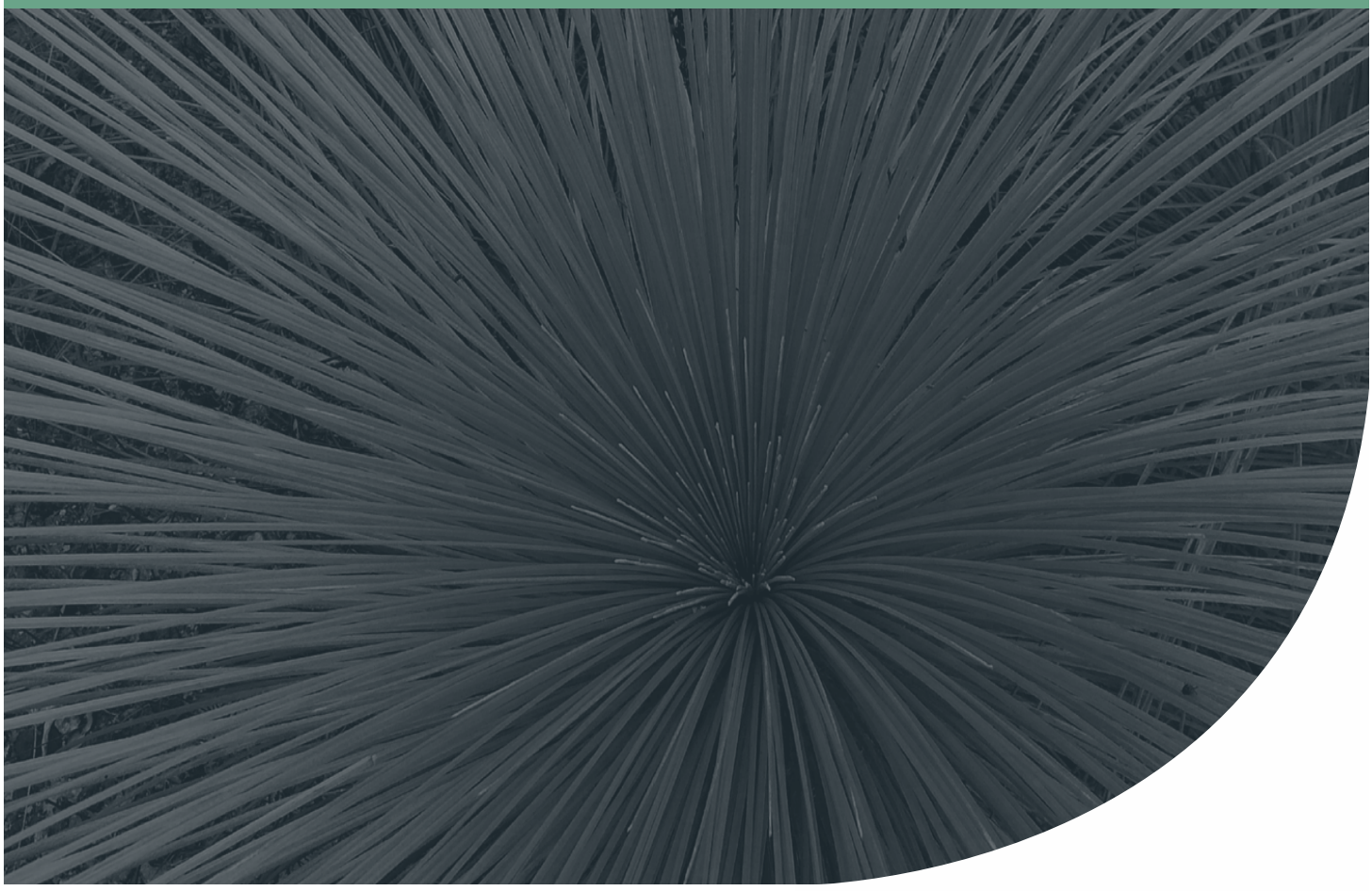
Clearing Permit Application

Extension Hill Environmental Support

Project No: EP25-094(02)

Prepared for Asia Iron Australia
February 2026



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Executive Summary

Asia Iron Australia (the 'proponent') proposes to construct four exploration drill pads and one access track (the 'site') at the Extension Hill mine in the Mount Gibson Ranges. The proposal involves clearing of 0.27ha of native vegetation and has been refined to avoid previously recorded populations of threatened flora species.

The Extension Hill mine operates under an existing Part IV environmental approval (Ministerial Statement 753). While the site falls within the broader mine footprint, the proposed clearing is not covered by this Part IV approval, however it does require annual monitoring of *Lepidosperma gibsonii* and *Darwinia masonii*.

To support this permit application an ecological survey was undertaken across the site and a surrounding 10m buffer (survey boundary) and found:

- The vegetation (Jibberding vegetation system - native shrublands and open woodlands) is mostly in good or better condition, and consistent with 'Mount Gibson Range vegetation complexes (banded ironstone formation)' a priority one ecological community (PEC).
- Two threatened flora species (*Lepidosperma gibsonii* (EN) and *Darwinia masonii* (CR)) and one priority flora species (*Hibbertia cockertoniana* (P3)) listed under the *Biodiversity Conservation Act 2016* (BC Act) were recorded within the surrounding area. *L. gibsonii* and *H. cockertoniana* were found in the site.
- No listed Threatened Ecological Communities were recorded.
- No threatened, specially protected or priority fauna species listed under the BC Act were recorded on the site.

The permit involves the following impact or clearing:

- 0.27 ha of Jibberding vegetation system, which is mapped with 100% of its pre-European vegetation extent remaining (Government of Western Australia 2019).
- 0.27 ha of 'Mount Gibson Range vegetation complexes (banded ironstone formation)' PEC (P1)
- Six individuals of *L. gibsonii* (EN), 12.5% of the number of recorded individuals within the broader survey boundary. Extensive records in the broader area were identified in surveys undertaken in 2015.
- 474 individuals of *H. cockertoniana* (P3), 50.12% of the number of recorded individuals within the broader survey boundary.

When assessed against the EP Act Clearing Principles the clearing is not likely to have a significant impact on the environment or have significant residual impacts, and therefore no offsets are proposed.

Once drilling complete all equipment, material, waste and litter will be removed. The ground will be recontoured into the surrounding landscape and cleared topsoil and stockpiled native vegetation will be spread across the drilling pad and allowed to recover over time.

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Abbreviation Tables

Table A1: Abbreviations – Organisations

Organisations	
ANZECC	Australian and New Zealand Environment and Conservation Council
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DWER	Department of Water and Environment Regulation
EPA	Environmental Protection Authority
RDAP	Regional Development Assessment Panel
WAPC	Western Australian Planning Commission

Table A2: Abbreviations – General terms

General terms	
CCW	Conservation category wetland
CEMP	Construction Environmental Management Plan
CMP	Construction Management Plan
ESA	Environmentally sensitive area
FCT	Floristic community type
IBRA	*Interim Biogeographic Regionalisation of Australia*
ISA	Index of surveys for assessment
MUW	Multiple use wetland
NVIS	National Vegetation Inventory System (ESCAVI 2003)
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
P5	Priority 5
PEC	Priority ecological community
REW	Resource enhancement wetland
T	Threatened
TEC	Threatened ecological community
UFI	Unique feature identifier
WMP	Water Management Plan

Table A3: Abbreviations –Legislation

Legislation	
BC Act	*Biodiversity Conservation Act 2016*
EP Act	*Environmental Protection Act 1986*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPP	*Environment Protection Policy*
PD Act	*Planning and Development Act 2005*

Table A4: Abbreviations – units of measurement

Units of measurement	
cm	Centimetre
ha	Hectare
Km	Kilometre
m	Metre
m^2	Square metre
m AHD	m in relation to the Australian height datum
mm	Millimetre

Table A5: Key terms

Key terms	
The site	This encompasses the full extent of Lot 31 Rendezvous Road, Vasse that is subject to the development approval.
Avoidance area	Refers to the areas that support native vegetation and associated values that have been avoided through the proposal design process.
Application area	Refers to the area of native vegetation that is proposed to be cleared within the site and is the subject of this clearing permit application.

1 Introduction

1.1 Background

The Extension Hill mine operates under an existing Part IV environmental approval (Ministerial Statement 753)(mining tenement: M 59/339-I). While the site falls within the broader mine footprint, the proposed clearing is not covered by this Part IV approval, however it does require annual monitoring of *Lepidosperma gibsonii* and *Darwinia masonii*.

1.2 Purpose of this report

To provide the following supporting information for the clearing permit application:

- An outline of the environmental values within the site (**Section 2**)
- Consideration of the mitigation hierarchy, including avoidance and mitigation (**Section 3**)
- Detail on the planning approval (**Section 4**)
- An assessment of the proposed clearing against all clearing principles listed in Schedule 5 of the *Environmental Protection Act 1986* (EP Act) (**Section 5**).

1.3 Clearing application area

Within a 0.31 ha site Asia Iron Australia (the 'proponent') is seeking a permit to clear 0.27 ha of native vegetation to construct four exploration drill pads and one access track at the Extension Hill mine site in the Mount Gibson Ranges. The location of the drill pads and track (**Figure 1**) has been developed to minimise impact to known records of the listed threatened flora species, *L. gibsonii* and *D. masonii* (**Appendix A**

). These locations are collectively referred to as the 'site'.

2 Existing Environment

2.1 Soil landscape and topography

A review of the Department of Primary Industries and Regional Development's (DPIRD) Soil landscape mapping (DPIRD 2025) shows that the site falls within the Tallering System which is described as 'Prominent ridges and hills of banded ironstone, dolerite and sedimentary rocks supporting bowgada and other acacia shrublands.'

The site is generally flat, occurring on a ridgeline at approximately 400m in relation to the Australian Height Datum (mAHD).

2.2 Historical land uses and clearing

Review of historical images available from April 2005 onwards shows that the existing tracks surrounding the site were cleared prior to 2005 with the site and the rest of the surrounding area containing remnant vegetation still present today. While areas north of the site have been subject to extensive clearing to support the development of the mine, the spatial extent of native vegetation within the site does not appear to have substantially changed from 2005 to the current time (WALIA 2024).

2.3 Flora and vegetation

Emerge Associates undertook an ecological survey on 11 and 12 September 2025 in accordance with EPA's *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016) and *Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA 2020). The survey boundary was based on a 10m buffer around the site to adequately capture the sites immediate surrounding area, (buffer area not part of this application, nor is native vegetation proposed to be impacted by this proposal).

The survey was undertaken by a qualified botanist and zoologist with over five years of experience in Western Australia. Technical review was undertaken by a senior environmental consultant with 15 years' experience in environmental science in Western Australia.

This assessment was undertaken to identify plant communities and vegetation condition, as well as the presence of priority or threatened flora species and ecological communities. The following provides a summary of the values identified within the site. The report has been submitted through the Index of Surveys for Assessment (ISA).

2.3.1 Regional vegetation complexes

The site is contained within the Avon Wheatbelt IBRA region and within the 'AVW01' or Merredin subregion (DCCEEW 2025a). The Merredin subregion an ancient, gently undulating plain of low relief and ancient drainage that has dissected the plateau. There is no connected drainage; salt lake chains occur as remnants of the ancient drainage systems and now only function in very wet years. Residual lateritic uplands are dominated by derived yellow sandplain covered in proteaceous scrubheaths,

which have a high number of endemic plant species. Mixed eucalypt, sheoak and jam woodlands dominate on Quaternary alluvials and eluvials (McKenzie *et al.* 2003).

Variations in native vegetation can be further classified based on regional vegetation mapping. DPIRD's (DPIRD 2019) mapping shows the site as comprising the 'Jibberding' system which is described as 'wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance on ironstone'. Statewide vegetation statistics indicate that the entire 8,493.20ha of the Jibberding system is mapped in the pre-European extent remains (Government of Western Australia 2019).

2.3.2 Vegetation units and condition

Three vegetation units were identified within the survey boundary and are described in **Table 1** and shown in **Figure 3.**

Table 1: Description and extent of vegetation units identified within the site

Vegetation unit	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Mixed shrubland	Tall shrubland of *Allocasuarina acutivalvis* subsp. *acutivalvis, Acacia assimilis* subsp. *assimilis, Grevillea obliquistigma* subsp. *obliquistigma* and *Melaleuca nematophylla* over low open shrubland of *Hibbertia cockertoniana, Philotheca sericea,* and *Micromyrtus clavata* over sparse forbland of *Waitzia acuminata, Trachymene ornata* and *Cheilanthes adiantoides.*	0.26	83.87	
ElsCc	Open woodland of *Eucalyptus loxophleba* subsp. *supralaevis* and *Callitris columellaris* over tall shrubland of *Acacia ramulosa* var. *ramulosa* and *Allocasuarina acutivalvis* subsp. *acutivalvis* over open shrubland of *Scaevola spinescens, Acacia assimilis* subsp. *assimilis,* and *Acacia andrewsii* over sparse forbland of *Waitzia acuminata, Trachymene ornata* and *Cheilanthes adiantoides.*	0.01	3.23	

Table 1: Description and extent of vegetation units identified within the site (continued)

Vegetation unit	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Cleared tracks/ scattered vegetation	Heavily disturbed areas comprising bare ground, scattered native plants, cleared tracks and firebreaks.	0.04	12.90	
Total		**0.31**	**100**	

Vegetation condition, shown in **Figure 4**, varied from 'completely degraded' to 'excellent' and has been outlined in **Table 2**.

Table 2: Extent of vegetation condition categories within the site

Condition category (Keighery 1994)	Total area (ha)	Proportion of site (%)
Pristine	-	-
Pristine – excellent	-	-
Excellent	0.04	12.90
Excellent - very good	0.22	70.97
Very good	0.01	3.23
Very good – good	0.01	3.23
Good	-	-
Good – degraded	-	-
Degraded	-	-
Degraded – completely degraded	0.02	6.45
Completely degraded	0.01	3.23
Total	0.31	100

2.3.3 Threatened and priority flora

2.3.3.1 Database search results

The *Protected Matters Search Tool* (DCCEEW 2025b) and DBCA's threatened and priority flora and communities databases (reference no. 33-0925FL) identified 21 threatened flora species, 82 priority flora species one threatened ecological community (TECs) and five priority ecological communities (PECs) occurring or potentially occurring within a 50 km radius of the site.

Based on background information available for the site, eight threatened, 50 priority flora species one TEC and two PECs were considered to have a 'high' or 'moderate' likelihood of occurring within the site. The legislative or policy status and habitat preferences of these species are summarised in **Table 3**. The remaining threatened and priority flora species were deemed to have 'low' or 'negligible' likelihood of occurrence due to lack of suitable habitat or absence of reliable records.

Table 3: Summary of conservation significant flora species with a high or moderate likelihood of occurrence in the site

Species	Status		Life strategy	Habitat	Flowering period	Likelihood of occurrence
	State	EPBC Act				
Acacia imitans	CR	EN	P	Rocky red loam. Rocky hills.	Aug-Sep	High
Acacia unguicula	CR	EN	P	Rocky clay or loam. Upper slopes & summit of mountain.	Aug-Sept	High
Eremophila viscida	EN	EN	P	Granitic soils, sandy loam. Stony gullies, sandplains.	Sep-Nov	Moderate
Darwinia masonii	CR	VU	P	Sandy soils over laterite, often soils. Hillsides, laterite outcrops.	Jul-Nov	High
Eucalyptus crucis subsp. praecipua	EN	T	P	Sandy loam. Granite outcrops.	Unknown	Moderate
Pigea cymulosa	CR	-	P/A	Clay, rocky loam clay.	May to Jul	Moderate
Acacia sulcaticaulis	EN	-	P	Favours quartz substrates on steep slopes, ridges and along rock creek courses, in shrubland typically *with A. burkittii* and *Allocasuarina acutivalvis*.	Unknown	Moderate
Lepidosperma gibsonii	EN	-	P	Shallow soil over massive, banded ironstone. Gullies and slopes.	Unknown	High
Acacia ampliata	P1	-	P	Red/orange sand, sandy loam, loam. Sandplains, hillsides.	Apr to Aug or Oct or Dec	Moderate
Acacia cerastes	P1	-	P	Skeletal soil. Rocky ironstone hillslopes.	Aug or Nov	High
Acacia diallaga	P1	-	P	Grows in skeletal soils on slopes or crests of low rocky hills in open Acacia and Allocasuarina shrubland.	Unknown	High
Acacia sp. Kalannie North (B.R. Maslin 7702)	P1	-	P	Low rise, weathered granite.	Jul	Moderate
Allocasuarina tessellata	P1	-	P	Loam, sand. Greenstone & dolerite boulders	Apr-Aug	High

Table 3: Summary of conservation significant flora species with a high or moderate likelihood of occurrence in the site (continued)

Species	Status		Life strategy	Habitat	Flowering period	Likelihood of occurrence
	State	EPBC Act				
Baeckea sp. Paynes Find (S. Patrick 1095)	P1	-	P	Granite outcrops.	Apr to Aug	Moderate
Chamelaucium sp. Warriedar (A.P. Brown & S. Patrick APB 1100)	P1	-	P	Unknown	Unknown	Moderate
Chamelaucium sp. Yalgoo (Y. Chadwick 1816)	P1	-	P	Granite outcrops.	Unknown	Moderate
Grevillea scabrida	P1	-	P	Red clay loam, stony loam.	Jul	Moderate
Grevillea subtiliflora	P1	-	P	Red-brown loam.	Apr-Jul	Moderate
Hemigenia tichbonii	P1	-	P	Occurs in semi-arid, open shrublands over granite or greenstone.	Aug and Oct	High
Hibbertia sp. Mount Gibson (B.H. Smith 883)	P1	-	P	Unknown	Unknown	Moderate
Isotropis petrensis	P1	-	A/P	Grows in sandy loam in association with granite outcropping. It has been recorded in open shrubland.	late July to mid-September	Moderate
Korthalsella leucothrix	P1	-	Unknown	On *Acacia acuminata* and *A. craspedocarpa.*	Aug	Moderate
Lepidosperma sp. Blue Hills (A. Markey & S. Dillon 3468)	P1	-	P	Unknown	Unknown	Moderate
Micromyrtus mucronulata	P1	-	P	Slope. Brown loam and dolerite.	Apr-May	Moderate
Micromyrtus ninghanensis	P1	-	P	Reddish or brown clay, greenstone, granite. Hills.	Sep-Oct	Moderate
Millotia dimorpha	P1	-	A	Red loamy soils.	Sep	Moderate
Nicotiana salina	P1	-	A	Red clay, rock outcrop. Saline areas.	Aug-Oct	Moderate
Philotheca sp. Latham (F. Keast L4B 043)	P1	-	P	Unknown	Unknown	Moderate
Prostanthera sp. Karara (D. Coultas & K. Greenacre Opp 8)	P1	-	P	Unknown	Unknown	Moderate

Table 3: Summary of conservation significant flora species with a high or moderate likelihood of occurrence in the site (continued)

Species	Status		Life strategy	Habitat	Flowering period	Likelihood of occurrence
	State	EPBC Act				
Ptilotus tetrandrus	P1	-	A	Red loamy sand.	Oct	Moderate
Acacia synoria	P2	-	P	Red sandy clay, brown sandy loam. Near granite outcrops, near gravel pits, creeklines.	Dec	High
Calandrinia kalanniensis	P2	-	A	Shallow brown clay,often gritty, derived from eroded granite. Rock outcrops, herbfields.	Nov to Dec or Jan	Moderate
Calandrinia sp. Warriedar (F. Obbens 04/09)	P2	-	A	Unknown	Unknown	Moderate
Eremophila sargentii	P2	-	P	Laterite, sandy loam. Sandplains, hills.	Aug to Oct	Moderate
Eucalyptus educta	P2	-	P	Shallow soils. Granite rocks.	Apr	Moderate
Psammomoya grandiflora	P2	-	P	Red loam, sand, jasperlite. Sandplains, rocky country.	Aug to Oct	Moderate
Acacia formidabilis	P3	-	P	Yellow or red/brown sand. Undulating plains, hillsides.	Aug-Sep	Moderate
Acacia karinae	P3	-	P	Red-brown silty clay loam with ironstone pebbles, banded ironstone, shalestone. Rocky slopes.	May- July	High
Acacia subsessilis	P3	-	P	Red sand or stony gravel over ironstone. Rocky hills.	Jul to Aug	High
Calotis sp. Perrinvale Station (R.J. Cranfield 7096)	P3	-	A	Red clay loam or sand.	Unknown	Moderate
Calytrix plumulosa	P3	-	P	Yellow sand with lateritic gravel, red loam.	Oct to Nov	Moderate
Cyanicula fragrans	P3	-	A	Flat granite outcrops.	Aug to Sep	Moderate
Euryomyrtus recurva	P3	-	P	Yellow/red sand, brown/yellow sandy clay. Gravel pits, catchment slopes.	Jul-Sep	Moderate
Grevillea globosa	P3	-	P	Red loam, yellow sand.	Jan or Jun or Nov	Moderate
Grevillea tenuiloba	P3	-	P	Sand, clay loam. Granite outcrops.	Apr or Jul to Oct	Moderate

Table 3: Summary of conservation significant flora species with a high or moderate likelihood of occurrence in the site (continued)

Species	Status		Life strategy	Habitat	Flowering period	Likelihood of occurrence
	State	EPBC Act				
Hibbertia cockertoniana	P3	-	P	Growing on banded ironstone, laterite, at the edge of granite outcrops and (near Canna) on sand over laterite, in shrublands dominated by *Calycopeplus paucifolius, Acacia* spp., *Melaleuca* spp., Thryptomene spp. and *Allocasuarina* spp.	July to Sept	High
Lepidium genistoides	P3	-	P	Sandy loam.	Sep-Oct	Moderate
Melaleuca barlowii	P3	-	P	Yellow-brown sand or red-brown clay loam. Roadside reserves, shrubland.	Apr	Moderate
Menkea draboides	P3	-	P	Red sand or clay, granite.	Aug-Sep	Moderate
Micromyrtus acuta	P3	-	P	Grey-tan silty fine to coarse sand, laterite, granite. Rock outcrops.	Unknown	Moderate
Micromyrtus trudgenii	P3	-	P	Red-brown loamy clay, yellow-brown soils, gravel, siltstone, quartz, basalt, banded ironstone, dolerite. Tops and slopes of hills and ridges.	Unknown	High
Petrophile pauciflora	P3	-	P	Decaying & dissected granite breakaways.	Sep	Moderate
Psammomoya implexa	P3	-	P	Stony rises.	Aug to Oct	Moderate
Pterostylis arida	P3	-	A	Currently known from on and around granite rock habitats in the northern goldfields from Bimbijy Station to Mount Magnet, where it grows in damper soil pockets under shrubs and soil-filled faults in the granite.	Mid Aug to Sep	Moderate
Rhodanthe collina	P3	-	A	Loam. Rocky hills.	Aug to Oct	Moderate
Stackhousia muricata subsp. *Perennial* (W.R. Barker 3641)	P3	-	P	Unknown	Unknown	Moderate
Stenanthemum poicilum	P3	-	P	Red clay or sandy clay, loam.	May to Jun or Sep to Nov	Moderate

Table 3: Summary of conservation significant flora species with a high or moderate likelihood of occurrence in the site (continued)

Species	Status		Life strategy	Habitat	Flowering period	Likelihood of occurrence
	State	EPBC Act				
Dodonaea amplisemina	P4	-	P	Red-brown sandy clay on basalt and gabbro and banded ironstone or on dolerite and quartzite. Rocky hills.	Unknown	High

CR=critically endangered, EN=endangered, VU=vulnerable, P1-P4=Priority 1-Priority 4, P=perennial, PG=perennial geophyte

2.3.3.2 Survey results

Two threatened flora species, *L. gibsonii* (EN) and *D. masonii* (CR) and one priority flora species, *H. cockertoniana* (P3) were recorded within the broader survey boundary. The distribution and abundance of these species vary across the site and is shown in **Figure 5**. The numbers of species recorded within the site and survey boundary are outlined in **Table 4** below.

Table 4: Threatened and priority species recorded within the direct impact area and buffer boundaries

Species	Status		Number of individuals in site boundary	Number of individuals in survey boundary	TOTAL
	State	EPBC Act			
Darwinia masonii	CR	VU	0	2	**2**
Lepidosperma gibsonii	EN	-	6	42	**48**
Hibbertia cockertoniana	P3	-	474	471	**945**

L. gibsonii was recorded in two portions of the survey boundary, with a low number (6) of individuals recorded in the site. *L. gibsonii* is subject to annual threatened flora monitoring under the Extension Hill Hematite Operation approval conditions (Ministerial Statement No. 753). This species is geographically restricted, occurring only within the Mount Gibson Ranges and adjoining areas (DEC 2008). Previous surveys undertaken in 2015 indicate that the species occurs extensively in the areas surrounding the survey boundary (see **Appendix A**).

D. masonii also occurred at low densities, with no individuals recorded in the site and two individuals in the broader survey boundary of the north-eastern drill pad. *D. masonii* is also subject to ongoing annual threatened flora monitoring and is range restricted, predominately occurring on upper slopes, crests and ridges within the Mount Gibson Ranges (DBCA 2018). Previous surveys undertaken in 2015 indicate that the species occurs extensively in the areas surrounding the survey boundary (see **Appendix A**).

The P3 species, *H. cockertoniana* was relatively widespread, occurring across both impact areas and buffers of the survey boundary. It was recorded in all proposed drill pads and along the access track, with 474 individuals in the site and 471 individuals within broader survey boundary. *H. cockertoniana* was observed to be locally abundant, with many other individuals recorded immediately outside of the survey boundary, in the broader survey boundary.

The absence of any other threatened and priority perennial species listed was relatively easy to confirm as either habitat was determined to be unsuitable during the field survey, or none were recorded during the survey and the timing was appropriate to detect them. The survey period also aligned with the main flowering periods for most remaining annual target species, meaning that any individuals present would likely have been observed if present. However, the field survey could not confirm the presence or absence of the priority annual species *Ptilotus tetrandrus* (P1) as it flowers outside the survey period.

Only three records of *Ptilotus tetrandrus* (P1) exist on DBCA's *Florabase*, one of which lies within 50 km of the survey boundary (33-0925FL). The closest record is approximately 1.2 km north-east but is located within revegetation on a waste rock landform at the Extension Hill mine site. The remaining two records are approximately 450 km (collected in 1974) and 630 km (collected in 2001) north-east of the survey boundary. Based on the paucity of records, *P. tetrandrus* (P1) appears to be both uncommon within Western Australia and the local area and it has been conservatively assigned a moderate likelihood of occurrence but there is little evidence to suggest it would occur in the survey boundary.

