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PORT HEDLAND IRON PROJECT

BILBY MANAGEMENT PLAN

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ACKNOWLEDGEMENT OF COUNTRY

In the spirit of reconciliation, Preston Consulting acknowledges the traditional lands of the Kariyarra People on which the Project is proposed. We recognise their rich culture and their continuing connection to land and waters, and pay our respects to their Elders past, present and emerging.



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EXECUTIVE SUMMARY

Port Hedland Iron Pty Ltd (PHI) is progressing the development of downstream iron ore processing capability known as the Port Hedland Iron Project (Project). The Project is located in the Boodarie Strategic Industrial Area (SIA) approximately 10 kilometres (km) south west of Port Hedland in the Pilbara region of Western Australia (WA). The Project will consist of a pellet plant and a hot briquette iron (HBI) Plant, consuming approximately 3-3.5 million tonnes per annum (Mtpa) iron ore to produce approximately 2 Mtpa HBI and 0.7 Mtpa of Pellets for export.

A detailed terrestrial fauna survey and pre-clearance survey for the Greater Bilby (Bilby; *Macrotis lagotis*) were undertaken by Phoenix Environmental Sciences Pty Ltd (Phoenix) in April 2023 for PHGS (Phoenix, 2023). The detailed survey was undertaken in a 1,476 ha survey area 7 km east of the South Hedland (Survey Area). The Survey Area included the 518 ha Plant Development Envelope (PDE) and the 466 ha External Infrastructure Development Envelope (EIDE). The pre-clearance survey was undertaken in support of geotechnical investigations over a 6 ha area within the PDE.

This Bilby Management Plan (BMP) has been developed in order to ensure that construction and operational activities of the Project are carried out in a manner that minimises impacts to Bilby and Bilby habitat.



Table 1: Summary

Project Name	Port Hedland Iron Project
Proponent Name	Port Hedland Iron Pty Ltd
Ministerial Statement number	NA
Purpose of this Management Plan	To ensure construction and operational activities of the Project are carried out in a manner that minimises impacts to the Bilby (<i>Macrotis lagotis</i>).
Key environmental factor	Terrestrial Fauna.
EPA's environmental objective	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
Condition clauses	NA
Key components	<p>The key components of this Bilby Management Plan include avoiding, minimising and reducing the impacts of the Project by:</p> <ul style="list-style-type: none"> • Restricting disturbance and vegetation clearing to designated areas, vehicle movement to designated tracks, and all other infrastructure to approved cleared areas; • Monitor Bilby activity to determine presence or absence within and around the development envelopes; • Monitor feral predator activity and implement feral predator control procedures; • Implementing a weed management procedure for vehicles and machinery entering and leaving the development envelopes, to ensure they are free from soil and vegetative material and are restricted to designated tracks or approved areas only; • Implementing dust, noise and vibration suppression procedures and controls; • Implementing fire prevention measures and procedures to prevent or minimise the occurrence of fire within the development envelopes; and • Implementing hydrocarbon or pollutant management engineering and design controls, to reduce the likelihood of spills occurring.
Proposed Construction Period	2025 - 2027
EMP required pre-construction?	Yes



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1 CONTEXT, SCOPE AND RATIONALE

1.1 PROJECT DESCRIPTION

PHI is progressing the development of large-scale downstream iron ore processing capability known as the Port Hedland Iron Project (Project). The Project is located in the Boodarie SIA approximately 10 km south west of Port Hedland in the Pilbara region of WA.

The Project will consist of a pellet plant and a HBI Plant, consuming approximately 3-3.5 Mtpa magnetite ore to produce approximately 2 Mtpa of HBI.

The initial infrastructure to be developed within the SIA for the Project will include:












- Iron ore processing facility (IOPF) comprising one pellet and one HBI plant producing approximately 2 Mtpa of HBI and 0.7 Mtpa of iron ore pellets;
- Carbon capture and storage infrastructure;
- Hydrogen production and storage facilities for supply to IOPF; and
- Supporting infrastructure such as:
 - HBI and pellet handling and storage facilities;
 - Flux storage;
 - Administration and other non-process buildings;
 - Workshops;
 - Water storage areas;
 - Magnetite concentrate handling facilities; and
 - Access roads.

The development envelopes will total an area of 984 ha. The development envelopes are comprised of a 518 ha PDE and a 466 ha EIDE (Figure 1). Both envelopes are within the SIA.

Development of the Project will require, subject to the finalised design, the clearing of up to 390 ha of land variably and sparsely covered in native vegetation within the development envelopes. This has the potential to impact on known habitat for a local population of Greater Bilby (*Macrotis lagotis*; hereafter Bilby). The Project location and development envelopes are shown in Figure 1. A summary of the Project details and the BMP are provided in Table 1.

