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20/12/2024

Subject: Mount Pleasant Optimisation Project (SSD-10418) - Revised Visual Impact Management Plan

Dear Mr Lauritzen,

I refer to your submission dated 28 November 2024, requesting approval of the revised Mount Pleasant Operation Visual Impact Management Plan (Revision 04, dated 11 December 2024).

The Department has carefully reviewed the document and is satisfied that it meets the requirements of the relevant conditions of consent for Mount Pleasant Optimisation Project (SSD-10418).

Accordingly, as nominee of the Planning Secretary, I approve the Mount Pleasant Operation Visual Impact Management Plan (Revision 04, dated 11 December 2024).

You are reminded that if there are any inconsistencies between the Plan and the conditions of approval, the conditions prevail. Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Kiera Plumridge at kiera.plumridge@dpie.nsw.gov.au.

Yours sincerely,



Jack Turner
A/ Team Leader
Resource Assessments

As nominee of the Planning Secretary



MOUNT PLEASANT OPERATION

VISUAL IMPACT MANAGEMENT PLAN

Document ID:	MP001-0000-ENV-PLN-0011		
Company:	MACH Energy Australia Pty Ltd		
Effective Date:	20 December 2024	Status:	Issued for Use
Endorsed By:	Andrew Reid	Revision Number:	04

MOUNT PLEASANT OPERATION VISUAL IMPACT MANAGEMENT PLAN	
Name of Mine:	Mount Pleasant Operation
Visual Impact Management Plan Commencement Date:	20 December 2024
Visual Impact Management Plan Revision Dates and Version Numbers:	Version 04 – This version has been updated to address the requirements of Development Consent SSD 10418. This version addresses consultation comments from Muswellbrook Shire Council.
Name of Mine Operator:	MACH Energy Australia Pty Ltd
Name of Lease Holder:	MACH Energy Australia Pty Ltd and J.C.D Australia Pty Ltd

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1 INTRODUCTION

The Mount Pleasant Operation (MPO) is located in the Upper Hunter Valley of New South Wales (NSW), approximately 3 kilometres (km) north-west of Muswellbrook and approximately 50 km north-west of Singleton (Figure 1). The village of Aberdeen and locality of Kayuga are also located approximately 5 km north-northeast and 1 km north of the MPO boundary, respectively (Figure 1). The proponent of the MPO is MACH Energy Australia Pty Ltd (MACH Energy), which purchased the MPO from Coal & Allied Operations Pty Ltd (Coal & Allied) in 2016.

MACH Mount Pleasant Operations Pty Ltd is the manager of the MPO as agent for, and on behalf of, the unincorporated Mount Pleasant Joint Venture between MACH Energy (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner). This Visual Impact Management Plan (VIMP) is implemented at the MPO by MACH Energy.

The initial development application for the MPO was made in 1997. This was supported by an Environmental Impact Statement (EIS) prepared by Environmental Resources Management (ERM) Mitchell McCotter (ERM Mitchell McCotter, 1997). On 22 December 1999, the then Minister for Urban Affairs and Planning granted Development Consent DA 92/97 to Coal & Allied. This allowed for the “Construction and operation of an open cut coal mine, coal preparation plant, transport and rail loading facilities and associated facilities” at the MPO. The consent allowed for operations 24 hours per day seven days per week and the extraction of 197 million tonnes (Mt) of run-of-mine (ROM) coal over a 21 year period, at a rate of up to 10.5 Mt of ROM coal per year.

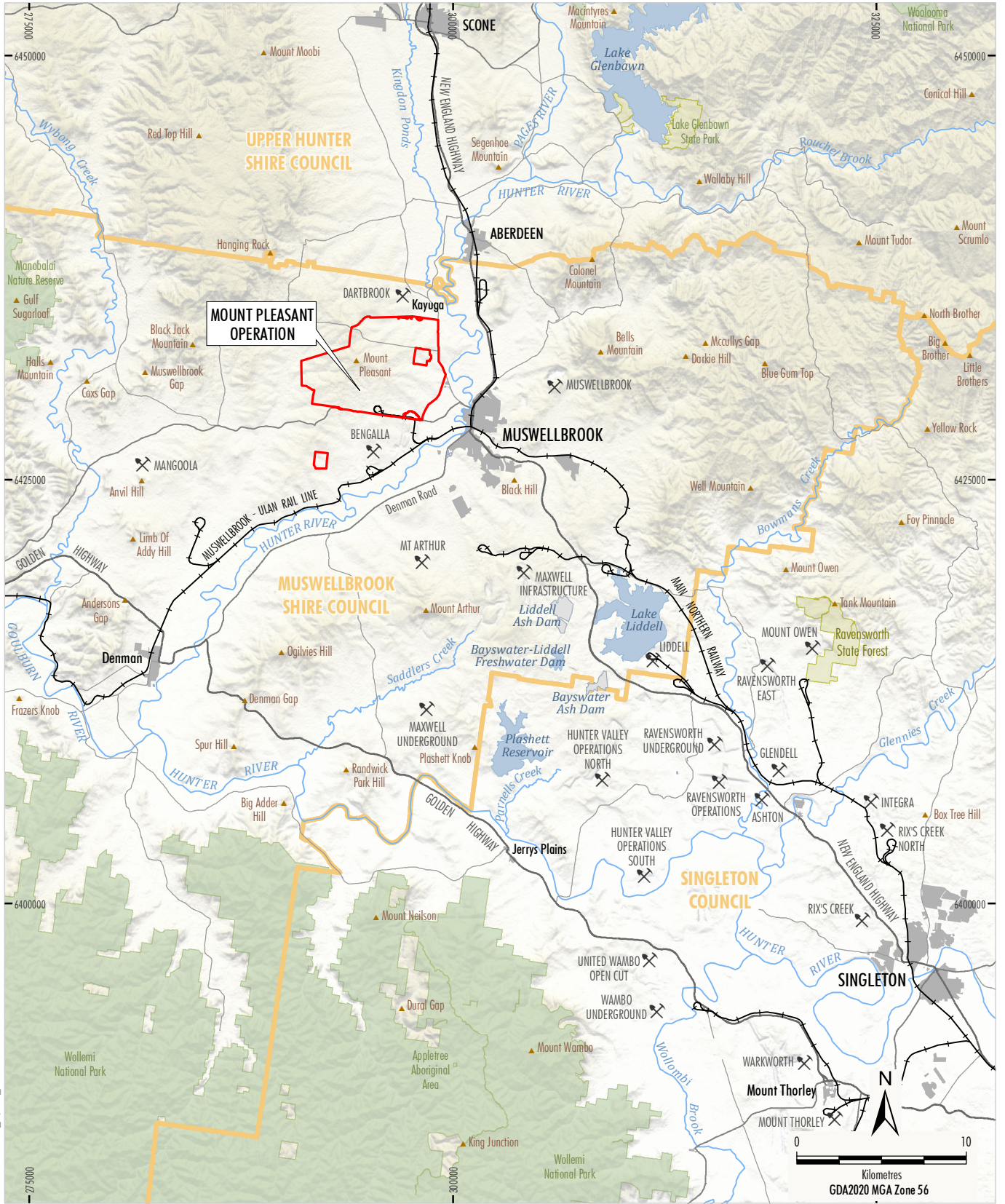
The Mount Pleasant Project Modification (MOD 1) was submitted on 19 May 2010 with a supporting Environmental Assessment (EA) prepared by EMGA Mitchell McLennan (EMGA Mitchell McLennan, 2010). MOD 1 included the provision of an infrastructure envelope for siting the mine infrastructure, the provision of an optional conveyor/service corridor linking the MPO facilities with the Muswellbrook-Ulan Rail Line and modification of the existing Development Consent DA 92/97 boundaries to accommodate the optional conveyor/service corridor and minor administrative changes. MOD 1 was approved on 19 September 2011.

The MPO South Pit Haul Road Modification (MOD 2) was submitted on 30 January 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017a). MOD 2 proposed to realign an internal haul road to enable more efficient access to the South Pit open cut, with no other material changes to the approved MPO. MOD 2 was approved on 29 March 2017.

