

# **BHP**

## **Ministers North Derived Proposal**

### **Impact Reconciliation Procedure**

### **Ministerial Statement 1105**

**September 2025**



**Version Control**

<b>Version</b>	<b>Description</b>	<b>Key changes</b>	<b>Date</b>
1	Draft Impact Reconciliation Procedure (IRP)	New document	15/09/2025

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## Abbreviations and Definitions

Term	Meaning
AUD	Australian Dollars
BHP	BHP Iron Ore Pty Ltd
BNTAC	Banjima Native Title Aboriginal Corporation
CEO	Chief Executive Officer of DWER
Clearing	as defined by Section 51A of the <i>Environmental Protection Act 1986 (WA)</i>
CY	Callendar Year
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
FY	Financial Year
ha	Hectares
IBRA	Interim Biogeographic Regionalisation for Australia
Instructions	EPA (2024) document <i>Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports</i>
IRP	Impact Reconciliation Procedure
IRR	Impact Reconciliation Report
MRF	Mining Rehabilitation Fund
NVCP	Native Vegetation Clearing Permit
PEOF	Pilbara Environmental Offsets Fund

# Executive Summary

Ministers North Impact Reconciliation Procedure	
Proposal	Ministers North
Proponent	BHP Iron Ore Pty Ltd
Statement	Pilbara Expansion Strategic Proposal – Ministerial Statement 1105
IRP Purpose	To meet the requirements of implementation conditions of Ministerial Statement 1105 for the Pilbara Expansion Strategic Proposal, being: <ul style="list-style-type: none"> <li>• Condition 16 - Offsets (Impact Reconciliation Procedure)</li> </ul>
Key Environmental Factors and Objectives	Flora and Vegetation - <ul style="list-style-type: none"> <li>• <i>To protect flora and vegetation so that biological diversity and ecological integrity are maintained (EPA 2023).</i></li> </ul> Terrestrial Fauna - <ul style="list-style-type: none"> <li>• <i>To protect terrestrial fauna so that biological diversity and ecological integrity are maintained (EPA 2023).</i></li> </ul>
IRP Key Components	Refer to Section 2 <i>Procedure</i> and Section 3 <i>Reporting</i> .
IRP required pre-construction?	Yes

# 1 Context, Scope and Rationale

## 1.1 Pilbara Expansion Strategic Proposal

BHP referred the Pilbara Expansion Strategic Proposal (Strategic Proposal) to the EPA under Part IV of the EP Act on 6 July 2012. Having devised a long-term mine development plan, BHP's aim was to consider a more regional approach to environmental management across all its current and future operations. The Strategic Proposal included new mining operations and future expansions to existing mining operations, and associated infrastructure and activities in the Pilbara. The EPA assessed the Strategic Proposal at the level of Public Environmental Review and published its report on 9 July 2018 (EPA Report 1619, EPA 2018a).

The Minister for Environment issued Ministerial Statement 1105 (MS1105) for the Strategic Proposal on 11 July 2019. The Statement states that in the event that the EPA declares a future proposal as identified in EPA Report 1619 and described in Schedule 1 of MS1105 under section 38E to be a derived proposal, the derived proposal may be implemented, subject to the Minister for Environment's identification of relevant conditions under section 45B(3) from the conditions set out in the Statement. The area covered by the Strategic Proposal is identified by Figure 1.

The MS1105 approval provides a framework through which future proposals within BHP's Strategic Proposal area may be referred to EPA for assessment as a 'Derived Proposal'.

## 1.2 Ministers North Derived Proposal

The Ministers North Derived Proposal (Ministers North) is located within the boundary of the Strategic Proposal, positioned to the south of the existing Yandi Mining Operations, as identified by Figure 1. Ministers North was identified within the environmental assessments of the Strategic Proposal by BHP (2016) and EPA (2018).

The Derived Proposal is positioned within a Development Envelope of 5,556.6 ha, with an Indicative Footprint of 2,360 ha (Figure 2). The Indicative Footprint requires clearing of 1,848 ha of native vegetation and 512 ha of existing cleared/ disturbed land.

Mining will be undertaken through standard open pit mining techniques (drill, blast, load, haul) with the extracted ore from the mine pits temporarily stockpiled, prior to transport of the ore to the existing Yandi Mining Operations for processing. Waste rock extracted from the Mine Pits will be disposed of through a combination of Overburden Storage Areas (OSA) and the in-pit backfilling of the Mine Pits.

Generally, the Derived Proposal includes the following main elements and activities:

- mining above the groundwater level in two mine pits (north and south)
- stockpiling of ore on a Run of Mine (RoM) pad (including mobile crushing units, if required)
- waste rock disposal to Central Overburden Storage Area (OSA), and in-pit backfilling of the mine pits
- infrastructure corridor connecting Ministers North to Yandi, including:
  - a dual lane Haul Road with an overpass over a third-party railway
  - land bridge over Yandi W5 Mine Pit (existing approved pit) and
  - a widening of an existing creek crossing over Marillana Creek watercourse and crossings of other minor watercourses (includes disturbance to watercourse bed/banks)

- infrastructure changes at the existing Yandi Ore Handling Plant (OHP) including a new primary crusher to accommodate the Brockman-type ore supply
- mine access roads to connect various mining infrastructure
- borrow pits<sup>1</sup> to supply civil construction works (roads, RoM)
- laydown areas for equipment storage and construction
- stockpiles for cleared rehabilitation materials (topsoil, subsoil, vegetation)
- temporary and localised minor diversion of drainage lines / watercourses comprising earthworks, earthen bunds, swale drains and/or culverts
- water supply pipelines including water storage (e.g. turkey's nest) and pump stations
- associated infrastructure to support the mine construction and operation including but not limited to administration, workshops, warehouse/storage, vehicle parking, vehicle and equipment wash-down, fuel storage and transfer, explosives storage, power generation and transmission powerlines, services infrastructure, wastewater treatment, and communications.

A full description of the Ministers North proposal, and an assessment of the potential impacts to the recorded environmental values, is provided within the BHP (2025) *Ministers North Derived Proposal Request. Ministerial Statement 1105*.

### 1.3 Impact Reconciliation Procedure

BHP has prepared this Impact Reconciliation Procedure (IRP) for Ministers North to meet the requirements of the implementation conditions for the Strategic Proposal under the MS1105 approval.

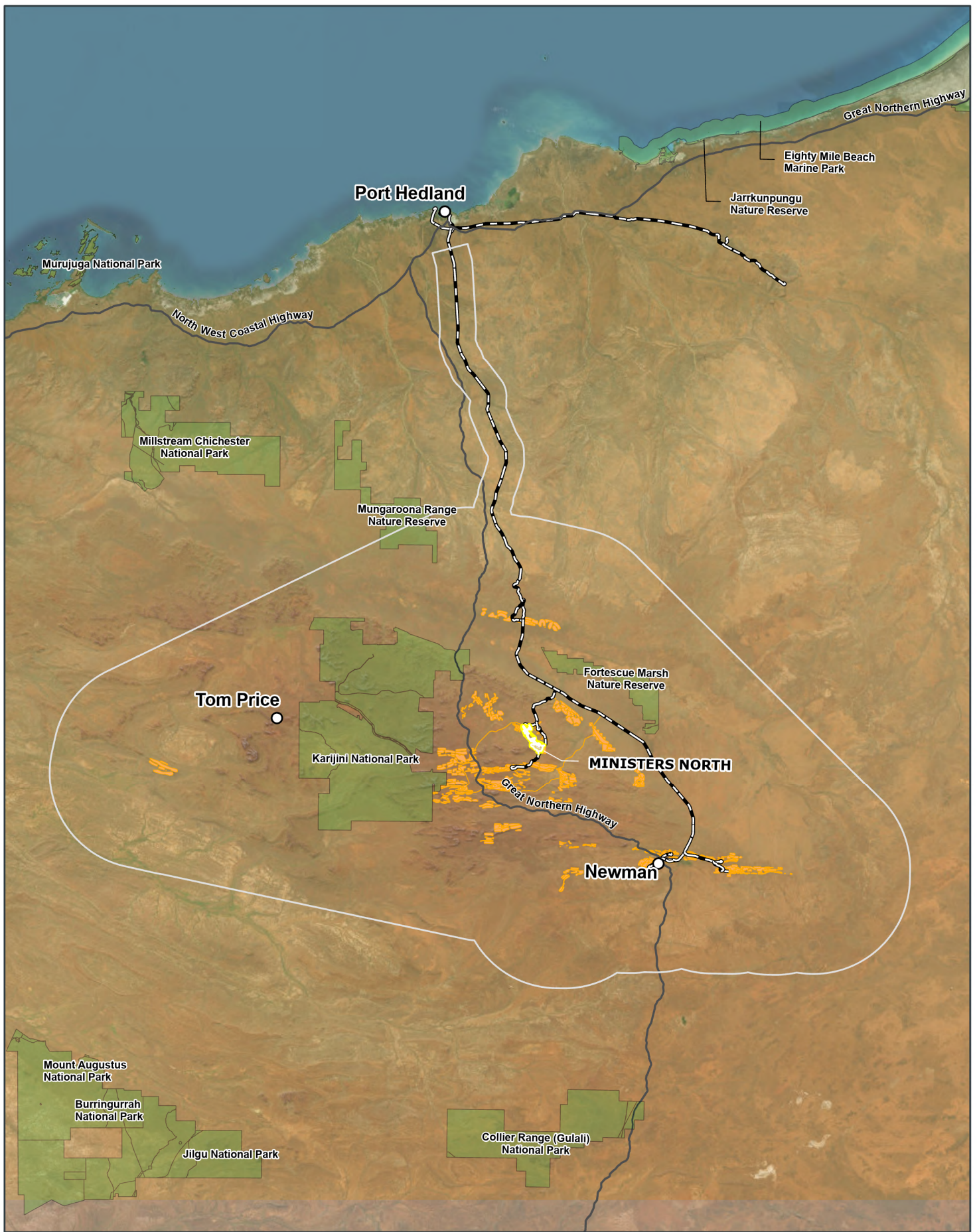
The intent for this IRP is to meet the requirements of the following implementation conditions:

