

# Victorian Desalination Project



Utilities D&C Environmental Management Plan  
Attachment I3 – Site Reinstatement and Rehabilitation Sub Plan

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## D&C Utilities EMP Attachment I3 – Site Reinstatement and Rehabilitation Sub Plan

### Definition and Acronyms

The following Definitions and Acronyms are used in this document:

BJD	Bovine Johne's disease
Close-Out	The stage at which all D&C activities have been completed in the accordance with the State Project Documents
CWMS	Construction Work Method Statements
D&C	Design and Construct phase of the VDP
Defect liability period	The period set out in the Project Deed after Close-Out that requires a defect to be corrected. The period is 2 years or 12 months after a defect notice has been issued, whichever is the later date.
DSE	Department of Sustainability and Environment
DPI	Department of Primary Industries
EES	Environment Effects Statement
EIRP	Environmental Incident Response Plan
EMP	Environmental Management Plan
EPA	Victorian Environment Protection Authority
EP Act	<i>Environment Protection Act 1970</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EVC	Ecological Vegetation Class
HSE	Health, Safety and Environmental
JSEA	Job Safety and Environmental Analysis
O&M	Operation and Maintenance Phase of the VDP
OHS	Occupational Health and Safety
PCN	Potato Cyst Nematode
Performance Criteria	The Performance Criteria outline the overarching requirements based on the environmental objective for each Subject Area of Schedule A of Appendix S3 of the Project Scope and Project Requirements
Plant site	Victorian Desalination Project Wonthaggi Plant site
Pollution of Land as defined in s.45, <i>Environment Protection Act 1970</i> )	<p>A person shall not pollute land so that the condition of the land is so changed as to make or be reasonably expected to make the land or the produce of the land—</p> <p>(a) noxious or poisonous;</p> <p>(b) harmful or potentially harmful to the health or welfare of human beings;</p> <p>(c) poisonous, harmful or potentially harmful to animals, birds or wildlife;</p>



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	<p>(d) poisonous, harmful or potentially harmful to plants or vegetation;</p> <p>(e) obnoxious or unduly offensive to the senses of human beings; or</p> <p>(f) detrimental to any beneficial use made of the land.</p>
Project Area	Refers to all areas designated for the project as defined in the Project Deed including the plant area and utilities corridor
PR	Performance Requirements
PS&PR	Project Scope and Project Requirements
Rehabilitation Consultant	The Rehabilitation Consultant is an independent engagement to liaises between the D&C Contractor and landowners, or any other persons with proprietary interests, with respect to the rehabilitation requirements and verify that the project area, and any extra areas are adequately rehabilitated.
SEI	Site Environmental Inspection
SEP	Site Environmental Plans
State Project Documents	Refers to the Project Deed and other relevant project documents as defined in the Project Deed
The State	The Minister for Water of the State of Victoria for and on behalf of the Crown in the Right of the State of Victoria
TDJV	Thiess Degremont Joint Venture
Utilities corridor	Construction footprint of the Victoria Desalination Project transfer pipeline, power supply and associated utilities
VDP	Victorian Desalination Project
VDP Utilities	Collective term used to refer to the power supply, transfer pipeline and communications components of the VDP including compensations reaction stations, surge vessels and the booster pump station. Refer to Section 1.4 of the Utilities Area EMP for further description of these utilities.
WAP	Work Area Packages
WP	Work Packs



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### 1 Purpose and scope

This Site Reinstatement and Rehabilitation Sub Plan describes the measures required to manage reinstatement and rehabilitation following the design and construction (D&C) of the Victorian Desalination Project (VDP) transfer pipeline and power supply (collectively referred to as the utilities corridor).

This sub plan must be read in conjunction with the Environmental Management System (EMS) Manual, D&C Environment Management Plan (D&C EMP) and the D&C Utilities Area EMP. This sub plan forms an attachment to the D&C Utilities Area EMP and addresses requirements listed in the Environmental Compliance Tracker (TDV-0-EV-RP-0001-01), including licence conditions, Performance Requirements (PRs), Performance Criteria (PC) and other obligations which may influence site reinstatement and rehabilitation.

