

Environmental Protection Act 1986

Section 43A

**NOTICE OF DECISION TO CONSENT TO AMEND A REFERRED PROPOSAL
DURING ASSESSMENT**

PERSON TO WHOM THIS NOTICE IS GIVEN

Robe River Mining Co Pty Ltd (ACN 008694246)
Central Park
152-158 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:

West Angelas Revised Proposal
Assessment No. 2290

DECISION

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

- A reduction in the total area of the Development Envelope (DE) by 4,705 hectares (ha) to 36,779 ha.
- A reduction to the total clearing extent by 1,805 ha to 17, 555 ha.
- Addition of solar renewable energy generation, storage, and associated infrastructure.
- Redesign proposed pits and associated waste landforms at the Mount Ella East deposit to limit southern extent.
- Removal of tailings storage facility (TSF) proposed at Deposit J.
- Amendments to update proposal description in relation to the above changes.

The amended proposal content document and figures are attached.

SUMMARY OF REASONS

- This amendment is in response to proponent consultation with the Yinhawangka and Ngarlawangga People.

- The change in DE is likely to decrease impacts to flora and vegetation, terrestrial fauna, and social surroundings.
- The change in total proposed clearing extent is unlikely to increase or introduce impacts for assessment and may improve the likelihood of the proposal being able to remain consistent with the EPA's environmental objectives.
- The addition of renewable energy generation, storage and associated infrastructure will likely decrease greenhouse gas emissions over time.
- There are no new environmental factors likely to be significantly affected as a result of the amendments, and no additional EPA functions need to be performed to assess the amended proposal.
- The proposal would not, if already approved, be considered a significant amendment. In considering this, the effects of the existing referred proposal, cumulative and holistic impacts have been considered.
- The amended proposal will be substantially the same character as the existing referred proposal.

EFFECT OF THIS NOTICE:

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

RIGHTS OF APPEAL:

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



Prof. Matthew Tonts
Delegate of the Environmental Protection Authority
CHAIR

26 April 2023

Att: Amended proposal content and relevant figures

Attachment 1- Amended proposal content document and figures showing the new approved proposal

Proposal Content Document

Table 1: Summary of the Proposal

Proposal Title	West Angelas Revised Proposal	No change
Proponent Name	Robe River Mining Co Pty Ltd	Robe River Mining Co Pty Ltd (ACN 008694246)
Short Description	<p>The Proposal is located approximately 130 km northwest of Newman in the East Pilbara region of Western Australia. The Proposal is located within Yinhawangka and Ngarlawangga Peoples Native Title Determination Areas. The Proposal includes the development of AWT and BWT iron ore deposits and associated infrastructure including:</p> <ul style="list-style-type: none"> • Development of above and below water table mine pits; • Activities required to facilitate the development of mine pits which may include as relevant, but are not limited to, the following: <ul style="list-style-type: none"> • Mineral waste management: including waste rock landforms, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles, in-pit waste rock landforms and storage of waste fines; • Ore processing (including crushing) infrastructure; • Other facilities including workshops, hydrocarbon and Ammonium Nitrate Fuel Oil (ANFO) storage and laydown areas; 	<p>The Proposal is located approximately 130 km northwest of Newman in the East Pilbara region of Western Australia. The Proposal is located within Yinhawangka and Ngarlawangga Peoples Native Title Determination Areas. The Proposal includes the development of AWT and BWT iron deposits and associated infrastructure including:</p> <ul style="list-style-type: none"> • Development of above and below water table mine pits; • Associated activities which may include as relevant, but are not limited to, the following: <ul style="list-style-type: none"> • Mineral waste management: including waste rock landforms, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles, in-pit waste rock landforms and storage of waste fines; • Ore processing (including crushing) infrastructure; • Other facilities including workshops, hydrocarbon and Ammonium Nitrate Fuel Oil (ANFO) storage and laydown areas; • Linear infrastructure including heavy and light vehicle access roads, rail and associated infrastructure, conveyors, utilities corridors, pipelines and power (including sub-stations) and communications distribution networks;

	<ul style="list-style-type: none"> • Linear infrastructure including but not limited to heavy and light vehicle access roads, rail and associated infrastructure, conveyors, utilities corridors, pipelines and power (including sub-stations) and communications distribution networks; • Infrastructure for surface water management including crossings, diversion drains, levees and culverts; • Groundwater abstraction and utilisation, and associated infrastructure; • Dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); • Infrastructure for management and use of water from dewatering • Offices and accommodation villages 	<ul style="list-style-type: none"> • Infrastructure for surface water management including crossings, diversion drains, levees and culverts; • Groundwater abstraction and utilisation, and associated infrastructure; • Dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); • Infrastructure for management and use of water from dewatering; • Offices and accommodation villages; • Renewable energy including renewable energy generation, energy storage and associated ancillary infrastructure.
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Table 2: Proposal characteristics

Proposal Element	Location/Description	Revised Proposal Extent (as referred)	Proposed Amendment	Revised Proposal Extent (as amended)
Physical Elements				
Mine and associated infrastructure	Figure 1	<p>Clearing of up to an additional 19,405 ha of native vegetation within a mine development envelope of 41,484 ha</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p> <p>No clearing of:</p> <p>Water features - WMAR-01 and WMAR-03</p> <p>Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>	<p>Reduction by 4,705 ha to the Development Envelope and reduction in the clearing of 1,850 ha</p>	<p>Clearing no more than 17,555 ha within a 36,779 ha Development Envelope.</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p> <p>No clearing of:</p> <p>Water features - WMAR-01 and WMAR-03</p> <p>Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>

