

Environmental Protection Act 1986

Section 43A

**NOTICE OF DECISION TO APPROVE AMENDMENTS TO PROPOSAL DURING
ASSESSMENT**

PERSON TO WHOM THIS NOTICE IS GIVEN

Hamersley Iron Pty Limited (ACN: 004 558 276)
152 – 158 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:

Greater Paraburdoo Iron Ore Hub Proposal
Assessment No. 2189

Pursuant to section 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) gives approval to the assessment of the proposal being completed in respect of the proposal as amended in accordance with the proponent's request being:

- Amending the conceptual footprint to minimise impacts to cultural heritage and *Aluta quadrata* (Threatened-endangered under the *Biodiversity Conservation Act 2016*).
- Removal of mine pits at 14W-16W and 20W (restriction not applicable to infrastructure).
- Application of mining exclusion zones and mining restriction zones to protect terrestrial fauna values, three gorge pools at Western Range and *Aluta quadrata*.

See the attached amended Proposal Content Document and Figure 1.

EFFECT OF THIS NOTICE:

1. The assessment of the proposal is to be completed in respect of the proposal as amended in accordance with the decision set out in this notice.
2. The proposal as amended in accordance with this notice is taken to have been referred to the EPA under section 38 of the EP Act.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.

A handwritten signature in blue ink, appearing to read 'M. Tonts', with a long horizontal flourish extending to the right.

Professor Matthew Tonts
Delegate of the Environmental Protection Authority
CHAIR

3 June 2022

Proposal Content Document

Table 1: Summary of the proposal

Proposal title	Greater Paraburdoo Iron Ore Hub Proposal
Proponent name	Hamersley Iron Pty Limited
Short description	<p>The proposal is to extend the existing Greater Paraburdoo iron ore mining operations located approximately 6 km to the south of the town of Paraburdoo in the Pilbara Region of Western Australia.</p> <p>The proposal includes the development of new deposits at Western Range including above and below water table mining and the extension of existing operations at Paraburdoo and Eastern Range and associated infrastructure, including, but not limited to:</p> <ul style="list-style-type: none"> • development of new deposits and extension of existing operations including above water table and below water table mining at Western Range, Paraburdoo and Eastern Range • ore processing, ore transport and ore handling facilities • ore, topsoil and subsoil stockpiles • mineral waste management, including waste landforms, constructed landforms, in-pit storage of waste fines, use of existing waste fine storage facilities, etc. • surface water management infrastructure: including diversion drains, levees, culverts, etc. • water abstraction, dewatering and surplus dewater management including use in ore processing, on-site use/storage, provision to other water users and surface discharge (including associated infrastructure) • linear infrastructure (including rail infrastructure) • other associated mine infrastructure and support facilities and upgrades (including but not limited to: workshops, hydrocarbon storage, laydown areas and offices; accommodation and ancillary buildings; transport, utilities and communications infrastructure).

Table 2. Changes to the proposal key characteristics

Proposal element	Location/description	Maximum extent, capacity or range
Physical elements		
Mine and associated infrastructure	Figure 1	<p>Clearing of up to 4,300 ha within a 17,422 ha development envelope*.</p> <p>No direct disturbance permitted within Mining Exclusion Zones.</p> <p>No pit crests to intersect Mining Restriction Zones. Disturbance restricted to potential material spillage and rilling associated with drill and blast activities only.</p> <p>No mine pits at 14W-16W and 20W (restriction not applicable to infrastructure).</p>
Operational element		
Dewatering and water supply	-	Abstraction up to 14 GL/a.
Management of surplus water	Figure 1	<p>Managed via options including:</p> <ul style="list-style-type: none"> • discharge to disused mine pits (storage and passive recharge) • storage infrastructure • provision to other water users • controlled discharge of up to 1.7 GL/a of surplus water** to watercourses (Seven Mile Creek, Pirraburdu Creek, Six Mile Creek), not extending beyond the development envelope under natural no-flow conditions.
Proposal elements with greenhouse gas emissions		
Peak annual emissions***		
Scope 1	Diesel and land clearing – no more than 160,000 tonnes(t) of carbon dioxide equivalent (CO ₂ -e) per annum.	
Scope 2	Electricity – no more than 64,000 t CO ₂ -e per annum.	
Rehabilitation and Closure		
The key closure outcome is to rehabilitate the site to create a safe, stable and non-polluting landscape consistent with the post-mining land use and consider environmental and cultural heritage values.		