No other threatened or priority flora species were recorded in the survey boundary or are considered likely to occur.

2.3.4 Threatened and priority ecological communities

2.3.4.1 Database search results

The *Protected Matters Search Tool* (DCCEEW 2025b) and DBCA's threatened and priority flora and communities databases (reference no. 17-0925EC) identified one threatened ecological community (TECs) and five priority ecological communities (PECs) occurring or potentially occurring within a 50 km radius of the site.

Based on geomorphology, soils and regional vegetation patterns, one TEC and two PECs were considered to have potential to occur in the site:

- 'Eucalypt woodlands of the Western Australian Wheatbelt' TEC/PEC which is listed as 'critically endangered' under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and priority 3 in Western Australia.
- 'Mount Gibson Range vegetation complexes (banded ironstone formation)' PEC which is listed as priority 1 in Western Australia.

2.3.4.2 Survey results

All of the vegetation within the survey boundary and therefore the site boundary (0.27 ha) was determined to represent the 'Mount Gibson Range vegetation complexes (banded ironstone formation)' PEC (P1) based on review of geological datasets, soil conditions observed during the survey, existing DBCA records and vegetation composition.

The Mount Gibson banded iron formation (BIF) is the geological feature that defines this PEC and forms part of the Tallering Land System (Lascelles 2006). Fine scale soil landscape mapping by DPIRD (2022) indicates the survey boundary lies within the 'Sandstone Yalgoo Paynes Find soil-landscapes'/

'Tallering Land system'. This land system is described as prominent ridges and hills of banded ironstone, dolerite and sedimentary rocks, typically supporting bowgada and other acacia shrublands.

Previous studies across the Mount Gibson Range show that the area is made up of a series of BIF ridges, including Extension Hill and Extension Hill North, where extensive flora and vegetation surveys have confirmed high biodiversity values associated with these formations (Department of Environment and Conservation 2007). The survey boundary shares the same landform and vegetation and is consistent with other mapped occurrences of the PEC.

The DBCA database shows six occurrences of the PEC within 50 km, one which lies within the survey boundary. The six occurrences of the PEC extend over an area of 2878.60 ha of which the occurrence within the site represents 0.009% of the PEC extent within 50km of the site. The occurrence associated with the survey boundary is referred to as 'Extension Hill North/Iron Hill South' and extends to the north and south.

This alignment between DPIRD mapping, geological descriptions of the Mount Gibson BIF and the DBCA's PEC boundary mapping support the presence of the PEC within the survey boundary.

No other TECs or PECs occur within the site.

2.4 Fauna assessment

2.4.1 Fauna habitat

Three broad fauna habitats were identified within the site. A description, the size of the area and a representative photograph of each habitat is provided in **Table 5** and shown in **Figure 6**.

Table 5: Fauna habitats identified within the site

Fauna habitat	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Mixed shrubland	Tall shrubland of *Allocasuarina acutivalvis* subsp. *acutivalvis, Acacia assimilis* subsp. *assimilis, Grevillea obliquistigma* subsp. *obliquistigma* and *Melaleuca nematophylla* over low open shrubland of native shrubs. • Medium microhabitat complexity • Microhabitats consisted of leaf litter, woody debris and rocky outcrops • Likely to be used by common and widespread avifauna and reptiles. • Disturbance from vehicle tracks.	0.26	83.87	

Table 5: Fauna habitats identified within the site (continued)

Fauna habitat	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Eucalyptus woodland	Open woodland of *Eucalyptus loxophleba* subsp. *supralaevis* and *Callitris columellaris* over tall shrubland of *Acacia ramulosa* var. *ramulosa* and *Allocasuarina acutivalvis* subsp. *acutivalvis* over open shrubland of native shrubs. • Medium microhabitat complexity • Microhabitats consisted of woody debris and rocky outcrops. • Likely to be used by common and widespread avifauna and reptiles. Disturbance from vehicle tracks.	0.01	3.23	
Cleared tracks/ scattered vegetation	Heavily disturbed areas comprising bare ground, scattered native plants, cleared tracks and firebreaks. • Low microhabitat complexity	0.04	12.90	

2.4.2 Threatened and priority fauna

2.4.2.1 Database search results

The *Protected Matters Search Tool* (DCCEEW 2025b) and DBCA's threatened and priority fauna and database (reference no. 19-0925FA) identified 40 fauna species as potentially occurring within a 50 km radius of the site.

Of the species indicated as potentially occurring, ten threatened and five priority species were classified as having a 'high' or 'moderate' likelihood of occurrence (Emerge Associates 2025). The legislative or policy status and habitat preferences of these species are summarised in **Table 6**.

The remainder of the conservation significant fauna species identified in the desktop assessment (25 species) were considered as having a 'low', negligible' or 'nil' likelihood of occurrence.

Table 6: Summary of conservation significant fauna species with a 'high' or 'moderate' likelihood of occurrence in the site

Species name	Common name	Status		Habitat description	Likelihood
		WA	EPBC Act		
Birds					
Falco hypoleucos	Grey falcon	VU	VU	Species occurs in arid and semi-arid Australia, where it inhabits timbered lowland plains. In particular Acacia shrublands and that are crossed by tree-lined water courses. Species has also been observed hunting in treeless areas and frequenting tussock grassland and open woodlands (TSSC 2020).	High
Leipoa ocellata	Malleefowl	VU	VU	Scrubs and thickets of Eucalyptus spp., Melaleuca lanceolata and Acacia linophylla; also other dense litter-forming shrublands. Attracted to fallen wheat in stubbles and along roads (Johnstone and Storr 1998).	High
Aphelocephala leucopsis	Southern whiteface	P4	VU	Relatively undisturbed open woodlands and shrublands with low tree densities, with an understory of grasses or herbaceous litter cover. They require hollows and crevices in living or dead trees for roosting and nesting (DCCEEW 2023).	Moderate
Invertebrates					
Idiosoma nigrum	Shield-backed trapdoor spider	EN	VU	"Typically inhabits clay soils of eucalypt woodlands and acacia vegetation, and relies heavily on leaf-litter and twigs to build its burrow. Found in three isolated populations in the central and northern wheatbelt, and the Jack Hills and Weld Ranges (DSEWPC 2013)"	High
Idiosoma formosum	Ornate Shield-backed Trapdoor Spider	EN	-	This species is restricted to the Lake Moore catchment of south-western Australia, in a relatively small area near the junction of the Wheatbelt, Yalgoo, and Coolgardie bioregions. It extends from near Rothsay in the north, south-east to Mungarri Nature Reserve and Dajoing Rock, both in the Cleary-Beacon-Wialki region. Previously recorded in Mount Gibson and Mummaloo regions.	High
Idiosoma kopejtkaorum	Lake Goorly Shield-backed Trapdoor Spider	EN	-	The species appears to be restricted to the north-eastern Wheatbelt bioregion of south-western Western Australia in a small area surrounding Lake Goorly.	Moderate

Table 6: Summary of conservation significant fauna species with a 'high' or 'moderate' likelihood of occurrence in the site (continued)

Species name	Common name	Status		Habitat description	Likelihood
		WA	EPBC Act		
Invertebrates (continued)					
Idiosoma clypeatum	Northern Shield-backed Trapdoor Spider	P3	-	This species has a moderately widespread distribution in the Geraldton Sandplains and far northern Wheatbelt bioregions of south-western Western Australia, from near Yandanooka, Canna, and Geraldton north to Zuytdorp.	Moderate
Idiosoma intermedium	Coolgardie Shield-backed Trapdoor Spider	P3	-	A relatively widespread albeit poorly defined distribution in the eastern Wheatbelt and north-western Coolgardie bioregions of south-western Western Australia. Its known range extends from Bodallin north to Billiburning Rock in the eastern Wheatbelt, and east to near the Helena-Aurora Range, Mount Manning, and Koolyanobbing in the Coolgardie bioregion.	Moderate
Idiosoma castellum	Tree-stem Trapdoor Spider	P4	-	This species is geographically moderately widespread but is restricted to hillslopes (lower slopes to upper ridges) and banded ironstone formations in gravelly loam soils and has been found to be reasonably common around hills at Windarling, Mt Jackson, and Koolyanobbing	Moderate
Mammals					
Bettongia penicillata ogilbyi	Woylie	CR	EN	Woodlands and adjacent heaths with a dense understorey of shrubs, particularly Gastrolobium spp. (TSSC 2018).	Moderate
Macrotis lagotis	Bilby	VU	VU	Open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises and hummock grassland (spinifex) growing on sandplains and dunes, drainage systems, salt lake systems and other alluvial areas (DBCA 2017).	Moderate
Nyctophilus major tor	Central Long-Eared Bat	P3	-	Occurs in drier habitats than the nominate form (western long-eared bat), including mallee, open savannah woodlands and spinifex grasslands. Roosts in tree hollows and fissures in tree limbs.	High

Table 6: Summary of conservation significant fauna species with a 'high' or 'moderate' likelihood of occurrence in the site (continued)

Species name	Common name	Status		Habitat description	Likelihood
		WA	EPBC Act		
Reptiles					
Egernia stokesii badia	Western Spiny-tailed Skink	VU	EN	Generally widespread though patchy distribution in dry to semi-arid habitats. E.s badia subspecies occupies hollow crevices and hollow timber in the southwest interior of WA and on Dirk Hartog Island. All known localities are east of Brand Highway (Wilson and Swan 2021)	High
Cyclodomorphus branchialis	Gilled slender blue-tongue	VU	-	Semi-arid shrublands on heavy red soils from Irwin river to Murchison river and inland to Mt Magnet (Bush et al. 2010).	Moderate

2.4.2.2 Survey results

A total of ten native and one non-native fauna species were directly or indirectly recorded during the field survey.

No threatened, specially protected or priority fauna species were recorded in the site.

One species listed as a declared pest (C3) pursuant to the BAM Act, **Oryctolagus cuniculus* (rabbit) was identified from scats and diggings within the site.

3 Application of Mitigation Hierarchy

In accordance with *A guide to the assessment of applications to clear native vegetation* (DER 2014), the clearing has been considered in the context of the impact mitigation hierarchy and outlined below.

3.1 Avoidance

The siting of the drill pads was intended to avoid threatened and priority flora mapped in 2015, as shown in **Appendix A**

. Despite the effort to avoid impacts based on 2015 data, the subsequent ecology survey undertaken in 2025 indicates the listed flora species are more widespread.

The total clearing footprint has also been minimised as far as possible to avoid impacts to surrounding environmental values such as threatened and priority species and ecological communities.

The use of existing tracks has also been utilised as much as possible to minimise the total extent of clearing required. This has resulted in the need for 100m of track within the site while over 500m of existing tracks have been utilised to provide connection between drill pads. Locating the site in areas that contain already cleared/ completely degraded areas have also been used to avoid impacts to surrounding environmental values.

3.2 Mitigation

The proposed clearing will be undertaken in accordance with the proponents Exploration Environmental Management Plan (Exploration EMP), seen in **Appendix C** to minimise potential impacts to native vegetation and fauna habitat.

The Exploration EMP includes (but is not limited to) the following procedures:

- Demarcating clearing areas and containing all disturbance within them
- Flagging threatened flora to be avoided
- Stockpiling cleared vegetation to be used in rehabilitation
- Drilling must be suspended if groundwater is encountered and assessed as harmful to vegetation or is present in significant amounts, until appropriate management can be put in place
- All waste generated at the exploration site must be removed at the completion of drilling and must be securely contained whilst drilling activities are in progress.

3.3 Rehabilitation

The Exploration EMP outlines the standard rehabilitation practices of the proponent which are to be undertaken within 6 months of completion of the drilling program. The full details of the rehabilitation program are outlined in **Appendix C.** The rehabilitation proposed includes:

- Remove all waste, sampling and drilling equipment

- Recontouring the site into the surrounding landscape
- Evenly distributing stockpiled topsoil and vegetation over the site and where required seed with suitable local native flora species.

3.4 Offset

Given the outlined small area to be cleared and the avoidance, mitigation and rehabilitation activities included in the proposal, no offset is proposed.

Removal of the vegetation within the application area would not significantly reduce the available vegetation, individuals of threatened or priority species, its connectivity or the vegetation available to fauna species in the area.

No residual significant impact is anticipated.

4 Planning Instruments and Other Environmental Approvals

Extension Hill Pty Ltd (a subsidiary of Asia Iron Australia, the proponent) referred a proposal to the Environmental Protection Authority (EPA) on 18 August 2004 for the Extension Hill mine. The proposal was conditionally approved by a ministerial statement on 24 September 2007 which was then superseded by Ministerial Statement 753 (MS 753) which was published 24 October 2007. A copy of MS 753 is provided in **Appendix A**

.

Whilst the clearing proposed in this clearing permit is not covered under the existing approval it has been included to provide context to the proponent's activities in the area and the relevant environmental conditions that were included in the ministerial statement. This includes the annual monitoring of populations of *L. gibsonii* and *D. masonii* and dust monitoring in specific locations surrounding the mine site.

5 Response to EP Act Clearing Principles

5.1 Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.

While there is a degree of endemism, the native vegetation of the site and region is not recognised as having particularly high biological diversity. The main flora species of the site and region are widespread, such as proteaceous scrubheaths, mixed eucalypt, sheoak and jam woodlands. The ecological survey identified that 'Mount Gibson Range vegetation complexes (banded ironstone formation)' PEC was present in the site. DBCA database search results indicate that 2878.60 ha of this PEC occur within 50km of the site, the occurrence within the site boundary represents 0.009% of the surrounding extent. Based on the findings of the ecology survey the area proposed for clearing does not constitute an area of high biological diversity. If this small area of native vegetation is cleared, the risk of an important area of high biological diversity being permanently lost is considered very low and therefore this principle is likely to be met.

5.2 Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

The native vegetation does not provide significant fauna habitat value and therefore this principle is likely to be met.

5.3 Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

There are listed flora species on the site and surrounds however surveys indicated they are relatively common and widespread in the local area. *D. masonii* (CR) was recorded in the survey boundary but was outside the impact area, no impacts to these individuals are likely. The proponent is required to undertake ongoing annual threatened flora monitoring under the Extension Hill Hematite Operation approval conditions (Ministerial Statement No. 753). Six individuals of *L. gibsonii* (EN), 12.5% of the number of recorded individuals within the broader survey boundary, will be cleared as a part of this proposal. Extensive records of *L. gibsonii* were identified in the broader area during surveys undertaken in 2015. 474 individuals of *H. cockertoniana* (P3), 50.12% of the number of recorded individuals within the broader survey boundary will also be cleared as a part of this proposal. If this small area of native vegetation is cleared, the risk of any recorded listed flora species becoming extinct is considered very low and therefore this principle is likely to be met.

5.4 Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

The native vegetation does contain a listed threatened ecological community and therefore this principle is likely to be met.

5.5 Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

The native vegetation is not part of an area that has been extensively cleared and therefore this principle is likely to be met.

5.6 Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

The native vegetation is not growing in or associated with any water course or wetland. If this small area of native vegetation is cleared, the risk of having a significant impact on a watercourse, wetland or groundwater dependent ecosystem is considered very low and therefore this principle is likely to be met.

5.7 Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

The area is flat and has been subject to low rainfall, very little clearing and land degradation. If this small area of native vegetation is cleared, the risk of it have appreciable land degradation (i.e. erosion) impacts is considered very low and therefore this principle is likely to be met.

5.8 Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

The nearest conservation area is 22 kilometres away. If this native vegetation is cleared, the risk of having a significant impact on a conservation reserve is considered very low and therefore this principle is likely to be met.

5.9 Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

The area has been subject to low rainfall, very little clearing or other uses that could significantly affect or pollute surface and ground water resources. If this small area of native vegetation is cleared, the risk of having a significant impact on surface and ground water resources is considered very low and therefore this principle is likely to be met.

5.10 Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

The area is subject to low rainfall with very little clearing or other uses that could significantly affect the incidence or intensity of flooding proposed. The activities associated with the clearing are not expected to affect ground levels, grades or increase impervious areas. The site will also be rehabilitated after the completion of the drilling program and as such any impacts would be temporary. If this small area of native vegetation is cleared, the risk of having a significant impact on the incidence or intensity of flooding is considered very low and therefore this principle is likely to be met.

5.11 Summary of clearing principle responses

Table 7: Summary of response to each clearing principle

Clearing principle	Compliance	Response to clearing permit principle
Principle (a)	Met	The native vegetation does not comprise a high level of biological diversity.
Principle (b)	Met	The native vegetation does not comprise the whole or a part of, or is necessary for the maintenance of a significant fauna habitat.
Principle (c)	Met	The native vegetation if cleared will not cause listed flora to become extinct.
Principle (d)	Met	The native vegetation does not comprise the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
Principle (e)	Met	The native vegetation is not a remnant in an area that has been extensively cleared.
Principle (f)	Met	The native vegetation is not growing in, or in association with, an environment associated with a watercourse or wetland.
Principle (g)	Met	The native vegetation if cleared is not likely to cause appreciable land degradation.
Principle (h)	Met	The native vegetation if cleared is not likely to have an impact on the environmental values of any adjacent or nearby conservation area.
Principle (i)	Met	The native vegetation if cleared is not likely to cause deterioration in the quality of surface or underground water.
Principle (j)	Met	The native vegetation if cleared is not likely to cause, or exacerbate, the incidence or intensity of flooding.

6 References

6.1 General references

The references listed below have been considered as part of preparing this document.

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Figures

Figure 1: Site Location

Figure 2: Proposed Development Elements

Figure 3: Vegetation Units

Figure 4: Vegetation Condition

Figure 5: Threatened and Priority Flora Locations

Figure 6: Fauna Habitat

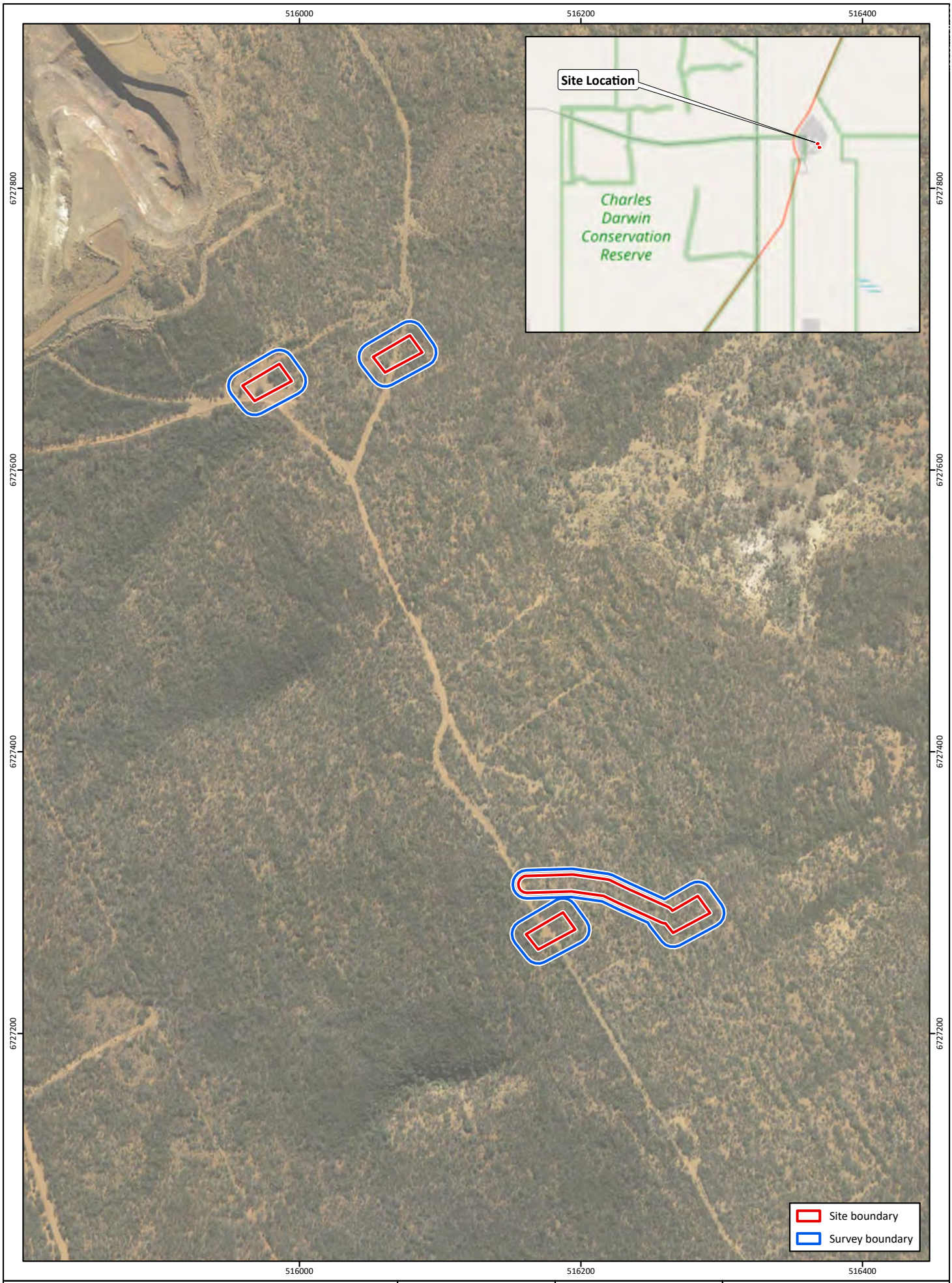

Figure 1: Site Location

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F07

Drawn:	GAR
Date:	28/11/2025
Checked:	CSR
Approved:	ASV
Date:	25/02/2026

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Metres
Scale: 1:3,500@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

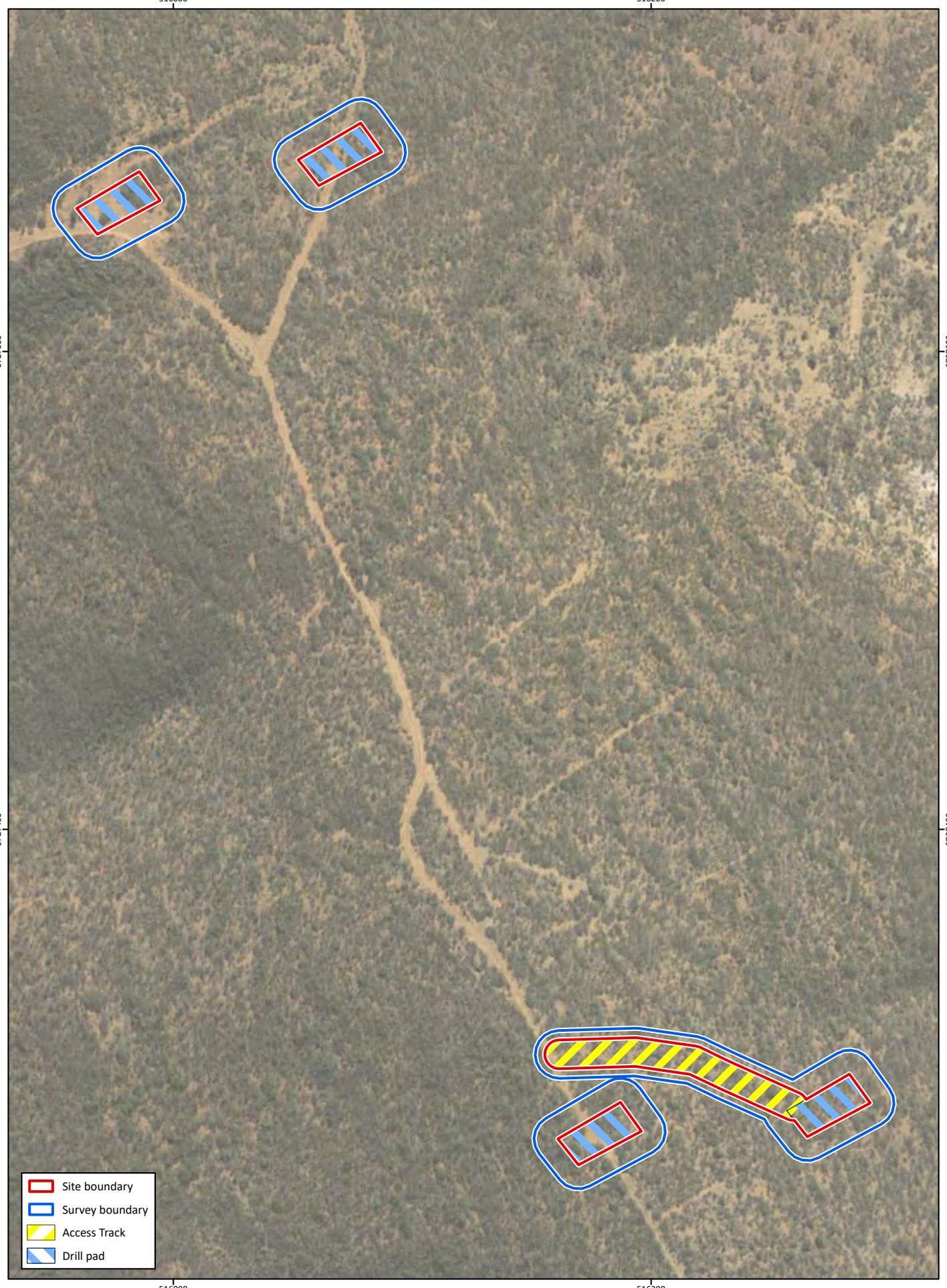

Figure 2: **Proposed Development Elements**

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F08

Drawn:	GAR
Date:	28/11/2025
Checked:	CSR
Approved:	ASV
Date:	25/02/2026

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GDA2020 MGA Zone 50

emerge ASSOCIATES

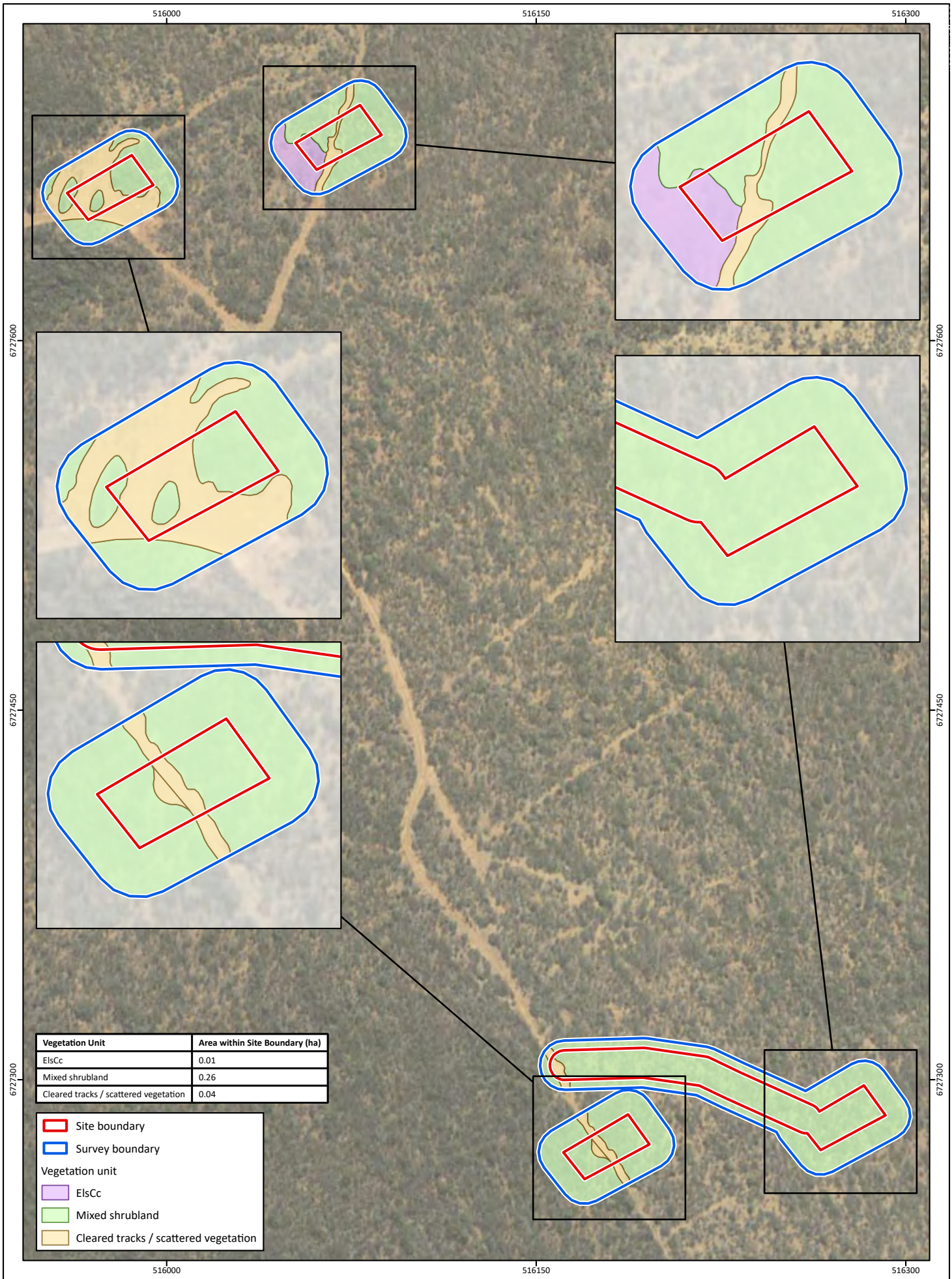

Figure 3: Vegetation Units

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F09

Drawn:	GAR
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Checked:	CSR
Approved:	ASV
Date:	25/02/2026

