

## **Impact Reconciliation Procedure (Offsets)**

Hamersley Iron Pty. Limited

Brockman Syncline

May 2023

RTIO-0953045

Hamersley Iron Pty. Limited

152-158 St Georges Terrace, Perth

GPO Box A42, Perth, WA 6837

Document Status					
Rev	Author	Reviewer/s	Date	Approved for Issue	
				To Whom	Date
A	Rio Tinto	Approvals, Ops Environment	October 2022	DWER – EPAS, DCCEEW	18 October 2022
B	Rio Tinto	Approvals, Ops Environment	May 2023	DWER – EPAS, DCCEEW	26 May 2023

DRAFT

# Contents page

<b>1</b>	<b>THE PROPOSAL AND CONDITION REQUIREMENTS</b>	<b>4</b>
1.1	The proposal	4
1.2	Ministerial Statement and Commonwealth approval condition requirements	4
<b>2</b>	<b>PROCEDURE</b>	<b>4</b>
2.1	Identification of the environmental values requiring offsets	4
2.1.1	Vegetation Condition	5
2.1.2	Footprint Attribution	6
2.2	Method to determine impacts	7
2.2.1	Footprint attribution	7
2.2.2	Offset contribution determination	7
<b>3</b>	<b>REPORTING</b>	<b>10</b>
3.1	Frequency and timing	10
3.2	Content	10
3.2.1	Baseline	10
3.2.2	Impact Reconciliation Reports	11
<b>4</b>	<b>MANAGEMENT OF CHANGE</b>	<b>12</b>
<b>5</b>	<b>APPENDICES</b>	<b>13</b>

## Tables

Table 1: Environmental values requiring offsets for the Proposal.....	4
Table 2: Offsets - estimated contribution calculation into the PEOF.....	8
Table 3: Proposed reporting period and frequency of the Impact Reconciliation Reports.....	10

## Appendices

Appendix 1: Proposed offset conditions that may apply to the Proposal.....	13
Appendix 2: Proposal Overview.....	15
Appendix 3: Proposal Baseline Vegetation.....	17
Appendix 4: Proposal offset areas.....	19
Appendix 5: Proposal Baseline Footprint.....	21
Appendix 6: Vegetation Condition Mapping References.....	24

© Rio Tinto 2022

**COPYRIGHT and LIMITATION:** This report has been prepared for the Department of Water and Environmental Regulation, and the Department of Climate Change, Energy, the Environment and Water. Rio Tinto accepts no liability or responsibility in respect of any use or reliance on the report by any third party. Copyright and Intellectual Property rights associated with the document are held by Rio Tinto and the document may not be distributed without the written permission of Rio Tinto.

# 1 THE PROPOSAL AND CONDITION REQUIREMENTS

## 1.1 The Proposal

This Brockman Syncline Impact Reconciliation Procedure (IRP) has been prepared in accordance with the Western Australian (WA) Department of Water and Environmental Regulation's (DWER) requirements relating to offset reconciliation for the Brockman Syncline Proposal (the Proposal). The Proposal is currently subject to assessment under Part IV of the *Environmental Protection Act 1986* (EP Act) Assessment Number 2219, and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Assessment 2019/8518, as an accredited assessment.

This Procedure addresses both State and Commonwealth offset requirements. Rio Tinto on behalf of Hamersley Iron Pty. Limited (the Proponent) intends to utilise the WA Pilbara Environmental Offset Fund (PEOF), as the nominated 'Conservation Offset Fund', to meet EPBC Act Decision Notice offset requirements.

Once approved, this IRP will supersede any aspects of the Impact Reconciliation Procedure for Hamersley Iron (our ref: RTIO-HSE-0165630), approved March 2021 that relate to Ministerial Statements 925 and 1000.

## 1.2 Ministerial Statement and Commonwealth approval condition requirements

Conditions from Ministerial Statement XXXX (State) and Decision Notice EPBC 2019/8518 (Commonwealth) relevant to offsets for the Proposal are included in Table A 1 and Table A 2 respectively of Appendix 1.

# 2 PROCEDURE

The methodology for determining the baseline and offset contributions to deliver an outcome that aligns with DWER's IRPs and Impact Reconciliation Reports (IRRs) is detailed below. Content of both IRPs and IRRs is outlined in Section 3.2.

## 2.1 Identification of the Environmental Values Requiring Offsets

Ministerial Statement XXXX and Decision Notice EPBC 2019/8518 include conditions that require the Proponent to offset the significant residual impact (EP Act) / residual significant impact (EPBC Act) of the Proposal including clearing of 'good to excellent' condition native vegetation, and threatened flora in the Hamersley Interim Biogeographic Regionalisation for Australia (IBRA) subregion; and riparian vegetation and critical habitat for conservation significant fauna species, in the Hamersley IBRA subregion.

Ministerial Statement XXXX and Decision Notice EPBC 2019/8518 specify the biodiversity values listed in Table 1 below and associated offset rates.

**Table 1: Environmental Values Requiring Offsets for the Proposal**

Biodiversity Value		Offset Rate (\$/ha) <sup>1</sup>
State (WA) Ministerial Statement XXXX (Placeholder values subject to offset conditions)		
TBC	The proponent shall contribute funds to the <b>Pilbara Environmental Offsets Fund</b> calculated on the rates below to achieve the objective of counterbalancing the significant residual impacts to: <ol style="list-style-type: none"><li>1) "Good to Excellent" condition native vegetation</li><li>2) Riparian vegetation of high local significance</li><li>3) Riparian vegetation and Priority Ecological Communities within Area 1a (delineated in Figure xx)</li><li>4) Critical denning, shelter and roosting habitat for the Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python</li></ol>	
TBC	"Good to excellent" condition native vegetation (up to 4,532 ha), cleared as a result of the Proposal within the Hamersley IBRA subregion	\$890

<sup>1</sup> Base rate provided in Ministerial Statement XXXX and Decision Notice EPBC 2019/8518, to be adjusted annually in accordance with the percentage change in the Perth Consumer Price Index (CPI) applicable that year.

Biodiversity Value		Offset Rate (\$/ha) <sup>1</sup>
TBC	Riparian vegetation of high local significance	\$1,780
TBC	Riparian vegetation and Priority Ecological Communities within Area 1a, as previously approved under MS 925	\$1,500 <sup>2</sup>
TBC	Supporting foraging and dispersal habitat (up to 2,947 ha) for the Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python cleared as a result of the proposal, as delineated in Figure x of the Proposal Content Document.	\$890
TBC	Critical habitat: denning, shelter and roosting habitat (up to 331 ha) for the Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python cleared as a result of the proposal, as delineated in Figure x of the Proposal Content Document.	\$1,780
<b>EPBC Decision Notice EPBC 2019/8518 (Placeholder values subject to offset conditions)</b>		
TBC	Critical habitat (breeding, denning, roosting and shelter) for MNES species: Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python comprising: <ul style="list-style-type: none"> <li>• Gorge/Gully; and</li> <li>• Debris Slope/Rocky Outcrop</li> </ul>	\$3,306
TBC	Supporting habitat (foraging and dispersal) for: <ul style="list-style-type: none"> <li>• Northern Quoll (1 km from known records),</li> <li>• Pilbara Leaf-nosed Bat (10 km from Upper Beasley River Roost and Plunge Pool),</li> <li>• Ghost Bat (5 km from category 2 and category 3 roosts, associated with apartment blocks)</li> <li>• Pilbara Olive Python (1 km from known records)</li> </ul> Supporting habitats comprise: <ul style="list-style-type: none"> <li>• Major Creekline (Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python);</li> <li>• Minor Creekline (Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python);</li> <li>• Alluvial Plain (Pilbara Leaf-nosed Bat and Ghost Bat);</li> <li>• Colluvial Plain (Pilbara Leaf-nosed Bat and Ghost Bat); and</li> <li>• Hardpan Plain (Pilbara Leaf-nosed Bat and Ghost Bat).</li> </ul>	\$1,653

### 2.1.1 Vegetation Condition

To support approval processes for the Proposal, baseline flora and vegetation surveys were conducted, identifying native vegetation types and condition in the proposed Development Envelope. Details of the surveys, including the time they were undertaken, are provided in Appendix 1. The 'CondDate' attribute in the data standard reflects the date that the vegetation survey occurred. Where vegetation surveys occurred over a period of time, the most recent date has been used.