The MPO Mine Optimisation Modification (MOD 3) was submitted on 31 May 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017b). MOD 3 comprised an extension to the time limit on mining operations (to 22 December 2026) and extensions to the South Pit Eastern Out of Pit Emplacement to facilitate development of an improved final landform. MOD 3 was approved on 24 August 2018.

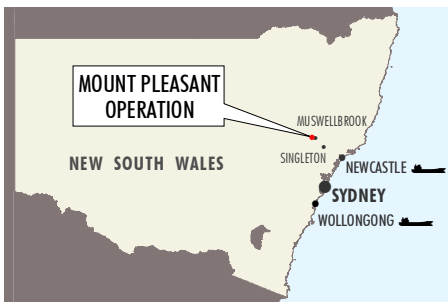
The MPO Rail Modification (MOD 4) was submitted on 18 December 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017c). MOD 4 proposed the following changes:

- duplication of the approved rail spur, rail loop, conveyor and rail load-out facility and associated services;
- duplication of the Hunter River water supply pump station, water pipeline and associated electricity supply that followed the original rail spur alignment; and
- demolition and removal of the redundant approved infrastructure within the extent of the Bengalla Mine, once the new rail, product loading and water supply infrastructure has been commissioned and is fully operational.



MAC18-038_MP2024_Figure 1_Rev A

Source: NSW Spatial Services (2024)



- LEGEND**
- Mining Operation
 - Railway
 - Local Government Boundary
 - State Forest/Reserve
 - National Parks and Wildlife Estate
 - Mining Lease Boundary (Mount Pleasant Operation)

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 MOUNT PLEASANT OPERATION
 Regional Location

Figure 1

MOD 4 was approved on 16 November 2018 by the Secretary of the Department of Planning and Environment (DPE) (under Delegation). Appendix 2 of the modified Development Consent DA 92/97 illustrates the Conceptual Project Layout Plan of the approved MPO at 2021 and 2025, Approved Surface Disturbance Plan and Conceptual Final Landform incorporating the MOD 4 infrastructure relocations.

Modification 5 (MOD 5) was submitted to rectify an administrative error in Development Consent DA 92/97 and was approved by DPE on 29 June 2022.

Modification 6 (MOD 6) was submitted to modify Development Consent DA 92/97 and was approved on 6 November 2023. MOD 6 allows for the construction and operation of a re-transmission facility including a tower or mast, shed and associated transmission infrastructure to re-transmit local digital television (DTV) signals from the Broadcast Australia site at Rossgole Lookout. Appendix 2 of the modified Development Consent DA 92/97 illustrates the Revised Approved Surface Disturbance Plan incorporating the MOD 6 infrastructure (Attachment 1).

Separate to Development Consent DA 92/97, on 22 January 2021, MACH Energy submitted the Mount Pleasant Optimisation Project (the Project) Environmental Impact Statement in support of a State Significant Development (SSD) 10418 under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). Key aspects of the Mount Pleasant Optimisation Project generally involve (among other things):

- increased open cut extraction within the MPO's existing Mining Leases (MLs);
- a staged increase in extraction, handling and processing of ROM coal up to 21 million tonnes per annum;
- upgrades to existing infrastructure and new infrastructure to support mining of the proposed Project; and
- an extension to the time limit on mining operations to 22 December 2048.

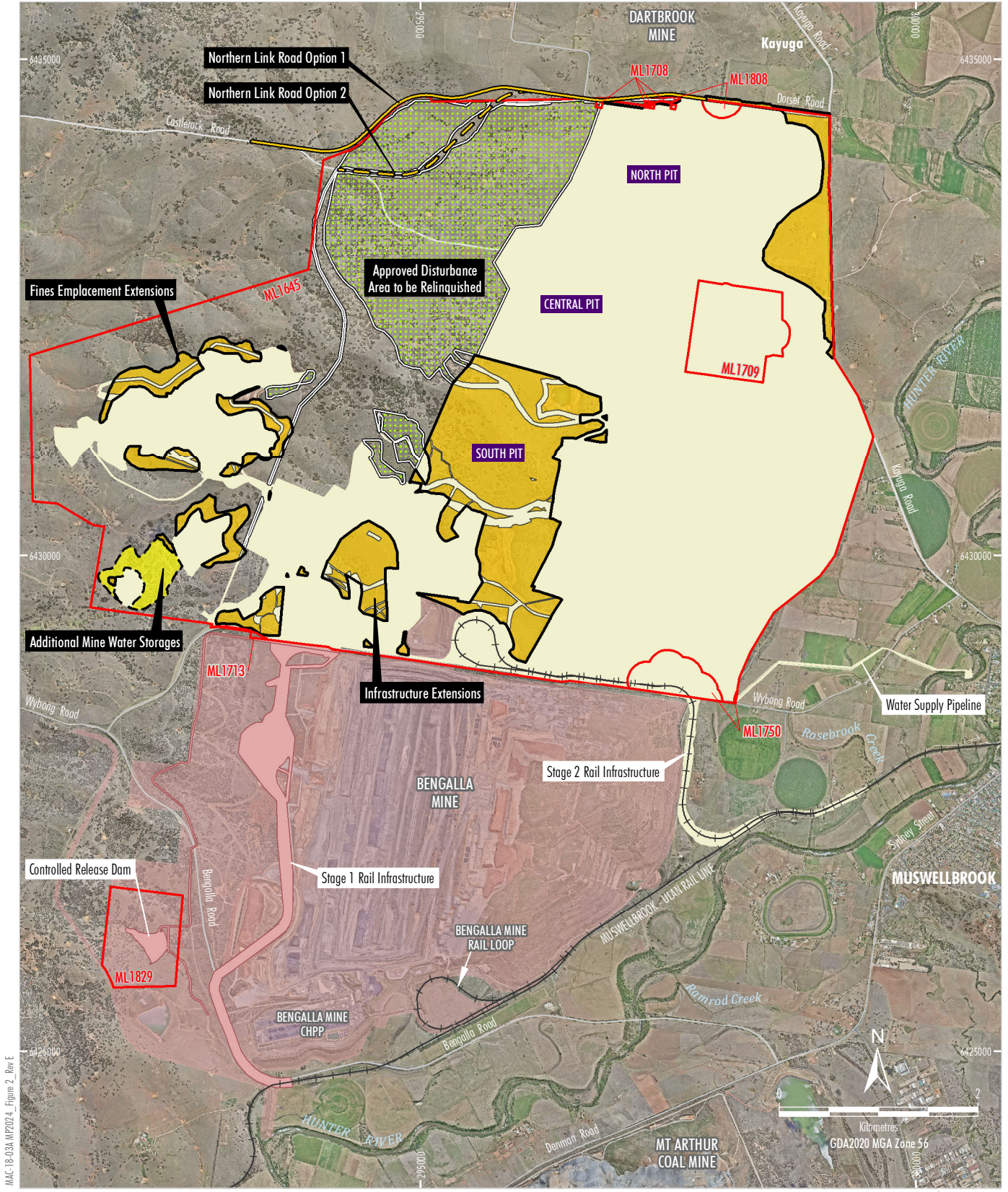
The Project was approved by the NSW Independent Planning Commission on 6 September 2022. Part A, Condition A14 of Development Consent SSD 10418 requires the surrender of Development Consent DA 92/97 within 12 months of the date of commencement of development under Development Consent SSD 10418, or an alternative timeframe agreed with the Planning Secretary of the DPE (now the Department of Planning Housing and Infrastructure [DPHI]). Attachment 2 describes the development layout of the Project in accordance with Development Consent SSD 10418.

The Project EIS was supported by a Visual and Landscape Assessment (VPA Visual Planning and Assessment [VPA], 2020). The Visual and Landscape Assessment findings and mitigation measures relevant to the preparation of this VIMP have been incorporated into this document.

Following the commencement of development under Development Consent SSD 10418 on 12 February 2024, and prior to the surrender of Development Consent DA 92/97, MACH Energy will comply with the requirements of both consents (Section 1.1).

This VIMP has been prepared to satisfy the relevant conditions of both Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender). Where relevant, this VIMP builds on the components of the existing/approved VIMP, including previous feedback from government stakeholders and recommendations.

