CONSTRUCTION FLORA AND FAUNA MANAGEMENT PLAN

Moorebank Precinct East Stage 2 - SSD 7628

Moorebank Intermodal Precinct – Precinct East Stage 2

SSD 7628

Construction Flora and Fauna Management Plan

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Report No	SSS2-QPMS-EN-PLN-00009
Date	03/12/2024
Revision	018

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Revisions

Revision	Date	Description
001	9/02/2018	Draft CFFMP
002	22/02/2018	Update in response to ER comments
003	01/03/2018	Updated in response to additional ER comments and prepared for consultation
004	19/04/2018	Updated in response to OEH consultation
005	2/05/2018	Updated based on DPE comments
006	27/09/2018	Updated to reflect issue of Moorebank Precinct EPL
007	21/05/2019	Updated with MPW Commonwealth Approvals relevant to Moorebank Avenue upgrade works
008	06/08/2019	Updates to reflect DotEE comments and the incorporation of koala management measures
009	15/08/2019	Updates to reflect additional DotEE comments
010	23/08/2019	Updates to reflect additional DotEE comments
011	25/10/2019	Minor updates associated with: • RfMA 007 - Update to compliance and non-compliance definitions and inclusion of cumulative impacts required by EPBC CoA (2011/6029) • RfMA 009 – Nest box advice • RfMA 013 – ISCA and UHIMS updates • RfMA 014 – Suitable spoil importation • RfMA 015 – Moorebank Precinct EPL • RfMA 019 – Clarification of definitions for Early Works and Construction Phase A activities • RfMA 024 – MPW EPBC (2011/6086) and MPE EPBC (2011/9229) approval requirements for DotEE review and approval

Revision	Date	Description	[redacted] by
012	21/11/2019	Update to address ER comments, removal of Construction Phase A updates associated with RfMA 019 and minor updates associated with RfMA 016 – Temporary access time extension	
013	20/12/2019	Update to address ER comments and the approved CTAMP – B.	
014	16/01/2020	Updated to address ER comments	
015	23/06/2020	Minor updates associated with: • RfMA-018 – MAUW boundary change • RfMA-028 – MAUW/MADR stockpile areas • SSD 7628-Mod 2 Approval	
016	19/03/2021	Minor updates associated with: • RfMA-039 – Corrections and update to Extended Hours Works Plan, and revision to construction program • RfMA-040 – Additional compound for light vehicle parking and break facilities • SSD 7628 – MOD 3 • SSD 7628 – MOD 4	
017	11/07/2022	Updates associated with: • SSD 7628 MOD1 • WH 6&7 amended layout	
018	03/12/2024	Updates associated with: • SSD 7628 MOD5 • RfMA-043 – Early works for MARW on MPE S2 site • Administrative updated to reflect development status	

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The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client).

Should additional information become available which may affect the opinions expressed in this report, Aspect Environmental Pty Ltd reserves the right to review such information and, if warranted, to modify the opinions accordingly.

Acronyms and Definitions

Acronym / Term	Meaning
BAR	Biodiversity Assessment Report
Bootland	The area of land located to the east and south of the Development site, which comprises the offset area for the Moorebank Precinct
BOS	Biodiversity Offset Strategy
BS Act	NSW Biosecurity Act 2015
CEMP	Construction Environmental Management Plan
CESCP	Construction Erosion and Sediment Control Plan
CFFMP	Construction Flora and Fauna Management Plan
CoA	Conditions of Approval
CoC	Conditions of Consent
Contractor's CM	Contractor's Construction Manager
Contractor's EM	Contractor's Environmental Manager
Contractor's WM	Contractor's Works package Manager
Development, the	Stage 2 of the MPE Concept Approval (MP 10_0193) approved as the MPE Stage 2 Development (SSD 7628) as consolidated. It involves the construction and operation of warehousing and distribution facilities on the MPE Site and upgrades to approximately 1.5 kilometres of Moorebank Avenue.
Development site	The subject of the MPE Stage 2 EIS, the part of the MPE Site which includes all areas to be disturbed by the Development (including the operational area and construction area).
DotEE	Commonwealth Department of the Environment and Energy (now Department of Agriculture, Water and Environment)
DP&E	NSW Department of Planning and Environment (now DPHI)
DPHI	Department of Planning Housing and Infrastructure (formerly DPIE)
DPIE	NSW Department of Planning, Industry and Environment (formerly DP&E now DPHI)
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EO	Environmental Officer
EPA	NSW Environment Protection Authority

Acronym / Term	Meaning
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
ER	Environmental Representative
ESR	the Developer
EWEMP	Early Works Environmental Management Plan
FBA	NSW Framework for Biodiversity Assessment (OEH 2014)
FCMMs	Final Compilation of Mitigation Measures
FM Act	NSW Fisheries Management Act 1994
ISCA	Infrastructure Sustainability Council of Australia
MARW	Moorebank Avenue Realignment Works
MNES	Matters of National Environmental Significance
Moorebank Precinct	Both MPE Site and MPW Site
MPE	Moorebank Precinct East as approved by the Concept Plan (MP_10_0913)
MPE EPBC Approval	Approval (No. 2011/6229) granted under the EPBC Act on March 2014 by the Commonwealth Department of Environment for the development of the Moorebank Intermodal Terminal Facility at Moorebank.
MPW EPBC Approval	Approval (No. 2011/6086) granted under the EPBC Act on September 2016 by the Commonwealth Department of Environment and Energy for the development of the Moorebank Intermodal Terminal Facility at Moorebank.
MPW	Moorebank Precinct West
MPW Site	The site at Moorebank as approved by the Concept Plan (SSD 5066)
Native vegetation	Areas of Plant Community Types (PCT) mapped by Arcadis and WSP Parsons Brinckerhoff in the Moorebank Precinct (including Moorebank Precinct East and Moorebank Precinct West) being a consolidation of all assessments for the Moorebank Precinct conducted since 2011 (Figure 2)
Native vegetation clearance	Native vegetation clearance includes the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of any native vegetation.
NBMS	Nest Box Management Strategy
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 7628 Conditions of Consent or EPBC Act Approval (EPBC 2011/6229) Conditions of Approval but is not an incident

Acronym / Term	Meaning
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan
OEH	Office of Environment and Heritage
PAC	Planning Assessment Commission
PCT	Plant Community Type
PE	Development Ecologist
RSoC	Revised Statement of Commitments
RtS	Response to Submissions
SSD	State significant development
TEC	Threatened Ecological Community
WIRES	NSW Wildlife Information, Rescue and Education Service Inc
WoNS	Weed of National Significance

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1. Background

Approval for the construction and operation of Stage 2 of the Moorebank Precinct East (MPE) Development, operated by ESR Australia & NZ (formerly LOGOS), which comprises the second stage of development under the MPE Concept Approval (MP10_0193) was received 31 January 2018 (State significant development (SSD) 7628)), as consolidated.

This Construction Flora and Fauna Management Plan (CFFMP) has been developed to manage impacts to threatened and protected flora and fauna specifies, populations and communities and terrestrial biodiversity during the construction phase of the MPE Stage 2 Development (hereafter, 'the Development').

Within this plan, a strategy has been established to demonstrate the construction contractor's approach to the management of terrestrial biodiversity values. This CFFMP addresses the relevant requirements of the Development approvals, including the Environmental Impact Statement (EIS), Response to Submissions (RtS) and Minister's Conditions of Consent (CoC), and all applicable guidelines and standards specific to the management of terrestrial biodiversity during construction of the Development.

1.1. Development Ownership

In 2022, LOGOS joined the ESR group of companies and since August 2024, the LOGOS and ESR operations have been integrated to now operate under the name ESR Australia & NZ (ESR). The applicant/ approval holder entity remains unchanged at this stage until further notice and references to LOGOS and LOGOS authored documents and/or plans may continue and remains relevant where LOGOS and ESR are used interchangeably.

1.2. Introduction

The MPE Site, including the Development site, is located approximately 27km's south-west of the Sydney Central Business District and approximately 26km west of Port Botany and includes the former Defence National Storage and Distribution Centre site. The MPE Site is situated within the Liverpool Local Government Area, in Sydney's south-west subregion, approximately 2.5km from the Liverpool City Centre.

Stage 2 of the Development involves the construction and operation of warehousing and distribution facilities on the MPE Site and upgrades to approximately 2.1km of Moorebank Avenue.

Key components of the Development include:

- Earthworks including the importation of 600,000m^3 of fill and vegetation clearing
- Importation, stockpiling and placement of up to 250,000m^3 of suitable spoil (separate to the 600,000m^3 of imported clean general fill permitted for bulk earthworks)
- Approximately 300,000m^2 gross floor area of warehousing and ancillary offices
- Warehouse fit-out
- Freight village, 8,000m^2 gross floor area of ancillary retail, commercial and light industrial land uses
- Internal road network and hardstand across the site
- Ancillary supporting infrastructure within the site, including:

  - Stormwater, drainage and flooding infrastructure
  - Utilities relocation/installation
  - Fencing, signage, lighting, remediation and landscaping
- Moorebank Avenue upgrade including:
  - Raising by about two metres and some widening
  - Embankments and tie-ins to existing Moorebank Avenue road levels
  - Signalling and intersection works
- Intersection upgrades along Moorebank Avenue including:
  - Moorebank Avenue/MPE Stage 2 access
  - Moorebank Avenue/MPE Stage 1 northern access
  - Moorebank Avenue/MPE Stage 2 central access
  - Moorebank Precinct West (MPW) Southern Access/MPE Stage 2 southern emergency access.

The location of the Development site is shown in Figure 1-1.

Moorebank Avenue Realignment Works (MARW) was approved by the NSW Minister for Planning on 14 October 2021 as State Significant Infrastructure (SSI-10053) (Infrastructure Approval) under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It is also a controlled action under Section 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and was approved by the Minister for the Environment on 7 December 2021 (EPBC Approval 2020-8839).

The footprint of MARW, which generally runs along the northern and eastern boundary of the MPE Site, interfaces and encroaches on the MPE Site. In order to allow for progression of construction works for MARW (in particular, the northern carriageway), some early preparatory works are required that are located within the MPE Site (where the project boundaries overlap). These works are undertaken under the MPE CEMP, with the MARW CEMP not being relevant to these works.

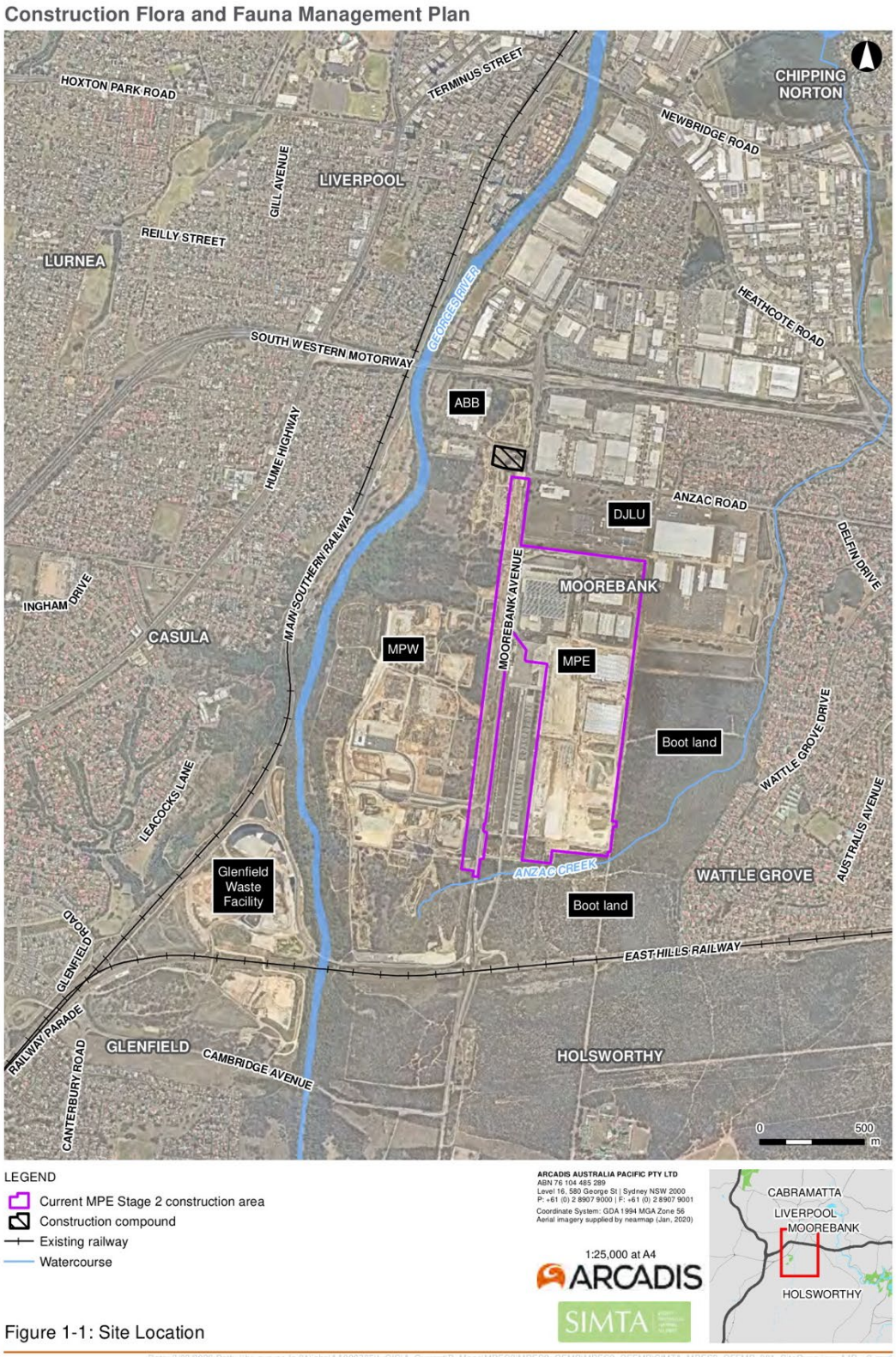

Figure 1-1: Site Location

Figure 1-1 Site Location

1.3. Development Consent

The Development was assessed by the Department of Planning and Environment (DP&E) under Part 4, Division 4.1 (now Division 4.7, as of 1 March 2018) of the EP&A Act as SSD. The Planning Assessment Commission (PAC) granted approval for the MPE Stage 2 Development on 31 January 2018 and is subject to the CoCs (SSD 7628). The Development has been subsequently modified. The Development, including its potential impacts, consultation and proposed mitigation and management, is documented in the following suite of documents:

- SSD consent SSD 7628, as consolidated
- SSD partial consent (subdivision) SSD 7628, as consolidated
- Moorebank Precinct East – Stage 2 – Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, December 2016)
- Moorebank Precinct East – Stage 2 – Response to Submissions (Arcadis Australia Pacific Pty Limited, July 2017).
- Consolidated assessment clarification responses issued on 10 November 2017.

Development consent compliance matrices are included in Appendix A.

1.4. Development Delivery Phase

The Development construction period is anticipated to be up to five years which is generally divided into three works phases.

The terminology for the Development phases was developed from the preparation of the EIS and RtS documentation in response to the language of the CoCs and the need to stage the delivery of the environmental management documentation required by the CoC. Current terminology, and the equivalent terminology from the CoCs and RtS are included in Table 1-1.

Table 1-1 Development Delivery Phase Terminology

Development Delivery Phase	CoC A18 Phase Equivalent	MPE Stage 2 RtS Works Period Equivalent
Early Works	Early Works Fill importation (to 60,000m^3)	Works Period A: Pre-construction Works Period B: Site preparation
Construction Phase A	Fill importation Construction	Works Period B: Site preparation Works Period E: Bulk earthworks, drainage and utilities Works Period F: Construction and internal fit out of warehousing Works Period G: Miscellaneous construction works
Construction Phase B	Fill importation Construction	Works Period C: Construction of Moorebank Avenue Diversion Road Works Period D: Pavement and intersection works along Moorebank Avenue Works Period E: Bulk earthworks, drainage and utilities

Additional details of the Development delivery phases is included in the CEMP.

1.5. Purpose and Application

This CFFMP has been developed to address the CoCs, final compilation of mitigation measures (FCMMs) and ISCA requirements and is based upon the Biodiversity Assessment Report (BAR) prepared by accredited ecologists to support the *Moorebank Precinct East – Stage 2 Proposal Response to Submissions* (Arcadis, 2017). This plan aims to demonstrate how terrestrial biodiversity is to be managed during construction of the Development.

This plan provides measures to reduce and mitigate impacts on biodiversity by the contractor during the construction of the Development, including all sub-contractors and consultant partners.

The specific requirements of this CFFMP, in accordance with the CoCs, are:

- Prescribe measures to minimise the loss of key fauna habitat, including tree hollows
- Prescribe measures to minimise the impacts on fauna on site, including conducting fauna pre-clearance surveys prior to vegetation clearing and building demolition
- Prescribe measures to ensure biodiversity values not intended to be impacted are protected
- Provide a protocol for controlling weeds, pests and vermin
- Provide an Unexpected Finds Procedure detailing procedures and management measures to be implemented in the event that flora and fauna is uncovered in any area not identified in the updated Biodiversity Assessment Report (BAR)
- Detail a program to monitor the effectiveness of the mitigation measures outlined in this CFFMP.

This CFFMP was developed in reference to the following documents:

- Moorebank Precinct East-Stage 2 Proposal Biodiversity Assessment Report (Arcadis 2017).
- Moorebank Precinct West (MPW) - Stage 2 Proposal Biodiversity Assessment Report (Arcadis 2016).
- Moorebank Project East Stage 1: Biodiversity Assessment Report (Arcadis 2017).
- Moorebank Intermodal Freight Terminal – Ecological Impact Assessment (Parsons Brinckerhoff 2014).
- Biodiversity Assessment Report: Biobanking Agreement - Wattle Grove Offset Area (Part Lot 4 DP 1197707), Casula Offset Area (Part Lot 4 DP 1130937) and Moorebank Conservation Area (Part Lot 100 DP 1049508 And Part Lot 1 DP 1197707) (WSP Parsons Brinckerhoff 2017).

The most recent, approved version of this plan is to be implemented to manage Development activities for the duration of construction.

1.6. Staged Submission of this Plan

Subject to the approval of the Secretary (CoC A14), the Development elected to stage the submission of a number of strategies, plans and programs that were required by the CoCs based on the Delivery Works Phases identified in Table 1-1.

In accordance with CoC A15, Table 1-2 identifies the stage of the Development to which this document applies, and the relationship between any future stage. The trigger for updating the document is also identified in Table 1-2. When a document is updated, the most recent version of the document supersedes the previous version(s).

Table 1-2 Staged Documentation and Triggers to Satisfy CoC A15

Delivery Works Phases	General Description of Works	Current Document	Trigger to Update Document
Early Works			
Early Works	Geotechnical and utilities investigations, adjustments and relocations, clearing and stripping of topsoil, heritage salvage, fill importation, establishment of site access, temporary fencing and compound establishment, and other activities determined by the ER to have minimal environmental impact	☐Document prepared to address Early Works only	Prior to the commencement of construction works
Construction			
Construction Phase A	Early Works activities, bulk earthworks, drainage and utilities, construction and internal fit-out of warehousing and finishing works.	☐ Document prepared to address Construction Works Phase A only (does not address Moorebank Avenue upgrade works)	Prior to the commencement of Moorebank Avenue upgrade works
Construction Phase B	Construction Phase A activities, construction of the Moorebank Avenue Diversion Road, bulk earthworks, drainage and utilities and pavement works	☒Document prepared to address all construction works (Phase A + Phase B)	No further staging expected.

