



Marillana Creek (Yandi) Life of Mine Proposal Significant Amendment

Proposal Content Document

6 May 2025
Version 3.0

Document amendment record

Version	Section/page	Version description	Key changes	Date
1.0	All	Original version submitted for legal review	N/A	24/03/2024
2.0	All	Draft version to be submitted to EPA	N/A	3/04/2025
3.0	All	Final version to be submitted to EPA	GHG updates	6/05/2025

1 Introduction

BHP has prepared the Proposal Content Document for the Amended Proposal, consistent with the EPA's *Instructions: How to identify the content of a Proposal* (EPA 2024).

As required by the Instructions, amendments to the existing General proposal description of the Approved Proposal (Ministerial Statement (MS) 679, as amended by MS1039)) are summarised below and the consolidated, updated General proposal description for the Amended Proposal is presented in Table 1. The proposal elements and amendments which have the potential to have a significant effect on the environment are quantified in Table 2.

Summary of proposal content amendments

Total Area Disturbed

- Amended from 4558 hectares to **4653 hectares**.
- Amended to include **clearing of no more than 48 ha of riparian vegetation for the E8 Proposal**

Proponent name

- Amended from BHP Billiton Iron Ore Pty Ltd to **BHP Iron Ore Pty Ltd**

Proposal description

- Amended proposal description to remove reference to Mining Tenement 47/292, which was incorporated into Mining Tenement 270SA in June 2017.

Project Life

- Amended from 17 years to **Approximately five years (5) from the date of issue of the Ministerial Statement**.
- **Decommissioning Phase up to approximately ten (10) years following cessation of mining**

2 Combined Proposal contents

Table 1: General proposal content description

Proposal title	Marillana Creek (Yandi) Life of Mine Proposal
Proponent name	BHP Iron Ore Pty Ltd
Short description	<p>The Combined Proposal is to mine the entire Yandi orebody within Mining Lease 270SA and subsequently rehabilitate the disturbed areas. The Yandi orebody occurs within an ancient channel iron deposit, which is subdivided into a series of mine areas known as the central mesa pits (C1 to C5), eastern mesa pits (E1 to E8) and the western mesa pits (W1 to W6). The Proposal is located 90 kilometres (km) northwest of the town of Newman (Figure 1).</p> <p>The Combined Proposal comprises:</p> <ul style="list-style-type: none"> • open cut mining of overburden and ore from the channel iron deposit above and below water table • dewatering of the orebody during mining operations • surplus water discharge to Marillana Creek • placement of overburden in mine voids and out-of-pit storage areas • processing, loading and transportation of ore • supply and distribution of power and raw material • linear infrastructure (haul roads, pipeline corridors etc.) • service infrastructure (e.g. main access roads, workshops, administration areas, accommodation village and airstrip) • permanent diversion of sections of Marillana Creek • creek crossings, permanent changes to the final landforms, including hill-like features of the out-of-pit overburden storage areas and pit lakes created in the final voids. <p>The Proposal relates to an amendment to both the Approved Proposal and the implementation conditions. Specifically, the Proposal includes:</p> <ul style="list-style-type: none"> • clearing of vegetation for the construction of the E8 West and East pits, haul roads, light vehicle access tracks and associated infrastructure • open cut mining of iron ore from above and below water table from the E8 West and East pits • Marillana Creek crossings for haul roads and light vehicle access • dewatering of the orebody in E8 east pit during mining operations • surplus water discharge to Marillana Creek. <p>The Proposal will use existing and approved elements which are part of the Approved Proposal for the mining, transportation and processing of ore.</p> <ul style="list-style-type: none"> • The Proposal is located within the existing 13,158 hectares (ha) development envelope for the Approved Proposal. The Proposal will require additional clearing (beyond that approved as part of the Approved Proposal) of up to 95 ha, resulting in a total disturbance for the Combined Proposal of 4,653 ha of native vegetation (Figure 2).