Figure 2 shows the indicative Project general arrangement and existing/approved surface development areas that would continue to comprise part of the Project and the areas that would be relinquished.



MACH-18-038.MP2024 - Figure 2 - Rev E

Source: MACH (2024); NSW Spatial Services (2024); Department of Planning and Environment (2016) Orthophoto: MACH (Dec 2023)

- LEGEND**
- Railway
 - Mining Lease Boundary (Mount Pleasant Operation)
 - Project Continuation of Existing/Approved Surface Development (DA92/97) ¹
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) ¹
 - Development Footprint 1 (Stage 1) - General Extension Areas ¹
 - Development Footprint 1 (Stage 2) - Mine Water Dam ³
 - Relinquishment Area ²
 - Northern Link Road Option 1 Centreline
 - Northern Link Road Option 2 Centreline

NOTES

¹ Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.

² Subject to detailed design of Northern Link Road alignment.

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 MOUNT PLEASANT OPERATION
 General Arrangement
 of the Project

Figure 2

1.1 PURPOSE AND SCOPE

This VIMP has been prepared by MACH Energy to satisfy the requirements of Schedule 3, Condition 47 of Development Consent DA 92/97 (prior to its surrender) and Part B, Condition B77 of Development Consent SSD 10418.

The VIMP applies to all employees and contractors at the MPO and covers all areas within the MPO boundary. The VIMP applies to the life of the MPO, including (but not limited to) the period of mining operations specified in Development Consent SSD 10418, which currently permits mining until 22 December 2048 and Development Consent DA 92/97 (prior to its surrender).

As required by Part A, Condition A5 of Development Consent SSD 10418, the VIMP will continue to apply beyond 22 December 2048 (excluding mining operations), as required, until the rehabilitation and any additional undertakings (required by the Planning Secretary of the DPHI or the NSW Resources Regulator) have been carried out satisfactorily.

All conditions and statutory requirements under Development Consent DA 92/97 will become null and void after its surrender, where the MPO will operate under Development Consent SSD 10418 and other relevant legislation.

The provisional general arrangement of the MPO at 2025 as per the Development Consent DA 92/97 (Attachment 1), highlighting the key mine components relevant to this VIMP is shown on Figure 3. Additionally, the provisional general arrangement of the MPO for 2026, 2028, 2031, 2034, 2041, 2044 and 2047 as per Development Consent SSD 10418 (Attachment 2), showing the key mine components relevant to this VIMP, are shown on Figures 4 to 10. These plans have been used to guide the management measures in this VIMP.

MACH Energy commenced development under Development Consent SSD 10418 on 12 February 2024. In accordance with Part A, Condition A15 of Development Consent SSD 10418, upon the commencement of development of Development Consent SSD 10418 and before the surrender of Development Consent DA 92/97, the conditions of Development Consent SSD 10418 prevail to the extent of any inconsistency with the conditions of those consents.

In accordance with Part B, Condition B78 of Development Consent SSD 10418, this VIMP will be submitted for approval within 12 months of commencement of development under Development Consent SSD 10418. Once approved by the Planning Secretary, MACH Energy will implement the VIMP in accordance with Part B, Condition B79 of Development Consent SSD 10418.

1.1.1 Previous Versions

A initial version of the Landscape Management Plan (LMP) (Version 6) was prepared by Coal & Allied and was approved on 23 July 2012.

The previously approved version of the LMP was prepared by MACH Energy to provide a contemporary outline of MACH Energy's proposed visual treatment of the MPO, following the approval of MOD 3.

The VIMP was updated by MACH Energy in October 2019 (Version 1) to replace the previously approved version of the LMP following the approval of MOD 4, and to describe additional visual impact management measures proposed for the MOD 4 rail infrastructure.

The VIMP was updated in August 2023 (Version 2) to include additional details regarding visual impact management measures relevant to MOD 4 rail infrastructure following completion of detailed design and approval of the Construction Environmental Management Plan.

As required by Condition 47, Schedule 3 of Development Consent DA 92/97, a draft of the VIMP (Version 2) was submitted to the Muswellbrook Shire Council (MSC) for the purpose of consultation. Appendix A (available upon request) details the comments received by MSC on the draft VIMP dated 18 May 2022 and MACH Energy's response dated 1 June 2022. Comments were made regarding visual screen monitoring, in-text references of the relevant sections/figures as well as the addition of the indicative location of the train light screens in Figure 12 (Appendix A). MSC's suggested text and figure edits were made. No material changes were made in relation to visual screen monitoring as the monitoring proposed is consistent with contemporary examples for other visual screens across the Hunter Valley.

Version 3 of the VIMP was updated to incorporate the management measures proposed for the design of the re-transmission facility approved as part of MOD 6 (Section 5.5.7).

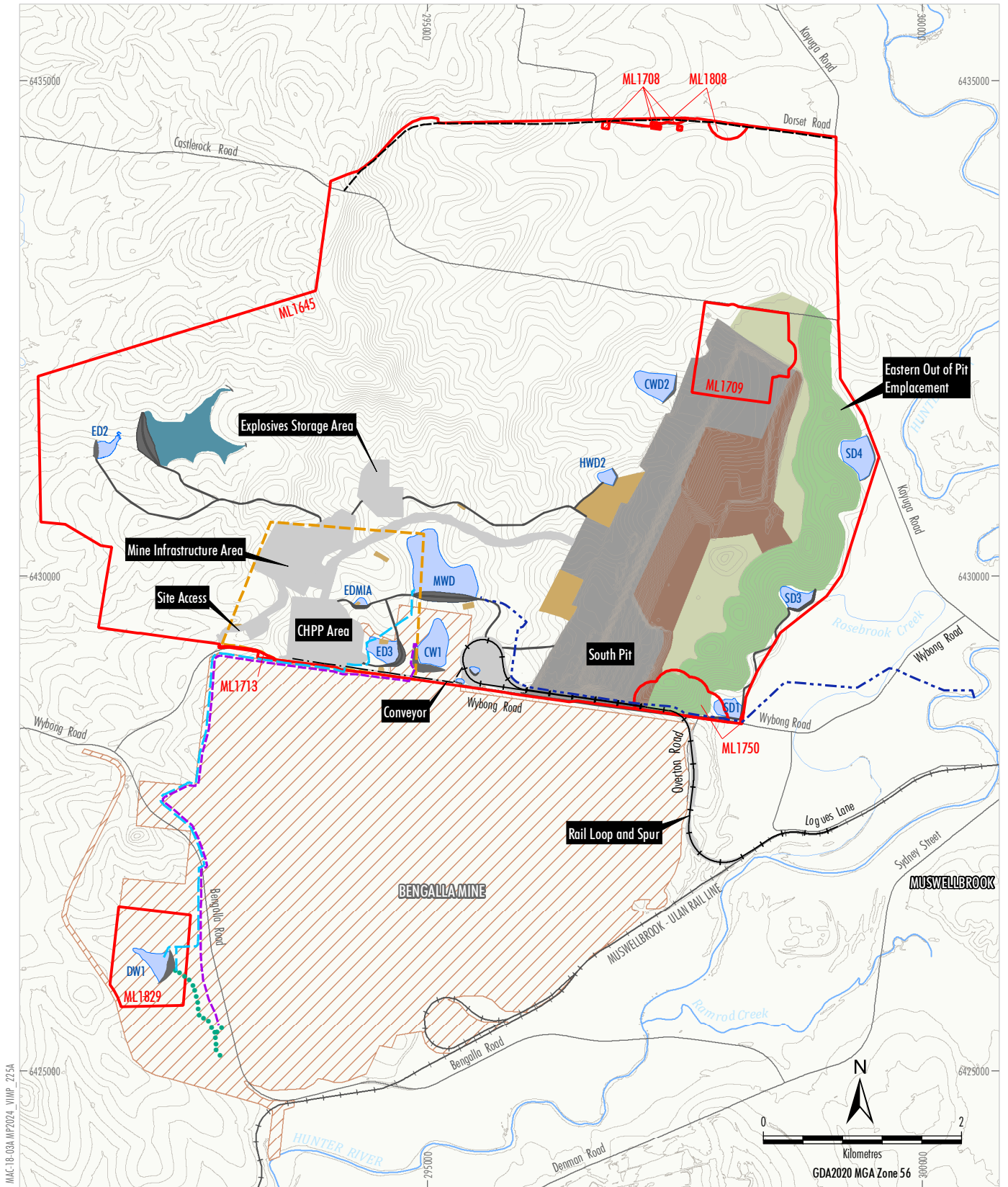
The previous versions of the VIMP were prepared to manage visual impacts associated with construction and operation of the MPO, including for example, initial establishment and development, open cut mining, operation of the coal handling and preparation plant (CHPP), construction and operation of the rail spur/loop, construction and operation of the Fines Emplacement Area and rehabilitation.