At the time of the surveys botanists recorded the condition of the vegetation based on Trudgen's (1991) Vegetation Condition Index<sup>3</sup>. This data was then digitised and logged in the Rio Tinto (the Company) central GIS system. Note that all clearing conducted (at the time of the IRP submission) prior to the Proposal's approval has been assigned a vegetation condition of 'Cleared' in the offset exempt footprints. A reconciliation of offset exempt clearing conducted between submission of the IRP and commencement of the Proposal will be documented in the first IRR, as per Section 4.

<sup>2</sup> Rate as per MS925 – noting the real value of contributions will be maintained through indexation to the Perth Consumer Price Index (CPI), with the first adjustment to be applied to the first contribution

<sup>3</sup> Trudgen, M.E. (1991) *Vegetation Condition Scale*. In: *National Trust (WA) 1993 Urban Bushland Policy*. National Trust of Australia (WA). Wildflower Society of Western Australia (Inc.) and the Tree Society (Inc.), Perth, Western Australia.

Where fire has occurred, the vegetation condition was extrapolated from surrounding unburnt vegetation assuming that the area will regenerate over time.

### **2.1.2 Footprint Attribution**

Aerial ortho or satellite imagery encompassing the proposed Development Envelope is taken as close to the Proposal's approval time as practicable and aligning with the Proponent's existing flyover schedules. Where required, ground survey and truthing practices may also be used to supplement the imagery. Cleared areas are identified and digitised according to an internal data standard using the Company's GIS package. The 'CondDate' attribute in the data standard reflects the end of the reporting period as the vegetation was cleared up to the date of commencement of action under the current MS or, if a prior MS was superseded during the report period, the date the prior MS was superseded.

#### **Ministerial Statement**

Using the Company's Approvals Request Coordination System (ARCS), a clearing mechanism, amongst other metadata fields in the data standard, is assigned to each digitised cleared polygon based on the purpose, location and time of the land clearing.

This clearing mechanism is then used to determine offset exempt areas, including areas cleared under:

- A previous MS, for areas not subjected to offset;
- A current MS where the previously approved clearing limits have not yet been exhausted, or where offsets are not applicable;
- An alternative clearing mechanism such as a Native Vegetation Clearing Permit (NVCP), *Bush Fires Act 1954*, *Land Administration Act 1997* or activities prescribed as clearing under Regulation 5 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;
- Clearing not conducted by the Proponent eg. pastoral station owners, government departments or other proponents;
- EPBC Act approval; since the EPBC Act Decision Notice approval offset rate is equal to or higher than the MS offset rate, disturbance within the EPBC Act approval areas will be captured in the EPBC Act offset payable layer and will then be exempt from additional payments under the MS to avoid duplication of payments.

Where a clearing limit has not yet been exhausted from a previously approved or superseded MS, clearing is attributed to the current MS and is identified as 'offset exempt' (i.e. to utilise the full complement of the approved clearing limit, however avoid attributing clearing to a superseded MS). This clearing is only assigned over a vegetation condition consistent with the previous MS (i.e. significant areas are avoided) and where activities are within the scope of the previous MS. Note that until the previously approved clearing limit is exhausted, this baseline layer will continue to change – refer to Section 0 for details of how such changes will be managed.

Where a Rio Tinto company has overlapping MS Development Envelopes, the ARCS system is used to identify which clearing mechanism to attribute the clearing polygons based on the purpose, location and timing of the clearing.

Clearing conducted under an overlapping MS, where a Rio Tinto company is the proponent, will be supplied as a separate layer (indicated as offset exempt for current MS) in order to provide assurance that all clearing has been accounted for within the Proposal Development Envelope. Note that the area will also be included in the overlapping MS/EPBC Act approval IRP/IRR when required.

Clearing conducted by a Rio Tinto company attributed to an NVCP that is not prescribed in a MS condition or to another approval mechanism such as an exemption, will be included as a totalised NVCP or Other clearing mechanism layer, respectively. Where a MS prescribes NVCPs which contribute to the total proposal clearing allocation (offset applicable or exempt), these MS-prescribed NVCPs shall be provided in a separate consolidated layer. Clearing suspected to have been performed by proponents other than Rio Tinto, with overlapping Development Envelopes will be attributed in the 'Other clearing' mechanism layer by review of internal records and the apparent purpose and location of the clearing. Data sharing agreements may also be utilised where present and ground survey and truthing practices implemented if required; however, the Proponent cannot confirm the clearing mechanism applied by a third party. Where possible, information will be added within the notes section of the data standard attribute table detailing the suspected cause of the impact. Refer to Section 3.2 for an outline of report content.

#### **EPBC Act Decision Notice**

All clearing conducted by the Proponent within the defined offset applicable areas and scope that occurred from commencement of the Proposed Action is offset applicable for the purposes of the EPBC Act approval.

The scope of the Proposed Action includes the extension to Brockman Syncline 2, Brockman Syncline 4 and Nammuldi- Silvergrass. Exemptions related to clearing mechanisms applied at the Western Australian level do not apply to the EPBC Act approval, except for clearing not conducted by the Proponent.

## **2.2 Method to determine impacts**

### **2.2.1 Footprint attribution**

Aerial ortho or satellite imagery encompassing the proposed Development Envelope is taken as close to the end of the reporting period as practicable and aligning with the Company's existing flyover schedules. Where available, ground survey and truthing practices will also be used to supplement the imagery.

Although IRRs are submitted biennially (refer to Table 5 for timing), footprints for each environmental value will be created annually.

The previous annual footprint, or baseline footprint if first reporting year, will be overlaid on the report period image to identify new clearing and rehabilitation activities and/or changes in ground condition and land use. These areas will then be digitised and attributed in a similar process to that outlined in Section 0 above, in the Company's GIS package, to the Company's relevant data standards.

### **2.2.2 Offset contribution determination**

Once the cleared footprint has been updated and finalised, data from the Company's internal data standard is consolidated and translated into the required DWER data standards.

For MS: Clearing footprints attributed to the current MS are overlaid against baseline layers for vegetation condition, type and areas of significant environment value that have been identified as requiring offset. The offset contribution is determined where the footprint and offset applicable areas intersect.

For EPBC Act Decision Notice: Clearing footprints attributed to the EPBC Act approval, after impacts commenced, will incur offset requirements (clearing footprints prior to impacts commencing under the EPBC Act approval will be attributed to a MS or other clearing mechanism).

For areas that are offset applicable under both the State and Commonwealth approvals, the offset will be paid once only, at the highest applicable rate (ie. no overlap between MS and EPBC Act approval offset payable layers) (Refer to Table 3 and Table 4).

Data and supporting spatial files will be submitted biennially in the IRR's, refer to Section 0 and Table 5 for details of IRR content and reporting period and frequency of the IRR's.