- Condition 16 - Offsets (Impact Reconciliation Procedure).

This IRP outlines the calculation methodology for the clearing of native vegetation / fauna habitat for the purpose of identifying the financial contributions for applicable environmental offsets to the Pilbara Environmental Offsets Fund (PEOF).

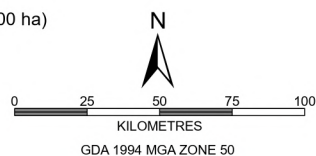
This IRP has been prepared consistent with the EPA (2024) document *Instructions on How to Prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports*.

<sup>1</sup> Suitable areas for borrow pits have been identified and accounted for within the current Development Envelope and Indicative Footprint. However, if constructability requirements identify potential borrow deficits, BHP may seek additional borrow material from outside the Derived Proposal area. Any additional borrow requirements that are identified would be subject to separate Government approvals process.



**Legend**

- Development Envelope (5,557 ha)
- Indicative Footprint (2,360 ha)
- Strategic Proposal Area (7,650,074 ha)
- Strategic Proposal Full Conceptual Development Scenario (98,500 ha)
- Conservation Area
- Townsite
- Major Roads
- Rail (BHP)



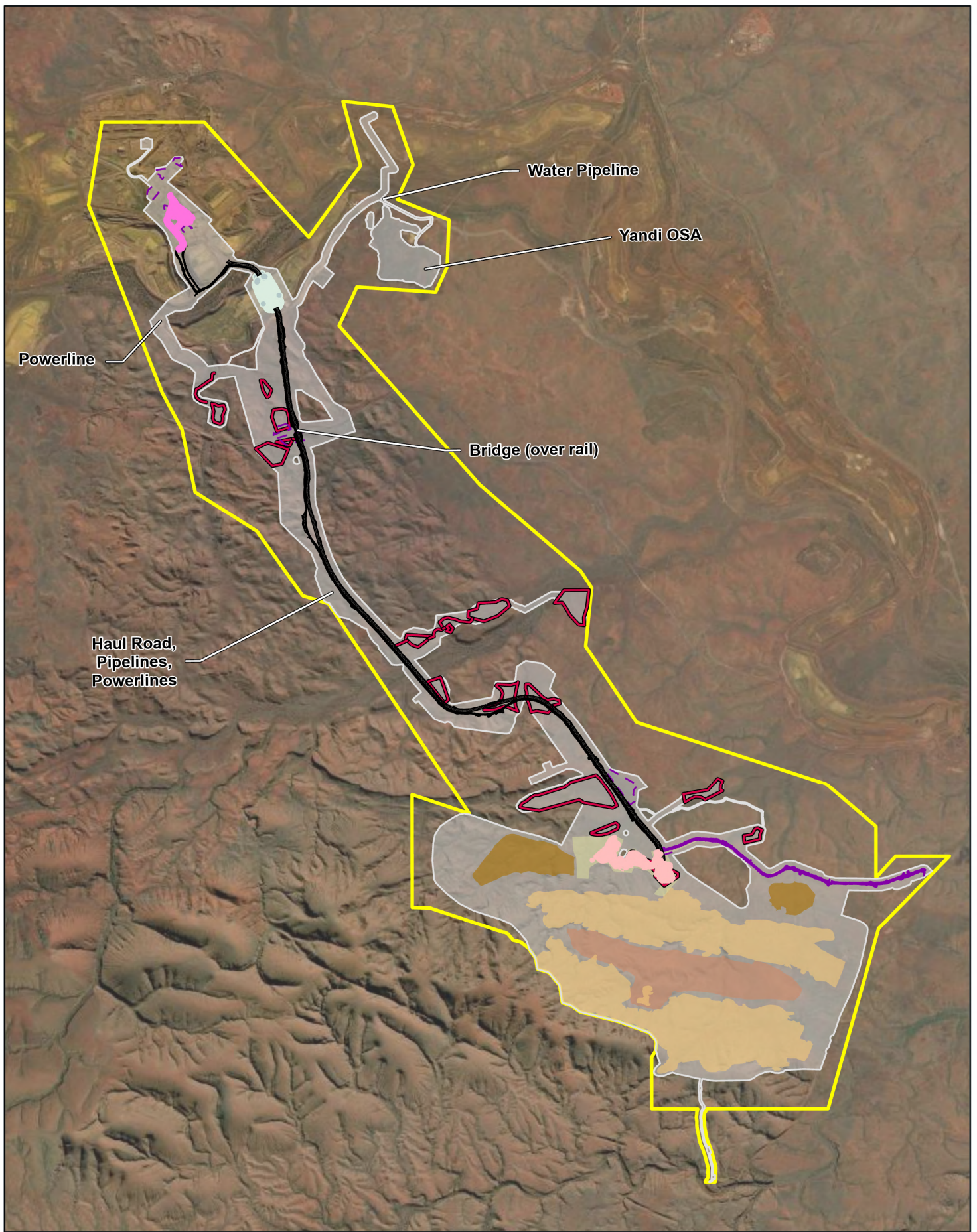
**BHP**

**PUBLIC**

**MINISTERS NORTH  
STRATEGIC PROPOSAL AND  
MINISTERS NORTH DERIVED PROPOSAL**

**WAIO PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @ A4:	1:2,607,553	REQUESTOR:	PROJECTS	FIGURE:	<b>1</b>
DATE:	27/08/2025	PREPARED:	GEOMATICS	NO:	<b>A1317-007 RevF</b>
		REVIEWED:			



- Legend**
- Development Envelope (5,557 ha)
  - Indicative Footprint (2,360 ha)
  - Indicative Mine Layout**
  - Non-Process Infrastructure
  - Stockpile
  - OSA
  - Pit
  - Non Process Infrastructure Layout
  - Yandi OHP
  - Borrow Pits
  - Road
  - Pipelines Access Road



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**MINISTERS NORTH  
DEVELOPMENT ENVELOPE AND  
INDICATIVE FOOTPRINT**

**WAIO- PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @A4:	1:70 000	REQUESTOR:	PROJECTS	FIGURE:	2
DATE:	8/09/2025	PREPARED:	GEOMATICS	NO:	A1317-003 RevJ
		REVIEWED:			

## 1.4 Key Environmental Factors

The 'Key Environmental Factor' relevant to this IRP are:

- 'Flora and Vegetation'.
- 'Terrestrial Fauna'

Table 1 describes the environmental values and environmental offsets for flora and vegetation values and terrestrial fauna values addressed in this IRP.

The environmental values required to be offset have been identified through the environmental impact assessment for Ministers North (BHP 2025), and the outcomes of the environmental impact assessment of the Pilbara Strategic Proposal (BHP 2016; EPA 2018) and the subsequent implementation conditions of the Statement 1105 approval (WA Minister for Environment 2019).