1.1.2 Current Version

The current version of the VIMP (Version 4) has been prepared to include additional details regarding visual management relevant to the full life of the mine following approval of the Project and associated Development Consent SSD 10418 conditions.

This VIMP has been prepared to satisfy the relevant conditions of both Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender).

As required in accordance with Part B, Condition B77(a) of Development Consent SSD 10418 and Schedule 3, Condition 47(a) of Development Consent DA 92/97 (prior to its surrender), a draft version of this VIMP was submitted to MSC for the purpose of consultation. The VIMP was updated to address the comments received from MSC. Details of the consultation undertaken, and the outcome of that consultation is detailed in Appendix A.



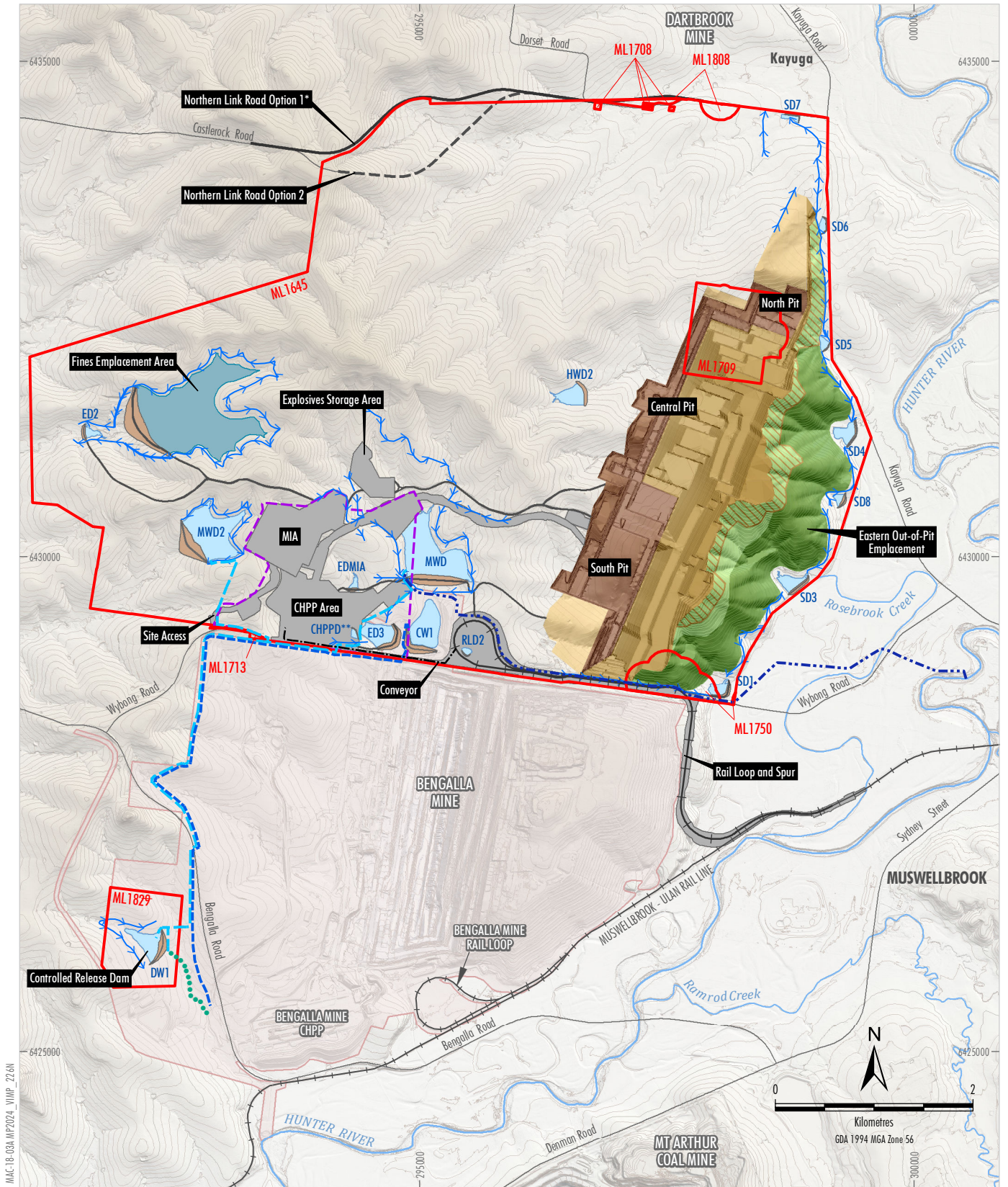
AMC:18-03A MP2024_VIMP_225A

Source: MACH (2018, 2023); NSW Spatial Services (2024); NSW Division of Resources & Energy (2017)

- | | |
|--|--|
| LEGEND | Indicative Water Pipeline Alignment |
| Mining Lease Boundary | MPO Hunter River Supply Pipeline |
| Bengalla Mine Approved Disturbance Boundary (SSD-5170) | MPO DW1 Pipeline (Bi-directional) |
| Infrastructure Area Envelope | Bengalla Mine CW1 Pipeline |
| Active Mining Area | Approximate Extent of Scour Protection |
| Active Overburden Emplacement Area | Water Dam |
| Topsail Stockpile | Fines Emplacement Area |
| Initial Rehabilitation | |
| Established Rehabilitation | |
| Infrastructure and Borrow/Stockpile Area | |
| Access Road | |
| Northern Link Road | |

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 MOUNT PLEASANT OPERATION
 Provisional General Arrangement 2025
 (DA 92/97)

Figure 3



Source: MACH (2020); NSW Spatial Services (2020)

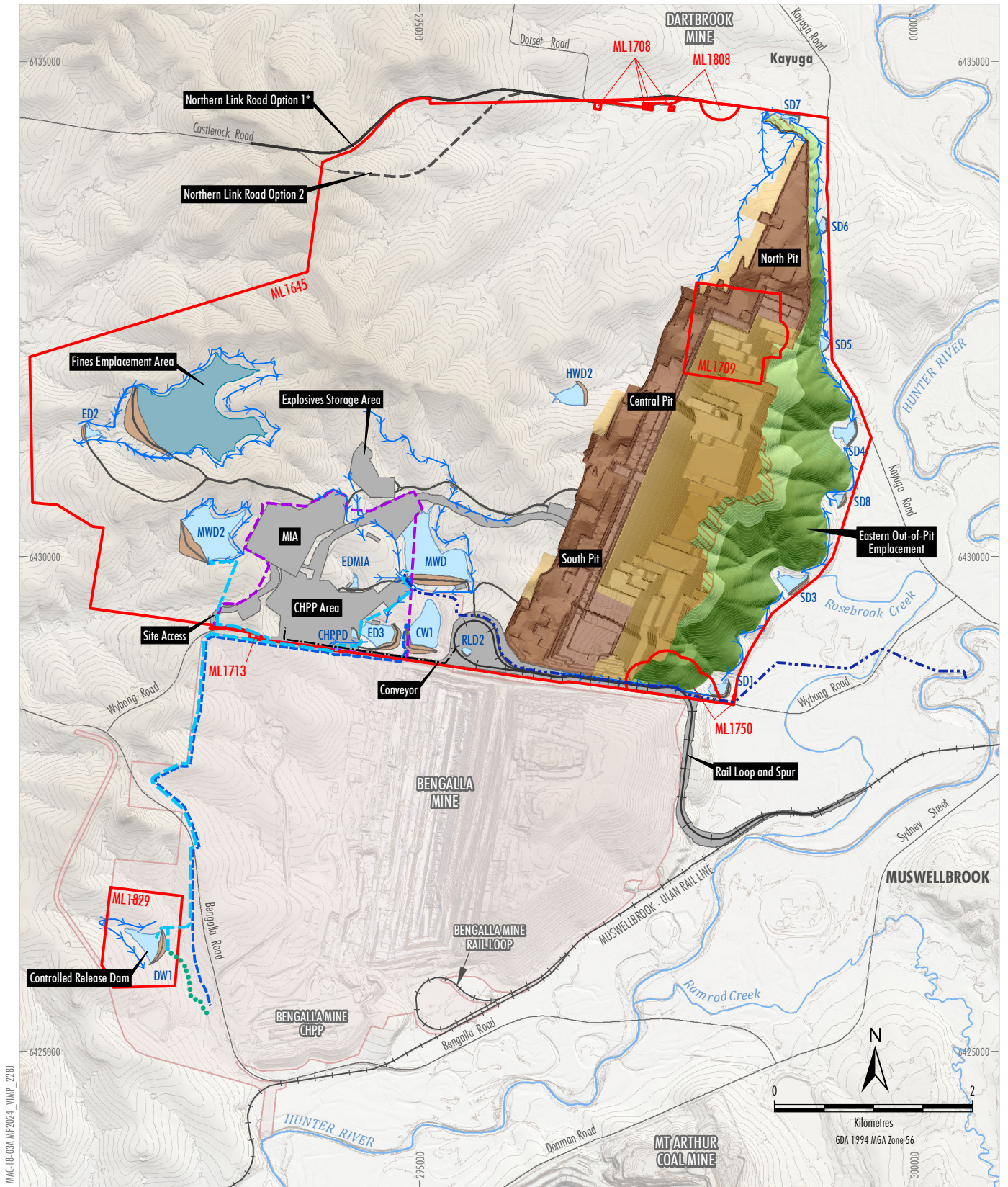
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection
- Indicative Water Pipeline Alignment
- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.
 ** Coal Handling and Preparation Plant Dam.

