ENVIRONMENTAL SCOPING DOCUMENT

PROPOSAL NAME:	**Mt Gibson Range Mine Operations – Iron Hill Deposit**
ASSESSMENT NUMBER:	**2034**
LOCATION:	**Approximately 90 kilometres east-south-east of the town of Perenjori**
LOCAL GOVERNMENT AREA:	**Shire of Yalgoo**
PROPONENT:	**Mount Gibson Mining Limited**
PUBLIC REVIEW PERIOD:	**6 weeks**

1. Introduction

The above proposal is being assessed by the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986* (EP Act) at the level of Public Environmental Review (PER). This Environmental Scoping Document (ESD) sets out the requirements for the environmental review of the proposal. The purpose of the ESD is to:

- provide proposal-specific guidelines to direct the proponent on the preliminary key environmental factors or issues that are to be addressed during the environmental review and preparation of the environmental review report;
- identify the work that needs to be carried out; and
- identify timing of the environmental review.

The proponent must conduct the environmental review in accordance with this ESD and then report to the EPA in an environmental review report (PER document). As well as the proposal-specific requirements for the environmental review identified in this ESD, the PER document must also address the generic information requirements listed in section 10.2.4 of the EPA's *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012*. When the EPA is satisfied that the PER document adequately addresses both of these requirements, the proponent will be required to release the document for a public review period of 6 weeks.

This ESD has been prepared by the EPA in consultation with the proponent, decision-making authorities and interested agencies consistent with EPA Environmental Assessment Guideline (EAG) 10 – *Scoping a proposal*. ESDs prepared by the EPA are not subject to public review. The ESD will be available on the EPA website (www.epa.wa.gov.au) upon finalisation and must be appended to the PER document.

2. Background

There has been a review of the environmental values in the Mt Gibson area and an assessment by the EPA, which are relevant to the current proposal.

The current proposal to mine the Iron Hill deposit is located in the Mt Gibson Range. The range is part of a cluster of high biodiversity and high conservation significant Banded Iron Formation (BIF) ranges of the Midwest region in the Yilgarn Craton. This is reflected in the 2007 *Strategic Review of the Conservation and Resource Values of the Banded Iron Formation of the Yilgarn Craton* (BIF Strategic Review). The BIF Strategic Review provides valuable assistance to the EPA and government agencies through the availability of background information and guidance for environmental assessment. While some of the information within this document is now dated, information on the biodiversity of BIF ranges released since 2007 largely reinforces the basic understanding of the distribution of key BIF range values reported in the BIF Strategic Review. The PER assessment for the Iron Hill proposal will provide further information about the biodiversity values.

The proposal is located 3 kilometres (km) to the south of the existing approved Mount Gibson Iron Ore Mine and Infrastructure Project, for which Mount Gibson Mining Limited (MGX) and Extension Hill Pty Ltd are joint proponents. The project was assessed by the EPA in November 2006 (EPA Report no. 1242). The project is to mine iron ore (hematite and magnetite) from Extension Hill and Extension Hill North, which are located in the Mt Gibson Range and to transport the ore to the Port of Geraldton for export. The project also included the construction of mine site infrastructure, such as ore processing facilities, haul roads and a mine camp. The EPA's assessment of that project found that restricted floristic vegetation communities and the following two plant species would be significantly impacted from vegetation clearing for the mine site.

1. *Darwinia masonii*; a shrub that predominantly occurs on the slopes, crests and ridges of the hills within the Mt Gibson Range. It is declared as Rare Flora (DRF) under the *Wildlife Conservation Act 1950* (WC Act) and is ranked as Vulnerable under the International Union for Conservation of Nature (IUCN) 2001 criteria D2. It is also listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.
2. *Lepidosperma gibsonii;* a sedge that is located on the slopes and gullies within the Mt Gibson Range and on the surrounding land. *L. gibsonii* is a DRF and is ranked as Vulnerable D2 under the IUCN criteria.

The EPA recommended to the Minister for Environment (EPA 2006) that the Extension Hill project should only proceed if, prior to ground-disturbing activities:

- the remaining ridges of the BIFs in the Mt Gibson area with sub-populations or suitable habitat for *Darwinia masonii* and *Lepidosperma gibsonii* and suitable habitat for the remaining floristic vegetation communities (that is, Extension Hill South, Iron Hill North, Iron Hill South, Iron Hill East, Mt Gibson and Mt Gibson South) are protected in the formal conservation state, as a class A nature reserve, exempt from any exploration or mining activity; and

- adequate management resources are provided to ensure that threatening processes on the remaining plant populations and restricted vegetation within the reserve are mitigated.

The Minister for Environment approved the proposal (Ministerial Statement 753) and together with the then Minister for Resources agreed that the southern ranges of Mt Gibson and Mt Gibson South require secure long term protection and should be reserved as a class A nature reserve to conserve the flora species and floristic communities of the ranges. The Minister for Environment also stated that the central ridges, including Iron Hill, would continue to be protected through the provisions of the EP Act, notably formal assessment provisions under Part IV[1]. Consultation has commenced with the relevant government agencies, native title bodies and land owners and managers in relation to the recommended nature reserve. The current proposal is within proximity, but does not extend into the recommended reserve.

Ministerial Statement 753 also includes a condition for offsets that addresses the proponent's responsibility in the environmental management of the Mt Gibson Range in general.