Specific management measures from this and other environmental sub plans have been incorporated into Work Area Packages (WAP) and Work Packs (WP) which include Construction Work Method Statements (CWMS), Site Environmental Plans (SEP) and Job Safety and Environmental Analysis (JSEA's) where applicable.

The following sub-plans will be implemented in conjunction with this plan:

- ~ Waterways and Wetlands Sub Plan
- ~ Water Quality and Erosion Management Sub Plan
- ~ Soil Management Sub Plan.

The Project Deed specifies that all work relating to site rehabilitation is subject to a defect liability period of two years after the date of Close-Out, or 12 months after a defect notice has been issued (whichever is the later date). Responsibilities for managing and maintaining the utilities corridor during the defect liability period will be transferred to the Operations and Maintenance (O&M) phase of the project.

### 2 Objectives and Targets

The objective of this sub plan is to ensure appropriate management measure and controls are in place to minimise impacts to native vegetation during construction and the utilities corridor is restored to pre-construction land quality and uses to ensure project objectives, targets and obligations, including PRs and associated criteria, are met.

Table 1 outlines the relevant objectives and targets to be achieved during the D&C phase of the VDP. Numbered entries are applicable PRs taken from Schedule A of Appendix S3 of the Project Deed.

**Table 1: Environmental objectives, targets and performance requirements**

Issue	Objective/Performance Criteria	Target/Performance Requirements
Site rehabilitation	<p><b>Restore preconstruction land quality and uses.</b></p> <p>All disturbed land progressively reinstated:</p> <ul style="list-style-type: none"> <li>• In the case of the</li> </ul>	<p>Progressively and prior to its disturbance, conduct pre-construction surveys of the land within 50 metres of the Project Area to be disturbed. Provide to the State a rehabilitation plan developed in consultation with each private landowner to address as applicable:</p>

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Issue	Objective/Performance Criteria	Target/Performance Requirements
	<p>Desalination Plant, to the standards agreed with the State <b>(PR#21136) D, C.</b></p> <ul style="list-style-type: none"> <li>• In the case of all other private land directly affected by the Project Activities in accordance with the rehabilitation plan <b>(PR#21136) D, C.</b></li> <li>• In the case of public land, as agreed with the public and manager <b>(PR#21136) D, C.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Site protection and site preparation <b>(PR#21138) D, C.</b></li> <li>• Planting design including plant densities relative to EVC benchmarks (subject to easement clearance requirements) <b>(PR#21138) D.</b></li> <li>• Source of planting stock <b>(PR#21138) D.</b></li> <li>• Post-planting maintenance. <b>(PR#21138) D.</b></li> <li>• Protection of re-seeded and revegetated areas <b>(PR#21138) D, C.</b></li> <li>• The timing of rehabilitation activities to ensure that it is appropriate to seasonal conditions as far as practicable <b>(PR#21138) D, C.</b></li> </ul> <p>Comply with Native Vegetation, Revegetation Planting Standards, DSE (2006) <b>(PR#21141) D, C.</b></p> <p>Identify areas where there is a risk of subsidence, and develop and implement construction approaches to mitigate the risk. Monitor and rectify any defect. <b>(PR#21142) D, C.</b></p> <p>Ensure that no Waste of any kind other than clean fill soil is placed in any trench or included in earthworks <b>(PR#21143) C.</b></p> <p>Re-instate the soil profile to pre-existing conditions <b>(PR#21144) D, C.</b></p> <p>Avoid or minimise settlement of backfill along the Transfer Pipeline and Electricity Land. Ensure that layering of sands, clays and topsoil is reinstated to ensure regeneration of existing pasture and vegetation. <b>(PR#21145) C.</b></p> <p>Revegetate, in accordance with Native Vegetation Management Framework and not inconsistently with landholder uses <b>(PR#21146) D, C.</b></p> <p>Restore any pre-existing infrastructure (including tracks, fences, dams, irrigation lines and the like) unless incompatible with obligations under the Deed or the terms of an acquired easement <b>(PR#21147) D, C.</b></p>



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D = Design phase requirement; C= Construct phase requirement

All PRs from Project Deed Schedule A of Appendix S3 are contained within the D&C Utilities Area EMP Attachment G – Environmental Obligations Register. The Environmental Compliance Tracker tracks conformance with these PRs and is updated regularly by the TDJV Environmental Manager, Environmental Manager and Area Environmental Managers.