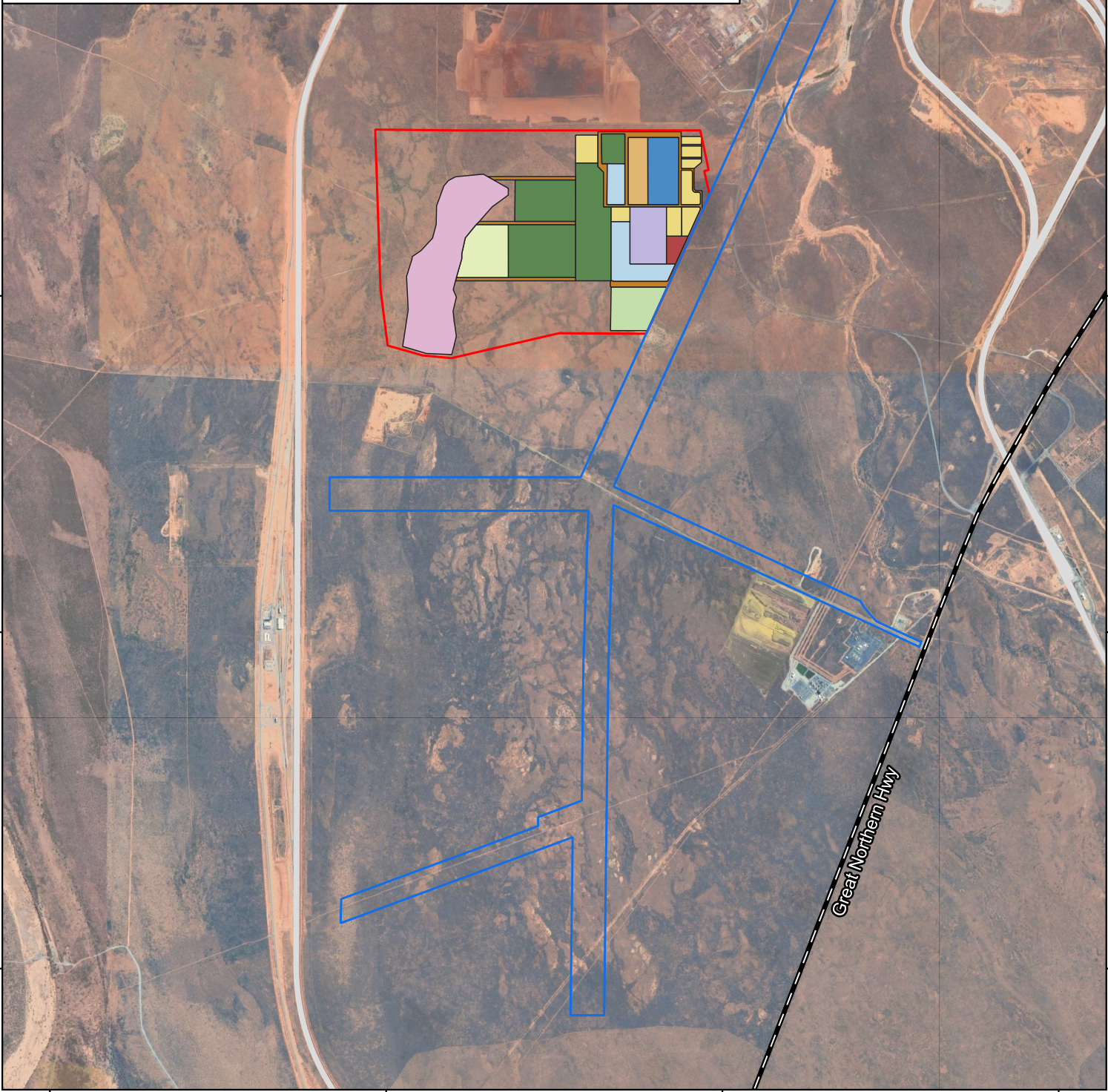


Indicative Disturbance Footprint Layout





 Borrow Pit	 Nitrogen Plant
 Construction Infrastructure and Laydown	 Non Process Infrastructure Operational
 Green Hydrogen Plant	 Laydown
 HBI Plant	 Pellet Plant
 Material Handling	 Roads and Internal Infrastructure Corridor
	 Topsoil Stockpile

7746500N
7743500N
7740500N
7737500N

7746500N
7743500N
7740500N
7737500N




Legend

-  External Infrastructure Development Envelope
-  Plant Development Envelope
-  Freeways & Highways (LGATE-195)
-  Railway (DPLH-058)

Imagery: Google Satellite

GDA 2020 / MGA Zone 50



1:50,000 (A4)

Figure 1: Development Envelopes



1.2 PURPOSE OF THIS MANAGEMENT PLAN

The purpose of this BMP is to ensure that impacts to the Bilby during construction of the Project are avoided and minimised as far as possible through the implementation of good practice management measures. This BMP will provide management actions and monitoring measures that will deliver conservation outcomes for the Bilby and account for the residual impacts associated with habitat loss from the construction of the Project.

This BMP includes:

- Spatially accurate, rectified and geographically referenced maps showing the location of the Bilby records in relation to the development envelopes;
- Management actions that will be undertaken to prevent indirect impacts to Bilby and Bilby habitat from weeds, feral predators, fire, hydrocarbon or other environmental contamination;
- Management actions to be implemented that aim to ensure the management targets are achieved; and
- Monitoring methodology including the frequency and assessment methodology.

This BMP also includes sections on both adaptive management and review, and stakeholder engagement to ensure it aligns with the Environmental Protection Authority's (EPA) and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) current guidance (EPA, 2024; DotE, 2014).

The management measures and monitoring identified are expected to ensure that the impacts on Bilby are not significant.

1.3 RELEVANT ENVIRONMENTAL FACTORS

The WA EPA's Environmental Factor relevant to this BMP is Terrestrial Fauna. The EPA's objective for this Environmental Factor is to *protect terrestrial fauna so that biological diversity and ecological integrity are maintained*.

1.4 APPROVALS

This BMP was prepared in anticipation of State and Commonwealth conditional requirements.

The EPA is assessing the Project at the level of assessment of "Referral Information with additional information (required under s. 40(2)(a) of the *Environmental Protection Act 1986*) with 4 weeks public review."

The Project is also being assessed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act, Cth) as an 'Assessment on Preliminary Documentation'.



1.5 BILBY INFORMATION

1.5.1 STATUS

The Bilby is listed as Vulnerable under the EPBC Act and the WA *Biodiversity Conservation Act 2016* (BC Act). In addition to legislative protection, this species is culturally important to Traditional Owners (Paltridge, 2016; Walsh & Custodians of the Bilby, 2016).

1.5.2 ECOLOGY AND DISTRIBUTION

The Bilby occurs in two main separate geographic areas: one extending from the western desert of the Northern Territory to the Pilbara and Kimberley regions in WA; and one in south-western Queensland.

The species is solitary and shelters in burrows during daylight and intermittently during the night. It occupies three main habitat types across its' distribution (Threatened Species Scientific Committee (TSSC), 2016):

- Open tussock grassland on uplands and hills;
- *Acacia aneura* (mulga) woodland/shrubland growing on ridges and rises; and
- Hummock grassland in plains and alluvial areas.

Bilby habitat varies across the landscape, influenced by climatic zones, soil, vegetation types, and landforms (Commonwealth of Australia, 2023). Throughout WA, three landforms have been identified as habitat; residual landforms, fluvial landforms and plains and dune fields (Cramer et al., 2016).