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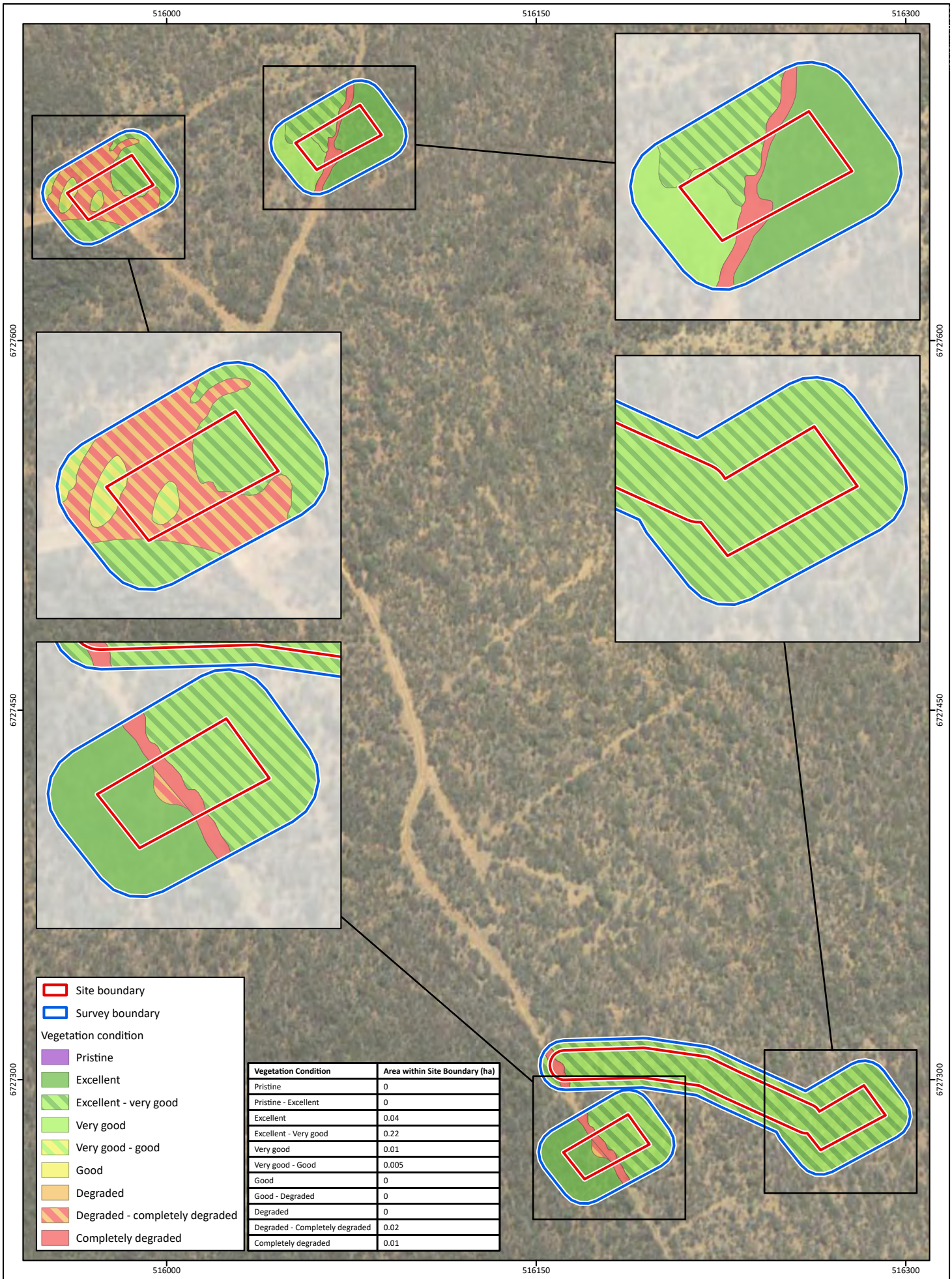
GDA2020 MGA Zone 50

emerge ASSOCIATES



Vegetation Condition	Area within Site Boundary (ha)
Pristine	0
Pristine - Excellent	0
Excellent	0.04
Excellent - Very good	0.22
Very good	0.01
Very good - Good	0.005
Good	0
Good - Degraded	0
Degraded	0
Degraded - Completely degraded	0.02
Completely degraded	0.01

Figure 4: Vegetation Condition

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F10
Drawn: GAR
Date: 28/11/2025
Checked: CSR
Approved: ASV
Date: 25/02/2026

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GDA2020 MGA Zone 50

emerge ASSOCIATES

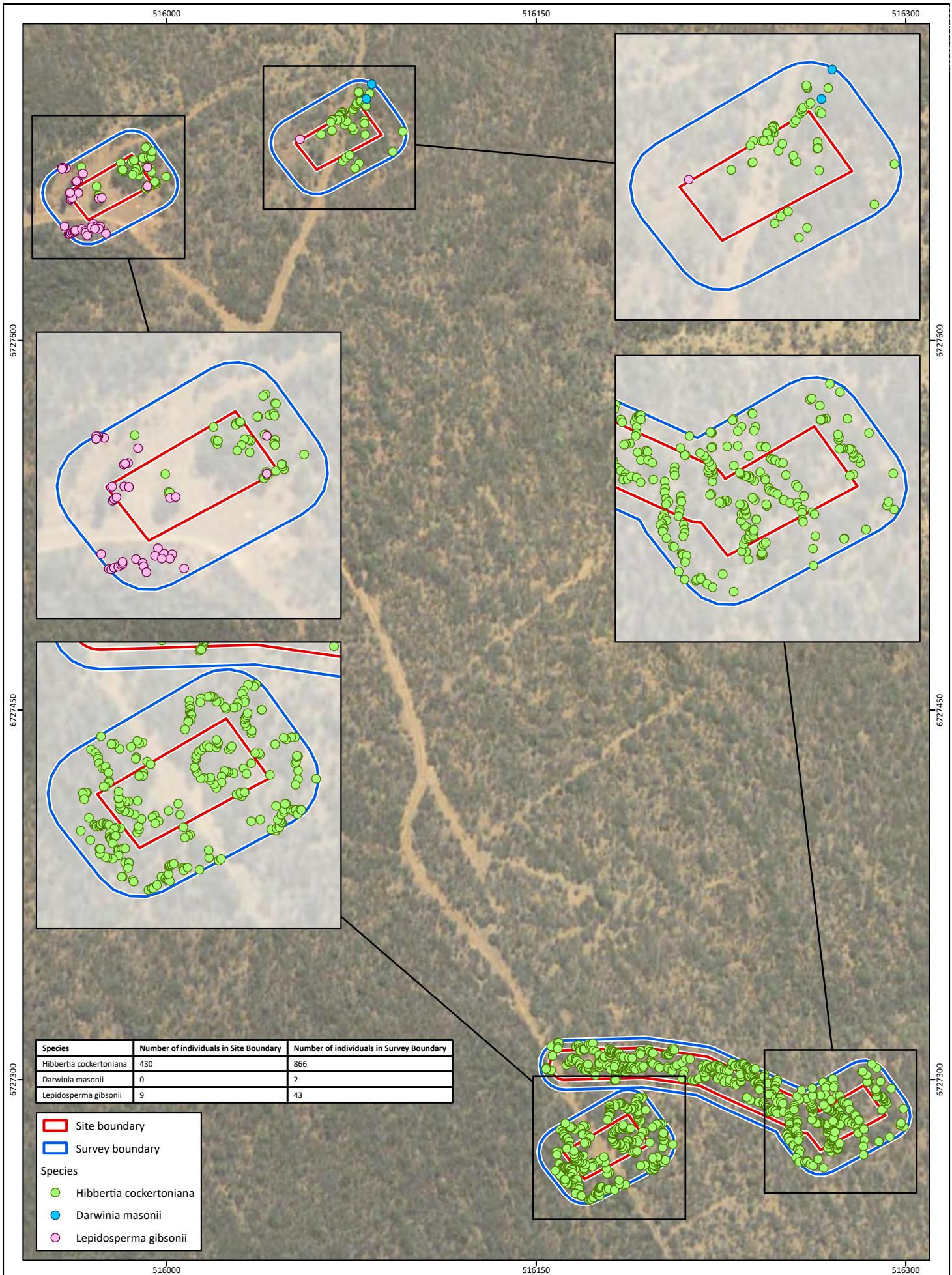

Figure 5: Threatened and Priority Flora Locations

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F11

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Checked:	CSR
Approved:	ASV
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GDA2020 MGA Zone 50

emerge ASSOCIATES

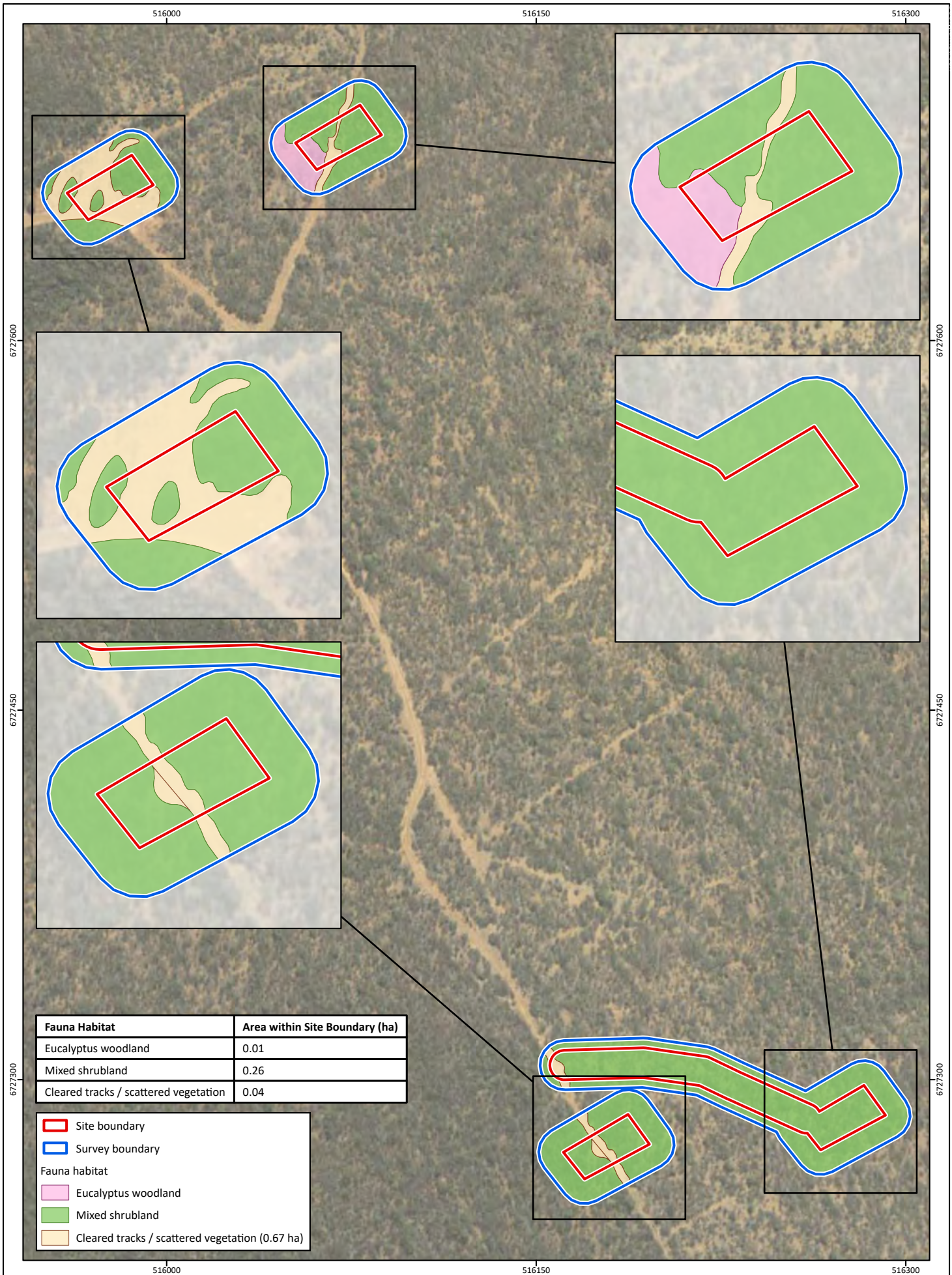

Figure 6: Fauna Habitat

Project: Clearing Permit Application
Extension Hill Environmental Support

Client: Asia Iron Australia

Plan Number:
EP25-094(02)--F12

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Checked:	CSR
Approved:	ASV
Date:	25/02/2026

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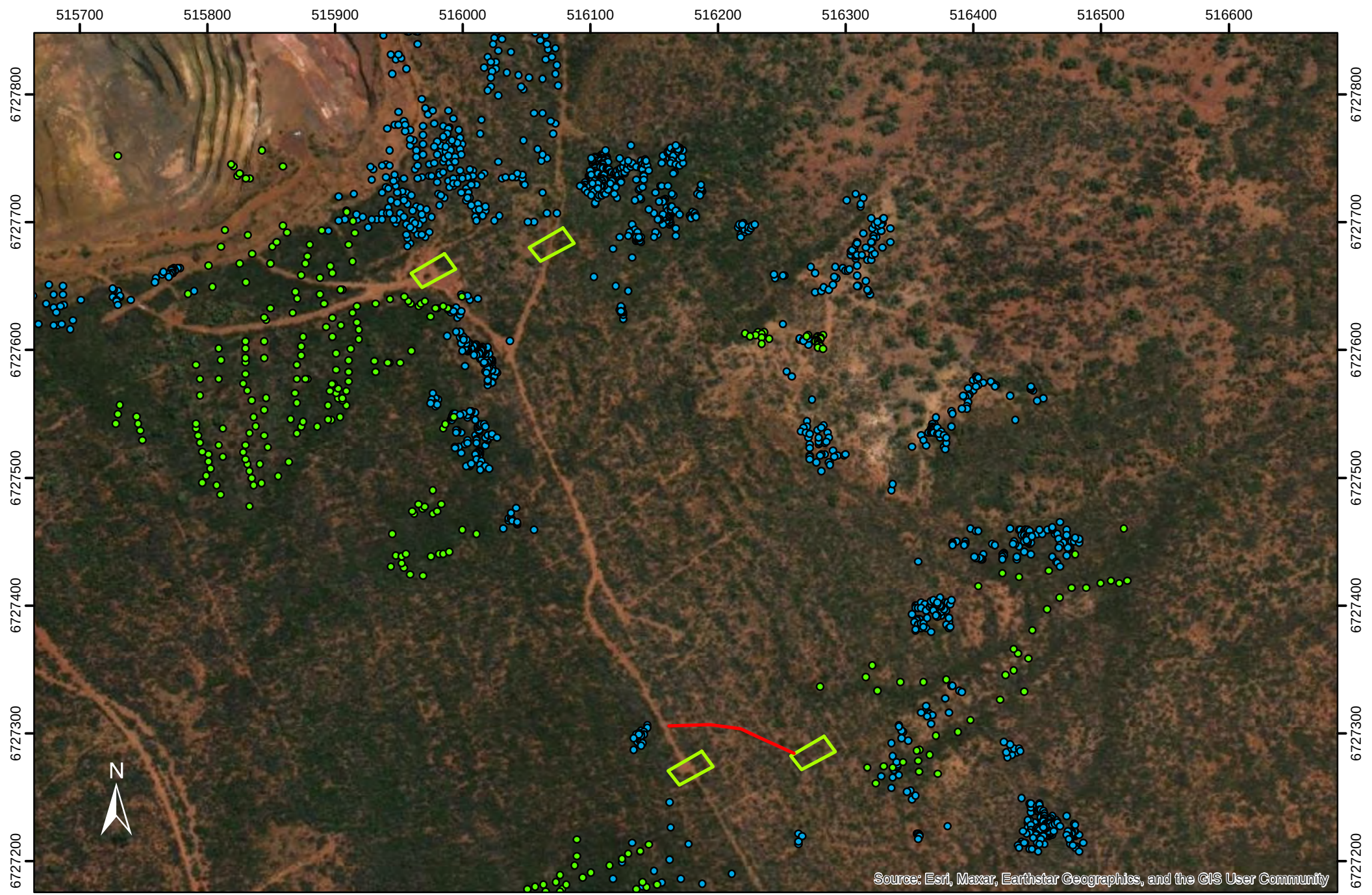
Metres
Scale: 1:2,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

Appendix A

Extension Hill Exploration Program Survey Area



Legend

- Lepidosperma gibsonii Sites 20151103
- Darwinia Masonii Sites 20151103
- Drill Track 2025
- Drill Pads 2025

Extension Hill Exploration Program Survey Area

0 50 100 200 Meters

Extension Hill Pty Ltd

Date: 20/03/2025
Drawn by: W Ennor
Grid: GDA94 MGA Zone50
Ref: Extension Hill Exploration Survey Area 2025

Appendix B

Ministerial Statement 753

Published on 24 October 2007 Statement No. 753

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

MT GIBSON IRON ORE MINE & INFRASTRUCTURE PROJECT
SHIRE OF YALGOO

Proposal: To mine and process iron ore from Extension Hill and Extension Hill North, within the Mt Gibson Ranges, construct a pipeline to transport the magnetite slurry to Geraldton Port, and construct infrastructure at the port to strip the ore from the slurry for export.

Proponent: Mount Gibson Mining Limited

Proponent Address: Level 1, 7 Havelock Street, WEST PERTH WA 6872

Assessment Number: 1538

Report of the Environmental Protection Authority: Bulletin 1242

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Nomination and Contact Details

2-1 The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

2-2 The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of a notice or other correspondence within 30 days of such change.

3 Time Limit of Authorisation

3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void within five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.

3-2 The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

4 Compliance Reporting

4-1 The proponent shall submit to the CEO environmental compliance reports annually reporting on the previous twelve-month period, unless required by the CEO to report more frequently.

4-2 The environmental compliance reports shall address each element of an audit program approved by the CEO and shall be prepared and submitted in a format acceptable to the CEO.

4-3 The environmental compliance reports shall:

1. be endorsed by signature of the proponent's Managing Director or a person, approved in writing by the CEO, delegated to sign on behalf of the proponent's Managing Director;

2. state whether the proponent has complied with each condition and procedure contained in this statement;

3. provide verifiable evidence of compliance with each condition and procedure contained in this statement;

4. state whether the proponent has complied with each key action contained in any environmental management plan or program required by this statement;

5. provide verifiable evidence of conformance with each key action contained in any environmental management plan or program required by this statement;

6. identify all non-compliances and non-conformances and describe the corrective and preventative actions taken in relation to each non-compliance or non-conformance;

7. provide an assessment of the effectiveness of all corrective and preventative actions taken; and

8. describe the state of implementation of the proposal.

4-4 The proponent shall make the environmental compliance reports required by condition 4-1 publicly available in a manner approved by the CEO.

5 Performance Review

5-1 The proponent shall submit a Performance Review report every five years after the start of ground-disturbing activities to the Environmental Protection Authority, which addresses:

1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;

3. significant improvements gained in environmental management, including the use of external peer reviews;

4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

5-2 The proponent shall make the Performance Review reports required by condition 5-1 publicly available in a manner approved by the CEO.

6 *Darwinia masonii* Research and Recovery Plans

6-1 Prior to the commencement of ground-disturbing activities for the mine site, the proponent shall prepare a *Darwinia masonii* Research Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the and the Department of Environment and Conservation.

The objective of this Plan is to facilitate the continued *in situ* survival and improvement in the conservation status of *Darwinia masonii* over time through targeted research which assists development of a recovery plan for the species.

This Plan shall set out a timetable, objectives and methodologies for research and measures to:

1. monitor the numbers of individuals of the species, their health, and reproductive success;

2. investigate the requirements for maintaining or improving the viability of the population through genetic and ecological factors relating to the conservation, management, restoration, propagation and translocation of the species;

3. provide a scientifically robust analysis of the habitat requirements of the species;

4. offset the direct impacts of the proposal on the local population of the species by regeneration, re-establishment or translocation of additional plants or sub-populations on suitable un-impacted areas of banded ironstone formations in the Mt Gibson area; and

5. provide information which, combined with the results of monitoring activities required by condition 8, assists in ensuring that mining and other activities of the proposal, particularly the generation of dust, do not lead to a further decline in the local population of the species.

6-2 Prior to the commencement of ground-disturbing activities for the mine site, the proponent shall prepare an Interim Recovery Plan for *Darwinia masonii*, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Environment and Conservation.

The objective of this Plan is to maintain or improve the conservation status of *Darwinia masonii* during the development of the Recovery Plan required by condition 6-3.

This Plan shall include a timetable for and actions to:

1. locate and report any additional populations of the species;

2. enhance the survival of existing populations of the species; and

3. expand the existing populations or establish new populations;

based on currently available information and the results of early research and experimentation undertaken in accordance with condition 6-1.

6-3 Within four years following the commencement of ground-disturbing activities for the mine site, the proponent shall prepare a Recovery Plan for *Darwinia masonii* to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Environment and Conservation.

The objective of this Plan is to maintain, and ultimately improve, the conservation status of *Darwinia masonii* such that its conservation status is more secure in the Mt Gibson area.

This Plan shall identify:

1. habitats which are critical to the survival of the species and the actions needed to protect those habitats;

2. threats to the species, and areas and populations under threat;

3. objectives to be achieved;

4. criteria against which achievement of the objectives is to be measured;

5. management actions, based on the outcomes of the implementation of the Research Plan referred to in Condition 6-1 and the Interim Recovery Plan referred to in Condition 6-2 that will remediate the impacts of the project and provide for a net improvement on the pre-mining conservation status of the species; and

6. further research required into the management or recovery of the species,

and shall be consistent with the requirements of the current version of the "Recovery Plan Guidelines for Nationally Listed Threatened Species and Ecological Communities under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*" (published on the Commonwealth Department of Environment and Heritage website).

6-4 The proponent shall implement the *Darwinia masonii* Research Plan required by condition 6-1.

6-5 The proponent shall implement the Interim Recovery Plan for *Darwinia masonii* required by condition 6-2.

6-6 The proponent shall implement the Recovery Plan for *Darwinia masonii* required by condition 6-3.

6-7 The proponent shall review and revise the *Darwinia masonii* Research and Recovery Plans required by conditions 6-1, 6-2 and 6-3 as and when directed by the CEO.

6-8 The proponent shall implement revisions of the *Darwinia masonii* Research and Recovery Plans required by condition 6-7.

6-9 The proponent shall make the *Darwinia masonii* Research Plan required by condition 6-1 and revisions required by condition 6-7 publicly available in a manner approved by the CEO.

6-10 The proponent shall make the Interim Recovery Plan for *Darwinia masonii* required by condition 6-2 and revisions required by condition 6-7 publicly available in a manner approved by the CEO.

6-11 The proponent shall make the Recovery Plan for *Darwinia masonii* required by condition 6-3 and revisions required by condition 6-7 publicly available in a manner approved by the CEO.

7 *Lepidosperma* sp. Mt Gibson - Research and Recovery Plans

7-1 Prior to the commencement of ground-disturbing activities for the mine site, the proponent shall prepare a *Lepidosperma* sp. Mt Gibson Research Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Environment and Conservation.

The objective of this Plan is to facilitate the continued *in situ* survival and improvement in the conservation status of *Lepidosperma* sp. Mt Gibson over time through targeted research which assists development of a recovery plan for the species.

