

# Appendix B2 Flora and Fauna Management Procedure

M6 Stage 1: Preliminary construction including commencement activties

October 2021

M6S1-CGU-NWW-ENPE-PRO-000419 Rev 01

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## **Document control**

### Approval and authorisation

Title	M6 Stage 1 Flora and Fauna Management Procedure
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Signed	85
Dated	20/10/2021
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Dated	21/10/2021
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Signed	Craig Gibson
Dated	20/10/2021

### **Document control**

Revision	Date	Description	Approval
A.01	15/07/2021	Initial TfNSW Review	
A.02	16/08/2021	Updated to reflect TfNSW comments and issue for consultation	
00	14/09/2021	Issued	
01	20/10/2021	Updated as per DPIE comments	

### **Distribution of controlled copies**

This Procedure as part of the CEMP for preliminary construction including commencement activities is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Project website.

The document is uncontrolled when printed. One controlled hard copy of the Procedure as part of the CEMP and supporting documentation will be maintained by the Quality Manager at the Project Office.

Copy number	Issued to	Version

## 1 Introduction

## 1.1 Context

This Flora and Fauna Management Procedure forms part of the Construction Environmental Management Plan for preliminary construction including commencement activities (CEMP) of the M6 Stage 1 Motorway (the Project). The full scope of activities that will occur under the CEMP for preliminary construction are outlined in Section 1.1 of the CEMP and Staging Report.

An Aspect and Impacts Register was developed (refer to Appendix A2 of the CEMP) and identified minor residual flora and fauna risks and impacts associated with preliminary construction including commencement activities. This Procedure has been developed to address and manage the minor residual risks and impacts.

## 1.2 Impacts and Risks

Table 1, Table 2 and Table 3 contains an extract from the Aspects and Impacts Register, related to Flora and Fauna during preliminary construction including commencement activities.

### Table 1 Extract from Appendix A2 Aspect and Impacts Register for C1 Arncliffe construction ancillary facility

Issue	Construction activity/aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures	Risk level following mitigation	Management Documents / Training Required
Flora and Fauna	<ul> <li>Inspection and maintenance of erosion and sediment controls and frog fence on boundary of C1 construction ancillary facility</li> <li>Installation of hoarding and frog fence in Lot 2E (adjacent to M8 Motorway Operations Centre)</li> <li>Activities being undertaken within the existing C1 construction ancillary facility</li> </ul>	<ul> <li>Unexpected encounter of Green and Golden Bell Frog (GGBF) while inspecting and maintaining erosion and sediment controls and frog fence</li> <li>Unexpected encounter of GGBF while installing hoarding and frog fence in Lot 2E</li> <li>Unexpected encounter of GGBF while undertaking activities within C1 construction ancillary facility</li> </ul>	12 (moderate)	<ul> <li>Direct:</li> <li>All Stage 1 Preliminary Construction activities are to take place within C1 boundary</li> <li>A No-Go Zone will be established outside the C1 boundary. Entry to No-Go Zone will be managed through a permit system:</li> <li>Boundary controls including frog fence are to be inspected and maintained</li> <li>Frog fence must be installed in accordance with the design outlined in the Green and Golden Bell Frog Plan of Management</li> <li>If a GGBF is encountered, the GGBF Stop Works Procedure must be implemented immediately</li> <li>Workforce and staff members to be educated on GGBF, the risks posed to this species and control measures to be implemented on site through inductions and information posters</li> <li>Frog handling training (by Project Herpetologist) will be undertaken with workforce and staff who undertake frog fence inspection and maintenance activities</li> <li>Indirect:</li> <li>Implementation of management measures outlined in the Appendix B2 Flora and Fauna Management Procedure.</li> <li>Implementation of Green and Golden Bell Frog Plan of Management.</li> </ul>	6 (minor)	<ul> <li>Appendix B2 Flora and Fauna Management Procedure which contains: <ul> <li>GGBF Stop Works Procedure</li> <li>Appendix E Unexpected flora or fauna finds procedure</li> </ul> </li> <li>CEMP Section 3.6 Competence, training and awareness: <ul> <li>Inductions</li> <li>Frog handling training</li> <li>Information posters (SEPs)</li> </ul> </li> <li>Green and Golden Bell Frog Plan of Management</li> </ul>
		Encountering fauna within C1 (including injured fauna)	8 (minor)	<ul> <li>Direct:</li> <li>If fauna is encountered, the Fauna Handling Procedure will be implemented.</li> <li>Boundary controls including frog exclusion fence, hoarding and noise walls are to be inspected, maintained and any gaps rectified immediately.</li> <li>Indirect:</li> <li>Implementation of management measures outlined in the Appendix B2 Flora and Fauna Management Procedure.</li> </ul>	3 (minor)	Appendix B2 Flora and Fauna Management Procedure which contains: • Fauna Handling Procedure