Note *: Total disturbance (including existing historical and disturbance which is already approved under clearing permits CPS 4032, CPS 4594, and CPS 5090) within the development envelope is estimated to be up to 8,512 ha.

Note **: Surplus water does not include surface water from rainfall events.

Note ***: Predicted peak annual emissions include existing operations and new activities associated with the proposal.

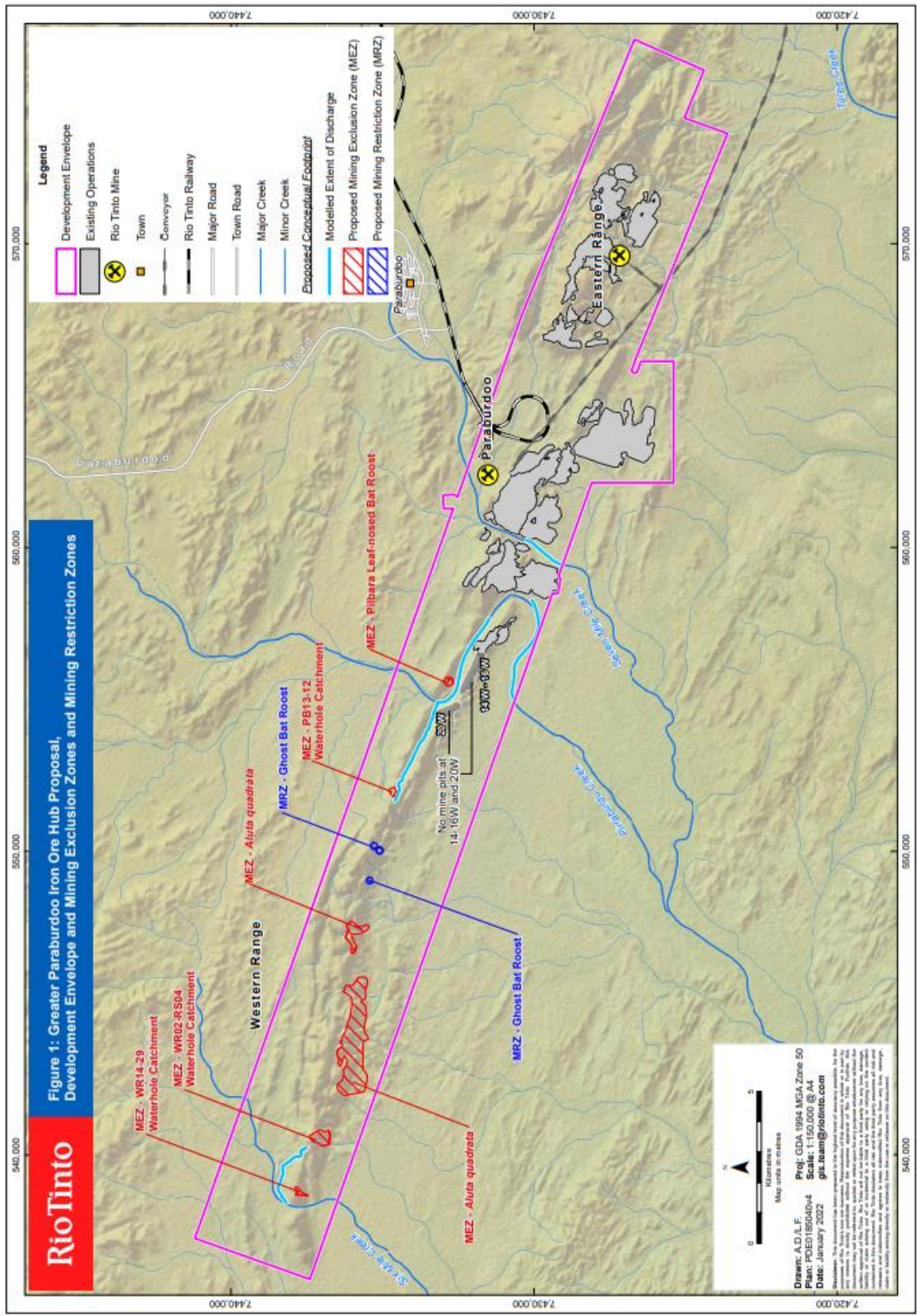


Figure 1. Greater Paraburdoo Iron Ore Hub Proposal Development Envelope and Mining Exclusion Zones and Mining Restriction Zones