Bilbies are highly mobile and have large foraging ranges, with adult females moving up to 1.5 km between burrows on consecutive days, and adult males moving up to 5 km between burrows on consecutive days (Commonwealth of Australia, 2023). Studies have indicated an average home range of 0.18 km² for females and 3.16 km² for males, with numerous active and inactive (unused) burrows present within this range (Commonwealth of Australia, 2023).

The Bilby is an omnivore that digs for food, with a diet consisting of invertebrates such as insect larvae, termites, ants, grasshoppers, spiders and beetles, and other items such as seeds, bulbs and fungi (TSSC, 2016). Some of the key food sources are dependent on fire history (Commonwealth of Australia, 2023).

1.5.3 KEY THREATS

The key threats to the Bilby include (Commonwealth of Australia, 2023):

- Predation by feral predators including cats (*Felis catus*) and foxes (*Vulpes vulpes*);
- Habitat loss and fragmentation;
- Domestic and other introduced species;
- Unmanaged fire and inappropriate fire regimes;
- Loss of Traditional Owner knowledge and land management; and
- Reduction in population resilience and genetic fitness in wild and intensively managed populations.



1.6 RATIONALE AND APPROACH

PHI's approach to management used in this BMP is to emphasise managing impacts through planning, organisation and controlling aspects of the Project prior to project commencement. The following hierarchical approach to manage potential impacts has been used:

- Avoidance: measures used to avoid or prevent impacts from the Project;
- Minimisation: measures taken to reduce the duration, intensity and/or extent of impact; and
- Rehabilitate: measures taken to remediate and rehabilitate areas temporarily disturbed during construction.

Results from surveys and study findings inform PHI's management approach for meeting the EPA's environmental objective.

All surveys have been conducted with escort and participation by Kariyarra Aboriginal Corporation (KAC) monitors.

1.6.1 SURVEY FINDINGS

A detailed terrestrial fauna survey was undertaken by Phoenix in April 2023 for PHI (Phoenix, 2023). The detailed survey was undertaken in a 1,476 ha survey area which included the PDE and the EIDE (Figure 2). Secondary evidence (tracks and scats) of the Bilby were recorded from 112 locations within the Survey Area during the detailed fauna survey, however, no active or inactive burrows were recorded (Figure 3). The majority of the secondary evidence (78%) was recorded within the PDE. The remaining locations were all located within the EIDE. All evidence was identified within sandplain habitat.

A small area of the PDE was subject to a Bilby pre-clearance survey in accordance with the conditions of a Native Vegetation Clearing Permit (CPS10103-1)(Figure 2). The survey did not record any active or inactive/old Bilby burrows. In the eastern area Bilby scats were recorded at three locations and foraging digs were identified at nine locations. The recency of the scats could not be determined due to weathering associated with heavy rainfall and large temperature ranges.

A detailed terrestrial fauna survey and targeted Bilby survey was also undertaken for APA's Port Hedland Solar Project, immediately southeast of the Project (Phoenix, 2022). No burrows were identified however evidence of Bilby was recorded throughout the study area and particularly along South West Creek. The study area for the targeted Bilby survey intersected with the Project area with 29 records at 10 locations within the EIDE (Phoenix, 2022; Figure 4). The majority of these records were associated with sandplain habitat, all associated with scats and diggings.

A description of the surveys are outlined in Table 2. The key findings of these assessments are detailed in the following sections.



Table 2: Environmental report and survey programs undertaken.

Survey Description	Area of Coverage	Field Dates	Report Title
Prior to Development			
Detailed Terrestrial Fauna Survey <ul style="list-style-type: none"> • Desktop assessment, with emphasis on Threatened & Priority fauna; • Detailed fauna assessment of the Survey Area; and • Definition and mapping of fauna habitat, Threatened and Priority fauna, and related management issues. 	PDE, EIDE and surrounds.	April 2023	Detailed terrestrial fauna survey for the Port Hedland Green Steel Project (Phoenix, 2024).
Pre-clearance Bilby Survey: <ul style="list-style-type: none"> • Targeted Bilby survey within the PDE. 	Within the PDE.	September 2023	Pre-clearance field note (S. Pynt pers. comms.)
Detailed Terrestrial Fauna and Targeted Bilby Survey <ul style="list-style-type: none"> • Survey undertaken for APA's Port Hedland Solar Project and included: <ul style="list-style-type: none"> ○ A desktop assessment; ○ Detailed fauna assessment; and ○ Targeted Bilby Survey. 	Sections of the EIDE	January 2021 and August 2021.	Detailed terrestrial fauna and targeted Bilby survey for The Port Hedland Solar Farm Project.