1.7. Objectives and Targets

Table 1-3 outlines the objectives and targets set out for the Development for the management of flora and fauna during construction. These objectives and targets implement the relevant objectives and targets in the MPW Concept Plan EIS Provisional Environmental Management Framework, and were developed in consultation with the technical specialist, the Proponent and the Principal's Representative, based on collective industry experience and best practice.

Table 1-3 Objectives and Targets

Objective	Target	Timeframe	Accountability
Avoid disturbance to flora and fauna located outside the approved clearing footprint during construction phase of the Development No reduction in the area of native vegetation proposed to be retained To minimise impacts to flora and fauna during Development works and to comply with contractual and legislative requirements	No unauthorised harm or disturbance to threatened flora and/or fauna species or threatened ecological communities outside the construction boundary No reduction in the area of retained native vegetation.	Construction	Contractor's CM
To implement the unexpected finds procedure to minimise impacts on threatened flora and/or fauna species or threatened ecological communities that have not been previously recorded within the Development site	Stop relevant works in 100% of cases where potential threatened flora and/or fauna species or threatened ecological communities is identified in accordance with the Unexpected Finds Procedure (Appendix D)	Construction	Contractor's EM
Maintain the Development personnel's awareness of relevant flora and fauna issues	100% of Development personnel to attend environmental site induction	Construction	Contractor's EM
To prevent the spread of weeds within nominated vegetation retention areas	As a result of implementing the Weed, Pest and Vermin Management Protocol (a) there are no new declared weeds species, pests or vermin introduced onto the Development site (b) noxious and environmental weeds do not spread within the Development site and their presence within vegetation retention areas is reduced	Construction	Contractor's EM
Avoid injury or death of fauna resulting from construction activities (including vegetation clearing and drainage of any on-site waterbodies)	Zero incidents of injury or death to fauna resulting from construction activities (including vegetation clearing and drainage of any on-site waterbodies)	Construction	Contractor's EM

1.8. Consultation

This CFFMP was prepared in consultation with the Office of Environment and Heritage (OEH). A summary of consultation undertaken in preparation of this plan is provided in Table 1-4.

Table 1-4 Consultation Summary

Agency	Date	Person Contacted	Comment	Status
Office of Environment and Heritage	02/03/18	OEH representative	This plan emailed to request consultation	Closed
	06/03/18	OEH representative	Voicemail left for OEH representative attempting to arrange a meeting for consultation with this plan. Follow up email sent.	Closed
	20/03/18	OEH representative	Voicemail left for OEH representatives attempting to arrange a meeting to discuss this plan. Follow up email sent.	Closed
	20/03/18	SIMTA	Phone conversation; indicating that there will be a new OEH representative for the Development.	Closed
	20/03/18	OEH representative	Follow up email sent confirming details of phone conversation and requesting the contact details of the new OEH contact for the Development.	Closed
	03/04/18	OEH representative	Attempted to contact OEH representative via phone. Email sent requesting OEH comments for this plan be provided.	Closed
	03/04/18	SIMTA	Email received from OEH representative with comments on this plan.	Closed
	19/04/18	OEH representative	Updated plan and response table emailed to OEH to demonstrate how comments have been addressed.	Closed

2. Environmental Management

2.1. Legal and Other Requirements

Table 2-1 below details the legislation, planning instruments and guidelines considered during development of this CFFMP.

Table 2-1 Legislation, Planning Instruments and Guidelines

Legislation	Description	Relevance to this FFMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The preparation of this CFFMP is a CoC of the Development Consent issued by the Planning Assessment Commission under Section 89E of the EP&A Act.
Environment Protection and Biodiversity Conservation Act 1999	The main purpose of this Act is to provide a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the EPBC Act as Matters of National Environmental Significance (MNES). In accordance with sections 67 and 67A of the EPBC Act, any works that have the potential to result in an impact on any MNES or on Commonwealth land are considered 'controlled actions' and require a referral to the Federal Minister for the Environment for approval.	The Development was determined to be a controlled action under the EPBC Act, as a result of the Development's impacts on listed threatened species and communities and Commonwealth land. This CFFMP prescribes measures to avoid and minimise impacts on threatened species and communities listed under the A EPBC Act, that are known or considered likely to occur in the Development site.
Threatened Species Conservation Act 1995	This Act provides for the protection and management of threatened species, populations and ecological communities listed under schedules 1, 1A and 2 of the Act. This Act was repealed on 25 August 2017 and replaced with the *Biodiversity Conservation Act 2016.*	This CFFMP prescribes measures to avoid and minimise impacts on threatened species and communities listed that were listed under the TSC Act (now repealed and replaced by the BC Act) that are known or considered likely to occur in the Development site.
Biodiversity Conservation Act 2016	This Act broadly incorporates similar objectives to those identified the TSC Act, and additionally seeks to establish a framework for assessment and offsetting of development impacts as well as investment in biodiversity conservation.	This CFFMP prescribes measures to avoid and minimise impacts on threatened species and communities listed under the BC Act, that are known or considered likely to occur in the Development site.
Biosecurity Act 2015 (Noxious Weeds Act 1993 repealed)	This act repeals the *Noxious Weed Act 1993* as of July 1 2017, as such, the *Noxious Weed Act 1993* is not included in this plan. The primary objective of the Act is to provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter, dealing with biosecurity matter, carriers and potential carriers.	This CFFMP prescribes measures to manage weeds and pests that may be identified in the Development site, although none have been identified to date.

Legislation	Description	Relevance to this FFMP
	Division 2 of the Act defines local control authorities for weeds. Schedule 1 outlines special provisions relating to weeds, including the duty of land occupiers to control and manage weeds.	
Fisheries Management Act 1994	This Act aims to conserve, develop and share the fishery resources of the State for the benefit of present and future generations, including conserving threatened species, populations and ecological communities of fish and marine vegetation.	Fish habitat is associated with Anzac Creek and Georges River. The Development will not directly impact this habitat. Management measures prescribed in Section 3.3 aim to minimise indirect impacts on these waterways.
Prevention of Cruelty to Animals Act 1979	This Act aims to prevent cruelty to animals, and to promote the welfare of animals by requiring a person in charge of an animal to provide care for the animal, and to treat the animal in a humane manner, and to ensure the welfare of the animal.	The implementation of the Clearing Protocol provided in Appendix B would avoid and minimise injury and mortality of fauna that occur within the construction footprint. Management measures are provided in this CFFMP for the management and treatment of any injured fauna species.
Infrastructure Sustainability Council of Australia (ISCA) Rating Scheme	The ISCA rating scheme aims to advance sustainable outcomes in infrastructure through evaluating planning, design, construction and operation phases of all infrastructure asset classes.	The implementation of sustainability initiatives related to targeted ISCA credits would enhance the sustainability of the Development. Credits related to ecology have requirements that are met through the management measures outlined in this CFFMP.
Biodiversity Offsets Policy for Major Projects	This policy was released in October 2014 and is applicable to projects that are SSD or State Significant Infrastructure under the EP&A Act.	A Biodiversity Offset Strategy was prepared as part of the MPE Stage 1 EIS and subsequently updated in the updated BAR (Arcadis, 2017). The offset areas consider the impacts for the greater Moorebank Precinct, including all stages of development under the MPW Concept Approval (SSD 5066) and the MPE Concept Approval (MP10_0193).

Guidelines and policy documents relevant to biodiversity and this CFFMP include the following publications:

- Hygiene Protocol for the control of Disease in Frogs (DECC 2008)
- Code of Practice for Injured, Sick and Orphaned Protected Fauna (OEH 2011)
- Code of Practice for injured, sick and orphaned flying foxes (OEH 2012)
- Guidelines for the rehabilitation of birds of prey (DECCW 2011)
- Florabank Native Seed Collection Code of Practice (Greening Australia NSW 1999)

- Guidelines for the Translocation of Threatened Plants in Australia – Second Edition (Australian Network for Plant Conservation 2004).

2.2. Development Consent Compliance Matrices

Development consent compliance matrices are included in Appendix A.

2.3. Roles and Responsibilities

Key roles and responsibilities associated with this plan are presented in Table 2-2.

Table 2-2 Roles and Responsibilities

Roles	Responsibilities
Contractor's Construction Manager (Contractor's CM)	• Identify and allocate sufficient resources for the implementation of this CFFMP • Verify that the outcomes of the visual checks/ compliance construction monitoring/ incident reporting are systematically evaluated as part of ongoing management of construction activities • Verify that audits of construction site records/ monitoring records/ incident reports are undertaken on a monthly basis; findings are shared with relevant site personnel and corrective actions are implemented • Verify that all relevant personnel understand the most up-to-date copy of this CFFMP • Verify that any required actions arising from the preclearance surveys, detection of a threatened species or if clearing is required outside of the approved Development footprint are reported to the relevant personnel for further action and verify that the actions are effectively implemented • Verify that qualified personnel conduct the preclearance surveys and any animal handling procedures • Verify that all monitoring reporting requirements are met and maintained on site • Authorise all monitoring reports and any revisions to this CFFMP.
Contractor's Environmental Manager (Contractor's EM) **Site Supervisors** **Sub-contractors**	• Understand and implement mitigation protocols as required in the CFFMP and any other required measures during construction • Undertake relevant training to implement the requirements of this CFFMP • All personnel are responsible for adhering to the clearing limits and protecting native flora and fauna species • All site personnel to undertake toolbox talks in relation to the reporting process for injury/ death to fauna or clearing of flora occurring beyond the required limits for construction • Supervisors are responsible for implementing environmental controls as outlined by the Contractor's EM.
Development Ecologist	• Preclearance surveys must be undertaken by a suitably qualified and experience ecologist. • The ecologist may also be responsible for providing advice to minimise potential impacts to any threatened and/or protected fauna species that may

Roles	Responsibilities
	be recorded during the preclearance surveys or as incidental observations during the construction activities. • The Development Ecologist must conduct all works under the following licences: – NSW National Parks and Wildlife Service Scientific Investigation Licence – Animal Research Authority issued by NSW Agriculture – Certificate of Accreditation of a Corporation as an Animal Research Establishment issued by NSW Agriculture – Animal Care and Ethics Committee Certificate of Approval issued by NSW Agriculture.

2.4. Training

Training and induction for construction and site personnel is to include, but not be limited to:

- Raising awareness of on-site environmental management issues
- Providing information on the location and importance of threatened flora and fauna species (and habitat), and ecological communities
- Providing information on the boundaries for vegetation clearing and no-go zones, including the Bootland to the east and south of the Development
- Training on procedures on encountering fauna
- Training on weed identification and the appropriate guidelines for removing weeds, driving vehicles in weed infested locations and the disposal of weed infested topsoil etc.
- Penalties associated with breaching environmental policies, regulation and law
- Emergency and incident responses, including spill management procedures including the management of chemical and fuel spills and fire.

Records of all training are to be filed in accordance with the document control system outlined in Section 2.4 of the CEMP.

3. Implementation

3.1. Existing Environment

The existing environment information described below is obtained from the Biodiversity Assessment Report (Appendix O of the EIS).

3.1.1. Threatened Flora Species

Four threatened species occur in the Development site (refer to Table 3-1). The locations of these species are shown on Figure 3-1.

Table 3-1 Threatened Species Located in the Development Site

Species	Status Under BC Act	Status Under EPBC Act
Hibbertia puberula subsp. puberula	Endangered	-
Persoonia nutans (Nodding Geebung)	Endangered	Endangered
Grevillea parviflora subsp. parviflora (Small-flowered grevillea	Vulnerable	Vulnerable
Hibbertia fumana	Critically Endangered	-

An additional two threatened species occur on land adjoining the Development site (refer to Table 3-2). The locations of these species are also shown on Figure 3-1.

Table 3-2 Threatened Species Located in Proximity to the Development site

Species	Status under BC Act	Status under EPBC Act
Acacia bynoeana (Bynoe's Wattle)	Endangered	Vulnerable
Acacia pubescens (Downy Wattle)	Vulnerable	Vulnerable

Hibbertia sp. Bankstown (syn. *Hibbertia puberula subsp. glabrescens*) is currently known to occur in only one population at Bankstown Airport. The airport site is very heavily modified from the natural state, lacks canopy species and is currently a low grass/shrub association with many pasture grasses and other introduced herbaceous weeds. Soil at the site is a sandy (Tertiary) alluvium with a high silt content. Based on the presence of potentially similar habitat surveys for the species were undertaken within the Development Site in June 2016, October 2016, October-November 2017. The species was not detected and was considered unlikely to occur within the Development Site (Moorebank Precinct East Stage 2 Biodiversity Assessment Report, Arcadis 2017).

3.1.1.1. *Hibbertia puberula subsp. puberula*

Table 3-3 Existing Environment and Occurrence of Hibbertia puberula susp. puberula

Hibbertia puberula* subsp. *Puberula	
Description	A small shrub with few spreading but wiry branches up to 30 cm long. This species flowers from October to December and sometimes January. The distribution of *Hibbertia puberula* subsp. *puberula* extends from Wollemi National Park in the north to Morton National Park near Nowra in the south. This species favours low heath on sandy soils or rarely clay, with or without rocks underneath (NSW Office of Environment & Heritage 2017).
Number occurring in the Development	Approximately 110 plants of *Hibbertia puberula* subsp. *puberula* were located within the Development site, in four locations: • Five plants in an area of sparse regrowth adjoining the fenceline in the south of the Development site, next to the access track • One plant in denser regrowth adjoining the fenceline in the south-east of the Development site, next to the powerline easement • 82 plants in mown grassland in the south-east of the Development site • 22 plants in Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland along the western margin of Moorebank Avenue A total of 3.49 ha of *Hibbertia puberula subsp. puberula* will be removed from the MPE Stage 2 Development site, including Mod 2.
Number occurring outside of the Development	A total of 1,161 plants have been recorded in Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain in the Bootland, to the south of the Development site. Of the 1,161 plants that have been recorded outside of the Development, 15 are within approximately 10 m of the eastern boundary, 24 are within approximately 10 m of the southern boundary and 17 are within approximately 10 m of the western boundary of the Development site.
Photo	

3.1.1.2. *Grevillea parviflora subsp. parviflora* (Small-flower Grevillea)

Table 3-4 Existing Environment and Occurrence of Grevillia parviflora subsp. parviflora

Grevillea parviflora* subsp. *Parviflora	
Description	A low spreading to erect shrub, usually less than a metre high. The small white flowers are spider-like and clustered in groups of 6-12. This species is sporadically distributed throughout the Sydney Basin and in the Hunter in the Cessnock - Kurri Kurri area (particularly Werakata National Park. Sydney region occurrences are usually on Tertiary sands and alluvium, and soils derived from the Mittagong Formation. Soil landscapes include Lucas Heights or Berkshire Park (NSW Office of Environment & Heritage 2017; Department of the Environment and Energy 2017).
Number occurring in the Development	A total of 79 stems of *Grevillea parviflora* subsp. *parviflora* were recorded in Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain, along the western margin of Moorebank Avenue.
Number occurring outside of the Development	A total of 7,063 stems have been recorded in Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain in the south of the bootland, to the south of the Development site. Of these 7,063 stems, zero have been recorded within 10 m of the eastern boundary and 141 have been recorded within 10 m of the western boundary of the Development site.
Photo (NSW Office of Environment & Heritage 2017)	

3.1.1.3. *Persoonia nutans* (Nodding Geebung)

Table 3-5 Existing Environment and Occurrence of Persoonia nutans

Persoonia nutans	
Description	An erect to spreading shrub 0.5–1.5 metres high, with linear leaves and hairy young branches (DotE 2017). It is restricted to the Cumberland Plain in Western Sydney, between Richmond in the north and Macquarie Fields in the south. Northern populations are confined to aeolian and alluvial sediments and occur in a range of sclerophyll forest and woodland vegetation communities.
Number occurring in the Development	12 plants were located in the far south of the Development site, in proximity to the Development site boundary, including the area associated with Mod 2. A total of 0.70 ha of *Persoonia Nutans* will be cleared for Mod 2.
Number occurring outside of the Development	A total of 258 plants of *Persoonia nutans* have been recorded to date in the Boot land, south of the Development site. Of the 258 plants recorded in the Boot Land, 4 have been recorded within approximately 10 m of the southern boundary, zero have been recorded within

Persoonia nutans	
	approximately 10 m of the eastern boundary and 3 have been recorded within approximately 10 m of the western boundary of the Development site.
Photo (NSW Office of Environment & Heritage 2017)	

3.1.1.4. *Acacia bynoeana* (Bynoe's Wattle)

Table 3-6 Existing Environment and Occurrence of Acacia bynoeana

Acacia bynoeana	
Description	A semi-prostrate shrub to a metre high with shiny, stiff and narrow leaves, that flowers from September to March. *Acacia bynoeana* occurs in heath or dry sclerophyll forest on sandy soils. The species seems to prefer open, sometimes slightly disturbed sites such as trail margins, edges of roadside spoil mounds and in recently burnt patches. Associated overstorey species include Red Bloodwood, Scribbly Gum, Parramatta Red Gum, Saw Banksia and Narrow-leaved Apple (NSW Office of Environment & Heritage 2017; Department of the Environment and Energy 2017).
Number occurring in the Development site	This species has not been identified in the Development site.
Number occurring outside of the Development site	39 plants have been recorded in Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, in the central area of the bootland, to the south of the Development site. One individual of *Acacia bynoeana* is located approximately 6 metres east of the eastern boundary of the Development site.
Photo	 

3.1.1.5. *Acacia pubescens* (Downy Wattle)

Table 3-7 Existing environment and occurrence of Acacia pubescens

Acacia pubescens	
Description	A spreading shrub, one to five metres high with brilliant yellow flowers, bipinnate leaves and hairy branchlets. *Acacia pubescens* occurs on alluviums, shales and at the intergrade between shales and sandstones in open woodland and forest. Found in a variety of plant communities, including Cooks River/Castlereagh Ironbark Forest, Shale/Gravel Transition Forest and Cumberland Plain Woodland (NSW Office of Environment & Heritage 2017; Department of the Environment and Energy 2017).
Number occurring in the Development site	This species has not been identified in the Development site.
Number occurring outside of the Development site	This species has been recorded in three distinct patches in both Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin (ME003) and Broad-leaved Ironbark -Grey Box- Melaleuca decora grassy open forest on clay/gravel soils of the Cumberland Plain, Sydney Basin. The total number of stems over the three patches was estimated at 254 stems. The closest record of Acacia pubescens is located approximately 18 metres east of the eastern boundary of the Development site.
Photo	

3.1.1.6. *Hibbertia fumana*

Table 3-8 Existing Environment and Occurrence of Hibbertia fumana

Hibbertia fumana	
Description	A low shrub or sub-shrub with many branches at the base and branches also well branched. Occurs in areas of woodland with a more open understorey, in associated with intergrade alluvial habitats rich in sands and laterite. Currently only known from a single population at Moorebank but potentially elsewhere in greater Sydney.
Number occurring in the Development site	This species has been identified in the Development site. A total of 0.14 ha of Hibbertia Fumana will be cleared from within Mod 2 Development boundary.
Number occurring outside of the Development site	The core population of 14,270 plants of Hibbertia fumana is located in a transitional zone between Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin and Broad-leaved Ironbark -Grey Box- Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin, in the central southern part of the Boot Land, south of Anzac Creek.