This Plan shall set out a timetable, objectives and methodologies for research and measures to:

1. monitor the numbers of individuals of the species, their health, and reproductive success;

2. investigate the requirements for maintaining or improving viability of the population through genetic and ecological factors relating to the conservation, management, restoration, propagation and translocation of the species;

3. provide a scientifically robust analysis of the habitat requirements of the species;

4. offset the direct impacts of the proposal on the local population of the species by regeneration, re-establishment or translocation of additional plants or sub-populations on suitable un-impacted areas of banded ironstone formations in the Mt Gibson area; and

5. provide information which, combined with the results of monitoring activities required by condition 8, assists in ensuring that mining and other activities of the proposal, particularly the generation of dust, do not lead to a further decline in the local population of the species.

7-2 Prior to the commencement of ground-disturbing activities for the mine site, the proponent shall prepare an Interim Recovery Plan for *Lepidosperma* sp. Mt Gibson, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Environment and Conservation.

The objective of this Plan is to maintain or improve the conservation status of *Lepidosperma* sp. Mt Gibson during the development of the Recovery Plan required by condition 7-3.

This Plan shall include a timetable for and actions to:

1. locate and report any additional populations of the species;

2. enhance the survival of existing populations of the species; and

3. expand the existing populations or establish new populations;

based on currently available information and the results of early research and experimentation undertaken in accordance with condition 7-1.

7-3 Within four years following the commencement of ground-disturbing activities for the mine site, the proponent shall prepare a Recovery Plan for *Lepidosperma* sp. Mt Gibson to the requirements of the Minister for the Environment on advice of the Environment Protection Authority and the Department of Environment and Conservation.

The objective of this Plan is to maintain, and ultimately improve, the conservation status of *Lepidosperma* sp. Mt Gibson such that its conservation status is more secure in the Mt Gibson area.

This Plan shall identify:

1. habitats which are critical to the survival of the species and the actions needed to protect those habitats;

2. threats to the species, and areas and populations under threat;

3. objectives to be achieved;

4. criteria against which achievement of the objectives is to be measured;

5. management actions, based on the outcomes of the Research Plan referred to in Condition 7-1 and the Interim Recovery Plan referred to in Condition 7-2 that will to remediate the impacts of the project and provide for a net improvement on the pre-mining conservation status of the species; and

6. further research required into the management or recovery of the species,

and shall be consistent with the requirements of the current version of the "Recovery Plan Guidelines for Nationally Listed Threatened Species and Ecological Communities under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*" (published on the Commonwealth Department of Environment and Heritage website).

7-4 The proponent shall implement a *Lepidosperma* sp. Mt Gibson Research Plan required by condition 7-1.

7-5 The proponent shall implement the Interim Recovery Plan for *Lepidosperma* sp. Mt Gibson required by condition 7-2.

7-6 The proponent shall implement the Recovery Plan for *Lepidosperma* sp. Mt Gibson required by condition 7-3.

7-7 The proponent shall review and revise the *Lepidosperma* sp. Mt Gibson Research and Recovery Plans required by conditions 7-1, 7-2 and 7-3 as and when directed by the CEO.

7-8 The proponent shall implement revisions of the *Lepidosperma* sp. Mt Gibson Research and Recovery Plans required by condition 7-7.

7-9 The proponent shall make the *Lepidosperma* sp. Mt Gibson Research Plan required by condition 7-1 and revisions required by condition 7-7 publicly available in a manner approved by the CEO.

7-10 The proponent shall make the Interim Recovery Plan for *Lepidosperma* sp. Mt Gibson required by condition 7-2 and revisions required by condition 7-7 publicly available in a manner approved by the CEO.

7-11 The proponent shall make the Recovery Plan for *Lepidosperma* sp. Mt Gibson required by condition 7-3 and revisions required by condition 7-7 publicly available in a manner approved by the CEO.

8 Conservation of Significant Flora and Communities

8-1 Prior to the commencement of ground-disturbing activities, the proponent shall prepare a Significant Flora Species and Communities Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Environment and Conservation.

Note: "Significant flora species" include: Declared Rare Flora; Priority Listed Flora; geographically restricted flora; and newly discovered and undescribed flora.

The following species shall be addressed in the Plan:

- *Darwinia masonii*;
- *Lepidosperma* sp. Mt Gibson;
- *Acacia cerastes*;
- *Grevillea aff. yorkrakinensis*;
- *Cryptandra imbricata*;
- *Podotheca uniseta*; and
- *Psammomoya implexa*.

Note: "Significant communities" include: Threatened Ecological Communities; Priority Ecological Communities; and geographically restricted ecological communities.

The objectives of this Plan are to:

- maintain the conservation status of significant native flora species and communities through the avoidance or management of adverse impacts of the proposal (other than those within the approved area of direct disturbance set out in schedule 1), including dust, and through improvements in knowledge of their distribution and ecology; and

- ensure compliance with the requirements of the *Wildlife Conservation Act 1950* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* for significant flora species and communities.

This Plan shall:

1. provide the results of targeted flora and vegetation surveys where surveys have not been completed or where the result of previous surveys are no longer current, to provide further information on the conservation and baseline conservation status of each of the significant flora species and communities within the project area;

2. describe details of monitoring and management activities to ensure that the proposal does not lead, directly or indirectly, to the taking of significant flora beyond the approved area of direct disturbance, including:

    - monitoring of the numbers and population distribution of *Darwinia masonii* and *Lepidosperma* sp. Mt Gibson, their health and reproductive success; and

- a detailed risk management plan setting out monitoring and management procedures, parameters, and schedules, and defining response triggers and acceptable performance criteria for the avoidance and management of potential indirect impacts of mining activities, including, the impacts of dust deposition, fire, weeds, altered hydrology and unauthorised disturbance, on the populations of *Darwinia masonii* and *Lepidosperma* sp. Mt Gibson outside the mining footprint;

Note: See also Weed Management Plan (condition 9) and Bush Fire Management Plan (condition 10).

3. describe measures to ensure that direct and indirect impacts on significant flora species and communities within the mine site and along the services corridor are minimised;

4. describe measures to manage impacts of the mining operation on vegetation downstream of the mine site;

5. set out monitoring parameters, methods and criteria for establishing impact on significant flora species and communities within the mine site and along the services corridor;

6. outline the regeneration or revegetation strategies which may be required for significant flora species and components of communities, including completion criteria to be met;

7. outline management or mitigation actions required to address any failure to achieve regeneration completion criteria arising from item 6 above; and

8. outline further investigations into the regeneration and reproductive ecology of affected significant flora species and components of communities, in order to determine appropriate regeneration methodologies, if the completion criteria are not being achieved.

8-2 The proponent shall implement the Significant Flora Species and Communities Management Plan required by condition 8-1.

8-3 The proponent shall review and revise the Significant Flora Species and Communities Management Plan required by condition 8-1 as and when directed by the CEO.

8-4 The proponent shall implement revisions of the Significant Flora Species and Communities Management Plan required by condition 8-3.

8-5 The proponent shall make the Significant Flora Species and Communities Management Plan required by condition 8-1 and revisions required by condition 8-3 publicly available in a manner approved by the CEO.

9 Weeds

9-1 Prior to the commencement of ground-disturbing activities, the proponent shall prepare, in consultation with the Department of Environment and Conservation and the Department of Agriculture and Food, a Weed Management Plan.

The objectives of this Plan are to:

- prevent the spread of existing weeds within the mine site and along the services corridor caused by the activities of the proponent;
- prevent the establishment of new weeds within the mine site and along the services corridor caused by the activities of the proponent;
- control and/or eradicate weeds within the mine site and along the services corridor; and
- minimise the potential for the impact of weeds and weed management on significant flora identified in condition 8.

This Plan shall:

1. identify the location and approximate number of each weed species recorded within the mine site and along the services corridor, during previous vegetation surveys, while having regard for weed species outside the project area;
2. identify weeds of environmental significance in the project area as target weeds in collaboration with the Department of Environment and Conservation;
3. map the presence of target weeds;
4. implement appropriate hygiene practices for all plant and vehicle equipment operated by the proponent;
5. control and eradicate target weeds during construction and operation of the mine site and construction of the services corridor;
6. identify performance indicators for weed management; and
7. monitor the success of weed control.

9-2 The proponent shall implement the Weed Management Plan required by condition 9-1.

9-3 The proponent shall review and revise the Weed Management Plan required by condition 9-1 as and when directed by the CEO.

9-4 The proponent shall implement revisions of the Weed Management Plan required by condition 9-3.

9-5 The proponent shall make the Weed Management Plan required by condition 9-1 and

revisions required by condition 9-3 publicly available in a manner approved by the CEO.

10 Bush Fires

10-1 Prior to the commencement of ground-disturbing activities, the proponent shall prepare, in consultation with the Department of Environment and Conservation and the relevant Local Governments, a Bush Fire Management Plan.

The objective of this Plan is to reduce the risk of unplanned fires and provide contingency measures to minimise the impacts of fires on the local environment.

This Plan shall set out the provision of resources and measures to:

1. prevent bushfires in the vicinity of the mine site;

2. detect bushfires in the vicinity of the mine site;

3. train personnel to fight fires in the vicinity of the mine site; and

4. respond to bush fire emergencies.

10-2 The proponent shall implement the Bush Fire Management Plan required by condition 10-1.

10-3 The proponent shall review and revise the Bush Fire Management Plan required by condition 10-1 as and when directed by the CEO.

10-4 The proponent shall implement revisions of the Bush Fire Management Plan required by condition 10-3.

10-5 The proponent shall make the Bush Fire Management Plan required by condition 10-1 and revisions required by condition 10-3 publicly available in a manner approved by the CEO.

11 Malleefowl *Leipoa ocellata*

11-1 Prior to the commencement of ground-disturbing activities, the proponent shall prepare, in consultation with the Department of Environment and Conservation, a Malleefowl Conservation Plan.

The objective of this Plan is to maintain the abundance, diversity, geographic distribution and productivity of the Malleefowl *Leipoa ocellata* through mitigation of adverse impacts and improvements in knowledge.

This Plan shall:

1. identify the distribution and abundance of *Leipoa ocellata* (Malleefowl) within and around the project area, including the services corridor;

2. identify the threats to the Malleefowl populations in the areas identified in item 1 above;

3. identify management objectives and actions to minimise impacts on Malleefowl from the threats identified in item 2 above, including feral animal control and investigations into avoiding mounds being used by Malleefowl;

4. identify a monitoring program to assess the Malleefowl population and any impacts as a result of the proposal; and

5. identify measures for community involvement in Malleefowl conservation.

11-2 The proponent shall implement the Malleefowl Conservation Plan required by condition 11-1.

11-3 The proponent shall review and revise the Malleefowl Conservation Plan required by condition 11-1 as and when directed by the CEO.

11-4 The proponent shall implement revisions of the Malleefowl Conservation Plan required by condition 11-3.

11-5 The proponent shall make the Malleefowl Conservation Plan required by condition 11-1 and revisions required by condition 11-3 publicly available in a manner approved by the CEO.

12 Fauna Management at the Mine Site

12-1 Prior to the commencement of ground-disturbing activities for the mine site, the proponent shall prepare in consultation with the Department of Environment and Conservation, a Mine Site Fauna Management Plan.

The objective of this Plan is to maintain the abundance, diversity, geographic distribution and productivity of native fauna through mitigation of adverse impacts and improvements in knowledge.

This Plan shall address management and monitoring to:

1. demonstrate that the effects of vegetation clearing, noise and vibration, light overspill and vehicle movement on fauna are minimised; and

2. in particular, management and monitoring of *Egernia stokesii badia* (Western spiny-tailed skink); *Falco peregrinus* (Peregrine Falcon); *Cacatua leadbeateri* (Major Mitchell's Cockatoo); and *Merops ornatus* (Rainbow Bee-eater).

Note: The management of Malleefowl is considered in a separate Malleefowl Conservation Plan (condition 11).

12-2 The proponent shall implement the Mine Site Fauna Management Plan required by condition 12-1.

12-3 The proponent shall review and revise the Mine Site Fauna Management Plan required by condition 12-1 as and when directed by the CEO.

12-4 The proponent shall implement revisions of the Mine Site Fauna Management Plan required by condition 12-3.

12-5 The proponent shall make the Mine Site Fauna Management Plan required by condition 12-1 and revision required by condition 12-3 publicly available in a manner approved by the CEO.

13 Fauna Management along the Services Corridor

13-1 Prior to ground-disturbing activities of the Services Corridor, the proponent shall clearly delineate on the ground the boundaries of the services corridor, being up to 20 metres wide from Geraldton Port to Monger's Lake (agricultural section) and up to 15 metres wide from Monger's Lake to the mine site (pastoral section).

13-2 The proponent shall not cause or allow disturbance of vegetation outside the delineated services corridor referred to in condition 13-1, unless authorised by the Minister for the Environment.

13-3 The proponent shall undertake open trench works in the pastoral section of the services corridor from April to September (inclusive) unless otherwise authorised by the CEO.

13-4 Prior to vegetation clearing, the proponent shall mark significant habitat trees of sufficient age to form nesting hollows for hollow-nesting birds and mammals, and Malleefowl mounds, in consultation with the Department of Environment and Conservation.

13-5 The proponent shall not fell marked trees or disturb mounds referred to in condition 13-4, except in the case where habitat trees or mounds occur in the direct line of the proposed pipeline and cannot reasonably be avoided.

13-6 The proponent shall limit the length of open trench to a maximum length of 10 kilometres at any time in the pastoral section and 20 kilometres at any time in the agricultural section of the services corridor.

13-7 No part of the trench shall remain open for more than seven days, unless authorised by the CEO.

13-8 The proponent shall install ramps at intervals of 500 metres along the entire route of the open trench to allow trapped animals to escape, except in remnant vegetation patches in the agricultural section, where each remnant vegetation patch shall have at least one ramp.

13-9 The proponent shall employ at least two “fauna clearing persons” per ten kilometres of open trench to remove fauna from the trench. The “fauna clearing persons” shall be able to demonstrate suitable experience to obtain a fauna handling licence issued by the Department of Environment and Conservation.

13-10 The open trenches shall be inspected by the “fauna clearing persons” for trapped fauna each day by no later than three hours after sunrise and half an hour prior to backfilling of the trench.

13-11 In the event of significant rainfall, the proponent shall, following the clearing of fauna from the trench, pump out any pooled water in the open trench (with the exception of groundwater) and discharge it via a mesh (to dissipate energy) to adjacent areas.

Note: “Fauna clearing persons” means employees whose responsibility is to daily walk the open trench to recover and record fauna found within the trench.

13-12 The proponent shall produce monthly performance monitoring reports on fauna management. These reports shall include a Fauna Register on the fauna found in the trenches, and fatalities. These reports are to be provided to the Department of Environment and Conservation each month, and made publicly available.

14 Closure

14-1 Prior to ground-disturbing activities, the proponent shall prepare a Preliminary Closure Plan in consultation with the Department of Environment and Conservation, the Department of Industry and Resources, the Department of Water, the Australian Bush Heritage Fund, the Australian Wildlife Conservancy, the Pindiddy Aboriginal Corporation and the relevant Local Governments, which describes the framework to ensure that the mine area and the services corridor are left in an environmentally acceptable condition, and provides:

1. the rationale for the siting and design of plant and infrastructure as relevant to environmental protection;

2. a conceptual description and design of the final landform at closure;

3. for the long-term management of groundwater and surface water systems affected by the mining operations and services corridor;

4. for the management of noxious materials to avoid the creation of contaminated areas (including acid-generating materials);

5. a rehabilitation program, which aims to restore the original vegetation communities to areas disturbed by the mining operations and construction within the services corridor, and includes completion criteria to be met; and

6. for the monitoring and response to the progress towards the re-establishment of the floristic communities as part of the rehabilitation of the area, including studies on the composition of the floristic communities on Extension Hill North.

14-2 The proponent shall make the Preliminary Closure Plan required by condition 14-1 publicly available in a manner approved by the CEO.

14-3 At least two years prior to the anticipated date of closure, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Closure Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of this Plan are to:

- achieve construction of landforms which are stable, non-polluting and aesthetically compatible with the surrounding landscape; and

- ensure that closure planning and rehabilitation are carried out in a coordinated, progressive manner and are integrated with development planning, consistent with current best practice, and the agreed end land uses.

The Final Closure Plan shall set out details and measures for:

1. removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;

2. final landforms and the extent of the mine void;

3. long-term management of groundwater and surface water systems affected by the waste rock dumps, the mine void and the services corridor;

4. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities; and

5. rehabilitation of all disturbed areas, including the mine area and the services corridor, to ensure establishment of sustainable vegetation communities with local species and local provenance, consistent with the reconstructed landscape and surrounding vegetation and in accordance with the completion criteria.

14-4 The proponent shall implement the Final Closure Plan required by condition 14-3 until such time as the Minister for the Environment determines, on advice of the CEO, that the proponent's closure responsibilities have been fulfilled.

14-5 The proponent shall make the Final Closure Plan required by condition 14-3 publicly available, in a manner approved by the CEO.

15 Performance Bond

15-1 As security for the due and punctual observance and performance by the proponent of the requirement to rehabilitate that part of the services corridor that lies outside mining tenure, as required by conditions 14-1(5) and 14-3(5), the proponent shall lodge with the CEO on demand prior to commencement of operations of the mine, an irrevocable Unconditional Performance Bond as nominated and approved by the CEO in his sole unfettered discretion to a cash value and in a form acceptable to the CEO ("the Security") which Security at the date hereof being $5,000 per hectare of disturbance from Geraldton Port to Mongers Lake (agricultural section) and $7,000 per hectare of disturbance from Mongers Lake to the mining tenure at the Mt Gibson mine site (pastoral section).

The proponent shall lodge with the CEO an Unconditional Performance Bond executed by a Bank or other approved financial institution for due compliance with the environmental conditions in the sum of $576,000.

15-2 The CEO may review the Security required by condition 15-1 at any time or times and if, on such review, the CEO considers that a security has ceased to be acceptable to the CEO, then the CEO may, with the approval of the Minister for the Environment, require the proponent to furnish replacement or additional security for performance by the proponent of its obligations to rehabilitate that part of the services corridor that lies outside mining tenure, as required by conditions 14-1(5) and 14-3(5).

15-3 The proponent shall within fourteen days after written request by the CEO furnish replacement or additional security in such sum as the CEO shall nominate, in a form and upon terms and conditions approved by the CEO, which approval shall not be unreasonably withheld. On receipt of approved replacement security the CEO shall release and discharge the original security.

Note:

1. In the preparation of advice to the CEO in relation to conditions 15-1, 15-2 and 15-3, the Environmental Protection Authority expects that the advice of the Department of Environment and Conservation and the Department of Industry and Resources will be obtained.
2. The rehabilitation of the services corridor referred to in conditions 15-1 and 15-2 is required by conditions 14-1(5) and 14-3(5).

16 Offsets

16-1 The proponent shall implement the offset package set out in Schedule 2 to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation.

Notes

1. Where a condition states "on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment and Conservation for the preparation of written notice to the proponent.

2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment and Conservation.

3. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment and Conservation over the fulfilment of the requirements of the conditions.

4. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

David Templeman MLA
MINISTER FOR THE ENVIRONMENT; CLIMATE CHANGE; PEEL

Schedule 1

The Proposal (Assessment No. 1538)

General Description

The proposal is to mine and process iron ore (hematite and magnetite) from Extension Hill and Extension Hill North and to construct an underground pipeline, within a services corridor, to transport the magnetite slurry to Geraldton Port, and infrastructure at the port to strip the magnetite ore from the slurry for export. Extension Hill and Extension Hill North are part of a ridge of banded ironstone formations within the Mt Gibson Ranges. The banded ironstone formation contains hematite, and the underlying magnetite. The mine site is located approximately 350 kilometres north-east of Perth (Figure 1).

Details of the proposal are provided in the proponent's *Mt Gibson Iron Ore Mine and Infrastructure Project Public Environmental Review*, April 2006.

Summary Description

A summary of the key proposal characteristics is presented in Table 1.

Table 1 – Summary of the Key Proposal Characteristics

Element	Description
Project life	Approximately 20 years
Ore quantity	Magnetite approximately 230 Million tonnes Hematite approximately 13 Million tonnes
Waste management	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.
Processing requirements	• Dry and wet processing of magnetite to produce approximately 5 Million tonnes per annum of magnetite concentrate • Dry processing of hematite
Size of final pit	Approximately 2,400 metres long and 700 metres wide
Depth of final pit	Not more than 350 metres below the ground level (approximately 220 metres below the groundwater level)
Dewatering	Approximately 2,500 cubic metres per day
Mine water supply	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5,424 cubic metres per day from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings
Vegetation disturbance	Not more than 880 hectares at the mine site (152 hectares for the mine pit and 552 hectares for the waste dump) Not more than 90 hectares along the services corridor
Underground pipelines within	• Slurry pipeline from the mine site to Geraldton Port

the services corridor	• Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Main Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site
Width of services corridor	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)

Figures (attached):

Figure 1 - Regional location
Figure 2 - Mt Gibson Ranges and pit
Figure 3 - Mine site layout
Figure 4 - Location of services corridor
Figure 5 - Facilities at Geraldton Port
Figure 6 - *Darwinia masonii*, *Lepidosperma* sp. Mt Gibson and floristic vegetation communities at Mt Gibson.