Summary of reasons for decision – request to amend a referred proposal under s43A of the *Environmental Protection Act 1986*

Proposal Title: Greater Paraburdoo Iron Ore Hub Proposal

Proponent: Hamersley Iron Pty Limited

Proposal referral date: 5 November 2018

Date request to amend referred proposal under section 43A received: 16 November 2021 (addendum received 25 January 2022)

Existing referred proposal:

Hamersley Iron Pty Limited (the proponent) proposes to develop the Greater Paraburdoo Iron Ore Hub Proposal (the proposal). The proposal is an expansion of the existing operations at Paraburdoo and Eastern Range which is not subject to a Ministerial Statement issued under Part IV of the *Environmental Protection Act 1986* (EP Act). The proposal area is located approximately six kilometres south of the town of Paraburdoo in the Pilbara region of Western Australia.

Existing operations at Paraburdoo and Eastern Range are currently regulated under Part V of the EP Act and the *Rights in Water and Irrigation Act 1914*.

The proposal will involve clearing of an additional 4,300 hectares (ha) of native vegetation within a development envelope of 17,422 ha.

Previous change to proposal

The following changes to the proposal were approved on 8 May 2020 under section 43A of the EP Act:

- A reduction in the amount of surplus water to be managed (reduced from 6 gigalitres per annum (GL/a) to 1.7 GL/a).
- Removal of the option to manage surplus water via aquifer reinjection.
- Changes to the conceptual footprint design to include low-grade ore stockpiles at Eastern Range with no net increase to clearing area.
- Correction of authorised clearing areas from 220 ha to 251.4 ha to correctly reflect existing approved clearing permits in the table of key characteristics of the proposal.
- Change the operational element ‘dewatering’ in the table of key characteristics of the proposal to ‘dewatering and water supply’.

Short description of amendment(s) sought:

As specified in the *Hamersley Iron Pty. Limited – Greater Paraburdoo Iron Ore Hub Proposal (Assessment No. 2189) Section 43A Application* (RTIO 2021) and *Hamersley Iron Pty. Limited – Greater Paraburdoo Iron Ore Hub Proposal (Assessment No. 2189) Section 43A Application - Addendum 1* (RTIO 2022), the proponent seeks to amend the proposal by:

- amending the conceptual footprint to minimise impacts to cultural heritage and *Aluta quadrata* (Threatened-endangered under the *Biodiversity Conservation Act 2016*)
- removal of mine pits at 14W-16W and 20W (restriction not applicable to infrastructure)
- application of mining exclusion zones and mining restriction zones to protect terrestrial fauna values, three gorge pools at Western Range and *Aluta quadrata*.

Decision:

Amendment(s) to proposal as set out in attachment 1 is approved.

Environmental factors relevant to amendment(s):

- Flora and Vegetation
- Terrestrial Fauna
- Social Surroundings.

Subterranean Fauna, Inland Waters and Greenhouse Gas Emissions are environmental factors that are not considered relevant to the amendment. No changes are proposed to the surplus water discharge, amount of dewatering or greenhouse gas emissions.

Summary of likely changes to environmental impacts from proposed amendment(s)