Rail Infrastructure	NA	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <p>Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network</p> <p>Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure</p>	No change	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <p>Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network</p> <p>Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure</p>
Operational Elements				
Surplus water management	Figure 1	<p>Management of surplus water via water management options including, but not limited to:</p> <ul style="list-style-type: none"> • Use and storage onsite, • Discharge to disused mine pits, • Controlled discharge to the environment: Turee Creek East (not to extend within 2 km of the boundary of Karijini National Park) and other unnamed ephemeral creeks. 	<p>Amended to more clearly identify water use hierarchy and proposed use of surface water</p> <p>Addition of use in Managed Aquifer Recharge Project and Provision to other users</p>	<p>Dewatering water will be used on-site in the first instance to supply water for operational purposes. Use of surplus water may include:</p> <ul style="list-style-type: none"> • Use in processing • On-site other use • Options for temporary storage in disused mine pits • Infiltration to the aquifer • Use in Managed Aquifer Recharge Project • Provision to other users <p>Surplus dewatering water exceeding the operational requirement is discharged to a local ephemeral tributary of Turee Creek East.</p> <p>The surface discharge extent will not extend within 2 km of the boundary of Karijini National Park under natural no-flow conditions</p>
Proposal Elements with Greenhouse Gas Emissions				
Peak Annual				
Scope 1	Diesel and land clearing –approximately 193,388 t CO ₂ -e pa.			

Scope 2	Electricity – approximately 25,335 t CO ₂ e pa.	
Scope 3	Annual average approximately 17.4 Mt CO ₂ -e pa.	
Rehabilitation		
<p>The key closure outcome is to rehabilitate the site to create a safe, stable, non-polluting landscape consistent with the post-mining land use and maintain environmental and cultural heritage values.</p> <p>Rehabilitation and closure activities will be carried out in accordance with the approved Mine Closure Plan (MCP).</p>		
Other Elements that Affect the Extent of Effects on the Environment		
Proposal Time	Maximum project life	Operational phase estimated to be ~ 15 years (not including construction and closure implementation phases).

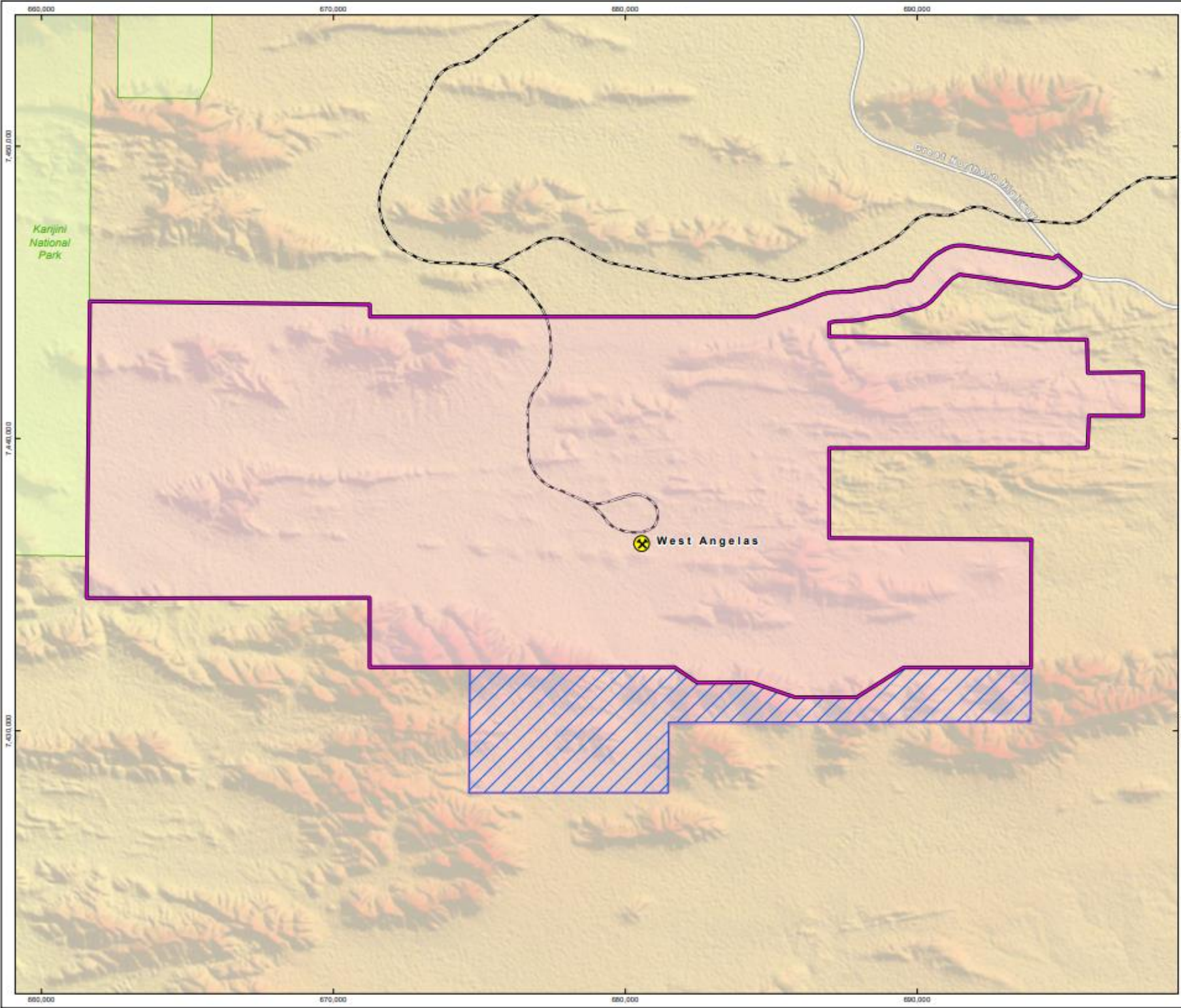
Figure 1-1: Proposed Amendments to the Development Envelope