### **3 Legal, regulatory, licence, permits and approval requirements**

This sub plan has been developed in accordance with the following legislation:

- ~ *Catchment and Land Protection Act 1994*
- ~ *Environment Protection Act 1970*
- ~ *Planning and Environment Act 1987*

The following guidelines have been used to determine the level of management necessary to meet legislative requirements. These are:

- ~ Native Vegetation Framework – A Framework for Action, (2002), DSE
- ~ Native Vegetation - Revegetation Planting Standards, (2006), DSE.

The legislative and contractual requirements for the D & C utilities works are summarised in:

- ~ D & C Utilities Area EMP – Attachment E – Environmental Legislation Register
- ~ D & C Utilities Area EMP – Attachment F – Environmental Licence, Permit and Approval Register
- ~ D & C Utilities Area EMP – Attachment G – Environmental Obligations Register

The applicable PRs from Project Deed Schedule A of Appendix S3 are provided in Table 1.

Under the Project Deed the D&C EMP, all sub plans and any changes to these must be endorsed by the State, who may refer aspects to relevant agencies.

The Department of Sustainability and Environment (DSE) and any other relevant agencies and stakeholders will be consulted with regard to any specific approval requirements in relation to this sub plan. The requirements of any permits, licences and approvals obtained will be placed in the Environmental Licence, Permit and Approval Register on receipt and updated in the Environmental Compliance Tracker.

### **4 Existing conditions and issues**

#### **4.1 Site Condition**

Pre-construction surveys of the land within 50 metres of the Utilities Corridor to be disturbed will be completed prior to the commencement of works. Based on the pre-construction surveys, a construction line list will be prepared in consultation with each landowner which outlines:

- ~ Existing conditions including infrastructure services
- ~ Trees and vegetation to be removed or retained where possible

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- ~ Livestock arrangements
- ~ Access issues
- ~ Fences and gate arrangements during construction
- ~ The landowner’s rehabilitation preferences.

The possibility of encountering acid sulfate soils and potential acid sulfate soils has been identified as a site issue and is addressed under the Acid Sulfate Soil Management Sub Plan. Any risks associated with rehabilitating and revegetating the site are addressed in the Environmental Risk Register (Attachment C) of the D&C Utilities Area EMP.

## 5 Environmental risks

An environmental risk assessment has been carried out for the D & C Utilities works. This assessment is contained in the Environmental Risk Register, Attachment C of the D&C Utilities Area EMP. Table 2 summarises the potential hazards from project activities, potential impacts of these hazards and the risk of occurrence as rated by the environmental risk assessment.

**Table 2: Summary of utilities risk assessment for Site Reinstatement and Rehabilitation**

Activity posing hazard	Risk/ Potential Impact	Inherent Risk (before controls)	Control Measure Reference (Att I03.1)
Spread of agricultural or horticultural pests or diseases including Bovine Johnes disease (BJD), Phytophthora or potato cyst nematode (PCN)	Loss of agricultural productivity (PCN and BJD), spread of declared disease (PCN) to new areas, die back of native vegetation and remnant native vegetation communities.	High	#19
Vehicle movements on and off corridor resulting in transportation of mud onto public roads.	Public safety as a result of changed traffic conditions, particularly around schools. Adverse impacts to water quality, associated beneficial and associated aquatic ecosystems.	Extreme	#21, 24
Reinstatement of subsoil is not to the original grade resulting in depressions or mounding along the corridor.	Change in surface water flow, visual amenity.	High	#2, 3, 4, 11, 18
Topsoil and Sub-soil condition (compaction, soil profile inversion) resulting in impacts rehabilitation and vegetation establishment.	Long term geomorphologic stability of landform, long term land use.	High	#3, 5, 8, 11, 18
Failure to establish pasture as a result of unsuitable pasture type, unsuitable timing of reinstatement, unsuitable topsoil chemistry.	Long term land use.	Moderate	#2, 3, 4, 6-11, 18, 22-23, 26, 31