Where a previous and current MS (for the same Proposal) both have offset conditions over a common overlapping area, offset applicable clearing under both MS's will be subject to the requirements and rates of the newest MS, unless otherwise specified.

The increase in the amount to be paid per hectare cleared in respect of the year in which clearing occurred will be calculated by application of the Perth Consumer Price Index (CPI) and paid as specified in the approval conditions.

Following the determination of offset liability, the Company will source the appropriate funds annually, aligning with internal accounting processes. Following submission and approval of IRRs (biennial), DWER will issue an invoice, which the Company will pay by transferring the required funds into the prescribed fund. The Company will submit evidence of each payment made to the prescribed fund to DCCEE within 10 business days of the date of making the payment.

To meet the requirements of the EPBC Act Offsets Policy, an initial contribution of 10% of the total calculated offset contribution for MNES values is required to be paid into the PEOF within one (1) month of receipt of the DWER invoice (see Table 2 for estimated contribution calculations). Since the initial payment is made prior to impacts commencing, this amount will be subtracted from the subsequent offsets payable prior to CPI adjustments being applied, with CPI then applied only to any remaining amount owing for that period.

**Table 3: EP Act Offset - estimated contribution calculation into the PEOF**

EP Act Environmental Value to be Offset	Amount of Area to be offset in ha(s)	Protected Matter Value Rating Category	Environmental Value Justification	IBRA Subregion	Estimated Offset Rate (\$/ha) <sup>4</sup>	Total to be Offset
Good – Excellent condition native vegetation	4,532	Good – Excellent condition native vegetation	Clearing of good to excellent condition native vegetation	Hamersley	\$890	\$4,033,480
High local significance riparian vegetation	6	Riparian vegetation	Clearing of high value riparian vegetation (C3 Duck Creek)	Hamersley	\$1,780	\$10,680
Offsets for EPBC Listed Species are specified in Table 4.						
<b>Total amount for the Proposal into the PEOF (State Requirement)</b>						<b>\$4,044,160</b>

<sup>4</sup> Estimated offset rates calculated on the 2021/22 financial year (excluding GST). Real value of contributions will be maintained through indexation to the Perth Consumer Price Index (CPI), with the first adjustment to be applied to the first contribution



**Table 4: EPBC Act Offset – estimated contribution calculation into the PEOF**

EPBC Act Protected Matter to be Offset	Amount of Area to be offset in ha(s)	Protected Matter Value Rating Category	Environmental Value Justification	IBRA Subregion	Estimated Offset Rate Documented (\$/ha) <sup>5</sup>	Total to be Offset
Critical habitat (roosting and breeding)	331	<i>Critical</i> habitat (breeding, denning, roosting and shelter) for MNES species: Northern Quoll, Pilbara Leaf-nosed Bat, Ghost Bat and Pilbara Olive Python	Clearing of critical habitat (breeding, denning and roosting (high significance) habitat) comprising: <ul style="list-style-type: none"> <li>• Gorge/Gully; and</li> <li>• Debris Slope/Rocky Outcrop</li> </ul>	Hamersley	\$3,306	\$1,094,286
Supporting habitat (foraging and dispersal)	2,946	<i>Supporting</i> habitat (foraging and dispersal) for: <ul style="list-style-type: none"> <li>• Northern Quoll (1 km from known records),</li> <li>• Pilbara Leaf-nosed Bat (10 km from Upper Beasley River Roost and Plunge Pool),</li> <li>• Ghost Bat (5 km from category 2 and category 3 roosts, associated with apartment blocks)</li> <li>• Pilbara Olive Python (1 km from known records)</li> </ul>	Clearing of supporting habitat (foraging and dispersal habitat) comprising: <ul style="list-style-type: none"> <li>• Major Creekline;</li> <li>• Minor Creekline.</li> <li>• Alluvial Plain;</li> <li>• Colluvial Plain; and</li> <li>• Hardpan Plain</li> </ul>	Hamersley	\$1,653	\$4,869,738
<b>Total amount for the Proposal into the PEOF (EPBC Requirement)</b>						<b>\$5,964,024</b>
<b>Initial estimated contribution into the PEOF (Commonwealth requirement, 10% of the overall EPBC Act offset contribution)</b>						<b>\$596,402</b>

### 3 REPORTING

#### 3.1 Frequency and timing

The reporting schedule for IRP and IRR submission for the first three periods is outlined below in Table 5. It will be extrapolated and implemented until the end of the period of effect of the approval or as otherwise agreed to by DWER and the Australian Government Minister for the Environment.

**Table 5: Proposed reporting period and frequency of the Impact Reconciliation Reports**

Biennial period	Action	Timing
	Ministerial Statement issued	DD Month Year
	EPBC Decision Notice issued	DD Month Year
	Proposal implementation commenced	[Year 1]
	Initial EPBC Act payment	Within one (1) month of receipt of the DWER invoice
	Submit evidence of initial payment to the DCCEEW	Within 10 business days of receipt of payment
Period 1	First biennial reporting period	From the commencement of the action to 31 December [Year 2]
	Aerial survey/ground-truthing	As close to 31 December as practicable
	IRR submission	30 April [Year 3]
	Submit evidence of payment into PEOF account to the DCCEEW	Within 10 business days of receipt of payment
Period 2	Second biennial reporting period	1 January [Year 3] – 31 December [Year 4]
	IRR submission	30 April [Year 5]
	Submit evidence of payment into PEOF account to the DCCEEW	Within 10 business days of receipt of payment
Period 3	Third biennial reporting period	1 January [Year 5] – 31 December [Year 6]
	IRR submission	30 April [Year 7]
	Submit evidence of payment into PEOF account to the DCCEEW	Within 10 business days of receipt of payment
Final Period	Final reporting period	1 January [Year X] – 31 December [Year X]
	Final IRR submission	30 April of Year after final reporting period
	Submit evidence of payment into PEOF account to the DCCEEW	Within 10 business days of receipt of payment

#### 3.2 Content

Commercially sensitive information within spatial data and aerial imagery in both Baseline and IRR's will be considered when completing required metadata and licensing statements (provided separately).

##### 3.2.1 Baseline

The Baseline package will contain three components:

1. IRP – this document.
2. Aerial imagery clipped to the proposed Development Envelope boundary and taken as close to the commencement of the approval as practicable, with an index providing date of capture for each image compiling the full composite.
3. Spatial data to support the above procedure. At a minimum, spatial data will meet the following:
  - be topographically accurate and georeferenced;
  - use GDA2020 (datum) co-ordinate system and projected into the appropriate Map Grid of Australia zone (ie 50);
  - include closed polygons and clipped to the relevant approval boundaries (any topology errors rectified);
  - be supplied in ESRI geodatabase format or shapefile;
  - be aligned with and attributed according to DWER's GIS Data Standards;
  - polygons of similar 'purpose' shall not overlap (ie. clearing polygons shall not overlap, vegetation type and condition polygons shall not overlap, and exemption polygons shall not overlap);
  - all clearing data will be supplied to two decimal places in attributable tables.