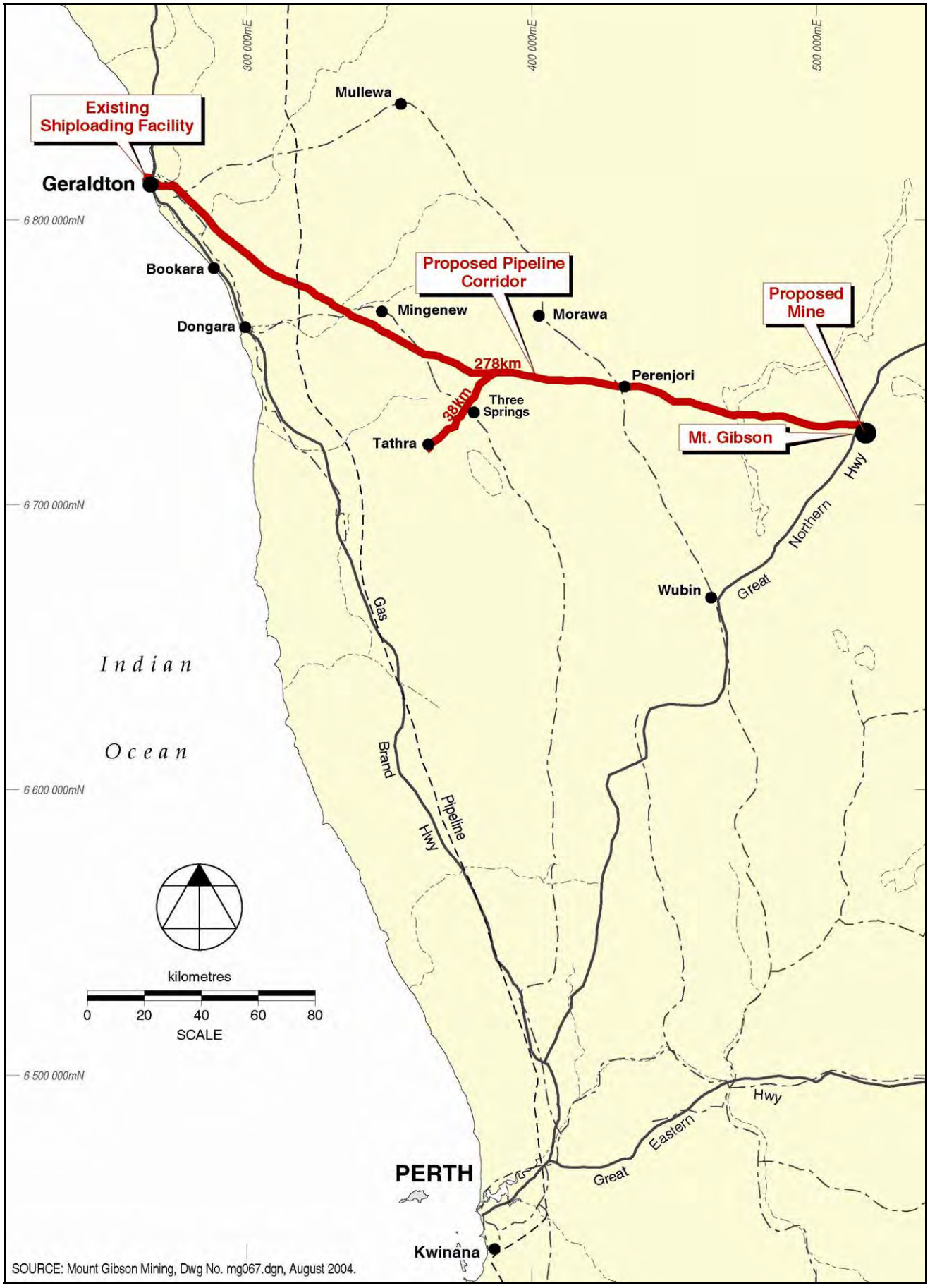


Figure 1: Regional location

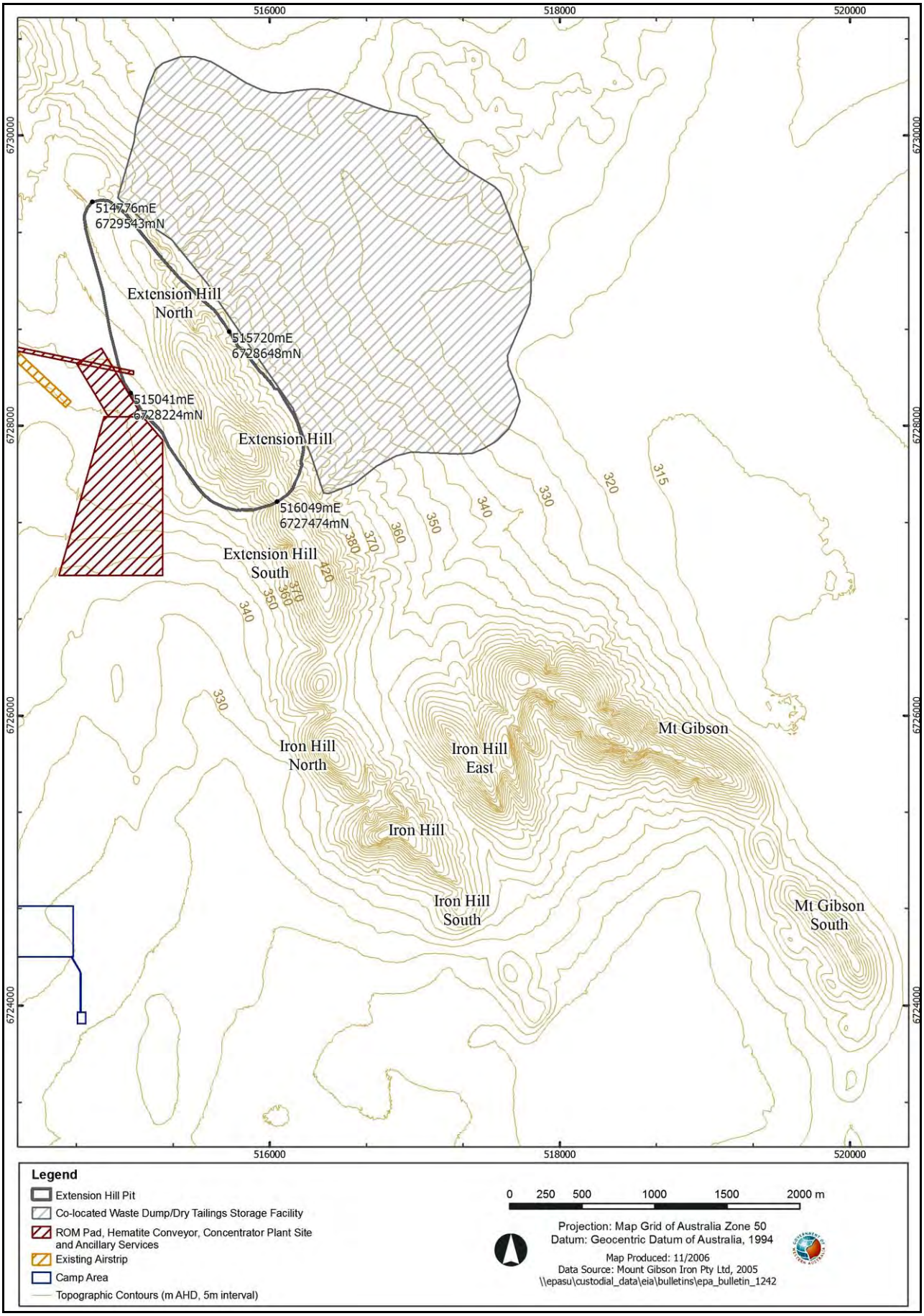


Figure 2: Mt Gibson Ranges and pit

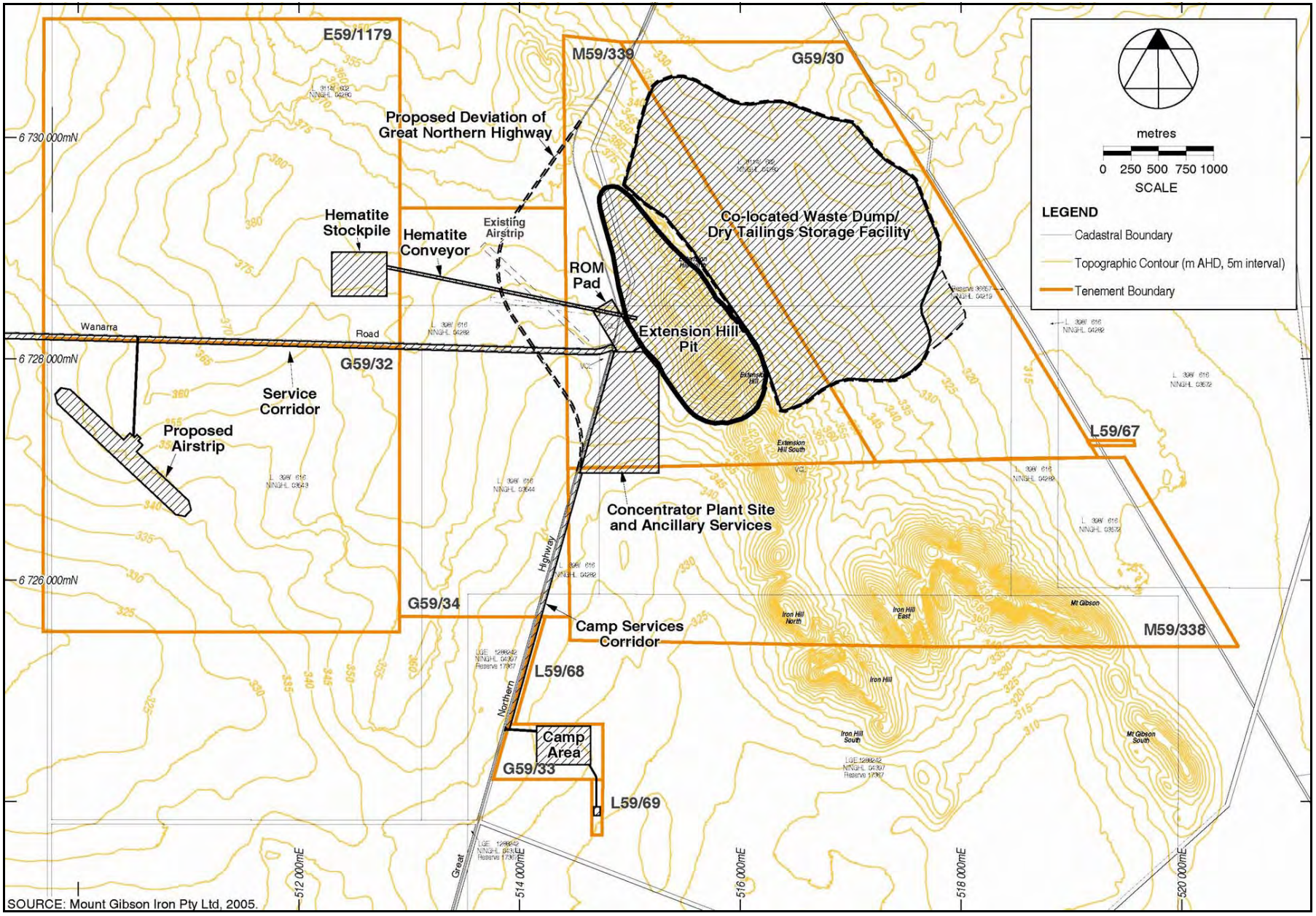


Figure 3: Mine site layout – NOTE: This hatched area defines the 'mine site' as referred to in the conditions

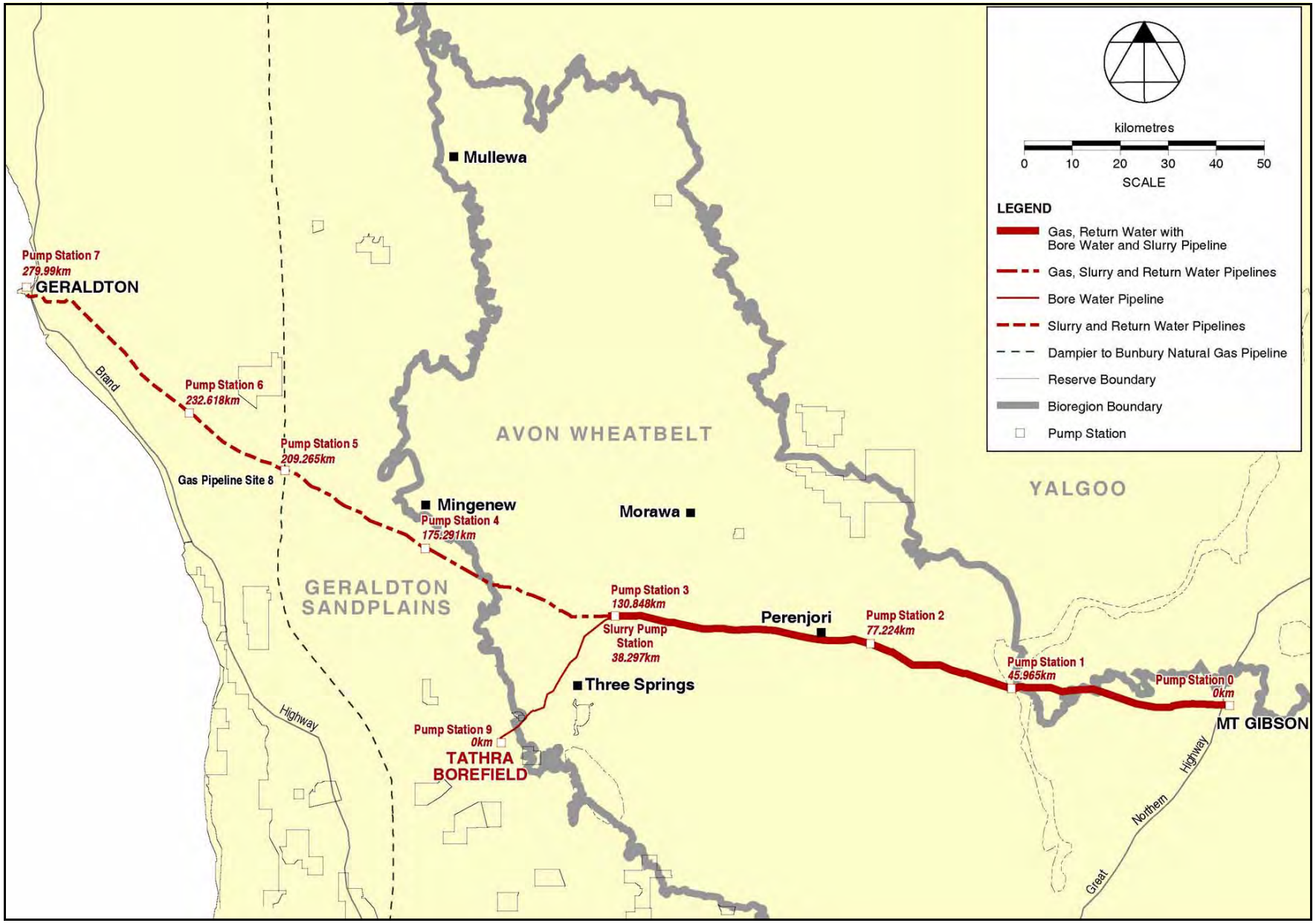


Figure 4: Location of services corridor

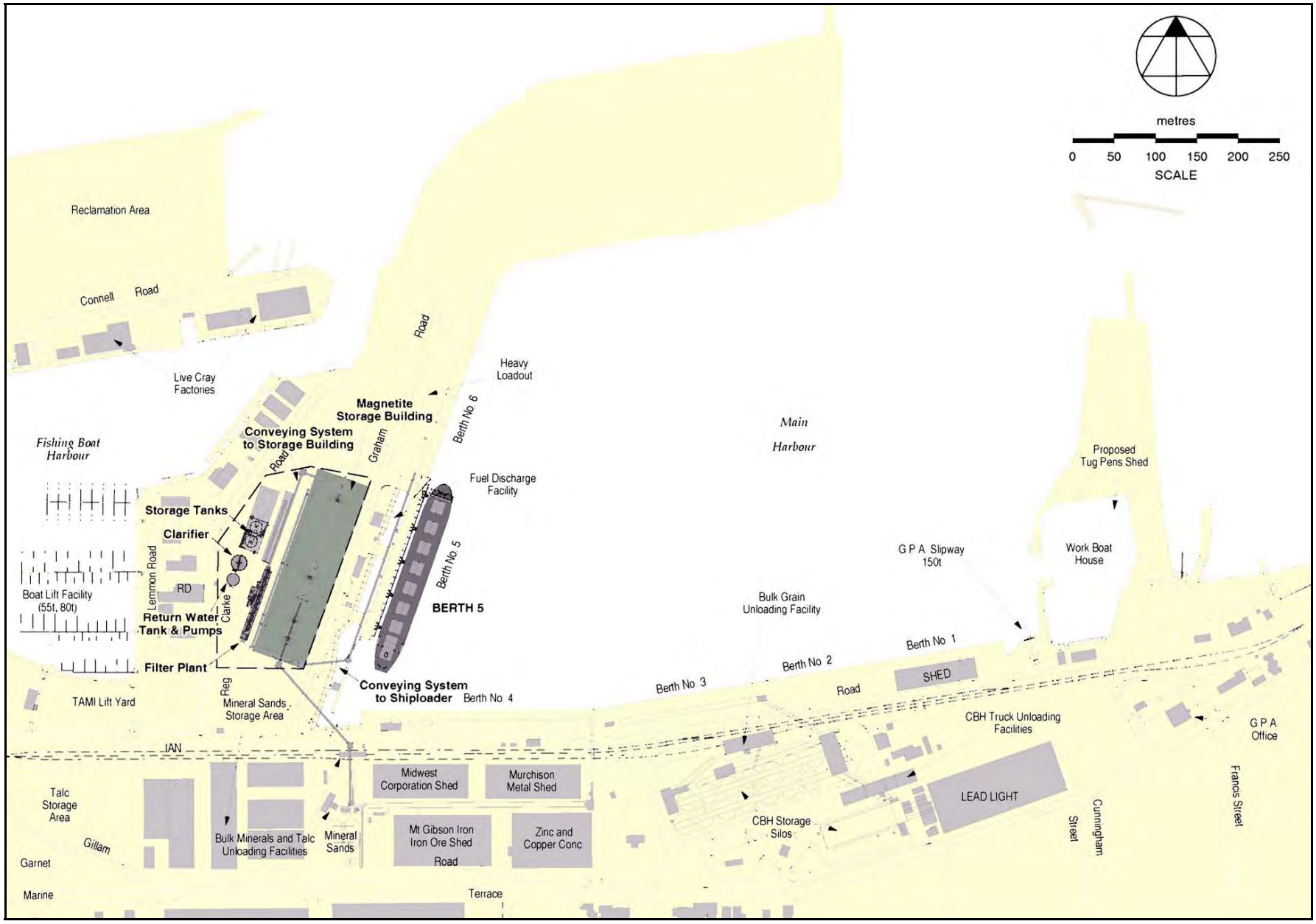


Figure 5: Facilities at Geraldton Port

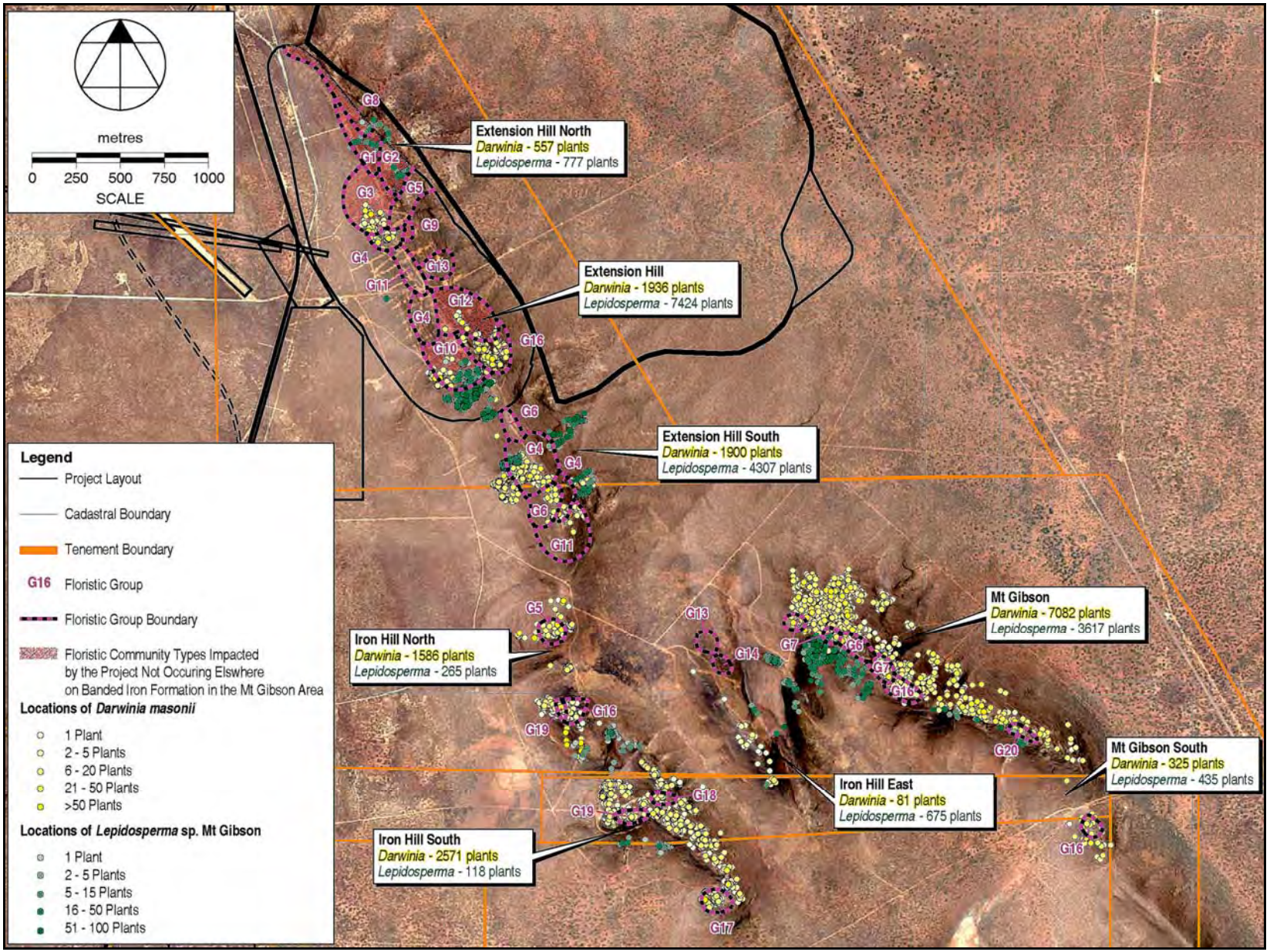


***Figure 6: Darwinia masonii, Lepidosperma* sp. Mt Gibson and floristic vegetation communities at Mt Gibson**

Schedule 2

Schedule: Summary of Proponent Offsets

Offset	Governance	Timeline	Value
Support for a 3 year plus (Stage 2) research program to be undertaken by BGPA leading to the preparation & implementation of a Recovery Plan for the DRF *Darwinia masonii* (already commenced).	BGPA commissioned to undertake this work To the requirements of the Minister for the Environment on advice of the EPA	Three years or as required to meet objectives of the Research Plan. Stage 1 of the Research Plan completed. Stage 2 of the Research Plan commenced in May 2007	Stage 1 = $215,900 (already completed) Stage 2 of combined research program = $1.11 million
Support for a 3 plus year (Stage 2) research program to be undertaken by BGPA leading to the preparation and implementation of a Recovery Plan for the DRF *Lepidosperma* sp Mt Gibson (already commenced).	BGPA commissioned to undertake this work To the requirements of the Minister for the Environment on advice of the EPA	Three years or as required to meet objectives of the Research Plan. Stage 2 of the Research Plan commenced in May 2007	
Management of the Proponent's mining tenements in the Mt Gibson Ranges in accordance with the: (i) Significant Flora Species and Communities Management Plan (Condition 8) (ii) Weed Management Plan (Condition 9) (iii) Fire Management Plan (Condition 10) (iv) Malleefowl Management Plan (Condition 11); (v) Minesite Fauna Management Plan(Condition 12) ; (vi) Fire Management Plan (Condition 10) ; and Preliminary Closure Management Plan (Condition 14).	To the requirements of the Minister for the Environment on the advice of the EPA, DEC, DAF, DOIR, DoW	Ongoing for the life of the project	
Funding of $110,000 pa for the position of a DEC officer(s) during the life of the proposal. The funding is to be directed towards the achievement of environmental objectives detailed below and will cease in the event of any type of conservation reserve being imposed on the all or part of the Proponents Non Project land by any government agency. The role of the DEC position will be limited to • Assist with the development and implementation of the	Expenditure of funds to be agreed between Proponent and DEC's Regional Manager for the Midwest by 30 Nov each year DEC to provide an annual report to the Proponent by the end of September in each year which addresses performance in that role in the previous 12 months to assist in Proponents annual environmental reporting requirements	Ongoing for the life of the project	$2.2 million ($110,000pa)

interim and full recovery plans for *Lepidosperma* sp Mt Gibson and *Darwinia masonii;* • Coordinating the management of threatening processes in relation to *Lepidosperma* sp Mt Gibson and Darwinia masonii; • Oversee the development and implementation of a Malleefowl Management Plan; and • Other environmental target areas in DEC's Midwest Region as agreed by the Proponent and the DEC Manager for the Mid West Region on an annual basis			
Provide support of $50,000 pa each to ABHF, AWC and Pindiddy for predominately on-ground projects aimed at enhancing biodiversity and regional sustainability values on White Wells, Mt Gibson and Ninghan Stations respectively.	Simple contract between Pindiddy, AWC, ABHF and the Proponent Reporting by each organisation on expenditure of funds & works undertaken. Included in Proponents annual compliance reporting	Ongoing for the life of the project	$3 million ($150,000pa)
Establishment of and support for a Regional Conservation Association with the objectives of enhancing biodiversity and regional sustainability values. Funding of $100,000pa for projects in the northern Avon Wheatbelt and Southern Yalgoo IBRA bioregions generally focusing on an 2,600,000 ha area between Morawa and Beacon (200km west – east) and Wubin to Paynes Find (approximately 130km north – south). Provision of $100,000 seed funding on receipt of all State and Commonwealth approvals to establish the organisation	In accordance with the Proponents Biodiversity Offset Management Plan Articles of Association of the Regional Conservation Association determined by the members Annual reporting by Association on financial expenditure and the success of the various projects to the Proponent Proponent will report on allocation of monies in Progress and Compliance reporting Operation of the Association will be	Ongoing for the life of the project	$2 million ($100,000 pa

	reviewed triennially by a current member of the EPA		
Contribute to a regional feral animal control program (in particular foxes)	Proponent, DEC, AWC, ABHF and Pindiddy to agree scope and implementation	On- going, for the life of the project	

Attachment 1 to Statement 753

Changes to Proposal

Proposal: Mount Gibson Iron Ore Mine and Infrastructure Project

Proponent: Mount Gibson Mining Limited

Change: Changes to road and mine layout

Amendment of Schedule 1 – Key Proposal Characteristics

Features of previously approved Proposal:

Element	**Quantities/Description**
Project Life – Hematite	Minimum 8 years
Mining Rate – Hematite	1.5 – 2 Mtpa
Hematite Stockpile area and converyor	26 ha
Hematite ROM, process plant	0 ha
Accommodation Village and associated services (incl camp access track)	19 ha
Deviation of Great Northern Highway	8 ha

Features of changed Proposal:

Element	**Quantities/Description**
Project Life – Hematite	Minimum 5 years
Mining Rate – Hematite	3 Mtpa
Hematite Stockpile area and converyor	0 ha
Hematite ROM, process plant	10.5 ha
Accommodation Village and associated services (incl camp access track)	21 ha
Deviation of Great Northern Highway	21 ha

Approved under delegation
from Minister for the Environment:

Approval Date: 20.2.08

Attachment 2 to Statement 753

Change to Proposal

Proposal: To mine and process iron ore from Extension Hill and Extension Hill North, within the Mt Gibson Ranges, construct a pipeline to transport the magnetite slurry to Geraldton Port, and construct infrastructure at the port to strip the ore from the slurry for export.

Proponent: Extension Hill Pty Ltd and Mount Gibson Mining Limited

Changes:

1) relocation of the hematite administration and workshop area;
2) increasing the clearing area related to the hematite ROM pad, processing plant, internal roads and administration buildings by 2.5 hectares;
3) moving of the camp area to the east;
4) increasing the size of the sewage evaporation ponds and relocating south;
5) definition of the location of a putrescible waste facility site;
6) definition of the location of a gate house security area; and
7) construction of a haul road from the pit to the waste dump.

No changes to Key Proposal Characteristics are required.

Figure 3 is replaced with the attached Figure 3.
Figure 2 is superseded in the areas that it does not agree with the attached Figure 3

Approved under delegation from Minister for the Environment: _

EPA Chairman

Approval Date: 26.8.08

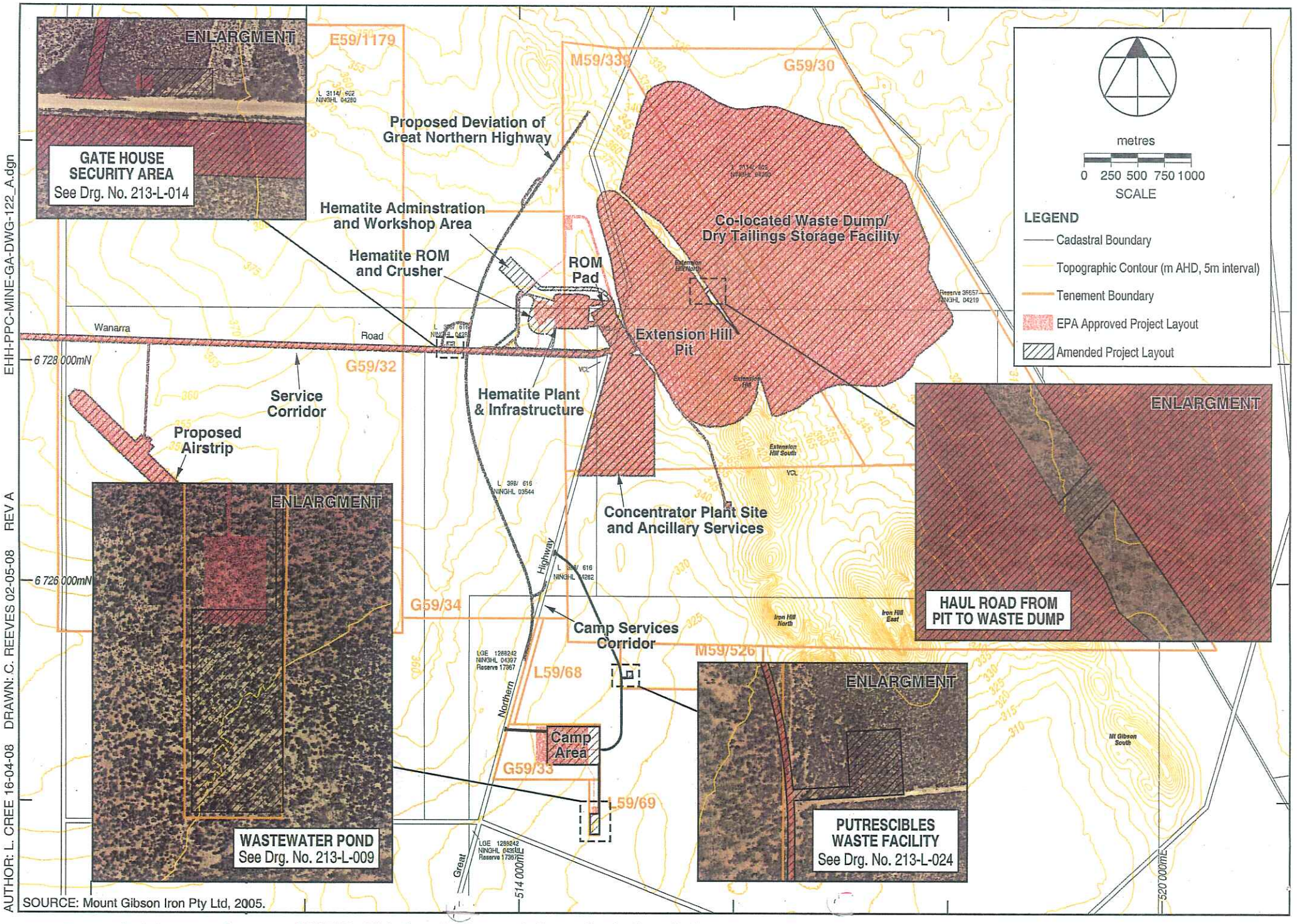


Figure 3: Mine site layout – NOTE: This hatched area defines the 'mine site' as referred to in the conditions

Attachment 3 to Statement 753

Change to Proposal

Proposal: Mt Gibson Iron Ore Mine & Infrastructure Project, Shire of Yalgoo

Proponent: Joint: Mt Gibson Mining Limited and Extension Hill Pty Ltd

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Change: Increase the mine pit, waste dump and processing plant area, and change the location of the accommodation village and airstrip.