Amendment sought	Changes to potential environmental impacts
<p>Amending the conceptual footprint.</p> <p>Removal of mine pits at 14W-16W and 20W (restriction not applicable to infrastructure)</p> <p>Application of mining exclusion zones and mining restriction zones.</p> <p>There will be no net increase to the additional clearing area (4,300 ha) or changes to the Development Envelope (17,422 ha).</p>	<p><u>Social Surroundings</u></p> <p>The amendments that are being sought are as a result of continued consultation between the proponent, Yinhawangka People and Yinhawangka Aboriginal Corporation (YAC). The YAC have confirmed that consultation has been undertaken with the Yinhawangka People on the change to the proposal.</p> <p><u>Likely decreased impacts (additional avoidance measures)</u></p> <ul style="list-style-type: none"> • Removed satellite pit (55W) to avoid potential blasting impacts to a rockshelter. • Modified waste dump (WD5) to avoid direct impacts and flooding risk to a rockshelter. • Removed 14-16W and 20W pits from the proposal at the request of Yinhawangka to minimise impacts to amenity (including access) associated with Gardagarli and Pirraburdu Creek. <p><u>Likely decreased impacts (additional minimisation measures)</u></p> <ul style="list-style-type: none"> • Modified pit crest (36W) and waste dump locations (WD1, WD2) to reduce visual impact and sediment risk to a site. • Modified pit crest (36W) to reduce risk of impact due to blasting, ex-pit rilling and sediment risk to a number of rockshelters. • Modified pit crest (36-40W) and initial mining area ramp alignment, add sediment trap and diversion drain to avoid direct impact, increase catchment retention and reduce sediment risk to a waterhole in Gorge 3 and a rockshelter. • Modified pit crest (40W) and add a sediment trap to reduce sediment risk to a persistent waterhole in Gorge 4. • Modified pit crest (36-50W and 55-66W) and waste dump (WD5) and add a sediment trap to reduce sediment risk to a persistent waterhole in Gorge 7. • Modified satellite pit (66W) and waste dump (WD4) to reduce visual impact from a rockshelter. • Modified waste dumps (WD2, WD3, WD4) to maintain watercourse flowpath in watercourses downstream of gorges with more significant cultural and environmental values. • Modified waste dump (WD4) to have a lower final dump height at closure to limit the impacts to viewshed from the adjacent rockshelter. • Modified alignment of infrastructure including haul and light vehicle roads, services corridors and stockpiles to reduce impacts to Social Surroundings, and areas of cultural or environmental significance. <p><u>Additional management measures</u></p> <p>At the request of the Yinhawangka People, the proponent has proposed to apply mining exclusion zones around three rainfed waterholes at Western Range to ensure 100% of the catchment is maintained:</p>

- WR14-29
- WR02-RS04
- PB13-12.

The EPA considers that the proposed changes are unlikely to increase potential for inconsistency of the proposal with the EPA's environmental factor objective for Social Surroundings.

Flora and Vegetation

The proponent has modified waste dump (WD3) to create a nominal 200-metre-wide vegetation corridor between WD3 and the 50W pit. The purpose is to maintain habitat connectivity and enable pollinator access and maintain genetic connectivity between the two expressions of the Western Range population.

The proponent has also modified the pit crest of 36-50W and 55-66W in several areas above *Aluta quadrata* to minimise the generation of rilling material when creating the pit crest. This subsequently reduces the pit disturbance footprint enabling the capture of 96.1% of the Western Range population within mining exclusion zones.

Vegetation

No Priority Ecological Communities or Threatened Ecological Communities have been recorded in the development envelope. Seven of the nine significant vegetation units recorded within the development envelope are to be impacted by the proposal (D1, D3, D6, D7, D8, P3 and H6).

Likely decreased impacts to significant vegetation units

- The proposed clearing of vegetation community H6 will decrease from 134.7 ha to 109.5 ha.

Likely increased impacts to significant vegetation units

- Impacts to significant vegetation (D1, D3, D6, D7, D8, P3) within the development envelope to increase from 245 ha to 324.1 ha (increased impact of 79.1 ha).

The EPA considers that the proposed change will not significantly increase the potential for inconsistency of the proposal with the EPA's objective for Flora and Vegetation. Potential for inconsistency with the EPA's objective for Flora and Vegetation will be assessed in the EPA's report and recommendations.

Flora

One threatened flora species, *Aluta quadrata* (Threatened-endangered under the *Biodiversity Conservation Act 2016*) and six priority flora species were recorded within the development envelope.

Three other significant flora species were recorded within the development envelope, including *Eremophila* sp. indet, *Eriachne* sp. Western Range and *Solanum* aff. *octonum*. These species will not be impacted by the proposal.

Likely decreased impact

- Impacts to *Aluta quadrata* will decrease from 5,646 individuals to 2,145 individuals (reduction of 3,501 individuals).
- Impacts to *Hibiscus campanulatus* (P1) will decrease from 303 individuals to 238 individuals (reduction of 65 individuals).
- Impacts to *Ptilotus trichocephalus* (P4) will decrease from 983 individuals to 977 individuals (reduction of 6 individuals).

No change in impacts

- Impacts to *Grevillea Saxicola* (P3) remain unchanged at 5 individuals.
- Impacts to *Sida* sp. Barlee Range (S. van Leeuwen 1642) (P3) remain unchanged at 6 individuals.

Likely increased impacts

- Impact to *Goodenia* sp. East Pilbara (A.A. Mitchell PRP 727) (P3) are predicted to increase from 107 individuals to 238 individuals as a result of the change. 91% of individuals within the development envelope will remain unimpacted by the proposal.