**Table 1: Key Environmental Values and Environmental Offsets**

Key Environmental Factor	Environmental Values	Applicable Environmental Offsets
Flora and Vegetation	Native vegetation in the Pilbara bioregion	Clearing up to 1,826.8 ha of native vegetation assessed to be in a 'Good' to 'Excellent' condition.
	Riparian Vegetation	Clearing up to 33.7 ha of riparian vegetation
Terrestrial Fauna	Fauna habitat suitable for Ghost Bat	Clearing up to 256.8 ha of 'Critical Habitat' for Ghost Bat
		Clearing up to 19.7 ha of 'Supporting Habitat' for Ghost Bat
	Fauna habitat suitable for Pilbara Olive Python	Clearing up to 99.6 ha of critical habitat for Pilbara Olive Python
		Clearing up to 78.7 ha of supporting habitat for Pilbara Olive Python
	Fauna habitat suitable for Northern Quoll	Clearing up to 115.5 ha of critical habitat for Northern Quoll
		Clearing up to 1518 ha of supporting habitat for Northern Quoll.

## 1.5 Condition Requirements

The following conditions for the Strategic Proposal under the Statement 1105 approval are relevant to Ministers North:

- Condition 16 - Offsets (Impact Reconciliation Procedure).

The relevant sub-clauses of Condition 16 *Offsets* and how they are addressed within this Impact Reconciliation Procedure is outlined in Table 2.

**Table 2: Ministerial Statement 1105 Condition 16**

Condition	
<b>16 Offsets</b>	
16-6	<i>Prior to ground-disturbing activities, the proponent shall prepare and submit an Impact Reconciliation Procedure to the CEO.</i>
16-7	<p><i>The Impact Reconciliation Procedure required pursuant to condition 16-6 shall:</i></p> <ol style="list-style-type: none"> <li><i>(1) state that clearing calculations for each biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the CEO;</i></li> <li><i>(2) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the significant residual impacts identified in condition 16-2; and</i></li> <li><i>(3) indicate the timing and content of the Impact Reconciliation Reports.</i></li> </ol>

## 2 Procedure

### 2.1 Environmental Values requiring Environmental Offsets

The environmental values required to be offset have been identified through the environmental impact assessment for Ministers North (BHP 2025), and the outcomes of the environmental impact assessment of the Pilbara Strategic Proposal (BHP 2016; EPA 2018) and the subsequent implementation conditions of the MS1105 approval (WA Minister for Environment 2019).

As outlined within the BHP (2025) environmental assessment for Ministers North, offsets are considered required for the impact of Ministers North to the following environmental values:

- Native vegetation in Good to Excellent Condition
- Riparian Vegetation
- Critical and supporting habitat for the Ghost Bat
- Critical and supporting habitat for the Northern Quoll
- Critical and supporting habitat for the Pilbara Olive Python.

#### 2.1.1 Baseline Environmental Studies / Surveys

The baseline environmental studies/surveys informing the calculations and figures are outlined within BHP (2025). To avoid duplication, the baseline environmental studies/surveys informing the calculations and figures are not repeated in this IRP.

A summary of the information from the baseline environmental studies/surveys relevant to the implementation of this IRP is provided in Appendix 1.

The baseline environmental studies/surveys are considered complete for the purpose of both the environmental assessment and for informing this IRP. The baseline environmental studies/surveys are not proposed to be repeated during implementation of Ministers North.

#### 2.1.2 Environmental Offset Calculations

Table 3 describes the extent of the significant residual impact from Ministers North, the applicable environmental offset rate (as published for the Pilbara Environmental Offsets Fund), and the calculated financial contribution value required for Ministers North.

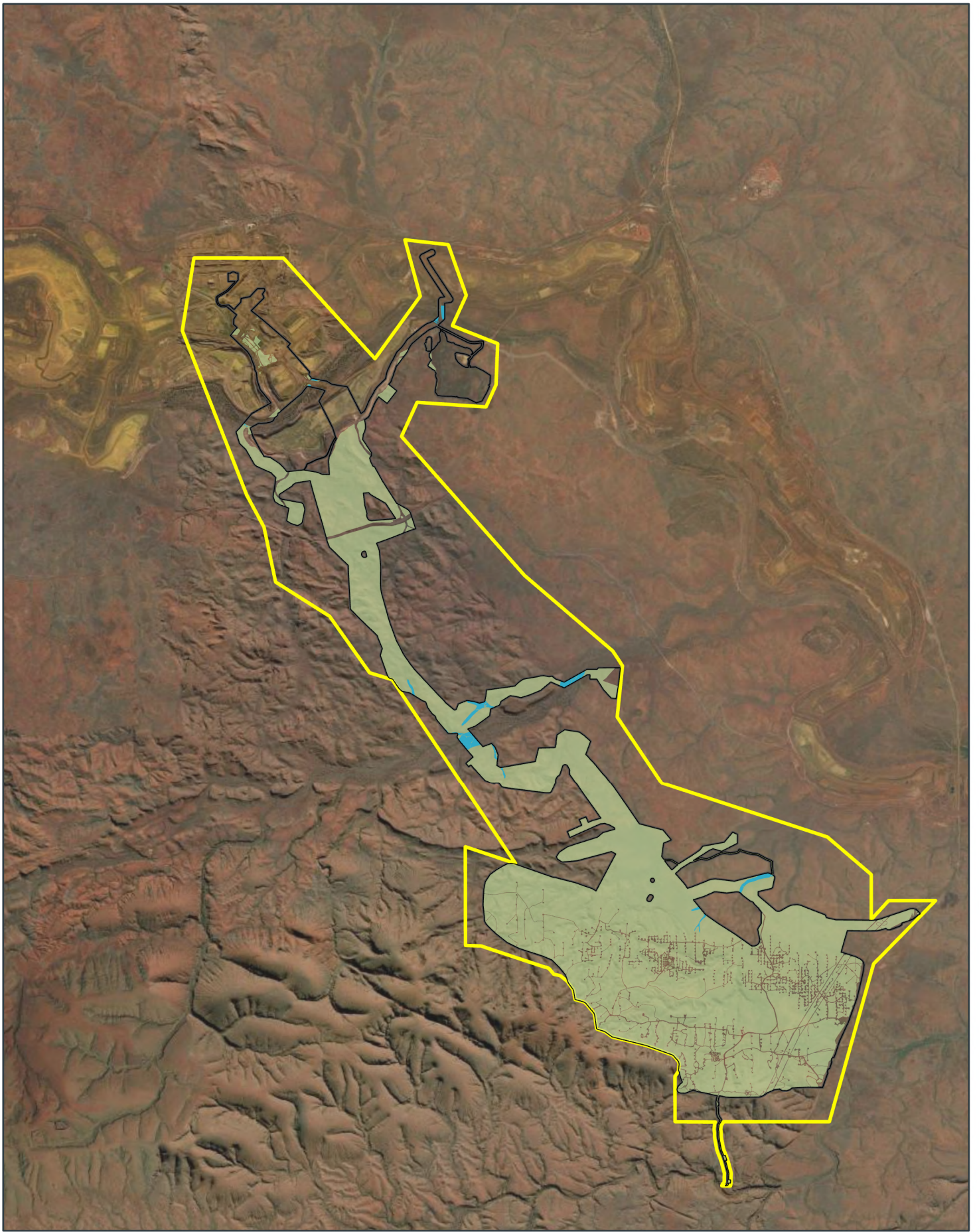
Figure 3 identifies the area upon which the environmental offset for the clearing of native vegetation in 'Good' to 'Excellent' condition and riparian vegetation have been calculated. Figure 4 to Figure 6 identifies the spatial area upon which the environmental offset for terrestrial fauna values has been calculated. In order to avoid duplication, the environmental offset for the clearing of native vegetation is applicable only to areas of native vegetation that are not otherwise offset for the clearing of fauna habitat (which a higher rate is applicable for the financial contributions).

The information presented is consistent with the BHP (2025) environmental assessment for Ministers North.

**Table 3: Environmental Offsets - Calculation of Environmental Offset Financial Contributions** (Source: BHP 2025)

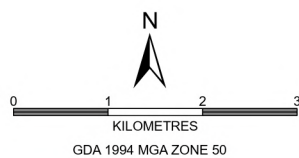
Significant residual impact	Values	Extent of impact (ha)	Area to be offset (ha) <sup>1</sup>	Offset payment rate \$/ha	Proposed offset \$
Clearing of native vegetation in the Pilbara - Hamersley IBRA subregion	Native vegetation in Good to Excellent condition	1826.8	27.4	\$ 986	\$27,016.4
Clearing of riparian vegetation	Riparian Vegetation	33.7	0.3	\$ 1,972	\$591.6
Clearing of critical habitat Ghost Bat, Northern Quoll and Pilbara Olive Python	Gorge/Gully Breakaway/Cliff Major Drainage Line All GB foraging habitat within 12km of CMIN-03 cave	269.2	269.2	\$ 1,972	\$ 530,862.4
Clearing of supporting habitat for Ghost Bat, Northern Quoll and Pilbara Olive Python	Hill crest / Hill slope Stony Plain Sand Plain Minor Drainage Line Drainage Area / floodplain Mulga Woodland Boulders / Rockpiles	1539.2	1539.2	\$ 986	\$1,517,651.2
<b>Total</b>					<b>\$2,076,121.6</b>

<sup>1</sup> The total extent to be offset has removed areas where good to excellent vegetation and riparian vegetation and/or critical and supporting fauna habitat to avoid duplication of offsets.