Issue	Construction activity/aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures	Risk level following mitigation	Management Documents / Training Required
		<ul> <li>Spread of weeds</li> <li>Spread of pathogens including Chytrid or Phytophthora fungus</li> </ul>	8 (minor)	<ul> <li>Direct:</li> <li>The application of pesticides will be modified, reduced or controlled during high or unfavourable wind conditions where wind can carry pesticides beyond the C1 project boundary</li> <li>An Environmental Work Method Statement will be developed on the application of pesticides and activity carried out in accordance with this EWMS</li> <li>Hygiene practices will be enforced before entering No-Go Zone to prevent the risk of spreading Chytrid and Phytophthora Fungus</li> <li>Prior to entry onsite plant and equipment need to be free of soil, foliage/leaves and mud. Declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and vehicles have been washed down, where required</li> <li>Indirect:</li> <li>Implementation of management measures outlined in the Appendix B7 Air Quality and Odour CEMP Sub-plan</li> <li>Implementation of management measures outlined in the Weed Management Procedure found in Appendix B2 Flora and Fauna Management Procedure</li> <li>Implementation of management measures outlined in the EWMS</li> </ul>	6 (Minor)	<ul> <li>Appendix B7 Air Quality and Odour CEMP Sub-plan:</li> <li>Section 6 Environmental control measures (Table 9)</li> <li>Section 7 Compliance management</li> <li>Appendix A Air Quality Monitoring Program</li> <li>Appendix B2 Flora and Fauna Management Procedure:</li> <li>Appendix A Clearing and Grubbing Procedure</li> <li>Appendix C Weed Management Procedure</li> <li>CEMP preliminary construction including commencement activities:</li> <li>Section 3.2.1 Environmental Risk Assessment Workshop including the use of Work Packs (Table 6)</li> </ul>
		Lighting	8 (minor)	<ul> <li>Direct:</li> <li>Avoid or minimise artificial light impacts on biodiversity within and immediately adjacent to the project site.</li> <li>Indirect:</li> <li>Implementation of management measures outlined in the CEMP – Appendix A4 Site Establishment Management Plan</li> </ul>	3 (minor)	CEMP – Appendix A4 Site Establishment Management Plan

## Table 2 Extract from Appendix A2 Aspect and Impacts Register for C2 Rockdale Depot construction ancillary facility

Issue	Construction activity/aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures	Risk level fol mitigatio
Flora and Fauna	• Removal of vegetation within construction ancillary facility (urban native and exotic cover)	• Clearing outside an approved area and/or the removal or pruning of tree/s not approved under Clearing and Grubbing Plan	9 (Moderate)	<ul> <li>Direct:</li> <li>No PCT and TECs are located within the C2 construction ancillary facility</li> <li>Clearing is to be undertaken in accordance with Guide 2 Exclusion Zones of Roads and Maritime's Biodiversity Guidelines</li> <li>Where feasible minimise native vegetation and habitat removal</li> <li>Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: <ul> <li>Location of any habitat trees (Pre-Clearing Survey)</li> <li>No-Go Zones (Safety, Heritage or Ecological)</li> <li>Sensitive Areas</li> <li>Noise Catchment Areas</li> <li>Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146)</li> <li>Clearance boundary</li> <li>Details on stages of work</li> <li>Working hours</li> <li>Location of weed (if applicable E42)</li> </ul> </li> <li>Permit to Clear Land and Vegetation must be in place prior to any clearing activities taking place</li> <li>Clearly delineate the C2 construction ancillary boundary (survey) prior to clearing activities taking place in accordance with the Clearing and Grubbing Plan</li> <li>Work crew involved with clearing activities to read and sign onto Permit to Clear Land or Vegetation</li> <li>Pre and Post Clearing checklist to be completed Indirect:</li> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul>	6 (mino
		Damage to vegetation (including) tree roots	9 (Moderate)	Direct: • Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: • Location of habitat trees (Pre-Clearing Survey) • No-Go Zones (Safety, Heritage or Ecological) • Sensitive Areas • Noise Catchment Areas • Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146) • Clearance boundary	6 (mino