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Revegetation and habitat restoration with unsuitable or non-endemic species of plant.	Introduction of species that are from non-providence stock or not representative of the regional EVCs.	Moderate	#2-7, 22, 23
Waterway reinstatement impacting fish passage of water quality in waterways and wetlands	Aquatic ecosystems including significant species	High	Refer to Att. I05.1 Flora & Fauna
Unsuitable landscape design	Diminished community benefit and use of public areas.	High	#1, 4-5, 12, 28
Landscape works not providing sufficient visual screening	Adverse impacts to aesthetic vales of rural landscapes and surrounding residential properties.	High	#1, 4-5, 12
Failure to reinstate property infrastructure or incorrect reinstatement of property infrastructure.	Impacts to agricultural activity.	High	#2-3, 5-10, 14-18, 36, 31
Proliferation of weeds in disturbed areas.	Increase in the density of weeds on agricultural properties or in remnant vegetation and fauna habitats.	High	#14, 22-23
Disturbance to pasture re-establishment.	Long term land use.	High	#2-3, 5-11, 22, 24, 26, 31
Slow revegetation	Potential soil erosion and runoff; potential increased dust.	High	#2-3, 5-12, 14, 18, 24, 26, 31

The Environmental Risk Register of the D&C Utilities EMP should be consulted for a comprehensive assessment of these risks.

The following environmental risks were not deemed as significant for site rehabilitation in the environmental risk assessment, but are listed below for completeness:

- ~ Modification of the stream profile
- ~ Subsidence of backfilled areas
- ~ In-stream scour and exposure of the utilities

## 6 Control, Management and Mitigation Measures

Attachment I3.1 describes a range of mitigation and control measures to be used to ensure the site is reinstated and rehabilitated according to the PRs.

The measures in Attachment I3.1 are designed to address potential impacts from the risks outlined in Section 5 as well as deliver on the objectives, targets and in particular the PRs listed in Section 2, They include requirements and responsibilities for design, construction, evaluating performance and reporting.



D&C Utilities EMP Attachment I3 – Site Reinstatement and Rehabilitation Sub Plan Attachment I3.1 also references Design Packages (DPs) in design-related control measures. PRs that relate to design are addressed in accordance with the Design Management Plan (PL-TDV-PM-0-X-000-0011-0-00).

## **7 Site environmental plans**

Site Environmental Plans (SEPs) have been developed for the utilities corridor that detail practical environmental management measures implemented to minimise potential impacts of construction activity on the environment and community.

The information contained in the SEPs is presented in pictorial and tabular drawing format. This is to make them easy to use by all site personnel, consultants and subcontractors. SEPs are updated to reflect operating practices on a regular basis.

The site rehabilitation measures set out in the SEPs are drawn from this sub plan. Additional practical management measures are picked up and covered by the Weekly Environmental Checklist.

SEPs are held by Area Environment Managers.

## **8 Evaluating performance and reporting**

Environmental audits and site environmental inspections (SEIs) are scheduled to detect where PRs are not being met with appropriate corrective actions developed to address these issues as they arise. Schedules, responsibilities and reporting procedures for rehabilitation and reinstatement are set out in the Monitoring, inspection, audit and reporting schedule - Attachment L of the D&C Utilities Area EMP.

Monitoring will be undertaken by appropriately qualified personnel, in accordance with the appropriate standards and guidelines as specified in Attachment L of the D&C Utilities Area EMP.

## **9 Contingency measures**

Contingency measures have been developed and are summarised below, referring to applicable sub plans. The control measures table (Attachment I3.1) focuses on preventative measures. These include such measures as monitoring the success of revegetation and responding accordingly.