Drawn: A.D.
Plan: RT10-0972965v1
Date: December 2022

Proj: GDA 1994 MGA Zone 50
Scale: 1:125,000 @A3
GIS.Team@riotinto.com

Legend

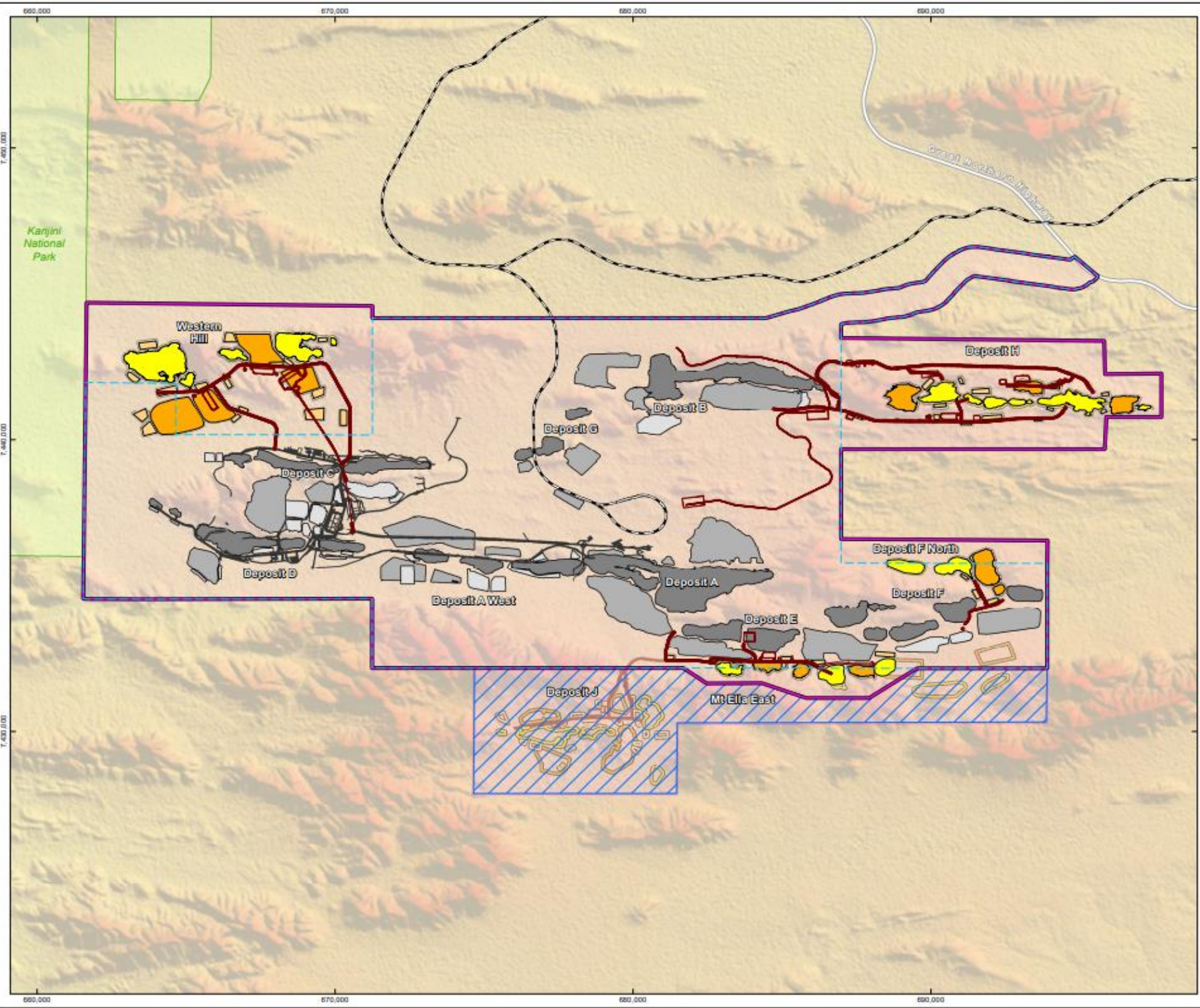
-  Rio Tinto Mine
-  Revised Development Envelope
-  Original Referred Development Envelope
-  Removed from Referred Development Envelope
-  National Park
-  Rio Tinto Railway
-  Highway



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Figure 1-2: Proposed Amendments to Key Proposal Elements

Drawn: GIS Team
Plan: RT12-072240v1
Date: December 2022
Proj: GDA 1994 MGA Zone 50
Scale: 1:120,000 @A3
GIS Team@riotinto.com



Legend

- Approved Development Envelope
- Original Referred Development Envelope
- Revised Development Envelope
- Removed from Referred Development Envelope

Key Proposal Elements removed from Referred Proposal

- Infrastructure
- Proposed Pit
- Proposed Waste Dump
- Proposed Stockpile

Current Proposed Conceptual Layout

- Infrastructure
- Pit
- Waste Dump
- Stockpile

Approved Conceptual Layout

- Infrastructure
- Pit
- Waste Dump
- Stockpile

- National Park
- Rio Tinto Railway
- Highway



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Summary of reasons for decision – request to amend a referred proposal during assessment under s. 43A of the *Environmental Protection Act 1986*

Proposal title: West Angelas Revised Proposal

Environment Online Reference Number: NA

Date request to amend referred proposal under s. 43A received: 21-02-2023

Proponent: Robe River Mining Pty Ltd

Proposal referral date: 25-03-2021

Level of assessment: Public Environmental Review with 8-week public review period.