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 MOUNT PLEASANT OPERATION
 Provisional General Arrangement 2026
 (SSD 10418)

Figure 4



MACH-18-03A-IMP2024_VIMP_228J

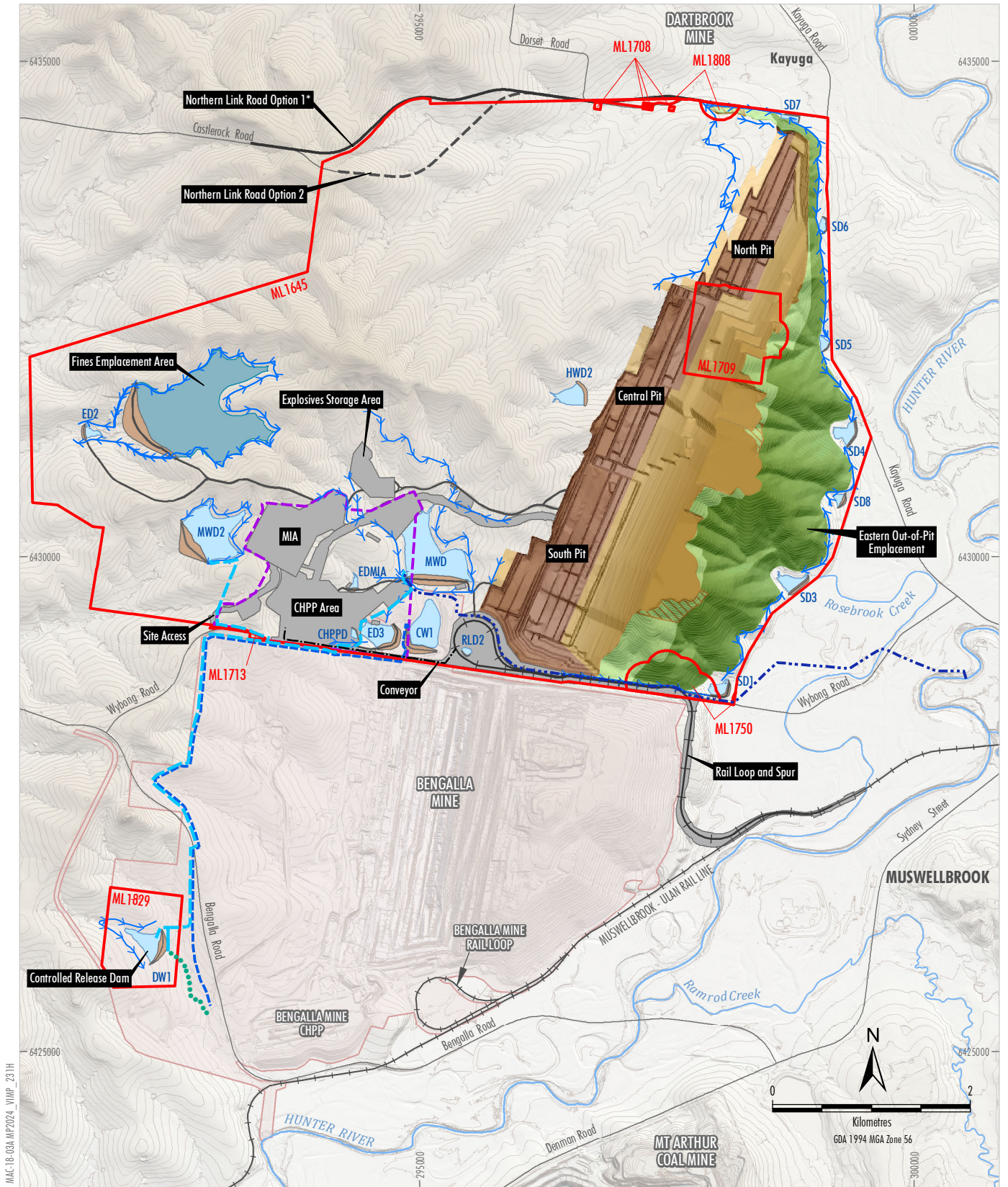
Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

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MOUNT PLEASANT OPERATION
Provisional General Arrangement 2028
(SSD 10418)

Figure 5



MACH-18-03A-IMP2024_VIMP_231H

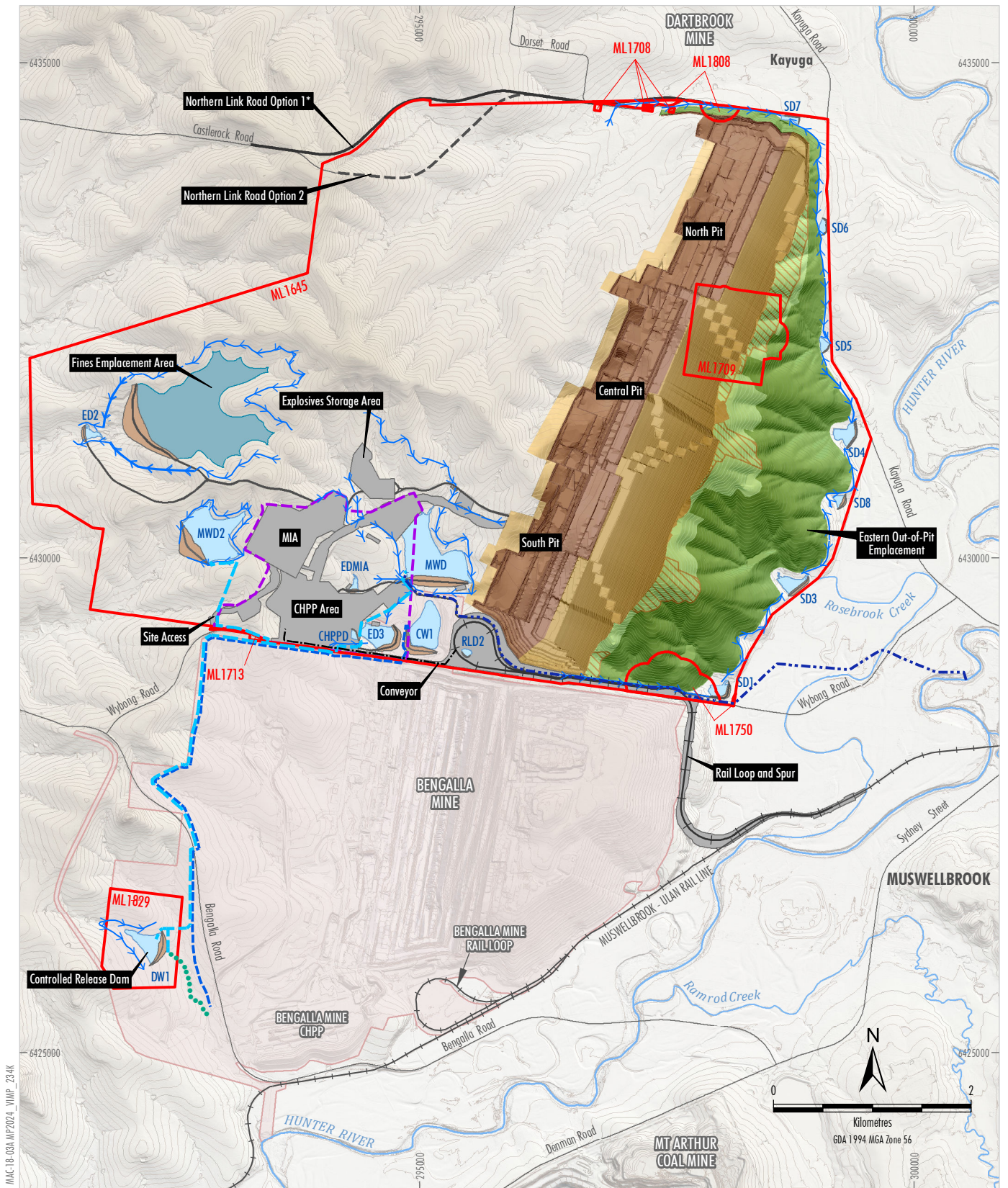
Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

