wall support is to be provided in accordance with SafeWork Australia (2018).</p> <p>Should failure occur, contingency response actions may include, for example, methods for temporary shoring and the removal, replacement, and rehabilitation of the disturbed soil.</p>	Construction



GROUND MOVEMENT		
Ref.	Environmental controls	Project Phase
GM4	<p><b>Management of trench erosion, consolidation and swelling</b></p> <p>Implement measures to manage soil dispersion, erosion, consolidation and swelling risks including:</p> <ul style="list-style-type: none"> <li>• Implementation of erosion and sediment control measures in accordance with EPA 1834 guidelines (2020) and is to be informed by the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control, Appendix P – Land Based Pipeline Construction (2008). This includes the use of trench breakers installed at regular intervals along the trench excavation where necessary (for example, near to existing slopes and where shallow groundwater tables exist) to minimise ongoing erosion caused by altered water flow regimes as a result of trench construction.</li> <li>• Compaction of the trench backfill as per APA's performance requirement and contractor's construction requirements. Degree of compaction and design of backfill to take into account design load limits on the pipe and density and permeability of surrounding soil.</li> <li>• Routine inspection and monitoring of the construction area must be undertaken to identify any issues such as ongoing erosion, ground movement, slope creep or other adverse effects on land use. Management, monitoring and identification of issues may be in accordance with IECA Best Practice Erosion and Sediment Control (2008).</li> </ul> <p>Additional erosion control measures in proximity to waterways are contained in EMM SW4. Additional measures for rehabilitation and monitoring of trenched waterways are contained in EMM SW3.</p>	Construction and Operation



GROUND MOVEMENT		
Ref.	Environmental controls	Project Phase
GM5	<p><b>HDD trenchless bore management</b></p> <p>Use trenchless bore support (such as a suitable drilling mud or bentonite) to temporarily support the bore during the trenchless activities in accordance with the guidelines for horizontal directional drilling, microtunnelling and pipe jacking (ASTT, 2009).</p> <p>Prior to construction, undertake a detailed hydrofracture risk assessment where necessary to confirm that the risk of blow-out is low. Prepare and implement a volumetric drilling fluid tracking program with defined threshold levels for fluid loss, stop works and further investigation and restart criteria.</p> <p>Monitor and manage support fluid to effectively minimise ground deformations and risk of bore collapse in unstable ground to reduce the risk of damage to nearby sensitive receptors as well as the potential for frac-out.</p>	Construction
GM6	<p><b>Confirmation of ground risk</b></p> <p>For sites where there is insufficient or no geotechnical information, confirm the viability of proposed temporary works (i.e. choice of trenchless method) by completing additional geotechnical investigations. Additional investigations may include shallow surface geophysical methods, trial pitting or drilling as appropriate (subject to environmental or access constraints).</p> <p>Take into account any new geotechnical information and review measures for trenchless construction to minimise the risk of harm so far as reasonably practicable (for example excessive settlement, damage to assets). Relevant sites include Beatty's Road, Morefield Court, Sunbury Road, Oaklands Road, Donnybrook Road (West).</p> <p>Carry out further utility proving works where information is not currently available at the crossing location (including at the Donnybrook Road (West) crossing).</p>	Design and Construction



GM7	<p><b>Preparation and implementation of sodic and Dispersive soil management measures</b></p> <p>Develop and implement a Sodic and Dispersive Soils Management Plan (SDSMP). The SDSMP is to be prepared by one or more suitably qualified professionals with relevant expertise, including soil science and geotechnical expertise or CPESC, for acceptance by DEECA for inclusion in an EMP under the Pipelines Act prior to commencement of clear and grade works. The SDSMP must include:</p> <ul style="list-style-type: none"> <li>• A description of the existing site conditions, including:                     <ul style="list-style-type: none"> <li>- Review of completed soil investigations and site walkover by a suitably qualified soil scientist/geologist/CPESC</li> <li>- extent of sodic and dispersive soils based on topsoil and subsoil samples in the works area</li> <li>- land gradient</li> <li>- erosion risk mapping</li> <li>- the extent of any existing erosion, landslip or other land degradation</li> </ul> </li> <li>• Requirements for soil management practices (including fill) in areas identified as medium to high dispersion risk on the Environmental Line List, with consideration of anticipated sodic and dispersive soil exposure, including:                     <ul style="list-style-type: none"> <li>- Any treatment necessary to manage soil while works are undertaken;</li> <li>- The management, volume and location of any stockpiles (additional to requirements of existing EMMs);</li> <li>- Vehicle access and movement within the construction area (additional to requirements of existing EMMs);</li> <li>- The management of drainage and dewatering during all stages of construction;</li> <li>- Monitoring and reporting processes;</li> <li>- Rehabilitation of disturbed areas, including any treatment to manage the soil post-construction (additional to requirements of existing EMMs);</li> <li>- Post-construction monitoring and management requirements;</li> <li>- Any awareness and supervisions processes for construction contractors to ensure compliance with the SDSMP.</li> </ul> </li> </ul>	Construction
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GROUND MOVEMENT		
Ref.	Environmental controls	Project Phase
	<p>Management measures must be proportional to the level of risk identified by the additional site investigations and in general accordance with the guidelines contained within Best Practice Erosion and Sediment Control, Appendix P (IECA, 2008) where applicable.</p> <p>The Sodic and Dispersive Soils Management Plan is to be prepared in consultation with Melbourne Water, and to the satisfaction of DEECA.</p> <p>Application of EMM GM4 is also considered to assist in the management of dispersive soils.</p>	



F.2.8 Land use

**Table F.9 Environmental management measures (Land use)**

LAND USE		
Ref.	Environmental controls	Project phase
LU1	<p><b>Impacts to Precinct Structure Plans (PSPs) and growth areas</b></p> <p>Minimise impacts as far as reasonably practicable to PSPs and growth areas by providing for consistency with approved and PSPs that are yet to be approved. This must include:</p> <ul style="list-style-type: none"> <li>• Co-locating the alignment with other utility and transport infrastructure projects to avoid impacts on net developable land where practicable</li> <li>• Where the pipeline has not been provided for in an existing PSP: designing the pipeline in accordance with AS 2885 with consideration to current land use</li> <li>• Incorporating the proposed easement and notification area based on the Area of Consequence into any future PSPs along the alignment</li> <li>• Rehabilitating land within existing PSPs in accordance with EMM LU2</li> <li>• Providing for future uses along the pipeline (e.g. shared use paths) in accordance with the APA Site Planning and Landscape National Guidelines (APA 2020).</li> </ul>	Design and Construction
LU2	<p><b>Continuation of existing land uses</b></p> <p>Construct and operate the Project in accordance with EMM AQ1, AQ3, NV1, NV2, NV3, NV4, NV5 to minimise amenity impacts and support the continuation of existing land uses during construction and operation phases.</p> <p>Rehabilitate land in accordance with this CEMP and agreements with landowners.</p> <p>Continuation of agricultural land uses must be managed in accordance with EMM S2.</p> <p>Inform landowners and occupiers of the construction commencement, and details of the proposed construction programme, in accordance with the Project Consultation Plan.</p>	Construction and operation



LAND USE		
Ref.	Environmental controls	Project phase
LU3	<p><b>Impacts to land tenure and access</b></p> <p>Provide compensation for the reservation of the easement and acquisition of land for the Project in accordance with Pipelines Act 1985 and Land Acquisition and Compensation Act 1986.</p> <p>Consult relevant stakeholders in relation to construction access and operational activities in accordance with the Project Consultation Plan and Project EMMs S3 and S5.</p>	Construction and operation
LU4	<p><b>Interruptions to roads and railways</b></p> <p>Develop and implement Traffic Management Plans in accordance with EMM S3.</p> <p>Use trenchless construction methods to avoid disruptions to major roads and railway lines as far as reasonably practicable.</p>	Construction
LU5	<p>Consult with relevant landholders regarding property-specific measures to implement during construction and operations including:</p> <ul style="list-style-type: none"> <li>• Access across the construction area during construction</li> <li>• Stock management</li> <li>• Biosecurity.</li> </ul>	Design and construction
LU6	<p>Undertake all reasonable steps to enter into an agreement with each landholder on fair and reasonable terms. Agreements must include commitments to agreed measures to minimise the impact of the Project on landholder activities.</p>	Design and construction
LU7	<p>Compile and maintain a schedule of Landholder Agreements, documenting actions to be carried out on each property.</p>	Design and construction
LU8	<p>All third party services within the easement, including on farm infrastructure, must be identified and marked on the ground in advance of open trench construction activities.</p>	Design and construction





LAND USE		
Ref.	Environmental controls	Project phase
LU9	Manage interfaces with all identified third party services and water lines so that their operation can continue during pipeline construction, wherever reasonably practicable.	Construction
LU11	Progressively commence and complete reinstatement as soon as reasonably practicable post-construction.	Construction
LU12	Reprofile the construction area to original contours or to new, stable contours (where it is not reasonably practical to re-profile to original contour) in line with contractor construction specification.	Construction
LU13	Apply soil amelioration and fertiliser where required as determined by soil assessments and tailored to rehabilitation requirements in consultation with the landholder.	Construction
LU14	Compact the trench backfill as per APA's performance specification and contractor's construction specifications. Degree of compaction to take into account design load limits on the pipe whilst minimising changes to pre-construction groundwater conditions.	Construction
LU15	Implement compaction relief by ripping or scarifying areas of the construction area which have been compacted by construction activities. Particular attention must be given to areas subject to regular watering and high traffic volume.	Construction
LU16	Reinstate all access tracks, fences and gates post construction in consultation with landholders and any relevant third parties.	Construction
LU17	Install permanent access gates post construction, where required at fence intersections and for access to MLV compounds which will be completely fenced.	Construction



LAND USE		
Ref.	Environmental controls	Project phase
LU18	<p>Where seeding is adopted to facilitate prompt revegetation and soil stabilisation, consider the following principles:</p> <ul style="list-style-type: none"> <li>• Formulate seed mixtures with consideration of the vegetation composition of the areas adjacent to the construction area and in consultation with the relevant landholder.</li> <li>• Sterile seed stock (cover crop) may be used to provide short term surface stability.</li> <li>• Disperse seed evenly dispersed over the disturbed area.</li> <li>• Seeding to take place as soon as reasonably practicable after reinstatement of the soil profile.</li> <li>• A suitable fertilizer may be applied depending on soil conditions and any landholder requirements.</li> </ul>	Construction
LU19	<p>Monitor the condition of the construction area and other disturbed areas post construction with remedial measures undertaken, as required, with the aim that all disturbed areas are re-profiled to a stable landform consistent with original contours and drainage lines, or proposed new stable contours, and vegetated with a self-sustaining, non-pest species groundcover.</p>	Construction and operation
LU20	<p>Implement reasonable and practicable measures to avoid impacts to landholder national vendor declarations and other requirements under applicable livestock production assurance programs due to the use of herbicides, pesticides and other chemicals during construction and operations. Such measures must be informed by consultation with Meat and Livestock Australia.</p>	Construction and operation