Existing referred proposal:

The West Angelas Revised Proposal (the Proposal) is located approximately 130 kilometres northwest of the township of Newman, in the east Pilbara region of Western Australia and includes the development of new above and below water table mine pits. The key components of the Proposal include:

- clearing of up to 7,200 hectares (ha) within a 39,851 ha development envelope (DE)
- development of new above and below water table mine pits at:
 - Western Hill
 - Deposit H
 - Deposit F-North
 - Mt Ella East
 - Deposit J.

Activities required to facilitate the development of the new mine pits which include:

- mineral waste management including waste dumps, tailings storage facilities, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles
- new processing infrastructure at new mining areas
- support facilities: workshops, hydrocarbon storage, laydown areas, and offices
- linear infrastructure: heavy and light vehicle access roads, conveyors, pipelines and power (including substations) and communications distribution networks
- infrastructure for surface water management: crossings, diversion drains, levees and culverts
- groundwater abstraction and utilisation, and associated infrastructure
- dewatering to enable below water table mining and associated infrastructure (including bores and pipelines)
- surplus water management and associated infrastructure: use in processing, onsite use and options for storage/discharge to disused mine pits and controlled discharge to surface water systems.

Short description of amendment(s) sought:

The proposed amendments include:

- a reduction to the DE by 4,705 ha
- a reduction to the clearing extent by 1,805 ha
- inclusion of renewable energy generation and storage options
- removal of tailings storage facility at Deposit J
- updated proposal description.

Proposed amendments to the development envelope and key proposal elements are displayed in Figures 1 and 2.

The amended proposal description identifies the associated activities and infrastructure required for the proposal. The proposed amendments have been bolded below. At the time of referral, EPA guidance under ‘*How to identify the content of a proposal: Instruction and Template*’ (Environmental Protection Authority 2021) was not available. The Tables below provide changes to the proposal content and satisfy current requirements.

Table 1: Proposed amendments to proposal elements (proposal content)

Element	Referred proposal	Proposed amendment	Revised proposal extent
Physical elements			
Mine and associated infrastructure	<p>Clearing of up to an additional 19,405 ha of native vegetation within a mine development envelope of 41,484 ha</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p>	<p>Reduction by 4,705 ha to the Development Envelope and reduction in the clearing of 1,850 ha</p>	<p>Clearing no more than 17,555 ha within a 36,779 ha Development Envelope.</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p>

	<p>No clearing of: Water features - WMAR-01 and WMAR-03, Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>		<p>No clearing of: Water features - WMAR-01 and WMAR-03, Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>
Linear Infrastructure	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <ul style="list-style-type: none"> • Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network • Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure 	No change	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <ul style="list-style-type: none"> • Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network • Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure
Operational elements			
Surplus Water Management	<p>Dewatering water will be used on-site in the first instance to supply water for operational purposes. Surplus dewatering water exceeding the operational requirement is discharged to a local ephemeral tributary of Turee Creek East. The surface discharge extent will not extend within 2 km of the boundary of Karijini National Park under natural no-flow conditions</p>	<p>Amended to more clearly identify water use hierarchy and proposed use of surface water</p> <p>Addition of use in Managed Aquifer Recharge Project and Provision to other users</p>	<p>Dewatering water will be used on-site in the first instance to supply water for operational purposes. Use of surplus water may include:</p> <ul style="list-style-type: none"> ○ use in processing ○ on-site other use ○ options for temporary storage in disused mine pits ○ infiltration to the aquifer ○ use in managed aquifer recharge Project ○ provision to other users. <p>Surplus dewatering water exceeding the operational requirement is discharged to a local ephemeral tributary of Turee Creek East.</p>

			The surface discharge extent will not extend within 2 km of the boundary of Karijini National Park under natural no-flow conditions
Proposal elements with greenhouse gas emissions			
Operational elements:			
Scope 1		Diesel and land clearing – approximately 193,388 t CO ₂ -e pa	
Scope 2		Electricity – approximately 25,335 t CO ₂ -e pa	
Scope 3		Annual average approximately 17.4 Mt CO ₂ -e pa	
Rehabilitation			
The key closure outcome is to rehabilitate the site to create a safe, stable, non-polluting landscape consistent with the post-mining land use and maintain environmental and cultural heritage values. Rehabilitation and closure activities will be carried out in accordance with the approved mine closure plan (MCP).			
Other elements which affect extent of effects on the environment			
Proposal time*	Maximum project life	Operational phase estimated to be 15 years (not including construction and closure implementation phases).	

Table 2: Proposed amendments to proposal description.