Element	Description of approved proposal	Description of approved changes to proposal
Project life	Approximately 20 years	**Approximately 40 years**
Project life - hematite	Hematite project life minimum 5 years	Hematite project life minimum 5 years
Ore quantity	Magnetite approximately 230 Million tonnes Hematite approximately 13 Million tonnes	**Magnetite approximately 1,000 million tonnes** Hematite approximately 13 million tonnes
Waste Management	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.
Processing requirements	• Dry and wet processing of magnetite to produce approximately 5 Million tonnes per annum of magnetite concentrate • Dry processing of hematite	• **Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate** • Dry processing of hematite
Mining rate - hematite	Hematite mining rate 3 MTPA	Hematite mining rate 3 million tonnes per annum
Size of final pit	Approximately 2,400 metres long and 700 metres wide.	**Approximately 2,500 metres long and 1,000 metres wide**
Depth of final pit	Not more than 350 metres below the ground level (approximately 220 metres below the groundwater level)	**Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)**
Height of waste dump	400 metres RL	**Not more than 460 metres RL**
Dewatering	Approximately 2,500 cubic metres per day	Approximately 2,500 cubic metres per day
Mine water supply	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5,424 cubic metres per day from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5,424 cubic metres per day from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings

Element	Description of approved proposal	Description of approved changes to proposal
Vegetation disturbance	Not more than 880 hectares at the mine site (152 hectares for the mine pit and 552 hectares for the waste dump) Not more than 90 hectares along the services corridor	**Not more than 1,038 hectares at the mine site, including:** • **251 hectares mine pit;** • **548 hectares waste dump;** • **99 hectares magnetite processing; and** • **24 hectares temporary laydown area (to be rehabilitated)** Not more than 90 hectares along the services corridor
Hematite ROM process plant	10.5 ha	10.5 hectares
Underground pipelines within the services corridor	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline fro Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline fro Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site
Width of services corridor	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)
Airstrip	West of plant	**South west of plant (28.5 hectares)**
Deviation of Great Northern Highway	21 ha	21 hectares
Hematite village	South of plant site (21 ha) (including camp access track)	South of plant site (21 hectares) (including camp access track)
Magnetite village	Co-located with hematite village, south of plant site	**West of plant site (40 hectares)**
Power	Gas supplied power station	**Electricity from South West Interconnection System grid to supplement gas power station**

List of Figures:

Figure 7: Mt Gibson Iron Ore Mine & Infrastructure Project – Mine site layout

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 2-6.09.

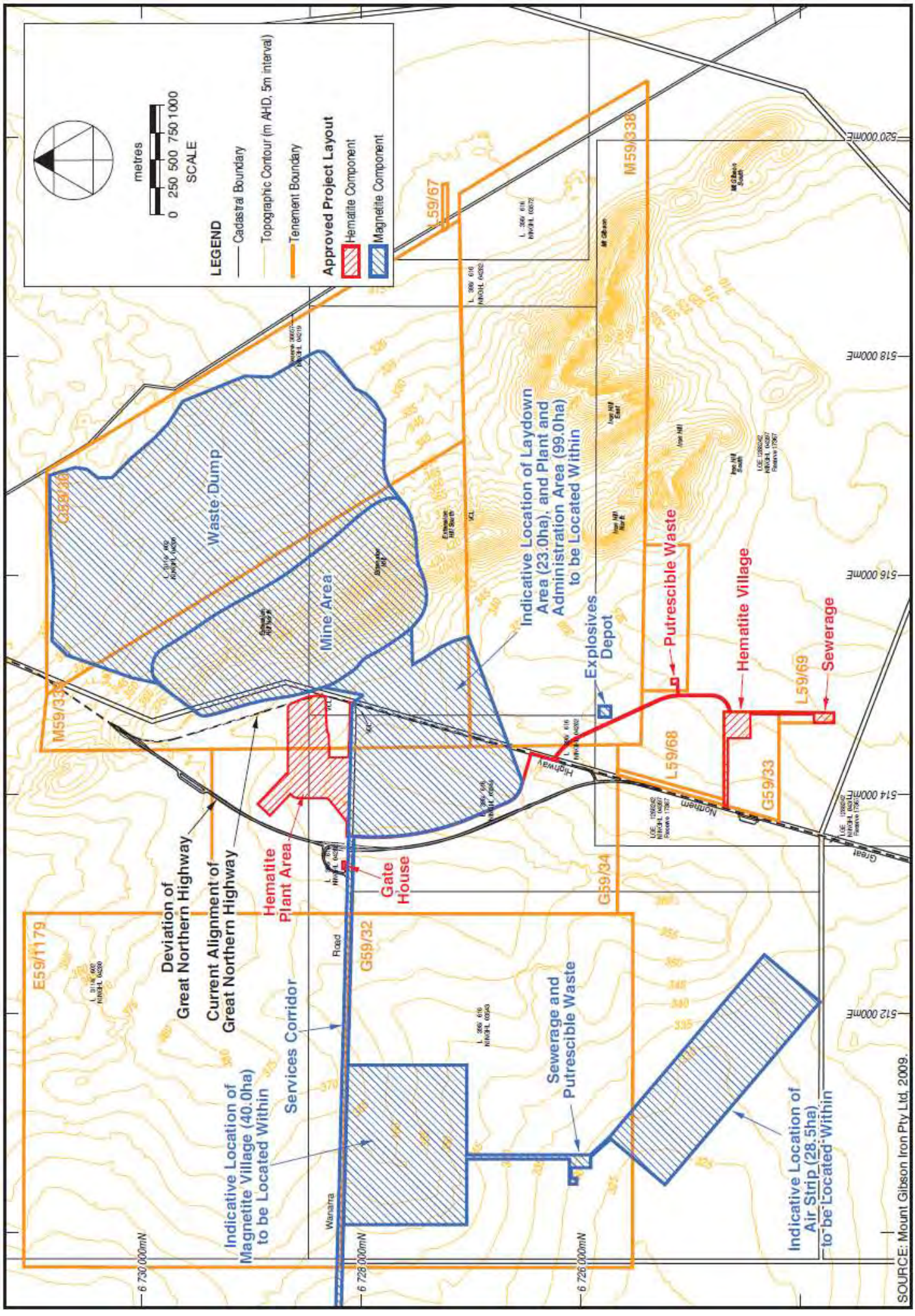

Figure 7: Mt Gibson Iron Ore Mine & Infrastructure Project – Mine site layout

Attachment 4 to Statement 753

Change to Proposal

Proposal: Mt Gibson Iron Ore Mine & Infrastructure Project, Shire of Yalgoo

Proponent: Joint: Mt Gibson Mining Limited and Extension Hill Pty Ltd

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Change: Correct two errors in the Key Characteristics Table.

Element	Description of approved proposal	Description of approved changes to proposal
Project life	Approximately 40 years	Approximately 40 years
Project life - hematite	Hematite project life minimum 5 years	Hematite project life minimum 5 years
Ore quantity	Magnetite approximately 1,000 million tonnes Hematite approximately 13 million tonnes	Magnetite approximately 1,000 million tonnes Hematite approximately 13 million tonnes
Waste Management	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.
Processing requirements	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite
Mining rate - hematite	Hematite mining rate 3 million tonnes per annum	Hematite mining rate 3 million tonnes per annum
Size of final pit	Approximately 2,500 metres long and 1,000 metres wide	Approximately 2,500 metres long and 1,000 metres wide
Depth of final pit	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)
Height of waste dump	Not more than 460 metres RL	Not more than 460 metres RL
Dewatering	Approximately 2,500 cubic metres per day	Approximately 2,500 cubic metres per day
Mine water supply	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5,424 cubic metres per day from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • **Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings**

Element	Description of approved proposal	Description of approved changes to proposal
Vegetation disturbance	Not more than 1,038 hectares at the mine site, including: • 251 hectares mine pit; • 548 hectares waste dump; • 99 hectares magnetite processing; and • 24 hectares temporary laydown area (to be rehabilitated) Not more than 90 hectares along the services corridor	Not more than 1,038 hectares at the mine site, including: • 251 hectares mine pit; • 548 hectares waste dump; • 99 hectares magnetite processing; and • 24 hectares temporary laydown area (to be rehabilitated) Not more than 90 hectares along the services corridor
Hematite ROM process plant	10.5 hectares	**13 hectares**
Underground pipelines within the services corridor	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline fro Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline fro Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site
Width of services corridor	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)
Airstrip	South west of plant (28.5 hectares)	South west of plant (28.5 hectares)
Deviation of Great Northern Highway	21 hectares	21 hectares
Hematite village	South of plant site (21 hectares) (including camp access track)	South of plant site (21 hectares) (including camp access track)
Magnetite village	West of plant site (40 hectares)	West of plant site (40 hectares)
Power	Electricity from South West Interconnection System grid to supplement gas power station	Electricity from South West Interconnection System grid to supplement gas power station

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 31.3.10

Attachment 5 to Ministerial Statement 753

Change to Proposal

Proposal: Mt Gibson Iron Ore Mine & Infrastructure Project, Shire of Yalgoo

Proponent: Joint: Mt Gibson Mining Limited and Extension Hill Pty Ltd

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Change: Include two haul track access roads from the mine pit to the hematite ROM processing plant; expand an existing track to the waste dump area and the revision of the layout of the approved hematite explosives depot

Key Characteristics Table:

Element	Description of approved proposal	Description of approved changes to proposal
Project life	Approximately 40 years	Approximately 40 years
Project life - hematite	Hematite project life minimum 5 years	Hematite project life minimum 5 years
Ore quantity	Magnetite approximately 1,000 million tonnes Hematite approximately 13 million tonnes	Magnetite approximately 1,000 million tonnes Hematite approximately 13 million tonnes
Waste Management	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.
Processing requirements	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite
Mining rate - hematite	Hematite mining rate 3 million tonnes per annum	Hematite mining rate 3 million tonnes per annum
Size of final pit	Approximately 2,500 metres long and 1,000 metres wide	Approximately 2,500 metres long and 1,000 metres wide
Depth of final pit	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)
Height of waste dump	Not more than 460 metres RL	Not more than 460 metres RL
Dewatering	Approximately 2,500 cubic metres per day	Approximately 2,500 cubic metres per day
Mine water supply	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings

Element	Description of approved proposal	Description of approved changes to proposal
Vegetation disturbance	Not more than 1,038 hectares at the mine site, including: • 251 hectares mine pit; • 548 hectares waste dump; • 99 hectares magnetite processing; and • 24 hectares temporary laydown area (to be rehabilitated) Not more than 90 hectares along the services corridor	**Not more than 1,040 hectares at the mine site, including:** • 251 hectares mine pit; • 548 hectares waste dump; • 99 hectares magnetite processing; and • 24 hectares temporary laydown area (to be rehabilitated) Not more than 90 hectares along the services corridor
Hematite ROM process plant	13 hectares	13 hectares
Underground pipelines within the services corridor	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site
Width of services corridor	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)
Airstrip	South west of plant (28.5 hectares)	South west of plant (28.5 hectares)
Deviation of Great Northern Highway	21 hectares	21 hectares
Hematite village	South of plant site (21 hectares) (including camp access track)	South of plant site (21 hectares) (including camp access track)
Magnetite village	West of plant site (40 hectares)	West of plant site (40 hectares)
Power	Electricity from South West Interconnection System grid to supplement gas power station	Electricity from South West Interconnection System grid to supplement gas power station
Additional Mine Haul Roads		**2 hectares**

List of Figures:
Figure 8: Mt Gibson Iron Ore Mine & Infrastructure Project – Mine site layout

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 2 February 2011

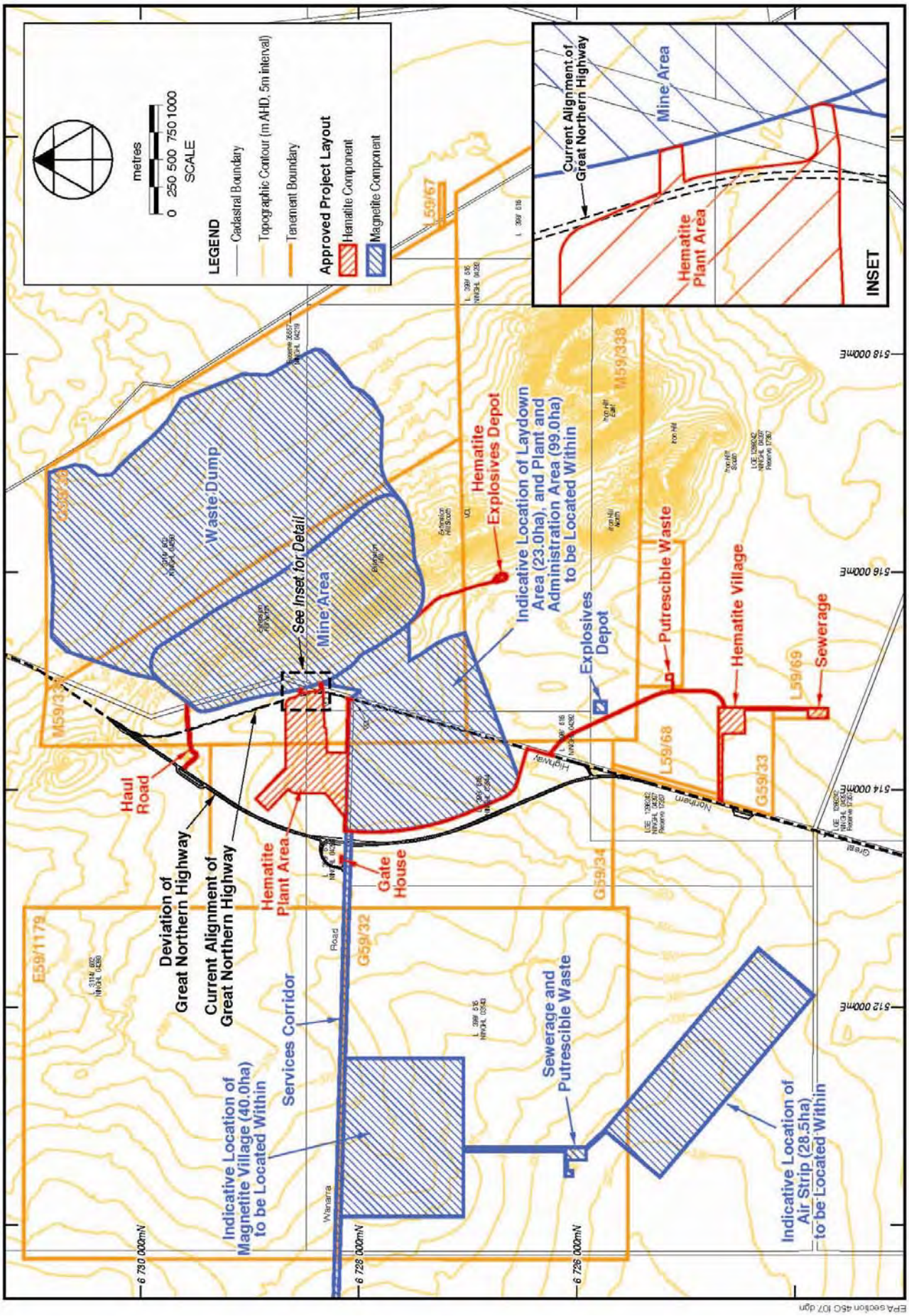


Figure 8: Mt Gibson Iron Ore Mine & Infrastructure Project – Mine site layout

Attachment 6 to Ministerial Statement 753

Change to Proposal

Proposal: Mt Gibson Iron Ore Mine and Infrastructure Project

Proponent: Joint: Mount Gibson Mining Limited and Extension Hill Pty Ltd

Change: Mining rate, clearance increases, and power supply changes. This attachment replaces the key aspects table and updates figures for the proposal.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Project life	Approximately 40 years	Approximately 40 years
Project life - hematite	Hematite project life minimum 5 years	Hematite project life minimum 5 years
Ore quantity	Magnetite approximately 1,000 million tonnes Hematite approximately 13 million tonnes	Magnetite approximately 1,000 million tonnes Hematite approximately **14.9 million tonnes**
Waste Management	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump.	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump
Processing requirements	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite
Mining rate - hematite	Hematite mining rate 3 million tonnes per annum	Hematite mining rate **up to 5 million tonnes** per annum
Size of final pit	Approximately 2,500 metres long and 1,000 metres wide	Approximately 2,500 metres long and 1,000 metres wide
Depth of final pit	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)
Height of waste dump	Not more than 460 metres RL	Not more than 460 metres RL
Dewatering	Approximately 2,500 cubic metres per day	Approximately 2,500 cubic metres per day

Element	Description of proposal	Description of approved change to proposal
Mine water supply	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day • Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings
Vegetation disturbance	Not more than 1,040 hectares at the mine site, including: • 251 hectares mine pit; • 548 hectares waste dump; • 99 hectares magnetite processing; and • 24 hectares temporary laydown area (to be rehabilitated) Not more than 90 hectares along the services corridor	Not more than **1,179 hectares** at the mine site, including: • **mine pit;** • **waste dumps;** • **magnetite and hematite processing areas;** • **temporary laydown areas;** • **deviation of great northern highway;** • **hematite and magnetite villages; and** • **additional haul roads** **Not more than 112 ha along the Services Corridor** **Not more than 39 ha along the Powerline corridor**
Hematite ROM process plant	13 hectares	**Removed – now included in vegetation disturbance**
Underground pipelines within the services corridor	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site

Element	Description of proposal	Description of approved change to proposal
Width of services corridor	• Not more than 15 metres in pastoral section (from Monger's Lake to the mine site) • Not more than 20 metres in the agricultural section (from Geraldton Port to Monger's Lake)	**Not more than 20 metres anywhere along the length of the services corridor where native vegetation is present**
Airstrip	South west of plant (28.5 hectares)	**Removed – will not be implemented**
Deviation of Great Northern Highway	21 hectares	**Removed – now included in vegetation disturbance**
Hematite village	South of plant site (21 hectares) (including camp access track)	South of plant site (including camp access track)
Magnetite village	West of plant site (40 hectares)	**West of plant site**
Power	Electricity from South West Interconnection System grid to supplement gas power station	Electricity from South West Interconnection System (SWIS) grid to supplement gas power station. **Diesel power generation to be used for commissioning and prior to connection to SWIS**
Additional Mine Haul Roads	2 hectares	**Removed – now included in vegetation disturbance**

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

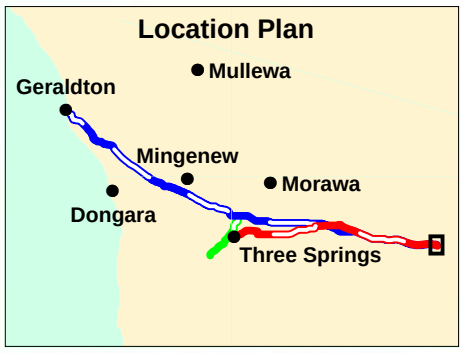
List of current Figures (new figures in bold):

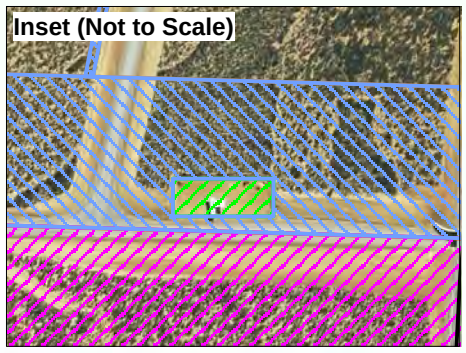
Figure 1: Regional Location
Figure 2: Mt Gibson Ranges and Pit
Figure 4: Location of Services Corridor
Figure 5: Facilities at Geraldton Port
Figure 6: *Darwinia masonii, Lepidosperma* sp. Mt Gibson and Floristic Vegetation Communities at Mt Gibson

Figure 9: Mt Gibson Iron Ore Mine – Revised Mine Layout
Figure 10: Mt Gibson Iron Ore Mine – Revised Services Corridor Map 1
Figure 11: Mt Gibson Iron Ore Mine – Revised Services Corridor Map 2
Figure 12: Mt Gibson Iron Ore Mine – Revised Services Corridor Map 3
Figure 13: Mt Gibson Iron Ore Mine – Powerline Corridor Map 1
Figure 14: Mt Gibson Iron Ore Mine – Powerline Corridor Map 2

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 28 August 2012





COMMUNICATIONS TOWER AND SERVICES

G 59/41

E 59/1179

HEMATITE PLANT AND INFRASTRUCTURE

WASTE DUMP

MINE AREA

G 59/30

SERVICES CORRIDOR

POWER LINE CORRIDOR

G 59/36

L 59/88

L 59/89

Location of Inset

M 59/339-I

MAGNETITE PROCESSING PLANT AND SERVICES

G 59/32

G 59/45

G 59/34

HEMATITE EXPLOSIVES DEPOT

M 59/338-I

MAGNETITE VILLAGE AND SERVICES

E 59/1773

E 59/1223-I

HEMATITE VILLAGE

G 59/40

G 59/33

G 59/42

GREAT NORTHERN HWY

Legend

- APPROVED MAGNETITE DISTURBANCE AREA
- APPROVED HEMATITE DISTURBANCE AREA
- ADDITIONAL s45c MAGNETITE DISTURBANCE AREA
- ADDITIONAL s45c HEMATITE DISTURBANCE AREA
- MINING TENEMENT

N

No.	Date	Revision	Drawn
E	27/07/12	TITLE AMENDED	DJ
D	16/07/12	PLAN SERIES AMENDED	DJ
C	11/07/12	EPA AMENDMENTS	DJ
B	28/03/12	ISSUED FOR CLIENT APPROVAL	MW
A	30/11/11	ISSUED FOR INTERNAL REVIEW	RW

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ISO 9001 FS 520793

250 0 250 500 750

Metres

Scale 1 : 1:30,000 @ A3

Drawn By	RW	30/11/2011

PLEASE REFER TO ASSOCIATED METADATA FILES FOR ACCURACY STATEMENT

EXTENSION HILL

MT GIBSON IRON ORE MINE
REVISED MINE LAYOUT

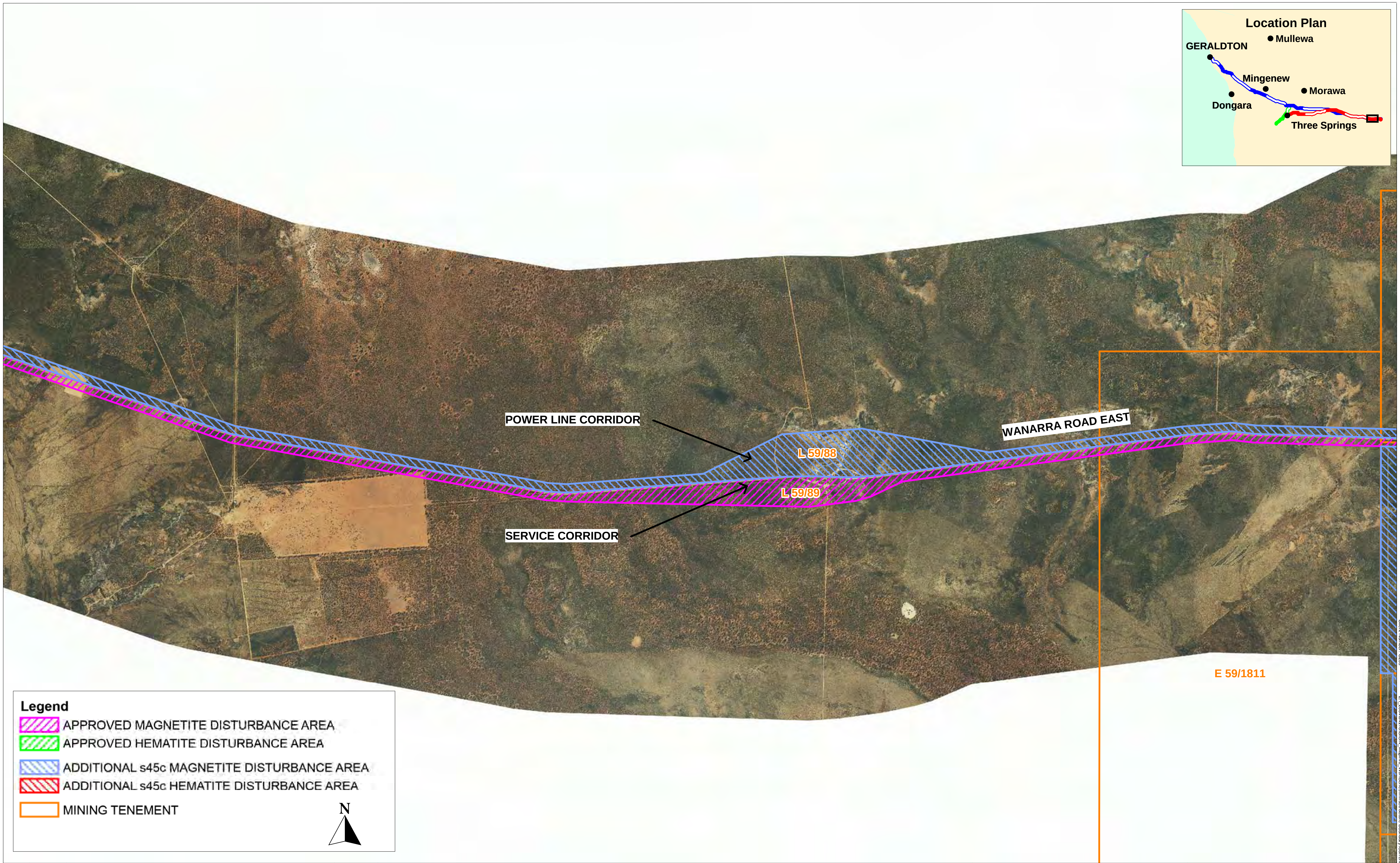
DATUM GDA94
ZONE MGA 50

DRAWING NUMBER
FIGURE 9

REV E
SIZE A3

Client Number: C259

Z:_2004\04478\GIS\4_Mapinfo_Wor\Series\Infrastructure Boundary\Current Revision Plan Number: 11236-G046