All environmental incidents will be responded to in accordance with the Utilities Environmental Incident Response Procedure (EIRP) (PR-PLV-PM-3-X-000-0001-00-00). The EIRP provides project specific details for the identification of and response to potential environmental related incidents along the utilities corridor during the D&C phase of the VDP. It provides guidance on strategies to manage potential and actual incidents, as well as follow-up and reporting requirements.

The environmental risk assessment has identified the following circumstances that could occur outside normal operating conditions that relate to site reinstatement and rehabilitation:

- Subsidence (refer to the Water Quality and Erosion Control Sub Plan )
- Soil erosion (refer to the Water Quality and Erosion Control Sub Plan)
- Stream profile significantly altered (refer to the Waterways and Wetlands Sub Plan)



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Further risks to successful rehabilitation include fire, severe drought and flooding, and require ongoing monitoring of the site to ensure adherence to the Rehabilitation Plan. In any of these cases, contingency measures will be implemented in accordance with the procedures outlined in the relevant sub plan and in consultation with the Rehabilitation Consultant, who is responsible for verifying that the project area has been rehabilitated in accordance with Project Deed requirements.

If any of these cases occur within the Defect Liability period (after Close-Out), then the corresponding O&M sub plans should be referred to.

## **10 References**

### **10.1 VDP Documents**

- ~ Victorian Desalination Project, Environment Effects Statement, Volume 4, Chapter 5 – Geology, Geomorphology and Soils.

### **10.2 Technical/ legislative documents**

- ~ Native Vegetation Framework – A Framework for Action, DSE (2002)
- ~ Native Vegetation - Revegetation Planting Standards, DSE (2006)
- ~ *Water Act 1989*
- ~ *Catchment and Land Protection Act 1994*
- ~ *Environment Protection Act 1970*
- ~ *Planning and Environment Act 1987*



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**ATTACHMENT I3.1 SITE REINSTATEMENT AND  
REHABILITATION – CONTROL MEASURES TABLE**