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MOUNT PLEASANT OPERATION
Provisional General Arrangement 2031
(SSD 10418)

Figure 6



Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection
- Indicative Water Pipeline Alignment
- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

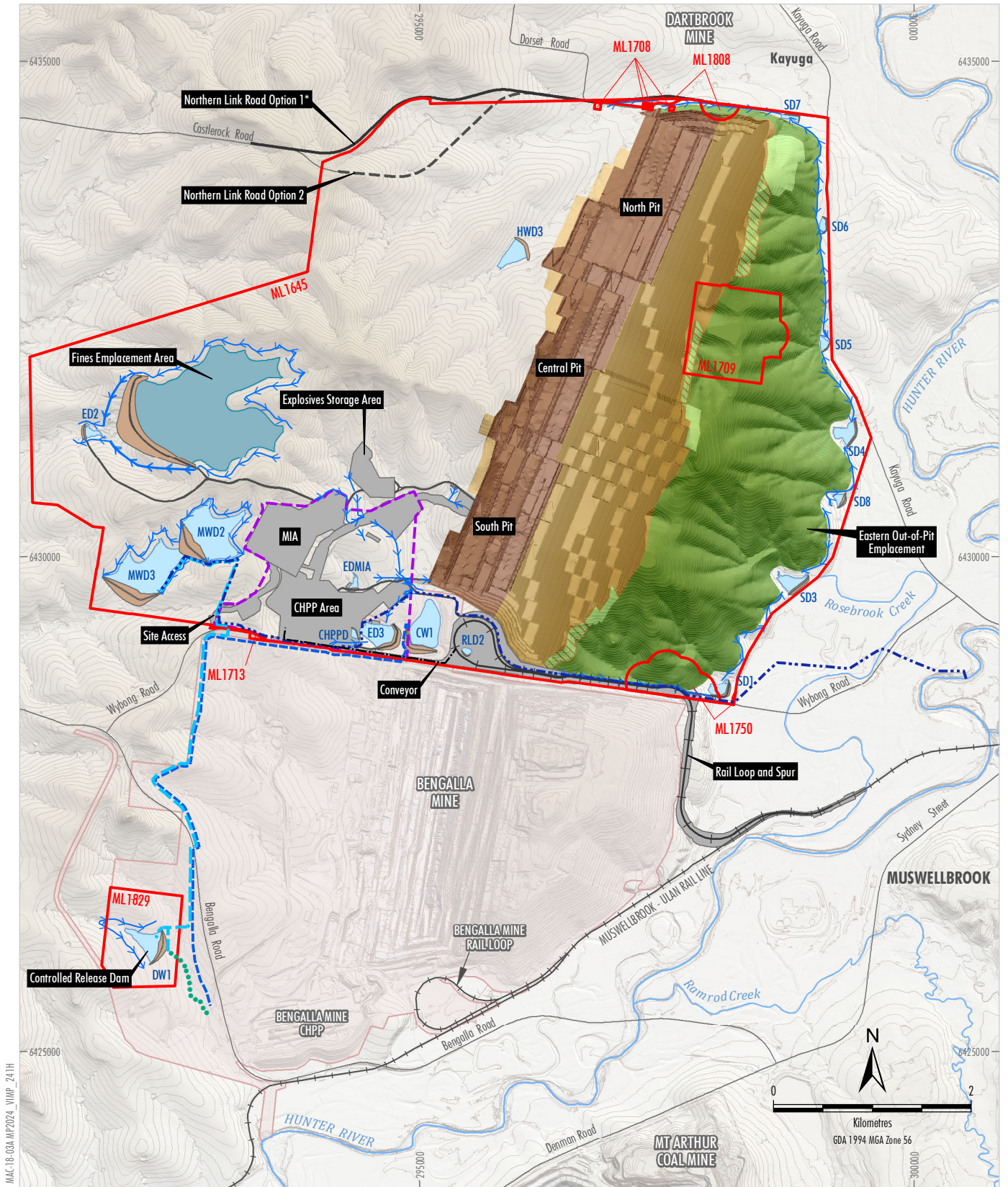
* Preferred alignment subject to landholder access.

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MOUNT PLEASANT OPERATION

Provisional General Arrangement 2034
(SSD 10418)

Figure 7



Source: MACH (2020); NSW Spatial Services (2020)

LEGEND

- | | | | |
|--|--|--|--|
| | Mining Lease Boundary (Mount Pleasant Operation) | | Fines Emplacement Area |
| | Revised Infrastructure Area Envelope | | Water Dam |
| | Topsoil Stripping | | Approximate Extent of Scour Protection |
| | Active Mining | | Indicative Water Pipeline Alignment |
| | Active Overburden Emplacement | | Hunter River Supply Pipeline |
| | Initial Rehabilitation | | DW1 Pipeline (Bi-directional) |
| | Established Rehabilitation | | Bengalla Mine CW1 Pipeline |
| | Topsoil Stockpile | | |
| | Infrastructure and Borrow/Stockpile | | |
| | Key Surface Water Drain (Conceptual) | | |
| | Access Road | | |
| | Northern Link Road Option 1 Centreline* | | |
| | Northern Link Road Option 2 Centreline | | |
| | Bengalla Mine Approved Disturbance Boundary (SSD-5170) | | |