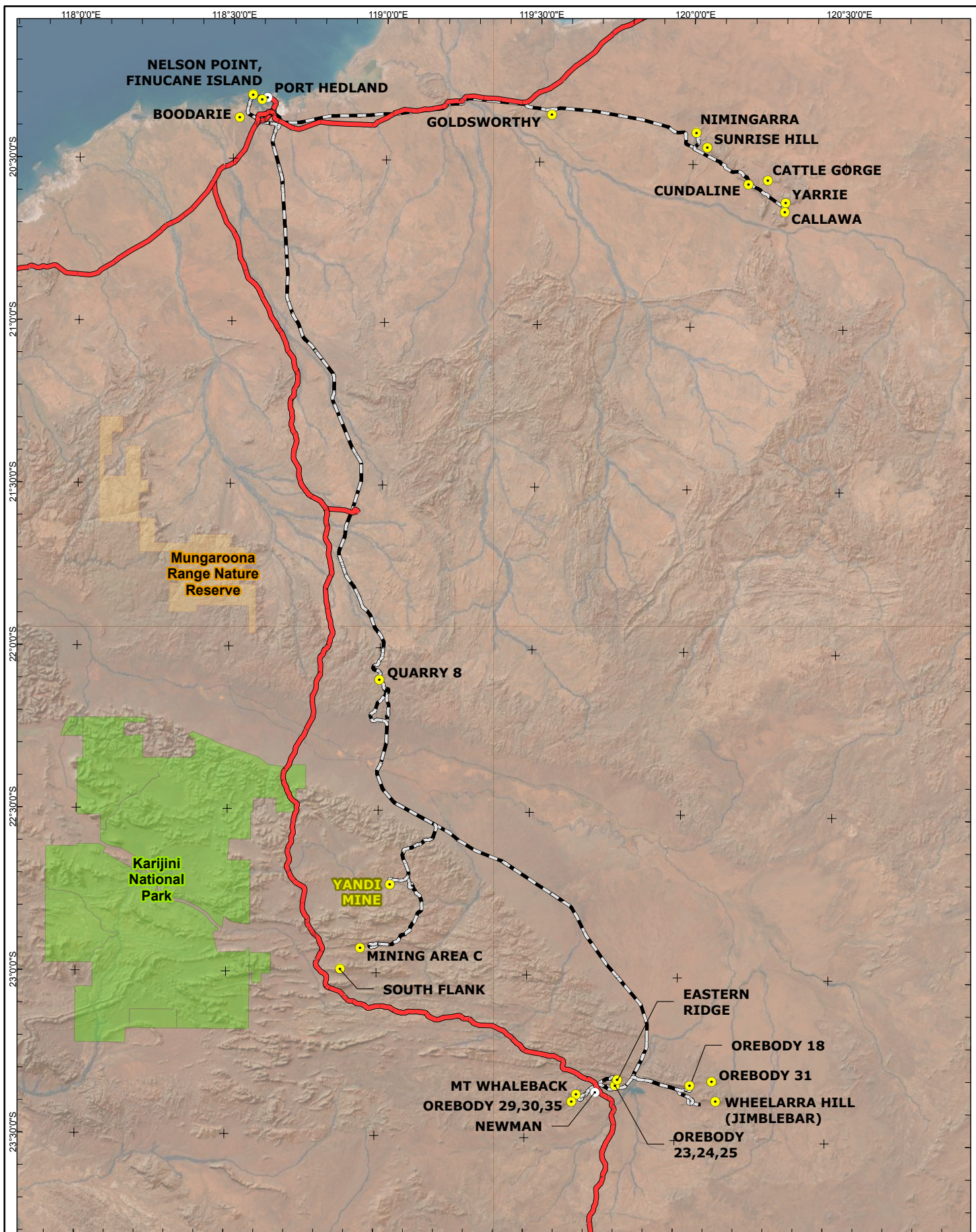
Table 2: Proposal content elements

Element	Location / description	Existing proposals maximum extent, capacity or range (Approved Proposals)	Proposed amendment extent, capacity or range (the Proposal – Significant Amendment)	Combined maximum extent, capacity or range (Combined Proposal)
Physical elements				
Mine and associated infrastructure	Figure 2	Part IV Approved MS679: Clearing of no more than 4,558 ha of native vegetation within the total approved proposal boundary area of 13,158 ha including: <ul style="list-style-type: none"> Clearing of no more than 393 ha for Marillana Creek Diversion Clearing of no more than 18 ha for Marillana Creek Crossings 	Additional clearing of 95 ha of native vegetation, including additional clearing of no more than 48 ha of riparian vegetation	Clearing of no more than 4,653 ha of native vegetation, within the 13,158 ha development envelope including: <ul style="list-style-type: none"> Clearing of no more than 393 ha for Marillana Creek Diversion Clearing of no more than 18 ha for Marillana Creek Crossings Clearing of no more than 48 ha of riparian vegetation for the E8 Proposal
Operational elements				
Overall Production rate	Figure 2	Part IV Approved MS679: Approximately 87 megatonnes per year	No change.	Overall production rate to remain within current authorised limit of approximately 87 megatonnes per year