## ATTACHMENT 3.1 SITE REINSTATEMENT AND REHABILITATION – CONTROL MEASURES TABLE

#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
1	Rehabilitation	21136	<p>All disturbed land will be progressively reinstated. In the case of:</p> <ul style="list-style-type: none"> <li>- Public land, as agreed with the public land manager</li> <li>- All other private land directly affected by the project activities in accordance with property rehabilitation plans.</li> </ul> <p>The following design packages include landscape design components for above ground features or PR Sensitive Areas :</p> <ul style="list-style-type: none"> <li>DP 3-0065 Booster Pump Station</li> <li>DP 3-0066 Melbourne Water Pipe Track / Berwick Park</li> <li>DP 3-0068 Water Quality Monitoring Stations</li> <li>DP 3-0069 Transfer Pipeline Landscape Reinstatement Works</li> <li>DP 3-0514 Pressure Reducing Station Detail &amp; Pit - DP1</li> <li>DP3-0563 Booster Pump Station</li> <li>DP 3-0566 Surge Station kp10.3 and kp29.1 - Process, Mechanical, Electrical, I&amp;C, HVAC</li> <li>DP3-0066 Berwick Bike Track</li> <li>DP4-0050 Southern Compensation Reactor Station</li> </ul>	Construction Manager	Design, Construct	Certificate of Rehabilitation	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
2	Rehabilitation Consultant	21136	<p>Engage a Rehabilitation Consultant (independent to and suitable to the State) to:</p> <ul style="list-style-type: none"> <li>- Liaise between the project and landowners of, and any other persons with a proprietary interest in, the transfer pipeline land with respect to rehabilitation requirements</li> <li>- Verify that the project area has been rehabilitated in accordance with the requirements of the State Project Documents and, if the project area meets these requirements, issue a certificate (substantially in the form set out in Schedule 2 Part B of the Project Deed)</li> <li>- Reports at least every 3 months during the D&amp;C Phase to TDJV and the State as to the progress of rehabilitation of the Project Area and any unresolved complaint or dispute by an owner or occupier concerning rehabilitation of any part of the Project Area</li> <li>- Determine and notify TDJV and the State of rehabilitation work required to address any complaint by an owner or occupier related to failure to rehabilitate the Project Area received until the end of the last defects liability period</li> </ul>	TDJV Environment Manager	Construct	<p>Contract of Engagement of Rehabilitation Consultant</p> <p>Progress Reports</p>	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
3	Rehabilitation Plan	21138, 21141	<p>Prepare a rehabilitation plan in accordance with Native Vegetation Framework – A Framework for Action, DSE 2002) and Native Vegetation - Revegetation Planting Standards, DSE (2006) and agreed with individual landholders The revegetation requirements will be included in rehabilitation plans that will be provided to the state and will address:</p> <ul style="list-style-type: none"> <li>- Planting design including plant densities relative to EVC benchmarks and/or required to adequately stabilise sites (subject to easement clearance requirements)</li> <li>- Source of planting stock</li> <li>- Protection measures of re-seeded and revegetated areas with permanent fencing removed for works replaced and temporary fencing used where appropriate and necessary to ensure establishment of vegetation</li> <li>- Post-construction maintenance and monitoring measures to assess actual impacts and the effectiveness of rehabilitation.</li> <li>- Topsoil reinstatement</li> <li>- A requirement for a close out meeting with all stakeholders to agree the completeness of the work activities on completion of work.</li> <li>- A requirement that additional works required to be undertaken in order to close out work areas must be completed in a timely manner and will require verification by agreed stakeholders affected by the additional works.</li> </ul>	Rehabilitation Consultant	Design	Preparation of Utilities Corridor Revegetation Management Plan in consultation with DSE BES.	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
4	Landscaping design	21141	<p>Prepare landscaping design plans that is consistent with the principles for the Rehabilitation Plan including the Native Vegetation Framework – A Framework for Action, DSE (2002) and Native Vegetation - Revegetation Planting Standards, DSE (2006). The following designs are applicable:</p> <ul style="list-style-type: none"> <li>DP 3-0065 Booster Pump Station</li> <li>DP 3-0066 Melbourne Water Pipe Track / Berwick Park</li> <li>DP 3-0068 Water Quality Monitoring Stations</li> <li>DP 3-0069 Transfer Pipeline Landscape Reinstatement Works</li> <li>DP 3-0554 Booster Pump Station Civil</li> </ul>	Landscape designers	Design	Completed Landscaping Design Plan	