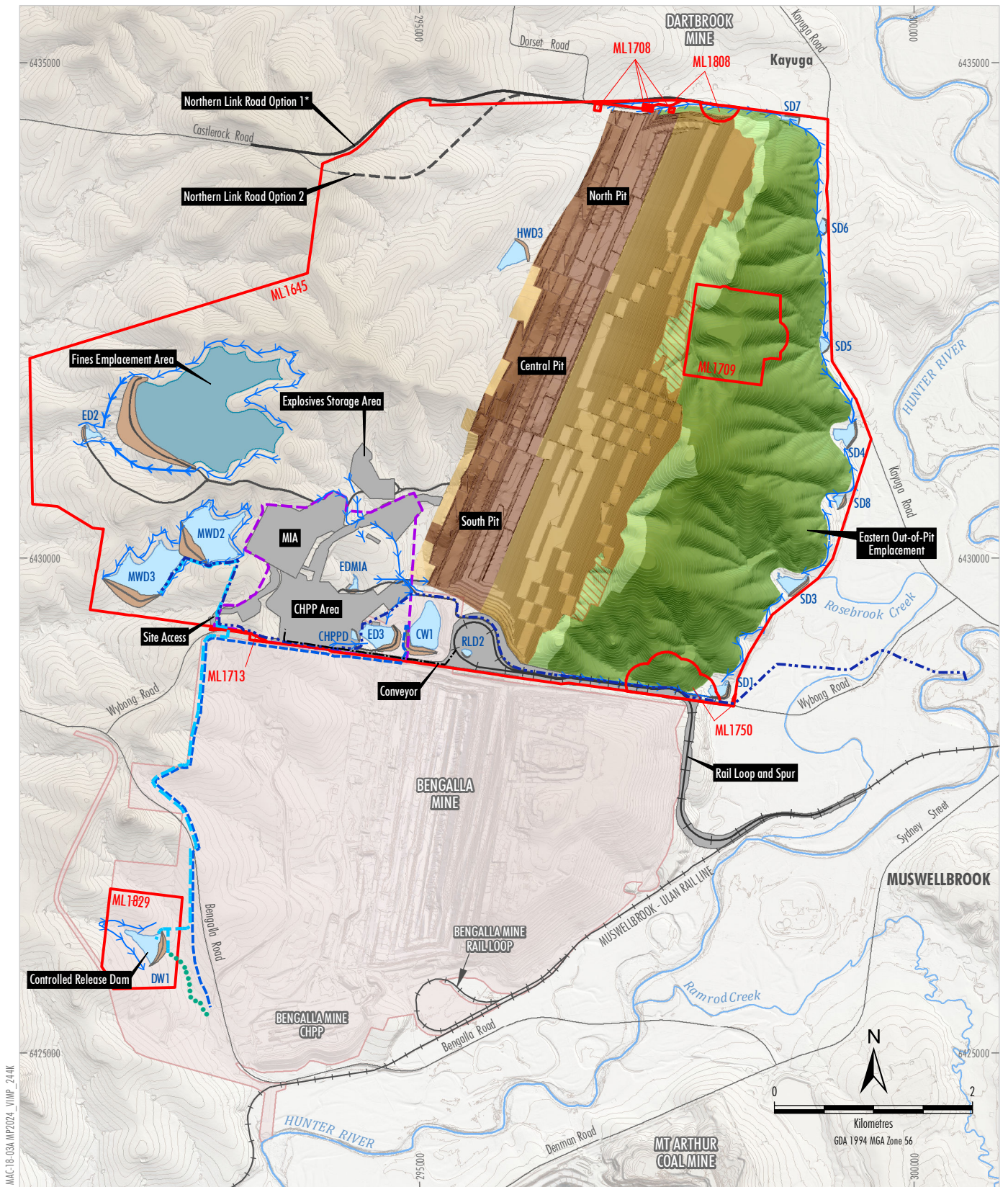
* Preferred alignment subject to landholder access.

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MOUNT PLEASANT OPERATION

Provisional General Arrangement 2041
(SSD 10418)

Figure 8



MACH-18-03A-IMP2024_VIMP_244K

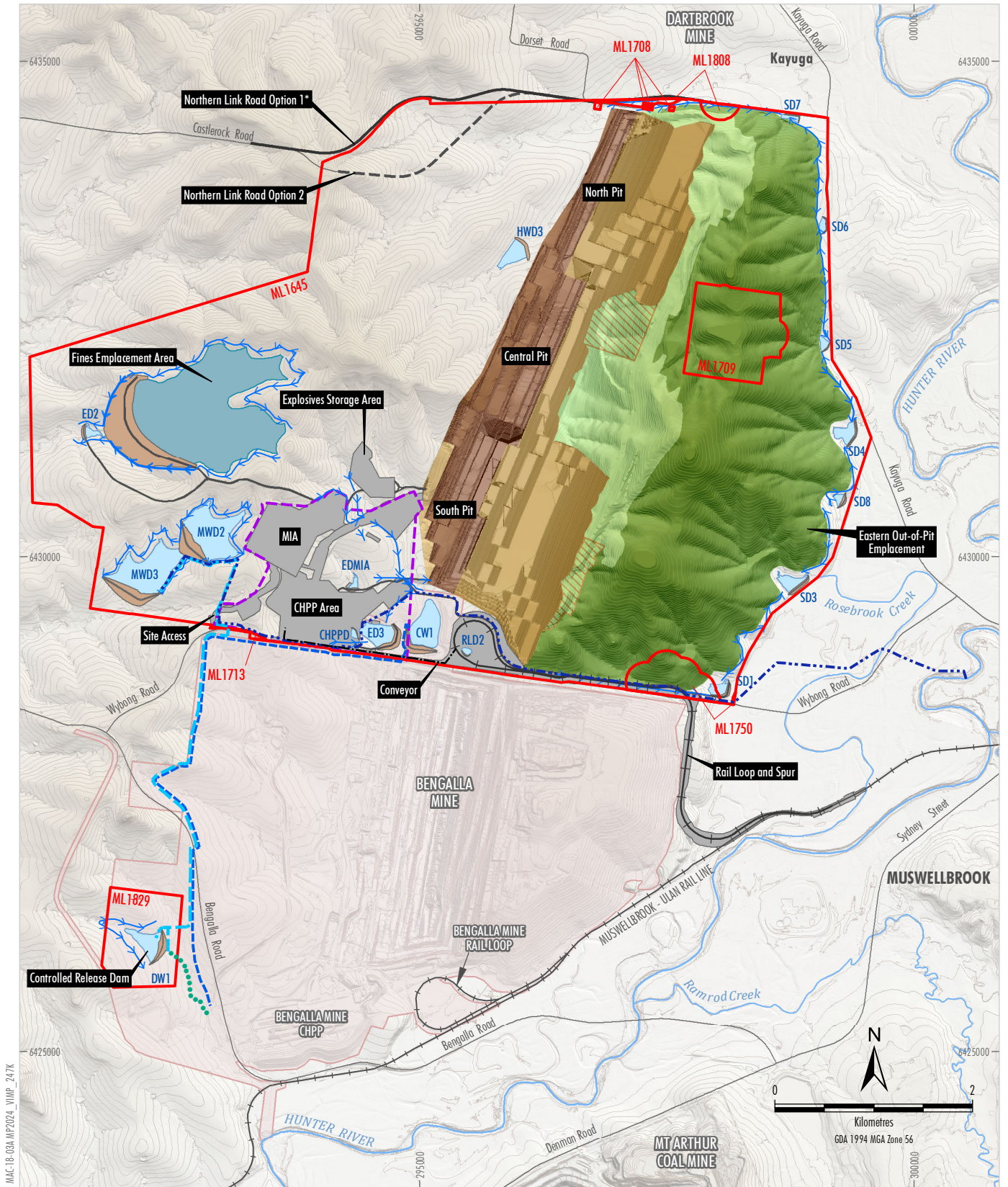
Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
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 - Infrastructure and Borrow/Stockpile
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 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

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MOUNT PLEASANT OPERATION
Provisional General Arrangement 2044
(SSD 10418)

Figure 9



Source: MACH (2020); NSW Spatial Services (2020)

LEGEND

- | | | | |
|--|--|--|--|
| | Mining Lease Boundary (Mount Pleasant Operation) | | Fines Emplacement Area |
| | Revised Infrastructure Area Envelope | | Water Dam |
| | Topsoil Stripping | | Approximate Extent of Scour Protection |
| | Active Mining | | Indicative Water Pipeline Alignment |
| | Active Overburden Emplacement | | Hunter River Supply Pipeline |
| | Initial Rehabilitation | | DW1 Pipeline (Bi-directional) |
| | Established Rehabilitation | | Bengalla Mine CW1 Pipeline |
| | Topsoil Stockpile | | |
| | Infrastructure and Borrow/Stockpile | | |
| | Key Surface Water Drain (Conceptual) | | |
| | Access Road | | |
| | Northern Link Road Option 1 Centreline* | | |
| | Northern Link Road Option 2 Centreline | | |
| | Bengalla Mine Approved Disturbance Boundary (SSD-5170) | | |

* Preferred alignment subject to landholder access.