Hibbertia fumana	
Photo	 

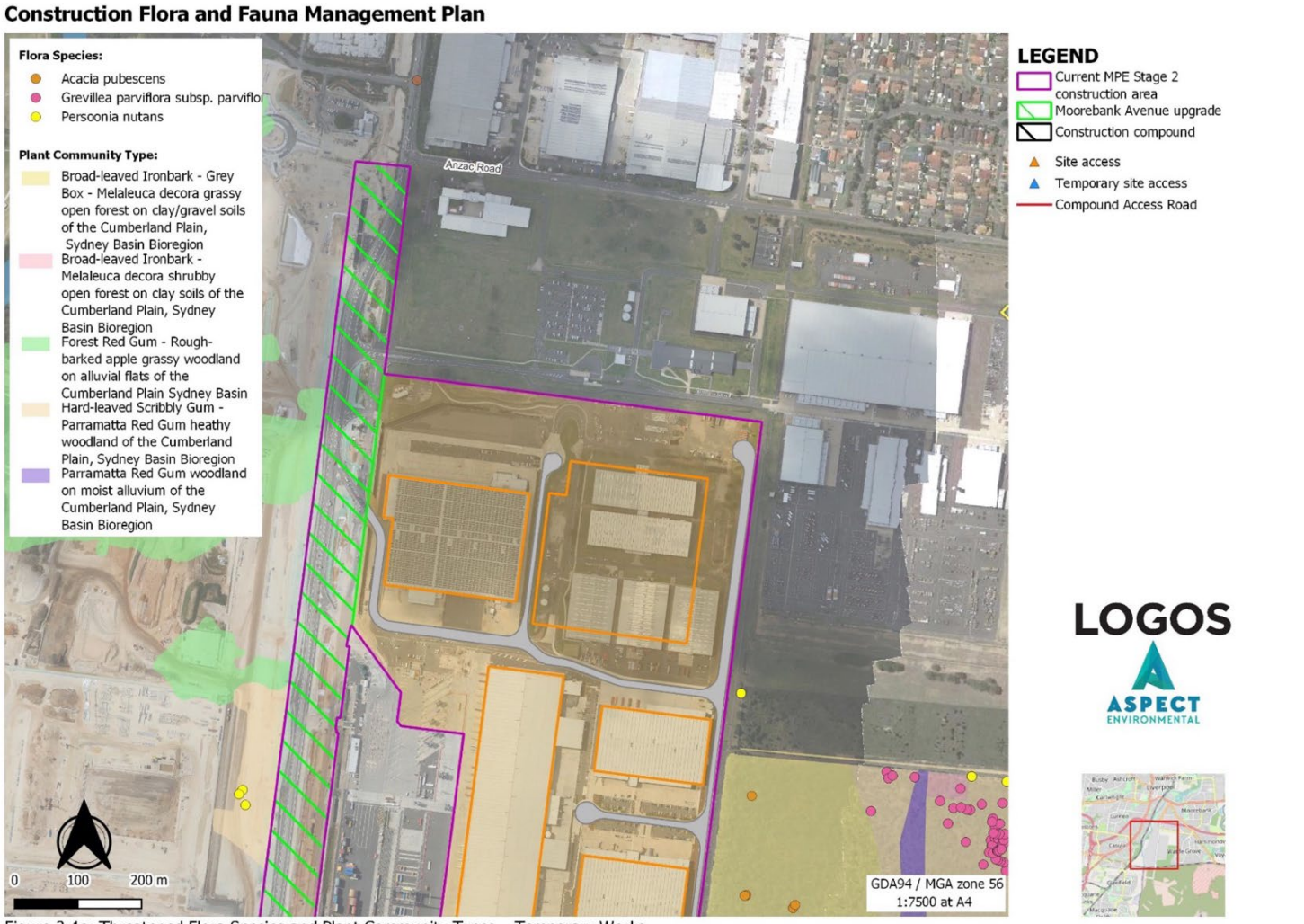

Figure 3-1a: Threatened Flora Species and Plant Community Types – Temporary Works

Figure 3-1a Threatened Flora Species and Plant Community Types – Temporary Works

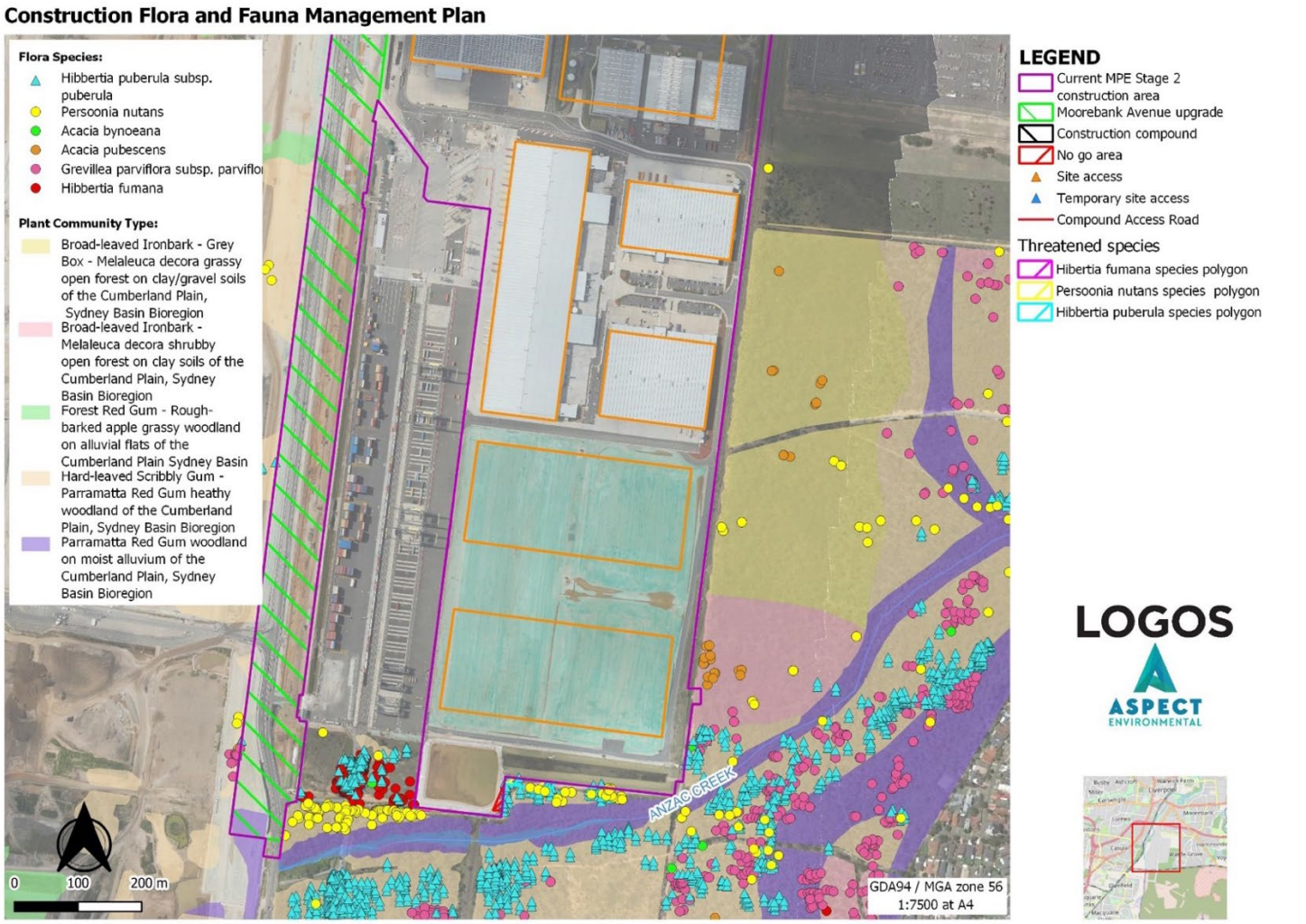

Figure 3-1b: Threatened Flora Species and Plant Community Types – Temporary Works

Figure 3-1b Threatened Flora Species and Plant Community Types – Temporary Works

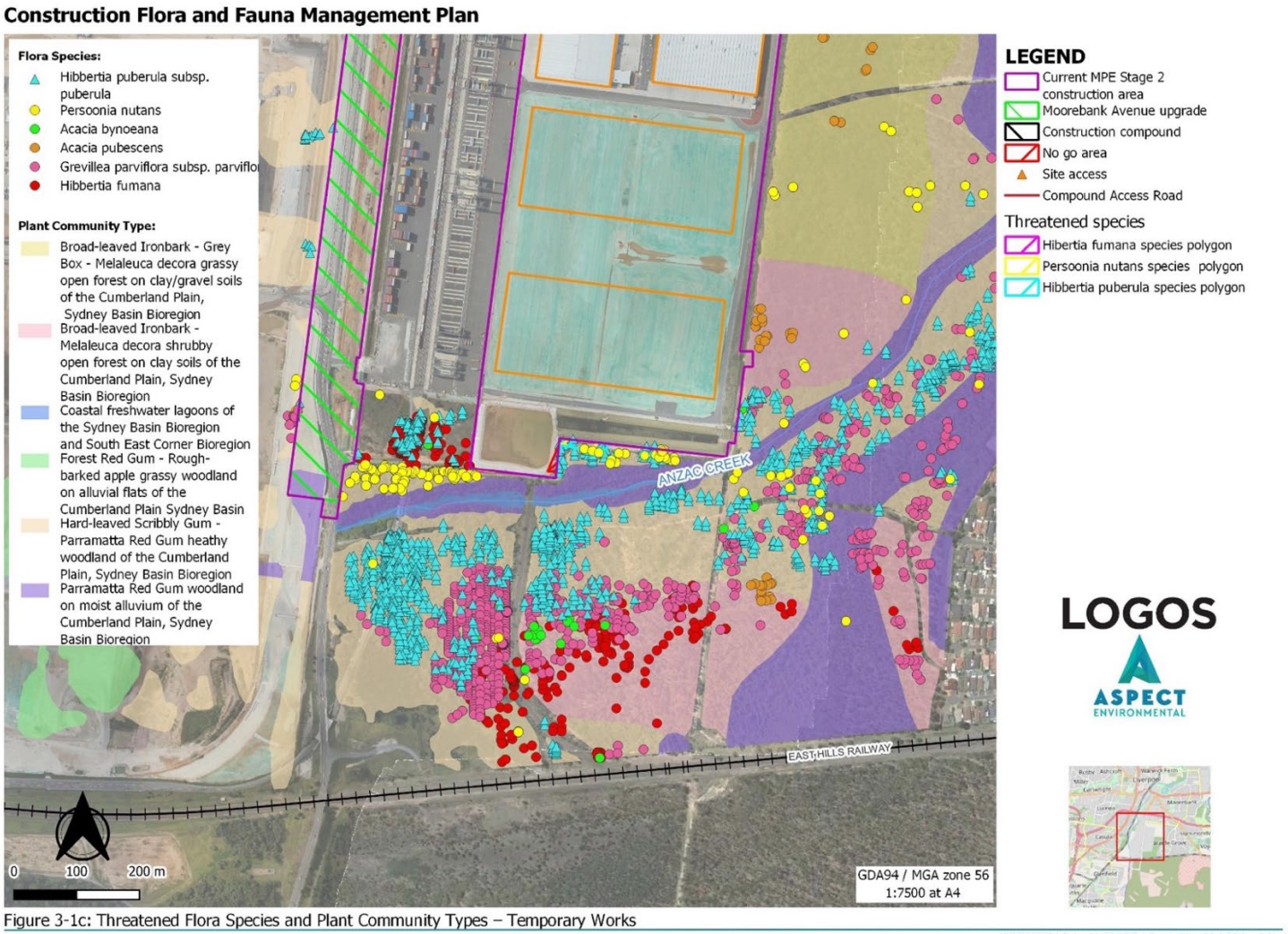

Figure 3-1c: Threatened Flora Species and Plant Community Types – Temporary Works

Figure 3-1c Threatened Flora Species and Plant Community Types – Temporary Works

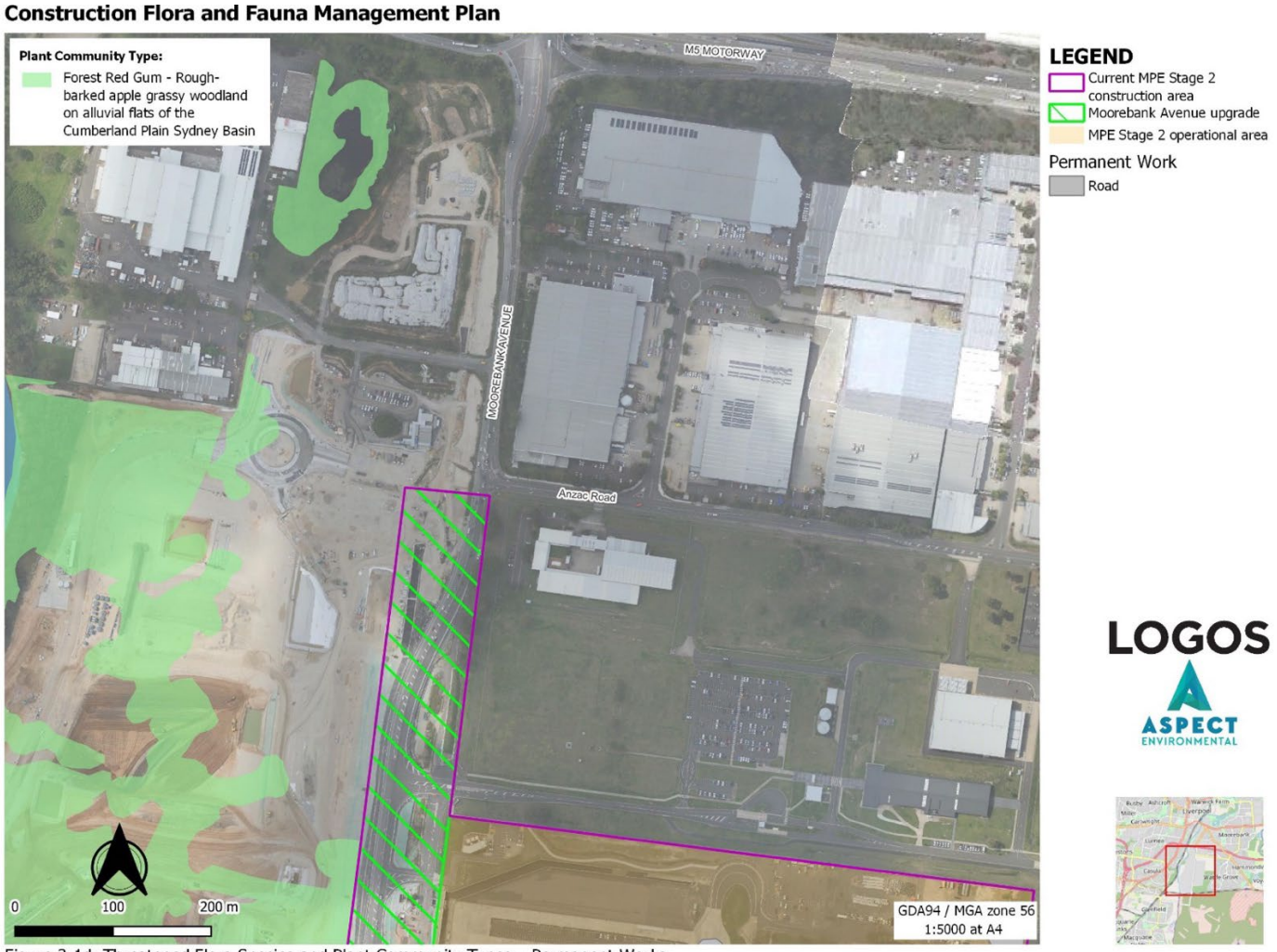

Figure 3-1d: Threatened Flora Species and Plant Community Types – Permanent Works

Figure 3-1d Threatened Flora Species and Plant Community Types – Permanent Infrastructure

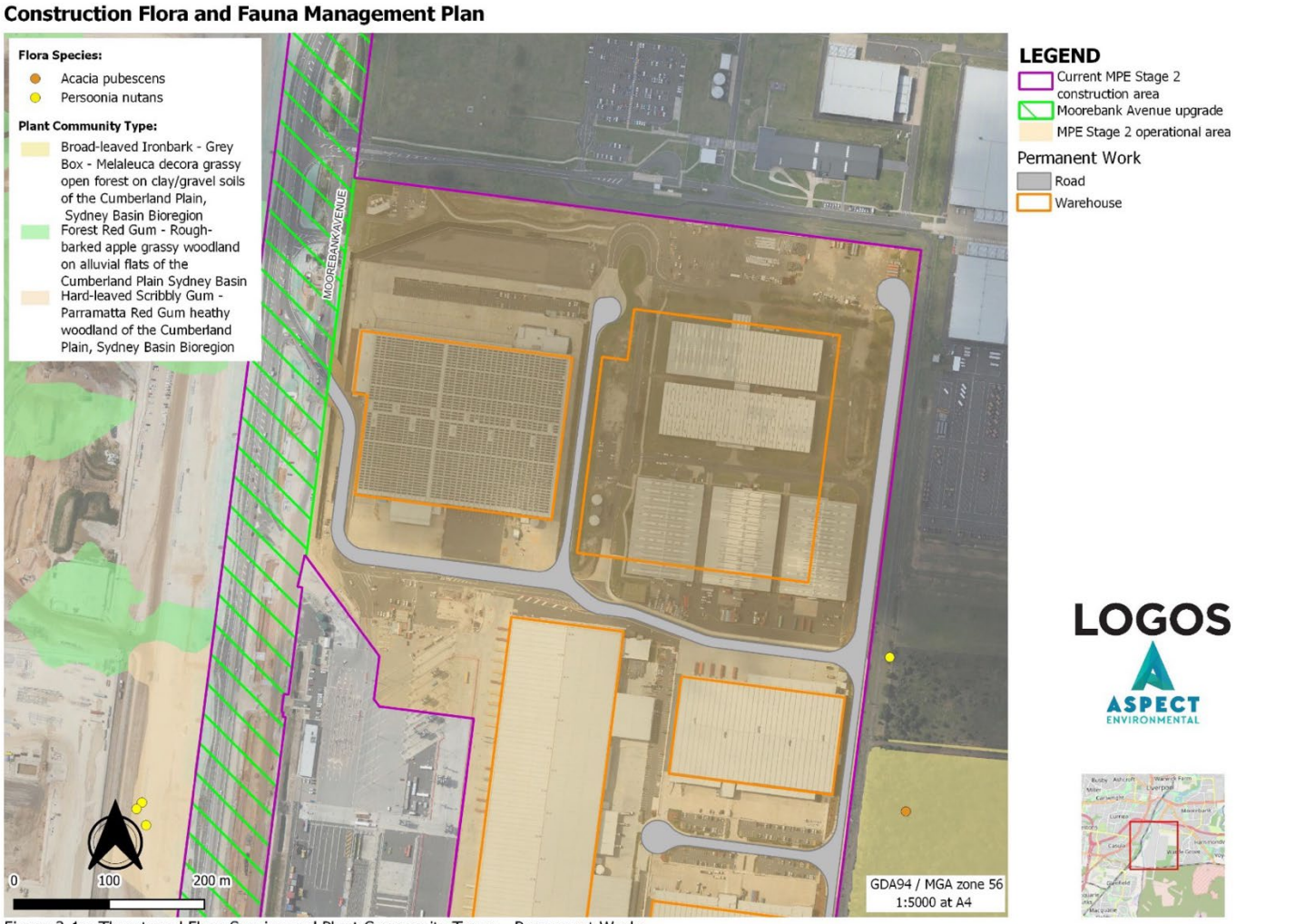

Figure 3-1e: Threatened Flora Species and Plant Community Types – Permanent Works