The EPA considers that the proposed change will not significantly increase the potential for inconsistency of the proposal with the EPA's objective for Flora and Vegetation. Potential for inconsistency with the EPA's objective for Flora and Vegetation will be assessed in the EPA's report and recommendations.

Terrestrial Fauna

Likely decreased impacts

- The proposed amendment will decrease clearing within high value fauna habitat types:
 - Gorge/Gully: from 290 ha to 256 ha.
 - Breakaway: from 45 ha to 35 ha.
- The proposed amendment will decrease clearing within moderate value fauna habitat types:
 - Drainage Line: from 70 ha to 68 ha.
 - Rocky Hill: from 1,000 ha to 943 ha.

No change in impacts

- The proposed amendment will decrease clearing within high value fauna habitat types:
 - Riverine: No change proposed (7 ha).

	<p><u>Likely increased impacts</u></p> <ul style="list-style-type: none"> The proposed amendment will increase the amount of clearing within the Stony Plain and Low Hill habitat types, considered to be lower value habitat types. Impacts will increase from 2,888 ha to 2,991 ha (increase of 103 ha). <p><u>Management measures</u></p> <p>To manage impacts to bat caves, the proponent has applied a mining exclusion zone around the Ratty Springs Pilbara leaf-nosed bat roost. The proponent has also applied mining restriction zones (100 metre (m) buffers) for retained ghost bat roosts located within 300m of the conceptual footprint.</p> <p>The EPA considers that the proposed change will not significantly increase the potential for inconsistency of the proposal with the EPA’s objective for Terrestrial Fauna. Potential for inconsistency with the EPA’s objective for Terrestrial Fauna will be assessed in the EPA’s report and recommendations.</p> <p><u>Cumulative and Holistic Impact Assessment</u></p> <p>Most impacts to significant environmental values are to decrease. There will be marginal increased impacts to Flora and Vegetation and Terrestrial Fauna values. It is not anticipated that the cumulative impacts of the proposal will significantly change.</p> <p>The proposed changes will require an increase in the clearing of significant vegetation, lower value fauna habitat and one priority flora (P3) species. Given the scale of the proposed changes, the holistic effects of the proposal are unlikely to change significantly.</p>
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Summary of consultation

The proposed amendment is an outcome of consultation that has been undertaken with the Yinhawangka People, Yinhawangka Aboriginal Corporation, and the Department of Biodiversity, Conservation and Attraction (DBCA) .

The EPA has undertaken consultation with DBCA on the revised impacts to *Aluta quadrata* and DBCA have confirmed that the loss will not elevate the current listing of *Aluta quadrata* from ‘Endangered’ to ‘Critically Endangered’ (DBCA 2022).

Summary of consideration of amendment

The EPA has considered whether, if the proposal were already approved, the amendment would be a significant amendment. This has included considering the likely significance of:

- effects of the proposed amendment on its own
- effects of the proposed amendment in the context of the existing referred proposal
- cumulative environmental impacts
- holistic impacts.

The EPA has considered whether it has sufficient information about the proposed amendment to be able to reasonably proceed with assessment of the amended proposal with or without performing any additional functions at this stage. The EPA has considered whether the amended proposal will still be substantially the same character as the existing referred proposal.

Approval – not a significant amendment

The EPA considers the amended proposal to be substantially the same character as the existing referred proposal and does not consider that the amendment would be a significant amendment if the proposal were already approved. The EPA considers it has enough information to reasonably proceed with assessment of the amended proposal without performing any additional functions at this stage.

Attachments

- Attachment 1 - Figure showing changes to the conceptual disturbance footprint

Appeals: Decision not appealable.