Spatial data and layers shall include:

- Spatial boundaries including:
  - Development Envelopes (*Current and overlapping Proponent MSs only, previous MSs not to be included*);
  - Areas of Significance (*Environment Matters specified in MS and EPBC Act Decision Notice, prescribed in offset conditions*) with areas already cleared at the time of IRP submission removed;
- Vegetation condition and type (1 consolidated polygon per condition and type), by IBRA region;
- Offset exempt areas. Exemptions may include clearing associated with:
  - previous MS (1 consolidated polygon per MS) (*where areas are not subject to offsets*), by IBRA region;
  - overlapping MS where the proponent is a Rio Tinto company (1 consolidated polygon per MS), by IBRA region;
  - MS-prescribed NVCPs (1 consolidated polygon) (*where MS prescribes NVCPs which contribute to the total Proposal clearing allocation*), by IBRA region;
  - other NVCP (1 consolidated polygon), all clearing attributed to NVCPs within the Proposal's Development Envelope, not prescribed by the MS, by IBRA region;
  - other clearing mechanism (1 consolidated polygon, by IBRA region) – may include:
    - Clearing authorised under an alternative approval mechanism (eg. *Bush Fires Act 1954, Land Administration Act 1997, Prescribed clearing under Regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004*). Note NVCP has been separated;
    - Clearing conducted prior to clearing legislation commencement;
    - Clearing not completed by the Proponent (where possible, information will be added within the notes section of the attribution table detailing the suspected cause of the impact).
  - Note: Exemptions related to clearing mechanisms applied at the Western Australian level do not apply to the EPBC Act approval, except for clearing not conducted by the Proponent.
- Maps to support the above-mentioned spatial data.

### 3.2.2 Impact Reconciliation Reports

IRR's will contain three components:

1. A biennial report specifying the annual area cleared (in hectares), and base and CPI adjusted rates for each offset applicable requirement outlined in the MS and EPBC Act approval as well as estimates of projected clearing for subsequent biennial periods. The report structure and content will be in accordance with an internal template which will be reviewed biennially to ensure alignment and consistency with DWER issued templates and guidance material. A final IRR will be submitted in the year after the final

reporting period that includes the offset attributable clearing footprint that has occurred over the life of the approval.

2. Aerial imagery clipped to the relevant approval boundaries and taken as close to the end of the annual reporting periods as practicable, with an index providing date of capture of each image compiling the full composite.
3. Spatial data to support the above report. Both IRR and Baseline spatial data shall be used to inform the overall requirement for offsets for the action. At a minimum, spatial data will meet the following:
  - be topographically accurate and georeferenced;
  - use GDA2020 (datum) co-ordinate system and projected into the appropriate Map Grid of Australia zone (ie. 50);
  - include closed polygons and clipped to the relevant approval boundaries (any topology errors rectified);
  - be supplied in ESRI geodatabase format or shapefile;
  - be aligned with and attributed according to DWER's GIS Data Standards;
  - polygons of similar 'purpose' shall not overlap (ie. clearing polygons shall not overlap, vegetation type and condition polygons shall not overlap, and exemption polygons shall not overlap);
  - all clearing data will be supplied to two decimal places in the attribute tables.

Spatial data and layers for both the MS and EPBC Act approval shall include:

- Clearing activity:
  - all clearing undertaken for each calendar year of each biennial reporting period (1 polygon per year, per mechanism, per IBRA region);
  - offset payable clearing undertaken for each calendar year of each biennial reporting period (1 polygon per year, per rate, per mechanism);
  - updates to offset exempt areas (1 polygon for each previously-submitted layer indicating changes).
- Maps to support the above-mentioned spatial data.
- Updated spatial layers if a change is required (refer to Section 0).

## 4 MANAGEMENT OF CHANGE

The Proponent recognises that due to the timing of new submissions, approval complexity and continued process and technology improvements, changes to submitted data may be required. For the below listed known changes, the Proponent will supply any updated data and support spatial files in the next IRR submission. Note that only the changed information will be provided, rather than the re-supply of the entire layer:

- offset exempt areas acknowledging that clearing will continue to occur between submission of baseline as part of pre-approval conditions (where required) and Proposal approval; and
- updated exempt areas as a result of continued clearing or until the previously approved offset-exempt clearing allocation has been exhausted.

For unforeseen changes, the Proponent will conduct an assessment of materiality and will initiate discussions with DWER and DCCEEW to determine an appropriate resolution strategy.

## 5 APPENDICES

Appendix 1: **PLACEHOLDER** Proposed offset conditions that may apply to the Proposal

Table A 1 – EP Act Ministerial Statement **XXX** offset conditions that apply to the Proposal.  
**PLACEHOLDER [placeholder until conditions are drafted. The values and associated rates are proposed to be offset in line with Table 1]**

Condition Number	Condition Requirement
TBC	

DRAFT

Table A 2 – EPBC Decision Notice EPBC 2019/8518 offset conditions that apply to the Proposed Action: **PLACEHOLDER [placeholder until conditions are drafted. The values and associated rates are proposed to be offset in line with Table 1]**

Condition Number	Condition Requirement
TBC	

DRAFT

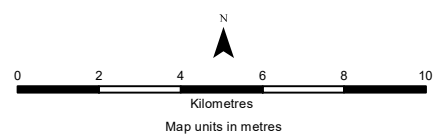
DRAFT

Drawn: L.Fuentes  
Plan: RTIO0952547v1  
Date: October 2022

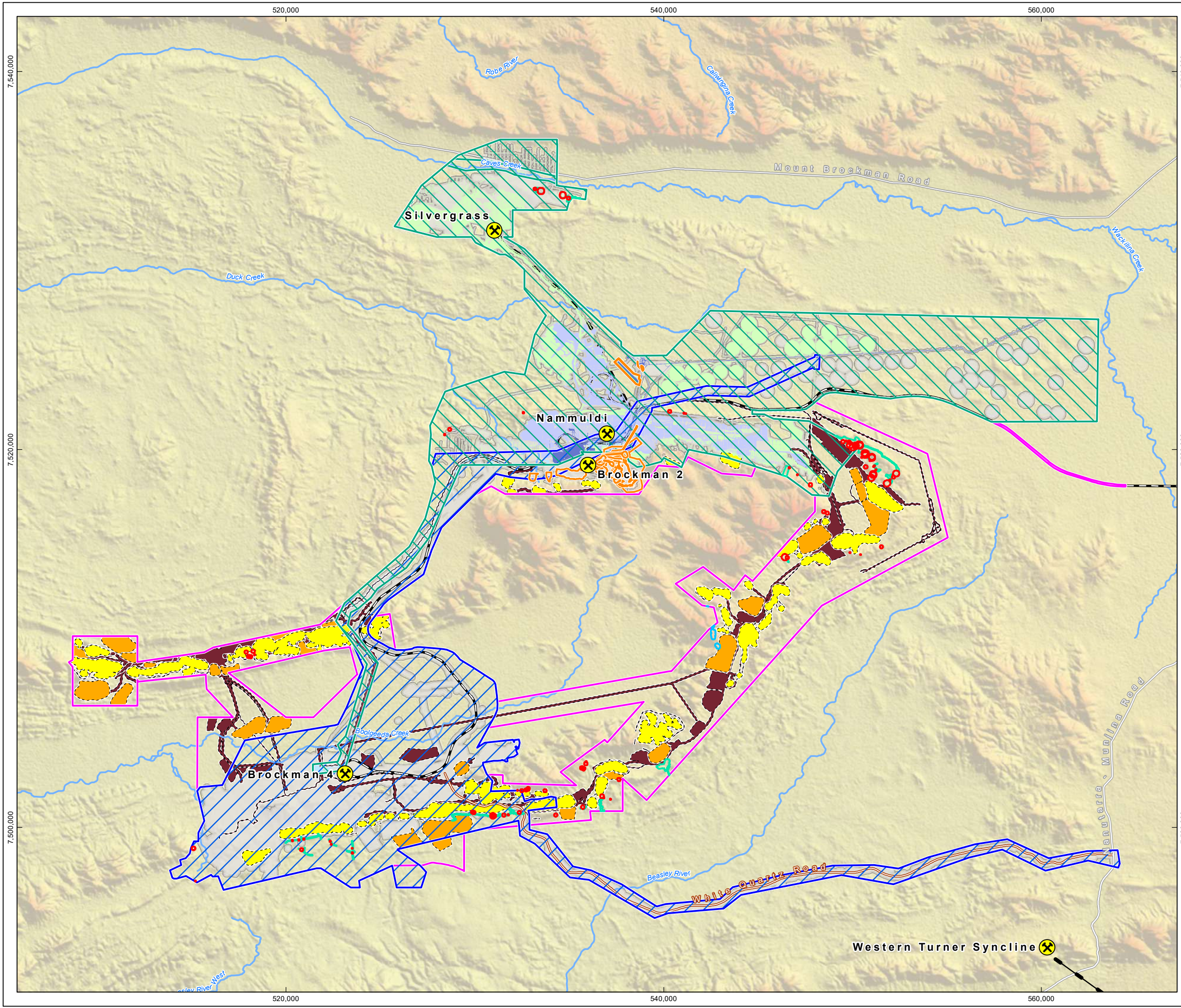
Proj: GDA 1994 MGA Zone 50  
Scale: 1:185,000 @A3  
GIS.Team@riotinto.com