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Metres

Scale 1:40,000

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PLEASE REFER TO ASSOCIATED METADATA FILES FOR ACCURACY STATEMENT

EXTENSION HILL

MT. GIBSON IRON ORE MINE
REVISED SERVICES CORRIDOR
MAP 1

DATUM GDA94
ZONE MGA 50

DRAWING NUMBER
FIGURE 10

REV E
SIZE A3

Client Number: C259
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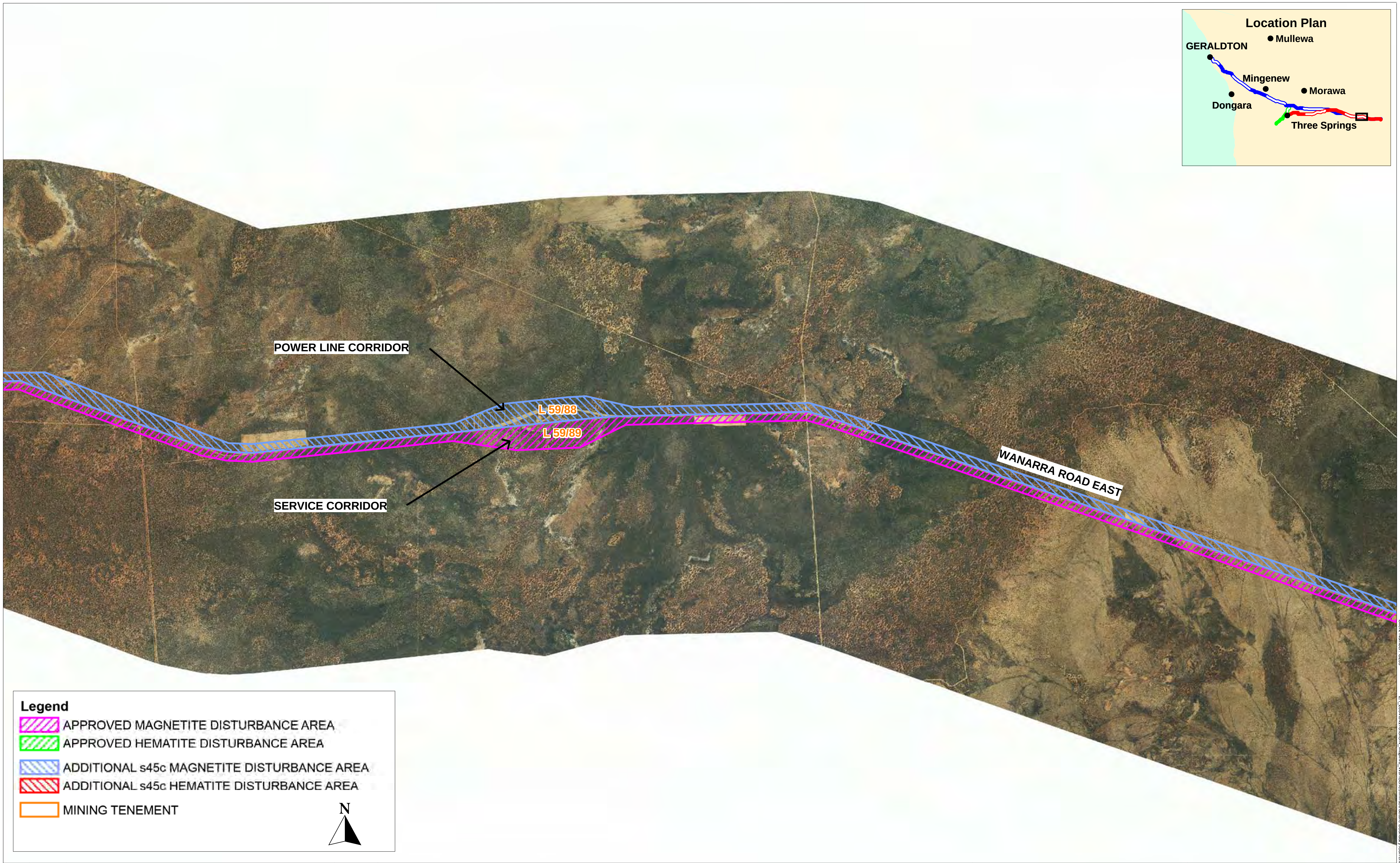
Plan Number: 11236-G047



No.	Date	Revision	Drawn
E	26/07/12	TITLE AMENDED	DJ
D	16/07/12	PLAN SERIES AMENDED	DJ
C	12/07/12	EPA AMENDMENTS	DJ
B	28/03/12	ISSUED FOR CLIENT APPROVAL	MW
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Metres

Scale 1:40,000

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EXTENSION HILL

MT. GIBSON IRON ORE MINE
REVISED SERVICES CORRIDOR
MAP 2

DATUM GDA94
ZONE MGA 50

DRAWING NUMBER
FIGURE 11

REV E
SIZE A3

Client Number: C259

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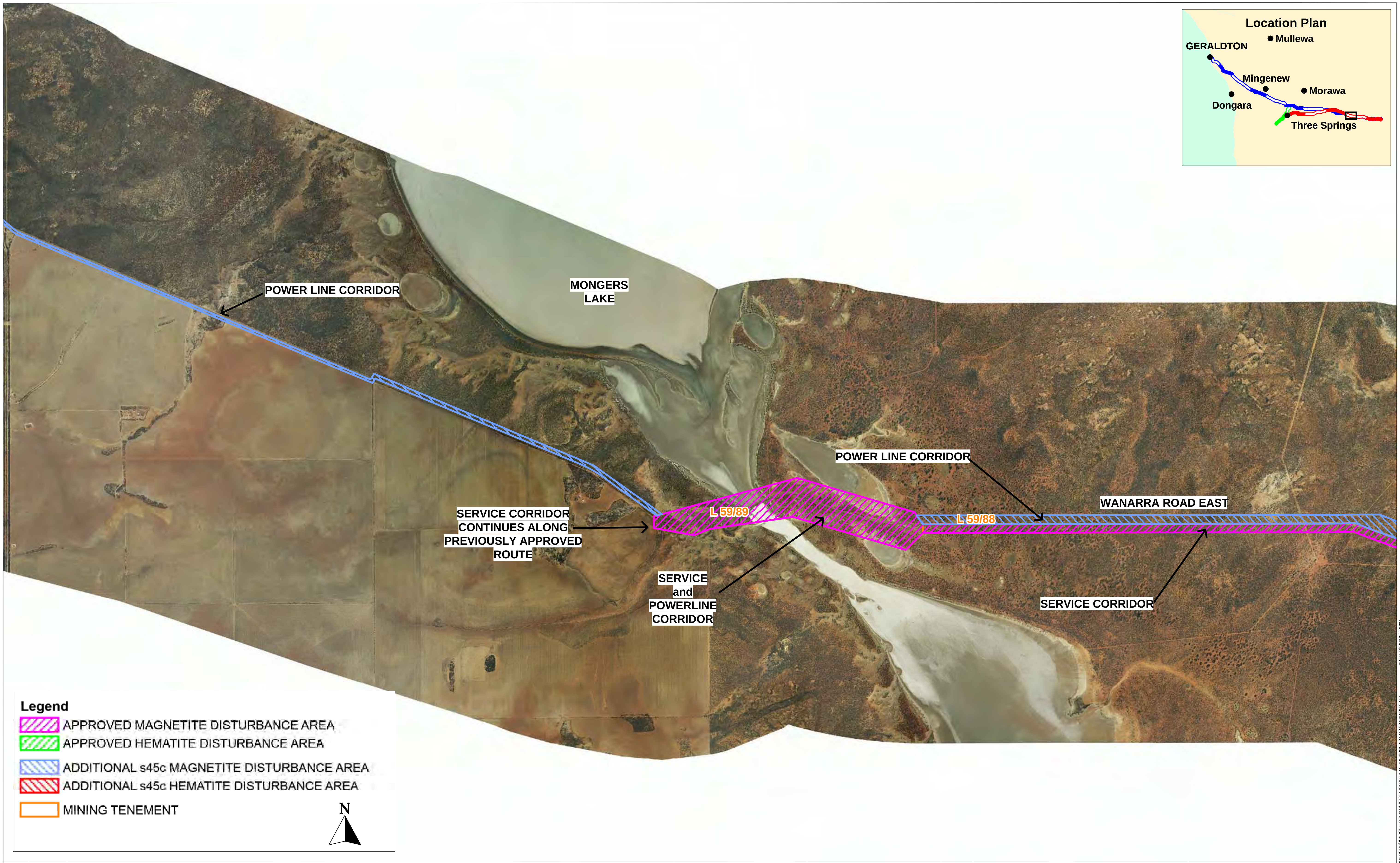
Plan Number: 11236-G048



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Metres

Scale 1:40,000

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EXTENSION HILL

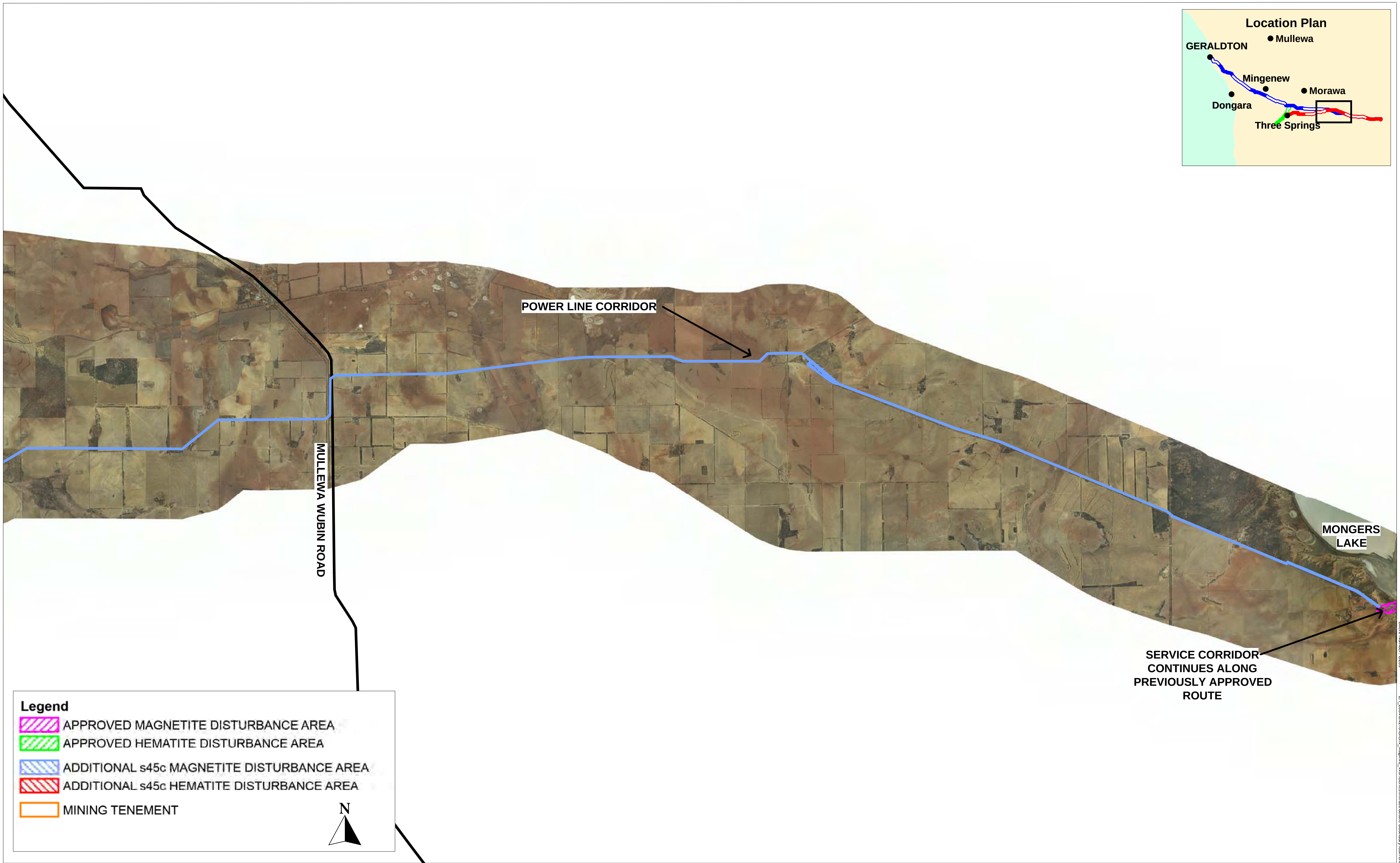
MT. GIBSON IRON ORE MINE REVISED SERVICES CORRIDOR MAP 3

DATUM GDA94 ZONE MGA 50

DRAWING NUMBER FIGURE 12

REV E

SIZE A3



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Kilometres

Scale 1:125,000

Drawn By DJ 16/07/2012

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EXTENSION HILL

MT. GIBSON IRON ORE MINE
POWER LINE CORRIDOR
MAP 1

DATUM GDA94 ZONE MGA 50

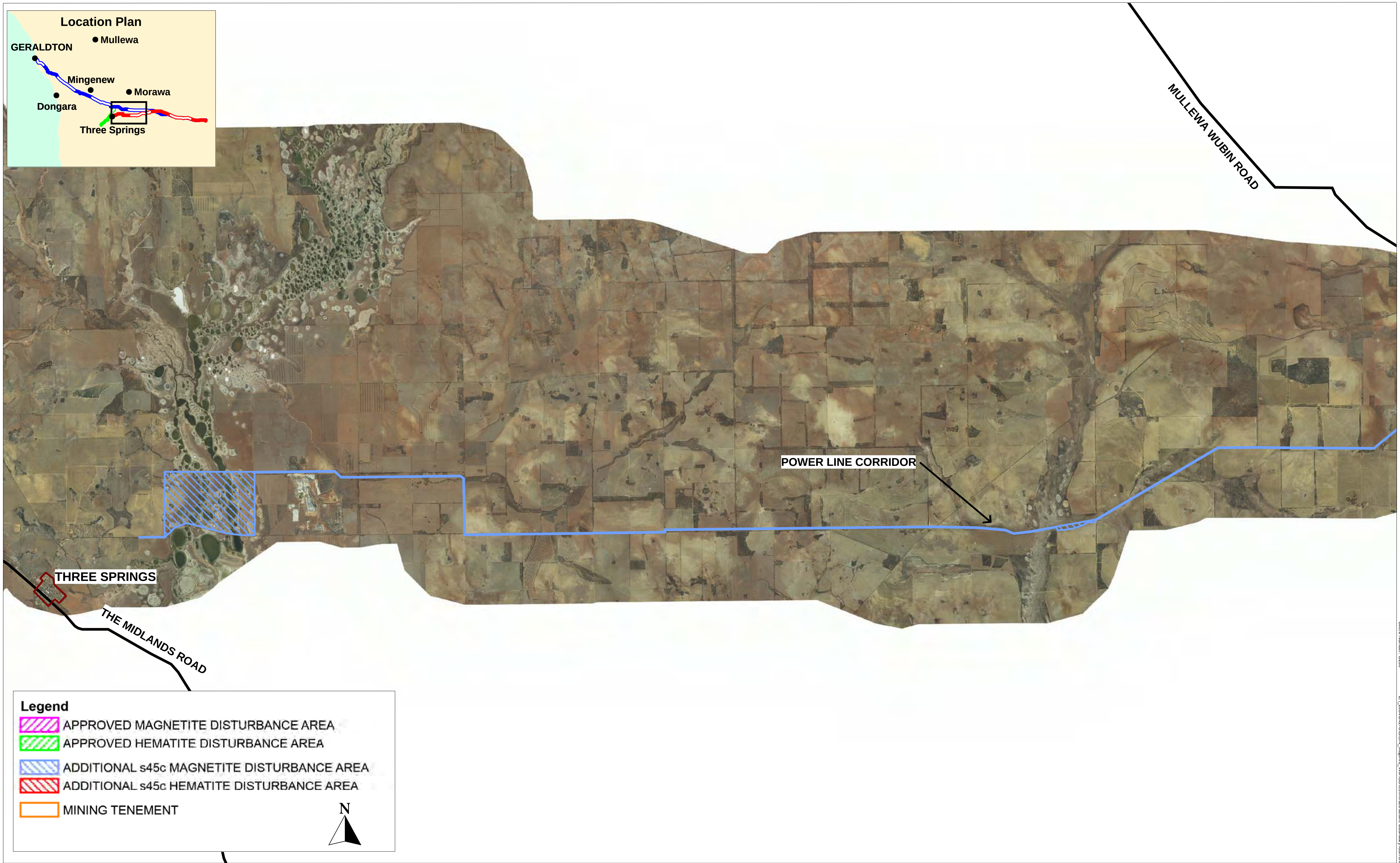
DRAWING NUMBER FIGURE 13

REV B

SIZE A3

Client Number: C259

Plan Number: 11226-G103



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FS 520793

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Kilometres

Scale 1:125,000

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PLEASE REFER TO ASSOCIATED METADATA FILES FOR ACCURACY STATEMENT

EXTENSION HILL

MT. GIBSON IRON ORE MINE
POWER LINE CORRIDOR
MAP 2

DATUM GDA94
ZONE MGA 50

DRAWING NUMBER
FIGURE 14

REV B
SIZE A3

Attachment 7 to Ministerial Statement 753

Change to proposal approved under section 45C of the
Environmental Protection Act 1986

This Attachment replaces the Key Characteristics Table and Figure 9 of Attachment 6 to Ministerial Statement 753

Proposal: Mt Gibson Iron Ore Mine and Infrastructure Project, Shire of Yalgoo

Proponent: Mt Gibson Mining Limited and Extension Hill Pty Limited

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Change:

- Remove the delineation between the hematite and magnetite footprints as outlined in Figure 9 of Attachment 6 to Ministerial Statement 753.

Table 1: Summary of the Proposal

Proposal Title	Mt Gibson Iron Ore Mine and Infrastructure Project
Short Description	To mine and process iron ore from Extension Hill and Extension Hill North, within the Mt Gibson Ranges, construct a pipeline to transport the magnetite slurry to Geraldton Port, and construct infrastructure at the Port to strip the ore from the slurry for export.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Authorised Extent
Project Life	N/A	Approximately 40 years
Project life - hematite	N/A	Hematite project life minimum 5 years
Ore quantity	N/A	Magnetite approximately 1,000 million tonnes Hematite approximately 14.9 million tonnes
Waste Management	N/A	Overburden will be stockpiled in a dump to the east of the pit. Tailings from magnetite processing will be combined with the overburden dump
Processing requirements	N/A	• Dry and wet processing of magnetite to produce approximately 10 million tonnes per annum of magnetite concentrate • Dry processing of hematite
Mining rate - hematite	N/A	Hematite mining rate up to 5 million tonnes per annum
Size of final pit	N/A	Approximately 2,500 metres long and 1,000 metres wide
Depth of final pit	N/A	Not more than 500 metres below the ground level (approximately 370 metres below the groundwater level)
Height of waste dump	N/A	Not more than 460 metres Relative Level (mRL)
Dewatering	N/A	Approximately 2,500 cubic metres per day
Mine Water Supply	N/A	• Dewater for potable and domestic supplies: 80 cubic metres per day • Dewater for dust suppression: 2,055 cubic metres per day

Element	Location	Authorised Extent
		• Process water and slurry transportation water: 5.5 Giga litres per annum from the Tathra borefield (piped 168 kilometres to the mine site) and drying of tailings
Vegetation disturbance	Figure 9	Not more than 1,179 hectares within the Development Envelope at the mine site, including: • mine pit; • waste dumps; • magnetite and hematite processing areas; • temporary laydown areas; • deviation of Great Northern Highway; • hematite and magnetite villages; and • additional haul roads Not more than 112 hectares (ha) along the Services Corridor Not more than 39 ha along the Powerline corridor
Underground pipelines within the services corridor	Figure 9	• Slurry pipeline from the mine site to Geraldton Port • Return water pipelines from Geraldton Port to Three Springs, from Three Springs to the mine site, and from the Tathra Borefield to the return water pipeline near Three Springs • Pumping stations for the water • Gas pipeline from Mine Line Valve 92 on the Dampier-Bunbury Natural Gas Pipeline to the mine site
Width of services corridor	N/A	Not more than 20 metres anywhere along the length of the services corridor where native vegetation is present
Hematite village	N/A	South of plant site (including camp access track)
Magnetite village	N/A	West of plant site
Power	N/A	Electricity from South West Interconnection System (SWIS) grid to supplement gas power station. Diesel power generation to be used for commissioning and prior to connection to SWIS

Figures – All previous Figures in Attachment 6 still apply to the proposal except for Figure 9 of Attachment 6 that is replaced by amended Figure 9:

Figure 9 Mt Gibson Iron Ore Mine and Infrastructure Project – Mine Site Layout

Coordinates defining the Development Envelope and Disturbance Footprint for Mt Gibson Iron Ore Mine and Infrastructure are held by the Office of the Environmental Protection Authority (Document Reference Numbers: 2016-1481254769652 and 2016-1481254772378, respectively).

[Signed 14 December 2016]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

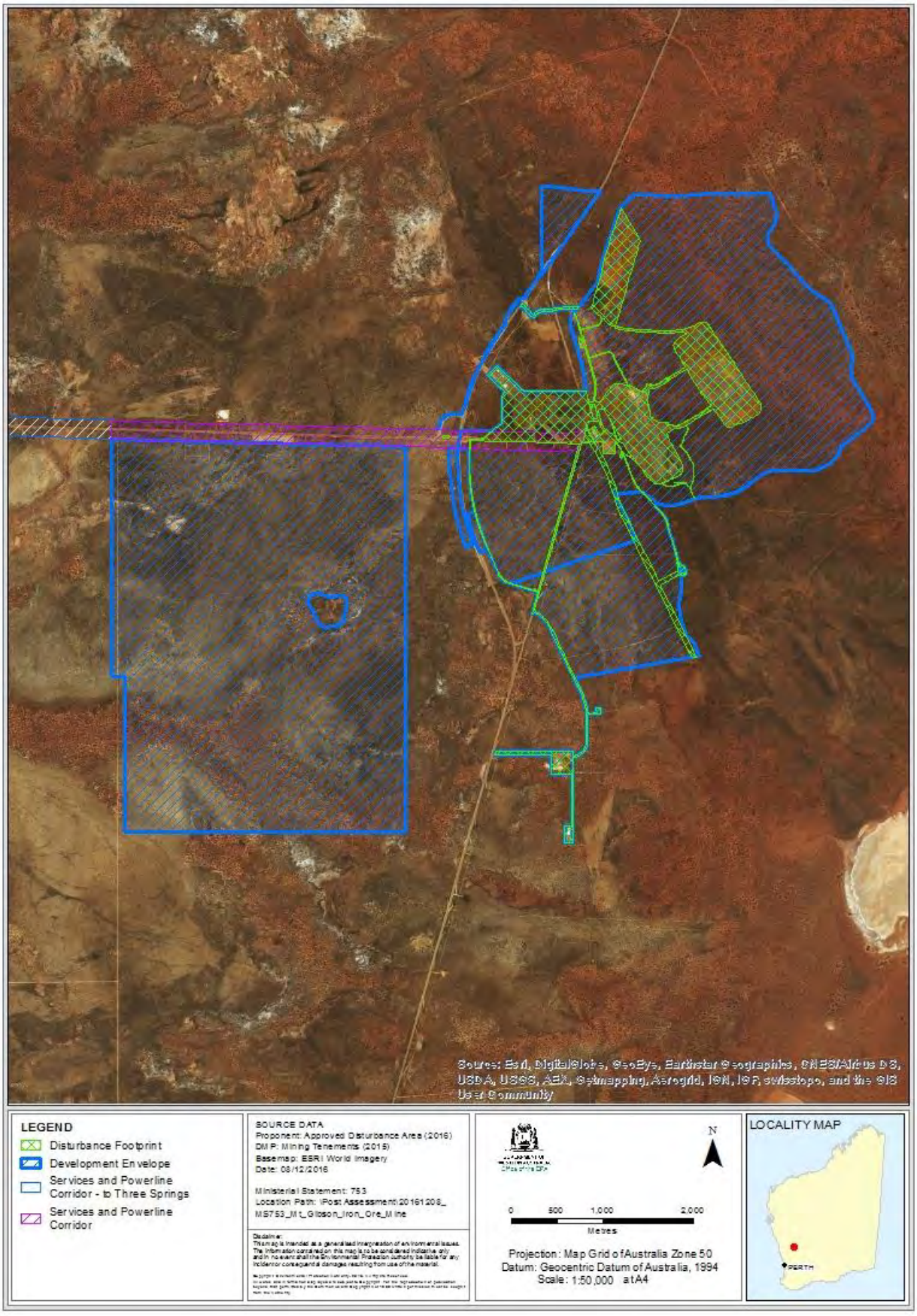

Figure 9: Mt Gibson Iron Ore Mine and Infrastructure Project – Mine Site Layout

Appendix C

Exploration Environmental Management Plan

Asia Iron Australia

EXPLORATION ENVIRONMENTAL MANAGEMENT PLAN

February 2023

10-800-EN-PLN-0024

Rev	Document Number	Date	Description	Author	Approved
2	10-800-EN-PLN-0024	07/02/2023	Exploration EMP	W Ennor	S Nair

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1 INTRODUCTION

This Exploration Environmental Management Plan (EEMP) outlines environmental management to be implemented to ensure exploration activities undertaken by Asia Iron Australia (AIA). AIA comprises of the following companies: Extension Hill Pty Ltd, MGM Pipelines Pty Ltd and Westralian Iron Pty Ltd.