Figure 3-1e Threatened Flora Species and Plant Community Types – Permanent Infrastructure

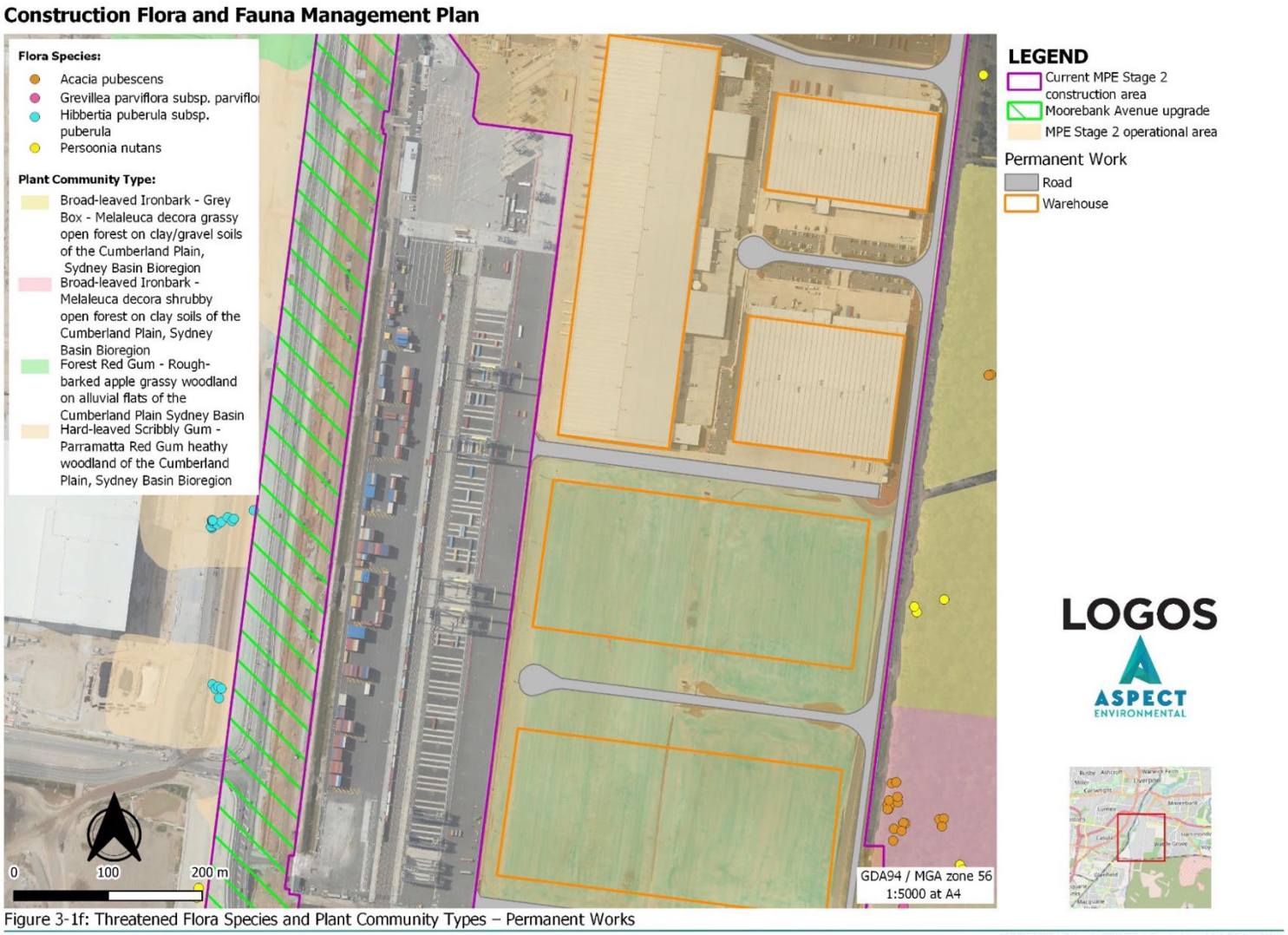

Figure 3-1f Threatened Flora Species and Plant Community Types – Permanent Infrastructure

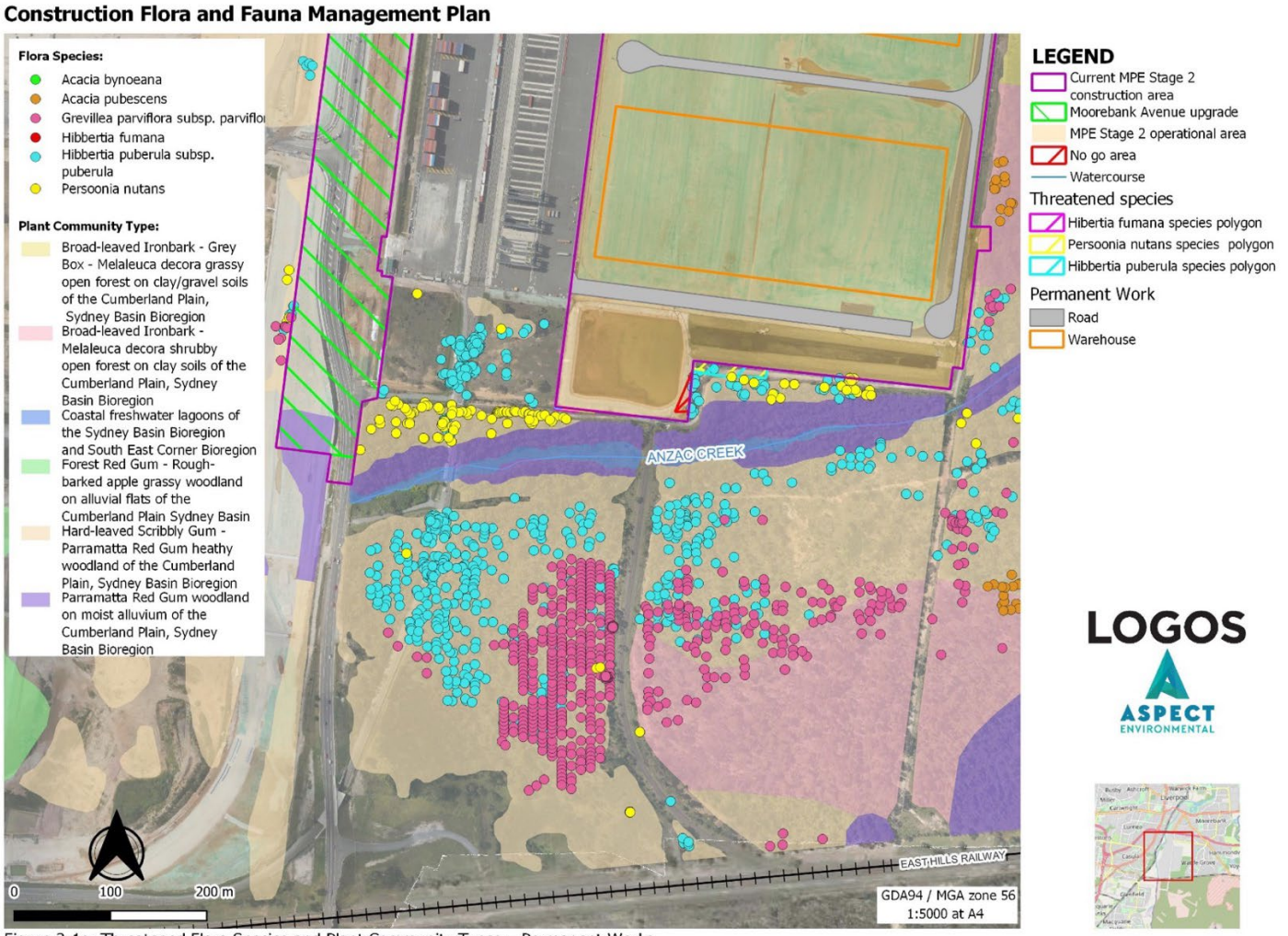

Figure 3-1g: Threatened Flora Species and Plant Community Types – Permanent Works

Figure 3-1g Threatened Flora Species and Plant Community Types – Permanent Infrastructure

3.1.2. Vegetation

Much of the Development supports planted and disturbed vegetation, with the exception of small patches of four different Plant Community Types (PCTs) that mostly occur on the western side of Moorebank Avenue.

3.1.2.1. Planted and Disturbed Vegetation

Planted tree species occur along the verges of Moorebank Avenue and the internal road network, that are typical of cultivated eucalypts that are commonly found as mature street trees in suburban Sydney, with *Eucalyptus microcorys* (Tallowwood), *E. saligna* (Sydney Blue Gum), *Corymbia maculata* (Spotted Gum) and *C. citriodora* (Lemon-scented Gum) frequently recorded. The groundlayer in non-paved areas consists of mown grass lawns, dominated by exotic grass species, with native grass species persisting in some locations. In the south of the Development site is a network of drainage channels with some tree plantings and some apparent tree and shrub regeneration. These channels support a mixture of native, non-local native and exotic trees and shrubs.

3.1.2.2. Plant Community Types

Four native PCTs occur within the Development site (refer to Table 3-9). Each of these four PCTs are equivalent to Threatened Ecological Communities (TECs) listed under the BC Act and/or EPBC Act. The distribution of these PCTs is shown on Figure 3-1.

Table 3-9 Plant Community Types Occurring in the Development Site

Plant Community Type	Equivalent Threatened Ecological Community	Status under BC Act	Status under EPBC Act	Area in Development
Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin:	Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion	Vulnerable	Endangered	4.00 ha
Broad-leaved Ironbark - Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin Bioregion:	Cooks River – Castlereagh Ironbark Forest in the Sydney Basin Bioregion	Endangered	Critically Endangered	0.05 ha
Parramatta Red Gum woodland on moist alluvium of the Cumberland Plain, Sydney Basin:	Castlereagh Swamp Woodland	Endangered	-	0.22 ha
Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin:	River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and Southeast Corner bioregions	Endangered	-	0.59 ha

A small, isolated patch of Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland adjoins the disused rail line in the south-east of the Development, which supports mature trees of *E. sclerophylla* (Hard-leaved Scribbly Gum) and numerous shrubs of *Acacia* spp., *Allocasuarina littoralis* (Black She-oak), *Hakea salicifolia* (Willow Hakea) and *Melaleuca nodosa* (Ball Honey-myrtle). Small patches of this woodland also occur along the western margin of the Development, on the western side of Moorebank Avenue.

A small area of Broad-leaved Ironbark - Melaleuca decora shrubby open forest occurs along the eastern margin of the Development, that is part of a much larger area that falls outside of the Development. This open forest community is characterised by a canopy of small trees and tall shrubs such as *Angophora bakeri* (Narrow-leaved Apple), *Acacia binervia* (Coast Myall), *Acacia parramattensis* (Parramatta Wattle) and *Melaleuca decora* (White Feather Honeymyrtle).

A small area of Parramatta Red Gum Woodland occurs within the south-west corner of the Development, on the western side of Moorebank Avenue. This woodland is characterised by a canopy of *Melaleuca linariifolia* (Flax-leaved Paperbark), *Casuarina glauca* (Swamp Oak) and *Leptospermum trinervium* /Flaky-barked Tea-tree).

Small patches of Forest Red Gum – Rough-barked Apple grassy woodland occurs in the north-western corner of the Development site, on the western side of Moorebank Avenue. This woodland is characterised by *Eucalyptus tereticornis* (Forest Red Gum), *Eucalyptus amplifolia* (Cabbage Gum), *Angophora floribunda* (Rough-barked Apple), *Bursaria spinose* (Blackthorn, Boxthorn), *Breynia oblongifolia* (Coffee bush), *Leucopogon juniperinus* (Prickly Beard-heath), *Jacksonia scoparia* (Winged Broom-pea), *Acacia spp.,* and *Exocarpos cupressiformis* (Cherry Ballart).

3.1.3. Threatened Fauna Species

No threatened fauna species have been identified in the Development site. Locally occurring threatened fauna species have been determined to have a low likelihood of occurring on the Development site, due to an absence of preferred nesting, sheltering and/or roosting habitat.

Koalas are known to occur within the Bootland, to the south and east of the MPE Stage 2 site. There are some eucalypt trees within the MPE Stage 2 site which are considered be feed tree species and therefore provide potential foraging resources for Koalas. Notwithstanding, Koalas or evidence of use by Koalas, has not been detected within the MPE Stage 2 site.

3.1.4. Fauna Habitat

Fauna habitat features identified in the Development site are summarised in Table 3-10 and hollow bearing trees are shown in Figure 3-2. These habitat features offer foraging, sheltering, nesting and roosting resources to a variety of native fauna species.

Table 3-10 Fauna Habitat Features Previously Occurring in the Development Site

Habitat Feature	Location	Comments
Flowing and fruiting trees and shrubs	Occur throughout the Development site, in planted and disturbed areas and within patches of native vegetation mapped as PCTs	Foraging, sheltering and roosting habitat to birds Noisy Miner (*Manorina melanocephala*), Raven (*Corvus coronoides*), Pied Currawong (*Strepera graculina*) and Magpie Lark (*Grallina cyanoleuca*). Foraging habitat for Grey-headed Flying Fox (*Pteropus poliocephalus*)
Groundlayer habitats, including leaf litter and ground timber	Associated with patches of native vegetation mapped as PCTs	Foraging and sheltering habitat to small mammals and reptiles such as Eastern brown snake (*Pseudonaja textilis)*
Mown grassy areas	Occur throughout the Development site, in planted and disturbed areas	Foraging habitat for ground-feeding birds such as White-winged Chough (*Corcorax melanorhamphos*), Red-rumped parrot (*Psephotus haematonotus*) and Magpie Lark (*Grallina cyanoleuca*)
Drainage channels supporting aquatic and fringing vegetation	A network of formalised drainage channels is located in the south of the Development site that drain into the native vegetation to the east of the Development site	Foraging and sheltering habitat for reptiles and amphibians such as Common Eastern Froglet (*Crinia signifera*)
Hollow-bearing trees	Four hollow-bearing trees are located within the Development site	Small hollows or bark fissures offer roosting and sheltering habitat to hollow-dependant microbats, arboreal mammals and birds such as Rainbow Lorikeet (*Trichoglossus haematodus*) and Scaly-breasted Lorikeet (*Trichoglossus chlorolepidotus*)
Koala feed trees	Scattered throughout the southern portion of the extended Mod 2 boundary	A total of 0.19 ha PCT 883 vegetation and 0.10 ha of scattered feed trees occurs within the Mod 2 boundary including Hard-Leaved Scribbly Gum and Parramatta Red Gum.
Warehouse buildings	Warehouses, sheds and other built structure of various sizes are located throughout the Development site	Marginal roosting habitat to microchiropteran bats that may occupy man-made structures, such as Gould's Wattled Bat (*Chalinolobus gouldii*)

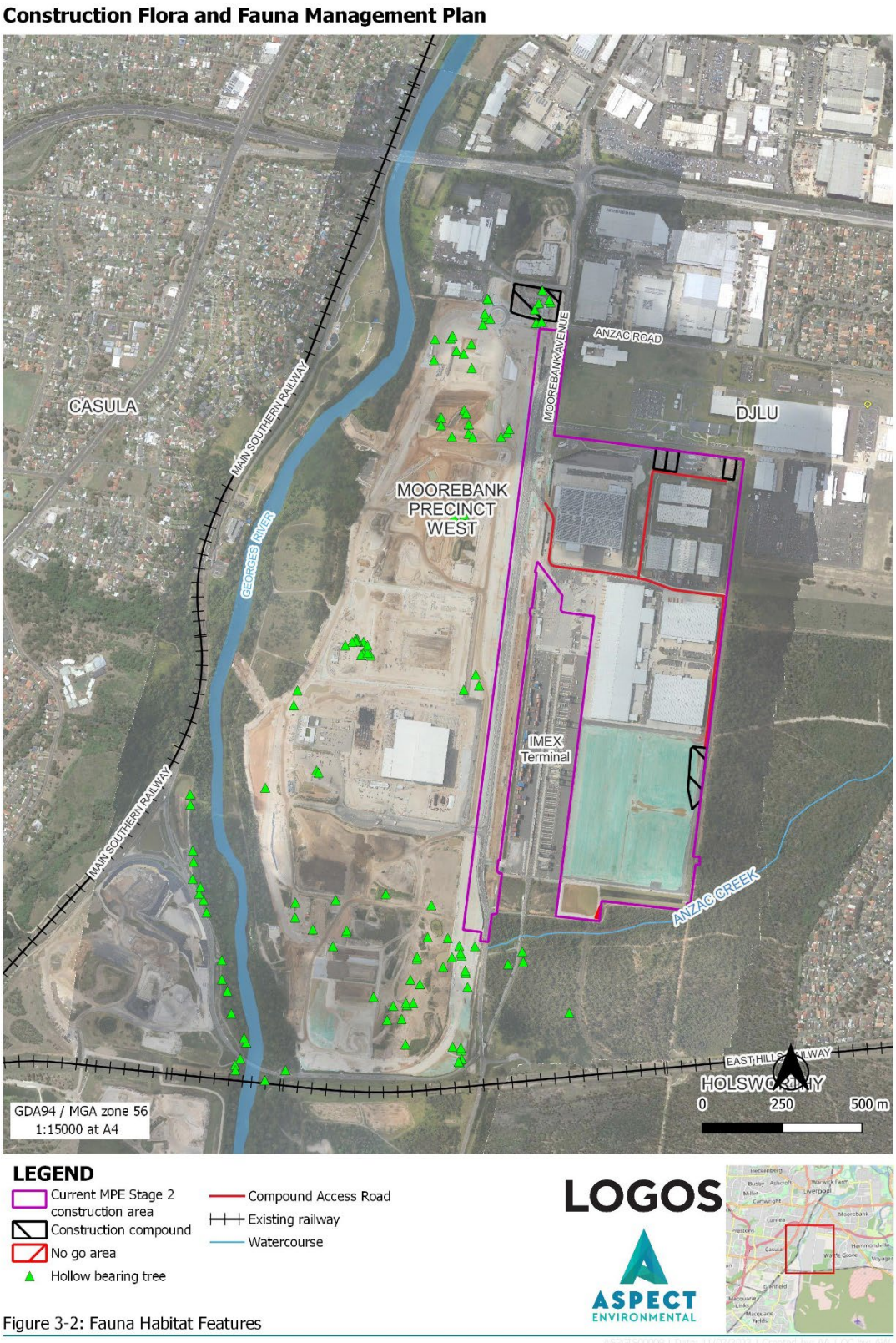

Figure 3-2: Fauna Habitat Features

Figure 3-2 Fauna Habitat Features

The Development site is located within a relatively industrialised and urbanised landscape. Single, isolated trees or patches of trees amongst expanses of mown exotic and native grasses in planted and disturbed areas do not maintain connectivity with larger areas of habitat to the east and south of the Development site. Patches of native vegetation (mapped as PCTs) adjoining Moorebank Avenue maintain some connectivity to other similar vegetation on the MPW site, which also occurs in a patchy/fragmented state. The fragmented habitat within the Development site is further isolated from adjacent habitat due to the presence of significant barriers to fauna movement such as Moorebank Avenue and the chain-mesh fencing surrounding the Development site.