Legend

- Development Envelope
- Part IV Indicative Approved Footprint
- Brockman 2 - MS 131/867
- Nammuldi Silvergrass - MS 925
- Brockman 4 - MS 1000
- MS131 Offset Exempt Area
- MS558 Offset Exempt
- MS717 Offset Exempt Area
- MS925 Offset Exempt Area
- MS1000 Offset Exempt Area
- Mine Exclusion Zone (*Tetratheca Butcheriana*)
- Bat Cave Exclusion Zone
- MNES Critical Habitat Exclusion Zone
- Conceptual Footprint**
- Pit
- Waste Rock Landform
- Infrastructure
- Rio Tinto Mine
- Rio Tinto Railway
- Conveyor
- Major Road
- Minor Road
- Site Access Road
- Major Creek



Disclaimer: This document has been prepared to the highest level of accuracy possible, for the purposes of Rio Tinto's iron ore business. Reproduction of this document in whole or in part by any means is strictly prohibited without the express approval of Rio Tinto. Further, this document may not be referred to, quoted or relied upon for any purpose whatsoever without the written approval of Rio Tinto. Rio Tinto will not be liable to a third party for any loss, damage, liability or claim arising out of or incidental to a third party using or relying on the content contained in this document. Rio Tinto disclaims all risk and the third party assumes all risk and releases and indemnifies and agrees to keep indemnified Rio Tinto from any loss, damage, claim or liability arising directly or indirectly from the use or reliance on this document.



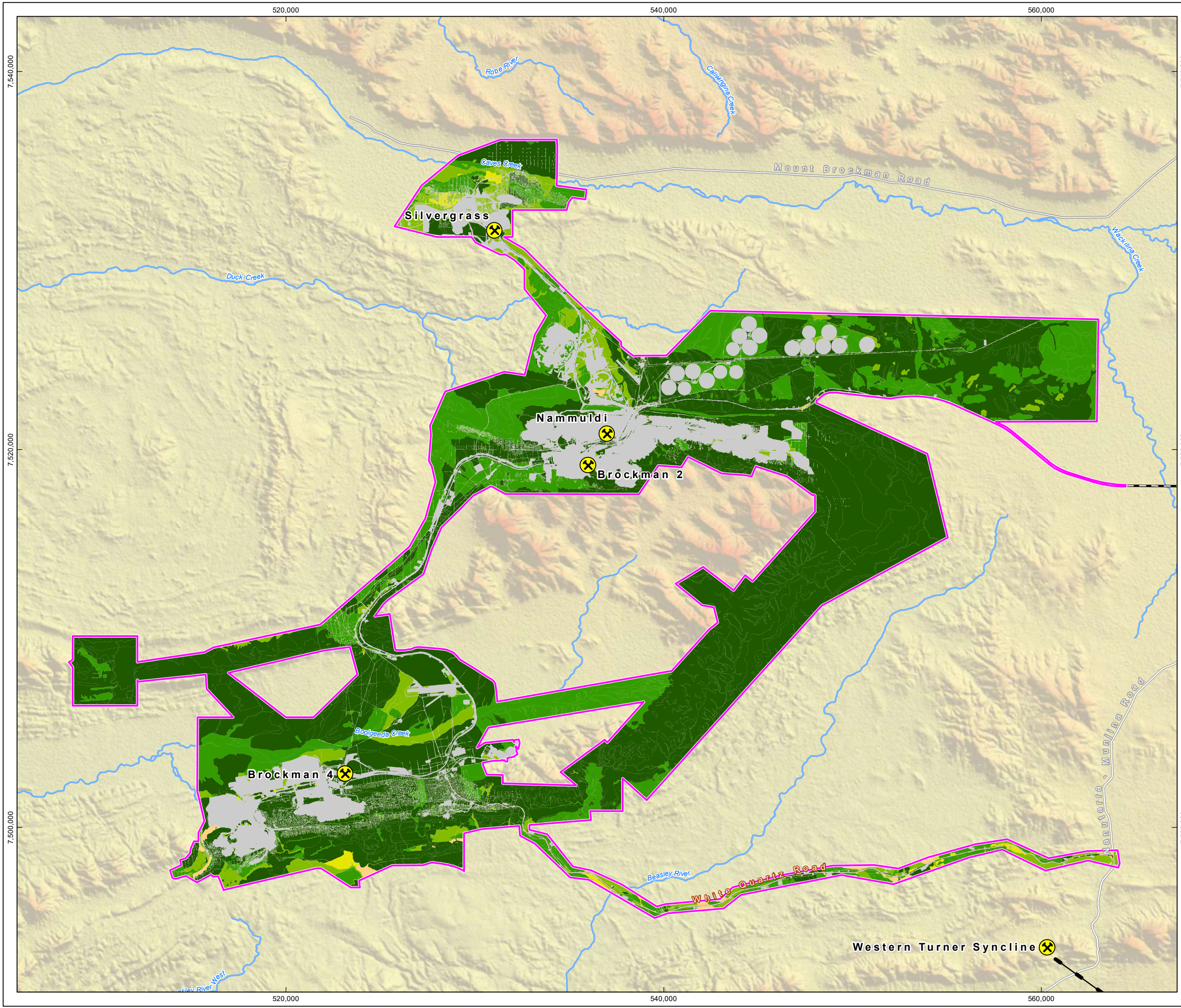


**Appendix 3: Proposal Baseline Vegetation**

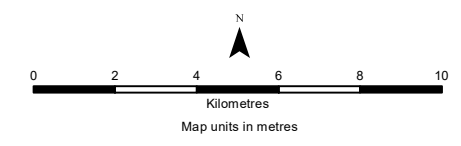
DRAFT

Drawn: L.Fuentes  
Plan: RTIO0952548v1  
Date: October 2022

Proj: GDA 1994 MGA Zone 50  
Scale: 1:185,000 @A3  
GIS.Team@riotinto.com



- Legend**
- Development Envelope
  - Vegetation Condition**
    - Excellent
    - Very Good
    - Good
    - Poor
    - Degraded
    - Completely Degraded
  - Rio Tinto Mine
  - Rio Tinto Railway
  - Conveyor
  - Major Road
  - Minor Road
  - Site Access
  - Major Creek



Disclaimer: This document has been prepared to the highest level of accuracy possible, for the purposes of Rio Tinto's iron ore business. Reproduction of this document in whole or in part by any means is strictly prohibited without the express approval of Rio Tinto. Further, this document may not be referred to, quoted or relied upon for any purpose whatsoever without the written approval of Rio Tinto. Rio Tinto will not be liable to a third party for any loss, damage, liability or claim arising out of or incidental to a third party using or relying on the content contained in this document. Rio Tinto disclaims all risk and the third party assumes all risk and releases and indemnifies and agrees to keep indemnified Rio Tinto from any loss, damage, claim or liability arising directly or indirectly from the use or reliance on this document.

