CBGU D&C JV

Land Management Plan

Cross River Rail Project – Tunnel, Stations and Development Package (TSD)

REV	DATE	PREPARED BY NAME & SIGNATURE	REVIEWED BY NAME & SIGNATURE	APPROVED BY NAME & SIGNATURE	REMARKS
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Document number: CRRTSD-EN-ENMP-CBGU-000014

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Revision: 4

Compliance Matrix

Table 1 Compliance matrix

CRRDA REFERENCE	REQUIREMENT	ADDRESSED IN SECTION
Coordinator-General's change report 2019 Appendix 1 – Part C – Condition 12		
Condition 12	A. Prior to the commencement of Project Works, predictive modelling must be undertaken of potential ground movement that may be caused by the Project Works. Such predictive modelling must ascertain the potential for damage due to ground movement being caused to property by Project Works.	Noise and Vibration Management Plan This Plan
	B. Where predictive modelling indicates the Project Works would lead to impacts above the vibration goals for cosmetic damage in Table 3 of Imposed Condition 11 – Construction Noise and Vibration, the Contractor must prepare and submit a property damage sub-plan, prior to the commencement of such works, as part of the CEMP. The property damage sub-plan must set out the procedure for: I. Advance communication with potentially Directly Affected Persons; II. procedures for building condition surveys both in advance of and following Project Works, including provision for consultation with property owners and occupants; III. monitoring to be undertaken for potential impacts to property; and IV. mitigation measures.	Community & Stakeholder Engagement Plan Noise and Vibration Management Plan This Plan
	C. Where a post-construction building condition survey identifies that property damage has occurred as a consequence of the Project Works, such damage must be repaired as soon as practicable by the Contractor at no cost to the property owners. Such repairs must be undertaken in consultation with the property owners and occupants and must return the premises at least to the condition existing prior to commencement of Project Works. The Contractor must agree the timing, method and extent of works required with the affected landowner and must gain permission to undertake such reparation works prior to their commencement.	Community & Stakeholder Engagement Plan Noise and Vibration Management Plan This Plan
Coordinator-General's change report Appendix 1 – Part C. – Condition 15		
Condition 15 Water Quality	A. Discharge of surface water and groundwater from Project Works must comply with the Brisbane River Estuary environmental values and water quality objectives (Basin no. 143 - mid-estuary) in the Environmental Protection (Water) Policy 2009.	Water Quality Management Plan
	B. During construction monitor and report on water quality in accordance with the Water Quality Management Plan, a sub-plan of the Construction Environmental Management Plan	Water Quality Management Plan
Coordinator-General's change report Appendix 1 – Part C. – Condition 18 Erosion and Sediment Control		
(a)	An erosion and sediment control sub-plan that is consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52 –	Erosion and Sediment Control Plan

CRRDA REFERENCE	REQUIREMENT	ADDRESSED IN SECTION
	Erosion and Sediment Control must be submitted as part of the Construction Environmental Management Plan.	
Coordinator-General's change report **Appendix 1 – Part C. – Condition 19 Acid sulphate soils**		
(a)	Acid sulphate soils must be managed in accordance with the methods and requirements of the latest edition of the Queensland *Acid Sulphate Soil Technical Manual.*	Acid Sulfate Soil Management Plan

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Details of Revision Amendments

Document Control

The CBGU Project Director is responsible for ensuring that this Plan is reviewed and approved. The Project Environment & Sustainability Manager is responsible for updating this Plan to reflect changes to the Project, legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the CBGU Project Director before being distributed / implemented.

Distribution and Authorisation

The CBGU Project Director is responsible for the distribution of this Plan. The controlled master version of this document is available for distribution as appropriate and maintained on TeamBinder. All circulated hard copies of this document are deemed to be uncontrolled.

All personnel employed on the Project will perform their duties in accordance with the requirements of this Plan, supporting management plans, and related procedures.

Referenced Documents

The following provides a list of referenced documents either as a sub-plan to this plan or referenced from.