3.2.Aspects, Impacts and Risks

Impacts of the Development on biodiversity were assessed by the *Moorebank Precinct East-Biodiversity Assessment Report* (Arcadis 2017), which was prepared in accordance with the NSW *Framework for Biodiversity Assessment* (FBA) (OEH 2014). Cumulative impacts associated with the Development are assessed in Section 3.2.

The Aspects and Impacts Register can be found in the CEMP.

3.2.1. Construction Activities

The Development's construction activities will have a direct impact on biodiversity values that are located in the Development construction footprint and may have indirect impacts on biodiversity values located on land that adjoins the construction footprint. The most significant construction activities that would impact biodiversity include:

- Clearing of vegetation
- Demolition of buildings
- Earthworks including excavation and grading of topography
- Stockpiling of building / construction waste and spoil
- Plant maintenance.

3.2.2. Construction Activities

A summary of impacts that are have resulted from construction of the Development is provided in Table 3-11. The extent or scale of the impact generally relates to biodiversity impacts that occurred within the construction footprint that would be directly impacted by construction activities.

Table 3-11 Construction Impacts on Biodiversity

Construction Activity	Description of Impact	Extent / Scale of Impact
Direct Impacts		
Vegetation cleared	Four TECS have been clearfed from the construction footprint.	4.02 ha Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion.
		0.05 ha Cooks River – Castlereagh Ironbark Forest in the Sydney Basin Bioregion.

Construction Activity	Description of Impact	Extent / Scale of Impact
		0.22 ha Castlereagh Swamp Woodland.
		0.59 ha River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and Southeast Corner bioregions.
	Four threatened flora species have been cleared from the construction footprint.	79 *Grevillea parviflora* subsp. *Parviflora.*
		A total of 3.49 ha including Mod 2..
		12 *Persoonia nutans* for MPE Stage 2 and a total of 0.70 ha as a result of Mod 2.
		0.14 ha of *Hibbertia Fumana* as a result of Mod 2.
	Loss of fauna habitat resources offered by native trees, shrubs and groundcovers has occurred on the construction footprint.	4.88 ha of native vegetation (total).
		Four hollow-bearing trees.
	Increased fauna habitat fragmentation due to the removal of vegetation from the construction footprint.	Removal of existing tenuous connectivity offered by scattered trees and small patches of native vegetation.
Demolition of buildings	Loss of potential microbat roosting habitat offered by buildings that will be demolished in the construction footprint.	Potential microbat roosting habitat offered by all buildings in construction footprint.
Indirect Impacts		
Earthworks	Changes in runoff and redirection of flows resulting in altered natural flow regimes and/or sedimentation and erosion of nearby waterways and native vegetation.	Anzac Creek, that is located approximately 40 metres south of the Development site. Native vegetation occurring in the Bootland, that directly adjoins the Development site to the east and south.
	Degradation of retained vegetation and fauna habitat due to dust and mobilisation of particulates generated by earthworks.	Native vegetation and fauna habitat occurring in the Bootland, that directly adjoins the Development site to the east and south.

Construction Activity	Description of Impact	Extent / Scale of Impact
Activities involving people, vehicles and plant	Injury or mortality of fauna resulting from collisions with vehicles or plant, or accidental entrapment in plant, trenches or other earthworks.	Fauna species that may occur within the Development site on a temporary or occasional basis.
	Infection of native plants by *Phytophthora cinnamomi,* by infected soil or plant material adhering to and being transferred by vehicles, people (clothes or shoes), animals, or by percolating through the soil, in creeks or storm runoff.	Native vegetation occurring in the Bootland, that directly adjoins the Development site to the east and south.
	Introduction and spread of weeds facilitated by vehicles and plant transporting weed propagules into the construction site.	Native vegetation occurring in the Bootland, that directly adjoins the Development site to the east and south.
	Degradation of waterways, retained vegetation and fauna habitat due to chemical and/or fuel spills from plant, vehicles or other construction equipment.	Anzac Creek, that is located approximately 40 metres south of the Development site. Native vegetation and fauna habitat occurring in the Bootland, that directly adjoins the Development site to the east and south.
Material stockpiling	Reduction in air quality due to dust and mobilisation of particulates generated by stockpiling activities.	Native vegetation and fauna habitat occurring in the Bootland, that directly adjoins the Development site to the east and south.

3.3. Cumulative Impacts

Assessment of potential cumulative biodiversity impacts was undertaken by Arcadis during preparation of the EIS (Appendix O of the EIS). This assessment included the use of database searches, literature and mapping reviews and numerous field surveys.

The assessment found that the development of the MPE Stage 2 site in conjunction with other construction phases associated with the Moorebank East Precinct requires the clearing of vegetation which will reduce or remove a range of biodiversity values. This may include available fauna habitat (roosting, nesting and foraging habitat), potential threatened fauna habitat, threatened flora species, *Biodiversity Conservation Act 2016* listed Threatened Ecological Communities, local provenance plant species and potential seedbanks.

Given the modified and fragmented nature of fauna habitat in the Development site, potential impacts on these species are considered likely to be minimal, and mainly comprise removal of marginal foraging, sheltering and roosting habitat. As a result, cumulative impacts to threatened fauna species are also considered to be unlikely.

Management measures (see Section 3.4) will be implemented prior to, during and after construction to avoid and minimise impacts on flora and fauna species located on the Development site. Impacts on flora species will be limited with appropriate implementation of the measures and, as such cumulative impacts are also anticipated to be unlikely.

3.4. Management Measures

3.4.1. Management of Construction Impacts

Management actions prescribed by this CFFMP aim to avoid and minimise impacts on biodiversity. Note that the direct impacts listed in Table 3-11 are unavoidable impacts, and the loss of threatened flora species and threatened ecological communities will be offset in accordance with a comprehensive Biodiversity Offset Strategy (BOS) that is being prepared for the Development Site.

Management measures to be implemented prior to, during and after construction are prescribed in Table 3-12.

Table 3-12 Management Measures

ID	Management Measure	Timing	Responsibility	Reference
Pre-construction Management Actions				
FF1	To minimise the extent of native vegetation clearing upon Commonwealth Land and the clearing of Nodding Geebung and Small-flower Grevillea clearing limits, No-Go zones and the Development boundary will be identified on all design, construction and operational drawings as well as sensitive area drawings. Clearing limits will be delineated by installing highly visible barrier or tape with “No-Go signage” as shown on the drawings. The southern and eastern boundary of the construction footprint will be located at least 10 metres from the edge of the area of habitat within the Bootland.	Check and verify limits two weeks prior to the commencement of clearing. Highly visible flagging tape or fencing that delineates vegetation to be retained will be maintained until the date of construction completion.	Contractor’s EM Site Supervisor	CoC A7 CoC B103(b) CoC B108(e) FCMM4A FCMM4B MPE C’th CoA - 5(e) MPW C’th CoA - 7(b) MPWS1 REMM 6A
FF2	All trees within the construction footprint that could potentially be used by resident and migratory fauna as habitat (eg hollow-bearing trees) will be marked as follows (with spray paint on their trunks in a visible location)**:** **‘H’** = Habitat Tree. If hollow-bearing or habitat trees are identified as requiring removal, the two-staged clearing process outlined in Appendix B is to be implemented and the clearing supervised by an ecologist. **O** = Ecologist has assessed the tree and it is ready for removal. **O** = Ecologist has assessed the tree and it requires pre-inspection immediately prior to, and during removal.	Two weeks prior to the commencement of clearing	Contractor’s EM Development Ecologist	CoC B108(b) CoC B109 FCMM 4D MPE C’th CoA - 5(f) MPWS1 REMM 6E MPW C’th CoA - 7(b)

ID	Management Measure	Timing	Responsibility	Reference
	Where feasible, clearing of habitat trees (as outlined in Appendix B) will be undertaken in March-April to avoid microbat and hollow-dependent bird breeding seasons In this instance, examples of "where feasible" include: • When pre-clearing surveys identify no species present within habitat trees • Where time restrictions do not allow but clearing of habitat trees can be mitigated through the appropriate management measures detailed in Table 3-12 and the Clearing Protocol located in Appendix B.			
FF2.1	Vegetation will be cleared from a 10m radius around habitat trees to encourage animals roosting in hollows to leave the tree.	During clearing	Contractor's EM Development Ecologist	MPE C'th CoA - 5(f) MPWS1 REMM 6E MPW C'th CoA - 7(b)
FF2.2	Native vegetation where practicable will be reused on the Development site as mulch in erosion and sediment control or landscaping. Where practicable, important habitat elements (e.g. large woody debris) will be moved from the construction area within the conservation area which would not be cleared during the Development, or to stockpiles for later use in vegetation/habitat restoration. Non-native vegetation will be removed from the Development site to an approved green waste facility. In this instance, an example of "where practicable" includes:	During construction	Contractor's EM Development Ecologist	CoC B108(c) MPE C'th CoA - 5(h) MPWS1 REMM 6A MPW C'th CoA - 7(b)

ID	Management Measure	Timing	Responsibility	Reference
	• Where relocating important habitat elements would require clearing of existing native vegetation in order to relocated to a conservation area.			
FF2.3	Weeds, pests and vermin will be managed in accordance with the Weed, Pest and Vermin Management Protocol (Appendix C).	During construction	Contractor's EM	CoC B127(a)(b) MPE C'th CoA - 5(h) MPWS1 REMM 6A
FF2.4	The Development site will be kept tidy for vermin control.	During construction	All construction site personnel	CoC B127(a) MPWS1 REMM 6A
FF2.5	Work occurring underneath the drip zone of EEC must be managed in accordance with the Drip Zone Protocol (Appendix F)	Prior to commencement of works within the drip zones of EECs	All construction site personnel	CoC B108
FF3	Identify nearby habitat suitable for the release of fauna that may be encountered during the pre-clearing process, such as fauna habitat contained within the Bootland to the east and south of the Development site.	Two weeks prior to the commencement of clearing	Contractor's EM Development Ecologist	Best Practice
FF4	Appropriate drainage infrastructure (e.g. sediment basins, diversion drains), erosion and sediment controls will be constructed during the initial stages of construction, in accordance with the Construction Soil and Water Management Plan (CSWMP) and the Construction Erosion and Sediment Control Plan (CESCP). Temporary mitigation measures for soil and water management control during construction will include, but will not be limited to the following: sediment fencing, diversion drains, geotextile	Prior to the commencement of clearing	Contractor's EM Site Supervisor	MPE C'th CoA - 5(e) MPWS1 REMM 6A CMM - Biodiversity

ID	Management Measure	Timing	Responsibility	Reference
	fabric, sediment control basins and gravel shaker ramps for construction traffic.			
FF5	Pre-clearing fauna surveys will be undertaken in accordance with the Clearing Protocol provided in Appendix B.	Two weeks prior to vegetation clearing/demolition of buildings	Contractor's EM Development Ecologist	CoC B103(b) CoC B108(b) CoC B109 FCMM 4D MPWS1 REMM 6A MPW C'th CoA - 7(b)
FF5.1	To manage the potential presence of koalas within the MPE Stage 2 site, the koala management measures outlined in the Clearing Protocol provided in Appendix B will be followed.	Prior to the commencement of each day of clearing	Contractor's EM Development Ecologist	Best Practice
FF5.2	Site fencing will be designed to minimise the entry of koalas onto the site or entrapment of koalas already present on site. Site boundary fencing will be used to prevent koala entry to the site from adjacent land while allowing any koalas present to exit the site. Appropriate boundary fence design will be specified by the Development Ecologist and may include using a strip of Colorbond or Perspek (or equivalent) sheeting on the outside face of fencing to prevent koalas from climbing the fence to enter the site.	Two weeks prior to vegetation clearing	Contractor's EM Development Ecologist	Best Practice
FF6	Nest boxes and microbat roost boxes have been installed in vegetation to be retained within the precinct, to compensate for the loss of hollow-bearing trees from the construction footprint.	Two months prior to vegetation clearing/demolition of buildings	Contractor's EM Development Ecologist	CoC B108(a) CoC B108(b) MPWS1 REMM 6A CMM - Biodiversity

ID	Management Measure	Timing	Responsibility	Reference
FF7	Site fencing and overhead powerlines will be designed and constructed to minimise the potential for collision by birds and bats		Contractor's EM	MPWS1 REMM 6A MPW C'th CoA - 7(b)
FF8	Additional construction areas, such as site offices, construction stockpile locations and machinery/equipment laydown areas will be located within cleared or disturbed areas.		Contractor's EM	CMM – Biodiversity
Construction Management Actions				
Pre-start / Induction				
FF9	All site personnel involved in construction activities must be inducted during Toolbox Talks on the requirements of this CFFMP prior to commencing work on the Development site. Site personnel are to be: • Made aware of the clearing limits and how they are marked • Informed that they are not to encroach on areas beyond the clearing limits • Are to be informed of the two-stage clearing process for hollow-bearing trees • Made aware of the locations of threatened flora species, Threatened Ecological Communities and vegetation to be retained, measures required to protect them, and the consequences of damage to these areas • Made aware of the local fauna that may occur on the Development site	Immediately prior to the commencement of construction activities	Contractor's EM Site Supervisor	FCMM 4A MPWS1 REMM 6A MPE C'th CoA – 5(e) and (h) MPW C'th CoA - 7(b)

ID	Management Measure	Timing	Responsibility	Reference
	• Made aware of the Unexpected Finds Procedure, pertaining to threatened flora and fauna species that may be found on the Development site • Informed of bushfire hazards and risks, and made aware of the Bushfire Management Plan and the Bushfire Emergency and Evacuation Plan • Informed of spill management procedures (e.g. fire and chemical / fuel spills) in the CSWMP. • Informed of the incident response procedures in the Construction Environmental Management Plan (CEMP).			
Vegetation Management Actions				
FF10	On declared 'Total Fire Ban' days, external hot works will not be undertaken and there will be no: • Grass or vegetation reduction works (including mowing/slashing) • Arborist works (chainsaw) • Vehicle operations in long grass.	During construction	Contractor's EM Site Supervisor	MPWS1 REMM 6A MPE C'th CoA – 5(h) MPW C'th CoA - 7(b)
FF11	Earthworks (and certainly all works in the vicinity of Anzac Creek) will not be undertaken during wet weather conditions. Clearing of vegetation will not be undertaken during overland flow events.	During construction	Contractor's EM	MPWS1 REMM 6A CSWMP CESCP
FF12	Soil or mulch stockpiles will be located away from key stormwater flow paths to limit potential transport of these	During construction	Contractor's EM	MPWS1 REMM 6A CMM – Biodiversity

ID	Management Measure	Timing	Responsibility	Reference
	substances into nearby watercourses (such as Anzac Creek) via runoff.			MPW C'th CoA - 7(b)
FF13	Soil stripped and stockpiled from areas containing known weed infestations are to be stored separately and are not to be moved to areas free of weeds.	During construction	Contractor's EM	CMM – Biodiversity
FF14	No spoil, excavated material, plant or equipment is to be stockpiled or stored within the delineated "No-Go" zones.	During construction	Contractor's EM	MPE C'th CoA - 5(e) MPWS1 REMM 6A Best Practice
FF15	Vehicles, equipment, materials and footwear will be clean on entry (free of soil, mud and/or seeds) to minimise the introduction or spread of *Phytophthora cinnamomi.* A wheel wash is to be established at the site access as per the CESCP.	During Construction	Contractor's EM	CoC B127 MPWS1 REMM 6A
FF16	To ensure that no more than 17 individual Nodding Geebungs and no more than 634 Small-flower Grevillea are cleared the following will be undertaken: • Recording of individuals cleared of each species cumulatively • Reconciling of totals of individuals of each species cleared against MPES1 and MPES2 cumulatively.	During Construction	Contractor's EM	MPE C'th CoA 5(d)
FF17	An ecologist will supervise the drainage of any waterbodies on the Development site and will relocate native fish (e.g. eels), tortoises and frogs to the edge of	During construction	Development Ecologist	Best practice

ID	Management Measure	Timing	Responsibility	Reference
	the Georges River and/or the existing pond at the northern end of the Development site.			
Fauna Management Actions				
FF18	Prior to the demolition of buildings located in the construction footprint, the Development ecologist will carry out targeted microchiropteran bat (microbat) surveys of the buildings to be demolished, as described in Clearing Protocol (Appendix B).	One week prior to demolition	Contractor's EM Development Ecologist	FCMM 4C MPWS1 REMM 6A
FF19	A pre-start-up check for sheltering native fauna in all infrastructure, plant and equipment and/or during relocation of stored construction materials, will be undertaken.	Daily, prior to commencement of works	Contractors	FCMM 4A
FF20	A site speed limit of 20km/h will be adhered to by all personnel to minimise the potential for fauna to be struck by a vehicle within the construction areas. All vehicles and plant in operation during construction will adhere to site rules relating to speed limits.	During Construction	All construction site personnel	FCMM 4A MPWS1 REMM 6A
FF21	No personnel on site are permitted to hunt, fish, feed, capture, extract or otherwise disturb aquatic, animal or vegetative species while performing any tasks in performance of the work.	During Construction	All construction site personnel	MPWS1 REMM 6A Best Practice
FF22	If a threatened species is identified in the Development site, management of that species is to be carried out in accordance with the Unexpected Find Procedure provided in Appendix C.	During Construction	All construction site personnel	CoC B108(d) MPWS1 REMM 6A
FF23	If any animal is injured, the Contractor's EM will contact the relevant local wildlife rescue agency (e.g. WIRES) and/or local veterinary surgery as soon as practical.	If injured terrestrial animals are found prior to or during clearing activities	All construction site personnel	FCMM 4F MPWS1 REMM 6A

ID	Management Measure	Timing	Responsibility	Reference
	• WIRES: 1300 094 737 • Sydney Wildlife Rescue: 9413 4300 • Moorebank Veterinary Hospital: 8798 4859 • Liverpool Veterinary Hospital: 9602 6015. Until the animal can be cared for by a suitably qualified animal handler, if possible, minimise stress to the animal and reduce the risk of further injury by: • Handling fauna with care and as little as possible • Covering large animals with a towel or blanket and placing in a large cardboard box • Placing small animals in a cotton bag, tied at the top. Keeping the animal in a quiet, warm, ventilated and dark location. • In the case of arboreal or flying mammals, attempts will be made to relocate the den or nest. After capture, the animal(s) will be held by a trained wildlife carer for a period of no longer than two weeks until the roost or den can be relocated, either as an entire tree or part thereof.			
FF24	Directional lighting will be used where lighting is required in construction areas to avoid impact on fauna.	During construction	Contractor's CM Site Supervisor	FCMM 4E MPWS1 REMM 6A
FF25	Fauna microhabitat such as logs will be relocated from areas to be cleared to suitable nearby bushland areas, under the supervision of the Development Ecologist.	During construction	Contractor's EM Development Ecologist	CMM - Biodiversity
FF26	Where possible, any pits/trenches that are to remain open overnight, are to be securely covered. Alternatively, fauna	During construction	Contractor's EM	CMM - Biodiversity