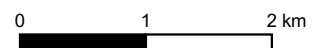


Legend

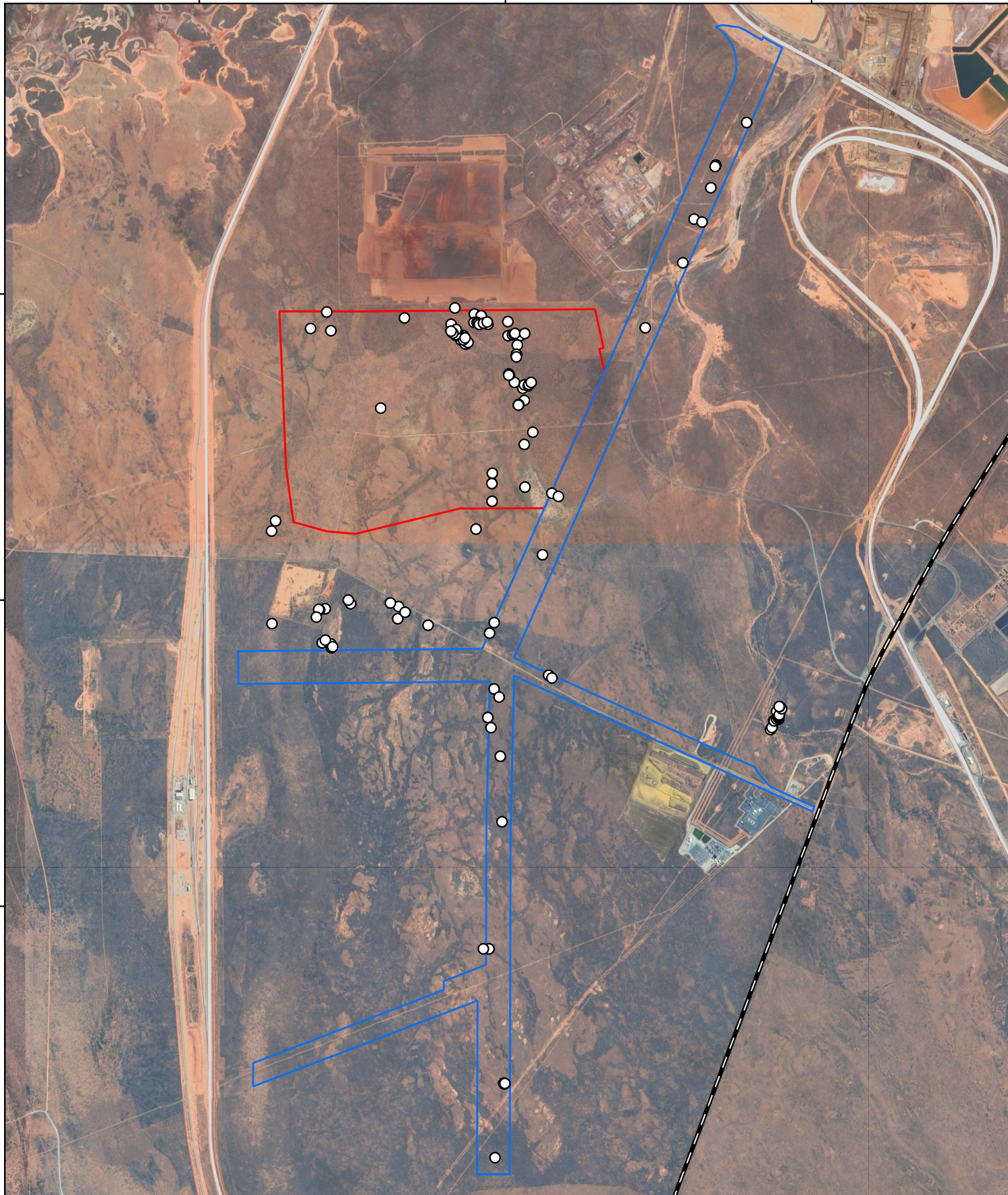
- Plant Development Envelope
- External Infrastructure Development Envelope
- Fauna Survey Area
- Pre-clearance survey area

Imagery: Google Satellite

Figure 2: Survey Areas



GDA 2020 (MGA Zone 50)
1:60,000 (A4)



Legend

- Macrotis lagotis, VU (EPBC Act, BC Act)
- ▭ Plant Development Envelope
- ▭ External Infrastructure Development Envelope
- ▬ Freeways & Highways (LGATE-195)
- ▬ Railway (DPLH-058)

Imagery: Google Satellite

GDA 2020 / MGA Zone 50

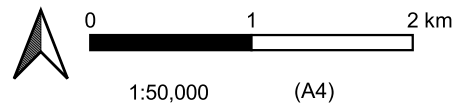
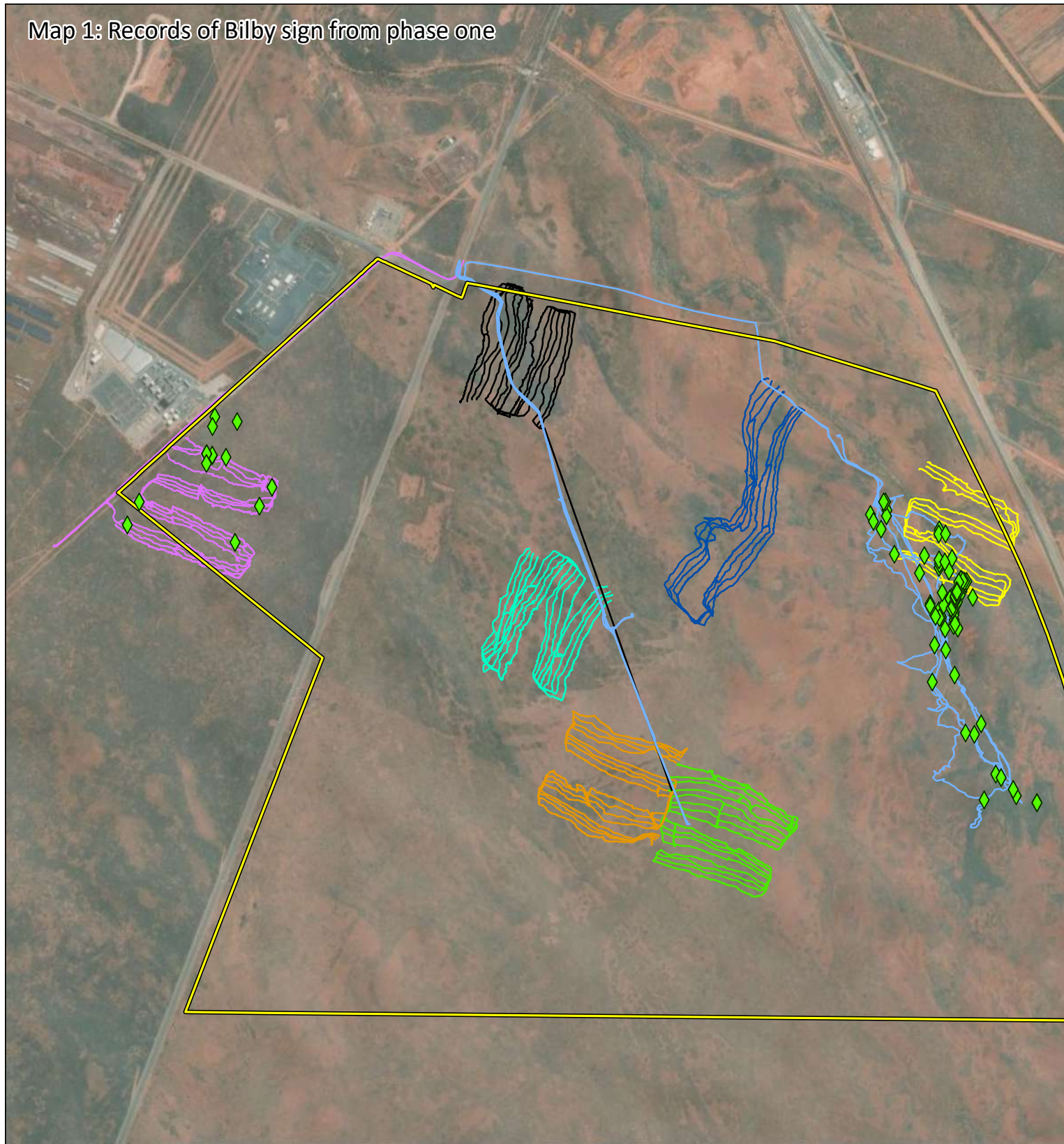