Table 2 Referenced Documents

Document Number	Document Name	Location of Controlled Version
Referenced Project Plans include:		
CRRTSD-EN-ENMP-CBGU-000017	Water Quality Management Plan	TeamBinder
CRRTSD-EN-ENMP-CBGU-000011	Acid Sulphate Soils Management Plan	TeamBinder
CRRTSD-EN-ENMP-CBGU-000016	Erosion and Sediment Control Plan	TeamBinder
	Sensitive Infrastructure Monitoring Regime	PMS
CRRTSD-CU-MPL-CBGU-000018	Communications and Stakeholder Engagement Management Plan	TeamBinder
CRRTSD-CS-MPL-CBGU-000032	Construction Monitoring Management Plan	TeamBinder

Note: this Management Plan may not contain the current version of the documents listed above. Refer to the 'location of controlled version' for the most current version.

Glossary of Terms

Table 3 Terms

Acronym	Definition
All Staff	Means all employees, Proponents and sub-contractors involved in the Project Works
BCC	Brisbane City Council
CBD	Central Business District
CBGU	D&C Contractor comprising a joint venture with CPB Contractors Pty Ltd, BAM International Australia Pty Ltd, Ghella Pty Ltd and UGL Engineering Pty Ltd
CMS	CPB Management System
CEMP	The Project's Construction Environmental Management Plan
CG	Coordinator-General
CGCR	Coordinator-General's Change Report
CGER	Coordinator-General's Evaluation Report
COEMP	The Project's Commissioning Environmental Management Plan
Contractor	The Contractors appointed to design, construct and commission the Project
Coordinator-General	The corporation sole preserved, continued and constituted under section 8 of the SDPWO Act
CRR	Cross River Rail
CRRDA	Cross River Rail Delivery Authority acting on behalf of the State
CRR TSD (the Project)	Cross River Rail - Tunnels, Stations and Development (TSD) Project
CSEP	Community and Stakeholder Engagement Plan
DES	Department of Environment and Science
Directly Affected Persons	An entity being either the owner or occupant of premises for which predictive modelling or monitoring indicates the Project impacts would be above the performance criteria in the Imposed Conditions
DTMR	Department of Transport and Main Roads (QLD)
EIS	Environmental Impact Statement
EMP	Environmental Management Plan (refers to the OEMP, CEMP, COEMP including any Project sub-plans)
EMS	Environmental Management System
Environmental Monitor	The Environmental Monitor engaged in accordance with Imposed Condition 7
FM	Facilities Manager
GIS	Geographic Information System
ISA	Independent Safety Assessor

Acronym	Definition
ISCA	Infrastructure Sustainability Council of Australia
Imposed condition/s	A condition/s imposed by the Coordinator-General under section 54B of the SDPWO Act for the Project
MRTS51	MRTS51 Environmental Management – DTMR Specification
O&M	Operations and maintenance
OEMP	The Project's Outline Environmental Management Plan
Outline CEMP	The Project's Outline Construction Environmental Management Plan
Outline COEMP	The Project's Outline Commissioning Environmental Management Plan
PIC	Project Independent Certifier
Predictive Modelling	Means the use of appropriate analytical scenario testing, whether or not by numerical measurements, undertaken prior to the commencement of Project Works
PPE	Personal Protective Equipment
Project	The Cross River Rail Project
Project Works	As defined in the Imposed Conditions
Proponent	The Authority
PSTR	Project Scope and Technical Requirements
QA	Quality Assurance
QR	Queensland Rail
Rail Infrastructure Manager	A person who has effective management and control of rail infrastructure or proposed rail infrastructure, whether or not the person – owns or will own the rail infrastructure; or has or will have a statutory or contractual right to use the rail infrastructure or to control, or provide, access to it.
Rail Transport Operator	A rail infrastructure manager or rolling stock operator, or a person or organisation which is both
RIS	Cross River Rail – Rail Integration and Systems Project Alliance
Risk matrix	A table used in the evaluation of risk severity that has likelihood and consequence as its axes with numbers and ratings applicable to each likelihood/consequence combination. For use in risk evaluation and Safety in Design reviews.
Risk register	A database containing Project risks, assessments, treatments and responsibilities
SDPWO Act	State Development and Public Works Organisation Act 1971
SEMS	Queensland Rail's Safety and Environment Management System
Subcontractor	Any company, body or person who is contracted to CBGU for the purpose of supplying plant and/or services
Sub-plan	Any environmental sub-plan to an EMP
TeamBinder	Proprietary software used as part of the Project wide Electronic Document Management System
The Authority	The Cross River Rail Delivery Authority, the Proponent for the Project