ID	Management Measure	Timing	Responsibility	Reference
	ramps (logs or wooden planks) are to be installed to provide an escape for trapped fauna. In this instance, examples of “where possible” include: • In an emergency situation, such as a bushfire alert, may arise and all staff are required to evacuate site and pits and trenches remain open • Where pits and trenches are fenced off and fauna is excluded from the work area.			
Dust impacts on flora and fauna				
FF27	Dust impacts on flora and fauna will be minimised by the following: • Completing rehabilitation as quickly as possible • Minimising the number of stockpiles on site • Using water carts for dust suppression during road construction • Coordinating delivery and removal of material to avoid unnecessary trips.	During construction	Contractor’s EM	CMM - Biodiversity

ID	Management Measure	Timing	Responsibility	Reference
Upon Completion of Construction				
FF28	Disturbed areas will be stabilised by using mulch and / or temporary vegetation cover to mitigate potential erosion and prevent the establishment of weed species.	As soon as practicable after disturbance	Contractor's EM Site Supervisor	MPWS1 REMM 6A CESCP
FF29	Where soil has been compacted, ripping may be required prior to re-spreading topsoil and/or seeding.	As soon as practicable after disturbance	Contractor's EM Site Supervisor	MPWS1 REMM 6A
FF30	Revegetation by seeding will utilise native species of local provenance. Where possible winter-flowering trees would be preferentially planted in landscaped areas to provide a winter foraging resource for migratory and nomadic nectar-feeding birds and the Grey-headed Flying-fox. In this instance, an example of "where possible" includes: • When the approved operational Urban Design and Landscape Plan for MPES2 requires planting of different species.	As soon as practicable after disturbance	Contractor's EM Site Supervisor	MPWS1 REMM 6A MPW MMM 6L MPW C'th CoA - 7(b)
Monitoring				
F31	Monitoring of the Development site to be undertaken in accordance with Section 4.1 of this plan.	During construction	Contractor's EM	CoC B127(c) MPWS1 REMM 6A

3.4.2. Nest Boxes

Nest boxes have been installed as a result of vegetation clearing, specifically the removal of hollow-bearing trees that provide habitat for hollow dependent fauna, progressively undertaken across the Moorebank Precinct (both MPE and MPW). Nest boxes were installed in accordance with the requirements within the Nest Box Management Strategy (NBMS) (Appendix D of the MPE Stage 1, Package 2 CFFMP). The MPE Stage 2 (SSD 7628) NBMS was adapted from the MPE Stage 1 (SSD 6766) NBMS in accordance with the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) Approval (2011/6299) and CoC B108(a) and (b).

To satisfy nest box monitoring required in accordance with the MPE Stage 1 NBMS, nest box monitoring was undertaken across both MPE and MPW in November 2018 by Arcadis Ecologists in order to assess the condition and number of nest boxes across these sites.

Based on these investigations, a memorandum (Appendix G) was developed on 8 February 2019 to consider the requirement to install additional nest boxes at the Development site. The memorandum provided a review of nest boxes installed to date and assessed the values and risks associated with the installation of additional nest boxes at the Development site.

This advice, based on investigations and approval conditions, recommended that no additional nest boxes be installed for the following reasons:

- The total number of nest boxes installed within the Georges River Corridor exceeds the recommended densities (i.e.- is oversaturated), favouring over-abundant, adaptable and/or aggressive species which outcompete less tolerant native species
- Availability of tree hollows and installation of nest boxes within the Bootland currently meet benchmark conditions so that additional supplementary nest boxes are not required
- In addition to the above, there is no suitable woodland present in the rail corridor and the southern Bootland has been burned; presenting installation risks, as well as risks to the highly sensitive land
- No threatened hollow-dependent fauna was recorded and therefore no habitat for these species will be removed. All hollows are in landscape planted trees in highly disturbed cleared or developed lands which do not provide habitat for threatened fauna
- Installation of nest boxes is likely to benefit over-abundant highly adaptable species to the detriment of other fauna, as observed during monitoring in November 2018
- Based on this advice, no further nest boxes will be installed for the MPE Stage 2 site.

4. Monitoring and Review

4.1. Monitoring

Daily site inspections are to be undertaken by the Site Supervisor (or delegate) and documented. Any maintenance of controls is to be recorded in site diaries during active site works.

Monitoring is required to verify the effectiveness of the management measures outlined in Section 4 of this CFFMP. Monitoring under this CFFMP is to be undertaken by the Contractor's EM (or delegate) during construction to monitor compliance with the requirements of the CoC and this CCFMP. Monitoring activities for the Development site is prescribed in Table 3-13. Daily inspections are to be recorded in site diaries during construction, and any failures in management measures will be rectified within 48 hours of identifying the failure.

Table 3-13 Monitoring Activities

Monitoring Activity	Frequency	Responsibility
Inspect the delineation of "NO-GO" areas, to verify that the clearing boundary (e.g. high visibility flagging tape) is intact and clearly visible	Daily	Contractor's EM
Inspect areas immediately adjoining the clearing boundary (i.e. within "NO-GO" areas), to verify no material stockpiling, plant or equipment storage is located within a "NO-GO" area	Daily	Contractor's EM
Inspect sediment control measures (sediment fencing) to verify all measures are intact and functioning properly, to avoid indirect impacts on adjoining areas	Weekly, and as soon as practical following rainfall	Contractor's EM
Inspect cleared and disturbed areas, to confirm that appropriate stabilisation measures have been implemented (e.g. placement of mulch and/or revegetation by seeding)	Weekly	Contractor's EM
Inspect cleared and disturbed areas to identify the presence of establishing weeds and assess the effectiveness of weed controls	Weekly	Contractor's EM
Inspect Development site to determine whether noxious weeds, vermin and pest species pose an environmental hazard, cause the loss of amenity in the surrounding area and/or require further control.	No less than every three months	Contractor's EM

4.2. Auditing and Reporting

Environmental auditing and reporting of the Development during construction is to be undertaken in accordance with Section 4.3 of the CEMP.

4.3. Review and Improvement

Review (both annually and intermittently) and improvement of this plan is to be undertaken in accordance with the CoCs and Section 4.5 of the CEMP. Continuous improvement will

be achieved by the ongoing evaluation of environmental management performance and effectiveness of this plan.

The continuous improvement process is designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-conformances/non-compliances with this plan or the conditions of approval
- Implement corrective and preventative action to address or prevent any actual or potential non-conformances/non-compliances
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparison and assess attainment and maintenance of CEMP objectives and targets.

Revision of this plan is to be undertaken in accordance with Section 1.2.7 of the CEMP.

A copy of the updated plan and changes is to be distributed to all relevant stakeholders in accordance with ESR document control system (refer to Section 2.3 of the CEMP).

In accordance with CoC C10 and MPW EPBC Approval (2011/6086) this plan is to be reviewed annually as a minimum but may be updated more regularly depending on process changes and refinements or where there is identification of hollow bearing trees, unexpected threatened species, or because of an environmental incident.

The most recent, approved version of this CFFMP is to be implemented during construction.

4.4. Non-compliances, Non-conformance and Actions

It is the responsibility of all site personnel to report non-compliances and non-conformances to the Site Supervisor and/or the Contractor's EM.

Non-compliances, non-conformances and corrective and preventative actions are to be managed in accordance with Section 4.4 of the CEMP.

APPENDIX A CONSENT APPROVAL COMPLIANCE MATRICES

State Approvals

The Development is being delivered under Part 4, Division 4.7 (previously Division 4.1 as of 1 March 2018) of the EP&A Act. The CoCs include requirements to be addressed in this plan and delivered during the Development. These requirements and how they are addressed is provided in Table 3-14.

Table 3-14 Conditions of Consent

CoC	Requirement	Plan Section	How Addressed
A1	In addition to meeting the specific performance measures and criteria established under this consent all reasonable measures must be implemented to prevent, and if prevention is not reasonable, minimise, any harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	This plan	Section 3.4 of this CFFMP identifies the management measures to be implemented to prevent and minimise environmental harm. Section 4 sets out the processes for monitoring and reviewing the effectiveness of these management measures. Opportunities to further minimise environmental harm will be identified through the ongoing evaluation of environmental management performance and effectiveness of this plan.
A2	The development may only be carried out: (a) in compliance with the conditions of this consent; (b) in accordance with all written directions of the Secretary in relation to this consent; (c) in accordance with the EIS, Submissions Report, Consolidated assessment clarification responses, and updated Biodiversity Assessment Report; (d) in accordance with the amended Development Layout Plans and Design Plans, amended WSUD plans and amended architectural plans to be submitted for the Secretary's approval as part of this consent; and (e) in accordance with the management and mitigation measures at APPENDIX B of this consent.	This plan	This plan has been developed to comply with the CoCs, written directions of the Secretary, amended development layout and management and mitigation measures outlined in Appendix B of the CoCs.
A15	If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program.	Section 1.3 Section 1.5	This CFFMP outlines the proposed staged delivery of this plan. This CFFMP is relevant to construction only. No further staging of this document is expected.

CoC	Requirement	Plan Section	How Addressed
A19	Where conditions of this consent require a document to be prepared in consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; (b) provide evidence that at least two weeks was provided for the relevant party to comment on the document; and (c) include in the document: (i) details of the consultation undertaken; (ii) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and (iii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Section 1.7	Section 1.7 indicates that this CFFMP has been developed in consultation with the identified parties.
A20	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits, approvals and consents.	CEMP	An Environmental Protection Licence (EPL) (No. 21054) was issued by the EPA on 4 June 2018. The Licence applies to the Moorebank Precinct areas identified in condition A2.2, scheduled activities include crushing, grinding or separating, and contaminated soil treatment. The Licence enables the importation of material classified under a Resource Recovery Order where the onsite use (approved land use) is consistent with the applicable Resource Recovery Exemption. Approvals, permits and licences required for the Development are discussed in Appendix A and B of the CEMP.
B1	The Applicant must: (a) prepare each plan, program and other documents in consultation with the specified stakeholders;	(a) Section 1.7 and Appendix E – Consultation	(a) This CFFMP has been prepared in consultation with OEH as evidenced in Section 1.7 and Appendix E – Consultation.

CoC	Requirement	Plan Section	How Addressed
	(b) not commence each phase of the project until the plans, programs and other documents required under this consent are approved by or, where not required to be approved, submitted to the Secretary specified within the timeframes; and (c) implement the most recent version of the required plans and programs approved by the Secretary for the duration of the development.	(b) Section 1.4 (c) Section 4.3	(b) Section 1.4 confirms that construction will not commence until the CFFMP has been submitted and is to the satisfaction of the Secretary. (c) The most recent, approved version of the CFFMP will be implemented.
B108	Prior to clearing of native vegetation, the Applicant must prepare a **Construction Flora and Fauna Management Plan** (CFFMP) in consultation with OEH. The CFFMP must form part of the CEMP required by condition C1 and must include the following: a) measures to minimise the loss of key fauna habitat, including tree hollows b) measures to minimise the impacts on fauna on site, including conducting fauna pre-clearance surveys prior to vegetation clearing and building demolition c) controlling weeds and feral pests d) an Unexpected Finds Procedure detailing procedures and management measures to be implemented in the event that flora and fauna is uncovered in any area not identified in the updated Biodiversity Assessment (BAR); e) to ensure biodiversity values not intended to be impacted are protected. These measures may include barriers and mapping of protected/'no-go' areas f) a program to monitor the effectiveness of the measures in the CFFMP	Section 1.7 and Appendix E - Consultation (a) Section 3.4 and Appendix B (b) Section 3.4 and Appendix B (c) Section 3.4 and Appendix C (d) Appendix D (e) Section 3.4 (f) Section 4	This plan has been prepared in consultation with OEH as shown in Section 1.7 and Appendix E – Consultation. (a) Section 3.4 includes mitigation measures to minimise the loss of fauna habitat. Appendix B provides details on the clearing protocol for the Development (b) Section 3.4 includes mitigation measures to minimise the impacts on fauna on site. Appendix B provides details on the clearing protocol for the Development (c) Section 3.4 includes measures to control weeds and feral pests. Appendix C is the Weed and Pest Management Protocol. (d) Appendix D is the Unexpected Finds Procedure and it provides a procedure and management measures to implemented if unexpected flora and fauna are found. (e) Section 3.4 includes measures to verify biodiversity values are protected. (f) Section 4 provides a program to monitor the effectiveness of this plan.

CoC	Requirement	Plan Section	How Addressed
B109	Prior to removing/clearing any vegetation, pre-clearing surveys and inspections for threatened species, populations and ecological communities must be undertaken to confirm the on-site location of those entities. The surveys and inspections, and any subsequent relocation of species and associated management measures, must be undertaken under the guidance of a suitably qualified and experienced ecologist. Methodologies must be incorporated into the **Construction Flora and Fauna Management Plan** required under condition B108. The agreement of OEH, whichever is the relevant agency, is required for any proposed amendments to the location or reclassification of threatened species, populations and ecological communities as identified in the updated BAR.	Section 3.4 Appendix B – Clearing Protocol	Section 3.4 includes management measures that will be undertaken prior to the removal and clearing of vegetation. Appendix B explains the actions and measures to be implemented prior to the commencement of vegetation clearing in the Development site.
B127	The Applicant must: (a) take all reasonable steps to manage pests and vermin on the site; (b) manage declared noxious weeds on the site in accordance with the requirements of the Noxious Weeds Act 1993; and (c) inspect the site on a regular basis, no less than every 3 months, to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area. *Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.*	(a) Section 3.4 Appendix C – Weed Pest, Vermin Management Protocol (b) Section 3.4 Appendix C – Weed, Pest and Vermin Management Protocol (c) Section 4.1 Appendix C – Weed, Pest and Vermin Management Protocol	(a) The management measure (FF2.3) in Section 3.4 includes that all weeds, pests and vermin must be managed in accordance with Weed, Pest and Vermin Management Protocol (Appendix C). (b) The *Biosecurity Act 2015* repeals the *Noxious Weed Act* 1993 as of July 1 2017, as such, the *Noxious Weed Act 1993* is not included in this plan. However, the *Biosecurity Act 2015* has been referenced in the Appendix C – Weed, Pest and Vermin Management Protocol. (c) The monitoring requirement for weed, pests and vermin is identified in Section 4.1 and Appendix C – Weed, Pest and Vermin Management Protocol.

CoC	Requirement	Plan Section	How Addressed
C7	The Applicant must ensure that the environmental management plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures / criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the management measures to be implemented to comply with the relevant statutory requirements, limits or performance measures / criteria; (d) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a program to investigate and implement ways to improve the environmental performance of the development over time;	(a) Section 3.1 (b) Section 2.1 and Section 1.6 (c) Section 3.4, Appendix B and Appendix C (d) Section 4 (e) Section 3.4 and Appendix D (f) Section 4.3 (g) CEMP - Sections 2.6, 2.8 and 4 (h) Section 4.3	The existing flora and fauna environment is described in Section 3.1. (b) (i) Section 2.1 provides a list of the relevant statutory requirements required for the Development; (ii) and (iii) Section 1.6 identifies performance measures /criteria (objectives) and performance indicators (targets). (c) Section 3.4 identifies the flora and fauna specific management measures for the Development. (d) Program for monitoring and review is discussed under Section 4. (e) The Unexpected Finds Procedure describes the process to follow in the event that unexpected threatened flora and/or fauna species or threatened ecological communities are identified. (f) Improvement measures are discussed in Section 4.3. (g) Incident management will be undertaken in accordance with the Sections 2.6, 2.8 and 4.0 in the CEMP. (h) Section 4.3 outlines the requirements for review of this plan. Further detail is provided within Section 4 and 1.2.7 in the CEMP.

CoC	Requirement	Plan Section	How Addressed
	(g) a protocol for managing and reporting any: (i) incidents and non-compliances; (ii) complaints; (iii) non-compliances with statutory requirements; and (h) a protocol for periodic review of the plan. Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for a particular management plan.		

The Final Compilation of Mitigation Measures (FCMMs) were prepared as part of the consolidated assessment clarification responses issued to DP&E on 10 November 2017. A list of the FCMMs as relevant to the Development and how they have been complied with in this plan are provided in Table 3-15.

Table 3-15 Final Compilation of Mitigation Measures

FCMM	Requirement	Document Reference
4A	A Construction Flora and Fauna Management Plan (CFFMP) would be prepared as part of the CEMP for the Amended Proposal. Native vegetation clearing for southern and eastern swales located outside of the MPE site would not occur until the Flora and Fauna Management Plan is approved. This would include the following: • Clear identification of vegetation exclusion zones • Site induction procedure, including briefings regarding the local threatened flora and local fauna of the site and protocols to be undertaken if they are encountered • A pre-start up check for sheltering native fauna of all infrastructure, plant and equipment and/or during relocation of stored construction materials • Application of speed limits in areas adjacent to native vegetation.	This plan

FCMM	Requirement	Document Reference
4B	The threatened plant populations identified within the Boot lands (to the south) would be protected by a minimum 10 metre buffer between the edge of the area of occupied habitat and the construction area.	Section 3.4
4C	Potential bat roosting locations in buildings to be demolished would be checked, as far as is practicable, by a qualified ecologist or wildlife carer for presence of bats prior to demolition. Any bats found would be relocated.	Section 3.4 Appendix B
4D	A two-stage approach would be undertaken to clearing: • Remove non-hollow bearing trees at least 48 hours before habitat trees are removed. • Hollow bearing trees are to be knocked with an excavator bucket or other machinery to encourage fauna to evacuate the tree immediately prior to felling. • Felled trees must be left for a short period of time on the ground to give any fauna trapped in the trees an opportunity to escape before further processing of the trees. • Felled hollow bearing trees must be inspected by an ecologist as soon as possible (not longer than 2 hours after felling).	Appendix B
4E	Directional lighting will be used where lighting is required in construction areas to avoid impact on fauna.	Section 3.4
4F	Should any animal be injured, the relevant local wildlife rescue agency (e.g. WIRES) and/or veterinary surgery would be contacted as soon as practical. Until the animal can be cared for by a suitably qualified animal handler, if possible minimise stress to the animal and reduce the risk of further injury by: • Handling fauna with care and as little as possible. • Covering larger animals with a towel or blanket and placing in a large cardboard box. • Placing small animals in a cotton bag, tied at the top. • Keeping the animal in a quiet, warm, ventilated and dark location.	Section 3.4 Appendix B

EPBC Approvals

The EPBC Act approval for the MPE Concept was granted by the Department of the Environment in March 2014 (No. 2011/6229). This approval was provided for the impact of the Development on listed threatened species and communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The EPBC Act approval for the MPW Concept was granted by the Commonwealth Department of Environment and Energy (DotEE) in September 2016 (No. 2011/6086). This approval was provided for the impact of the MPW Project on listed threatened species and communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The Moorebank Avenue upgrade works will be performed under the MPE Stage 2 Consent as described in Section 1.1 and 1.3 of the CEMP. Since the western side of the Moorebank Avenue upgrade works construction footprint is located in an existing area of hardstand within the MPW site, the works must comply with the MPW Commonwealth Approval.