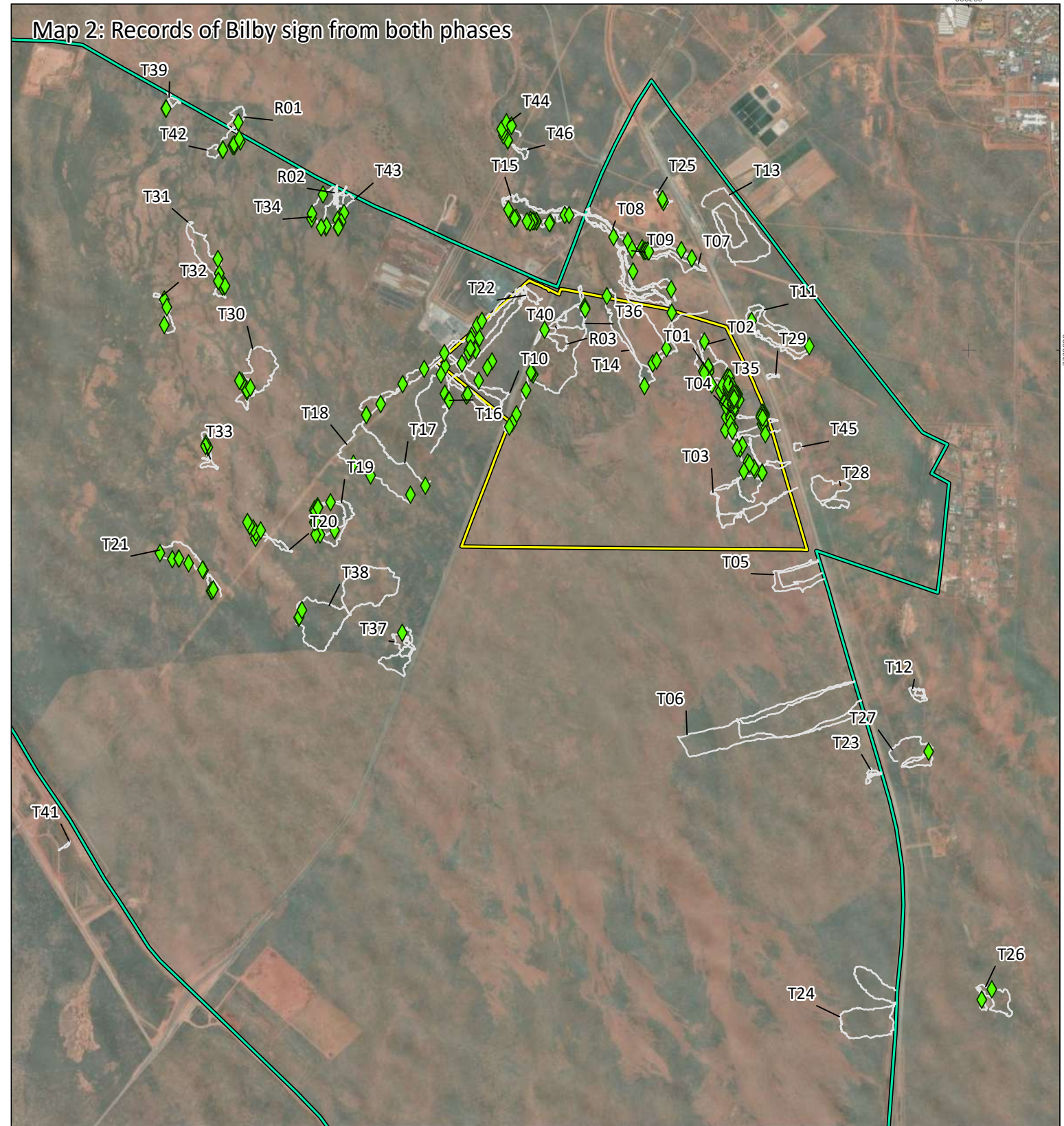
Figure 3: Location of Secondary Bilby evidence




Map 1: Records of Bilby sign from phase one



Map 2: Records of Bilby sign from both phases



Alinta Energy Pty Ltd via Preston Consulting Port Hedland Solar Farm Project	
Project No	1454
Date	8/11/2021
Drawn by	IN
Map author	SP
	
Map 1 0 240 480 Meters	Map 2 0 0.5 1 Kilometers
1:17,501 (Map 1, at A3)	GDA 1994 MGA Zone 50
1:48,773 (Map 2, at A3)	













	Study Area		Transect 03
	Targeted Bilby survey area		Transect 04
	<i>Macrotis lagotis</i> , VU (EPBC Act, BC Act)		Transect 05
Map 1: Phase 1			Transect 06
	Transect 01		Transect 07
	Transect 02		Transect 08

Figure 4: Location of secondary Bilby evidence Port Hedland Solar Project (Phoenix, 2022)


P H O E N I X
 ENVIRONMENTAL SCIENCES

All information within this map is current as of 8/11/2021. This product is subject to COPYRIGHT and is property of Phoenix Environmental Sciences (Phoenix). While Phoenix has taken care to ensure the accuracy of this product, Phoenix make no representations or warranties about its accuracy, completeness or suitability for any particular purpose.
 P:\GIS\Projects\PortHedlandSolarFarm\1454-PHS-AE-VER\Mapping\MapDocuments\Figures\Figure_5_7_Records_of_bilby_sign.mxd

1.6.2 KEY ASSUMPTIONS AND UNCERTAINTIES

Key assumptions of this BMP include:

- Fauna surveys have accurately recorded the nature of the presence of Bilby and identified habitat values;
- Fauna surveys accurately reported on the distribution of the Bilby;
- Conditions experienced during survey programs were ideal for recording Bilby unless specified otherwise; and
- Bilby evidence of occupancy has been correctly identified during the survey.