F.2.9 Landscape and visual

**Table F.10 Environmental management measures (landscape and visual)**

LANDSCAPE AND VISUAL		
Ref.	Environmental controls	Project Phase
LV1	Avoid removal of trees that provide screening to private property residences as far as reasonably practicable. Through detailed design and selection of construction methods identify and demarcate trees to be retained (within the construction area) prior to commencement of construction. Protect trees to be retained in accordance with AS-4970 Protection of trees on development sites.	Design and construction
LV2	Prior to construction, undertake an arborist report on trees that screen private residences from road reserves to be retained immediately bordering the construction area where trimming would be required. The arborist assessment must consider any potential impacts on trees from proposed construction activities and recommend tree protection measures to be adopted in accordance with AS-4970 Protection of trees on development sites.	Construction
LV3	Remove machinery, materials and temporary infrastructure from construction area as soon as it is no longer required. Keep construction laydown areas tidy and minimise dust in accordance with EMM AQ1.	Construction
LV4	Manage light generated during night construction activities such as HDD, in general accordance with the requirements in Australian Standard AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting. Design lighting to minimise off-site light spill as far as reasonably practicable.	Construction
LV5	Where trees and shrubs within the approved construction area are lost and affect public places or existing screening of private residences from road reserves, replace trees and shrubs where practicable and reasonably requested, subject to any necessary approvals being granted, in accordance with a planting and remediation plan prepared under LV7.	Construction



LANDSCAPE AND VISUAL		
Ref.	Environmental controls	Project Phase
LV6	Introduce trees and shrubs to screen the mainline valve from roads and residences, if requested by affected landholders, does is not a threat to pipeline integrity and subject to any necessary approvals being granted in accordance with a planting and remediation plan prepared under LV7.	Construction
LV7	<p>Develop and implement a planting and remediation plan (applicable to screening trees directly impacted) where planting of trees and shrubs are proposed, in consultation with any affected landowners where requested.</p> <p>Planting will be undertaken in accordance with relevant bushfire management overlays for the area and with consideration of APA requirements for restricted uses within an easement and asset protection zones.</p> <p>The plan must outline a monitoring and defects period for the planting and remediation.</p> <p>The plan must be reviewed by the responsible authority (if planting on Crown land) and affected landholder.</p>	Construction and Operation



F.2.10 Safety

**Table F.11 Environmental management measures (Safety)**

SAFETY		
Ref.	Environmental controls	Project Phase
SA1	<p><b>Pipeline, MLV and compressor works safety standards</b></p> <p>Design, construct and operate the pipeline, MLV and compressor works in accordance with AS/NZS 2885, including:</p> <ul style="list-style-type: none"> <li>• Completion of identification/assessment of threats and mitigating strategies as part of detailed design</li> <li>• Maintenance and inspections of the pipeline in accordance with APA procedures and AS/NZS 2885.</li> </ul> <p>Maintain and inspect the MLVs and the Wollert compressor station at a frequency in accordance with APA's monitoring regime and procedures. This must include vegetation management, valve and compressor operation and corrective maintenance.</p>	Design and construction
SA3	<p><b>Fire protection</b></p> <p>Develop and implement a Health and Safety Management Plan that requires:</p> <ul style="list-style-type: none"> <li>• Provision of active fire protection and suppression for liquid fires in the turbine enclosure</li> <li>• Storage of diesel in storage tanks in accordance with AS 1940:2017 and provision of foam for firefighting purposes at diesel stations and implementation of routine monitoring to manage the risk of any fire events.</li> </ul> <p>Manage diesel in accordance with the HSEMS, including the creation of Emergency Response Plan(s).</p>	Construction
SA4	<p><b>Emergency response plans</b></p> <p>Develop and implement emergency response plans, such as for spills, for both the construction and operations phases of the Project.</p>	Construction & Operation



SAFETY		
Ref.	Environmental controls	Project Phase
SA5	<p><b>Bushfire Management Plan</b></p> <p>Review and update the existing APA Bushfire Management Plan to consider the new infrastructure introduced by the WORM Project in consultation with relevant stakeholders including the Country Fire Authority and Fire Rescue Victoria.</p>	Construction & Operation



SAFETY		
Ref.	Environmental controls	Project Phase
SA6	<p><b>Traffic Management Plan</b></p> <p>Develop and implement a Traffic Management Plan(s) (TMP). The TMP(s) should be prepared with input from the relevant Responsible Authority and be approved by the relevant road authorities and include provision for:</p> <ul style="list-style-type: none"> <li>• Consultation with the Department of Transport as early as practicable to identify works that have the potential for a high impact on the road network and measures to manage such impacts.</li> <li>• .</li> <li>• Monitoring on-going traffic impacts associated with the proposed pipeline.</li> <li>• Determination of preferred travel route options based on minimising the impact on local roads and having preference for B-double approved roads.</li> <li>• Inspection of existing road conditions.</li> <li>• Assessment of relevant existing intersection ability to facilitate large truck turning movements.</li> <li>• Management of roads at the time when boring activities are to occur underneath.</li> <li>• Traffic measures required as a result of partial road closures to limit travel disruptions</li> <li>• Temporary traffic control measures required at access track entrances, as required</li> <li>• Notification to local stakeholders of timing of traffic impacts, particularly regarding traffic impacts through private land</li> <li>• Restoration of road surface post-pipeline construction, as necessary. This includes pre- and post-construction surveys of roads likely to be impacted by construction activity</li> <li>• Measures to manage dust/dirt impacts as a result of construction traffic.</li> <li>• Management of waste to/from the construction area as a result of construction activities.</li> <li>• Measures to avoid public transport impacts (if any).</li> </ul>	Construction



F.2.11 Social

**Table F.12 Environmental management measures (Social)**

SOCIAL		
Ref.	Environmental controls	Project Phase
S1	<p><b>Reduce community disruption:</b></p> <p>Construct the Project in accordance with EMMs AQ1, AQ3, B7, LV1, LV2, LV5, NV1, NV2, NV3, NV4, NV5, NV6, and NV7 to minimise risks of harm from noise, vibration, air quality, and landscape and visual amenity impacts to residents directly adjacent to the alignment, community facilities and recreation areas as far as reasonably practicable.</p>	Construction
S2	<p><b>Minimise property impacts:</b></p> <p>Minimise the risk of property damage due to construction of the Project by carrying out construction activities in accordance with EMM LU3 to LU20.</p>	Construction
S3	<p><b>Community and residential access and connectivity:</b></p> <p>The following must be implemented to manage potential impacts to local access roads during construction:</p> <ul style="list-style-type: none"> <li>• Approved Traffic Management Plans (TMPs) to mitigate risks to workers and the public arising from the movement of construction vehicles on public roads and at site access points</li> <li>• Stakeholder and communications arrangements in accordance with the Project Consultation Plan (Refer to EMM S6)</li> <li>• Measures to prevent impacts to emergency services access.</li> </ul>	Pre-construction





SOCIAL		
Ref.	Environmental controls	Project Phase
S4	<p><b>Land access:</b></p> <p>Prior to any works commencing on a property, develop agreements with the landowners and occupiers regarding the use of existing roads or tracks, the selection of new access routes and any property-specific measures to implement during construction and operation, such as</p> <ul style="list-style-type: none"> <li>• Access across the construction area</li> <li>• Relocation / duplication of facilities and infrastructure.</li> </ul> <p>No access by APA or construction contractors is to be gained to properties outside of the construction area boundary unless undertaking survey or property management activities, either with prior agreement of the land owner or otherwise exercising statutory powers to undertake the works.</p> <p>Inform landowners and occupiers of the construction commencement, and details of the proposed construction program, in accordance with the Project Consultation Plan (EMM S6).</p>	Pre-construction
S5	<p>Source workers, supplies and services during construction from the regional study area as far as reasonably practicable.</p> <p>Support regional employment and purchasing by requiring the main construction contractor to detail mechanisms to provide for regional employment and purchasing during the tender phase. The adequacy of this plan must be a consideration in the selection of the preferred construction contractor. Once engaged, contractors must be required to report on performance against set criteria.</p>	Construction



SOCIAL		
Ref.	Environmental controls	Project Phase
S6	<p>Develop and implement an internal Project Consultation Plan to facilitate ongoing consultation with relevant stakeholders throughout the Project's planning and construction.</p> <p>The Plan must include:</p> <ul style="list-style-type: none"> <li>• The approach to communicating and engaging with the community and potentially affected stakeholders in relation to:                             <ul style="list-style-type: none"> <li>– The likely timing and nature of the Project's construction activities and potential impacts.</li> <li>– Changes to transport conditions.</li> </ul> </li> <li>• The mechanisms and timing for communicating Project updates for all stakeholders through multiple channels (website, newsletters, local media)</li> <li>• Liaison with municipal Councils, where appropriate, to gain insight into the most appropriate consultation methods for specific communities or community groups.</li> <li>• The approach for communicating and engaging with vulnerable groups, including community groups, culturally and linguistically diverse groups, and residents who do not speak English. The approach should outline circumstances under which translation services will be provided.</li> <li>• Measures to evaluate the effectiveness of the communication and engagement under the Plan.</li> <li>• Arrangements for receipt and management of feedback and complaints, including timeframes for responding to complaints.</li> </ul>	Construction



F.2.12 Surface water

**Table F.13 Environmental management measures (Surface water)**

WATER		
Ref.	Environmental controls	Project Phase
SW1	<p><b>Managing runoff from adjacent construction areas, discharge from dewatering activities and spills / leaks</b></p> <p>Implement measures to minimise risks of harm so far as reasonably practicable on downstream environments due to construction activities and potential runoff. This is to be in accordance with EPA Publication 1834: Civil construction, building and demolition guidance, Publication 1894: Manage soil disturbance, Publication 1895: Manage stockpiles, Publication 1896: Manage how you work within or adjacent to waterways and Publication 1897: Manage truck and other vehicle movement, including:</p> <ul style="list-style-type: none"> <li>• Where practicable, construct all trenched crossings of ephemeral watercourses during no or low flow conditions and reinstated as soon as reasonably practicable.</li> <li>• Form discrete stockpile segments (i.e. rather than a continuous row of stockpile materials) to prevent causing water to pond on the upstream side.</li> <li>• Where drainage lines intersect the construction area, place flow diversion measures upstream of soil stockpiles.</li> <li>• Direct surface water runoff from external catchments through regular gaps in soil stockpiles where erosion and sediment controls are installed to allow runoff to pass over the construction area at a controlled location without causing erosion.</li> <li>• Install flow diversion measures, such as berms, sediment fences and temporary trench breakers, on steep slopes to disperse surface water runoff without causing erosion.</li> <li>• Implement erosion and sediment controls for the construction area with reference to International Erosion Control Association Best Practice Erosion and Sediment Control, Appendix P – Land Based Pipeline Construction (IECA, 2008).</li> </ul>	Construction