ollowing ion	Management Documents / Training Required
or)	Appendix B2 Flora and Fauna Management Procedure: • Appendix A Clearing and Grubbing Procedure Clearing and Grubbing Plan: • Approved Tree Report under E146 Permit to Clear Land and Vegetation: • Pre-clearing checklist • Post clearing checklist
or)	<ul> <li>Appendix B2 Flora and Fauna Management Procedure:</li> <li>Appendix A Clearing and Grubbing Procedure</li> <li>Clearing and Grubbing Plan: <ul> <li>Approved Tree Report under E146</li> </ul> </li> <li>Permit to Clear Land and Vegetation: <ul> <li>Pre-clearing checklist</li> <li>Post clearing checklist</li> </ul> </li> </ul>

 •			
Injury / encounter with fauna	9 (Moderate)	<ul> <li>Details on stages of work         <ul> <li>Working hours</li> <li>Location of weed (if applicable E42)</li> </ul> </li> <li>Implement tree protection measures as identified by arborist (E146)</li> <li>Permit to Clear Land and Vegetation must be in place prior to any clearing activities taking place and any tree protection measure implemented</li> <li>Pre-Clearing checklist to be completed to check controls are in place</li> <li>Work crew involved with clearing activities to read and sign onto Permit to Clear Land or Vegetation</li> <li>If damage is identified in Post Clearing Checklist, arborist will be assigned to assess tree</li> <li>Indirect:         <ul> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul> </li> <li>Direct:         <ul> <li>Pre-clearing surveys to be undertaken prior to the removal of any vegetation.</li> <li>Habitat trees must be identified in accordance with the Approved Clearing and Grubbing Report and Permit to Clear Land and Vegetation</li> <li>If fauna is encountered and/or injured, Fauna Handling Procedure will be implemented</li> <li>Indirect:             <ul> <li>Implement management measures outlined in the Approved Clearing and Grubbing Report and Permit to Clear Land and Vegetation</li> <li>If fauna is encountered and/or injured, Fauna Handling Procedure will be implemented</li> <li>Indirect:             <ul> <li>Implement management measures outlined in the Appendix B2</li> </ul> </li> </ul> </li> </ul></li></ul>	6 (minor
		Flora and Fauna Management Procedure	
<ul> <li>Spread of weed species</li> <li>Spread of pathogens including Chytrid or Phytophthora fungus</li> </ul>	8 (minor)	<ul> <li>Direct:</li> <li>Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: <ul> <li>Location of habitat trees or threatened flora (Pre-Clearing Survey E42)</li> <li>No-Go Zones (Safety, Heritage or Ecological)</li> <li>Sensitive Areas</li> <li>Noise Catchment Areas</li> <li>Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146)</li> <li>Clearance boundary</li> <li>Details on stages of work</li> <li>Working hours</li> <li>Location of weed (if applicable E42)</li> </ul> </li> </ul>	6 (minor)