**Legend**

- Development Envelope (5,557 ha)
- Indicative Footprint (2,360 ha)
- Good to Excellent Vegetation Condition
- Good to Excellent Riparian Vegetation



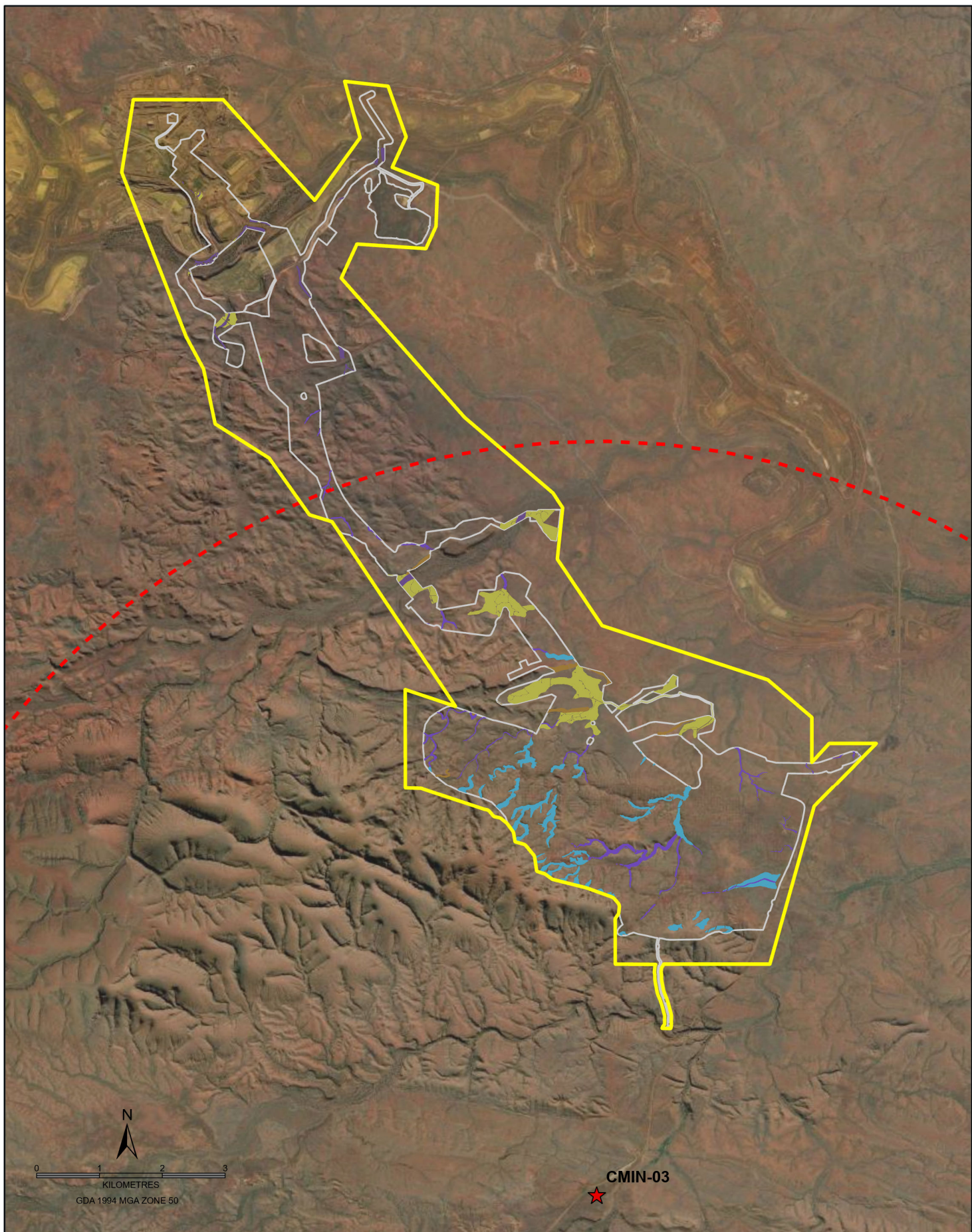
**BHP**

**PUBLIC**

**MINISTERS NORTH  
ENVIRONMENTAL OFFSETS -  
VEGETATION CONDITION**

**WAIO PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @ A4:	1:80,000	REQUESTOR:	PROJECTS	FIGURE:	<b>3</b>
DATE:	3/09/2025	PREPARED:	GEOMATICS	NO:	<b>A1317-045 RevB</b>
		REVIEWED:			



**Legend**

- Development Envelope (5,557 ha)
- Indicative Footprint (2,360 ha)
- 12km Foraging Range
- ★ Category 2 Ghost Bat Cave

- Critical Habitat (Inside 12km Foraging Range)**
- Breakaway/ Cliff
  - Drainage Area/ Floodplain
  - Gorge/ Gully
  - Major Drainage Line
  - Minor Drainage Line

- Supporting Habitat (Outside 12km Foraging Range)**
- Drainage Area/ Floodplain
  - Major Drainage Line
  - Minor Drainage Line
  - Mulga Woodland

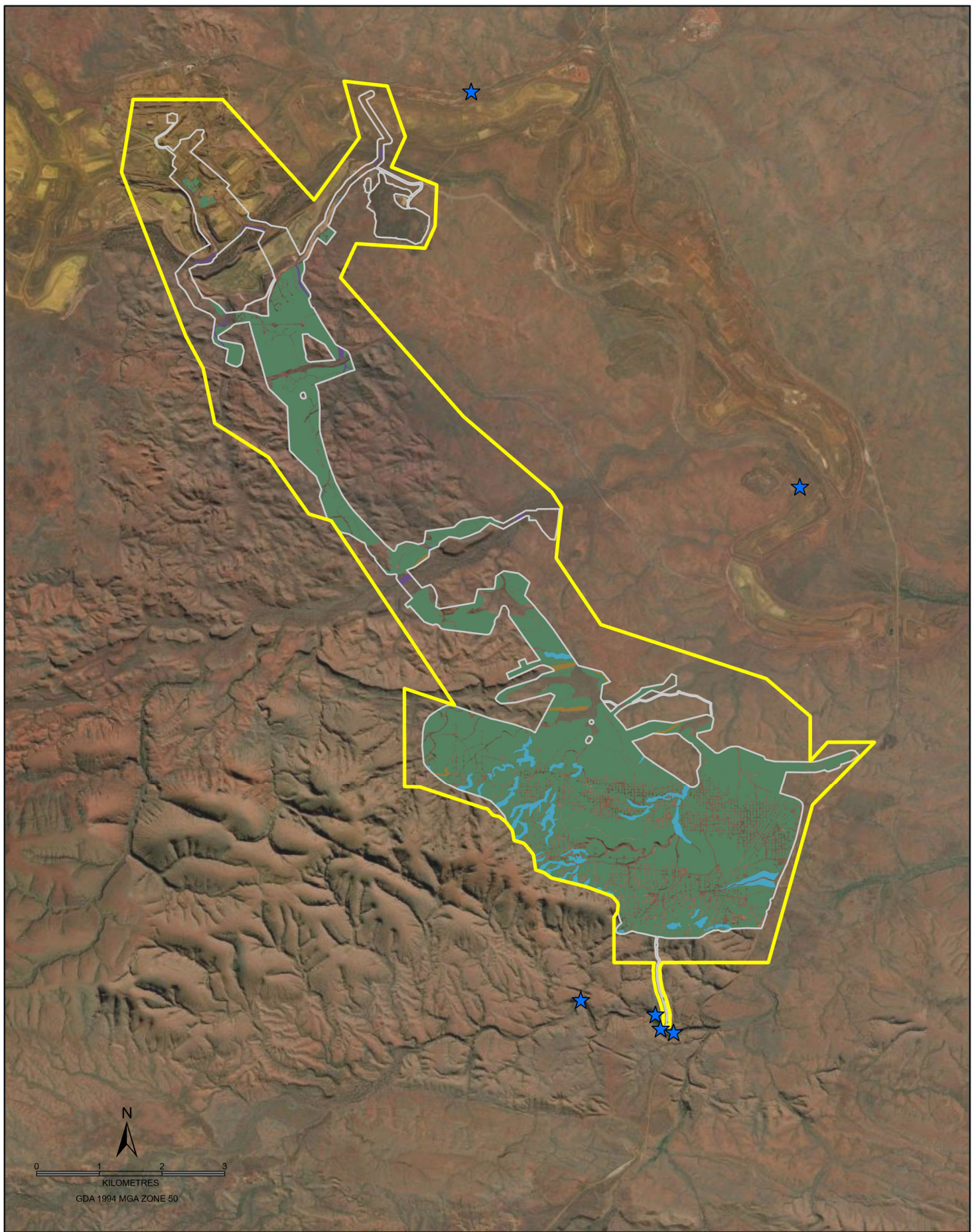
**BHP**

**PUBLIC**

**MINISTERS NORTH  
ENVIRONMENTAL OFFSETS -  
GHOST BATS**

**WAIO PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @A4: 1:80,000    REQUESTOR: PROJECTS    FIGURE: **4**  
 DATE: 15/07/2025    PREPARED: GEOMATICS    NO: **A1317-046 RevB**  
 REVIEWED:



**Legend**

- |                                 |                           |
|---------------------------------|---------------------------|
| Development Envelope (5,557 ha) | <b>Critical Habitat</b>   |
| Indicative Footprint (2,360 ha) | Gorge/ Gully              |
| Northern Quoll Records          | Breakaway/ Cliff          |
|                                 | Major Drainage Line       |
|                                 | <b>Supporting Habitat</b> |
|                                 | Hillcrest/ Hillslope      |

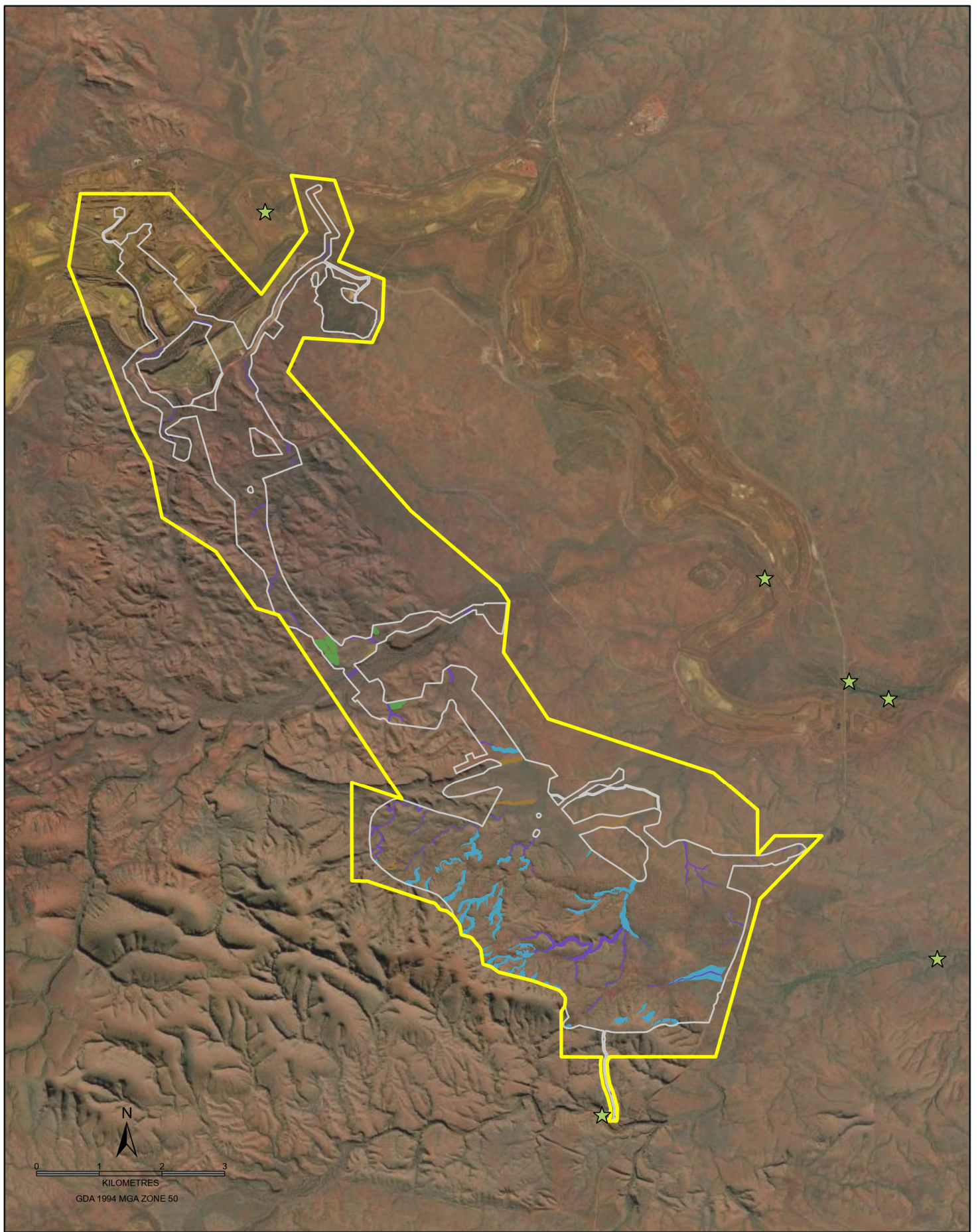
**BHP**

**PUBLIC**

**MINISTERS NORTH  
ENVIRONMENTAL OFFSETS -  
NORTHERN QUOLL**

**WAIO PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @A4:	1:80,000	REQUESTOR:	PROJECTS	FIGURE:	. 5
DATE:	15/07/2025	PREPARED:	GEOMATICS	NO:	A1317-048 RevB
		REVIEWED:			



**Legend**

- |                                 |                           |
|---------------------------------|---------------------------|
| Development Envelope (5,557 ha) | <b>Critical Habitat</b>   |
| Indicative Footprint (2,360 ha) | Breakaway/ Cliff          |
| Pilbara Olive Python Record     | Gorge/ Gully              |
|                                 | <b>Supporting Habitat</b> |
|                                 | Boulders/ Rockpiles       |
|                                 | Major Drainage Line       |
|                                 | Minor Drainage Line       |

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**MINISTERS NORTH  
ENVIRONMENTAL OFFSETS -  
PILBARA OLIVE PYTHON**

**WAIO PLANNING, TECHNICAL & ENVIRONMENT**

SCALE @A4: 1:80,000    REQUESTOR: PROJECTS    FIGURE: 6  
 DATE: 9/09/2025    PREPARED: GEOMATICS  
 REVIEWED:    NO: A1317-049 RevC

## 2.2 Methodology to determine impacts

BHP will use the methodology detailed in Step 1 to Step 3 below to calculate the extent of land disturbance (i.e. clearing) for Ministers North. Steps 1 to 3 will result in a verified Land Disturbance Dataset to be used in determining the extent of clearing required to be offset against the environmental values under Step 4.

The calculation of land disturbance will be undertaken annually, based upon land disturbance within each financial year (July, to June the following year), to allow for input into the annual *Impact Reconciliation Report* (IRR) as described within Section 3 *Reporting*.

To note, the verified Land Disturbance Dataset each year will be used to update the baseline datasets, in order to avoid duplication of impact calculations between reporting periods.

- **Step 1 - Remotely Sensed Data**

BHP sources appropriate remotely sensed data (i.e. aerial photography or satellite imagery) for the area of the IRR. The remotely sensed data may come from a variety of sources and where appropriate, it will be digitally joined together (mosaicked). The mosaicked remotely sensed data is then re-sampled to 1 metre (m) resolution. This Remotely Sensed Dataset is used for the capture of land clearing, to be supplied as an end deliverable dataset.

- **Step 2 - Land Disturbance Data**

Direct land disturbance (i.e. clearing) is captured by BHP on a periodic basis throughout each financial year. The data is captured via digitising the land disturbance visible in the Remotely Sensed Data (Step 1) at a scale of 1:1,000 (i.e. +/- 0.5 m on the ground), being consistent with the precision of all BHP internal datasets. The data is ground-truthed by BHP site surveyors in mining areas and BHP geoscience technicians in resource definition drilling areas (where required).

All land disturbance data is then attributed with the reporting year, responsible operational entity (e.g. Ministers North or Yandi Mining Operations), the underlying approval and the proposed or actual land-use (consistent with the classifications of the Mining Rehabilitation Fund (MRF) administered by the Department of Mines, Petroleum, and Exploration (DMPE) - formerly Department of Energy, Mines, Industry Regulation and Safety (DEMIRS)). Where there are multiple approvals within the same area, the BHP site responsible person will be accountable for allocating the land disturbance to the appropriate approval.