The construction and operation of the Development has been designed to be consistent with the EPBC Act Approval conditions, where relevant. EPBC Act Approval conditions relevant to this plan are identified in Table 3-16.

Table 3-16 Commonwealth Approvals

Condition	Requirement	Document Reference
MPE EPBC Approval (2011/6229)		
2	b) implement all feasible and practicable measures that ensure sedimentation and / or erosion (as a result of the proposed action) do not lead to any further reductions in the water quality, or degradation of, Macquarie Perch habitat.	Section 3.4 outlines sedimentation and erosions measures to avoid impact to Macquarie Perch habitat
5	For the better protection of **EPBC listed flora** and the environment on Commonwealth land, the person taking the action must engage a **suitably qualified expert** to prepare a Flora and Fauna Management Plan (FFMP) for the approval of **the Minister**. The FFMP must include (but need not be limited to): a) details on the timing of **native vegetation clearance** works	This plan Section 1.3 Section 3.4– management measure timing indicated
	b) detailed maps of the rail link easement and construction zone showing: i. permanent infrastructure and temporary works; ii. no-go areas; and iii. physical barriers used for the protection of native vegetation on Commonwealth land, and of EPBC Act listed Nodding Geebung and Small-flower Grevillea.	Not applicable to this plan – detailed maps of the rail link easement are outlined in the MPE Stage 1, Package 1 (RALP) CFFMP.

Condition	Requirement	Document Reference
	c) measures to minimise the extent of native vegetation clearing upon Commonwealth land and the clearing of **Nodding Geebung** and **Small-flower Grevillea**	Section 3.4 includes management measures that minimise the extent of native vegetation clearing upon Commonwealth Land and threatened flora species. Appendix B- Clearing Protocol explains the actions and measures to be implemented prior to and during vegetation clearing in the Development site.
	d) provisions to ensure no more than 17 individuals of **Nodding Geebung** and 634 stems of **Small-flower Grevillea** are cleared	Table 3-11 outlines anticipated construction impacts to threatened flora Section 3.4 includes management measures that prevent clearing beyond the construction boundary Appendix B - Clearing Protocol explains the actions and measures to be implemented prior to and during vegetation clearing in the Development site.
	e) the results of targeted surveys for **Hibbertia sp. Bankstown** and **Bynoe's Wattle** (including the number of individuals recorded) and what measures will be implemented to avoid, mitigate and manage impacts to these species, if individuals are found on site	Section outlines results of targeted surveys Section 3.4 outlines measures to avoid, mitigate and manage impacts to threatened flora species
	f) measures which allow all terrestrial fauna to disperse naturally ahead of clearing activities, and minimise the risk of injury to individuals	Section 3.4 outlines measures to encourage fauna to disperse naturally during clearing Appendix B outlines clearing procedures
	g) actions to maintain or enhance the long-term viability of native vegetation adjoining the rail easement in particular, adjoining populations of **Nodding Geebung** and **Small-flower Grevillea**	Not applicable to this plan – management of flora and fauna impacts adjacent to the rail link easement are outlined in the MPE Stage 1, Package 1 (RALP) CFFMP.
	h) measures to safeguard flora and fauna from the threat of weeds, fire, pathogens and unauthorised access, including (but not limited to) the commitments outlined in section 7.4.1 of the ***EIS*** (and summarised at Annexure A);	Section 3.4 outlines measures to safeguard flora and fauna from weeds, fire, pathogens and unauthorised access Appendix C outlines processes for managing weeds, pests and vermin on site.

Condition	Requirement	Document Reference
	i) ongoing monitoring to inform the adaptive management of native vegetation adjoining the rail easement	Not applicable to this plan – management of flora and fauna impacts adjacent to the rail link easement are outlined in the MPE Stage 1, Package 1 (RALP) CFFMP.
	Native vegetation clearance must not occur until the FFMP has been approved. The FFMP must be implemented once approved	This plan
MPW EPBC Approval (2011/6086)		
7	Sections of the CEMP and OEMP relating to biodiversity must be prepared by a suitably qualified expert and must: a) be consistent with the Biodiversity Provisional Environmental Management Framework (3 July 2014), provided at Appendix O to the finalised EIS	The management measures outlined in Section 3.4 are consistent with the Biodiversity Provisional Environmental Management Framework.
	b) incorporate all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'mandatory'	Section 3.4 excluding 6G, 6M, 6P and 6V which are not applicable to the MPE Site.
	c) explain how all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed	Section 3.4 excluding 6N and 6Q which are not applicable to the MPE Site.
	d) include detailed biosecurity protocols, prepared in consultation with relevant New South Wales and Commonwealth biosecurity agencies, in relation to international and interstate container movement be approved by the Minister.	Not applicable to construction as container movement will only occur once operation of the Precinct has commenced.
	e) be approved by the Minister	N/A

The MPE Commonwealth mitigation measures which are relevant to this plan are detailed in Table 3-17. There are no additional mitigation measures for MPW.

Table 3-17 MPE Commonwealth Mitigation Measures

Issue	Requirement	Document Reference
	Mitigate • Install appropriate drainage infrastructure (e.g. sediment basins, diversion drains), sediment and erosion controls prior to the commencement of construction. • Clearing of vegetation is not to be undertaken during overland flow events. • Clearly identifying sensitive areas and areas for construction and managing clearing such that clearing activities are constrained to these approved areas only. • Locate soil or mulch stockpiles away from watercourses and key stormwater flow paths to limit potential transport of these substances into the watercourses via runoff. • Dust suppression activities to be undertaken where appropriate. • Stabilisation of disturbed areas, including revegetation in accordance with the VMP, is to be undertaken as soon as practicable after disturbance. • Emergency response protocols and procedures for implementation in the event of a contaminant spill or leak to be clearly articulated in the Construction Environmental Management Plan. • Spill kits to be located to allow for timely response to uncontained spills. Site inductions are to include a briefing on the use of spill kits. • Management of weeds in and adjacent to cleared areas will occur in accordance with a Weed Management Plan. This plan will include details relating to the monitoring, management and where necessary eradication of weeds, disposal of green waste, and vehicle/plant weed wash down protocols if required. • Management of noxious weeds are to be undertaken in accordance with the Noxious Weeds Act 1993. • Equipment used for treating weed infestation will be cleaned prior to moving to a new area within the Development site to minimise the likelihood of transferring any plant material and soil. • Soil stripped and stockpiled from areas containing known weed infestations are to be stored separately and are not to be moved to areas free of weeds.	Section 3.4

Issue	Requirement	Document Reference
	• Fauna microhabitat such as logs should be removed from areas to be cleared and relocated to suitable nearby bushland areas in the presence of an ecologist. • Consider the installation of nest boxes in woodland vegetation in the rail corridor that may offer alternative nesting habitat to hollow dependent species recorded in the study area. • High visibility plastic fencing is to be installed to clearly define the limits of the works area to not further encroach on fauna habitat. • Undertake a pre-start up check for sheltering native fauna of all infrastructure, plant and equipment and/or during relocation of stored construction materials. • Undertake a two-stage approach to clearing: – Remove non-hollow bearing trees at least 48 hours before habitat trees are removed. – Hollow bearing trees are to be knocked with an excavator bucket or other machinery to encourage fauna to evacuate the tree immediately prior to felling. – Felled trees must be left for a short period of time on the ground to give any fauna trapped in the trees an opportunity to escape before further processing of the trees. – Felled hollow bearing trees must be inspected by an ecologist as soon as possible (not longer than 2 hours after felling). • Site inductions are to include a briefing regarding the local fauna of the site and identification of protocols to be undertaken if fauna are encountered. • If any pits/trenches are to remain open overnight, they are to be securely covered, if possible. Alternatively, fauna ramps (logs or wooden planks) are to be installed to provide an escape for trapped fauna. • Clearance of native vegetation should be minimised as far as is practicable. • Consider retention of some, or all, of the remnant scattered *E. sclerophylla* over patches of shrub and grass cover in the cleared grassland immediately south of the SIMTA site, in landscaping works. • The extent of, and limitations to, vegetation clearing would be clearly identified on construction plans. • Any additional construction areas, such as site offices, construction stockpile locations and machinery/equipment laydown areas are to be located, where possible, within existing cleared or disturbed areas.	

Issue	Requirement	Document Reference
	• Extent of clearing should be fenced with highly visible temporary fencing to minimise any extension of clearing beyond the area necessary. • A VMP should be prepared prior to construction, detailing restoration, regeneration and rehabilitation of areas of native vegetation in study area. The VMP should also detail appropriate management for the potential habitat of threatened plant species in the study area, including monitoring during and after construction works to ensure impacts are minimised. • As soon as possible rehabilitation will commence where possible. Management of land disturbed as a result of construction works will occur in accordance with a VMP. • High visibility plastic fencing is to be installed to clearly define the limits of the works area as to not further encroach on EEC and locations of threatened flora species. • Fencing is to be installed delineating threatened species habitat to be retained. Appropriate warning signage is to be installed along this fencing at regular intervals. Site inductions are to include a briefing on the presence of threatened species and its habitat, its significance and locations and extents of no-go zones. • Design and construction of rail crossings over Anzac Creek and Georges River to be in accordance with Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge 2003). • Minimise clearing and disturbance to the riparian zone where possible. • Install appropriate drainage infrastructure (e.g. sediment basins, diversion drains), sediment and erosion controls prior to the commencement of construction. • Construction disturbance areas will be clearly demarcated to avoid accidental clearing or stockpiling in riparian vegetation. • Landscaped zones to capture gross pollutants and oil and grits from pavement. These areas can be regularly maintained to remove rubbish and can be renewed on a regular basis. • Bio-retention installed in base of channels and swales proposed to capture and store stormwater. This will consist of bio-filtration layers, planting and subsoil collection and drainage. • Hot work not to be undertaken on declared total fire ban days • Vehicles and plant should not block fire trails. • Bushfire awareness included in staff induction and in toolbox talks pre-commencement.	

Issue	Requirement	Document Reference
	• Directional lighting will be used where lighting is required in construction areas. • Frequent maintenance of construction machinery and plant will be undertaken to minimise unnecessary noise. • Dust suppression activities to be undertaken where appropriate. • Speed limits will be developed so as to minimise the potential for fauna to be struck by a vehicle within the SIMTA site. All vehicles and plant in operation on the SIMTA site are to adhere to site rules relating to speed limits. • If an animal is injured, contact one of the following local wildlife rescue agency (e.g. WIRES) and/or veterinary surgery immediately • Until the animal can be cared for by a suitably qualified animal handler, if possible minimise stress to the animal and reduce the risk of further injury by: – Handling fauna with care and as little as possible. – Covering larger animals with a towel or blanket and placing in a large cardboard box. – Placing small animals in a cotton bag, tied at the top • Keeping the animal in a quiet, warm, ventilated and dark • Weed infestations that are identified during the operation of the SIMTA proposal are to be managed in accordance with the removal methods outlined in the Weed Management Plan.	

Concept Plan Approvals

The MPE Concept Plan was originally approved on 14 September 2011. The most recent modification to the approval was granted on 31 January 2018 subject to the (modified) Conditions of Approval (CoA). MPE Concept Plan CoAs that are relevant to this plan are identified in Table 3-18. Under the approved Concept Plan no native vegetation is to be retained on site. Therefore, the requirements of a Vegetation Management Plan required in the Commonwealth CMMs do not apply to this Plan.

Table 3-18 Concept Plan Conditions of Approval

CPCoA	Requirement	Document Reference
	d) include the details of available offset measures to compensate the biodiversity impacts of the proposal where offset measures are proposed to address residual impacts, in particular the following should be considered: i. as stipulated in principle 2 of the *'NSW offset principles for major projects (state significant development and infrastructure)*', for terrestrial biodiversity, established assessment tools, such as BioBanking Assessment Methodology (BBAM), are considered best practice; ii. the Biodiversity Offset Strategy will be undertaken in accordance with the '*NSW offset principles for major projects (state significant development and state significant infrastructure)'* and; iii. offsets will be identified, and demonstrate that they can be secured.	A Biodiversity Offset Strategy was prepared as part of the MPE Stage 1 EIS and subsequently updated in the updated BAR (Arcadis, 2017). The offset areas consider the impacts for the greater Moorebank Precinct, including all stages of development under the MPW Concept Approval (SSD 5066) and the MPE Concept Approval (MP10_0193).

The Revised Statement of Commitments (RSoC) includes the most recent compilation of DEVELOPMENT commitments to mitigate the environmental impacts, monitor the environmental performance and/or achieve a positive environmentally sustainable outcome. These RSoCs (June 2017) were presented in the Moorebank Precinct East – Concept Plan Modification 2 Response to Submissions. The RSoC that are relevant to this plan are identified in Table 3-19.

Table 3-19 Revised Statement of Conditions

RSoC	Requirement	Document Reference
22	• The Proponent will undertake further detailed assessment to establish the potential biodiversity impacts of the proposed rail link and measures to mitigate its potential impacts. The investigations shall incorporate the mitigation measures listed within Section 5 of the Flora and Fauna Assessment and as summarised below:	*This Development will not impact on the proposal rail link
	<u>Avoid impacts</u> • Site establishment, earthworks and rail construction	Section 3.4
	<u>Mitigate impacts</u> • Soil disturbance related to site establishment, earthworks and rail construction* • Vegetation clearance for rail construction, access and maintenance tracks • Construction in riparian areas/in proximity to watercourse* • Construction of pavement, slabs and building structures • Hot works (including vegetation clearing requiring heat producing equipment) • Alteration to air quality and noise environments • Operation of the SIMTA proposal	*Impacts to riparian corridors not applicable to the Development site, this will be addressed in the CFFMP for MPE Stage 1.
23	<u>Management of Threatened Plant Species</u> • The Proponent shall prepare and implement a Threatened Species Management Plan for the *Persoonía nutans* and *Grevillea parviflora* subsp. *parviflora* populations within the rail corridor that would be affected by the rail link	*Impacts to threatened flora within the rail corridor not applicable to the Development site, this will be addressed in the CFFMP for MPE Stage 1.
24	<u>Off-Set impacts</u> • The Proponent will update the Preliminary Biodiversity Offset Strategy (Hyder Consulting 2013) in accordance with the NSW offset principles for major projects (state significant development and state	A Biodiversity Offset Strategy was prepared as part of the MPE Stage 1 EIS and subsequently updated in the updated BAR (Arcadis, 2017).

RSoC	Requirement	Document Reference
	significant infrastructure) and continue to consult with the Department of the Environment (DOTE) through the project approval processes. • The offset package will be secured before any clearing of endangered ecological communities or threatened species is carried out.	The offset areas consider the impacts for the greater Moorebank Precinct, including all stages of development under the MPW Concept Approval (SSD 5066) and the MPE Concept Approval (MP10_0193).
25	<u>Aquatic Flora and Fauna</u> • The Proponent will implement the following measures to protect the aquatic flora and fauna as part of the applications for the detailed planning applications (where relevant and applicable): • Implementation of design principles for friendly fish passage. • Implementation of Construction and Operation Management Plans for maintenance of structures in riparian and aquatic zones. • Minimise siltation of the Georges River during construction through implementing the water quality mitigation measures detailed within the Stormwater and Flooding section of the Statement of Commitments. • Thorough assessment of any development within the Anzac Creek CSWL community, including potential impacts on groundwater quality and quantity. • Lantana removal within nominated construction zones to reduce degradation of streamside vegetation and offset any potential impacts to aquatic biodiversity.	*Impacts to aquatic habitats not applicable to the Development site. This will be addressed in MPE Stage 1.

Infrastructure Sustainability Council of Australia (ISCA) requirements relevant to this plan are detailed in Table 3-20.

Table 3-20 ISCA Requirements

ISCA Credit Reference	Requirement	Document Reference
Eco-1: Ecological value	The ecological value of the infrastructure site is maintained through ecological assessment	Assessment of existing environment and anticipated impacts is outlined in Section 3.1, 3.2, 3.3 and 3.4.
	The ecological value of the infrastructure site is enhanced	Management measures are provided in Section 3.4. Section 3.4.2 provides details on the translocation of threatened flora species. MPE Stage 1 CFFMP contains details of the Nest Box Management Strategy which has been adopted for MPE Stage 2.
Eco-2: Habitat connectivity	The existing degree of habitat connectivity is maintained (based on previous ecological assessments). This can include offset strategies.	Management measures are provided in Section 3.4. The extent of the offset is described in detail in Biodiversity Assessment Report: Biobanking Agreement (WSP 2017).
	Ecological assessments and management plans must be reviewed by a suitably qualified professional.	The responsibilities of the Development Ecologist are outlined in Table 2-2. Reviews of this CFFMP will be undertaken in accordance with the CoC outlined in Section 4.3.

APPENDIX B CLEARING PROTOCOL

Purpose

This protocol explains the actions and measures to be implemented prior to the commencement of vegetation clearing in the Development site.

Scope

This protocol is applicable to all vegetation that occurs in the Development site.

Training

All personnel undertaking clearing activities, or directly involved with works, will be trained in this protocol through Toolbox Talks and/or a site induction.

Protocol

Prior to Commencement of Clearing

At least two weeks prior to proposed vegetation clearing the Contractor's Environment Manager (EM) will verify that the following actions have been implemented. Each action must be checked off by the Development Ecologist (PE) and Contractor's EM.

Pre-clearing Management Action	**PE** (√)	**EM** (√)
To minimise the extent of native vegetation clearing upon Commonwealth Land and the clearing of Nodding Geebung and Small-flower Grevillea clearing limits, No-Go zones and the Development boundary will be identified on all design, construction and operational drawings as well as sensitive area drawings. Clearing limits will be delineated by installing highly visible barrier or tape with "No-Go signage" as shown on the drawings. The southern and eastern boundary of the construction footprint will be located at least 10 metres from the edge of the area of habitat within the Bootland.		
Prior to the commencement of clearing, to ensure that no more than 17 individual Nodding Geebungs, 0.33 ha of Nodding Geebungs (required as part of Mod 2) and no more than 634 Small-flower Grevillea are cleared the following will be undertaken: • Confirming the individuals cleared of each species to date • Confirming the totals of individuals of each species cleared against MPES1 and MPES2 cumulatively to date.		
Prior to the commencement of clearing, ensure that all biodiversity credits have been retired in accordance with B104 and B104A		
The Development Ecologist has undertaken an assessment of vegetation within and adjacent to the construction footprint (from which vegetation will be cleared), clearly marking all hollow-bearing trees within the construction footprint as follows: • **'H'** = Habitat Tree. If hollow-bearing or habitat trees are identified as requiring removal the two-staged clearing process outlined below is to be implemented and the clearing supervised by the Development ecologist. • **O** = Ecologist has assessed the tree and it is ready for removal.		