1.6.3 RATIONALE FOR CHOICE OF PROVISIONS

This BMP has been prepared in accordance with the “*Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans*” (EPA, 2024) and the “*Environmental Management Plan Guidelines*” (DotE, 2014) published by the EPA and the Commonwealth, respectively.

The rationale for the choice of provisions is based on implementing the management approach described above to avoid, minimise and rehabilitate the potential impacts caused by construction of the Project on Bilby. A critical element to this management approach is identifying and quantifying the potential direct and indirect impacts to the Bilby caused by the Project. A summary of the potential impacts of the Project is included in the following sections.

Direct Impacts

Loss of habitat

Survey work by Phoenix (2023) identified the areas within the development envelopes as containing suitable Bilby sandplain habitat. Up to 390 ha of sandplain habitat has the potential to be cleared for the development of the Project (26% of mapped extent) which is not expected to represent a significant proportion of locally available habitat.

Vehicle strike

During construction of the Project there will be increased vehicle movement throughout the development envelopes, consequently increasing the likelihood of vehicle strikes on Bilby.

Indirect Impacts

Weed invasion

Weeds have the potential to disperse during construction due to clearing of native vegetation and increased vehicle movements. Increased weed burdens in Bilby habitat can prevent seedling recruitment of native plant species potentially reducing the amount of habitat and food resources available to the Bilby. Increased weed densities can also alter fire regimes. The land has historically been used for pastoralism.



Increased predation from introduced fauna

The initial clearing of habitat could increase the likelihood of predation by introduced predators by reducing the amount of shelter and protection from native vegetation. Domestic waste within the development envelopes also has the potential to attract feral predators and increase predation on Bilbies particularly by cats and/or dogs. The site is close to the town of South Hedland, the Wedgefield Industrial Area and port of Port Hedland.

Erosion of Bilby habitat

Clearing of native vegetation has the potential to increase the risk of erosion from wind and surface water run-off and cause degradation of Bilby habitat.

Other

Disruption to normal behavioural patterns from increased levels of activity (i.e. noise, dust, light and vibration) in the area could impact on dispersal, foraging and breeding opportunities for Bilby individuals.



2 COMPONENTS

2.1 OBJECTIVES

2.1.1 RECOVERY PLAN OBJECTIVES

The Commonwealth issued a revised National Recovery Plan for the Greater Bilby in 2023 (Commonwealth of Australia, 2023). The Recovery Plan aims to halt the decline and support recovery of the Bilby and provides the research and management actions necessary to maximise the Bilby's chances of long-term survival in nature (Commonwealth of Australia, 2023).

The Recovery Plan includes on-ground conservation and management actions, which are planned to occur within a monitoring framework that measures the impact of management. The Recovery Plan includes supporting actions to promote the role of Traditional Owners and land managers in Bilby conservation, provide governance and coordination, establish and maintain monitoring and surveys, and undertake research to inform management.

The Recovery Plan has four key objectives with associated performance criteria, as detailed below:

- **Objective 1:** The size of the Greater Bilby population has grown.
- **Objective 2:** The area occupied by the Greater Bilby has been maintained or increased.
- **Objective 3:** The genetic diversity of the Greater Bilby has been maintained and retains the potential for evolutionary change through adaption and selection.
- **Objective 4:** Indigenous organisations, communities, and individuals have a greater role in Bilby conservation.

2.1.2 ENVIRONMENTAL PROTECTION AUTHORITY OBJECTIVE

The EPA's environmental objective for Terrestrial Fauna is set out within the EPA's *Statement of environmental principles, factors, objectives and aims of EIA* (EPA, 2023). The EPA's objective for the Terrestrial Fauna Environmental Factor is "to protect terrestrial fauna so that biological diversity and ecological integrity are maintained".

2.1.3 ENVIRONMENTAL OBJECTIVES FOR THIS PLAN

The key management objectives for Bilby specific to construction of the Project are:

- Minimise clearing and impacts to Bilby habitat in the development envelopes;
- Reduce impacts to Bilby populations and habitat outside of the development envelopes;
- Prevent introduction and/or spread of weeds into Bilby habitat or adjacent areas;
- Prevent introduction and dispersal of feral predators into Bilby habitat;
- Prevent introduction of fire and/or spread of fire into adjacent areas; and
- No Bilby mortality as a result of vehicle strike.



2.2 MANAGEMENT ACTIONS, TARGETS AND MONITORING

To achieve these objectives, management targets and actions have been developed to address the key potential impacts associated with the Project. The management targets and actions which will be implemented in accordance with this plan are summarised in Table 3.

Table 3 presents the environmental management objectives and actions that the Project has implemented or will implement prior to ground disturbing activities, and during construction, in order to achieve the objectives. These actions are focused on avoiding adverse impacts on the Bilby resulting from Project activity and will be implemented prior to and during ground disturbance and construction activities of the Project.