Component	Existing description	Proposed Amendment
Proposal Title	West Angelas Revised Proposal	West Angelas Revised Proposal
Proponent name	Robe River Mining Co. Pty Ltd	Robe River Mining Co. Pty Ltd (ACN 008694246)
Short Description	<p>The Proposal is located approximately 130 km northwest of the township of Newman, in the east Pilbara region of Western Australia and includes the development of new above and below water table (AWT / BWT) mine pits.</p> <p>The key components of the Proposal include, but are not limited to the following (Figure 2 Conceptual Footprint and Development Envelope of the Proposal):</p> <ul style="list-style-type: none"> • Clearing of up to 7,200 hectares (ha) within a 39,851 ha Development Envelope; • Development of new above and below water table mine pits at: <ul style="list-style-type: none"> ○ Western Hill; ○ Deposit H; ○ Deposit F-North; ○ Mt Ella East; and ○ Deposit J. 	<p>The Proposal is located approximately 130 km northwest of Newman in the East Pilbara region of Western Australia. The Proposal is located within Yinhawangka and Ngarlawangga Peoples Native Title Determination Areas. The Proposal includes the development of AWT and BWT iron ore deposits and associated infrastructure including:</p> <ul style="list-style-type: none"> • Development of above and below water table mine pits at; <ul style="list-style-type: none"> ○ Western Hill; ○ Deposit H; ○ Deposit F-North; ○ Mt Ella East; • Associated activities which may include as relevant, but are not limited to, the following:

	<ul style="list-style-type: none"> • Activities required to facilitate the development of the new mine pits which may include as relevant, but are not limited to the following: <ul style="list-style-type: none"> ○ mineral waste management including waste dumps, tailings storage facilities, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles; ○ new processing infrastructure at new mining areas; ○ support facilities: including workshops, hydrocarbon storage, laydown areas, and offices; ○ linear infrastructure: including heavy and light vehicle access roads, conveyors, pipelines and power (including sub-stations) and communications distribution networks; ○ infrastructure for surface water management: including crossings, diversion drains, levees and culverts; ○ groundwater abstraction and utilisation, and associated infrastructure; ○ dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); and ○ surplus water management and associated infrastructure: including use in processing, onsite use and options for storage/discharge to disused mine pits and controlled discharge to surface water systems. 	<ul style="list-style-type: none"> ○ Mineral waste management: including waste rock landforms, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles, in-pit waste rock landforms and storage of waste fines; ○ Ore processing (including crushing) infrastructure; ○ Other facilities including workshops, hydrocarbon and Ammonium Nitrate Fuel Oil (ANFO) storage and laydown areas; ○ Linear infrastructure including heavy and light vehicle access roads, rail and associated infrastructure, conveyors, utilities corridors, pipelines and power (including sub-stations) and communications distribution networks; ○ Infrastructure for surface water management including crossings, diversion drains, levees and culverts; ○ Groundwater abstraction and utilisation, and associated infrastructure; ○ Dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); ○ Infrastructure for management and use of water from dewatering; <ul style="list-style-type: none"> • Offices and accommodation villages <ul style="list-style-type: none"> • Renewable energy including renewable energy generation (solar), energy storage and associated ancillary infrastructure.
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Bolded items identify the key changes/limitations to the proposal description.

The proponent considers that there are no feasible alternatives to the proposal.

Decision:

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

Environmental factors relevant to amendment(s):

- Social Surroundings
- Inland Waters
- Flora and Vegetation
- Terrestrial Fauna
- Subterranean Fauna
- Greenhouse Gas Emissions.

Summary of likely changes to environmental impacts from proposed amendment:

Amendment sought	Changes to environmental impacts
<p>Change to DE:</p> <ul style="list-style-type: none"> - reduction in size by 4705 ha 	<p>The proposed amendment will likely result in:</p> <ul style="list-style-type: none"> • reduced impacts to Social Surroundings Aboriginal Heritage values by avoiding direct impacts and minimising indirect impacts to culturally significant landforms. • reducing impacts to critical habitat by avoiding 3,269 ha of Gorge/Gully for conservation significant fauna including: <ul style="list-style-type: none"> ○ northern quoll ○ ghost bat ○ Pilbara olive python • avoid direct impacts to 1,363 ha of supporting habitat (for foraging and dispersal) for Matters of National Environmental Significance (MNES) species. • reduce potential clearing of vegetation communities with high local significance, including 108 ha of riparian vegetation and 1,700 ha of vegetation type H15. • avoidance of direct impacts to 7 caves utilised by ghost bats including: <ul style="list-style-type: none"> ○ one category 2 (maternity/diurnal roost cave with regular occupancy) ○ one category 3 (diurnal roost cave with occasional occupancy) ○ 5 category 4 roosts (nocturnal roost caves with opportunistic usage). <p>The proposed change is unlikely to increase or introduce additional impacts. The environmental outcomes may improve compared to the original proposal and increase the likelihood of remaining consistent with EPA objectives.</p>

Amendment sought	Changes to environmental impacts
<p>Change to clearing extent:</p> <ul style="list-style-type: none"> - reduction by 1850 ha 	<p>The proposed amendment will result in:</p> <ul style="list-style-type: none"> • reduced clearing of native vegetation of up to 1,850 ha. • reduced clearing of terrestrial fauna habitat of up to 1,850 ha. <p>The proposed change is unlikely to increase or introduce additional impacts. The environmental outcomes may improve compared to the original proposal and increase the likelihood of remaining consistent with EPA objectives.</p>
<p>Inclusion of option for renewable energy generation and storage (solar).</p>	<p>The proposed amendment will result in an opportunity to reduce greenhouse gas emissions in a scalable manner to assist in meeting 5 yearly GHG emissions reductions and net zero by 2050.</p> <p>Specific solar infrastructure risks are not currently considered by the proposed change however, any clearing activities to support implementation would contribute towards the limits on clearing outlined by the proposal. As such, any associated impacts are unlikely to be significantly different compared to the original proposal and can be adequately considered during the assessment process.</p> <p>The proposed change is unlikely to increase impacts. The environmental outcome for greenhouse gas may improve compared to the original proposal and increase the likelihood of remaining consistent with EPA objectives.</p>