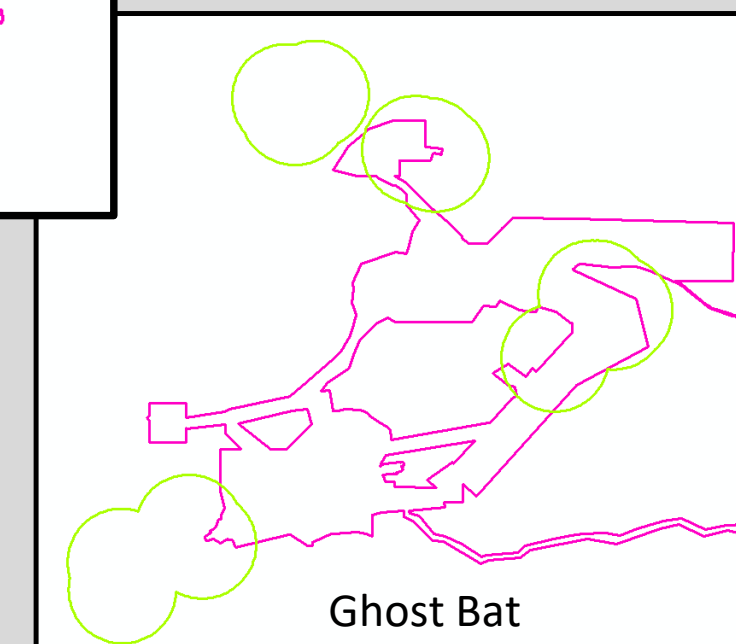
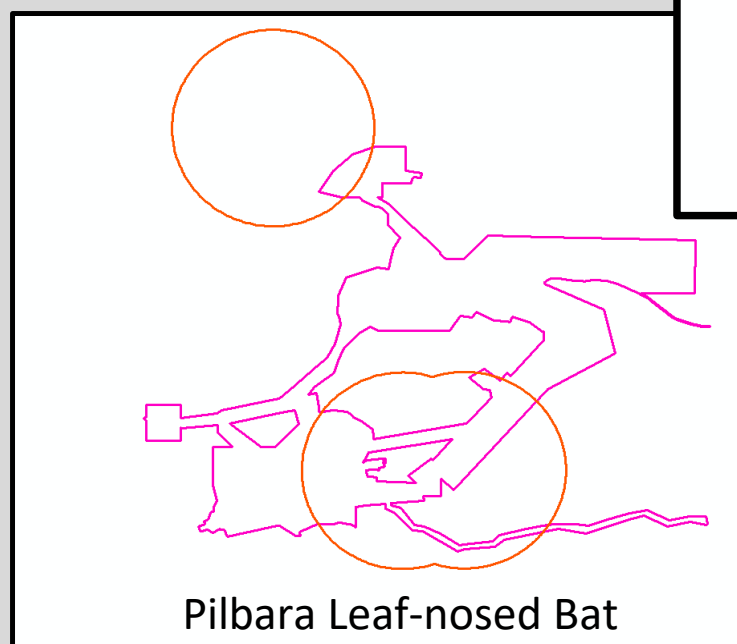
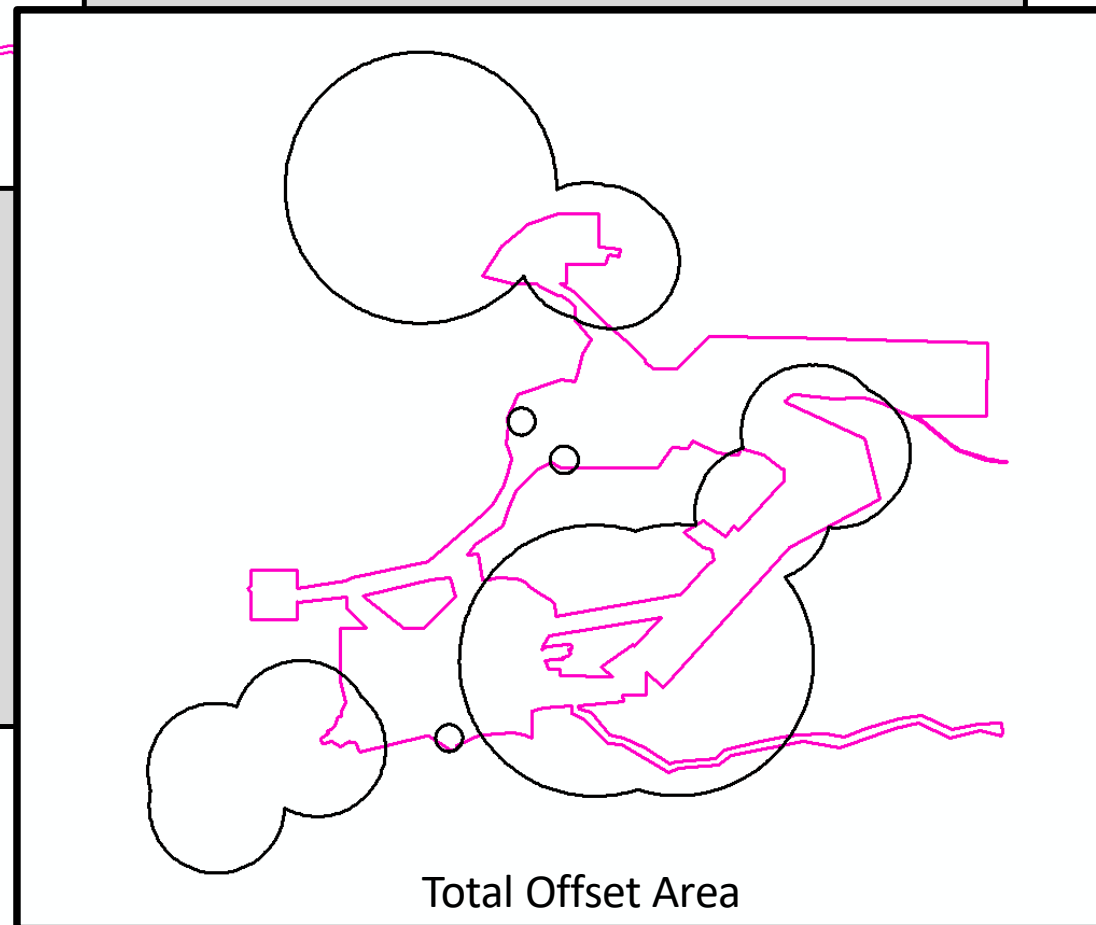
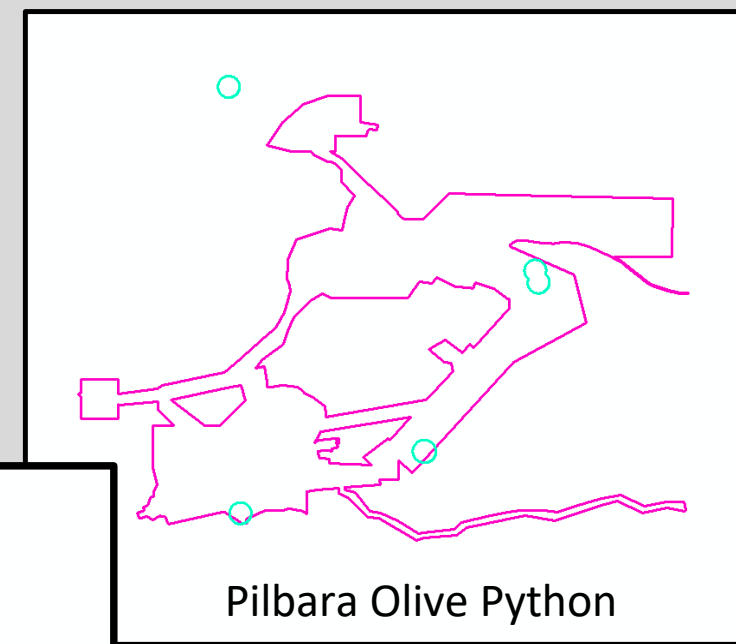
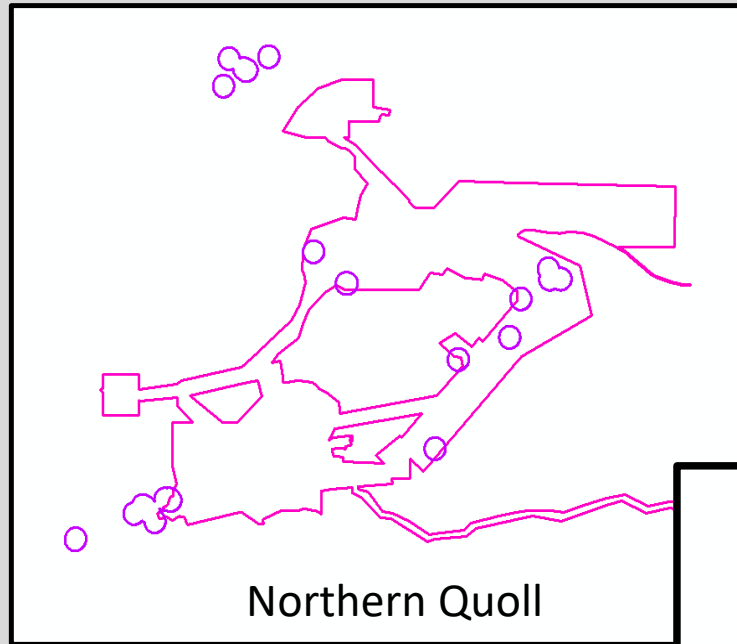
**Appendix 4: Proposal Offset Areas**