Table 3: Management objectives and actions

Management Objective	Key Management Action	Management Target	Monitoring	Reporting
<p>Objective 1: Avoid and minimise clearing impacts to Bilby habitat.</p>	<ul style="list-style-type: none"> • A suitably qualified person will survey for the presence of Bilby before clearing works in known Bilby habitat and undertake relocation of individuals where required; • Clearing is only to occur within approved areas; • Boundaries of areas to be cleared or disturbed will be identified by a Global Positioning System (GPS) coordinates and maps of boundaries will be provided to dozer operators; • Exclusion zones will be established around any active Bilby burrows (should they be identified during pre-clearance surveys or at other times during construction works); • Exclusion zones will be demarcated with flagging prior to the commencement of clearing and the exclusion zones are to remain adequately marked for the duration of clearing activities; • All clearing will require a permit via completion of internal ground disturbance procedures, that will include: <ul style="list-style-type: none"> ○ Prompts to minimise clearing; ○ Demarcation of disturbance areas; ○ Designated oversight responsibilities and timing of actions; ○ General actions that ensure clearing is undertaken in accordance with environmental approvals; • Clearing boundaries will be clearly marked on construction documents and within the field; • Surface water management measures (i.e. bunding) will be implemented to ensure clearing of native vegetation will not increase erosion of Bilby habitat; • Erosion and sedimentation control measures will be implemented during all construction activities to prevent erosion and control sediment on the site; • Vehicles and machinery to remain on approved and/or existing tracks to reduce soil compaction; and • Undertake remediation and rehabilitation of areas that are temporarily disturbed during construction. 	<p>Total clearing not to exceed the authorised extent in the ministerial statement.</p> <p>No clearing outside the development envelopes.</p> <p>No direct loss of, or serious injury to Bilby individuals as a result of the Project.</p> <p>No evidence of soil compaction or soil erosion in areas of retained habitat as a result of the Project.</p>	<p>Monitoring of vegetation clearing will be ongoing until clearing is complete.</p> <p>Monitoring for Bilby will be undertaken at least every two years.</p> <p>Monitoring of erosion controls during construction.</p>	<p>To DCCEW and Department of Water and Environmental Regulation after any potential non-compliance within seven days of potential non-compliance being known.</p> <p>Reporting to Department of Biodiversity, Conservation and Attractions (DBCA) in accordance with the BC Act.</p> <p>Annual clearing data reported in annual Compliance Assessment Report (CAR).</p>



Management Objective	Key Management Action	Management Target	Monitoring	Reporting
<p>Objective 2: Prevent introduction and/or spread of weeds into Bilby habitat or adjacent areas.</p>	<ul style="list-style-type: none"> • Baseline weed survey to determine weed locations and densities; • Weed hygiene procedures will be implemented to minimise the risk of introducing new species to the site and surrounding areas. Weed hygiene procedures include: <ul style="list-style-type: none"> ○ Equipment inspections undertaken to check hygiene of earthmoving equipment and vehicles arriving on site; ○ Vehicles and machinery to remain on approved and/or existing tracks to limit the risk of weed invasion within undisturbed areas; ○ Movement of machines and other vehicles will be restricted within the development envelopes, to designated tracks or approved areas only; ○ Plant and soil materials will be restricted from being brought to site unless approved for a specific purpose; and ○ Hygiene breaches to be reported internally as an environmental incident. • Post-construction weed survey to determine whether new species have been introduced or existing infestations have expanded or intensified; • If inspections show new weed species or populations are established, weed mapping will be conducted to determine the extent of the impact and measure the effectiveness of control measures; • Develop and implement weed control programs where new species are detected and/or the area of occupancy of weed species has increased; and • Follow up monitoring on any areas where weeds have required control within one year. • Internal reporting as follows: <ul style="list-style-type: none"> ○ Incident reports of occurrences weed infestations, during general and targeted searches for <i>Cenchrus ciliaris</i>, <i>Aerva javanica</i>, <i>Malvastrum americanum</i>, <i>Portulaca oleraceoleracea</i>. and <i>Vachellia farnesiana</i> ○ Invasive species control reports; and ○ Records of equipment (including vehicle) washdown, hygiene certificates and auditing. 	<p>No new Declared Weeds or Weeds of National Significance within surrounding vegetation, attributable to the Project.</p> <p>No significant increase in weed cover attributable to the Project.</p>	<p>Assess the extent of weed infestation annually. Monitoring will include targeted searches of the weed species within the development envelopes.</p>	<ul style="list-style-type: none"> • Summary of Summary of weed management actions undertaken reported in CAR • Detection of any Declared Weeds or Weeds of National Significance will be reported to the Department of Primary Industries and Regional Development



Management Objective	Key Management Action	Management Target	Monitoring	Reporting
<p>Objective 3: Prevent introduction and dispersal of feral/domestic predators into Bilby habitat.</p>	<ul style="list-style-type: none"> • Undertake baseline feral fauna survey prior to commencing construction; • Undertake feral fauna monitoring and control measures (if required) within and on the perimeter development envelopes; • Monitoring to be undertaken at appropriate locations by PHI in partnership with Indigenous Rangers where feasible; • Feral animal control programme in line with the Town of Port Hedland and DBCA guidance. Should feral predator control be required, trapping will be the preference; • Trapping will be undertaken at appropriate locations by PHI in partnership with Aboriginal land managers, Traditional Owners and Indigenous Rangers where feasible; • Trapped animals will be managed through an agreement with the Town of Port Hedland; • Incident reports of occurrences feral/domestic predators, during general and targeted searches; • Opportunistic feral fauna sightings will be recorded, and assessed on an annual basis; • No pets will be permitted on site; and • Avoid attraction of introduced species to the development envelopes by implementing waste management procedures (e.g. rapid removal of putrescible waste, secure lids on bins). 	<p>No increase in feral/domestic predator activity within the development envelopes.</p>	<p>Monitoring will be undertaken at least annually.</p> <p>If monitoring indicates an increase of feral predator activity (above baseline results) within the development envelopes, feral predator controls will be implemented.</p>	<p>Summary of feral animal sightings reported in CAR.</p> <p>Summary of feral animal control actions undertaken reported in CAR.</p>
<p>Objective 4 Prevent introduction of fire and/or spread of fire into adjacent areas.</p>	<ul style="list-style-type: none"> • Maintenance of existing fire breaks; • An Emergency Response Plan; • On-site firefighting capability will be established, and firefighting equipment located on site and in vehicles; • Fire awareness training; • Specific measures to prevent accidental fires; • Procedures for fire identification and reporting; • Response procedures and fire drills; and • Implementation of a Bushfire Management Plan. 	<p>No incidents of fire originating within, and spreading outside of, the development envelopes attributable to the Project.</p>	<ul style="list-style-type: none"> • Regular inspections of firefighting equipment and machinery; and • Regular inspections of fire breaks and environmental fuel loads in proximity to the development envelopes. 	<p>As per the Bushfire Management Plan.</p>



Management Objective	Key Management Action	Management Target	Monitoring	Reporting
<p>Objective 5: No Bilby mortality as a result of vehicle collisions.</p>	<ul style="list-style-type: none"> All construction personnel to undergo induction training on Bilby presence and behaviour and the required vehicle speed limits; and Restricted night-time vehicle movements to minimise the potential for vehicle strikes. 	<p>No direct loss or serious injury to Bilby individuals as a result of vehicle strikes.</p>	<p>Not applicable.</p>	<p>Report any incidents of mortality to DBCA and DCCEEW within seven days of incident.</p> <p>All vertebrate fauna deaths and injuries will be entered as an incident and tracked through PHI's incident management system and reported in AER.</p> <p>Monitoring reports will be submitted to Government as per requirements under the Biodiversity Conservation Regulations 2018 and <i>Animal Welfare Act 2002</i>.</p>



2.3 IMPLEMENTATION

Incident reporting and investigations will be undertaken in accordance with a Project-specific incident reporting and investigation procedure, and root causes will be determined. Corrective actions will be identified and implemented to address the root causes.