Summary of consultation

The proponent has consulted with the following stakeholders with further details as follows:

- Department of Climate Change, Energy, the Environment and Water regarding a reduction in scope via s.156A under the *Environmental Protection Biodiversity Conservation Act 1999*
- the Yinhawangka People (68.5% of the proposal occurs on their Native Title Determination Area) have been consulted on the referred proposal and provided feedback that Deposit J should be removed and development at Mt Ella East be substantially reduced in size. The proponent has presented this proposed change to the Yinhawangka People in response
- the Ngarlawangga People (31.5% of the proposal occurs on their Native Title Determination Area) have been consulted on the referred proposal and they advised the Mt Ella East development needs to be substantially reduced. The proposed amendment has been presented to the Ngarlawangga People in response.

Summary of consideration of amendment

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

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

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

The EPA has considered whether the amended proposal will still be substantially the same character as the existing referred proposal.

Approval – not a significant amendment

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

Attachments

- Figure 1: Proposed change to development envelope
- Figure 2: Proposed change to proposal elements and indicative development footprint
- Appendix 1: Amended Proposal content document

Appeals: Decision not appealable.



Prof. Matthew Tonts
CHAIR
Delegate of the Environmental Protection Authority

26 April 2023

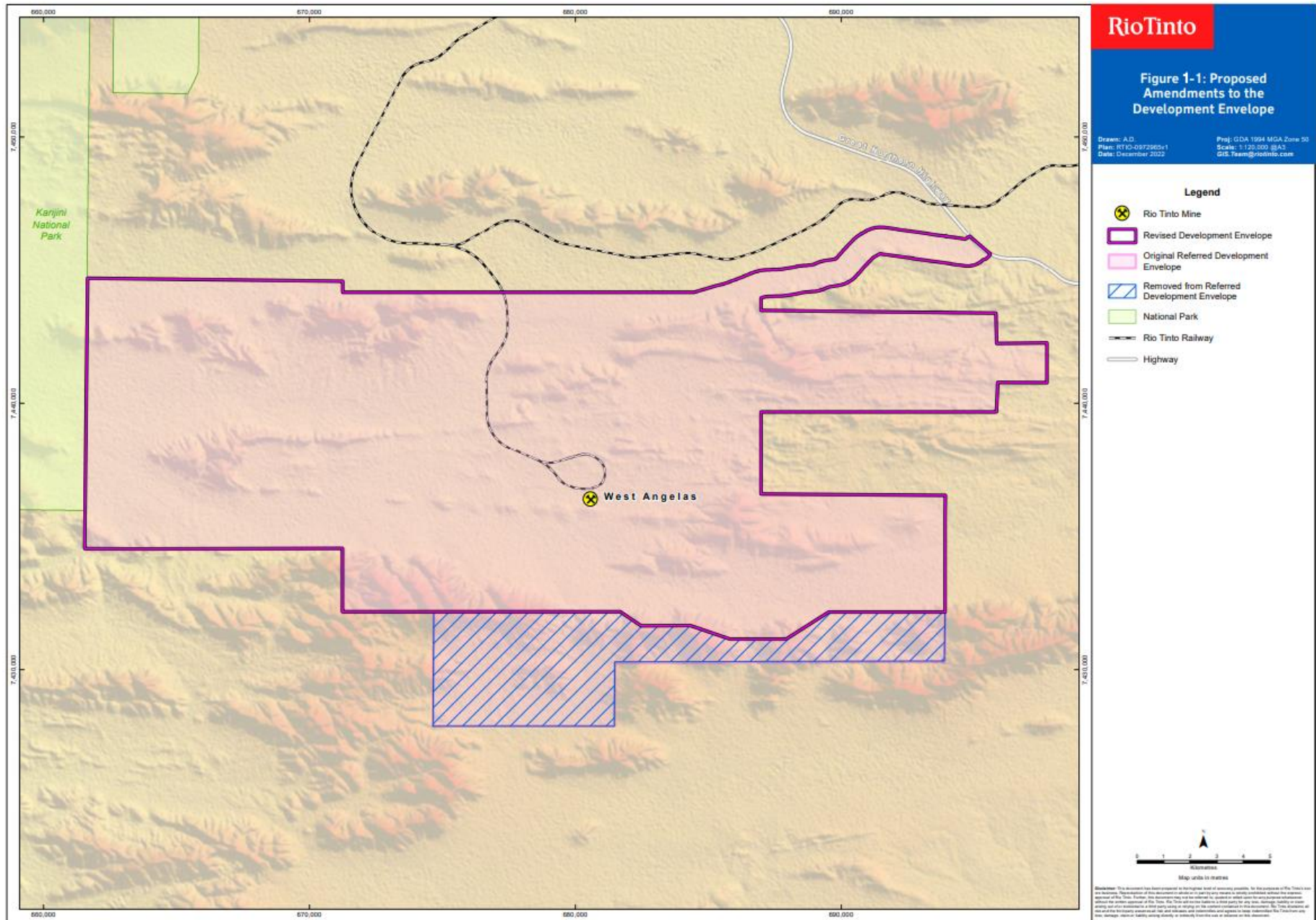


Figure 1: Proposed change to development envelope

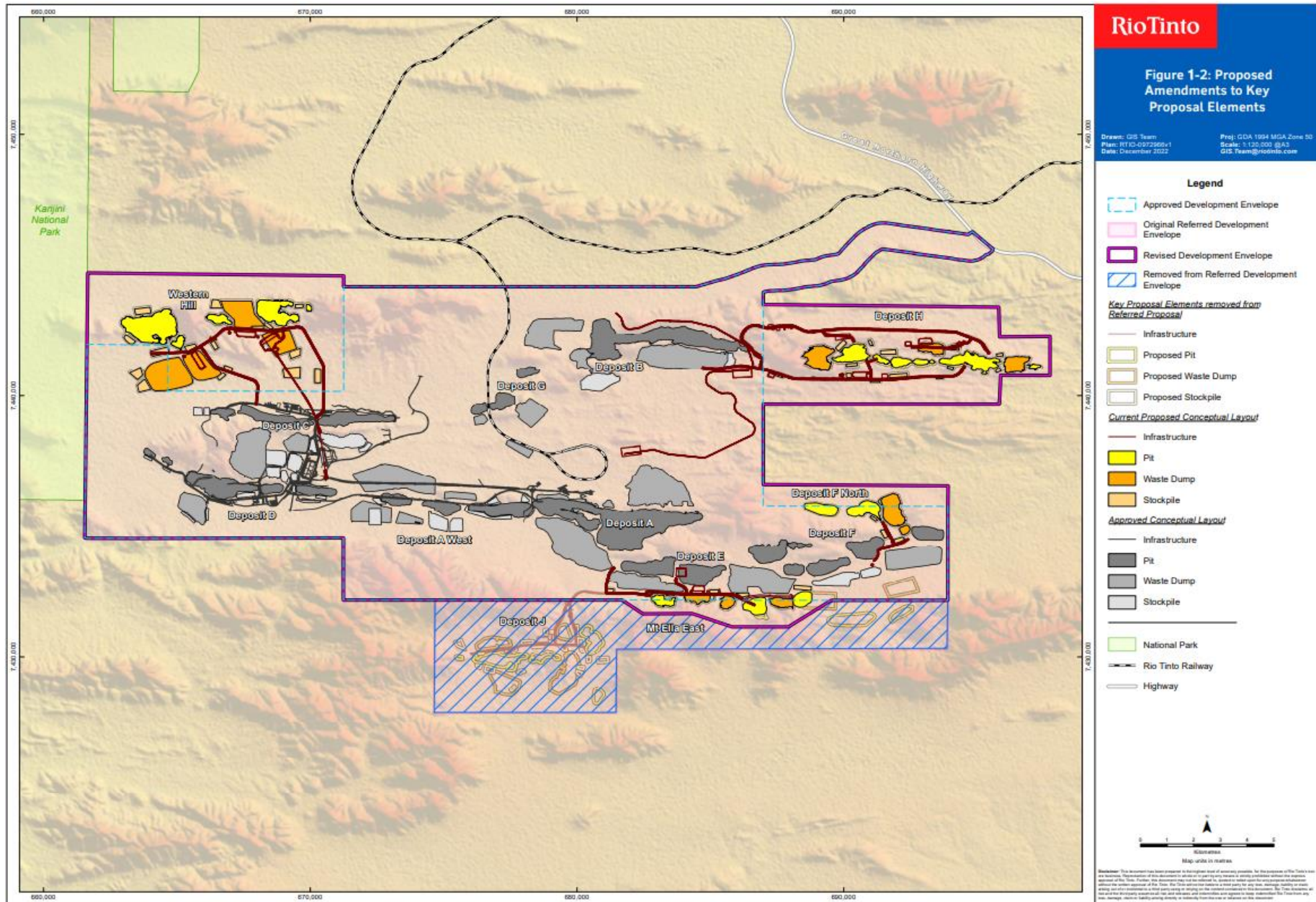


Figure 2: Proposed change to proposal elements and indicative development footprint