DRAFT

Appendix 4  
Significant Species Home Range  
Utilised to Determine Total Offset  
Area for Supporting Habitat

Drawn: L.Fuentes  
Plan: PDE0191389v1  
Date: July 2022

NTS @A3  
GIS.Team@riotinto.com

















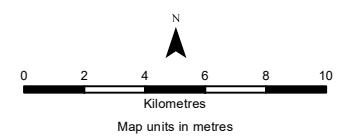
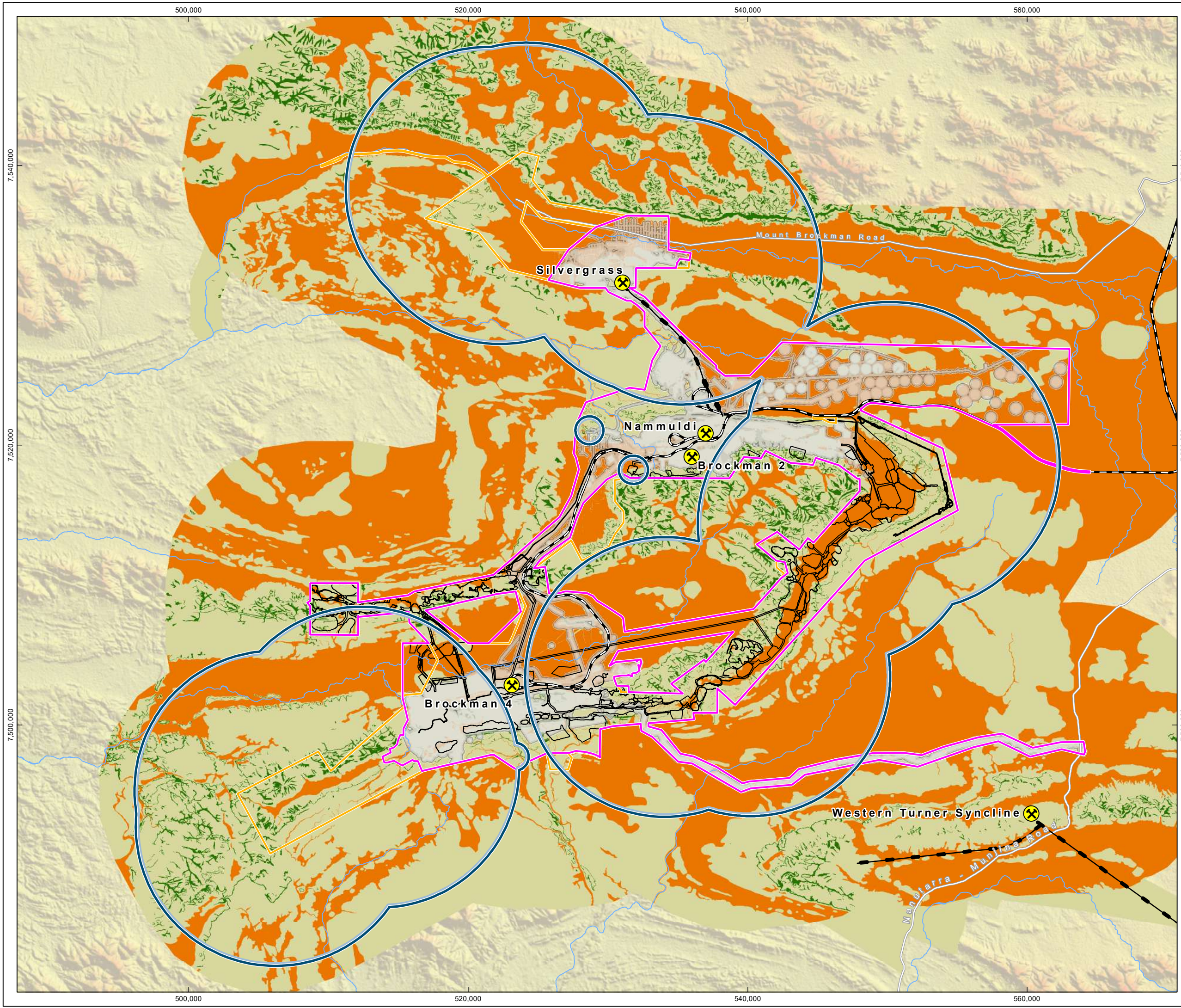
### Appendix 4 Significant Habitat Depicted over Significant Species Home Ranges

Drawn: L.Fuentes  
Plan: PDE0189727v2  
Date: May 2023

Proj: GDA 1994 MGA Zone 50  
Scale: 1:250,000 @A3  
GIS.Team@riotinto.com

#### Legend

-  Development Envelope
-  Survey Area
-  Total Offset Buffer
-  Conceptual Footprint
-  Part IV Indicative Approved Footprint
- Pilbara Leaf-nosed Bat Habitat Quality**
  -  Critical Habitat
  -  Supporting Habitat
  -  Habitat
-  Rio Tinto Mine
-  Rio Tinto Railway
-  Conveyor
-  Major Road
-  Minor Road
-  Major Creek



Disclaimer: This document has been prepared to the highest level of accuracy possible, for the purposes of Rio Tinto's iron ore business. Reproduction of this document in whole or in part by any means is strictly prohibited without the express approval of Rio Tinto. Further, this document may not be referred to, quoted or relied upon for any purpose whatsoever without the written approval of Rio Tinto. Rio Tinto will not be liable to a third party for any loss, damage, liability or claim arising out of or incidental to a third party using or relying on the content contained in this document. Rio Tinto disclaims all risk and the third party assumes all risk and releases and indemnifies and agrees to keep indemnified Rio Tinto from any loss, damage, claim or liability arising directly or indirectly from the use or reliance on this document.