Incidents and non-compliances with this BMP and other management documents will be reported and investigated in accordance with a Project-specific incident reporting and investigation procedures, and appropriate measures implemented to prevent recurrence. Where applicable, environmental incidents will be reported to the relevant government agency.

The following procedure will be implemented when a non-compliance occurs:

- Report the incident (within seven days), investigate the cause and identify contingency actions;
- Implement contingency actions which may include:
 - Review management measure practicality or relevance;
 - Improve training and education for all personnel; and
 - Improve and implement increased protective measures as necessary;
- Monitor outcomes.

2.3.1 WEED MANAGEMENT

Introducing or spreading weeds by earthmoving equipment and ground disturbance can impact the availability and quality Bilby habitat. PHI will engage in ongoing active weed management to ensure weeds are controlled.

Objectives

The objective of weed management is to ensure that Project activities do not result in the introduction of new weed species or increase in the extent of existing weed species.

Methodology

A weed monitoring and management programme will be developed to ensure that any existing and new weed infestations within area of Project-related disturbance (including areas of rehabilitation) are identified and controlled or eradicated. Monitoring will be undertaken at specific locations within and around the development envelopes.

Should monitoring indicate the introduction or spread of weeds within the development envelopes, weed control programs will be developed and implemented.

2.3.2 FERAL PREDATOR CONTROL

Predation from feral cats, dingo/wild dogs and foxes have had a serious detrimental effect on the conservation of the Bilby. Accordingly, feral predator control in areas of Bilby habitat is considered important to maintain populations of the species.

Objectives

The objective of feral predator control is to reduce the threat to Bilby from feral predators.



Methodology

A key component of the feral predator monitoring and control program will be to provide opportunities to exchange knowledge and experience on techniques with Traditional Owners.

Should monitoring indicate an increase in feral predator activity within the development envelopes, feral predator control will be implemented. Trapping will be the preferential control method as the proximity to South Hedland means that shooting and baiting are not appropriate. Trapped animals will be managed under an agreement with the Town of Port Hedland.

2.3.3 FIRE MANAGEMENT

The relationship between the Bilby and fire is complex, as the fire regimes of an area can influence the availability of foraging resources and cause increases or decreases in habitat suitability. Bilbies in some instances respond well to fires due to the regeneration of major food plants following fires, but this is not always the case (Commonwealth of Australia, 2023).

Inappropriate fire management regimes can result in large-scale fires, which reduce vegetation cover (including foraging resources) and increased predation pressures. The key reasons to undertake appropriate fire management activities is to minimise the risk of large-scale fires and instead use fire to promote mosaics of vegetation through patch burning and traditional burning. Smaller and less intense fires can promote the growth of Bilby food plants and influence vegetation density, making the habitat more suitable for Bilby (Commonwealth of Australia, 2023).

Objectives

- Adopt a Bushfire Management Plan.

Methodology

Improvements in habitat quality via the design and implementation of fire management may be gained via undertaking landscape-scale fire management, and limit the extent and spread of wildfires to protect sites and Bilby habitat from unmanaged fire.



3 ADAPTIVE MANAGEMENT AND REVIEW

This BMP has been developed to mitigate the potential impacts of the Project identified in Section 1.6.3 by implementing the management actions outlined in Section 2.2. The success of the BMP will be measured against the EPA objectives for the Terrestrial Fauna factor, defined in Section 2.1. The adaptive management and review strategy includes ongoing evaluation of monitoring data to determine if the environmental outcomes are being met. In the event that the BMP is failing to achieve the outcomes defined in Section 2.1, PHI will initiate a review of the BMP.

In order to facilitate an adaptive management approach, the BMP will be revised annually from the first year of construction. Each revision will draw on information learned in the preceding years and will typically include a review of following:

- Key assumptions and uncertainties (Section 1.6.2);
- The performance of the BMP against the outcomes (Section 2.1);
- Re-evaluation of the rationale for the choice of provisions (Section 1.6.3); and
- The consideration of any external changes during the life of the Project.



4 STAKEHOLDER CONSULTATION

This BMP has been structured to ensure the document aligns with the EPA's *How to prepare Environmental Protection Act 1986 Part IV environmental management plans* (EPA, 2024). Representatives from PHI and Preston Consulting Pty Ltd have met and liaised with EPA and DCCEEW to discuss the Project and presence of Bilby in the development envelopes.

KAC monitors have assisted in survey work and provided Traditional Owner perspectives into the survey work.



5 GLOSSARY

Term	Definition
BC Act	<i>Biodiversity Conservation Act 2016 (WA)</i>
Bilby	Greater Bilby (<i>Macrotis lagotis</i>)
BMP	Bilby Management Plan
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
Recovery Plan	Recovery Plan for the Greater Bilby
EPA	Environmental Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
GPS	Global Positioning System
ha	Hectare
HBI	Hot Briquetted Iron
IOPF	Iron Ore Processing Facility
KAC	Kariyarra Aboriginal Corporation
km	Kilometre
m	Metres
Mtpa	Million tonnes per annum
PHI	Port Hedland Iron Pty Ltd
Phoenix	Phoenix Environmental Sciences Pty Ltd
Project	Port Hedland Iron Project
SIA	Strategic Industrial Area
TSSC	Threatened Species Scientific Committee
UCL	Unallocated Crown Land
WA	Western Australia



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