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Monitor weather forecasts to manage the pipeline works with the intent of avoiding open trench works at each individual waterway crossing when high rainfall events are expected.</li> <li>• Manage non- contaminated groundwater and surface water run-off that enters the open trenches and bell holes in accordance with EPA Publication 1834 Civil Construction, building and demolition guide (November 2020).</li> <li>• Where surface water run-off and rainfall collect in trenches and is to be dewatered, test turbidity, salinity and pH prior to discharge to land. Treat water if parameters exceed the objectives in the Environment Reference Standard. Treatment options include, but are not limited to filtration, and the addition of flocculants or pH buffers as appropriate. Discharge to land (i.e. grass filtration) must not occur within 100 metres of watercourses. Where the water cannot be treated to the required standard it is to be removed from construction area for disposal in accordance with EPA Publication 1828.2.</li> <li>• Potentially contaminated trench water is to be assessed and managed in accordance with NEPM ASC, NEMP v2.0, EPA Publication 1828.2 and other EPA guidance as appropriate.</li> <li>• Manage any spills and / or leaks during construction in accordance with EMM C6.</li> </ul> <p>Implement measures to minimise impacts due to discharge from Trenchless construction sites including, where reasonably practicable:</p> <ul style="list-style-type: none"> <li>• Install a combination of earth bunds and drainage channels around the upper edges of trenchless drilling sites to divert runoff away from the site and prevent it from mixing with material used during drilling operations</li> <li>• Install sump pits at the bottom of trenchless drilling sites to capture any runoff from drilling compound and construct earth bunds around the sump pits to prevent spillage from entering the waterway</li> <li>• Construct bunds around all facilities that are involved in the HDD activities including around slurry operations and pumping of drilling mud</li> </ul>	



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>Manage trenchless bores and drilling fluids in accordance with EMM GM5 and EMM D1. The contents of sump pits are to be removed with residual drilling fluids for disposal in accordance with EMM C9.</li> </ul>	
SW2	<p><b>Waterway and floodplain function (construction)</b></p> <p>Implement measures to minimise impacts so far as reasonably practicable to the function of waterways and floodplains during construction and allow flow to be conveyed across the construction area in accordance with EPA Publication 1896: Manage how you work within or adjacent to waterways, including:</p> <ul style="list-style-type: none"> <li>Form discrete stockpile segments (i.e. rather than a continuous row of stockpile materials) to prevent causing water to pond on the upstream side.</li> <li>Provide regular gaps in stockpiles to allow flood water to pass through.</li> <li>Avoid stockpiling material near waterways. Material must be located away from the top of banks so that there is no restriction to the flow conveyance area.</li> <li>To maintain the waterway and floodplain function, the Project must compact soil, scarify and re-profile the land to original contours as far as reasonably practicable.</li> <li>Provisions for diverting unexpected flow on all waterways where the crossing will be constructed by open cut trench. The measures may scaled down for minor waterways, with a minimum requirement to have resources on site to respond in changed weather conditions.</li> </ul>	Construction
SW3	<p><b>Site Rehabilitation measures for disturbance caused by open cut trench construction</b></p> <p>Implement site rehabilitation measures to minimise the impacts to waterway health as far as reasonably practicable and in accordance with EPA Publication 1896: Manage how you work within or adjacent to waterways including:</p> <ul style="list-style-type: none"> <li>Compact soil, scarify and re-profile the land to original contours to maintain the waterway and floodplain function</li> </ul>	Construction



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Restrict any operational works to the easement only, with landholder requirements determined prior to commencement of works.</li> <li>• Restore waterway bed and banks as soon as reasonably practicable after pipe installation and backfilling works</li> <li>• Restore banks by grading (nominally 1:3 grade. and revegetation), and smoothly transition to the undisturbed banks (refer to APA standard drawing no. 530-DWG-L-5008).</li> <li>• Restore waterway bed to preconstruction profile, and smoothly transition to the upstream and downstream undisturbed bed condition</li> <li>• Provide temporary protection such as geofabric or erosion matting on bed and banks to prevent erosion until vegetation has established</li> <li>• Carry out routine inspections (e.g. minimum every six months plus potentially following any significant flood event) to monitor effectiveness of civil rehabilitation works (earthworks and rock beaching works) during the first 24 months post-construction. Where monitoring identifies defects or deficiency in civil rehabilitation works, appropriate rectification measures will need to be implemented.</li> <li>• Establishment of vegetation cover within the first three months post construction. Following establishment of vegetation/ground cover, routine maintenance to be undertaken for a period of 24 months to monitor and manage successful reinstatement</li> <li>• Include site specific application of rock beaching protection as part of site rehabilitation where required</li> </ul>	
SW4	<p><b>Control measures for open cut trenching construction and watercourse management</b></p> <p>Trenched crossings of “higher-risk waterways (as identified in the ELL) are, where practicable, to be carried out during the summer and autumn months (i.e. from December through to May), particularly for Kalkallo Retarding Basin and Merri Creek.</p> <p>Where open cut trenching is required for a watercourse implement the following mitigation measures to minimise risks of harm to waterway health as far as reasonably practicable and</p>	Construction



WATER		
Ref.	Environmental controls	Project Phase
	<p>in accordance with EPA Publication 1896: Manage how you work within or adjacent to waterways:</p> <ul style="list-style-type: none"> <li>• Minimum depth: 2m below bed invert level (or as otherwise agree to with MWC for designated waterways).</li> <li>• Trench exposure: Limit the longitudinal extent of trench exposure to the extent reasonably practicable (i.e. to what could be backfilled within 24 hours)</li> <li>• Construction duration: limit time for trench exposure and construction duration between bank to bank works to the extent reasonably practicable (e.g. pre-prepare the pipe works)</li> <li>• Backfilling works: Backfilling in accordance with appropriate MWC standard drawings for pipe trenching, backfilling and compaction requirements</li> <li>• Contingency works: make provisions for diverting unexpected flow. Have available backfill and stockpile of rock beaching to protect exposed trench in lieu of a late change or unexpected forecast weather event.</li> <li>• Implement erosion and sediment controls (ESC) for the site with reference to International Erosion Control Association Best Practice Erosion and Sediment Control, Appendix P - Land Based Pipeline Construction (IECA, 2008).</li> <li>• Construct trenched crossings of ephemeral watercourses during no or low flow conditions where reasonably practicable.</li> <li>• Monitor weather forecasts to minimise the likelihood of having open trenches at the waterway when high rainfall events are expected.</li> <li>• Remove all obstructions to flow after the pipe has been laid and backfilled.</li> <li>• Reinstate the exposed trench within the watercourse and riparian zones as soon as reasonably practicable following the installation of the pipeline.</li> </ul>	



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Design waterway reinstatement to avoid future erosion over the pipeline alignment and to provide bank stability at the crossing location as the same or better than prior to construction.</li> <li>• Provide temporary erosion and sediment control as needed to prevent erosion and scour until the vegetation has established throughout the post-construction period (e.g. up to 12 months depending on establishment of vegetation).</li> <li>• Undertake visual monitoring downstream of the trench during flow events if the trench has not been reinstated.</li> <li>• Provide temporary flow diversions if there is permanent flow in the waterway. Flow diversion measures may include pumps to ensure that water can be moved from one side of trench to the other, screened inlets (or other appropriate equipment) to minimise the entrapment of aquatic fauna and outlet structures that are designed to avoid scouring of the channel. Measures must be in accordance with International Erosion Control Association Best Practice Erosion and Sediment Control, Appendix P – Land Based Pipeline Construction (IECA, 2008).</li> <li>• Restore waterway bed and banks as soon as reasonably practicable after pipe installation and backfilling works, including revegetation using geofabric to provide temporary protection until vegetation is re-established.</li> <li>• For steeper gullies, use rock beaching for additional stabilisation where practicable.</li> <li>• Carry out bed and bank restoration, temporary protection and monitoring of establishment works as part of the site rehabilitation.</li> <li>• Prepare a construction management plan for Merri Creek works including site works methodology, construction timeframes and durations, and water quality monitoring frequency and parameters for APA approval.</li> </ul> <p>Groundwater levels and flows will be managed in accordance with EMM GW1.</p>	
SW5	<b>Implement a Monitoring Program</b>	Construction





WATER		
Ref.	Environmental controls	Project Phase
	<p>Develop and implement a monitoring program for Merri Creek, if these crossings are open cut, to determine whether there are any construction related impacts.</p> <p>The monitoring program must adopt a control/impact approach with water quality monitored at a suitable distance of 20 - 200 metres from the Project Area both upstream and downstream of the works to establish background conditions. The monitoring program must be developed and undertaken in accordance with EPA Publication 1896: Manage how you work within or adjacent to waterways and ANZG Australia Guidelines for Water Quality Monitoring and Reporting (2018).</p> <p>Water quality monitoring must occur immediately prior to construction to establish background conditions upstream and downstream of the Project area. Monitoring must then occur on a continual basis during construction (e.g. at appropriate intervals) with comparisons of upstream and downstream conditions used to infer if there is a downstream impact such as increased turbidity.</p> <p>Monitor the benthic macroinvertebrate communities to assess pre-construction condition, detect and evaluate potential impacts from sedimentation and/or flow changes during construction and operation, implement better controls and initiate rehabilitation measures as needed.</p> <p>This biodiversity monitoring must occur at the two sites upstream and downstream of the Project Area prior to construction to establish background conditions. Biodiversity and water quality monitoring must be continued for a period of 24 months post-construction, to identify any potential effects from the construction and rehabilitation work, including secondary and lagged effects.</p> <p>Should the monitoring determine adverse residual impacts on surface water and biodiversity values, contingency measures must be developed and implemented. These remedial actions may include:</p> <ul style="list-style-type: none"> <li>Identifying, repairing and redesign failed management measures aimed at reducing impacts due to erosion and sedimentation.</li> </ul>	