Post-assessment changes to the Extension Hill proposal under section 45C of the EP Act have occurred for Statement 753. The Iron Hill proposal is also related to the Extension Hill Hematite Haulage Road and Rail Siding project, which was approved under Ministerial Statement 786 and for which MGX is the proponent.

3. The proposal

The subject of this ESD is a proposal by MGX to mine hematite ore from the Iron Hill deposit, located within the Mt Gibson Range. The regional location of the proposal is shown in Figure 1. Figure 2 shows the Mt Gibson Range, with the location of the current proposal at Iron Hill and the approved mining operations at the Extension Hill deposits. The development envelope of the proposal is delineated in Figure 3.

The key characteristics of the proposal are set out in Table 1, in accordance with EAG 1 – *Defining the key characteristics of a proposal.* It should be noted that the key proposal characteristics may change as a result of implementation of the mitigation hierarchy by the proponent on account of the findings of studies and investigations conducted as part of the environmental review.

Table 1 Key Proposal Characteristics

Summary of the proposal	
Proposal title	Mt Gibson Range Mine Operations – Iron Hill Deposit
Proponent name	Mount Gibson Mining Limited
Short description	To mine hematite ore from the Iron Hill deposit, located within the Mt Gibson Range.

[1] Minister for the Environment, Appeal Decision Report. Appeal Number 426-457 of 2006.

	The proposal is located approximately 90 km east-south-east of the town of Perenjori in the Shire of Yalgoo, Western Australia. The proposal includes: • an open cut mine; • waste rock landform for the disposal of waste rock excavated from the mine; • support infrastructure, such as rehabilitation stockpiles (vegetation, topsoil and subsoil for post-mining rehabilitation), internal mine roads, water storage dams, workshop and maintenance facilities.

Physical Elements		
Element	**Location**	**Proposed Extent**
Mine	Figure 3	Clearing no more than 16 ha of native vegetation within the development envelope of 75 ha.
Waste rock landform	Figure 3	Clearing no more than 29 ha of native vegetation within the development envelope of 75 ha.
Support infrastructure	Figure 3	Clearing no more than 30 ha of native vegetation within the development envelope of 75 ha.

Table 1 and Figure 3 shows that the physical elements of the proposal cover the entire development envelope. Therefore, it is important that the proponent accurately evaluates all elements of the proposal to ensure that they fit within the development envelope.

The current proposal to develop the Iron Hill deposit will use the ore beneficiation (crushing, screening and ore stockpiles) and haul road transport corridors within the development envelope under Ministerial Statement 753 and the road and rail infrastructure under Ministerial Statement 786 to the extent necessary.

The proposal requires clearing of no more than 75 hectares (ha) of native vegetation. The proposal occurs on BIF landform units within the Mt Gibson Range and within the Priority 1 ecological community (PEC) 'Plant assemblages of the ridgelines and hilltops of the Mt Gibson Ranges (including Mt Gibson, Iron Hill and Extension Hill)'.

The recorded locations of *Darwinia masonii* and *Lepidosperma gibsonii* and the extent of the PEC are shown in Figure 4.

The proposal would require groundwater abstraction to supply water for dust suppression. The proposal does not require dewatering because the proposed mining of hematite would take place above the groundwater table.

4. Preliminary key environmental factors and scope of work

The key proposal characteristics in Table 1 have informed the identification of the preliminary key environmental factors for the proposal, in accordance with EAG 8 – *Environmental principles, factors and objectives*. The preliminary key environmental factors for this proposal and the EPA's objective for each of those factors are identified in Table 2.

To provide context to the preliminary key environmental factors, Table 2 also identifies the aspects of the proposal that cause the factors to be key factors, and the potential impacts and risks likely to be relevant to the assessment. All of this in turn has informed the work required to be conducted in the environmental review.

Finally, Table 2 identifies the policy documents that establish how the EPA expects the environmental factors to be addressed in the environmental review and the PER document that follows. Impacts associated with the proposal are to be considered at a local and regional scale, including evaluation of cumulative impacts. Details of proposed management/mitigation measures should also be provided. This includes whether environmental offsets are required by application of the mitigation hierarchy, consistent with the Government of Western Australia (2014) WA Environmental Offsets Guidelines.

Table 2 Preliminary key environmental factors and required work

Landforms	
EPA objective	To maintain the variety, integrity, ecological functions and environmental values of landforms.
Relevant aspects	Mining, construction of a waste rock dump and construction of support infrastructure have the potential to alter the landforms.
Potential impacts and risks	The landform is the Mt Gibson Range, which comprises of different landform units (Extension Hill ridges, Iron Hill ridges, Mt Gibson ridges and Gibson ridges). The proposal has the potential to alter part of this landform. The potential impacts of the proposal include: • impacts to the variety, ecological integrity (intactness) of the landform features and the ecological function and environmental values it supports, either temporarily or permanently; and • alteration of landforms and soils that host habitat for rare and conservation significant flora and fauna species.
Required work	1. Identify landforms likely to be impacted. Identify and describe areas that will be altered, both temporarily and permanently, those that will remain as a structural or visual impact on the landform, and those that are proposed to be restored and/or re-vegetated. 2. Provide information on the significance of the Mt Gibson Range landforms to be impacted, in terms of intactness, uniqueness and/or regional significance having regard to ecological function including: restricted soil types, geodiversity values and habitat for BIF specialist species and also from a visual landscape perspective.