From time to time, additional controls may be imposed through regulatory instruments used to approve exploration activities. This EEMP allows for additional controls to be implemented as required based on the outcome of risk assessments or as imposed by regulatory instruments.

2 REGULATORY REQUIREMENTS

All AIA employees and contractors are required to comply with the requirements of this EEMP. Amendments to the EEMP must be approved by the AIA Exploration Manager or delegated person. In addition, all AIA and contractor activities are required to comply with State and Commonwealth legislation. Relevant legislation and regulations include, but are not limited to:

- *Environmental Protection Act (1986)* – WA;
- *Environmental Protection (Clearing of Native Vegetation Clearing) Regulations 2004* – WA;
- *Biodiversity Conservation Act 2016* – WA;
- *Environment Protection and Biodiversity Conservation Act 1999* – Commonwealth;
- *Mining Act 1978* – WA; and
- *Aboriginal Cultural Heritage Act 2021* – WA.

There are a range of regulatory instruments that may be directly relevant to a proposed exploration programme and the requirements of these instruments must be checked and understood by all parties involved in field activities. Regulatory approvals include, but are not limited to:

- *Native Vegetation Clearing Permit;*
- *Programme of Work (PoW);*
- *Aboriginal Heritage (Section 18) notice;*
- *Section 26D bore construction and 5C groundwater abstraction permit;*
- *Ministerial Statement;*
- *Mining Proposal; and*
- *Tenement conditions.*

Aboriginal heritage agreements must also be complied with, as must any agreements made with landowners or pastoral lease holders relating to access and agreed activities approved on land.

3 ROLES AND RESPONSIBILITIES

All exploration activities are under the direct control of the Registered Exploration Manager, or an approved delegate, for each AIA owned company (Extension Hill Pty Ltd, AP Mining Pty Ltd, MGM Pipelines Pty Ltd, Westralian Iron Pty Ltd and Austral Iron Pty Ltd).

The EHPL site supervisor is responsible for ensuring that the earthmoving and drilling crew operate in compliance with this plan.

4 RISK MANAGEMENT

4.1 RISK ASSESSMENT

All exploration programs require an assessment of environmental risk as part of the AIA permit assessment process.

Common exploration related risks are documented in the Asia Iron Australia Resource Development Functional Risk Register (document number 01-100-RI-LIS-0001).

Specific environmental risks are listed below and should be considered in all risk reviews undertaken prior to implementing exploration programs.

5.1.1 Unauthorised Ground Disturbance

Ground disturbance can result in permanent changes to surface water flows, flora and vegetation and can directly impact on fauna.

Unauthorised ground disturbance also carries significant risk in relation to potential impacts on Aboriginal Heritage sites.

5.1.2 Fire

Fire presents a significant threat to personnel, flora and vegetation, fauna and assets. Fire can also significantly impact the habitat of terrestrial fauna and may cause increased competition for limited resources.

5.1.3 Weeds

Environmental weeds have potential to establish, reproduce and disperse resulting in serious impact to surrounding flora and vegetation, fauna habitat and rehabilitated areas. Weeds can displace native plants by competing for resources (water, nutrients, light, etc.) and may increase fire risk. In addition, weeds can also have a significant adverse impact on fauna habitat.

Weeds can be prevalent in exploration areas, particularly on farmland, therefore stringent weed hygiene protocols must be implemented to prevent their spread during construction and rehabilitation activities.

5.1.4 Excavations

During the period that an excavation (sump) is left open, there is a potential risk to fauna through entrapment or, where water is present, drowning. Whilst sumps are open, at least one end is to be ramped (to approximately 10 degrees) to allow egress of fauna.

5.1.5 Introduced fauna

An increase in human activity is often associated with an increase in introduced fauna species. Access to water must be controlled as must the disposal of any food waste that may encourage introduced species.

5.1.6 Dust Generation

The impacts arising from dust deposition generated from exploration activities on the foliage of adjacent flora must be minimised with adequate dust control.

4.2 INSPECTION AND AUDIT

Periodic inspection and audit will be undertaken of exploration activities to assist with managing risk.

Inspection checklists are included in the Exploration Field Procedures Manual for:

- Management of groundwater;
- Management of waste;
- Weed and fire management;
- Topsoil management;
- Cleared vegetation management; and
- Post drilling clean-up.

Inspection of all rehabilitated drilling sites will include:

- The standard of rehabilitation;
- Compliance with the conditions of approval/s;
- GPS recording of disturbance areas;
- Photographic record of rehabilitation undertaken;

for inclusion in the DMIRS Exploration rehabilitation reports.

4.3 INCIDENT MANAGEMENT

All incidents will be recorded and reported via the AIA Incident Reporting form. Environmental incidents that must be reported include, but are not limited to:

- Unauthorised clearing;
- Impacts on any avoidance sites;
- Death of native fauna;
- Contamination of ground or surface water;
- Breach from containment sumps;
- Major erosion of access tracks;
- Fires;
- Hydrocarbon or chemical spills;
- Incorrect disposal of waste;
- Non-compliance with issued regulatory permits; and
- Unauthorised access to any station, tenement or farm.

5 ENVIRONMENTAL REQUIREMENTS

5.2 GROUND DISTURBANCE

A Ground Disturbance Permit (GDP) is required prior to conducting work that will in anyway changeor disturb the ground surface. The ‘ground surface’ includes undisturbed areas, rehabilitated areasand all areas for which there is not a current GDP in place that covers the specific activity being undertaken.

The following related form must be used as part of the GDP Procedure:

- Ground Disturbance Request Form EHP-910-EV-FRM-0001

5.3 CLEARING OF VEGETATION AND TOPSOIL

5.3.1 Planning

All exploration activities must be planned in a way that minimises the requirement for vegetation clearing and impacts to fauna. While reducing impacts to flora, vegetation and fauna are important, planning must also consider safety and the requirement to obtain optimal geological information/data as a priority.

Every effort must be made to locate access tracks to work around large trees and dense vegetation wherever possible. Pre-existing tracks and previously disturbed areas must always be used in preference to new clearing. Pads and tracks should be located along contours where practicable to reduce the area of clearing and erosion risk.

5.3.2 Vegetation Clearing

Vegetation clearing must be undertaken in accordance with an approved GDP which will incorporate the requirements of an approved Native Vegetation Clearing Permit and ensure that protected flora and heritage sites are demarcated on site.

Threatened flora must be flagged and a 50m clearing buffer applied unless a Native Vegetation Clearing Permit and permit to take flora are in place. Areas associated with these species must be demarcated prior to the commencement of any work.

5.3.3 Topsoil and Vegetation

Topsoil and vegetation should be removed from all excavated areas and drill pads where possible for use in rehabilitation post drilling. Topsoil should be pushed aside to a depth of up to 100 mm where available.

Topsoil should not be removed from access tracks if possible. Tracks should be cleared blade up wherever possible and vegetation pushed aside for return during rehabilitation works. Any topsoil that contains weeds must be segregated and will be quarantined from use in general rehabilitation.

Topsoil must be replaced on disturbed areas in accordance with the Rehabilitation section 5.8 of this management plan. Vegetation should be stockpiled separately where possible and returned to the rehabilitated area. This will facilitate the return of seeds, provide habitat for fauna and reduce erosion.

5.4 WEED HYGIENE

Refer to the Vehicle and Mobile Equipment Weed Hygiene Form 01-912-EN-FRM-0002_0

5.5 ACCESS TRACKS, DRILL PADS AND SUMPS

5.5.1 Access Tracks

Access tracks will be constructed to the minimum safe working width possible. Track width must be adequate for the size and weight (up to 40 tonnes) of fully laden exploration trucks.

Access tracks must incorporate an adequate turning radius for exploration drill rigs and trucks as well as safe turn around areas that allow for safe evacuation if required in bushfire risk areas.

Tracks should be located along contours where practicable to reduce erosion risks.

5.5.2 Drill Pads

Drill pads (and tracks) must be designed and constructed to the minimum safe working size (in consultation with the drilling contractor if possible). The pad must include an area to stockpile topsoil and vegetation and accommodate sumps if required.

Wherever possible, drill pads should be located in areas that are flat and require minimal or no ground disturbance or vegetation clearing. Drill pads must also be situated away from watercourses with a minimum 20 metre separation distance.

Within six months of completion of the program, the pads are to be re-contoured into the surrounding landscape with any cut and fill material. Topsoil and vegetation is then to be evenly distributed over the pad. Figure 1 shows the general process of drill pad construction and rehabilitation.

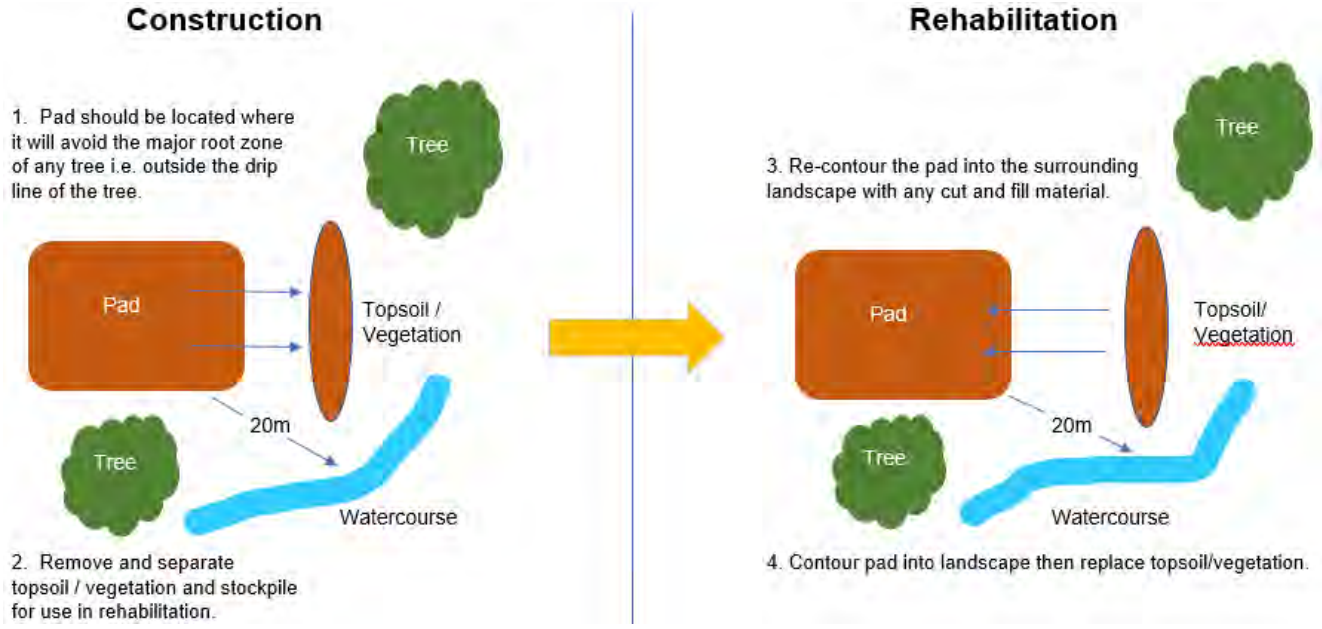

Figure 1: Drill pad construction and rehabilitation.

5.5.3 Sumps

Sumps should be located away from significant vegetation (large trees or stands of dense scrub) where possible, to minimise disturbance to roots and prevent horizontal transmission of saline water and potentially hostile material coming into contact with vegetation.

Sumps must be of an appropriate size to accommodate the volume of the water/ sedimentintercepted to ensure containment. All material intercepted whilst drilling must be directed to the sump excluding drill samples. Whilst sumps are open, at least one end is to be ramped (to approximately 10 degrees) to allow fauna to escape.

Within six months of completion of operations, the sumps are to be backfilled with excavated material. All drill cuttings and waste samples can be buried within sumps or removed from site. General rubbish must not be buried in sumps**.** Figure 2 shows the process of sump construction and rehabilitation.

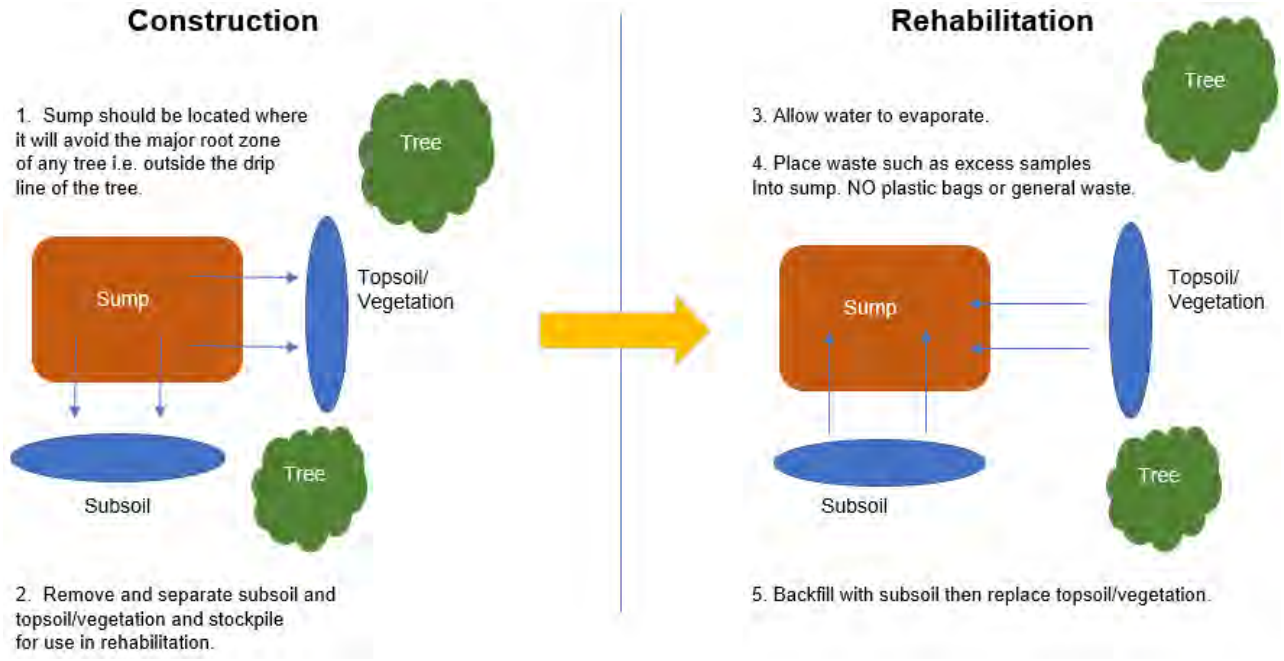

Figure 2: Drill sump construction and rehabilitation.

5.6 DRILLING WATER MANAGEMENT

Water used or encountered during drilling activities must be suitably contained.

Before drilling commences, suitably sited and sized sumps will be constructed for diamond drillholes (DD) and all reverse circulation (RC) drilling in areas where water is likely to be encountered.

The electrical conductivity (EC) of the water will be measured using a meter to determine salinity levels. If identified as being potentially harmful to vegetation (approx. 9000 micro siemens/cm or 4,500ppm TDS) water must not be allowed to contact vegetation.

Drilling must be suspended if the groundwater is assessed as harmful to vegetation or is present in significant amounts, until appropriate management can be put in place.

5.7 HYDROCARBONS AND CHEMICALS

5.7.1 General Requirements

Material Data Sheets (MDS) will be available for all chemicals used on site. Handling, use and storage of chemicals will be compliant with the relevant MDS;

Hydrocarbons and chemicals will be stored, used, and transported in accordance with *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*. DMIRS have produced a guide which covers the requirements of the regulations and is available on their website.

5.7.2 Disposal

Empty drum and containers must be periodically removed from site and disposed or recycled.

Hydrocarbons and oily wastes (e.g. fuels, greases, de-greaser, emulsified oils and oily waste-water) generated on site, must be captured and stored for removal from site for safe disposal or recycling.

Contaminated soil will be collected and removed from site for disposal and treatment at an appropriate facility.

5.8 WASTE

All waste generated at the exploration site must be removed at the completion of drilling and must be securely contained whilst drilling activities are in progress.

If sample bags are used in drilling, they must be secured to prevent their loss to wind gusts. Any bags that become wind borne will be retrieved immediately (as well as any other windblown litter).

Prior to drill pad rehabilitation, sample bags can be emptied into sumps during rehabilitation.

5.9 SITE REHABILITATION

5.9.1 Drill Pad and Track Rehabilitation

Cut and fill pads and tracks should be re-contoured into the surrounding landscape. Erosion control measures such as ripping on the contour should also be implemented to prevent erosion and loss of rehabilitation material.

Within six months of the completion of the approved drilling programme:

1. Temporarily cap or plug the drill hole immediately on completion of drilling the hole.
2. Remove or cut drill collars off at approximately 40cm below surface.
3. Insert a tight fitting permanent plug in the drill hole (preferably a conical concrete plug).
4. Tamp plug to ensure that it fits securely into the drill hole collar.
5. Backfill drill hole to the surface, with low permeability material e.g. clay / oxide drill cuttings.
6. Mound over the backfilled hole to facilitate water shedding away from the drill hole (with low permeability material if available) approximately 20cm high by 80cm wide and then cover with topsoil.
7. Remove survey pegs and dispose of all rubbish.
8. Non-hazardous drill samples (excluding plastic sample bags) may be emptied into sumps prior to backfilling.
9. Remove and suitably dispose of all sample bags. Drill samples must be retained in approved (designated) areas.
10. Backfill all sumps with excavated subsoil.
11. Rip and/or contour all drill pads and tracks into the surrounding landscape.
12. Replace topsoil.
13. Cover with cleared vegetation and, where required, seed with suitable local native flora species.

Figure 3 shows how to plug and rehabilitate a drill hole. Figure 4 shows the final rehabilitation profile of a drill hole.

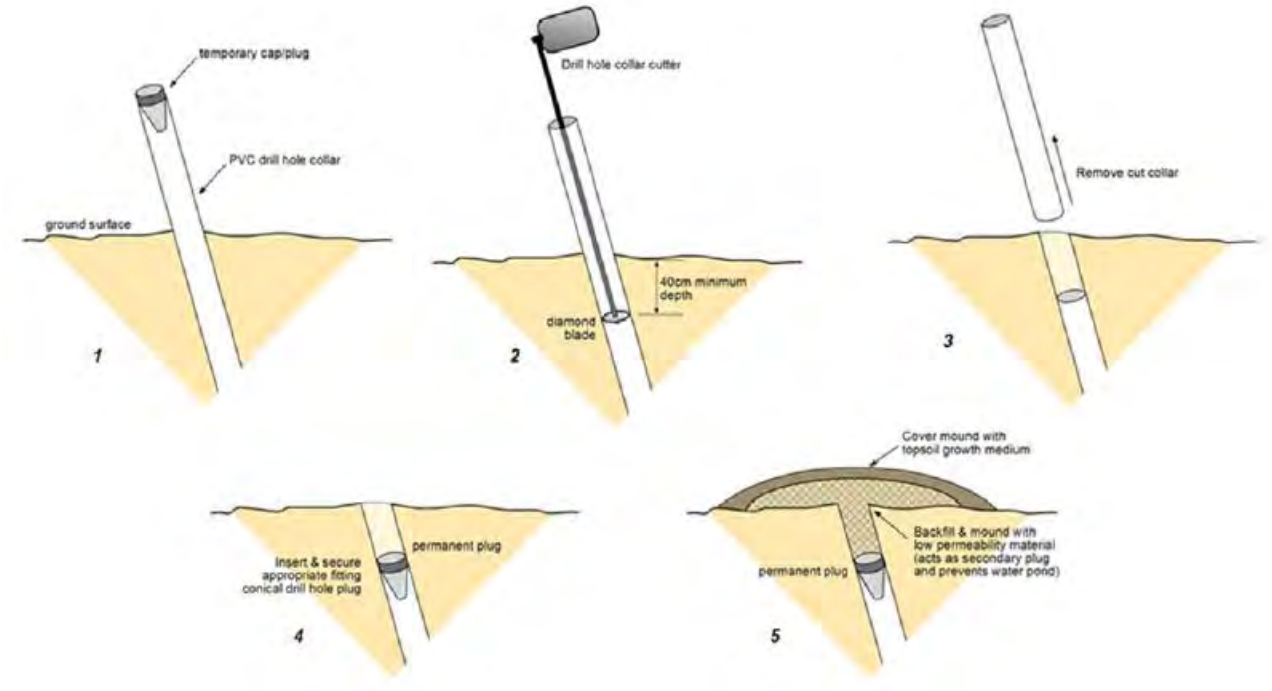

Figure 3: Drill hole rehabilitation process

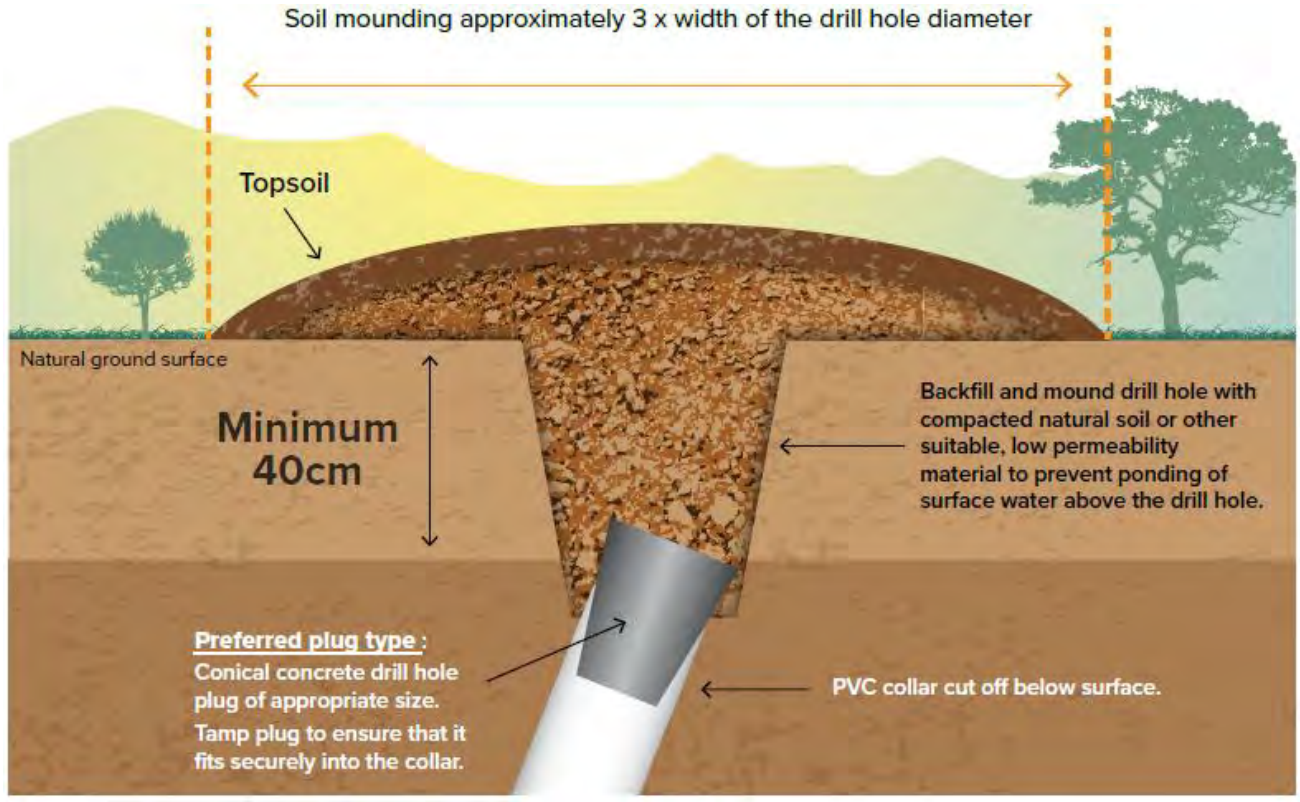

Figure 4: Drill hole rehabilitation profile

Cut and fill drill pads and access tracks are required to be re-profiled back into the natural hillside/terrain, to create a long term safe and stable landform which supports self-sustaining vegetation comprising of suitable local native flora species.

5.9.2 Rehabilitation Register

Failure to rehabilitate ground disturbance within required timeframes constitutes a breach of tenement conditions. It is therefore important to track approvals and progress towards meeting rehabilitation requirements, as well as maintain spatial data that tracks disturbed and rehabilitated areas.

Information recorded in the rehabilitation register includes:

- Tenement number;
- PoW registration ID;
- Date of approval;
- PoW purpose (e.g. tracks, drill pads, sumps);
- Date disturbance commenced;
- Date disturbance finished;
- Disturbance area approved (ha);
- Area disturbed (ha);
- Number of drill holes approved;
- Number of drill holes completed;
- Date rehabilitation commenced;
- Rehabilitation area (ha);
- Date rehabilitation completed;
- Rehabilitation activities undertaken e.g. holes plugged, collars cut, scarifying, topsoil and vegetation respread;
- Shape files of actual disturbance; and
- Shape files of rehabilitated area.

The rehabilitation register is maintained by the Environment Manager.

5.10 POST REHABILITATION

5.10.1 Inspection and Audit

At the completion of rehabilitation the area will be photographed and the location of the photograph logged as a GPS coordinate.

The area of rehabilitation will be recorded via hand-held GPS and corner coordinates logged.

All data will be collated for inclusion in the annual exploration rehabilitation report submitted to DMIRS and any related reporting required under a Native Vegetation Clearing Permit.

5.10.2 Rehabilitation Reports

A rehabilitation report should be submitted to DMIRS when rehabilitation works have been completed, or otherwise upon request by DMIRS. If required by a tenement condition, a rehabilitation report must be provided to DMIRS upon request. Progressive rehabilitation reports can also be submitted to DMIRS when relevant.

A rehabilitation report can be completed using the template provided on the DMIRS website.

Useful attachments to a rehabilitation report include a map or shapefiles of activities and rehabilitation conducted, photographic evidence of rehabilitation, and photos of the rehabilitated area pre-disturbance

Information to be provided in a rehabilitation report should include the following:

- Tenement;
- Tenement holder;
- PoW registration ID;
- Hole ID/drill collar ID;
- Program name/code;
- Drilling type (e.g. RC, DD, AC, etc.);
- GPS coordinates/spatial data;
- Disturbance start date;
- Disturbance end date;
- Rehabilitation completed (Y/N);
- Drill collar cut (Y/N);
- Rehabilitation earthworks complete (Y/N);
- Rehabilitation completion date; and
- Comments (including rehabilitation activities undertaken, evidence demonstrating rehabilitation has been undertaken.