**Appendix 5: Proposal Baseline Footprint**

DRAFT

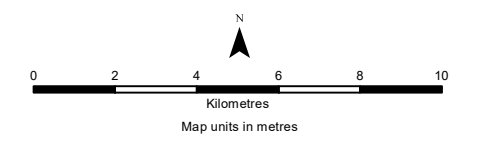
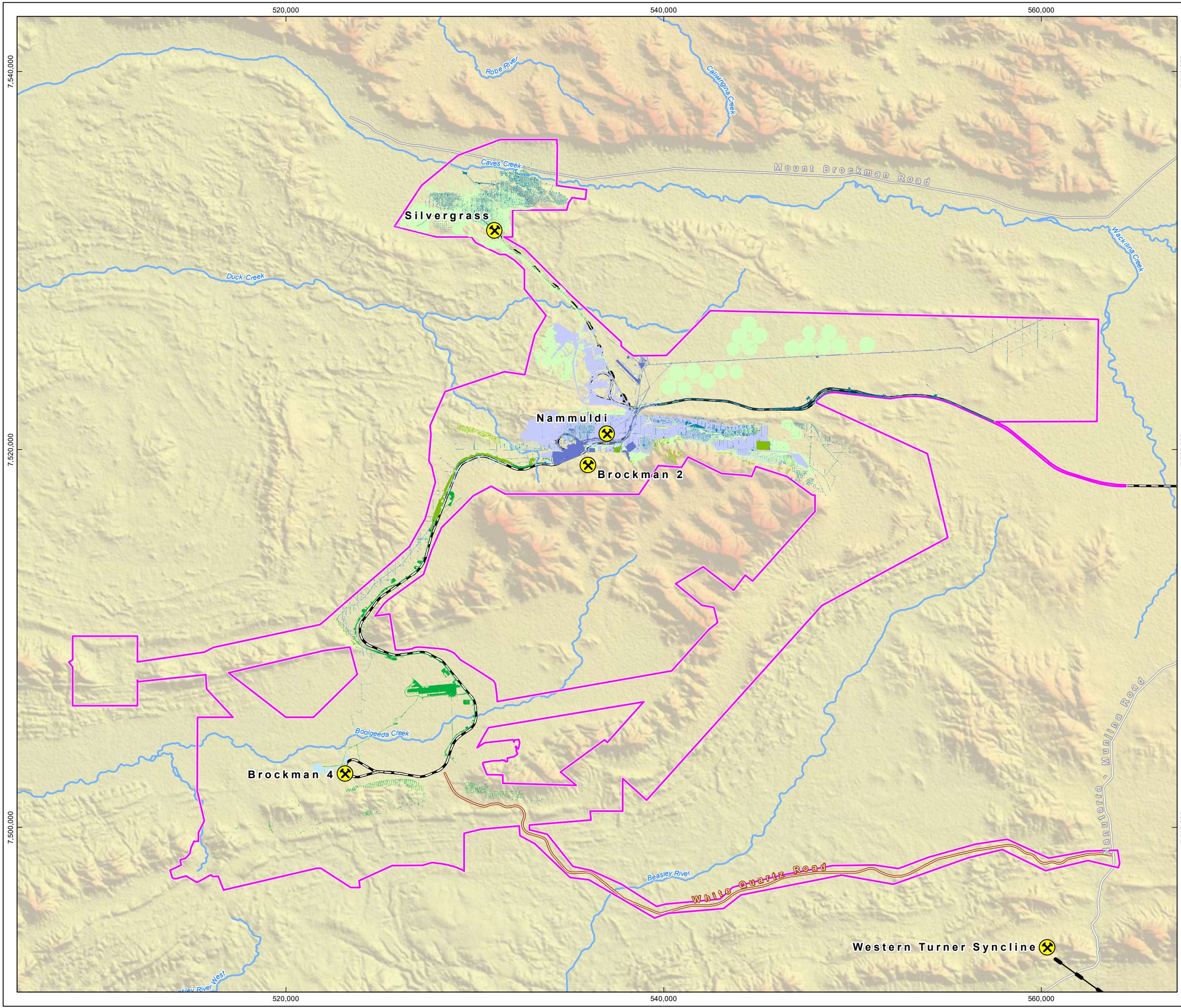
# Appendix 5 Proposal Baseline Footprint

Drawn: L.Fuentes  
Plan: RTIO0952550v1  
Date: October 2022

Proj: GDA 1994 MGA Zone 50  
Scale: 1:185,000 @A3  
GIS.Team@riotinto.com

### Legend

-  Development Envelope
-  MS131 Offset Exempt Area
-  MS558 Offset Exempt
-  MS717 Offset Exempt Area
-  MS925 Offset Exempt Area
-  MS1000 Offset Exempt Area
-  MS 925 NVCP Footprint Offset Exempt Area
-  MS 1000 NVCP Footprint Offset Exempt Area
-  Other Footprint Offset Exempt Area
-  Rio Tinto Mine
-  Rio Tinto Railway
-  Conveyor
-  Major Road
-  Minor Road
-  Site Access Road
-  Major Creek



Disclaimer: This document has been prepared to the highest level of accuracy possible, for the purposes of Rio Tinto's iron ore business. Reproduction of this document in whole or in part by any means is strictly prohibited without the express approval of Rio Tinto. Further, this document may not be referred to, quoted or relied upon for any purpose whatsoever without the written approval of Rio Tinto. Rio Tinto will not be liable to a third party for any loss, damage, liability or claim arising out of or incidental to a third party using or relying on the content contained in this document. Rio Tinto disclaims all risk and the third party assumes all risk and releases and indemnifies and agrees to keep indemnified Rio Tinto from any loss, damage, claim or liability arising directly or indirectly from the use or reliance on this document.

## Appendix 6: Vegetation Condition Mapping References

### Report References

- Biota Environmental Sciences (Biota). 2019. Brockman 2 Deposits Detailed Flora and Vegetation Survey: Phase 1 and 2. Prepared for Rio Tinto Iron Ore, September 2019.
- Stantec. 2019. Greater Brockman 4 Sustaining Tonnes Project: Detailed Flora and Vegetation Survey 2019.
- Biologic Environmental Survey (Biologic). 2020. Brockman Syncline: Riparian Vegetation Survey - Boolgeeda Creek.
- Biologic Environmental Survey (Biologic). 2021. Brockman Syncline: Riparian Vegetation Survey - Duck Creek.
- Biologic Environmental Survey (Biologic). 2021. Brockman Syncline Proposal 'Revised Operations' GDE Assessment.
- Stantec. 2021. Greater Brockman Syncline: Consolidated Vegetation Type and Condition Mapping. Prepared for Rio Tinto. April 2021.
- Rio Tinto, 2022. Metadata\_Statement Vegetation Condition Mapping for Brockman Syncline

DRAFT