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>Further stabilise banks and beds at waterway crossing to reduce erosion potential and sedimentation.</li> <li>Inspect pumping of water from coffer dams and / or other areas if water quality exceeds background conditions and implement further management measures.</li> </ul>	
SW9	<p><b>Develop and implement a Flood Management and Response Plan (FMRP) for Kalkallo Creek and Merri Creek</b></p> <p>Develop and implement a Flood Management and Response Plan during construction for Kalkallo Creek and Merri Creek. The FMRP must include but not limited to:</p> <ul style="list-style-type: none"> <li>Measures to manage flood risk during construction including end of day requirements to limit flood risk exposure overnight</li> <li>Limiting footprint of disturbance of works within waterways and floodplains to limit flood risk exposure at any point in time to the extent reasonably practicable</li> <li>Placement of construction equipment and stockpile materials above threshold flood levels.</li> <li>Flood warning communication protocols and emergency response procedures.</li> </ul> <p>As part of the detailed design, flood modelling of the existing conditions for the waterways must be undertaken and verified by MWC to inform the FMRP and to understand the flood response within the floodplain for the range of possible design events.</p> <p>The plan could identify restrictions on construction activities within threshold flood extents, as well as contingency planning if a flood were to occur.</p> <p>A specific FMRP must be prepared for Kalkallo Retarding Basin and the various waterways and drainage lines that enter the Kalkallo Retarding Basin to consider the flood response within the basin and incoming waterways during construction.</p> <p>FMRPs may be incorporated in to the SSEMP for a waterway crossing (see SW11).</p>	Construction
SW10	<p><b>Pipeline design for waterway crossings within a Drainage Services Scheme (DSS)</b></p>	



WATER		
Ref.	Environmental controls	Project Phase
	To minimise potential impacts to the pipeline and to account for ongoing future development within the DSS, develop the pipeline detailed design and alignment in consultation with MWC to inform the design requirements at waterway crossings that are within a DSS. This is relevant for the crossings at Kalkallo Creek and the Tributary to Merri Creek.	
SW11	<p><b>Develop and implement Site-Specific Environmental Management Plans for all designated waterways</b></p> <p>Prior to commencement of construction at the location, the Contractor must develop a Site-Specific Environmental Management Plan (SSEMP) for each of the watercourses:</p> <ul style="list-style-type: none"> <li>• Jacksons Creek and tributaries</li> <li>• Merri Creek</li> <li>• Deep Creek</li> <li>• One combined SSEMP for all other designated waterways (including Tame Street Drain, Kalkallo Creek and tributaries, and tributaries to Merri Creek, Darebin Creek and Curl Sedge Creek)</li> </ul> <p>The SSEMPs must be submitted to MWC for review prior to construction commencing at the location.</p> <p>The SSEMPs must address the following:</p> <ul style="list-style-type: none"> <li>• Sediment and silt management controls</li> <li>• Vegetation management techniques</li> <li>• Access tracks</li> <li>• Spoil stockpiling</li> <li>• Machinery/Plant locations</li> </ul>	Pre-construction and construction



WATER		
Ref.	Environmental controls	Project Phase
	<ul style="list-style-type: none"> <li>• Exclusion fencing around native vegetation/habitat</li> <li>• Flow management work method statement</li> <li>• Sodic soil and ground movement management measures (as applicable to each watercourse)</li> <li>• Planting / remediation management measures</li> </ul>	



F.2.13 Groundwater

Table F.14 Environmental management measures (Groundwater)

GROUNDWATER		
Ref.	Environmental controls	Project phase
GW1	<p><b>Minimising dewatering rates and impact to groundwater levels and flows</b></p> <p>Design and construct the Project to minimise changes in groundwater levels, flows and quality so far as reasonably practicable, including by implementing the following measures during construction to minimise risks of harm to groundwater:</p> <ul style="list-style-type: none"> <li>• Where excavations require dewatering, adopt a construction method that minimises the dewatering period. The anticipated period is expected to be approximately four weeks at the creek crossings</li> <li>• Install trench breakers adjacent to watercourses, wetlands and steep slopes as shown in the standard drawing (530-DWG-L7003) to minimise trench inflows.</li> </ul>	Construction
GW2	<p><b>Minimise impact to groundwater bore users</b></p> <p>Although it is not anticipated that any neighbouring bore will be impacted by dewatering, it is possible there is unregistered bores nearby, or a slightly greater than predicted distance of drawdown influence may occur. If this is the case, and any neighbouring bores are considered likely to be impacted by the Project within 60 metres of an area of dewatering (including the registered bore at approximately KP 47.6), then the location, condition and functionality of the bore must be visually confirmed and make-good arrangements must be agreed in consultation with affected landholders, if required.</p>	Construction
GW3	<p><b>Minimise risk of harm associated with contaminated groundwater and disposal</b></p> <p>Complete additional groundwater quality analysis in the existing bore network to confirm baseline groundwater level and quality conditions prior to the construction phase to assess any existing contamination or quality issues where groundwater is likely to be intercepted during construction and dewatering is expected, and also allow suitable disposal options to be assessed and planned.</p>	Construction



GROUNDWATER		
Ref.	Environmental controls	Project phase
	<p>Manage extracted groundwater to minimise risks of harm so far as reasonably practicable, including by implementing the following measures:</p> <ul style="list-style-type: none"> <li>• Dispose groundwater in accordance with the ERS, EPA Publication 1834 Civil construction building and demolition guide and other EPA Guidelines and all relevant approvals processes with relevant authorities.</li> <li>• Groundwater from areas that have been identified as contaminated must not be discharged to the environment (land, waterways). If required, engage with the local water authority to develop a trade waste agreement for sewer discharge. This agreement would specify the levels of contamination to allow for sewer discharge.</li> <li>• Contaminated groundwater must either be treated onsite, depending on contaminant encountered (this may require approval from the EPA Victoria) or disposed offsite to an EPA Victoria licensed facility. Alternatively, a construction approach may be adopted where contaminated groundwater is left in-situ (i.e. not abstracted or disturbed).</li> <li>• If non-aqueous phase liquid is present in soil or groundwater within the authorised project construction footprint and exposed during construction activities, it must be, so far as reasonably practicable: (a) cleaned up; and (b) if the source of the NAPL is located on the land, the source of the NAPL must be removed or controlled (refer to EMM C1).</li> <li>• Manage dewatering of excavated trenches/bell holes to minimise sedimentation, including the use of sediment control devices to remove suspended solids and dissipate flow. Sediment control devices must be listed in site specific environmental management plans. Minimise the duration that trench sections and bell holes are open, and divert surface water runoff away from the excavations, to reduce the potential for poor quality runoff impacting groundwater.</li> </ul>	
GW4	<p><b>Managing unexpected groundwater encountered during construction</b></p> <p>The following actions are required before any dewatering occurs when unexpected groundwater is encountered during construction:</p>	Construction



GROUNDWATER		
Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>• Review contamination risks in relation to the unexpected groundwater and undertake testing to determine appropriate management and disposal options.</li> <li>• Undertake assessments for the presence of actual acid sulfate soils and potential acid sulfate soils in formations where such soils could potentially occur, including the Kalkallo retarding basin and other areas with Quaternary floodplain and swamp deposits.</li> <li>• Identify any groundwater bores that are likely to be affected by dewatering and liaise with the affected bore owners to make appropriate arrangements as required in EMM GW2.</li> <li>• Assess and manage ground movement risks related to construction dewatering in accordance with EMMs GM2 and GM3.</li> <li>• Review the construction methodology and change if appropriate.</li> <li>• Undertake other measures as necessary to meet the requirements of other relevant EMMs, including the groundwater EMMs GW1 and GW3 and the contamination EMMs C2, C3 and C4.</li> </ul>	



GROUNDWATER		
Ref.	Environmental controls	Project phase
GW4	<p><b>Manage chemicals, fuels and hazardous materials</b></p> <p>Manage chemicals, fuels and hazardous materials as detailed in EMM C6.</p>	Construction and operation
GW5	<p><b>Drilling Fluids Requirements</b></p> <p>Manage drilling fluids in accordance with EMM C9.</p>	Construction
GW6	<p><b>Implement Spoil Management Procedures</b></p> <p>Implement spoil management procedures as detailed in EMM C1.</p>	Construction
GW7	<p><b>Design Requirements</b></p> <p>The pipeline design shall consider where groundwater interaction is expected to occur and incorporate trench breakers or plugs, as well as suitable backfill compaction, to prevent preferential flow paths so far as reasonably practicable.</p> <p>Implement trench compaction procedures as detailed in GM4 including the design of the backfill to take into account the density and permeability of the surrounding soil.</p>	Design, construction and operation





F.2.14 Fuels & chemicals

**Table F.15 Performance standards (Fuels & chemicals)**

FUELS & CHEMICALS		
Ref.	Environmental controls	Project phase
F1	<p>All fuels and chemicals must be stored and handled to comply with the following:</p> <ul style="list-style-type: none"> <li>• Australian Standard AS1940:2004: The storage and handling of flammable and combustible materials</li> <li>• EPA Publication 1698: Liquid Storage and Handling Guidelines</li> <li>• Victorian Worksafe Codes of Practice</li> <li>• Manufacturer's instructions and</li> <li>• Relevant safety data sheets.</li> </ul>	Construction
F2	Safety data sheets must be available for reference for all fuels and chemicals at the storage location.	Construction
F3	The volume of liquid material (fuel, oil, lubricant) required on-site for construction activities is to be limited to only that which is required.	Construction
F4	All liquid material must be stored within containment facilities (e.g. bunded areas, leak proof trays) at a designated area within the construction area.	Construction
F5	Where flammable or combustible chemicals are required to be stored on-site, fire-fighting equipment proportionate to the risk of the materials stored must be available for the duration of the material storage.	Construction
F6	Prestart vehicle and equipment inspections must be undertaken to check for oil, lubricant or fuel leaks and general wear and tear of hoses. Vehicles and equipment will be maintained and serviced in accordance with the service schedule.	Construction



F7	Spill kits must be available at all work sites, refuelling points and fuel and chemicals storage locations.	Construction
F8	Should a spill/release occur the Contingency Plan for Chemical/Fuel Spill Response must be followed (refer to Section 9).	Construction