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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
5	Pipeline Mitigation Plan	21138, 21145	<p>Based on the pre-construction surveys and construction line lists, a pipeline mitigation plan will be prepared that detail the measures required to accommodate the existing land use and its seasonal and other needs including viability of operation and maintenance of access during construction works. The Mitigation plan is a living document that will be updated via addendum to record the agreed changes that might occur through alterations to farming operations or during construction works. These plans will include opportunities to:</p> <ul style="list-style-type: none"> <li>- Minimise clearing of indigenous vegetation consistent with functional requirements</li> <li>- Minimise the movement of soils and vegetation around the site</li> <li>- Minimise disturbance of stream profile consistent with functional requirements</li> <li>- Take account of seasonal conditions in timing of rehabilitation</li> <li>- Reinstated layers of sands, clays and topsoil in appropriate sequence and depth to ensure regeneration of existing pasture and vegetation</li> <li>- Avoid or minimise settlement of backfill</li> <li>- Prepare verification schedules and implementation plans for each individual site</li> <li>- Stockpile topsoil for use in rehabilitation, subject to appropriate treatment for weeds</li> <li>- Ensure that the pre-existing soil profile and layering of sands, clays and topsoil is reinstated to ensure regeneration of existing pasture and vegetation</li> <li>- Reinstatement and rehabilitate to prevent soil erosion and settlement following construction activities</li> <li>- Rehabilitation measures to be incorporated into contract conditions</li> <li>- Stabilise and landscape areas around new buildings and facilities</li> <li>- Where possible, retain stands of native vegetation as habitat areas and landscaping elements</li> <li>- Landscape existing buildings and facilities to be retained</li> <li>- Ensure building and facility sites are maintained so that vegetation in the surrounds is not a fire hazard.</li> </ul>	Construction Manager	Construct	Completed pipeline mitigation plan	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
6	Protection of revegetated areas	21141, 21146	Ensure protection of re-seeded and revegetated areas with permanent fencing removed for works replaced and temporary fencing used where appropriate and necessary to ensure establishment of vegetation	Construction Manager	Construct	Site Inspection reports	
7	Rehabilitation plan implementation	-	<p>Check actual revegetation and reinstatement is in accordance with DSE approved Landscape Reinstatement Designs Plans and other relevant plans.</p> <p>The following designs are applicable:</p> <ul style="list-style-type: none"> <li>DP 3-0065 Booster Pump Station</li> <li>DP 3-0066 Melbourne Water Pipe Track / Berwick Park</li> <li>DP 3-0067 Creek Crossings</li> <li>DP 3-0068 Water Quality Monitoring Stations</li> <li>DP 3-0069 Pipe Line Easement</li> </ul>	Construction Manager	Construct	Completed verification schedules	
8	Soil reinstatement	21144	Reinstate the soil profile to pre-existing conditions.	Construction manager	Construct	Preparation of Utilities Corridor Reinstatement Plan, Verification by the Rehabilitation Consultant.	
9	Soil Reinstatement	21144	Stockpile topsoil for use in rehabilitation, subject to appropriate treatment for weeds	Area Environment Manager	Construct	Site Inspection reports	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
10	Soil Reinstatement	21144, 21145	Avoid or minimise settlement of backfill along the Transfer Pipeline and Electricity Land. Ensure that the pre-existing soil profile and layering of sands, clays and topsoil is reinstated to ensure regeneration of existing pasture and vegetation.	Construction manager	Construct	Preparation of Utilities Corridor Reinstatement Plan, Verification by the Rehabilitation Consultant.	
11	Soil Reinstatement	21142	Reinstate and rehabilitate to prevent soil erosion and settlement following construction activities	Construction manager	Construct	Preparation of Utilities Corridor Reinstatement Plan, Verification by the Rehabilitation Consultant.	
12	Rehabilitation	-	Stabilise and landscape areas around new buildings and facilities	Rehabilitation Consultant /Site Manager	Design, Construct	Preparation of relevant design packages, Verification by the Rehabilitation Consultant	
13	Induction	-	Education programs for workforce, and definition of contractual environmental responsibilities	Area Environmental Manager	Construct	Training records	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
14	Earthworks	21143	Ensure that no waste of any kind other than clean fill soil is placed in any trench or included in earthworks	Site Manager/ Construction Manager/ Area Environmental Manager	Construct	Site Environmental Inspection Reports (report by exception).	
15	Site reinstatement	21147	Restore any pre-existing infrastructure (including tracks, fences, dams, irrigation lines and the like) unless incompatible with obligations under the Deed or the terms of an acquired easement. The following designs are applicable:  DP 3-0065 Booster Pump Station DP 3-0066 Melbourne Water Pipe Track / Berwick Park DP 3-0067 Creek Crossings DP 3-0068 Water Quality Monitoring Stations DP 3-0069 Pipe Line Easement	Site Manager / Area Environment Manager	Design, Construct	Inspection records	
16	Subsidence	21142	Identify areas where there is a risk of subsidence, and develop and implement construction approaches to mitigate the risk. The following designs are applicable:  DP 3-0065 Booster Pump Station DP 3-0066 Melbourne Water Pipe Track / Berwick Park DP 3-0067 Creek Crossings DP 3-0068 Water Quality Monitoring Stations DP 3-0069 Pipe Line Easement	Construction Manager	Design, Construct	Verification by the Rehabilitation Consultant	
17	Subsidence	21142	Monitor subsidence on reinstated sites and rectify any defects.	Construction Manager	Construct	Verification by the Rehabilitation Consultant	