- **Step 3 - Data Review**

Following the capture of the Land Disturbance Data (Step 2), the dataset is reviewed at the end of each financial year to ensure:

- All land disturbance activities for the financial year (FY) period have been identified.
- Accurate and clean spatial boundaries (including removal of any overlaps and correction of any anomalies).
- Data attributes are complete and complete.

As BHP captures land disturbance/clearing at a scale of 1:1,000, any polygon slivers or gaps in the dataset of  $\leq 1 \text{ m}^2$  are ignored and are considered acceptable in the context of analysing large-scale datasets.

- **Step 4 - Processing of Environmental Value/s Datasets**

BHP have developed a methodology which automates the process of combining datasets for Land Disturbance Data (Step 3), Interim Biogeographic Regionalisation for Australia (IBRA)

subregions, and baseline study/survey environmental values (e.g. vegetation condition) to ensure the process of deriving offset calculations that are consistent and repeatable. This process manipulates the datasets (e.g. clips data inputs to defined project boundaries, 'cleans' any overlaps) to meet the requirements of EPA (2024), resulting in a final spatial area calculation.

## 2.3 Frequency and Indexation of Financial Contributions

BHP will make financial contributions for applicable environmental offsets to the PEOF at a biennial frequency (i.e. each 2 years) consistent with the requirements of Condition 16 of the MS1105 approval (refer to Section 1.5 *Condition Requirements*).

The financial contributions will be calculated in accordance with the PEOF published rates that was applicable for each financial year (FY) of each biennial period in which the land disturbance (clearing) is undertaken, consistent with the specifications of Condition 16 of the MS1105 approval. The outcome of this approach is that each biennial reporting period will identify 2 published rates covering the first year and second year of each biennial period, with calculations of impact values and offset financial contributions for each year of the biennial period.

The PEOF published rates include annual indexation (increases) in accordance with the Australian Bureau of Statistics published *Perth - All Groups Consumer Index*<sup>3</sup>. Accordingly, the Table 2 provides a general guide as to the rate for financial contributions for Ministers North, however, the actual rate for financial contributions is anticipated to be higher (subject to the timing of clearing and the biennial contribution period).

<sup>3</sup> Australian Bureau of Statistics published *Perth - All Groups Consumer Index* available at: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#selected-tables-capital-cities>

## 3 Reporting

### 3.1 Frequency and Timing

Consistent with Condition 16 of the MS1105 approval, the first biennial reporting period shall commence at the beginning of the financial year (FY) that ground-disturbing activities are undertaken, being from Q3 2026CY (i.e. Q1 2027FY) and covering the 2-year period of July 2026 to June 2028.

BHP will submit an Impact Reconciliation Report (IRR) for each biennial reporting period to the Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) identifying the location and spatial extent of the clearing undertaken within the relevant biennial reporting period.

Table 5 identifies the proposed biennial reporting periods applicable to Ministers North, based upon BHP's target schedule for development and mining.

Consistent with the EPA (2024) document *Instructions on How to Prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports*, and as identified by Table 5, BHP propose to submit an Impact Reconciliation Report (IRR) to the Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) by the end of the October month after the conclusion of the biennial reporting period (thereby allowing BHP a period of 4 months for IRR preparation, review and submission).

**Table 4: Schedule for Reporting Periods and Frequency of Impact Reconciliation Reports**

Biennial Reporting Period		Impact Reconciliation Report (IRR) submission to DWER
Ministers North commences implementation		Mining scheduled from Q3 2026CY <sup>1</sup>
Period 1	July 2026 to June 2028	October 2028
Period 2	July 2028 to June 2030	October 2030
Period 3	July 2030 to June 2032	October 2032
Period 4	July 2032 to June 2034	October 2034
Period 5	July 2034 to June 2036	October 2036
Period 6	July 2036 to June 2038	October 2038
Period 7	July 2038 to June 2040	October 2040
Ministers North implementation concludes		Mining scheduled for completion Q4 CY2039

<sup>1</sup> Implementation schedule is subject to all Government approvals being granted including pre-development requirements being met (e.g. approval of required plans/procedures), as well as subject to BHP's operational mining requirements. The implementation schedule may be subject to change.

### 3.3 Impacts and Reconciliation

The majority of land disturbance (clearing) for Ministers North is anticipated to occur within the first biennial reporting period (July 2026 to June 2028) associated the development (construction) phase for mining infrastructure and initial development of the mining area. Land disturbance is anticipated to be substantially lower in the subsequent biennial reporting periods.

In accordance with Condition 16 of the MS1105 approval, the IRR for each biennial reporting period will identify the location and spatial extent of the clearing undertaken within the reporting period. More specifically, the following information will be submitted in each IRR:

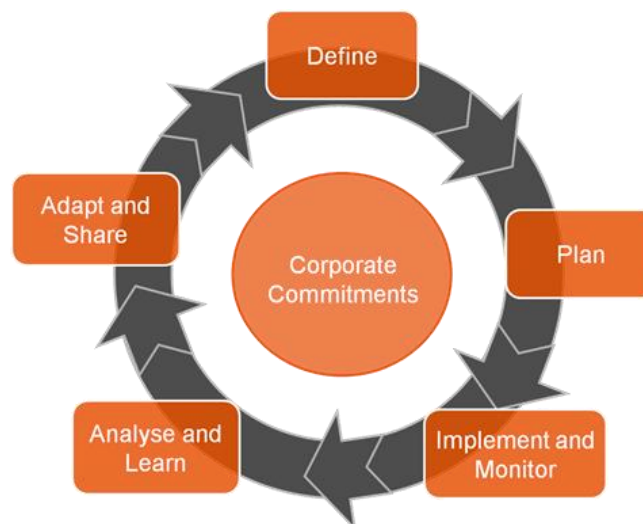
- Calculated spatial extent of clearing (ha) that has occurred during each financial year of the reporting period, including the offset rate, for:
  - Native vegetation in 'Good' to 'Excellent' condition
  - Riparian vegetation
  - Fauna habitat assessed as critical habitat for Ghost Bat, Northern Quoll and Pilbara Olive Python
  - Fauna habitat assessed as supporting habitat for Ghost Bat, Northern Quoll and Pilbara Olive Python
- Information used to validate the extent of clearing (e.g. aerial imagery, remote sensing data, digitised polygons and/or ground-truthing surveys) in each financial year.
- Information regarding any exemptions, other clearing approvals or reductions to contributions to the PEOF, for example, where impacts have been allocated to a different authorisation (e.g. other Statement approval or a Native Vegetation Clearing Permit (NVCP)).
- Forward estimate of impacts anticipated to be reported in the subsequent biennial reporting period, based upon BHP's mine plan.
- Details and spatial data for historical impacts excluded from offset requirements.

## 4 IRP Adaptive Management and Review

### 4.1 Adaptive Management Approach

BHP applies an 'Adaptive Management Framework' for implementing management measures identified in this IRP. Adaptive management is a structured, iterative process to decision making. BHP's framework embeds a cycle of monitoring, reporting and implementing change where required. The framework allows for an evaluation of the management and mitigation measures so that they are progressively improved and refined, or alternative solutions adopted, in order to ensure that the environmental objectives and outcomes within the Impact Reconciliation Procedure are achieved. The key steps of BHP's adaptive management approach are depicted in Figure 7.

As this IRP is a requirement of the MS1105 implementation conditions, where BHP identifies that this IRP should be revised arising from information gained through the adaptive management approach, BHP will seek the endorsement of the CEO prior to the implementation of the revised IRP.



**Figure 7: BHP's Adaptive Management Approach**

### 4.2 Review and Revision

BHP will review this Impact Reconciliation Procedure (and revise the Impact Reconciliation Procedure, if required), to ensure that it achieves the identified environmental objectives and meets the implementation condition requirements of the MS1105 approval.

A review by BHP may arise from the following:

- Where initiated by BHP as part of the adaptive management process.
- Where requested by the CEO DWER.
- If triggered by and outcome from implementation of this Impact Reconciliation Procedure.

Changes to this Impact Reconciliation Procedure may arise from the following:

- Government publishes new or amend guidance/policy relevant to this Impact Reconciliation Procedure.

- BHP proposes to add and/or amend Impact Reconciliation Procedure components following a change to Ministers North (mining operations) and/or the implementation conditions.
- The CEO confirms by notice in writing that it has been demonstrated that the objective and/or outcome in the relevant condition is being met (and will continue to be met) and therefore certain requirements within this Impact Reconciliation Procedure are no longer required to be implemented.

BHP will implement the latest revision of this Impact Reconciliation Procedure, which the CEO has confirmed by notice in writing, satisfies the implementation condition requirements.