F.2.15 Waste

**Table F.16 Performance standards (Waste)**

WASTE		
Ref.	Environmental controls	Project Phase
W1	Waste management must comply with the EPA waste hierarchy - waste avoidance, waste re-use, waste recycling, and waste disposal.	Construction
W2	The construction area must be kept free of litter and waste and refuse containers or skip bins must be located at designated storage areas. Skip bins are to be covered to prevent access by fauna and pest species.	Construction
W3	General waste to be removed from the construction area by crews. Surplus or waste materials to be stockpiled at laydown areas for regular collection.	Construction
W4	Separate, labelled general and regulated waste bins must be available. An EPA licensed contractor must collect regulated waste for recycling or licensed disposal.	Construction
W5	Spill kits are to be available at regulated waste storage areas	Construction
W6	Disposal of any waste contaminated soil must be undertaken in accordance with EPA Publications IWRG 821: Waste Transport Certificates and IWRG 822: Waste Codes and must require the use of EPA-registered trucks for transport of the soil to appropriately licensed landfills. Contaminated soil must be remediated or disposed of at an EPA approved facility in accordance with EPA waste disposal guidelines.	Construction



W7	Toilets at the construction depot must be a self-bunded portable blocks. Clearing of portable toilet facilities, including waste collection and disposal, must be undertaken by a licensed waste contractor.	Construction
W8	Appropriate receptacles must be provided and used for cigarette butt disposal.	Construction
W9	Mats/plastic ground covers will be used to capture coating overspray.	Construction

**F.2.16 Horizontal directional drilling**

**Table F.17 Performance standards (HDD and Thrust Boring)**

Performance standard – horizontal directional drilling		
<b>Objective</b>	To plan for and manage environmental impacts associated with the proposed HDD and thrust boring activities.	
<b>Target</b>	No loss of material or contamination of land or water outside of the designated work areas.	
<b>Application</b>	During the installation of HDD and thrust bored crossings.	
Ref.	Environmental controls	Project phase
D1	For major HDDs, the drill profile design, the work method statement and the proposed volumetric drilling fluid tracking program is to be approved by APA prior to the commencement of HDD activities.  The work method statement is to be prepared to the satisfaction of the Regulator.	Pre-construction
D2	An Inspection and Test Plan must be developed to ensure quality control during the HDD activities.	Pre-construction
D3	Earth bunds and drainage channels must be placed around the upper edges of drill sites and work areas, to divert natural run-off around and away from the site.	Construction (HDD Activities)



Performance standard – horizontal directional drilling		
D4	Appropriate measures must be installed for HDD works to manage drilling fluid and bunding requirements.	Construction (HDD Activities)
D5	Any runoff in sump pits used during drilling activities must be managed daily.	Construction (HDD Activities)
D6	Appropriate spill response and clean up equipment will be onsite during HDD activities. If a spill/release occurs, the Contingency Plan for HDD mud lease or fuel and or chemical release will be implemented.	Construction (HDD Activities)
D7	Drilling fluids are to comprise only benign materials without the potential to cause contamination to land and water.	Construction (HDD Activities)
D8	All facilities utilised in the surface mud handling (mixing, cleaning and pumping) during the HDD activities must be bunded.	Construction (HDD Activities)



F.2.17 Hot works

**Table F.18 Performance standards (hot works)**

Performance standard – hot works		
<b>Objective</b>	To plan for and manage environmental impacts associated with hot works during construction of the pipeline.	
<b>Target</b>	No hot works impacts to land or property. No non-conformance with these performance standards.	
<b>Application</b>	During pipeline construction.	
Ref.	Environmental controls	Project phase
HW1	Undertake hot works in areas cleared of combustible materials (e.g. fuel, chemicals, wood, paper, plastic or rubbish). Combustible materials that cannot be cleared from the area shall be covered, screened or otherwise made safe.	Construction (hot works)
HW2	Comply with Fire Rescue Victoria (FRV)/Country Fire Authority (CFA) restrictions during the CFA declared Fire Danger Period when carrying out hot works: <ul style="list-style-type: none"> <li>• a fire-resistant shield or guard is in place to stop sparks, hot metal or slag</li> <li>• an area at least 1.5 metres from the operation is clear of flammable material or wetted down sufficiently to prevent the spread of fire</li> <li>• a hose connected to a reticulated water supply or water spray knapsack containing at least 9 litres of water</li> <li>• all cut-offs and hot materials from the operation are placed in fire-proof containers</li> <li>• a person is in attendance at all times while the fire is alight (hot work in progress) and has the capacity and means to extinguish the fire</li> <li>• the fire is completely extinguished before the person leaves.</li> </ul>	Construction (hot works)
HW3	Obtain and comply with FRV/CFA Section 40 permit on Total Fire Ban Days if carrying out hot works	Construction (hot works)



Performance standard – hot works		
HW4	Fire extinguishers are to be carried by all mobile plant.	

F.2.18 Hydrostatic testing

Table F.19 Performance standards (hydrostatic testing)

Performance standard – hydrostatic testing		
<b>Objective</b>	To plan for and manage environmental impacts associated with the cleaning and hydrotesting of the new pipeline section.	
<b>Target</b>	No adverse impacts to land or water from cleaning, hydrostatic testing and venting or flaring. No non-conformance with this performance standard or complaint from landowners.	
<b>Application</b>	The duration of the cleaning, hydrotesting and venting or flaring activities.	
Ref.	Environmental controls	Project phase
H1	Prior to hydrostatic testing, the pipeline must be pre-cleaned to remove weld debris, dust and surface scale. Produced waste water must be captured in a temporary pit or bunded area and removed by an EPA licenced waste contractor.	Cleaning/Flushing
H2	All hydrotesting operations must conform to <i>AS2885.5: Gas and liquid petroleum - Field pressure testing</i> .	Hydrotesting
H3	Hydrostatic test water discharge must only be undertaken where water designated for release into the environment is of a quality that is within relevant statutory water quality guidelines.	Hydrotesting
H4	Where hydrostatic testing is not consistent with any of Environmental Controls H3 to H5, hydrostatic test water must be removed by an EPA licenced waste contractor.	Hydrotesting



Performance standard – hydrostatic testing		
H5	Any discharge of hydrotest water must not result in soil erosion or sedimentation of land or water. Sediment control devices to remove suspended solids such as geotextile fabric filters must be used. No direct discharge must occur to watercourses or drains.	Hydrotesting
H6	Pumps and compressors used for hydrotesting and pigging activities must be muffled to reduce noise.	Hydrotesting, cleaning and drying
H7	All venting and flaring activities must be supervised by APA	Venting and flaring

### F.2.19 Reinstatement

**Table F.20 Performance standards (reinstatement)**

Performance standard – reinstatement		
<b>Objective</b>	To allow for the return of the land to its previous land use and capacity.	
<b>Target</b>	Landowner/occupier satisfaction with completion of works and timely rectification of any defects.	
<b>Application</b>	The duration of the proposed reinstatement works and the identified rehabilitation monitoring period.	
Ref.	Environmental controls	Project phase
R1	Project activities must be progressed sequentially, with clean-up, restoration and rehabilitation as soon as practical after installation activities are complete unless weather conditions prevent this.	Reinstatement



Performance standard – reinstatement		
R2	If weather conditions prevent the prompt reseeded of the disturbed areas within the construction area, controls must be put in place, monitored and maintained to manage erosion and sedimentation until such time reseeded can occur.	Reinstatement
R3	The construction area must be rehabilitated to pre-existing contours with natural drainage lines restored and protected if required. Where required, seeding, soil conditioning of disturbed areas must be undertaken as part of the reinstatement activities.	Reinstatement
R4	Soil inversion must be avoided during respreading of topsoil	Reinstatement
R5	Soil surfaces that have been compacted due to construction activities, such as those subject to traffic or storage areas within the construction area, must be ripped to allow the topsoil to bind with the subsoil and increase water filtration.	Reinstatement
R6	Targeted control of weeds must be undertaken by a qualified pest plant control contractor to ensure that the construction area does not have an increased density and distribution of noxious and agricultural weeds relative to adjacent areas	Reinstatement
R7	Following completion of reinstatement, agreement must be sought from landowners (and occupiers, managers or government agencies as applicable) of the satisfaction of the reinstatement work as required by conditions of the Pipelines Licence.	Post-construction
R8	Following the completion of reinstatement activities, the construction area must be monitored for a period of 12-24 months to ensure the land is stable and consistent with adjacent areas. Any defects from construction must be rectified during this time and following this period any residual environmental issues must be addressed through the APA's Operating Environmental Management Plan.	Post-Construction
R9	Reinstatement will be undertaken in accordance with land owner agreements required under the Pipeline Licence	Post-Construction



## Appendix G Unexpected Discovery Of Historic Heritage

While it is not anticipated that significant archaeological artefacts will be recovered from the construction area, the following artefact management process is proposed in the case of unexpected finds.

Significant historic archaeological artefacts greater than 75 years old are protected under the Victorian Heritage Act 2017. While provisions are made during the investigation, assessment and management of historic sites for identifying, recording and curating historic artefacts as part of the Heritage Victoria consent process, in some instances, historic artefacts may be found in location and at times when no archaeological supervision is present. In these cases this unexpected finds protocol will be followed.

The following provides a step by step process for determining when and how this unexpected finds protocol will be enacted.

### Induction and information

In the first instance, the foreman of works on site or other responsible Project Manager will have taken part in an induction as part of the consent to Damage conditions. This induction will demonstrate the nature of archaeological materials that can be found and the procedures to follow. Copies of the Heritage Victoria Consent, the supporting documentation that describes the heritage values of the place, and this protocol will be kept on site and be made familiar to workers on site.

### Procedure

If historic heritage material is found, works must stop in the relevant area and the following process be followed:

- Discovery
  - If suspected historic heritage is identified, all activity must stop within the extent of the finds and advice be sought from the archaeologist or Heritage Advisor.
  - The historic heritage must be left in place, and protected from harm or damage.
- Notification
  - The person in charge of the activity must notify the Project Manager of the identification of historic heritage immediately.
  - The Project Manager must notify a heritage advisor of the find immediately.
  - The Archaeologist or Heritage Advisor will determine if notification to Heritage Victoria is necessary based on the following assessment.
- Assessment
  - A site assessment will determine if the artefacts are:
    - In-situ and part of a significant deposit based on determining their age, extent, formation and other factors as appropriate
    - The location, extent, depth and other site formation data will be recorded VHI assessment

- If the artefacts or deposit constitute a new previously unrecorded historic archaeological place, then a new VHI site record will be prepared and submitted to Heritage Victoria. If works cannot proceed without harming the archaeological deposit and it is not considered to be covered by the existing Consent, a new Consent will be sought from Heritage Victoria.
- Impact mitigation or salvage
  - An appropriate impact mitigation or salvage strategy will be determined by the archaeologist or Heritage Advisor in consultation with a Heritage Victoria staff. This will occur under the provisions of the existing or further Consent as appropriate.
- Curation and further analysis
  - The treatment of salvaged historic heritage must be in accordance with a curation strategy developed by a heritage consultant in consultation with HV.