	Appendix B2 Flora and Fauna Management Procedure: • Appendix A Clearing and Grubbing Procedure
	Appendix B Fauna Handling     Procedure
iinor)	<ul> <li>Appendix E Unexpected flora or fauna finds procedure</li> </ul>
	Clearing and Grubbing Plan:
	• Pre-clearing Survey under E43
	Permit to Clear Land and Vegetation:
	Pre-clearing checklist
	Post clearing checklist
	Appendix B2 Flora and Fauna Management Procedure:
	Appendix A Clearing and Grubbing     Procedure
	Appendix C Weed Management     Procedure
	Clearing and Grubbing Plan:
ninor)	Approved Tree Report under E146
	Permit to Clear Land and Vegetation:
	Pre-clearing checklist
	Post clearing checklist
	Appendix B9 Waste CEMP Sub-plan:
	<ul> <li>Section 6 Environmental Control Measures</li> </ul>

	Permit to Clear Land and Vegetation must be in place prior to any clearing activities taking place and weeds identified within Permit
	<ul> <li>Weeds to be identified on site prior to clearing activities taking place</li> </ul>
	<ul> <li>Work crew involved with clearing activities to read and sign onto Permit to Clear Land or Vegetation</li> </ul>
	<ul> <li>Pre and Post Clearing checklist to be completed by CGU Environmental Advisor to identify that weed were managed in accordance with Permit</li> </ul>
	<ul> <li>Disposal of weeds it to occur in accordance with Waste CEMP Sub-plan (MMW6)</li> </ul>
	<ul> <li>Hygiene practices will be enforced before entering No-Go Zone to prevent the risk of spreading Chytrid and Phytophthora Fungus</li> </ul>
	• Prior to entry onsite plant and equipment need to be free of soil, foliage/leaves and mud. Declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and vehicles have been washed down, where required
	Indirect:
	<ul> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul>
	<ul> <li>Implement management measures outlined in the Appendix B9 Waste CEMP Sub-plan</li> </ul>
	Direct:
	Avoid or minimise artificial light impacts on biodiversity within and immediately adjacent to the project site.
Lighting 8 (minor)	Indirect: 3 (m
	<ul> <li>Implementation of management measures outlined in the CEMP – Appendix A4 Site Establishment Management Plan</li> </ul>

ninor)	CEMP – Appendix A4 Site Establishment Management Plan

## Table 3 Extract from Appendix A2 Aspects and Impacts Register for C3 Bicentennial Park (including MOC3) construction ancillary facility

Issue	Construction activity/aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures	Risk level following mitigation	Management Documents / Training Required
Flora and Fauna	• Removal of vegetation within C3 (urban native and exotic cover)	• Clearing outside an approved area and/or the removal or pruning of tree/s not approved under Clearing and Grubbing Plan	9 (Moderate)	<ul> <li>Direct:</li> <li>Clearly delineate exclusion zone of the PCT and TECs: <ul> <li>PCT and TECs will not to be cleared during Stage 1 preliminary construction</li> </ul> </li> <li>Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: <ul> <li>Location of habitat trees or threatened flora (Pre-Clearing Survey E43)</li> <li>No-Go Zones (Safety, Heritage or Ecological)</li> <li>Sensitive Areas</li> <li>Noise Catchment Areas</li> <li>Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146)</li> <li>Clearance boundary</li> <li>Details on stages of work</li> <li>Working hours</li> <li>Location of weed (if applicable E42)</li> </ul> </li> <li>Permit to Clear Land and Vegetation must be in place prior to any clearing activities taking place</li> <li>Clearly delineate the C3 construction ancillary facility boundary (survey) prior to clearing activities taking place in accordance with the Clearing and Grubbing Plan</li> <li>Work crew involved with clearing activities to read and sign onto Permit to Clear Land or Vegetation</li> <li>Pre and Post Clearing checklist to be completed by CGU Environmental Advisor</li> <li>Clearing is to be undertaken in accordance with Guide 2 Exclusion Zones of Roads and Maritime's Biodiversity Guidelines</li> <li>Where feasible minimise native vegetation and habitat removal Indirect:</li> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul>	6 (minor)	Appendix B2 Flora and Fauna Management Procedure: • Appendix A Clearing and Grubbing Procedure Clearing and Grubbing Plan: • Approved Tree Report under E146 Permit to Clear Land and Vegetation: • Pre-clearing checklist • Post clearing checklist CEMP: preliminary construction including commencement activities: • Appendix A4 Site Establishment Management Plan Appendix A Site Environmental Plan for C3
		Damage to vegetation (including) tree roots	9 (Moderate)	<ul> <li>Direct:</li> <li>Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: <ul> <li>Location of habitat trees or threatened flora (Pre-Clearing Survey)</li> <li>No-Go Zones (Safety, Heritage or Ecological)</li> <li>Sensitive Areas</li> <li>Noise Catchment Areas</li> </ul> </li> </ul>	6 (minor)	<ul> <li>Appendix B2 Flora and Fauna Management Procedure: <ul> <li>Appendix A Clearing and Grubbing Procedure</li> </ul> </li> <li>Clearing and Grubbing Plan: <ul> <li>Approved Tree Report under E146</li> </ul> </li> <li>Permit to Clear Land and Vegetation: <ul> <li>Pre-clearing checklist</li> </ul> </li> </ul>