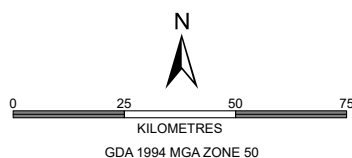
Marillana Creek diversions	Figure 2	<p>Part IV Approved MS679:</p> <p>Diversion of sections of Marillana Creek to maximise resource use in W5 mine area and the E1 to E6 mine area will be designed and constructed in accordance with the Marillana Creek Diversion Management Plan.</p>	No change.	Diversion of sections of Marillana Creek to maximise resource use in W5 mine area and the E1 to E6 mine area will be designed and constructed in accordance with the Marillana Creek Diversion Management Plan
Pit depth	Figure 2	<p>Part IV Approved MS679:</p> <p>Typically, 60 metres (ranges from 55 to 80 metres)</p>	No change.	Maximum pit depth up to approximately 80 metres below ground level.
Groundwater abstraction – mine pit dewatering and water supply	Figure 2	<p>Part IV Assessed MS679:</p> <p>Groundwater abstraction originally assessed by EPA as part of original proposal. Limit removed under section 45C of EP Act.</p> <p>MS1039:</p> <p>Not specified.</p> <ul style="list-style-type: none"> Groundwater abstraction regulated under 5C Groundwater Licence GWL89501(11) (June 2018-June 2028) issued under the Rights in Water and Irrigation Act 1914. GWL89501(11) Annual Water Entitlement 20.65 GL/a Total groundwater abstracted for FY23 was 7.43 GL 	No change.	Groundwater abstraction will remain within the current authorised limit of 20.65 GL/a and regulated under RiWI Act.

Surplus water management – discharge to creeks	Figure 2	Part IV Assessed <ul style="list-style-type: none"> 15,000,000 tonnes per annum current limit Dewater discharge to Marillana Creek Regulated under Part V Operating Licence L6168/1991/11 6,732,481 tonnes (6.73GL) dewater discharged FY23 	No change.	Maximum surplus water discharge will remain 15,000,000 tonnes per annum and regulated under Part V Operating Licence.
Greenhouse Gas Emissions				
Peak annual				
Scope 1	Mine Emissions covered by Safeguard Mechanism	Part IV not assessed <i>MS679:</i> Not specified <i>MS1039:</i> Not specified.	Additional 17,238 tCO₂-e per annum (FY2027)	Up to 89,791 tCO ₂ -e per annum (FY2028)
Scope 2	Electricity supply- (Grid-connected electricity demand)	Part IV not assessed <i>MS679:</i> Not specified <i>MS1039:</i> Not specified.	Additional 12,252 tCO₂-e per annum (FY2027)	Up to 25,460 tCO ₂ -e per annum (FY2026)
Scope 3	Downstream emissions (including rail transport, port, iron ore shipping and steel making)	Part IV not assessed <i>MS679:</i> Not specified <i>MS1039:</i> Not specified.	Additional 9,538,704 tCO₂-e per annum (FY2027)	Up to 20,851,796 tCO ₂ -e per annum (FY2026)
Annual average GHG Emissions life of mine				
Scope 1	Mine Emissions covered by	Part IV not assessed <i>MS679:</i>	Additional 8,986 tCO₂-e per annum)	Up to 49,553 tCO ₂ -e per annum

	Safeguard Mechanism	Not specified <i>MS1039:</i> Not specified.		
Scope 2	Electricity supply- (Grid-connected electricity demand)	Part IV not assessed <i>MS679:</i> Not specified <i>MS1039:</i> Not specified.	Additional 5,478 tCO₂-e per annum)	Up to 9,873 tCO ₂ -e per annum
Scope 3	Downstream emissions (including rail transport, port, iron ore shipping and steel making)	Part IV not assessed <i>MS679:</i> Not specified <i>MS1039:</i> Not specified.	Additional 4,315,551 tCO₂-e per annum	Up to 18,312,706 tCO ₂ -e per annum
Other elements which affect extent of effects on the environment				
Maximum project life		Part IV assessed and approved <i>MS679:</i> 17 Years	Additional approximate 5 years of operations	Approximately five years (5) from the date of issue of the Ministerial Statement. Decommissioning Phase up to ten (10) years following cessation of mining
Commissioning				
Commissioning of the additional dewatering and surplus water management infrastructure will be undertaken subject to the operational elements above				
Rehabilitation and closure				
Progressive rehabilitation will be undertaken, where practicable, when disturbed areas are no longer required for operations. Any permanent pit lake that forms following the permanent cessation of dewatering (if backfilling above the water table cannot be achieved) will be designed and managed to be safe and non-polluting.				