	3. Identify and describe the environmental values associated with the landform (e.g. geodiversity values, ecological function, habitat etc.) that will be temporarily or permanently altered. 4. Identify and describe the extent to which mining and associated works may fragment the landform and the impacts to the integrity of the landform. Consider whether impacts (both direct and indirect) to the landform will result in unstable landforms and/or soils, and may lead to erosion with consequential impacts on environmental values. 5. Provide information on the cumulative impacts to the Mt Gibson Range landform from past, current and any known future exploration and mining. Provide information on any past, current or proposed conservation areas or conservation activities to mitigate the cumulative impacts identified above. 6. Synthesise the above information (i.e. table, GIS information, photos, aerials, contour maps, elevations) to describe, spatially define and visually represent the extent of temporary (define timescale) and permanent impacts to the landform, its ecological function and environmental values. 7. Describe how the mitigation hierarchy (avoid, minimise, rehabilitate) has been applied during mine planning and design to make decisions about mining and associated infrastructure, and whether any residual impacts remain. 8. Describe proposed management, monitoring and mitigation methods to be implemented to ensure impacts are contained to predictions.
Relevant policy	EPA (2008) *Guidance Statement 33 – Environmental Guidance for Planning and Development*. Perth, Western Australia.

Flora and Vegetation	
EPA objective	To maintain representation, diversity, viability and ecological function at the species, population and community level.
Relevant aspects	Clearing of native vegetation, altered surface hydrology, dust and rehabilitation activities.
Potential impacts and risks	The potential impacts of the proposal include: • clearing of native vegetation, which includes conservation significant vegetation, flora species (especially *Darwinia masonii* and *Lepidosperma gibsonii*) and habitat; • introduction and/or spread of introduced flora (weed) species; and • indirect impacts on flora and vegetation including impacts from fragmentation, altered hydrology, change in microclimate and dust.
Required work	9. Provide a detailed description and figure(s) of the proposed clearing associated with the proposal. Discuss the potential for direct and indirect impacts to flora and vegetation as a result of the proposal. 10. Undertake a Level 2 flora and vegetation survey of the development envelope in accordance with EPA Guidance Statement 51 and the Department of Environment and Conservation (now Parks and Wildlife) *Recommended interim protocol for flora surveys of BIFs of the Yilgarn Craton*. In areas not already surveyed or where survey information is not of acceptable quality (such as incorrect survey season), standard and/or the proponent intends to use results from surveys at a lower level than a Level 2, justification will be required to ensure those surveys are relevant, representative of the development envelope, and were carried out using methods consistent with

current best practice. A peer review of the vegetation and flora information by a botanist with appropriate experience and expertise would also be required.

11. Assess existing flora surveys and subsequent analysis of impacts on significant flora (other than DRF species). Identify whether any further targeted survey for significant flora is required to validate the original findings and to inform the assessment.

Significant flora as defined in Guidance Statement 51 includes flora other than those that are listed at the State or national level as threatened, Priority and specially protected (e.g. endemic or restricted taxa, new taxa or affinities, taxa at the limits of their range, etc).

12. Identify and map vegetation units (including sub-units of the plant assemblages of the Mt Gibson Range PEC) and DRF, Priority flora and other significant flora species and their areas to be cleared or indirectly impacted as defined in EPA Guidance Statement 51. Provide details of the methodology used in the identification and mapping of vegetation units. The vegetation units should be based on floristics, rather than structural vegetation features. Describe the condition of the vegetation.

13. Assess the impact on the different vegetation units (including sub-units of the plant assemblages of the Mt Gibson Range PEC).

14. Assess impacts on conservation significant flora species (noting which are BIF specialist species), including the number of plants in the affected populations, the percentage of plants in the affected populations, the number of plants to be impacted (directly and indirectly) in a 'worst case scenario' and the number of plants known to occur outside the disturbance footprint at both a local and regional scale.

15. Describe the conservation status of vegetation units (including sub-units of the plant assemblages of the Mt Gibson Range PEC) and conservation significant flora species and analyse their known or inferred habitats to be cleared or indirectly impacted by the proposal.

The analysis is to include identification and mapping of the known regional distribution of vegetation units including the conservation status of vegetation and percentages of vegetation units (including threatened and priority ecological communities and vegetation units) and conservation significant species affected in the determination of the significance of impacts.

16. Provide information on the representation of conservation significant flora (including *D. masonii, L. gibsonii*) and conservation significant vegetation units (including sub-units of the plant assemblages of the Mt Gibson Range PEC) on the remaining, unmined, areas of the Mt Gibson Range. Analyse the tenure of those occurrences, such as managed for conservation or within an exploration or mining lease.

17. Provide information on the implications of the proposal (direct and indirect) on the genetic diversity and structuring of *D. masonii* and *L. gibsonii.* Consideration of the implications of the proposal on population functionality (connectivity etc) should be provided.

18. Analyse and collate the information from all the relevant flora reports to address cumulative impacts on *D. masonii* and *L. gibsonii.* This includes an assessment on the number of individual plants to be impacted and on populations, sub-populations, area of occupancy and extent of occupancy and habitat.