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#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
18	Soil Reinstatement	-	Inspect, recommend and verify the sub-soil condition prior to topsoil and sub-soil reinstatement. Verify all reinstated subsoil and/or topsoil grade by post-construction feature survey	Rehabilitation Consultant	Construct	Inspection records	
19	Biosecurity Management	-	Implement Biosecurity Washdown Protocol (Section 8 of the Flora and Fauna Sub Plan) outlining the washdown and soil movement requirements for works on the VDP Utilities Corridor to address PCN, BJH and Phytophthora.	Area Environment Manager	Construct	Completed Biosecurity Management Procedure	
20	Mitigation measures	-	Ensure staged clearing under controlled conditions	Area Environment Manager	Construct	Site Inspection records	
21	Public Safety	-	Prepare traffic management plan in consultation with relevant road authorities to direct the movement of trucks between site and disposal locations. Limit truck movements around schools to outside of morning and afternoon drop off and pick up times.	Construction Manager	Construct	Completed traffic management plan, inspection records	
22	Weed management	-	Control noxious and environmental weeds according to Weed Management Plan (see Flora and Fauna Sub Plan). For example: <ul style="list-style-type: none"> <li>- Identify weed infested areas</li> <li>- Control movement of spoil from infested areas</li> <li>- Ensure wheel washers for vehicles</li> <li>- Spray/cut/poison weeds</li> </ul>	Area Environmental Manager	Construct	Site Environmental Plans / Inspection records	
23	Site Rehabilitation	21136, 21141, 21146	Rehabilitation with approved non-invasive pasture species or indigenous species as soon as possible after construction	Rehabilitation Consultant and Site Manager	Design, Construct	Property Reinstatement Plans, Verification by the Rehabilitation Consultant	

### Att I3 D&C Utilities EMP – Site Reinstatement and Rehabilitation Sub Plan

#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
24	Erosion controls	-	Sediment/runoff measures to be maintained in place (in accordance with the Water Quality and Erosion Management Sub Plan) until Rehabilitation Consultant determines they are no longer required.	Site Manager	Construct	Verification by the Rehabilitation Consultant	
25	Rehabilitation works disputation	-	Where work activities lead to disputation a Dispute Advice form will be completed and issued to the Rehabilitation Consultant for action. The Rehabilitation Consultant will liaise with the affected stakeholders and ensure the dispute is resolved to all parties' satisfaction. The Rehabilitation Consultant may refer disputes to the Independent reviewer or Project Director for direction.	Rehabilitation Consultant/ Stakeholder and Community Relations Manager/ Construction Manager	Construct	Stakeholder verification	
26	Reinstatement verification	-	Undertake quarterly inspections of all reinstatement through to handover to O&M contractor	Rehabilitation Consultant	Construct	Quarterly reinstatement inspection records	
27	Closeout	-	Removal of all plant, machinery and equipment used for the D&C phase of the project other than that required for operation of the VDP	Site Manager	Construct	Final Site Inspection report	
28	Closeout	-	Completion of all landscaping and rehabilitation works by date of Close-Out to the standards agreed with the State	Site Manager / Rehabilitation Consultant	Construct	Certificate of Rehabilitation	
29	Closeout stakeholder meeting	21136	Conduct a close out meeting with all stakeholders to agree the completeness of the work activities on completion of work (minutes recording actions required will be taken and distributed to all parties)	Stakeholder and Community Relations Manager	Construct	Stakeholder meeting minutes	
30	Additional closeout works	21136	Additional closeout works undertaken in order to meet the site rehabilitation requirements of the State Project Documents or to address a complaint by a land owner or occupier must be completed in a timely manner and will require verification by agreed stakeholders affected by additional works.	Stakeholder and Community Relations Manager /Construction Manager	Construct	Stakeholder verification	

Att I3 D&C Utilities EMP – Site Reinstatement and Rehabilitation Sub Plan

#	Issue	PR # addressed	Control Measure	Responsibility *	Project Phase	Evidence	Audit Check
31	Ongoing Monitoring and maintenance	-	There will be a handover of responsibilities from the D&C phase to the O&M phase of the project for managing and maintaining the plant site during the defect liability period.	Environmental Manager	Construct	Correspondence records	

\* The *Responsibilities* column refers in many cases to senior positions within the project organisation, due to the changing nature of project teams. In practice some responsibilities may be delegated by the person nominated.