- BHP WAIO operation
- Town
- National highway
- Rail
- National park
- Nature reserve



BHP

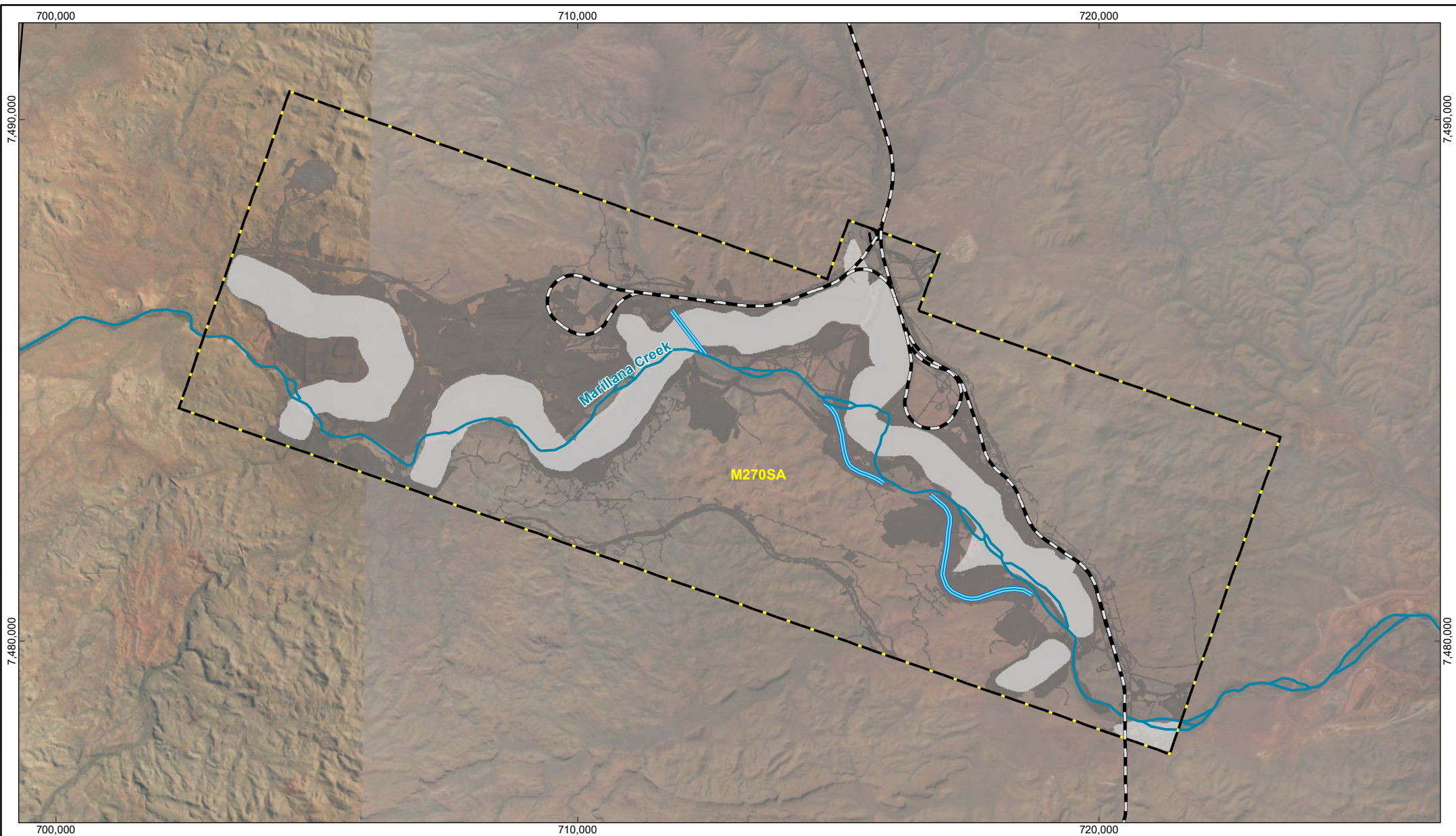
PUBLIC

MARILLANA CREEK (YANDI) SIGNIFICANT AMENDMENT REGIONAL LOCATION

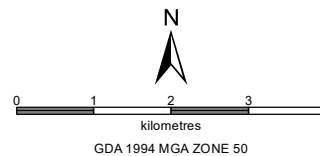
WAIO PLANNING, TECHNICAL & ENVIRONMENT

SCALE @ A4: 1:1,700,000 PREPARED: GEOMATICS FIGURE: 1
DATE: 1/04/2025 REQUESTOR: ENV APPROVALS NO:

A1205-008-RevC



-  BHP rail
-  Marillana Creek
-  Constructed Creek Diversion
-  Development Envelope
-  BHP Tenement
-  Indicative Location of Deposits
-  Existing Disturbance



BHP

PUBLIC

YANDI
SIGNIFICANT AMENDMENT
 Development Envelope
 PLANNING & STANDARDS - IRON ORE

SCALE @ A4: 1:98,000	PREPARED: SPATIAL DATA	FIGURE: 2
DATE: 23/04/2024	REQUESTOR: ENV APPROVALS	

A1205-009-RevC

3 References

Environmental Protection Authority (EPA) 2024. *How to identify the content of a Proposal: Instruction and template*. EPA, Western Australia