Acronym	Definition
the Project (or CRR TSD)	Cross River Rail - Tunnels, Stations and Development (TSD) Project
TMR	Queensland Department of Transport and Main Roads.
WBS	Work Breakdown Structure - the hierarchical breakdown of a project into manageable portions of work, used to drive program, cost, work documentation and organisational structure

1 Introduction

1.1 Background

The Design and Construction Joint Venture comprising of CPB Contractors Pty Ltd, BAM International Australia Pty Ltd, Ghella Pty Ltd and UGL Engineering Pty Ltd (CBGU D&C JV or CBGU) is responsible for delivering the Cross River Rail (CRR) Project (the Project) on behalf of the Cross River Rail Delivery Authority (the Authority).

This Land Management Plan should be read in conjunction with the Project's overarching Construction Environment Management Plan (CEMP). Additionally, this management plan covers the requirements of the Settlement Management Plan.

The CEMP provides specific details regarding the background of the Project, the scope of the Project and the staging and timing of key milestones associated with the construction of the Project.

1.2 Context

This Construction Land Management Plan (LMP) forms part of the Construction Environmental Management Plan (CEMP) developed for the construction of the Project. The LMP describes how the CBGU D&C JV will manage land, geology and settlement and minimise impacts during construction of the Project.

1.3 Objectives

The objectives of this LMP are to achieve the environmental outcomes stated in the OEMP and the CEMP through the implementation of site-specific mitigation measures. It will also:

- ensure that the Project's impacts on land and land health are minimised
- ensure controls and procedures are implemented during construction activities to avoid, minimise or manage potential adverse impacts to geology and soil within and adjacent to the Project
- ensure controls and procedures are implemented to manage settlement as a result of construction of the Project and spoil generated from the Project
- nominate the Project's monitoring and reporting requirements in relation to this plan
- monitor the effects of management and mitigation measures.

1.4 Legislative Framework

Delivery and implementation of the Project must comply with the environmental legislation, guidelines and standards specified in the OEMP and CEMP (as updated to reflect any changes current at commencement of each Project phase) and any additional requirements specified in the conditions of approval.

1.4.1 Commonwealth Legislation

Commonwealth legislation that is likely to be relevant to the Project and this LMP includes:

- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
- *Environment Protection and Biodiversity Conservation Act 1999*

- *Native Title Act 1993.*

1.4.2 State Legislation

State legislation that is likely to be relevant to the Project and this LMP includes:

- *Cross River Rail Delivery Authority Act 2016*
- *Aboriginal Cultural Heritage Act 2003*
- *Biosecurity Act 2014*
- *Fisheries Act 1994*
- *Land Act 1994*
- *Planning Act 2016*
- *Vegetation Management Act 1999*
- *Environmental Protection Act 1994*
- *Acquisition of Land Act 1967*
- *Explosives Act 1999*
- *Forestry Act 1959*
- *Nature Conservation Act 1992*
- *Queensland Heritage Act 1992*
- *Water Act 2000*
- *State Development and Public Works Organisation Act 1971*

1.4.3 Approvals, Permits and Licences

CBGU will obtain licences, permits and approvals as required by law and maintain them as required throughout the delivery phase of the project. No condition of the Infrastructure Approval removes the obligation for CBGU to obtain, renew or comply with such necessary licences, permits or approvals.

Approvals expected to be required for the Project, that relate to land management impacts are identified in Table 4 below.