## Appendix H Construction Consultation Plan

notifications

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# CONSTRUCTION CONSULTATION PLAN

## Western Outer Ring Main Project

<b>Project No</b>		18035			
<b>Document No</b>		18035-PL-HSE-0004 Appendix H			
<b>Rev</b>	<b>Date</b>	<b>Status</b>	<b>Originated/ Custodian</b>	<b>Checked</b>	<b>Approved</b>
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			Communications & Engagement Consultant	Land Access Lead	Approvals Lead

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# 1. INTRODUCTION

APA VTS Australia (Operations) Pty Limited, a subsidiary of the APA Group (APA) will construct and operate the Western Outer Ring Main (the Project), a 500mm diameter gas transmission pipeline between Plumpton and Wollert that will connect the eastern and western sections of the Victorian Transmission System (VTS). The Project also includes construction of additional compression and regulation capacity at APA's existing Wollert Compressor Station Site as part of the Project.

A licence to construct the Project was issued under Victoria's *Pipelines Act 2005* (the Pipelines Act) on 5 May 2022, following the Victorian Minister for Planning's Assessment of the environmental effects of the Project, as required by the Victorian *Environment Effects Act 1978* (the EE Act).

Construction at the Wollert Compressor Station is expected to commence in August 2022, followed by the start of pipeline construction in September 2022. Construction will finish in mid-2023, at which time the pipeline will be commissioned into operation.

## 1.1 About this plan

This Construction Consultation Plan fulfils the requirements outlined in S.48 of the Pipelines Regulations 2017 (Pipelines Regulations).

It outlines how communications, engagement and consultation with directly affected stakeholders and the community will be conducted during Project mobilisation and construction. This includes how APA will communicate its approach to protecting the environment in delivering and operating the Project. This Plan is informed by

- The Australian Pipelines and Gas Association (APGA) Stakeholder Engagement Guidelines (2015)
- The former Department of Primary Industry's Guidelines for the preparation of pipeline consultation plans – Pipelines Act 2005
- The International Association for Public Participation Australasia (IAP2's) Public Participation Spectrum (2014) and
- The Victorian Auditor-General's Office Auditing in the Public Participation in Government Decision-making – Better practice guide (2015).

Each of these guidance documents aims to promote best practice and positive relationships between pipeline companies and landowners, occupiers and other stakeholders, and ensure relevant regulatory requirements are met.

All activities associated with the implementation of this Construction Consultation Plan will comply with the relevant statutory requirements and APA standards. When conflict exists between applicable documents, the following order of preference will apply, in decreasing order of precedence

- Acts of law or other legislation
- Government licenses and permits and
- APA Standards.

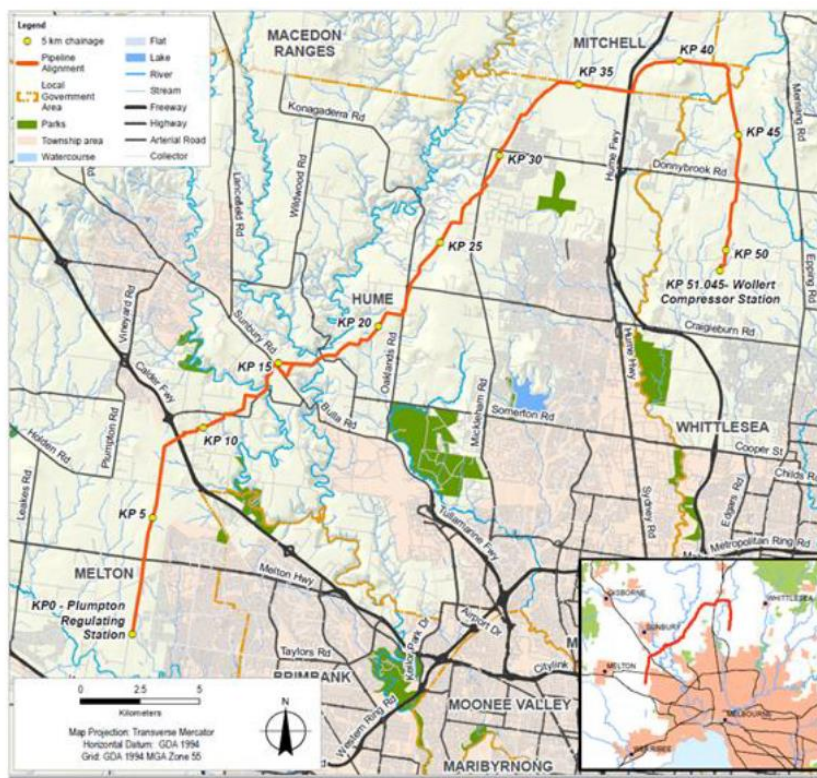
Where APA requirements are more stringent, they will take precedence. If you are reading a hard copy of this document, please consider it uncontrolled.

## 2. PROJECT OVERVIEW

The Western Outer Ring Main will be constructed as a 500mm diameter, high-pressure gas transmission pipeline between APA’s existing Plumpton Regulating Station and Wollert Compressor Station, to provide an additional connection between the eastern and western pipeline networks of the Victorian Transmission System (VTS).

The pipeline will occupy an easement of 10-15m width and be buried for its entire length to a minimum depth of 750mm. The Project will also include upgrades to APA’s existing Wollert Compressor Station Site, including the construction of additional compression capacity and a regulating station.

**Figure 2-1: Western Outer Ring Main**



APA is the proponent of the Project. APA is Australia’s largest natural gas infrastructure business, owning and/or operating around \$22 billion of energy assets. Its gas transmission pipelines span every state and territory in mainland Australia, delivering approximately half of the nation’s gas usage. Further information on APA operations and activities is available on the APA website: <https://www.apa.com.au/>

### 2.1 Victoria’s gas network

The Australian Energy Market Operator (AEMO) forecasts, monitors and manages gas systems across Victoria and Australia, based on supply and demand requirements.

In 2020<sup>1</sup>, AEMO identified risks of a natural gas supply shortfall in Victoria in the winter months from 2024 onwards, due to supply constraint factors rather than changes in demand. These include network capacity constraints preventing adequate transfer and storage rates over summer to meet winter peak demand.

1 AEMO (2020), Victoria Gas Planning Report Update, page 6.

This Project will ease those network constraints by increasing transfer and storage capacity in the Victorian Transmission System (VTS), which moves gas around Victoria. The VTS has three main branches

- The Longford Dandenong Pipeline (LDP) which lies between Dandenong in Melbourne's south east and South Eastern Victoria
- The Victorian Northern Interconnect (VNI) which lies between Wollert in Melbourne's north and the NSW border and
- The South West Pipeline (SWP) which lies between Brooklyn in Melbourne's west and South Western Victoria.

The LDP and the VNI are connected by the high-pressure Outer Ring Main (Pakenham to Wollert Gas Pipeline). There is no equivalent high-pressure ring main between the VNI and SWP, or the LDP and SWP. Gas can only be delivered between these pipelines through the lower pressure Melbourne pipeline network.

This limits the amount of gas that can be moved across Victoria, creating significant storage and capacity limitations in the VTS.

## 2.2 Project benefits

The Project will improve Victoria's gas transmission and storage capacity. It will

- carry higher volumes of gas than Melbourne's lower-pressure pipeline network allows, so Victoria's main gas storage facility at Port Campbell can be refilled more quickly and to higher levels during the lower-demand summer period, and supply more gas during peak winter periods.
- enable alternate supplies to be scheduled, including from interstate, in the event of loss of supply from any of the gas trains at Longford, Port Campbell or Pakenham.
- increase the whole system's storage capacity, reducing operational risks to Victorian gas supply and making it easier to match available supply to areas of demand.
- improve the network's ability to maintain gas contracts with the assurance that any surplus gas supply can be physically injected into the VTS, even in periods of low system demand.
- reduce fuel gas consumption and the compressor maintenance costs involved in managing flows between Longford and Port Campbell.



## 3. CONSULTATION IN CONSTRUCTION

APA values and respects its relationships with stakeholders and the communities in which APA is based. APA is committed to building and maintaining long term relationships with all stakeholders of the Project, as well as meeting applicable statutory requirements.

This Plan reflects these commitments, and applies the information, knowledge and understanding APA have gained through earlier phases of the Project. It also aligns with the commitments outlined in Chapter 8 of the Environmental Management Plan (EMP).

### 3.1 APA's approach

APA's approach to community engagement and consultation applies to all staff and contractors of the APA Group or those that represent APA in the community, including the construction Contractor (Contractor) appointed to deliver the WORM Project.

The approach is underpinned by the following values and commitment to consultation.

- APA values and respects its relationships with the communities in which its assets and operations exist and focuses on ensuring that it remains engaged with its stakeholders to inform and engage them in meaningful ways on the activities it undertakes.
- APA recognises that every community has insights, knowledge and experiences that can add value to, or improve the outcomes of, proposed activities it may take in a location. By tapping into these insights, knowledge and experiences, APA can improve its decision-making processes and develop better ongoing sustainable solutions.
- APA is committed to meeting all applicable regulatory and legislative requirements and working with relevant government and other organisations to fully communicate its approach and principles.
- APA is also committed to building and maintaining relationships with all its stakeholders and ensuring each stakeholder community is recognised and listened to as appropriate to its ongoing work or specific projects.

### 3.2 Principles

The key principles below will guide APA's implementation of this plan during construction of the Project.

- APA will ensure a proactive and responsive approach to Project consultation, communication and engagement with all key stakeholders and the community.
- APA will plan construction to minimise local impacts and clearly communicate the anticipated extent, timing and duration of upcoming disruptions ahead of time.
- APA will implement complaint management protocols and procedures.
- APA will provide prior notice of access to private property as agreed with landholders, and honour the reinstatement agreements APA have made once our construction works are complete.

### 3.3 Objectives

The primary objectives of the activities proposed under this Construction Consultation Plan are outlined below.

- Adopt and maintain a consistent consultation, engagement and communication approach during the Project.
- Communicate clearly and make relevant information about Project activities available to stakeholders and nearby communities, including Culturally and Linguistically Diverse (CALD) communities.
- Respond in a timely way to the relevant needs and expectations of directly affected stakeholders and community members.

### 3.4 Outcomes by construction stage

#### 3.4.1 Pre-construction

The desired consultation outcomes of the pre-construction stage are that

- Residents and landowners are aware of the project and its rationale, and of relevant construction activities and timelines.
- Residents and landowners understand ongoing communications protocols, including complaints processes.
- Landowners are aware of the Contractor, and both share a common understanding of all property- and landowner-specific requirements, including the pre-existing state of all buildings and assets.