		<ul> <li>Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146)</li> <li>Clearance boundary</li> <li>Details on stages of work</li> <li>Working hours</li> <li>Location of weed (if applicable E42)</li> <li>Implement tree protection measures as identified by arborist (E146)</li> <li>Permit to Clear Land and Vegetation must be in place prior to any clearing activities taking place and any tree protection measure implemented</li> <li>Pre-Clearing checklist to be completed by CGU Environmental Advisor to check controls are in place</li> <li>Work crew involved with clearing activities to read and sign onto Permit to Clear Land or Vegetation</li> <li>If damage is identified in Post Clearing Checklist, arborist will be assigned to assess tree</li> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul>	
<ul> <li>Injury / encounter with fauna</li> </ul>	9 (Moderate)	<ul> <li>Direct:</li> <li>Pre-clearing surveys (E43) to be undertaken prior to the removal of any vegetation.</li> <li>Any habitat trees would be identified in accordance with the Approved Clearing and Grubbing Report and Permit to Clear Land and Vegetation</li> <li>If fauna is encountered and/or injured, Fauna Handling Procedure will be implemented</li> <li>Indirect:</li> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> </ul>	6 (minor)
<ul> <li>Spread of weed species</li> <li>Spread of pathogens including Chytrid or Phytophthora fungus</li> </ul>	8 (minor)	<ul> <li>Direct:</li> <li>Hold point for the Clearing and Grubbing Plan must be released prior to any clearing activities taking place. The Clearing and Grubbing Plan must include: <ul> <li>Location of habitat trees or threatened flora (Pre-Clearing Survey E42)</li> <li>No-Go Zones (Safety, Heritage or Ecological)</li> <li>Sensitive Areas</li> <li>Noise Catchment Areas</li> <li>Trees approved to be removed, pruned/trimmed and retained (Approved Tree Report under E146)</li> <li>Clearance boundary</li> <li>Details on stages of work</li> <li>Working hours</li> </ul> </li> </ul>	6 (minor)

	Post clearing checklist		
	Appendix B2 Flora and Fauna Management Procedure:		
	<ul> <li>Appendix A Clearing and Grubbing Procedure</li> </ul>		
	<ul> <li>Appendix B Fauna Handling Procedure</li> </ul>		
ninor)	Clearing and Grubbing Plan:		
	• Pre-clearing Survey under E43		
	Permit to Clear Land and Vegetation:		
	Pre-clearing checklist		
	Post clearing checklist		
	Appendix B2 Flora and Fauna Management Procedure:		
	Appendix A Clearing and Grubbing     Procedure		
	Appendix C Weed Management     Procedure		
	Clearing and Grubbing Plan:		
ninor)	Approved Tree Report under E146		
	Permit to Clear Land and Vegetation:		
	Pre-clearing checklist		
	Post clearing checklist		
	Appendix B9 Waste CEMP Sub-plan:		
	<ul> <li>Section 6 Environmental Control Measures</li> </ul>		