## 5 IRP Changes

As outlined within Section 3 *IRP Adaptive Management and Review*, this Impact Reconciliation Procedure may be revised. Table 5 provides a summary description of the revisions made to this IRP.

**Table 5: Summary of Impact Reconciliation Procedure Changes**

Revision	Date	Description IRP Change(s)
1	September 2025	Original revision submitted with referral of Ministers North.

## 6 References

Astron Environmental Services Pty Ltd (2025) *Ministers North Consolidated Targeted Significant Vertebrate Fauna Surveys*. Rev 0, March 2025.

BHP Iron Ore Pty Ltd (2016) *Pilbara Public Environmental Review Strategic Proposal*. Report prepared by Hashim S, Reilley L and Hill Faskel F of BHP Iron Ore Pty Ltd (formerly as BHP Billiton Iron Ore Pty Ltd). March 2016.

BHP Iron Ore Pty Ltd (2020) *Biodiversity Survey Spatial Data Requirements Procedure*. Document No. SPR-IEN-EMS-015. Version 11.0. January 2020.

BHP Iron Ore Pty Ltd (2023) *Pilbara Strategic Assessment Assurance Plan and Offsets Plan*. Revision 2.3 Final. May 2023.

BHP Iron Ore Pty Ltd (2025) *Ministers North Derived Proposal Request. Ministerial Statement 1105*

Environmental Protection Authority (2018) *Pilbara Expansion Strategic Proposal*. Report and recommendations of the Environmental Protection Authority. Report 1619. July 2018.

Environmental Protection Authority (2023) *Statement of Environmental Principles, Factors, Objective and Aims of EIA*. April 2023.

Environmental Protection Authority (2024) *Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports*. July 2024.

Government of Western Australia (2024) *Program: Pilbara Environmental Offsets Fund*. Accessed September 2024 from <https://www.wa.gov.au/service/environment/business-and-community-assistance/program-pilbara-environmental-offsets-fund>.

Spectrum Ecology Pty Ltd (2024) *Ministers North Targeted Significant Flora and Vegetation Assessment*.

Western Australian Minister for Environment (2019) *Pilbara Expansion Strategic Proposal*. Statement 1105 approval granted by the Western Australian Minister for Environment to BHP Iron Ore Pty Ltd (formerly as BHP Billiton Iron Ore Pty Ltd) for the Pilbara Expansion Strategic Proposal in accordance with Section 40B and Section 45 of the State Environmental Protection Act 1986 (WA). July 2019.

## 7 Appendices

## Appendix 1 Spatial Data associated with the Environmental Values requiring an Environmental Offset

Environmental surveys/studies were undertaken for Ministers North over multiple years to identify the environmental values present, as detailed within the BHP (2025) *Ministers North Derived Proposal Request. Ministerial Statement 1105*. The environmental surveys/studies were undertaken in accordance with the relevant Government guidance documents and by personnel appropriately qualified and experienced to undertake the assessments.

The key environmental surveys/studies relevant to this IRP are detailed in Table A1 and A2 below.

**Table A1. Flora and Vegetation Supporting Studies.**

Title	Survey date	Survey summary
Spectrum Ecology Pty Ltd (2023) <i>Ministers North Targeted Significant Flora and Vegetation Assessment</i> .	30 May – 7 June 2023	Spectrum was commissioned to undertake a targeted flora and vegetation assessment at Ministers North. The survey was undertaken by six botanists over a 54 person-day period and comprised 22 relevés and 405 km of targeted traverses. No Threatened flora taxa were recorded during the field assessment. Five Priority flora taxa were recorded.
Biologic Environmental Survey Pty Ltd (Biologic) (2023) <i>Yandi E8 Targeted Flora Survey</i>	13-20 May 2022	Targeted searching was undertaken for flora of significance. Flora taxa that were confirmed or considered Very Likely, Likely or Possible to occur were preferentially targeted. Three Priority flora taxa were recorded.
Biologic (2023) <i>Central Pilbara Hub Targeted and Detailed Flora Survey</i>	Five separate trips: comprising two trips in March 2022, one trip in April-May 2022, one trip in June 2022	A total of 152 quadrats, 21 relevés, and 27 mapping notes were completed across 25,563 ha of the Study Area, as well as opportunistic sampling. A total of 516 confirmed vascular flora taxa, from 62 families and 190 genera were recorded in the Study Area, comprising 499 native and 17 introduced flora taxa. No DRF, taxa listed under the EPBC Act or TEC were recorded
Biologic (2020a) <i>Ministers North Miscellaneous Licence Area Amendment Surveys and Yandicoogina Creek Detailed Flora and Vegetation Assessment</i> .	30 Mar – 1 Apr 2020	At Ministers North, vegetation was sampled with three quadrats and four relevés, supplemented with targeted searches. Overall, a total of 279 vascular flora taxa from 51 families and 141 genera were recorded from the Study Area during the current field survey, comprising 262 native and 17 introduced flora taxa. No DRF, taxa listed under the EPBC Act or TEC were recorded.
Onshore Environmental Consultants Pty Ltd (Onshore Environmental) (2020) <i>Ministers North and Yandi Vegetation Association and Condition Mapping</i>	N/A	BHP commissioned Onshore Environment to complete a detailed review of all existing vegetation association and condition mapping across their Ministers North and Yandi tenements. The consolidated vegetation association mapping for the project area resulted in the delineation of 40 vegetation associations, classified under 21 broad floristic formations.

Title	Survey date	Survey summary
Astron Environmental Services Pty Ltd (2018) <i>Area C West to Yandi Flora and Vegetation Assessment</i> .	13 – 22 November 2018	Astron Environmental Services conducted an assessment of flora and vegetation values along five creeklines in the vicinity of the Area C, Yandi and South Flank mining operations, including Marillana Creek and Yandicoogina Creek. No Threatened taxa were recorded nor are expected to occur. One Priority flora taxa was recorded.
Onshore Environmental (2018a) <i>Yandicoogina Creek Reconnaissance Vegetation Survey</i> .	4 – 6 June 2018	Onshore Environmental were commissioned to undertake a reconnaissance vegetation survey of Yandicoogina Creek. Six vegetation associations supporting groundwater dependent vegetation were described and mapped. A total of five Priority listed flora were opportunistically recorded during the reconnaissance survey.
Onshore Environmental (2018b) <i>Ministers North to Yandi Corridor Flora and Vegetation Survey</i>	9 – 13 <sup>th</sup> October 2017, & 21 <sup>st</sup> – 27 <sup>th</sup> May 2018	A total of 256 plant taxa (including varieties and subspecies) from 45 families and 130 genera were recorded. No Threatened Flora taxa were recorded. Three Priority flora taxa were recorded.
Biologic Environmental Survey (2017) <i>Ministers North to Yandi Corridor Single Phase Level 2 Fauna and Detailed Flora/Vegetation Survey</i>	9 <sup>th</sup> – 13 <sup>th</sup> October 2017	The flora and vegetation field survey involved systematic sampling using quadrats. Relevé vegetation descriptions were undertaken, and targeted searches were completed in habitats where it was anticipated that significant flora might occur. No DRF were recorded, three Priority flora taxa were recorded.
Biota Environmental Sciences Pty Ltd (Biota) (2017) <i>Ministers North Detailed Flora and Vegetation Survey</i> .	Two Phases: Sept 2016 & May – Jul 2017	During the Phase 1 survey, 22 quadrats and 14 relevés were surveyed. Fifteen quadrats and five of the relevés were resampled, and one additional relevé was conducted, during the second phase a total of ten vegetation associations were described from the study area. No DRF, taxa listed under the EPBC Act or TEC were recorded and none are considered likely to occur

Table A2. Terrestrial Fauna Supporting Studies.

Title	Survey date	Survey summary
<b>Vertebrate Fauna</b>		
Astron Environmental Services Pty Ltd (Astron) (2025) Ministers North Targeted Significant Vertebrate Fauna Survey	13 - 22 April 2023 and 7- 18 June 2024	One-hundred and eleven vertebrate fauna were recorded within the Survey Area, comprising one amphibian, 25 reptile, 64 bird, and 21 mammal (including three introduced) species. Three MNES species, northern quoll ( <i>Dasyurus hallucatus</i> ), ghost bat ( <i>Macroderma gigas</i> ), and Pilbara olive python ( <i>Liasis olivaceus</i> ), were recorded during the current surveys. Only the ghost bat records coincide with the Derived Proposal area.
Astron (2023a) Yandi 45C Targeted Significant Vertebrate Fauna Survey.	22 Sept – 2 Oct 2022	There were 91 vertebrate fauna species recorded within the survey area, comprising of seven reptiles, 66 birds, and 18 mammals (including four introduced species). The fauna species assemblage recorded during the survey was considered typical for the Pilbara region.