Pre-clearing Management Action	PE (√)	EM (√)
• **O** = Ecologist has assessed the tree and it requires pre-inspection immediately prior to, and during removal. The tree must be cleared in accordance with the two-staged clearing process which is outlined below.		
Where feasible, clearing of hollow-bearing trees would be undertaken in March-April when most microbats are likely to be active (not in torpor) but are unlikely to be breeding or caring for young, and when threatened hollow-dependant birds in the locality are also unlikely to be breeding. In this instance, examples of "where feasible" include: • When pre-clearing surveys identify no species present within habitat trees • Where time restrictions do not allow but clearing of habitat trees can be mitigated through the appropriate management measures detailed in Table 25 of the CFFMP and this Clearing Protocol.		
The Development Ecologist has carried out targeted microchiropteran bat (microbat) surveys prior to the demolition of buildings from the construction footprint. This must involve Anabat surveys carried out for at least one full night (from dusk until dawn) in proximity to buildings that offer potential microbat roosting habitat. If microbats are found to be roosting in a building proposed to be demolition, exclusion measures must be implemented to exclude microbats from that building, so that no microbats are occupying the building when it is to be demolished. Any microbat exclusion methods must be carried out by an appropriately qualified and experienced Ecologist.		
The Development Ecologist is available to be present during the felling of hollow-bearing trees.		
The Development Ecologist has identified weed infestation within the Development site and weeds are managed in accordance with the Weed, Pest and Vermin Management Protocol (Appendix C of this CFFMP).		
Sediment control measures have been installed in accordance with the Soil and Water Management Plan, particularly along the eastern and southern boundary of the Development site so that potential indirect impacts on the adjoining Bootland are mitigated.		
The Development ecologist has identified areas suitable for the release of fauna so that, if fauna species are encountered immediately prior do or during clearing activities are relocated to a suitable site. Suitable areas would most likely be contained within the Bootland to the east and south of the Development site, however, the suitability of a relocations site must be confirmed by the Development Ecologist.		
Install nest boxes in woodland vegetation in the rail corridor that may offer alternative nesting habitat to hollow dependent species recorded in the study area.		
Pre-clearing surveys would be conducted 12 to 48 hours before vegetation clearing to search for native wildlife (e.g. reptiles, frogs, Cumberland Land Snail) that can be captured and relocated to suitable adjacent habitat within the Wattle Grove Offset Area. After a period of 48 hours, clearing of habitat trees (marked 'H' or O) can commence		
Koala Management		

Pre-clearing Management Action	PE (√)	EM (√)
Pre-clearing surveys will be conducted immediately prior to (the morning of) vegetation clearing to search for koalas within the area scheduled for clearing.		
If no koalas are recorded during the ecologist inspection, then vegetation clearing can proceed under supervision by the Development Ecologist.		
If koalas are recorded during the ecologist inspection, then koala management measures outlined in the 'Vegetation Clearing' section below must be implemented.		

Site Preparation

Immediately prior to vegetation clearing, the Contractor's EM will ensure that the following actions have been implemented. Each action must be checked off by the Contractor's EM.

Site Preparation Management Action	EM (√)
All pre-clearing management actions listed in the pre-clearing checklist has been completed.	
The boundary of the clearing footprint is clearly fenced or delineated on site, and shown on all relevant plans.	
All construction personnel (subcontractors and employees) involved in the clearing are trained via toolbox talks and/or pre starts on the environmental risks and aspects of vegetation clearing, including: • Clearing limits and no-go areas, including the Bootland to the east and south of the Development; • Two stage clearing for hollow-bearing trees; • Location and attributes of threatened flora species, and attributes of threatened fauna species that may occur in the Development site; • Guideline for working around trees; • If any timber is to be reused for milling or mulching; • The Unexpected Finds Procedure (Appendix D of this CFFMP).	
Sediment and erosion controls are in place (in accordance with the Construction Soil and Water Management Plan and the Construction Erosion and Sediment Control Plan).	

Vegetation Clearing

A two-stage approach to the clearing of habitat trees is to be used for trees marked **'H'** or **O** by the Development ecologist during pre-clearing surveys. The Development Ecologist must be present for the clearing of each habitat tree. Each action must be checked off by the Development Ecologist and Contractor's EM.

A maximum of three hectares shall be cleared during each day of vegetation clearing in accordance with guidelines provided in Nature Conservation (Koala Conservation Plan 2006 and Management Program 2006-2016 (Queensland EPA 2006).

Clearing Management Actions	PE (√)	EM (√)
Stage 1		
Trees marked O by the Development Ecologist during pre-clearing surveys must be felled at least 48 hours prior to habitat tree removal. Vegetation marked O would be cleared from a 10m radius around habitat trees to encourage animals roosting in hollows to leave the tree		
Habitat trees (marked 'H' or O) are to remain standing for a period of 48 hours while non-habitat trees area felled, to allow fauna to vacate the habitat on their own accord.		
Stage 2		
Habitat trees are to be knocked with an excavator bucket or other machinery to encourage fauna to evacuate the tree immediately prior to felling.		
If an animal is detected in a tree prior to pushing over, the clearing activities are to cease to allow fauna time to leave, or the animal is carefully removed from the tree.		
Tree should be "soft-felled", i.e. felled in sections and/or lowered to the ground slowly by an excavator.		
Felled trees must be left for a short period of time on the ground to give any fauna trapped in the trees an opportunity to escape before further processing of the trees.		
Felled hollow bearing trees must be inspected by an Ecologist as soon as possible (not longer than two hours after felling), to check for injured or immature fauna.		
Animals found prior to or during clearing activities will be released to the suitable location previously identified by the Development Ecologist.		
If any animal is injured, the Contractor's EM will contact the relevant local wildlife rescue agency (e.g. WIRES) and/or local veterinary surgery as soon as practical. WIRES: 1300 094 737 Sydney Wildlife Rescue: 9413 4300 Moorebank Veterinary Hospital: 8798 4859 Liverpool Veterinary Hospital: 9602 6015. Until the animal can be cared for by a suitably qualified animal handler, if possible minimise stress to the animal and reduce the risk of further injury by: Handling fauna with care and as little as possible. Covering larger animals with a towel or blanket and placing in a large cardboard box. Placing small animals in a cotton bag, tied at the top. Keeping the animal in a quiet, warm, ventilated and dark location. In the case of arboreal or flying mammals, attempts will be made to relocate the den or nest. After capture, the animal(s) will be held by a trained wildlife carer for a period of no longer than two weeks until the roost or den can be relocated, either as an entire tree or part thereof.		
Work may recommence once the animal(s) have been captured and removed from the area.		
Under supervision of the Development Ecologist, fauna microhabitat such as logs will be removed from areas to be cleared and relocated to suitable nearby bushland areas.		

Clearing Management Actions	PE (√)	EM (√)
Excess native vegetation material will be mulched and used on the Development site as erosion and sediment control or landscaping. Excess non-native vegetation will be removed from the Development site to an approved green waste facility. Remove unused mulch to designated stockpile locations and do not use mulch within 40 metres of waterways (e.g. Anzac Creek) or drainage lines.		
Koala Management		
If koalas are detected at any stage before or during clearing the following measures will be implemented:		
All vegetation clearing and construction works in the immediate vicinity (i.e. within 30 metres) of the koala will cease and the Development Ecologist or Environmental Coordinator will be informed of the presence of the koala.		
If the koala is located on the ground, then all site works within the immediate vicinity (including vehicle movement) will immediately cease until advised by the Development Ecologist or Environmental Coordinator that it is safe to re-commence. The koala will be encouraged to self-relocate by the Development Ecologist.		
If the koala is in a tree, this tree (and other trees with crowns overlapping the tree containing the koala) will be marked with flagging tape. An appropriate buffer area around the trees (typically 30 metres) will also be marked as a temporary 'no-go' area. Clearing and construction works adjacent to the no-go area can recommence if/when confirmed by the Development Ecologist or Environmental Coordinator. The Development Ecologist will remain present during works to confirm that the koala does not descend from the tree and to issue a cease work warning if the koala descends from the tree.		
A further pre-clearing survey of the temporary no-go area will be undertaken the following day prior, and prior to commencement of vegetation clearing. If the koala is still present then the temporary no-go area will remain in place until the koala has, or is, relocated.		
If the koala remains in-situ for several days then relocation may be required. Such relocation will be conducted by a recognised koala expert following consultation with OEH.		

APPENDIX C WEED, PEST AND VERMIN MANAGEMENT PROTOCOL

Purpose

This Weed, Pest and Vermin Management Protocol explains the actions and measures to be implemented if any noxious weeds, pest species and/or vermin are found in the Development site. To date, no noxious weeds or fauna pest species have been identified in the Development site.

This Weed, Pest and Vermin Management Protocol prescribes measures to manage weeds, pests and vermin that may be identified in the Development site, in accordance with the *Biosecurity Act 2015.* The *Biosecurity Act 2015* repeals the *Noxious Weed Act 1993* as of July 1 2017.

Training

All personnel undertaking construction activities within the Development site will be inducted on the identification of noxious weeds species, pest species and vermin that may occur on the Development site, and will be trained in this protocol through Toolbox Talks or a site induction.

Protocol

Prevent introduction of noxious weeds, pest species and/or vermin

As outlined in Section 3.4 of this CFFMP, the following management measures will be implemented to prevent the introduction of weeds to the Development site:

- Vehicles, equipment, materials and footwear will be clean on entry (free of soil, mud and/or seeds) to minimise the introduction or spread of *Phytophthora cinnamomi*; a wheel wash to be installed at the Development site entry.
- No spoil, excavated material, plant or equipment is to be stockpiled or stored within the delineated “No-Go” zones
- Undertake weekly inspections of cleared and disturbed areas, to identify the presence of establishing weeds.

Identification of noxious weeds, pest species and/or vermin

No noxious weeds have been previously identified within the Development site. However, the movement of people, plant and equipment during construction activities has the potential to introduce weed propagules to the construction footprint. Disturbed areas (i.e. where the soil profile has been disturbed by vegetation clearing and/or earthworks) are most susceptible to the establishment of weeds.

Noxious weeds, pest species and/or vermin may be identified on the Development site during the weekly inspections of cleared and disturbed areas that must be carried out, in accordance with the monitoring requirements prescribed by Section 4 of this CFFMP. Soil stripped and stockpiled from areas containing known weed infestations will be stored separately and will not to be moved to areas free of weeds.

Management of noxious weeds, pest species and/or vermin

1. **IDENTIFY WEED, PEST SPECIES AND/OR VERMIN.** The Contractor's Environment Manager (EM) or Environmental Officer (EO) is to contact the Development Ecologist (PE), who will identify the weed, pest or vermin to species level.
2. **REMOVE WEED, PEST SPECIES AND/OR VERMIN.** The PE must recommend management measures specific to the species identified in the Development site. Management measures may include:
    a. Physical removal of weed species.
    b. Application of a herbicide for chemical removal of a weed species.
    c. Disposal of weed and non-native vegetation.
    d. Capture or deterrent of a fauna pest species.
    e. Capture fauna vermin species or removal of flora vermin species.
3. **CONTINUE MONITORING FOR WEED, PEST SPECIES AND/OR VERMIN.** The Contractor's EM must ensure that the weed, pest species or vermin is included in subsequent inductions and Toolbox Talks. Subsequent weekly inspections must include inspections of areas from which weeds, pest species or vermin have been removed.

    Inspect the Development site on a regular basis, no less than every 3 months, to ensure that the measures in this protocol are working effectively, and that pests, vermin or noxious weeds are not present on the Development site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area.

APPENDIX D UNEXPECTED FINDS PROTOCOL

Purpose

This Unexpected Finds Procedure explains the actions and measures to be implemented if any threatened flora and/or fauna species or threatened ecological communities, that have not been previously recorded within the Development Site, are found during construction. Examples of such species include Hibbertia sp. Bankstown and Bynoe's Wattle.

Training

All personnel undertaking construction activities within the Development site will be inducted on the identification of known and potential threatened species and ecological communities occurring on site, and will be trained in this protocol through Toolbox Talks or a site induction.

Protocol

Upon detection of a threatened species or ecological community during construction activities, the following steps must be followed.

1. **STOP ALL WORK** in the vicinity of the find. Immediately notify the Contractor's Environment Manager (EM) or Environmental Officer (EO) who will notify the Development Ecologist (PE) and Environmental Representative (ER). The Development ecologist must confirm the presence of the threatened species. The EM will then contact the relevant agencies as required.
2. **ASSESS IMPACT.** An assessment is to be undertaken by the Contractor's EM and the PE to identify the plant or animal to species level and the likely impact to the threatened species / ecological community and appropriate management options, such as re-location measures, developed in consultation with the relevant agencies.
3. **OBTAIN APPROVALS.** Obtain any relevant licences, permits or approvals required if the threatened species / ecological community is likely to be significantly impacted. Consultation with OEH must be completed for any proposed amendments to the location or reclassification of threatened species, populations and ecological communities as identified in the updated BAR.
4. **RECOMMENCE WORKS.** Construction works may recommence once the EM has:
    a. obtained approvals as required, and
    b. confirmed that all corrective actions and additional mitigation measures have been Implemented.
5. **UPDATE PLANS AND PROCEDURES.** The Contractor's EM must ensure that the threatened species / ecological community is included in subsequent site plans and/or sensitive area drawings, inductions and Toolbox Talks. The Contractor's EM must provide information to enable an update of ecological monitoring and/ or biodiversity offset requirements.

APPENDIX E CONSULTATION

Addressing comments from Office of Environment and Heritage dated 3 April 2018.

Section of comment	Comment	Development Response	Section Amended
Acronyms and Terms	Also located south of the Project site.	Addressed	Acronyms and Terms
Background	Typo: 2nd para – Construction (not Constriction).	Addressed	Background
Section 1.3.3	Construction Works Phase B includes Construction Works Phase A – is this correct? If so, the difference between Phase A and Phase B is not clear.	This is correct. The activities that are started in Construction Works Phase A will be continued and completed during Construction Works Phase B. The key difference between Phase A and Phase B is the addition of Moorebank Avenue upgrade works in Phase B	Section 1.3.3
Section 2.3	Replace 'should' with 'will'.	Addressed	Section 2.3
Section 3.1.1.1	Within the 'number occurring outside the Project site' information box include details of those individuals outside but in close proximity to the eastern, western and southern boundaries.	Table 15 has been updated to include the statement: *"Of the 1,161 plants that have been recorded outside of the Project, 15 are within approximately 10 m of the eastern boundary, 24 are within approximately 10 m of the southern boundary and 17 are within approximately 10 m of the western boundary of the Project site"*	Section 3.1.1.1
Section 3.1.1.2	Within the 'number occurring outside the Project site' information box include details of those individuals in close proximity to the eastern and western boundaries.	Table 16 has been updated to include the statement: *"Of these 7,063 stems, zero have been recorded within 10 m of the eastern boundary and 141 have been recorded within 10 m of the western boundary of the Project site"*	Section 3.1.1.2
Section 3.1.1.3	Within the 'number occurring outside the Project site' information box include details of those individuals in close proximity to the western, eastern and southern boundaries.	Table 17 has been updated to include the statement: *"Of the 258 plants recorded in the Boot Land, 4 have been recorded within approximately 10 m of the southern boundary, zero have been recorded within*	Section 3.1.1.3

Section of comment	Comment	Development Response	Section Amended
		approximately 10 m of the eastern boundary and 3 have been recorded within approximately 10 m of the western boundary of the Project site."	
Section 3.1.1.5	Within the 'number occurring outside the Project site' information box include details of those individuals in close proximity to the eastern boundary.	The closest record of *Acacia pubscens* is located approximately 18metres east of the eastern boundary of the Project site	Section 3.1.1.5
Section 3.1.2.2	The area of 'Hard-leaved Scribbly Gum - Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin' (3.83 ha) does not accord with the area (3.74 ha) in Table 23 Construction Impacts on Biodiversity (on p.39). [It is assumed 3.83 ha of this PCT will be cleared as Table 23 (p.40) states the total area of native vegetation to be impacted is 4.69 ha – a correction is required if this is an error].	3.83 hectares is correct. Table 23 has been updated accordingly.	Section 3.2.2
Section 3.1.4	The location of hollow-bearing trees within the construction area is not clear (i.e. is it 2 or 4?). In addition, the total is different to the 9 indicated in Table 23 (on p.40).	Figure 3-2 indicates that 4 hollow-bearing trees (HBT) are located within the construction area. Table 23 has been updated to be consistent with Section 3.1.4 and Figure 3-2, i.e. 4 hollow bearing trees. During preclearing surveys, the ecologist will determine whether there are any additional HBTs, these will be managed in accordance with Appendix B.	Section 3.2.2
Section 3.2.2	Typo: '*Phytophthora cinnamomic'* should be *'Phytophthora cinnamomi'.*	Addressed	Section 3.2.2
Section 3.3	Under Management Measure, 3rd paragraph delete last 4 words (… 'and the construction footprint').	Addressed	Section 3.3
Section 3.3	Typo: 4th dot point under 'Management Measure', replace 'will' with 'to'.	Addressed	Section 3.3

Section of comment	Comment	Development Response	Section Amended
Section 3.3	It is recommended the induction program for construction staff also include emergency and incident response/spill management procedures (eg fire and chemical/fuel spills).	Addressed	Section 3.3
Section 3.3	Typo: under ‘Management Measure’, replace ‘not’ with ‘no’.	Addressed	Section 3.3
Appendix A	Typos: under ‘Purpose’, replace ‘commandment’ with ‘commencement’ and replace ‘Area’ with ‘site’.	Addressed	Appendix A
Appendix A	Typo: under ‘Pre-clearing Management Action’ Purpose’, 4th action, replace ‘Area’ with ‘site’.	Addressed	Appendix A

APPENDIX F DRIP ZONE PROTOCOL

Purpose

This protocol explains the actions and measures to be implemented prior to the commencement of works within the drip zones of Endangered Ecological Communities (EECs) (including Threatened Ecological Communities (TECs)) within the Development site. It should be noted that the term EECs within this Schedule incorporates both Endangered and Threatened Ecological Communities (TECs) within the Development site.

Scope

This protocol is applicable to all vegetation (trees, understorey, groundcover) that comprise an ecological community (i.e. TEC, EEC) listed under the *Biodiversity Conservation Act 2016* ((BC Act) which replaced the former *Threatened Species Conservation Act 1995* (TSC Act)) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) that occur within the Development site.

Training

All personnel undertaking works, or directly involved with works, within the drip zone of EECs (including TECs) will be trained in this protocol through Toolbox Talks and/or a site induction.

Protocol

Drip Zone Protocol	
1	Contractor plans proposed works, including location, plant/equipment, general approach
2	The Arborist and the Ecologist visit the proposed work area/s with the contractor to determine the most adequate practicable construction methodology and mitigation requirements for proposed works
3	Arborist and Ecologist identifies tree protection and mitigation measures and any other EEC protection measures to be implemented for proposed works
4	Contractor implements protection and mitigation measures identified by Arborist and Ecologist
5	Arborist and Ecologist (if required) reviews/inspects implementation of protection and mitigation measures
6	***HOLD POINT – Works must not proceed without Development Arborist's and Ecologist's (if required) and Environmental Representative's sign off that works may commence***
7	Contractor conducts proposed works in accordance with Arborist's / Ecologist's protection and mitigation measures
8	Arborist and Ecologist (if required) conducts inspection to determine whether proposed works have been completed without affecting the health of trees, that any EECs have not been significantly impacted, and whether any rectification works are required
9	Development Arborist, Development Ecologist (if required) and Environmental Representative sign off that all proposed works are complete, and rectification works (if required) are complete

APPENDIX G NEST BOX ADVICE