• Lighting       • Lighting       8 (minor)         • Lighting       8 (minor)	 			-	
• Lighting       8 (minor)         • Lighting       8 (minor)				Permit to Clear Land and Vegetation must be in place prior to any	
• Ughting       8 (minor)         • Lighting       8 (minor)				Weeds to be identified on site prior to clearing activities taking	
Image: Second and the second and th				<ul> <li>Work crew involved with clearing activities to read and sign onto</li> </ul>	
Sub-plan (MMW6)         Hygiene practices will be enforced before entering No-Go Zone to prevent the risk of spreading Chytrid and Phytophthora Fungus         Prior to entry onsite plant and equipment need to be free of soil, foliage/leaves and mud. Declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and vehicles have been washed down, where required         Indirect:       Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure         Implement management measures outlined in the Appendix B9 Waste CEMP Sub-plan       Direct:         Avoid or minimise artificial light impacts on biodiversity within and immediately adjacent to the project site.       3 (minor         Indirect:       Implementation of management measures outlined in the CEMP –				Environmental Advisor to identify that weed were managed in	
• Lighting       8 (minor)         • Lighting       8 (minor)					
• Lighting       8 (minor)       8 (minor)       Direct:       • Avoid or minimise artificial light impacts on biodiversity within and immediately adjacent to the project site.       • Implement measures outlined in the CEMP –       3 (minor					
<ul> <li>Implement management measures outlined in the Appendix B2 Flora and Fauna Management Procedure</li> <li>Implement management measures outlined in the Appendix B9 Waste CEMP Sub-plan</li> <li>Lighting</li> <li>8 (minor)</li> <li>8 (minor)</li> <li>Implement management measures outlined in the Appendix B2</li> <li>Implement management measures outlined in the Appendix B9</li> <li>3 (minor</li> </ul>				foliage/leaves and mud. Declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and	
Flora and Fauna Management Procedure       Implement management measures outlined in the Appendix B9         Waste CEMP Sub-plan       Direct:         Lighting       8 (minor)         8 (minor)       Implement to the project site.         Indirect:       Implement to the project site.         Indirect:       Implement to the project site.         Implementation of management measures outlined in the CEMP –				Indirect:	
• Lighting       8 (minor)       Waste CEMP Sub-plan         • Lighting       8 (minor)       Direct:         • Implementation of management measures outlined in the CEMP –       3 (minor)					
Lighting     S (minor)     B (minor)					
Lighting     S (minor)     S (minor)     S (minor)     S (minor)     Indirect:     Implementation of management measures outlined in the CEMP –				Direct:	
Indirect:     Implementation of management measures outlined in the CEMP –		- Lighting			0 (
			8 (minor)	Indirect:	3 (minor

iinor)	CEMP – Appendix A4 Site Establishment Management Plan

## **Appendix A Clearing and Grubbing Procedure**

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# **TREE CLEARING AND GRUBBING MANAGEMENT PROCEDURE**

## MANAGEMENT AND RESPONSIBILITY



## PROTOCOL

NOTE: No clearing works are to commence until the applicable Clearing and Grubbing Plan TfNSW Hold Point has been released and the Pre-Clearing Inspection Checklist has been completed. Clearing is to be undertaken as per Guide 2 Exclusion Zones of Roads and Maritime's Biodiversity Guidelines.

### **Delineate Vegetation to be Cleared or Trimmed**

Environment Coordinator and Site Supervisor to delineate the area of vegetation to be cleared or trimmed based on a survey, by the use of fencing or flagging. Delineate area of vegetation to be retained and install "No-Go Zone - Protected Vegetation" signage.

Different coloured flagging can be used to differentiate clearing boundary, exclusions zones and protected species. This is to be documented in the Cleaning and Grubbing Plan and communicated to work crews by the Supervisor.