#### 3.4.2 Construction

The desired consultation outcomes of the construction stage are that

- Landowners, community members and directly affected stakeholders are aware of upcoming construction activities, potential construction impacts and management measures.
- Project team members understand their obligations to the community and stakeholders, including to minimise disruption to nearby residents, businesses and other directly affected stakeholders.
- Highly impacted (including directly affected and vulnerable) landowners, residents and stakeholders are supported as far as reasonably practicable.
- Enquiries and complaints are managed in a timely way, as per APA's complaints protocol.

#### 3.4.3 Commissioning and reinstatement

The desired consultation outcomes of commissioning and reinstatement are that

- Landowners, community members and directly affected stakeholders are aware of upcoming commissioning and reinstatement activities, potential construction impacts and management measures.
- The broader community and stakeholders are aware of the end of Project activities and construction-related communications.

### 3.4.4 Handover

The desired consultation outcomes of the handover stage are that

- Landowners are satisfied with the condition of the land and the land can be returned to the landowners use.
- Any remaining disagreements between a landowner and APA are settled.

## 3.5 Tools and techniques

Tool / technique	Function
<b>Door knocking</b>	Direct, face-to-face contact with nearby owners and occupiers, generally only used to introduce the Project or provide advance notice of very high impact, out of hours activity
<b>Email and 1800 number</b>	Dedicated Project phone number and email address included on all Project communications, to enable community members and stakeholders to make enquiries or complaints
<b>Fact sheets and brochures</b>	Printed or online materials offering information about the Project, its benefits, key construction or operational methodologies, to build community and stakeholder understanding of the Project.
<b>Local advertising</b>	Locally targeted radio, digital or print advertising, would generally only be used to inform communities if there were to be significant upcoming impacts such as major road closures or transport disruptions
<b>Meetings and briefings</b>	Targeted meetings and briefings, used to inform and engage impacted landowners and key authorising stakeholders such as local councils, local MPs or utility and asset owners
<b>Newsletter</b>	Printed or emailed bulletin providing updates on Project progress and reportable environmental management outcomes delivered to subscribed community members, businesses and stakeholders and published on website
<b>Signage</b>	Signage fixed to Project fencing encouraging local community members and stakeholders to sign up for Project updates (including newsletters, see above) using QR codes
<b>Website</b>	Dedicated, regularly updated Project website used to ensure that current and archived Project information is continuously available to interested community members and stakeholders
<b>Works notifications</b>	Overview of upcoming works and impacts (including access changes) delivered to impacted and emailed to subscribed community members, businesses and stakeholders

## 3.6 Relevant stakeholders

This Construction Consultation Plan has been prepared to inform engagement and consultation with stakeholders and community members impacted by the Project. Stakeholders to be engaged as part of this Construction Consultation Plan are identified Table 1 – Stakeholder matrix.

**Table 1 – Stakeholder matrix**

(NB: in the table below, IAP2 refers to the stakeholder categorisation approach outlined in the International Association for Public Participation Australasia Public Participation Spectrum (2014))

Category	Examples	IAP2 category	Key interests	Potential communication tools	Desired outcomes
<b>Community</b>					
<b>Impacted owners and occupiers</b>	Owners and occupiers of directly impacted land	Consult	<ul style="list-style-type: none"> <li>Land access</li> <li>Asset protection</li> <li>Reinstatement</li> <li>Potential construction impacts and management</li> <li>Work activities and timelines</li> </ul>	Door knocking, email and 1800 number, fact sheets and brochures, local advertising, meetings and briefings, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Agreement on land access and property management, including timing</li> <li>Awareness of works, potential construction impacts and management</li> </ul>
<b>Neighbouring owners and occupiers</b>	Owners and occupiers of homes and land immediately adjacent to the construction area (especially in the Fraser Rise (Plumpton) and Olivine (Donnybrook) estates)	Inform	<ul style="list-style-type: none"> <li>Potential construction impacts and management</li> <li>Individual property and local access</li> <li>Work activities and timelines</li> </ul>	Door knocking, email and 1800 number, fact sheets and brochures, local advertising, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of Project, works, potential construction impacts and management</li> </ul>
<b>Local residents</b>	Communities close to works: Plumpton, Diggers Rest, Bulla, Oaklands Junction, Wildwood, Mickleham, Kalkallo, Donnybrook, Craigieburn, Wollert	Inform	<ul style="list-style-type: none"> <li>Potential construction impacts and management</li> <li>Local access</li> <li>Work activities and timelines</li> </ul>	Email and 1800 number, fact sheets and brochures, local advertising, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of Project, works, potential construction impacts and management</li> </ul>
<b>Local businesses</b>	Businesses close to works, including Hi-Quality Quarry Products Pty Ltd, Mickleham Musallah Muslims Sunni, Marnong Estate Winery and Homestead	Inform	<ul style="list-style-type: none"> <li>Potential construction impacts and management</li> <li>Individual property and local access</li> <li>Work activities and timelines</li> </ul>	Door knocking, email and 1800 number, fact sheets and brochures, local advertising, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of Project, potential construction impacts and management</li> </ul>

Category	Examples	IAP2 category	Key interests	Potential communication tools	Desired outcomes
<b>Community, environment and action groups</b>	Clubs, land care groups, Friends of Parks groups and other interest and action groups	Inform	<ul style="list-style-type: none"> <li>Local community and broader impacts</li> <li>Project rationale</li> <li>Land access</li> <li>Environmental protection and reinstatement</li> <li>Local traffic and access changes</li> </ul>	Email and 1800 number, fact sheets and brochures, local advertising, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of the Project and rationale, work activities and timelines, potential construction impacts and management measures</li> </ul>
<b>Government and regulators</b>					
<b>Elected representatives – all levels</b>	Relevant local, State and federal members of Parliament	Inform	<ul style="list-style-type: none"> <li>Local community impacts</li> <li>Project rationale</li> </ul>	Fact sheets and brochures, local advertising, meetings and briefings, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of the Project and rationale, work activities and timelines, potential construction impacts and management measures</li> </ul>
<b>Local councils</b>	Melton City Council, Hume City Council, Mitchell Shire Council and Whittlesea City Council (including councillors, specialists and high-level personnel such as CEOs)	Involve	<ul style="list-style-type: none"> <li>Local community impacts</li> <li>Project rationale</li> <li>Land access</li> <li>Asset protection and reinstatement</li> <li>Local traffic and access changes</li> </ul>	Fact sheets and brochures, local advertising, meetings and briefings, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Awareness of the Project and rationale, work activities and timelines, potential construction impacts and management measures</li> <li>Agreement on land access and asset management</li> <li>Approval of local access and traffic changes</li> </ul>
<b>Regulatory authorities (State)</b>	DELWP, Environment Protection Authority, First Peoples State Relations, Energy Safety Victoria, Heritage Victoria	Involve	<ul style="list-style-type: none"> <li>Regulatory approval and ongoing compliance</li> </ul>	Meetings and briefings, website	<ul style="list-style-type: none"> <li>Approval and continued confidence in compliance</li> </ul>
<b>Regulatory authorities (Commonwealth)</b>	Department of Water, Agriculture and the Environment	Consult	<ul style="list-style-type: none"> <li>Regulatory approval and ongoing compliance</li> </ul>	Meetings and briefings, website	<ul style="list-style-type: none"> <li>Continued confidence in compliance</li> </ul>

Category	Examples	IAP2 category	Key interests	Potential communication tools	Desired outcomes
<b>Interested parties</b>					
<b>Asset / infrastructure owners impacted by pipeline route</b>	Land owners e.g., Melbourne Water, Department of Transport, VicTrack	Consult	<ul style="list-style-type: none"> <li>Land access</li> <li>Asset protection and reinstatement</li> </ul>	Meetings and briefings, website	<ul style="list-style-type: none"> <li>Agreement on land access and asset management</li> </ul>
	Utility asset owners and retailers e.g., Telstra, Optus, NBN, Jemena, AusNet and water retailers (e.g. Greater Western Water, Yarra Valley Water)	Consult	<ul style="list-style-type: none"> <li>Asset access (including relocation), protection and reinstatement</li> </ul>	Meetings and briefings, website	<ul style="list-style-type: none"> <li>Agreement on land access and asset management</li> </ul>
<b>Registered Aboriginal Parties and Traditional Owner Groups</b>	Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, Boon Wurrung Foundation, Bunurong Land Council Aboriginal Corporation	Involve	<ul style="list-style-type: none"> <li>Recognition of traditional ownership and relationship</li> <li>Respect and protection of cultural heritage and assets</li> <li>Identifying employment and business opportunities for Aboriginal people and enterprises</li> </ul>	Meetings and briefings (including site walks), website	<ul style="list-style-type: none"> <li>Mutually collaborative and respectful relationship</li> <li>Confidence in cultural heritage management</li> <li>Creating jobs and business opportunities</li> </ul>
<b>Property developers</b>	Dahua Group, Dennis Family, Corporation, MAB, Merristock, Olivine by Mirvac, Peppercorn Hill (planned, community facilities), Potter George, Santieri Developments, Satterley, Stockland, Wolfdene	Inform	<ul style="list-style-type: none"> <li>Potential construction impacts and management</li> <li>Work activities and timelines</li> <li>Asset protection</li> <li>Reinstatement</li> </ul>	Email and 1800 number, fact sheets and brochures, local advertising, meetings and briefings, newsletter, signage, website, works notifications	<ul style="list-style-type: none"> <li>Understanding of upcoming impacts</li> <li>Agreement on asset issues</li> <li>Awareness of access needs and timing</li> </ul>

### 3.7 Impact mitigation

As outlined in the Performance Objectives and Standards listed in the EMP (see Appendix F of that document), APA and the Contractor will minimise construction impacts of on nearby community members in accordance with the EMP, including by

- minimising out of hours work (that is, other than between 7am and 6pm, Monday to Friday and 7am and 1pm on Saturdays)
- selected and siting equipment to minimise noise and light impact
- considering lower impact construction and transport methodologies
- encouraging all team members to be mindful of their surroundings, behave appropriately and communicate at a reasonable volume.

Where residual noise and vibration outside normal construction hours will unduly impact residents located near construction, APA will directly contact those residents affected to discuss the works, the anticipated impacts and specific mitigations.

### 3.8 Enquiry and complaint management

Communication channels – including the Project phone number and email address – will be broadly promoted, so that community members and stakeholders can contact the Project directly to enquire or complain about construction impacts.