Table 1: Amended general proposal content description

Proposal Title	West Angelas Revised Proposal	No change
Proponent Name	Robe River Mining Co Pty Ltd	Robe River Mining Co Pty Ltd (ACN 008694246)
Short Description	<p>The Proposal is located approximately 130 km northwest of Newman in the East Pilbara region of Western Australia. The Proposal is located within Yinhawangka and Ngarlawangga Peoples Native Title Determination Areas. The Proposal includes the development of AWT and BWT iron ore deposits and associated infrastructure including:</p> <ul style="list-style-type: none"> • Development of above and below water table mine pits; • Activities required to facilitate the development of mine pits which may include as relevant, but are not limited to, the following: <ul style="list-style-type: none"> • Mineral waste management: including waste rock landforms, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles, in-pit waste rock landforms and storage of waste fines; • Ore processing (including crushing) infrastructure; • Other facilities including workshops, hydrocarbon and Ammonium Nitrate Fuel Oil (ANFO) storage and laydown areas; 	<p>The Proposal is located approximately 130 km northwest of Newman in the East Pilbara region of Western Australia. The Proposal is located within Yinhawangka and Ngarlawangga Peoples Native Title Determination Areas. The Proposal includes the development of AWT and BWT iron deposits and associated infrastructure including:</p> <ul style="list-style-type: none"> • Development of above and below water table mine pits; • Associated activities which may include as relevant, but are not limited to, the following: <ul style="list-style-type: none"> • Mineral waste management: including waste rock landforms, land bridges, low grade ore dumps, topsoil and sub-soil stockpiles, in-pit waste rock landforms and storage of waste fines; • Ore processing (including crushing) infrastructure; • Other facilities including workshops, hydrocarbon and Ammonium Nitrate Fuel Oil (ANFO) storage and laydown areas; • Linear infrastructure including heavy and light vehicle access roads, rail and associated infrastructure, conveyors, utilities corridors, pipelines and power (including sub-stations) and communications distribution networks;
	<ul style="list-style-type: none"> • Linear infrastructure including but not limited to heavy and light vehicle access roads, rail and associated infrastructure, conveyors, utilities corridors, pipelines and power (including sub-stations) and communications distribution networks; • Infrastructure for surface water management including crossings, diversion drains, levees and culverts; • Groundwater abstraction and utilisation, and associated infrastructure; • Dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); • Infrastructure for management and use of water from dewatering 	<ul style="list-style-type: none"> • Infrastructure for surface water management including crossings, diversion drains, levees and culverts; • Groundwater abstraction and utilisation, and associated infrastructure; • Dewatering to enable below water table mining and associated infrastructure (including bores and pipelines); • Infrastructure for management and use of water from dewatering; • Offices and accommodation villages; • Renewable energy including renewable energy generation, energy storage and associated ancillary infrastructure.
	<ul style="list-style-type: none"> • Offices and accommodation villages 	

Table 2: Amended Proposal Content Document

Proposal Element	Location/Description	Revised Proposal Extent (as referred)	Proposed Amendment	Revised Proposal Extent (as amended)
Physical Elements				
Mine and associated infrastructure	Figure 1	<p>Clearing of up to an additional 19,405 ha of native vegetation within a mine development envelope of 41,484 ha</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p> <p>No clearing of:</p> <p>Water features - WMAR-01 and WMAR-03</p> <p>Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>	Reduction by 4,705 ha to the Development Envelope and reduction in the clearing of 1,850 ha	<p>Clearing no more than 17,555 ha within a 36,779 ha Development Envelope.</p> <p>No clearing within Ghost Bat Cave AA1, WA-13, WA-21 and WA-23 Exclusion Zones</p> <p>No clearing within the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5)</p> <p>No more than 20 ha of clearing to other representations of the West Angelas Cracking Clay Priority Ecological Community</p> <p>No more than 25 ha of clearing of riparian vegetation</p> <p>No clearing of Hilltop, Hillslope, Ridge or Cliff habitat for the Managed Aquifer Recharge Scheme infrastructure</p> <p>No clearing of:</p> <p>Water features - WMAR-01 and WMAR-03</p> <p>Caves - CMAR-02, CMAR-03 and CMAR-04</p> <p>Clearing of no more than 0.6 ha of Major Drainage habitat for the Managed Aquifer Recharge scheme infrastructure</p> <p>Below water table pits are to be backfilled to a level to prevent the formation of permanent pit lakes.</p>
Rail Infrastructure	NA	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <p>Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network</p> <p>Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure</p>	No change	<p>A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert</p> <p>Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:</p> <p>Five existing sidings (Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu) and potential additional sidings to support the rail network</p> <p>Turee Creek B Borefield, pipeline, powerline, access roads and other associated infrastructure</p>
Operational Elements				
Surplus water management	Figure 1	<p>Management of surplus water via water management options including, but not limited to:</p> <ul style="list-style-type: none"> Use and storage onsite, Discharge to disused mine pits, Controlled discharge to the environment: Turee Creek East (not to extend within 2 km of the boundary of Karijini National Park) and other unnamed ephemeral creeks. 	<p>Amended to more clearly identify water use hierarchy and proposed use of surface water</p> <p>Addition of use in Managed Aquifer Recharge Project and Provision to other users</p>	<p>Dewatering water will be used on-site in the first instance to supply water for operational purposes. Use of surplus water may include:</p> <ul style="list-style-type: none"> Use in processing On-site other use Options for temporary storage in disused mine pits Infiltration to the aquifer Use in Managed Aquifer Recharge Project Provision to other users <p>Surplus dewatering water exceeding the operational requirement is discharged to a local ephemeral tributary of Turee Creek East.</p> <p>The surface discharge extent will not extend within 2 km of the boundary of Karijini National Park under natural no-flow conditions</p>
Proposal Elements with Greenhouse Gas Emissions				
Peak Annual				
Scope 1	Diesel and land clearing –approximately 193,388 t CO ₂ e pa.			
Scope 2	Electricity – approximately 25,335 t CO ₂ e pa.			
Scope 3	Annual average approximately 17.4 Mt CO ₂ e pa.			
Rehabilitation				
<p>The key closure outcome is to rehabilitate the site to create a safe, stable, non-polluting landscape consistent with the post-mining land use and maintain environmental and cultural heritage values.</p> <p>Rehabilitation and closure activities will be carried out in accordance with the approved Mine Closure Plan (MCP).</p>				
Other Elements that Affect the Extent of Effects on the Environment				
Proposal Time	Maximum project life		Operational phase estimated to be ~ 15 years (not including construction and closure implementation phases).	