### Pre-clearing Survey and Inspection of Vegetation

- · Before the removal or clearing of any vegetation, or the demolition of structures identified as potential roosting sites for microbats commences, pre-clearing/demolition inspections for the threatened species must be undertaken. The inspections, and any subsequent relocation of fauna and associated management/offset measures, must be undertaken under the guidance of a suitably gualified and experienced ecologist.
- · Pre-clearing Survey to be completed by Project Ecologist and habitat trees marked.
- A Clearing and Grubbing Plan needs to be compiled in accordance with TfNSW G40 Clearing and Grubbing and submitted at least seven days prior to clearing activities.
  - Once Hold Point has been released by TfNSW, clearing activities can proceed in accordance with Clearing and Grubbing Plan.
- Project Ecologist and/ or Environment Coordinator to inspect for presence of fauna prior to any work commencing and manage any native fauna.
- The Project Ecologist is to determine a suitable relocation area if fauna is encountered
- · Toolbox talk or Pre-start Meeting to be undertaken to discuss limit of clearing, clearing procedures, fauna handling and any weed identification and control measures.

### **Implement Environmental Controls**

- · If grubbing is to be undertaken then erosion and sediment controls will be installed, where required, prior to grubbing to ensure that soil laden with seed does not run off site.
- · Equipment storage areas and stockpile areas are to be located in cleared areas.
- · Prior to entry onsite plant and equipment need to be free of soil, foliage/leaves and mud. Declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and vehicles have been washed down, where required
- Top soil is to be separated from sub soil and green waste and stockpiled for reuse onsite or offsite. Stockpiles must be appropriately delineated and not be compacted.

### Remove Vegetation

 Only clear within delineated area. ANY CLEARING OR TRIMMING NEEDED OUTSIDE THE PROJECT FOOTPRINT MUST BE APPROVED BY THE PROJECT ENVIRONMENT MANAGER BEFORE THE ACTIVITY IS STARTED.

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Procedure for initial site clearing is as follows:

- 1. All non-marked trees and features will be removed first. Groundcover habitat features that are not too large to be moved will be removed and searched by the Environment Coordinator and/or Project Ecologist. All remaining marked habitat trees will be left intact.
- 2. Groundcover features such as logs will be gently rolled and searched for the presence of animals at the end of the shift.
- 3. At least 24 hours\* after the clearance of non-marked vegetation, each habitat tree will be carefully removed in the presence of a suitably qualified ecologist and/or fauna rescue personnel, and thoroughly searched for the presence of animals:
  - Marked trees will be shaken prior to felling using a excavator or similar equipment to allow any fauna using the hollows to be observed.
  - Hollow-bearing trees will be slowly pushed over, with care taken to avoid damage to hollows.
  - Fauna rescue personnel (Environment Coordinator or qualified ecologist) will instruct the equipment operators regarding how and which side to fell the trees so that hollows can be guickly checked. In some circumstances sections of a tree containing a hollow or habitat may be individually removed prior to felling. For example, a hollow branch could be individually removed and placed gently on the ground for checking by fauna rescue personnel, prior to felling the tree.

4. Habitat features to be used for habitat enhancement or in rehabilitation works will be relocated to adjacent habitat (subject to landowner consent)

· Any tree clearing will require presence of the Environment Coordinator:

- · Ensure all environmental controls (where required) are in place before removal of vegetation occurs.
- · Report any injured native fauna to the Environment Coordinator immediately.
- Native fauna should be relocated to the specified relocation area.
- · If personnel are unsure where clearing may or may not be undertaken, contact the Environment Coordinator or Project Environment Manager prior to carrying out works.
- Mulch may be reused on-site for erosion and sediment control, if practicable. Residual mulch is to be taken to a recycling facility. Records of mulch/ green waste sent off site will be recorded.

5. Impacts to plant community types must not exceed approved locations, unless otherwise approved by the Planning Secretary. In requesting the Planning Secretary's approval, CGU must provide to the Planning Secretary an assessment of the additional impact(s) to plant community types and an updated ecosystem and/or species credit requirement under Condition E40, if required.

\*as referenced in Transport Roads and Traffic Authority Biodiversity Guidelines: Protection and managing biodiversity on RTA projects.