19. Analyse and collate the information from all the relevant flora reports (including annual reports) to address direct and indirect impacts and risk of exploration and mining related activities to the long term survival and population viability of *D. masonii* and *L. gibsonii.* Indirect impacts include dust, changed microclimate, changed hydrology, changed ecosystem processes, including

	impacts to pollinators and reproductive success, reduced genetic diversity, fragmentation, introduced weeds/disease, increased grazing pressure and changes to seed dispersal. **20.** Discuss the cumulative impacts of past, current and any known future activities on the Mt Gibson Range and the specific flora and vegetation units (including sub-units of the plant assemblages of the Mt Gibson Range PEC) utilising quantitative data from appropriate local and regional surveys. **21.** Discuss the proposed management, monitoring and mitigation methods to be implemented demonstrating that the design of the proposal has addressed the mitigation hierarchy in relation to impacts on flora and vegetation. **22.** Discuss management measures, outcomes/objectives sought to ensure residual impacts (direct and indirect) are not greater than predicted (e.g. conditions and potential offsets). **23.** Complete the EPA Checklist for documents submitted for EIA on terrestrial biodiversity.
Relevant policy	EPA (2000) *Position Statement 2: Environmental Protection of Native Vegetation in Western Australia.* Perth, Western Australia. EPA (2003) *Position Statement 3: Terrestrial Biological Surveys as an Element of Biodiversity Protection.* Perth, Western Australia. EPA (2004) *Guidance Statement No. 51: Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia.* Perth Western Australia. DEC (2006) *Recommended Interim Protocol for Flora Surveys of Banded Ironstone Formations (BIF) of the Yilgarn Craton.* Department of Environment and Conservation, unpublished. EPA Checklist for documents submitted for EIA on marine and terrestrial biodiversity.

Terrestrial Fauna	
EPA objective	To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.
Relevant aspects	Mining, clearing of native vegetation and vehicle movement.
Potential impacts and risks	Fauna surveys have identified the following conservation significant species that may be impacted by the proposal: *Idiosoma nigrum* (Shield-backed Trapdoor Spider) and *Leipoa ocellata* (Malleefowl), both listed as Schedule 1 under the WC Act and ranked as Vulnerable using the IUCN (2012) criteria; and *Cacatua leadbeateri* (Major Mitchell's Cockatoo) and *Falco peregrine* (Peregrine Falcon), both listed as Specially protected fauna under the WC Act. Clearing of native vegetation may result in the loss or fragmentation of fauna habitat and consequently, displacement or death of fauna species.
Required work	**24.** Describe, in detail, the expected direct and indirect impacts on terrestrial fauna, including short range endemic invertebrate fauna. **25.** In accordance with EPA Guidance Statement 56 and the EPA/DEC *Technical Guide - Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment:* - carry out a desktop assessment of previous surveys, justify how those surveys are relevant and representative of the development envelope and

	if they were carried out using methods consistent with the EPA Guidance. - Conduct a Level 1 fauna survey including local and regional mapping of habitats (including rare or unusual habitat types) inside and outside of the development envelope. - Prepare a comprehensive listing of fauna species likely to occur in habitats to be directly or indirectly impacted. - Provide figure(s) showing the likely extent of loss or the habitat types and the extent of areas where vegetation is expected to recover, from both direct and indirect impacts. **26.** Analyse the likely loss of fauna habitat, including percentages of habitat types to be impacted, to assist in determining the significance of impacts to fauna. **27.** Conduct targeted Level 2 surveys within the development envelope and immediate surrounds, to identify potential impacts to conservation significant vertebrate fauna species and other fauna listed as specially protected under the WC Act. Include mapping of any conservation significant fauna in relation to the development envelope. **28.** In accordance with EPA Guidance Statement 20, assess the likelihood of the habitats to support short range endemic invertebrate species. If the area is prospective for these species, undertake short range endemic invertebrate fauna sampling as per Guidance Statement 20. Consider cumulative impacts. **29.** If the proponent intends to rely on results from previous surveys, justify how those surveys are relevant, representative of the development envelope, and were carried out using methods consistent with best practice. **30.** Discuss the proposed management, monitoring and mitigations methods to be implemented in relation to fauna.
Relevant policy	EPA (2000) *Position Statement 3: Terrestrial Biological Surveys as an Element of Biodiversity Protection.* Perth, Western Australia. EPA (2004) *Guidance Statement No. 56: Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia.* Perth, Western Australia. EPA (2009) *Guidance Statement No. 20: Sampling of Short Range Endemic Invertebrate Fauna for Environmental Impact Assessment in Western Australia.* Perth, Western Australia. EPA Checklist for documents submitted for EIA on marine and terrestrial biodiversity. EPA and DEC (2010) *Technical Guide - Terrestrial Vertebrate Fauna Surveys for Environmental Impact* Assessment. Technical report of the Environmental Protection Authority and the Department of Environment and Conservation.

Subterranean Fauna	
EPA objective	To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.
Relevant aspects	Excavation for mining activities.
Potential impacts and risks	Mining activities may result in direct mortality of troglofauna and loss of habitat for troglofauna.

Required work	**31.** Assess the likelihood of troglofauna being present in accordance with EPA Environmental Assessment Guideline 12, and if so proceed to items 32, 33 and 34. **32.** Undertake subterranean fauna sampling representative of the extent of the area to be impacted including outside impact areas to provide context of impacts in accordance with EPA Environmental Assessment Guideline 12 and EPA Guidance Statement 54a. Consider cumulative impacts. **33.** Provide a detailed description of expected direct and indirect impacts on troglofauna from the proposal. **34.** Discuss the findings of the sampling and describe any proposed management, monitoring and mitigation methods to be implemented in relation to troglofauna.
Relevant policy	EPA (2007) *Guidance Statement 54a: Sampling Methods and Survey Considerations for Subterranean Fauna in Western Australia.* Perth, Western Australia. EPA (2013) *Environmental Assessment Guideline 12: Consideration of Subterranean Fauna in Environmental Impact Assessment in Western Australia.* Perth, Western Australia.