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Professor Matthew Tonts
CHAIR
Delegate of the Environmental Protection Authority

3 June 2022

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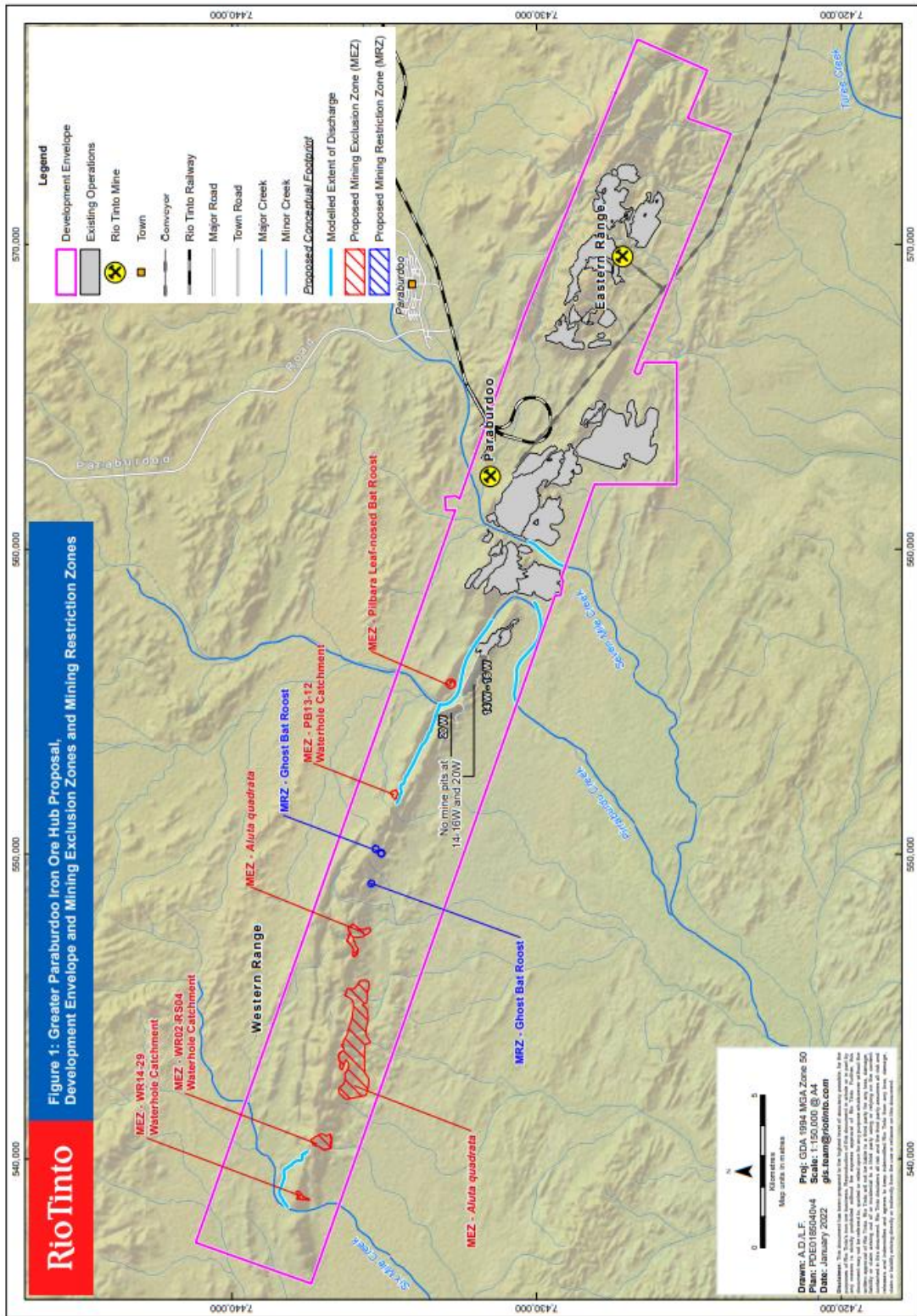


Figure 1. Greater Paraburadoo Iron Ore Hub Proposal Development Envelope and Mining Exclusion Zones and Mining Restriction Zones

References

Department of Biodiversity, Conservation and Attractions (DBCA 2022) *Greater Paraburdoo Iron Ore Hub Proposal – Impacts to *Aluta quadrata**. 7 April 2022.

Rio Tinto (RTIO 2021) *Hamersley Iron Pty. Limited – Greater Paraburdoo Iron Ore Hub Proposal (Assessment No. 2189) Section 43A Application*. 16 November 2021.

Rio Tinto (RTIO 2022) *Hamersley Iron Pty. Limited – Greater Paraburdoo Iron Ore Hub Proposal (Assessment No. 2189) Section 43A Application – Addendum 1*. 25 January 2022.

Yinhawangka Aboriginal Corporation (YAC 2022) *Greater Paraburdoo Social Cultural Heritage Management Plan (SCHMP)* 17 January 2022.