Table 4. Environmental approvals, permits and licences

Approval / Permit / Licence	Regulatory Authority	Responsibility / Timeframe	Items approved
Potential existing permits allowing import of clean material to various sites – Brisbane Airport	Commonwealth Department of Infrastructure, Regional Development and Cities & the Commonwealth Department Environment & Energy	CBGU Approval Timeframes: Minimum 50 Business days for Approval (assuming no EPBC referral)	
Permits allowing import of clean material to various sites – Port of Brisbane	Port of Brisbane & the Commonwealth Department Environment & Energy	CBGU Approval Timeframes: Minimum of 20 Business days for Port of Brisbane Approval, Minimum of 20 Business days for EPBC Referral (if triggered)	
Permits allowing import of clean material to various sites – Swanbank Enterprise Park	Ipswich City Council and the Department of Environment & Heritage Protection	CBGU Approval Timeframes: Up to 80 Business Days (16 weeks), assuming no RFI request.	
Permits allowing	Brisbane City Council	CBGU	

Approval / Permit / Licence	Regulatory Authority	Responsibility / Timeframe	Items approved
import of clean material to various sites – Pine Mountain (Quarry) & Larapinta (Sand Quarry)		Approval Timeframes: Minimum of 80 Business Days (16 weeks), subject to Overlay Controls & assuming no RFI request.	
Development Permit (MCU) of Premises on Contaminated Land	Brisbane City Council & Department of Environment and Science	CBGU Preparation Timeframes: Assume up to 40 Business days negotiation & preparation. Approval Timeframes: Minimum of 50 Business Days (10 weeks), assuming no requests for further information (RFI).	

1.4.4 Guidelines and Standards

The following guidelines and standards are relevant to land management during the Project's construction:

- Queensland Acid Sulphate Soil Technical Manual – version 4
- *National Environment Protection (Assessment of Site Contamination) Measure 1999*. Queensland Acid Sulfate Soils Technical Manual.
- TMR standards, including:
  - MRTS52 Erosion and Sediment Control – TMR Specifications
  - MRTS16 Landscape and Revegetation Works – TMR Specifications.
- International Erosion Control Association Best Practice Erosion and Sediment Control Guidelines 2008 (IECA Guidelines)
  - International Erosion Control Association (IECA) Australasia 'Appendix B – Sediment basin design and operation' (June 2018)
- Environmental Protection Policy (Water) Brisbane River Estuary environmental values and water quality objectives (Queensland Government)
- Procedural guide, compliance notes: Standard work method for the assessment of the lawfulness of releases to waters from constructions site – South East Queensland.
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC, 2000)
- Queensland Urban Drainage Manual 2013 (Department of Energy and Water Supply, 2013)
- AS 4482 Guide to the investigation and sampling of sites with potentially contaminated soil.

2 Required Outcomes

The following Imposed Conditions and environmental outcomes must be achieved throughout construction of the Project. The environmental outcomes may be achieved by meeting the performance criteria in this LMP.

2.1 Coordinator-General Conditions

The Imposed Conditions relating to Land Management for the Project can be found on the Coordinator-General's website (http://www.dsdmip.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/cross-river-rail-project.html).

2.2 Environmental Outcomes

The following environmental outcomes in relation to land (including geology, soil, settlement and spoil) to be achieved for the Project are detailed below.

- Construction activities minimise soil erosion and sedimentation and avoid adverse impacts on the environmental values of receiving waters
- Construction activities minimise the impacts of ground settlement from tunnelling or other construction works
- Construction activities avoid or minimise environmental and public health risks associated with disturbance of potential acid sulphate soils encountered during construction works
- Construction activities do not impact on the environmental values of the Brisbane River and other waterways within the study corridor.

2.3 Performance Criteria

The following performance criteria must be achieved throughout construction of the Project.