APA's approach to managing stakeholder and community enquiries and complaints has been developed in line with the AS NZ 10002-2014 'Guidelines for complaint management in organisations'. Enquiries and complaints will be:

- recorded, acknowledged and responded to in a timely, accurate and respectful way
- regularly reviewed to improve future performance and minimise the causes of common complaints.

Stakeholders and community members with questions or concerns will be encouraged to contact the Project team using the channels promoted in all communication materials and on APA's website, including the Project's

- hotline – 1800 951 444
- email address – worm@apa.com.au
- postal address – PO Box 423, Flinders Lane VIC 8009

As part of the Project and site induction processes, relevant team members will be encouraged to refer stakeholders and community members to these channels if they are approached on site.

All enquiries and complaints will be recorded in the Project's contact register.

## 4. CONSULTATION IN OPERATION

APA is committed to building sound relationships with landowners and occupiers to enable the safe, ongoing operation of pipelines.

APA will maintain contact with landowners and occupiers:

- by mailing an information pack containing an information booklet, landowner brochure, and guidance for activities in proximity of the pipeline every year
- with a face-to-face visit every three years (at a minimum)
- ahead of any non-routine maintenance activities such as chemical vegetation and weed control, excavations, etc.

APA will also seek annual meetings with authorities (including local governments) that have jurisdiction over land in which APA assets are located.



## Appendix A Frequently asked questions

General	
What is the Project?	The Western Outer Ring Main will be constructed as a 500mm diameter, high-pressure gas transmission pipeline between APA's existing Plumpton Regulating Station and Wollert Compressor Station, to provide an additional connection between the eastern and western pipeline networks of the Victorian Transmission System (VTS). The pipeline will occupy an easement of 10-15m width and be buried for its entire length to a minimum depth of 750mm. Additional compression and a regulating station will also be constructed at the existing Wollert Compressor Station.
What is the rationale for the Project?	<p>The Project will improve Victoria's gas transmission and storage capacity. It will</p> <ul style="list-style-type: none"> <li>• carry higher volumes of gas than Melbourne's lower-pressure pipeline network allows, so Victoria's main gas storage facility at Port Campbell can be refilled more quickly and to higher levels during the lower-demand summer period, and supply more gas during peak winter periods.</li> <li>• enable alternate supplies to be scheduled, including from interstate, in the event of loss of supply from any of the gas trains at Longford, Port Campbell or Pakenham.</li> <li>• increase the whole system's storage capacity, reducing operational risks to Victorian gas supply and making it easier to match available supply to areas of demand.</li> <li>• improve the network's ability to maintain gas contracts with the assurance that any surplus gas supply can be physically injected into the system, even in periods of low system demand.</li> <li>• reduce fuel gas consumption and the compressor maintenance costs involved in managing flows between Longford and Port Campbell.</li> </ul>
Why was the route option selected?	<p>The preferred pipeline route traverses through land zoned as Green Wedge Zone, the proposed Outer Metropolitan Ring Road easement and other pipeline easements. Of the routes considered, the selected route:</p> <ol style="list-style-type: none"> <li>1. best aligned with the objectives of the Pipelines Act 2005</li> <li>2. uses existing easements and encumbrances on properties</li> <li>3. reflects consultation with affected landholders</li> <li>4. minimised co-location with the Ausnet 500kV easement</li> <li>5. minimised impacts to the environment generally, including the Mount Ridley Nature Conservation Reserve and adjoining the Melbourne Strategic Assessment conservation area and Merri Creek</li> </ol>

### Timing

How long will construction take?	Construction of the WORM is scheduled to begin in September 2022 with construction due to be completed in mid-2023.
What is the operation lifespan?	Once constructed, WORM will have a design life of around 60 years.
<b>Environment</b>	
What approvals has the Project obtained?	<p>Following an extensive consultation process that began in 2019, the Project has been:</p> <ul style="list-style-type: none"> <li>• issued a Pipeline Licence under the Pipelines Act 2005 (Vic)</li> <li>• assessed in detail by the Minister for Planning as part of a full Environmental Effects Statement (EES) process</li> <li>• assessed and given approval to proceed by the Commonwealth Department of Agriculture, Water and Environment (DAWE) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).</li> </ul>
How have environmental impacts been minimised?	Extensive consultation with land owners, occupiers and other stakeholders has informed the alignment and design for the Project. The final alignment has been selected in order to balance and minimise impacts on environmental values, cultural heritage, terrain, existing and proposed infrastructure corridors, watercourses, and land use. The Project's EES also details all required and committed mitigation measures across a range of environmental considerations.
Who is responsible for the impacts of constructing and operating WORM?	APA is accountable for any impacts arising from the construction or operation of WORM. APA's nominated construction Contractor will manage, minimise and mitigate construction impacts as far as possible while the Project is being delivered.
<b>Cultural Heritage</b>	
How is APA protecting Aboriginal cultural heritage?	APA has worked with Traditional Owners and Registered Aboriginal Parties (RAPs) to ensure that places of cultural significance were identified and either avoided or protected as far as reasonably practicable. It has also developed three Cultural Heritage Management Plans. The first, covering the areas west of Diggers Rest, was evaluated by First Peoples State Relations (formerly Aboriginal Victoria). It involves three Traditional Owner groups: Boon wurrung Land and Sea Aboriginal Corporation; Bunurong Land Council Aboriginal Corporation; and Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWWCHAC). The remaining two, covering the area from Diggers Rest to Wollert, were evaluated by WWWWCHAC, as the RAP for in and around Melbourne.
<b>Stakeholder Engagement</b>	
How have landowners or occupiers been engaged?	Since March 2019, APA has worked with landowners to identify and determine the pipeline alignment. At all points, APA has sought to reach agreement with landowners to establish access arrangements, compensation and acquisition terms and reinstatement expectations.
Can landowners and occupiers continue to use the pipeline easement once the Project is operating?	While some activities – such as earthworks, land levelling and the use of some machinery – will require APA's approval, APA encourage landowners and occupiers to use the easements for agriculture or horticulture, to aid the reinstatement process. APA does require that the easement continue to be kept clear so that it can be regularly visually inspected, to maintain its safe operation.



## Appendix I    APA Environment and Heritage Policy

# APA Group Policy

## Health, Safety, Environment and Heritage Policy

<b>Document type</b>	Policy
<b>Effective from</b>	1 January 2023
<b>Key contact</b>	Manager, HSEH Systems and Governance
<b>Document owner</b>	General Manager, HSEH
<b>Approved by</b>	Board
<b>Approved date</b>	15 December 2022
<b>Next review date</b>	15 October 2024
<b>Review cycles</b>	Every 2 years
<b>Legend</b>	<p><a href="#">Hyperlink</a> to either a location in this document or to an intranet site or website</p> <p><i>Reference to an APA document</i></p> <p><i>Glossary terms</i> (in the <a href="#">Glossary</a> in this document)</p> <p><i>Version control</i> (in the <a href="#">Version Control</a> in this document)</p> <p><u><a href="#">Document Guidance {to be removed when the document is created}</a></u></p>

## 1 Purpose

At APA Group (APA) we strive to be world class in health, safety, environment and heritage performance. Our foremost priorities are the health, safety and wellbeing of our workers and protection of the environment, heritage and the communities in which we operate.

APA is committed to managing and minimising our impact on the environment and heritage. We foster a culture of responsibility, leadership and awareness of our environment and heritage obligations and practices. We recognise our role as land stewards and aspire to not just respect the past but protect values for the future.

## 2 Scope

This policy applies to all APA employees as well as directors, contingent workers, contractors and visitors.

## 3 Strategic intent

We are committed to establishing a workplace culture that values and prioritises safety, respect and inclusion. We aspire for our workers to be free of illness and injury which includes the health, wellbeing and psychological safety such that the whole person is considered.

## 4 Objectives

The APA's Health, Safety Environment and Heritage (HSEH) Management System outlines accountabilities to implement this Policy and requires that we:

- Proactively identify hazards and aim to eliminate or implement effective controls to minimise the risk of injury, illness to people or unacceptable impacts on the environment and heritage as far as reasonably practicable;
- Provide systems of work that focus on guiding workers to manage and control critical risk;
- Provide a work environment and fit for purpose equipment that minimises the risk to workers so far as is reasonably practicable;
- Provide systems of work that empower workers to control the risks to themselves, others and the environment, whilst carrying out their duties;
- Meet or exceed applicable HSEH statutory, regulatory, legal and social obligations;
- Adopt and monitor measurable, fit for purpose objectives and targets around HSEH performance;
- Consult, engage and educate with our workers and communities on HSEH matters that affect them;
- Undertake early intervention and support the rehabilitation of workers in the event of injury or illness;
- Establish a learning culture through investigation of incidents to embed learnings and reduce the risk of repeated events;
- Ensure HSEH leadership is visible across the organisation to promote a strong culture;
- Undertake activities to continuously improve the effectiveness of the HSEH Management System and controls.

## 5 Key roles and responsibilities

For the purposes of this policy, the following specific responsibilities apply:

Position	Responsibility
<i>APA Board</i>	<ul style="list-style-type: none"> <li>Oversight of, and support for, APA's commitment to HSEH in accordance with this Policy</li> <li>Monitoring the performance of the HSEH Management System.</li> </ul>
<i>Safety and Sustainability Committee</i>	<ul style="list-style-type: none"> <li>Assisting the Board to carry out its role in overseeing APA's safety and sustainability matters, including APA's compliance with this Policy</li> </ul>
<i>CEO</i>	<ul style="list-style-type: none"> <li>Resourcing the implementation of the HSEH Management System to ensure these Policy commitments are being achieved.</li> </ul>
<i>Executive Leadership Team</i>	<ul style="list-style-type: none"> <li>Implementation of the HSEH Management System within their area of responsibility.</li> </ul>
<i>General Manager HSEH</i>	<ul style="list-style-type: none"> <li>Facilitating the implementation of the HSEH Management System, collating information and reporting on APA's performance.</li> </ul>
<i>APA Employees</i>	<ul style="list-style-type: none"> <li>Managing HSEH risks that impact themselves, others, the environment and communities in which they operate</li> <li>All workers have the authority to stop work if the HSEH risks cannot effectively be managed to an acceptable level.</li> </ul>

## 6 Glossary

Term	Definition
<i>HSEH Definitions</i>	Refer to <a href="#">HSEH Definitions</a>

## 7 Related Documents

- Health, Safety, Environment & Heritage Operating Mandate
- HSEH Management System

## 8 Version Control

Date	Changes
15/12/2022	Combination of Health Safety & Wellbeing Policy and Environment & Heritage Policy