Integrating Factor – Rehabilitation and Decommissioning	
EPA objective	To ensure that premises are decommissioned and rehabilitated in an ecologically sustainable manner.
Relevant aspects	Mining and earthworks resulting in changed landforms, vegetation clearing and waste rock disposal.
Potential impacts and risks	The proposal has the potential to alter BIF landforms and soils, temporarily and permanently, in addition to the impact of the loss of its associated environmental values. The potential impacts of the proposal include: • permanent impacts to landform(s); • unsuccessful restoration of flora and vegetation in cleared/developed areas; • impact on soils from compaction and erosion; • impediment of rehabilitation success due to the spread of weeds; and • other threatening processes (i.e. grazing/trampling by livestock, increased risk of fire) impeding rehabilitation success.
Required work	**35.** Describe the proposed management actions for mine closure and rehabilitation consistent with the DMP and EPA (2011) *Guidelines for Preparing Mine Closure Plans.* **36.** Demonstrate that the mitigation hierarchy has been addressed including placing infrastructure offsite and demonstrate that any access and infrastructure within vegetated areas has had regard to utilising existing areas of disturbance. **37.** Provide an assessment on the physical and chemical characteristics of soil to be disturbed by the proposal, with particular focus on the ability to use such soil materials in post-mining rehabilitation works. **38.** In consultation with the Department of Mines and Petroleum (DMP), provide a detailed study on the waste characteristics (volume, chemical and physical

	properties) of waste rock material generated as part of the proposal. The proposed waste landform design should be based on the outcomes of the waste characterisation study to ensure the final design will achieve desired long term stability and visual amenity as identified in completion criteria. **39.** Undertake a literature review/provide evidence of successful best practice mining rehabilitation procedures, including a review of learnings from rehabilitation at other BIF environments. **40.** Describe the techniques of rehabilitation proposed, including but not limited to, topsoil management, retention or reuse of vegetative material, return of species and communities consistent with the pre-existing composition of the affected area and the standards that will apply. Identify a timeframe for return of species and vegetation units. **41.** Identify completion criteria, including criteria for reconstructed soils and soil profiles (identification and profile reconstruction), landform stability, drainage/erosion control and species and communities. **42.** Provide information on whether backfilling of the mine pit would be undertaken.
Relevant policy	EPA (2006) *Guidance Statement No. 6: Rehabilitation of Terrestrial Ecosystems.* Perth, Western Australia. DMP and EPA (2011) *Guidelines for Preparing Mine Closure Plans.* Department of Mines and Petroleum and Environmental Protection Authority (or any revisions – currently being revised).

Integrating Factor – Offsets	
EPA objective	To counterbalance any significant residual environmental impacts or uncertainty through the application of offsets.
Relevant aspects	Impacts on landforms and clearing of native vegetation, which includes conservation significant flora, vegetation and habitat.
Potential impacts and risks	Potential significant residual impact: • on conservation significant vegetation, flora and fauna species and habitat; • on BIF landforms in the Mt Gibson Range; and • from unsuccessful rehabilitation outcomes.
Required work	**43.** Describe the residual impacts for the proposal and analyse these impacts to identify and detail any that are significant. **44.** Provide qualitative information (peer reviewed or an independent report) from a relevant expert on the outcomes of the proponent's DRF (*Darwinia masonii* and *Lepidosperma gibsonii*) management, rehabilitation and restoration associated with the existing operations. Information should include, but not be limited to: the outcomes of research projects; the implementation of plans; and the current status of any attempts to establish or improve populations of the species in the wild. **45.** If the proposal is likely to have any significant residual environmental impacts, identify environmental offsets, consistent with the requirements in the: - WA Environmental Offsets Guidelines, which includes the use of the WA Environmental Offsets template; and - EPA *Environmental Protection Bulletin No.1: Environmental Offsets.*
Relevant policy	WA Environmental Offsets Policy, September 2011, Perth, Western Australia.

	WA Environmental Offsets Guidelines, August 2014, Perth, Western Australia. WA *Environmental Offsets template* (230914). EPA (2014) *Environmental Protection Bulletin No. 1: Environmental Offsets*. Perth, Western Australia.

5. Stakeholder consultation

The EPA expects that the proponent will consult with stakeholders who are interested in, or affected by, the proposal. This includes decision-making authorities (DMAs), other relevant State government departments and local government authorities, environmental non-government organisations and the local community.

The proponent must document the stakeholder consultation undertaken and the outcomes, including any adjustments to the proposal and any future plans for consultation. This is to be addressed in a specific section of the PER document. In addition, the key outcomes of the consultation are to be reported against the preliminary key environmental factors as relevant.

It is expected that as a part of the consultation with DMAs there will be discussion around each agency's specific regulatory approvals, and a demonstration that other factors can be managed by another regulatory body.

6. Other factors or matters

During assessment of proposals, other factors or matters will be identified as relevant to the proposal, but not of significance to warrant further assessment by the EPA, or impacts can be regulated by other statutory processes to meet the EPA's objectives.