- The Project does not result in soil erosion beyond the boundaries of worksites. Soil erosion within a worksite is rectified as soon as practicable after a rainfall event to prevent the release of sediment offsite.
- Soil erosion and sediment controls are implemented and maintained for each worksite in accordance with the guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and TMR's Technical Standard MRTS52 Erosion and Sediment Control.
- Runoff from worksites complies with the environmental objectives established in the *Environmental Protection (Water and Biodiversity) Policy 2019 (EPP (Water and Biodiversity))*.
- Ground settlement consequential to Project works does not impact on the structural integrity of buildings or infrastructure and generally does not exceed 1:500 differential settlement.
- Acid Sulfate Soil (ASS) is avoided, or if intercepted, is managed to avoid adverse impact to environmental values, infrastructure, construction equipment, construction personnel or the public.

3 Impacts and Mitigation Measures

A range of environmental management measures and requirements to address potential impacts to land are outlined below.

3.1 Impacts

3.1.1 Topography

- During construction, temporary changes to topography would be associated with the development of the major construction worksites proposed in the vicinity of the Woolloongabba Station and the Southern portal.

3.1.2 Geology and Geomorphology

- Adverse impacts to geological stability resulting in settlement impacts and the loss of fossil material are likely to occur as a result of tunnelling activities. Potential settlement impacts are further discussed in Section 3.1.4.
- There is potential to impact on surface and groundwater systems as a result of drawdown if tunnelling activities intercept significant water-bearing geological discontinuities that cause groundwater inflows to the tunnel. The Water Quality Management Plan (WQMP) provides further detail on potential surface water and groundwater impacts.

3.1.3 Soils

- Accelerated erosion and sediment movement due to disturbance of soils or impacts resulting from the disturbance of ASS, may include:
  - Loss of valuable soil material
  - Accelerated erosion of vulnerable soils
  - Oxidation of ASS material and mobilisation of acidified leachate
  - Mobilisation of contaminant concentrations resulting from a change to soil pH conditions due to ASS disturbance.
  - Lowering of groundwater levels in the vicinity of the northern portal during tunnel operation either temporarily or permanently stockpiling
  - Removal of spoil material at the construction worksites.

The Acid Sulphate Soils Management Plan (ASSMP) prepared for the Project provides further detail regarding potential impacts associated with ASS.

- Impacts on soil values that may indirectly impact the surrounding environment, including:
  - Sedimentation of surface water and changes to flows
  - Changes to the water chemistry of receiving water bodies
  - Mortality of aquatic and riparian flora
  - Mortality of aquatic fauna

- Acid contamination of surface water or groundwater
- Contaminant mobilisation within surface water or groundwater.

3.1.4 Settlement

- The following types of settlement in tunnelling projects may arise:
  - Excavation induced settlement
  - Groundwater drawdown induced settlement
  - Local ground relaxation effects around structures at tunnel declines
- Settlement resulting from tunnel excavation/construction activities may arise due to:
  - Elastic ground settlements caused by the excavation of the tunnel
  - Consolidation settlements caused by dewatering of porous rock formations or compressible soil layers that are hydraulically connected to groundwater drawdown into the tunnel excavations.

Detailed geotechnical investigations are currently underway to confirm potential risks associated with settlement during the construction of the Project. The preliminary investigations undertaken for the preparation of the EIS found that:

- Groundwater inflow into the tunnel during excavation and construction of the tunnels and station caverns, particularly near Albert Street Station, the river crossing and Woolloongabba Station may result in consolidation of currently unconsolidated sediments with alluvial material present.
- Lateral relaxation of soils associated with soil retaining structures that may be adopted in the vicinity of the surface works for each of the underground stations.
- There is a potential low risk of significant effects for construction induced ground settlement along the full tunnel alignment.
- Separate mitigation measures are to be proposed for Albert Street Station, Woolloongabba Station (above the busway), Boggo Road Station and the section of tunnel immediately north of Boggo Road Station.

3.2 Mitigation Measures

The following advisory mitigation measures may be implemented to achieve the nominated environmental outcomes and performance criteria.

Permit to Clear Land or Vegetation is to be completed prior to any clearing works commencing, as per Appendix A.