## **Appendix B Fauna Handling Procedure**

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## **FAUNA HANDLING PROCEDURE**

## MANAGEMENT AND RESPONSIBILITY



### INJURED FAUNA

For snakes and bats that are seriously injured and require immediate attention, the appropriate rescue service. ecologist or snake handler will be called immediately. For all other native fauna, agreement will be made with the rescue agency if the animal will be collected or taken to animal hospital

### **Rescue Service Contact**

WIRES	1300 094 737
RSPCA (Emergency Line)	02 9770 7556
Sydney Snake Catchers	1300 599 938
Kogarah Veterinary Hospital	02 9588 4588
Sydney Wildlife	02 9413 4300

### HANDLING PROCEDURE

1. If the animal cannot be handled (i.e. venomous reptile or bats), the exact location of the animal is to be recorded and provided to the snake handler or suitable qualified ecologist. All personnel and/or subcontractors are to be

Once the snake handler or ecologist arrives on site they are responsible for the fauna. Any decisions regarding the care of the animal will be made by them.

- 2. If the animal does not require immediate attention, as determined by the Environment Coordinator in consultation with the fauna specialist (where required), a rescue service will be called to collect any animals
- 3 In the event the rescue service cannot attend the Environment Coordinator will deliver the injured/captured animal (other than snakes or bats) to the animal service/ shelter as soon as practically possible.

### (native fauna other than snakes or bats)

If the animal is not injured, the Environment Coordinator in consultation with the ecologist (where required) may release the fauna into a suitable area in accordance with the

- 1. The Environment Coordinator in consultation with the ecologist (where required) is to be responsible for
- 2. If the species is nocturnal, release should be carried out

### (i.e. dogs & cats)

If the animal is not aggressive, the Environment Coordinator in consultation with the Community and Stakeholder Team to make arrangements for the animal to be returned to its owner (if details are provided on the animals collar). If there are no details, the Environment Coordinator in consultation with the Community and Stakeholder team to make arrangements for the animal to be taken to the local council animal shelter. If the animal is aggressive, the Environment Coordinator is to arrange for the local council animal control officer to collect the animal.

If the animal is injured and not aggressive, the Environment Coordinator in consultation with the Community and Stakeholder team will take the animal to the nearest vet.

### REPORTING

Records of any fauna handling will be recorded by the Environmental Coordinator

## PROTOCOL

IMAGE	FAUNA	OEH ACT	EPBC ACT
	Grey-headed Flying Fox	Vulnerable	Vulnerable
	Green and Golden Bell Frog	Endangered	Vulnerable

If the above fauna are located within site boundaries, stop works in the vicinity and contact Environmental Coordinator immediately.



Site Supervisor

**Environment Coordinator** 

Project Environment Manager



## **Appendix C Weed Management Procedure**

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# WEED MANAGEMENT PROCEDURE

## MANAGEMENT AND RESPONSIBILITY

## NOXIOUS WEEDS TO BE CONTROLLED (Identified in EIS)



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WEED	SOLUTION
ne: Foeniculum vulgare ne: Fennel	
ne: Ipomoea alba ne: A Morning Glory	
ne: Lantana camara ne: Lantana	
ne: Ochna serrulata ne: Mickey Mouse Bush	
ne: Parietaria judaica ne: Asthma Weed	
ne: Paronychia brasiliana	
ne: Pennisetum clandestinum me: Kikuyu	
ne: Ricinus communis ne: Castor Oil Plan	
ne: Rumex crispus ne: A Dock	
ne: Tradescantia fluminensis ne: Trad	

### Pathogen Management

Prior to entry onsite plant and equipment need to be free of soil, foliage/leaves and mud.

Prior to entry onsite declare if plant and equipment had previously worked in areas where Myrtle Rusk and Phytophthora is present, and provide evidence that all plant, equipment and vehicles have been washed down, where required

Prior to entering RTA Ponds area personnel are required to clean and disinfect boots and equipment before entering the area







Appendix D Green and Golden Bell Frog Stop Work Procedure

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# GREEN AND GOLDEN BELL FROG STOP WORK PROCEDURE



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## **Appendix E Unexpected Flora or Fauna Finds Procedure**