These factors do not require further work as part of the environmental review, or detailed discussion and evaluation in the PER document, although they must be included in the PER document in a summarised, tabular format noting that the PER document will be subject to public review.

In some circumstances other factors, while not being considered as preliminary key environmental factors, may require greater emphasis in the PER document. For this assessment, the other factors that need to be concisely described and discussed in the PER document are:

- Hydrological processes – including outcomes of consultation with the Department of Water in relation to the availability of groundwater for dust suppression required for the proposal; and
- Heritage – including outcomes of consultation with the Department of Aboriginal Affairs (DAA) as to any heritage significance of DAA Record 25293, covering the Mt Gibson Range.

It is also important that the proponent be aware that other factors or matters may be identified during the course of the environmental review that were not apparent at the time that this ESD was prepared. If this situation arises, the proponent must consult

with the EPA to determine whether these factors and/or matters are to be addressed in the PER document, and if so, to what extent.

7. Agreed assessment timeline

Table 3 sets out the timeline for the assessment of the proposal agreed between the EPA and the proponent. Proponents are expected to meet the agreed timeline, and in doing so, provide adequate, quality information to inform the assessment.

Table 3 Assessment Timeline

Key stages of assessment	Agreed completion date
EPA approval of ESD	end April 2015
Proponent submits first adequate draft PER document	end May 2015
Office of the EPA provides comment on first adequate draft PER document	mid July 2015 (6 weeks)
Proponent submits adequate revised draft PER document	end July 2015
EPA authorises release of PER document for public review	mid August 2015 (2 weeks)
Proponent releases authorised PER document for public review	mid August 2015
Public review of PER document	end September 2015 (6 weeks)
Office of the EPA provides Summary of Submissions to the proponent	end October 2015 (3 weeks)
Proponent provides Response to Submissions	end November 2015 (4 weeks)
Office of the EPA reviews the Response to Submissions	end December 2015 (4 weeks)
Office of the EPA assesses proposal for consideration by EPA	end February 2016 (7 weeks)
Preparation and finalisation of EPA assessment report (including two weeks consultation on draft conditions with proponent and key Government agencies)	early April 2016 (5 weeks)

If any stage in the agreed timeline is not met or inadequate information is submitted by the proponent, the timing for the completion of subsequent stages of the process will be revised. Equally, where the EPA is unable to meet an agreed completion date in the timeline, the proponent will be advised and the timeline revised.

The proponent should refer to EAG 6 – *Timelines for environmental assessment of proposals* for information regarding the responsibilities of proponents and the EPA for achieving timely and effective assessment of proposals.

8. Decision-making authorities

At this stage, the EPA has identified the authorities listed in Table 4 as DMAs for the proposal. Additional DMAs may be identified during the course of the assessment.

Table 4 Decision-making authorities

Decision-making authority	Relevant legislation
Minister for Environment	*Wildlife Conservation Act 1950* Licence to take protected flora and fauna
Minister for Water	*Rights in Water and Irrigation Act 1914* Groundwater Extraction licence
Department of Environment Regulation	Part V of the *Environmental Protection Act 1986* Works approvals and licences
Department of Mines and Petroleum	*Mining Act 1978* Mining Proposal *Dangerous Goods Safety Act 2004* Storage and handling of hazardous materials *Mine Safety and Inspection Act 1994*

9. Parallel processing

The EP Act constrains DMAs from making any decision that could have the effect of causing or allowing the proposal to be implemented. However, the proponent is encouraged to pursue other approvals in parallel with the EPA's assessment noting that the constraint only relates to making an approval decision.

10. PER document

When the EPA is satisfied with the standard of the PER document (refer to section 4.4 of EAG 6) it will provide written authorisation for the release of the document for public review. The proponent must not release the PER document for public review until this authorisation is provided.

The proponent is responsible for advertising the release and availability of the PER document in accordance with instructions that will be issued to the proponent by the EPA. The EPA must be consulted on the timing and details for advertising.

11. References

EPA (2006) Report and Recommendations Bulletin 1242. *Mt Gibson Iron Ore Mine and Infrastructure Proposal.* Environmental Protection Authority. November 2006.

Department of Environment and Conservation and Department of Industry and Resources (2007) *Strategic Review of the Conservation and Resource Values of the Banded Iron Formation of the Yilgarn Craton.* September 2007.