3.2.1 Topography

- Where possible, surface connections with the tunnel have been located in areas of existing, dense urban development and it is intended that surface structures will be designed in line with prevailing structural design at the surface so as not to create unnecessary visual disruption to surface topography. The transition from tunnel to surface infrastructure has been designed with consideration of the existing topography of the study corridor.

3.2.2 Soils

- Management of ASS as dictated by the ASSMP.
- Management of erosion and sediment as per the requirements of the ESCP.

3.2.3 Settlement

- Preliminary investigations identified the following specific mitigation measures which may need to be considered:
  - Incorporation of stiff lateral supports in shafts, initial support of caverns and sequential excavation at Albert Street Station
  - Buildings in the vicinity of the northern shaft would require direct measures of support
  - Ground treatment may be required at the Woolloongabba Station to limit settlement in the vicinity of the busway
  - Provision of ground treatment to limit settlement and crown-holes in shallow cover areas at Boggo Road Station
  - Lateral support scheme to prevent distress to the Ecosciences Precinct and Boggo Road Gaol.
- Intensive instrumentation to monitor settlement would be required at Albert Street, Woolloongabba and Boggo Road Stations.
- Identify the potential for settlement impacts, including, but not limited to:
  - excavation induced settlement;
  - groundwater drawdown induced settlement;
  - ground treatment-related heave; and
  - local ground relaxation settlement.
- Where the predictive modelling indicates damage may occur as a consequence of the Project works, consult with potentially affected owners to undertake a dilapidation survey of buildings, structures, utilities and significant landscaping works and heritage landscape features. Asset condition surveys would be undertaken to identify and document pre and post construction conditions. Asset condition surveys of heritage buildings are to be undertaken by a person suitably qualified in condition assessments of heritage buildings (refer to Construction Monitoring Management Plan for further information).

3.2.4 Fossil and archaeological material

- If significant fossil and archaeological material or finds are encountered during excavation, a suitably qualified specialist will be consulted to determine management or preservation measures as required. For archaeological material, the find will be reported to DES.

4 Compliance Management

4.1 Roles and Responsibilities

The organisational responsibilities and accountabilities in relation to environmental management throughout Project construction works are outlined in the overarching CEMP.

4.2 Induction and Training

4.2.1 Environmental Induction

All CBGU staff, subcontractors and visitors to worksites must attend general induction training that covers general environmental management requirements, site-wide controls and site-specific and work specific risks and mitigation measures. Further details regarding environmental induction requirements have been outlined in the overarching CEMP.

4.2.2 Environmental Training

Details regarding environmental training requirements, including completion of Toolbox Talks, have been outlined in the overarching CEMP.

4.3 Communication

Communication strategies including internal communication, external and Government Authority consultation, and stakeholder and community liaison must be undertaken in accordance with the CEMP and the CSEP.

4.4 Incidents and Emergencies

4.4.1 Incident Notification

The immediate response to all incidents is to make the area safe and undertake measures to prevent further environmental harm. The Environment and Sustainability Manager, Shared Services Director and Project Director should be notified immediately in the event of an environmental incident.

Further details regarding Incident Notification, have been outlined in the overarching CEMP.

4.4.2 Incident Types

For the purpose of this LMP, incidents include, but are not limited to:

- Any breach of the legislation or an approval or permit condition.

4.4.3 Incident Prevention Management

Incident Classification and Procedure has been identified within the overarching CEMP.

4.4.4 Incident Investigation

The Incident Investigation process has been specified in the overarching CEMP.

4.4.5 Complaint Management

All complaints are to be dealt with in accordance with the complaints management procedure outlined in the CEMP.

5 Inspections, Monitoring, Auditing and Reporting

This section outlines the compliance processes that have been adopted by CBGU to ensure compliance with the Coordinator-General Conditions and any other legislative requirements. The section below details specific requirements relating to Inspections, monitoring, auditing requirements have not been outlined in the overarching CEMP.

5.1 Environmental Monitoring

Monitoring will be undertaken at various sensitive receptors to validate the impacts predicted for the Project to measure the effectiveness of environmental controls and implementation of this LMP. The monitoring also helps in addressing any potential Community Complaints that may be made. The monitoring requirements for settlement are outlined below.