Title	Survey date	Survey summary
Biologic (2023) Central Pilbara Hub: Targeted Matters of National Environmental Significance Vertebrate Fauna Survey	4 – 13 April 2022 (relevant dates to the Derived Proposal)	Due to the size of the Study Area (approximately 60,000 ha <sup>5</sup> ), the field survey was undertaken over five separate field trips. Calls of Pilbara leaf-nosed bats were recorded at four locations during the survey (note these do not intersect the Derived Proposal area). Ghost bat was recorded on 33 nights at four locations (note these do not intersect the Derived Proposal area). No evidence of other MNES were recorded.
GHD Pty Ltd (GHD) (2021b) Ministers North Fauna Survey Level 2 Survey	19 Mar – 27 Mar 2020	The field survey identified 122 species of vertebrate fauna. This number comprises 55 birds, 44 reptiles, 19 mammals and four amphibians. Four conservation significant fauna species were recorded during the field survey: Ghost Bat, Western Pebble-mound Mouse ( <i>Pseudomys chapmani</i> ), Pilbara Olive Python, Pilbara Flat-headed Blind Snake ( <i>Anilius ganei</i> )
GHD (2021a) Ministers North Fauna Survey Level 1 Survey	9 Sept – 20 Sept 2019	The fauna survey identified 67 species of vertebrate fauna. This number comprises 40 birds, 19 mammals and eight reptiles. Two conservation significant fauna species were recorded during the field survey: Ghost Bat; Western Pebble-mound Mouse.
Biologic (2018a) Ministers North to Yandi Corridor Two Phase Targeted Fauna Survey	Phase 1: 9 – 13 Oct 2017 Phase 2: 15 – 23 June 2018	The surveys consisted of habitat assessments, targeted transect searches; motion cameras; ultrasonic bat recordings, acoustic bird recordings, Northern Quoll trapping sites and opportunistic recording of fauna species.  Two species of conservation significance were recorded during the current survey: the Western Pebble Mound Mouse and the Peregrine Falcon ( <i>Falco peregrinus</i> )
Biologic (2017b) Ministers North Level 2 Vertebrate Fauna Survey	15 – 26 October 2016 and 3 – 13 April 2017	The survey recorded 116 vertebrate fauna species, comprising 17 mammal species, 54 bird species, 43 reptile species, and 2 amphibians. Two conservation significant species were recorded: the Western Pebble-mound Mouse and Rainbow Bee-eater. No species listed as Threatened were recorded.
<b>Short-range Endemic Fauna</b>		
Bennelongia Pty Ltd (Bennelongia) (2024a) Ministers North Short-Range Endemic (SRE) Desktop and Field Survey	13-21 April 2023	The field survey resulted in the collection of 182 specimens (including higher order identifications) belonging to 39 species from SRE groups. This includes 12 centipedes, nine pseudoscorpions, five spiders (four mygalomorph spiders and one selenopid spider), five isopods, four scorpions, three millipedes, and one snail. The survey collected one Confirmed SRE species, and seven Potential SREs at Ministers North. The single Confirmed SRE species is the Mouse Spider <i>Missulena faulderi</i> . This species has also been collected outside the Study Area.
Bennelongia (2024b) Yandi Operations Short-Range Endemic Fauna Survey Report.	Two Season: 14-19 October 2022 and 30 March-4 April 2023	The field survey collected 903 individuals attributable to at least 58 species belonging to SRE Groups. Of these, 25 were arachnids, including mygalomorph spiders, pseudoscorpions, and scorpions; 15 were centipedes, predominantly scolopendrids; seven were molluscs; seven were isopod crustaceans; and the remaining four species were millipedes. Two species were Confirmed SREs (the mygalomorph <i>Missulena faulderi</i> and the millipede <i>Antichiropus pediculus</i> )

<sup>5</sup> Only a small portion of this survey intersects with the project – Mining Area C to Yandi Rail Corridor assessment area

Title	Survey date	Survey summary
Biologic (2021) Ministers North and Yandicoogina Creek Short Range Endemic Invertebrate Fauna Survey	Two Season: 9 – 13 Sept 2019 and 3 – 10 April 2020	A total of 123 invertebrates were collected from the two survey areas, of which 109 were considered to represent groups known to contain SRE species. These groups were Araneae (one taxon), Pseudoscorpiones (eight taxa), Scorpiones (three taxa), Chilopoda (one taxon), Diplopoda (one taxon), Isopoda (six taxa), and Gastropoda (four taxa). No Confirmed SRE were collected.
Biologic (2018b) Ministers North to Yandi Corridor SRE Invertebrate Fauna Survey	Two Season: 9 – 13 Oct 2017 and 14 – 24 June 2018	A total of 21 invertebrate taxa representing five target groups known to contain SRE; namely selenopid spiders, pseudoscorpions, scorpions, millipedes and isopods. Six of these taxa have been regarded as widespread, nine considered 'Data Deficient' with the remaining six regarded as Potential SRE.
<b>Aquatic Fauna</b>		
Biologic (2024b) Ministers North Yandicoogina Creek Aquatic Ecosystem Survey Dry 2022 and Wet 2023	September 2022 (dry season) March 2023 (wet season)	The fourth round of sampling for the two-season aquatic ecosystem survey along Yandicoogina Creek. Ecosystem sampling methods included habitat assessments and sampling of water quality, wetland flora (submerged and emergent macrophytes), zooplankton, hyporheos, macroinvertebrates and fish.
Biologic (2023 <i>in prep</i> ) Ministers North Aquatic Ecosystem Survey: Dry 2021 – Wet 2022	October 2021 (dry season) April 2022 (wet season)	The third round of sampling for the two-season aquatic ecosystem survey along Yandicoogina Creek. Ecosystem sampling methods included habitat assessments and sampling of water quality, wetland flora (submerged and emergent macrophytes), zooplankton, hyporheos, macroinvertebrates and fish.
Biologic (2022) Ministers North: Yandicoogina Creek Aquatic Ecosystem Surveys Dry 2020 and Wet 2021	October 2020 (dry season) April 2021 (wet season)	The third round of sampling for the two-season aquatic ecosystem survey of the pools at Yandicoogina Creek. Sampling methods included habitat assessments and sampling of water quality, wetland flora (submerged and emergent macrophytes), zooplankton, hyporheos, macroinvertebrates and fish.
Biologic (2020) Ministers North: Yandicoogina Creek Aquatic Ecosystem Surveys	October 2019 (dry season) April 2020 (wet season)	Aquatic ecosystem surveys were undertaken at eight sites. A diverse range of aquatic fauna was recorded, including 250 invertebrate taxa and three freshwater fish species.
Wetland Research and Management (WRM) (2018) Yandi: Marillana Creek Aquatic Fauna Survey - Wet & Dry 2017 Sampling Final Report	May 2017 (wet season) Sept 2017 (dry season)	A diverse invertebrate fauna (microinvertebrates, hyporheos fauna and macroinvertebrates) was recorded during both the 2014 and 2017 surveys. The majority of invertebrate species recorded are common and widespread throughout the Pilbara. Three common, widespread freshwater fish species were recorded.

All baseline environmental survey data captured during the above surveys/studies was supplied to BHP in accordance with the BHP (2020) *Biodiversity Survey Spatial Data Requirements Procedure* (BHP Data Standard). The BHP Data Standard ensure a consistent and repeatable method of capturing environmental survey data. Following review by BHP for technical and spatial accuracy, the survey data is stored on BHP's internal database system.

This baseline environmental survey data and existing land disturbance data is considered to form the pre-clearing extent and baseline state (of vegetation condition and fauna habitats) for this IRP.

The following spatial data is provided to support this IRP, as per the EPA (2024) document *Instructions on How to Prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports*:

- **Boundary:** the Ministers North Development Envelope.
- **Baseline:** Vegetation condition mapping (baseline survey data), fauna habitat mapping (baseline survey data), clearing/ land disturbance up to the date of the approval of Ministers North, and IBRA subregions.
- **Imagery:** Aerial imagery for the extent of the Ministers North Development Envelope.

All spatial data is provided in a format that complies with the requirements of EPA (2024), and as per the following parameters:

- **Data Type:** Closed polygons for boundary and baseline data attributes (as per Table 6 of EPA 2024).
- **Format:** Shape files or Environmental Systems Research Institution (ESRI) geodatabase format.
- **Coordinate System:** Geocentric Datum of Australia 2020 (GDA2020) datum, projected into the appropriate Map Grid of Australia zone.
- **Imagery:** Enhanced Compressed Wavelet (ECW) format or Geographic Tagged Image File Format (GeoTIFF), at a minimum 1 m resolution.

**BHP**