Figure 1 – Regional location of the Mt Gibson Range

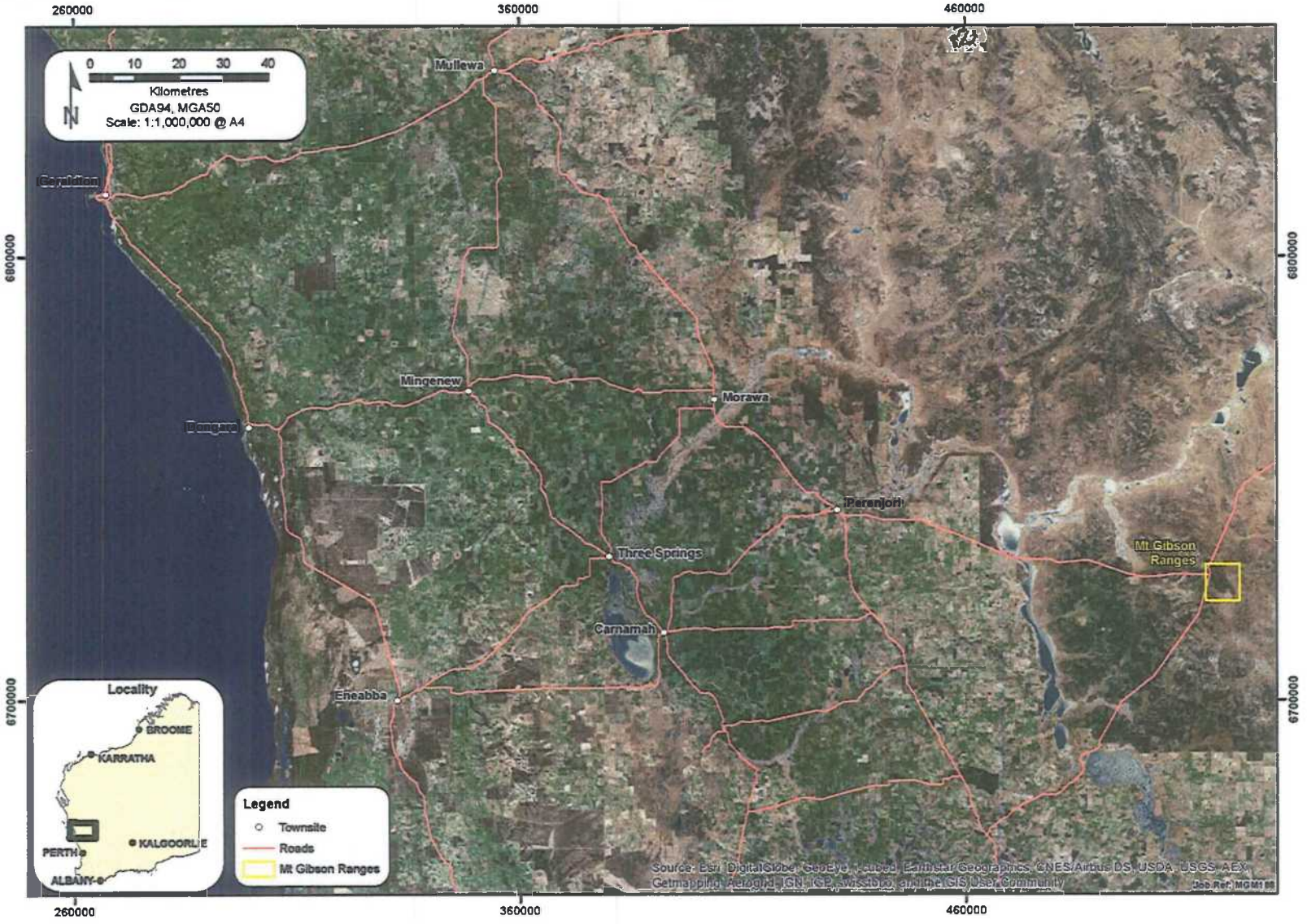

Figure 2 – Mt Gibson Range

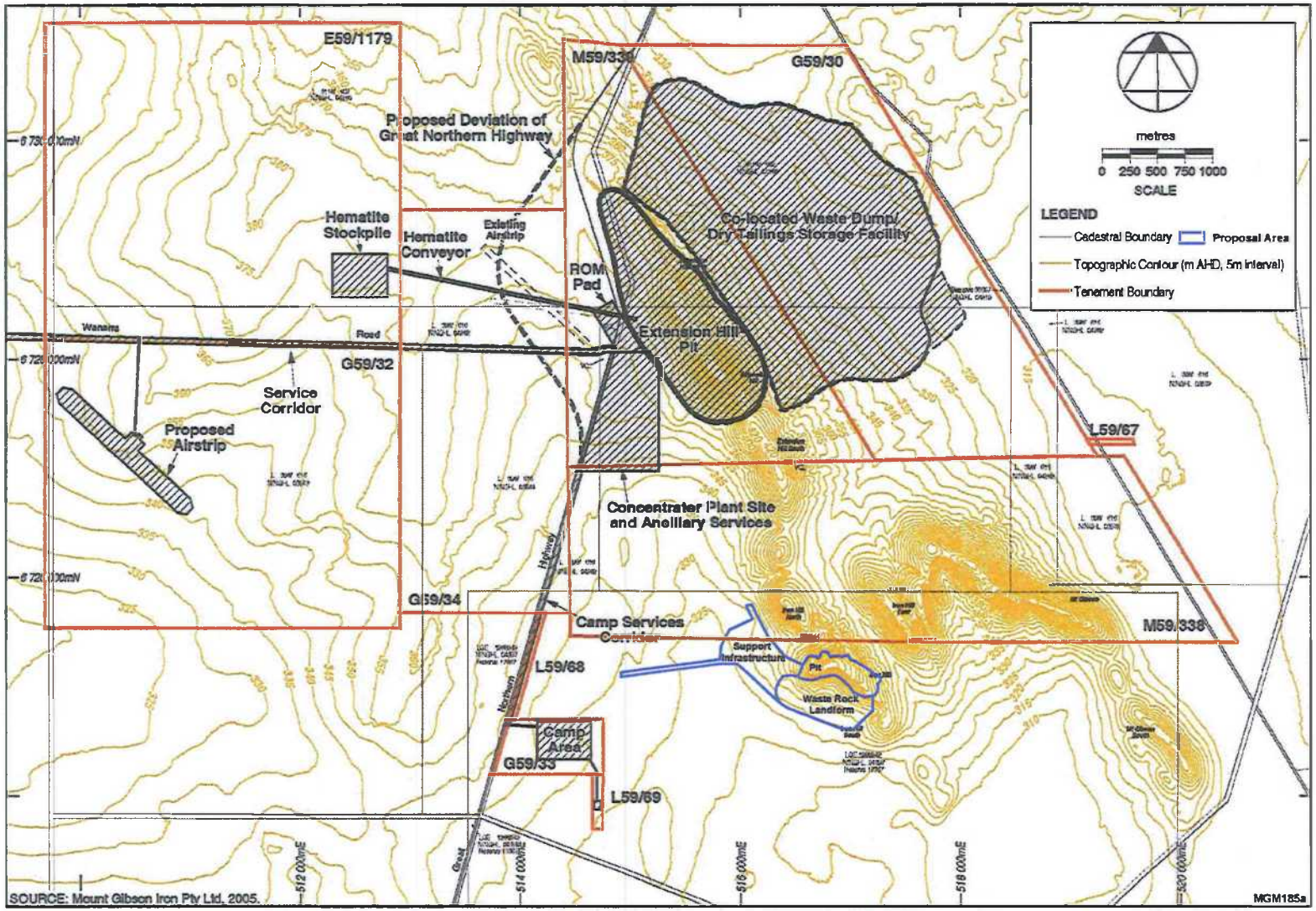