5.1.1 Settlement

- Monitoring of settlement must be conducted from the commencement of sub-surface construction works and dewatering.
- If any subsequent ground settlement is alleged to be caused by the Project, an independent consultant may be engaged to prepare a building conditions survey report, investigate the cause of any damage and make recommendations for repairing building damage established.
- New condition surveys of heritage buildings are to be undertaken by a person suitably qualified in condition assessments of heritage buildings.

In addition to the monitoring requirements for Settlement, as outlined in Section 5.1.2.1, there are also relevant monitoring requirements relating to vibration, ASS, erosion, sedimentation, and water quality. These have been addressed in the NVMP, ASSMP, ESCP, and WQMP prepared for the Project.

5.1.2 Sensitive Infrastructure Monitoring

The Project has prepared a proposed monitoring regime for sensitive infrastructure that may be impacted by the project. In summary, it will include monitoring provisions for the following areas and structures:

- Eco-sciences building
- Princess Alexandra Hospital
- Russian Orthodox Church
- 600mm Cast Iron Water Main on Vulture Street
- S1 sewer in Turbot Street
- The Clem 7
- Heritage-listed Roma Street Station.

For additional information, refer to Noise and Vibration Management Plan.

5.1.3 Environmental Auditing

Audits will be undertaken to assess the effectiveness of environmental controls, compliance with the CEMP, compliance with Environmental Design Requirements, and other relevant permits, approvals, and guidelines. There will be a monthly internal audit undertaken by CBGU as per the CEMP, who is to report findings to the Environmental Monitor and the Authority. This includes reporting on compliance with the CEMP and the Imposed Conditions.

Audits will be undertaken in accordance with the overarching CEMP.

5.1.4 Environmental Reporting

To ensure compliance with Coordinator-General Condition 6 and where relevant the CEMP, CBGU will prepare and submit a monthly report within 6 weeks from the end of the month to the Delivery Authority

The specific requirements of the Monthly Report have been identified in the CEMP.

5.1.5 Incidents and Non-Compliance Reporting

Environmental incidents meeting the criteria of an NCE shall be notified verbally as soon as practical and in writing within 48 hours of becoming aware of an incident occurring to the Development Authority. Notification will generally be undertaken by the Environment and Sustainability Manager or a member of the CBGU environment team. Additional notification of the incident to the relevant authorities, EM and parent companies will also be undertaken as required.

Further details regarding reporting, including provision of interim and detail reports have been provided in the overarching CEMP.

5.1.6 Corrective Actions

Corrective actions must be undertaken where monitoring or validated complaints indicate the environmental outcomes or Imposed Conditions are not achieved in relation to particular works, either because the performance criteria have not been met, or mitigation measures have not been implemented. Where corrective actions become necessary, the specific works that do not achieve the environmental outcomes or meet the Imposed Conditions must cease until the corrective actions have been developed and implemented.

The process for developing and implementing Correction Actions has been specified within the overarching CEMP.

5.2 Documentation

5.2.1 Environmental Records

The process for managing and collecting environmental records is detailed in the overarching CEMP. All relevant records in relation to land management must be maintained in accordance with these requirements.

5.2.2 Document Control

Document control requirements have been specifically addressed within the overarching CEMP.

5.2.3 Review

Revisions to this LMP may be required during the Project to reflect changing circumstances or identified deficiencies. Revisions may result from:

- Management Review
- Audit (either internal or by external parties)
- Complaints or non-conformance reports
- Changes to the Company's standard system.

Revisions shall be reviewed and approved prior to issue. Updates to this LMP are numbered consecutively and issued to holders of controlled copies.

5.2.4 Communication

All internal and external communication with all stakeholders including the public, Coordinator-General, government agencies and the Delivery Authority must be done in accordance with the requirements of the CEMP.

Appendix A

Permit to Clear Land or Vegetation

Refer to PMS for template / form