Figure 3 – Iron Hill Development Envelope

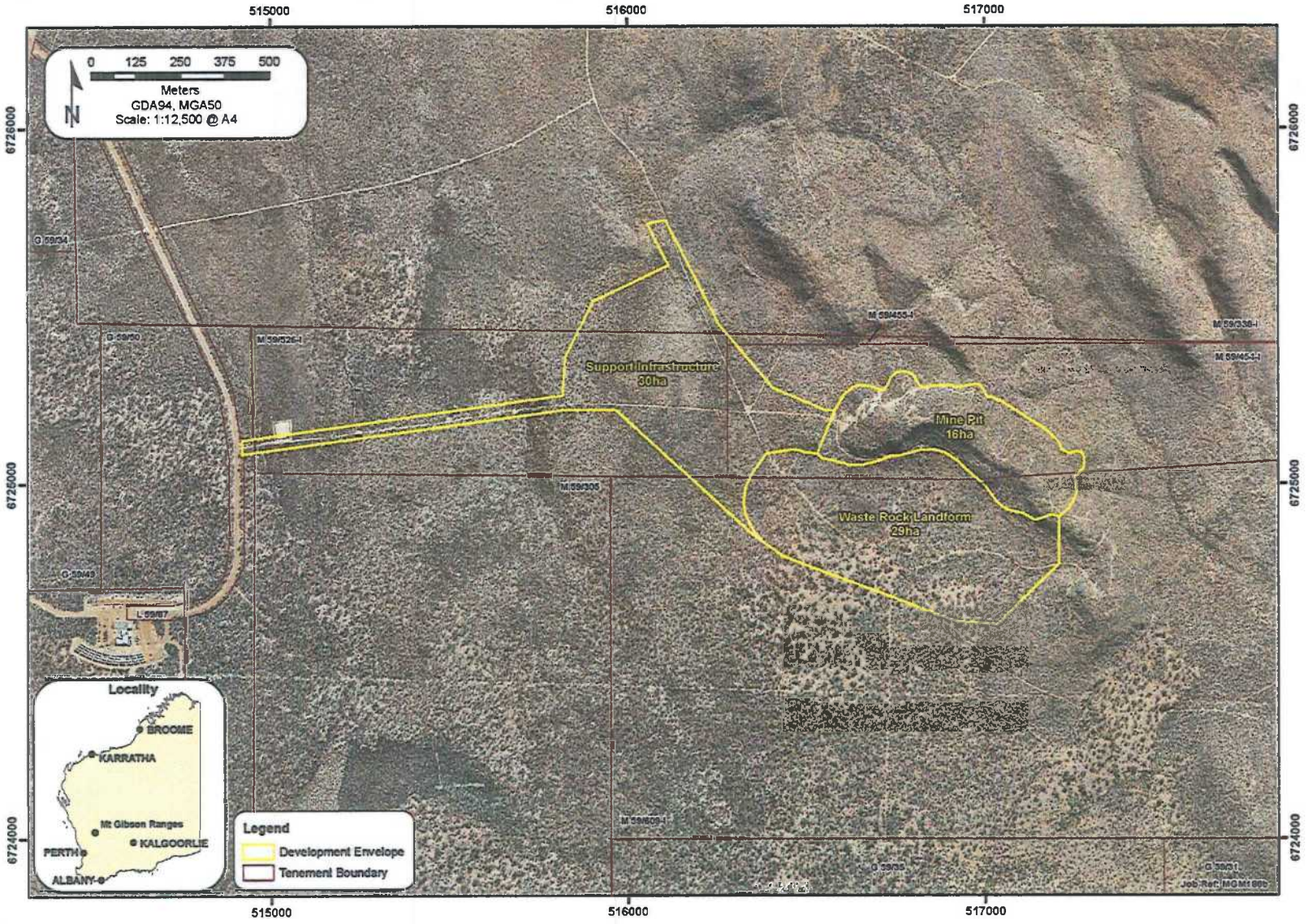

Figure 4 – Location of Declared Rare Flora and Priority Ecological Community on the Mt Gibson Range