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 MOUNT PLEASANT OPERATION
 Provisional General Arrangement 2047
 (SSD 10418)

Figure 10

1.2 STRUCTURE OF THE VISUAL IMPACT MANAGEMENT PLAN

The remainder of the VIMP is structured as follows:

- Section 2: Outlines the statutory obligations relevant to this VIMP.
- Section 3: Summarises the existing visual environment of the MPO and the predicted visual impacts of mine operations.
- Section 4: Outlines the objectives and performance indicators relevant to this VIMP.
- Section 5: Describes the visual management measures proposed for the MPO.
- Section 6: Outlines the proposed landscape monitoring program.
- Section 7: Outlines the contingency plan for key risks to the visual amenity of the MPO.
- Section 8: Outlines the reviewing procedure for MPO documentation, including in particular for this VIMP.
- Section 9: Describes the reporting procedures proposed for the MPO.
- Section 10: Lists the references cited in this report.
- Appendix A: Lists comments received from the relevant consultees during the consultation period.

2 STATUTORY OBLIGATIONS

MACH Energy’s statutory obligations relevant to landscape management are contained in the conditions of Development Consent DA 92/97 (prior to its surrender) and Development Consent SSD 10418, as outlined in Sections 2.1 and 2.2.

Activities associated with the MPO will be undertaken in accordance with the licences, leases and permits described in the MPO Environment Management Strategy (EMS).

2.1 DEVELOPMENT CONSENT DA 92/97

The conditions of Development Consent DA 92/97 (prior to its surrender) relevant to the content and structure of this VIMP are described in Sections 2.1.1 and 2.1.2.

2.1.1 Visual Impact Management Plan Requirements

Schedule 3, Conditions 45 to 47 of Development Consent DA 92/97 (prior to its surrender) outline the visual management required at the MPO, including the preparation of a VIMP (Table 1). Additionally, conditions related to the visual amenity of the MPO are contained in Appendix 3 of Development Consent DA 92/97 (Table 1).

**Table 1
Visual Management Development Consent DA 92/97 Conditions**

MPO Development Consent DA 92/97	Section where addressed in this VIMP document
<p>Schedule 3 – Environmental Performance Conditions</p> <p>VISUAL</p> <p>45. The Applicant must:</p> <ul style="list-style-type: none"> (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; (b) ensure no outdoor lights shine above the horizontal; and (c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version, to the satisfaction of the Secretary. <p>46. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct view of the mining operations on site, the Applicant must implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p><u>Note: Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining operations.</u></p> <p>47. The Applicant must prepare a Visual Impact Management Plan to mitigate the visual impacts of the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with Council, and submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary; 	<p>Section 5.3</p> <p>Section 5.6</p> <p>Section 1.1.2, Appendix A</p>

Table 1 (Continued)
Visual Management Development Consent DA 92/97 Conditions

MPO Development Consent DA 92/97 Schedule 3	Section where addressed in this VIMP document
<p>(b) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:</p> <ul style="list-style-type: none"> • along the access road to the mine site; • around the water storage dams and coal preparation plant; • at other areas identified as necessary for the maintenance of satisfactory visual amenity; <p>(c) include details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications), aimed at blending as far as possible with the surrounding landscape; and</p> <p>(d) include detailed measures to minimise the visual impacts of the MOD 4 rail infrastructure, including:</p> <ul style="list-style-type: none"> • details regarding any proposed light screens, earth bunds and screen planting; and • procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development. <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<p>Section 5.5.5</p> <p>Sections 5.5.2 and 5.5.4</p> <p>Section 5.5</p> <p>Section 5.4</p> <p>Sections 5.5.6, 6 and 8.2</p>
<p>Appendix 3 - Statement of Commitments</p> <ul style="list-style-type: none"> • Visual amenity management will be undertaken in accordance with the development consent, which requires the preparation of a Visual Impact Management Plan. • Lighting management will be undertaken in accordance with the development consent, including preparation of an engineering report regarding light emissions. • MACH Energy will inspect the condition of the vegetation visual screens described in the Visual Impact Management Plan on a quarterly basis, and maintain these vegetation visual screens to the satisfaction of the Secretary. 	<p>This document.</p> <p>Section 5.3</p> <p>Section 6</p>

2.1.2 Management Plan (General) Requirements

Condition 2, Schedule 5 of Development Consent DA 92/97 outlines general management plan requirements. Table 2 presents these requirements and indicates where each is addressed within this VIMP.

**Table 2
General Management Plan Development Consent DA 92/97 Conditions**

MPO Development Consent DA 92/97 Schedule 5	Section where addressed in this VIMP document
<p>2. <i>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</i></p> <p>(a) <i>detailed baseline data;</i></p> <p>(b) <i>a description of:</i></p> <ul style="list-style-type: none"> • <i>the relevant statutory requirements (including any relevant consent, licence or lease conditions);</i> • <i>any relevant limits or performance measures/criteria;</i> • <i>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</i> <p>(c) <i>a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</i></p> <p>(d) <i>a program to monitor and report on the:</i></p> <ul style="list-style-type: none"> • <i>impacts and environmental performance of the development;</i> • <i>effectiveness of any management measures (see c above);</i> <p>(e) <i>a contingency plan to manage any unpredicted impacts and their consequences;</i></p> <p>(f) <i>a program to investigate and implement ways to improve the environmental performance of the development over time;</i></p> <p>(g) <i>a protocol for managing and reporting any:</i></p> <ul style="list-style-type: none"> • <i>incidents;</i> • <i>complaints;</i> • <i>non-compliances with statutory requirements; and</i> • <i>exceedances of the impact assessment criteria and/or performance criteria; and</i> <p>(h) <i>a protocol for periodic review of the plan.</i></p> <p><i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p align="center">Section 3</p> <p align="center">Section 2</p> <p align="center">Section 4</p> <p align="center">Section 4</p> <p align="center">Section 5</p> <p align="center">Sections 6 and 8</p> <p align="center">Section 7</p> <p align="center">Section 8</p> <p align="center">Section 9</p> <p align="center">Section 8</p>

2.2 DEVELOPMENT CONSENT SSD 10418

The conditions of Development Consent SSD 10418 relevant to the content and structure of this VIMP are described in Sections 2.2.1 and 2.2.2.

2.2.1 Visual Impact Management Plan Requirements

Part B, Condition B77 of Development Consent SSD 10418 requires the preparation of a VIMP. Table 3 details the relevant conditions from Development Consent SSD 10418.

**Table 3
Visual Management Development Consent SSD 10418 Conditions**

MPO Development Consent SSD 10418 Part B	Section where addressed in this VIMP document
<p>VISUAL Visual Amenity and Lighting B76. The Applicant must:</p> <ul style="list-style-type: none"> (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development; (b) take all reasonable steps to shield views of mining operations and associated equipment from users of public roads and privately-owned residences; (c) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure; (d) ensure no in-pit mobile lighting rigs shine directly above the pit wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes); (e) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting; (f) ensure that the visual appearance of any new builds, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape. 	<p>Section 5.3</p> <p>Section 5.5</p> <p>Section 5.3</p> <p>Section 5.3</p> <p>Section 5.3</p> <p>Section 5.4</p>

Table 3 (Continued)
Visual Management Development Consent SSD 10418 Conditions

MPO Development Consent SSD 10418 Part B	Section where addressed in this VIMP document
<p>Visual Impact Management Plan</p> <p><i>B77. The Applicant must prepare a Visual Impact Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:</i></p> <ul style="list-style-type: none"> <i>(a) be prepared in consultation with Council;</i> <i>(b) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding: <ul style="list-style-type: none"> <i>(i) around the water storage dams and coal preparation plant;</i> <i>(ii) at other areas identified as necessary for the maintenance of satisfactory visual amenity;</i> </i> <i>(c) include details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications), aimed at blending as far as possible with the surrounding landscape;</i> <i>(d) include detailed measures to minimise the visual impacts of the out-of-pit emplacements and rail infrastructure, including: <ul style="list-style-type: none"> <i>(i) details of macro- and microrelief, revegetation and screen plantings for the emplacements;</i> <i>(ii) details of proposed light screens, earth bunds and screen planting for the rail infrastructure; and</i> <i>(iii) procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development; and</i> </i> <i>(e) include a program to implement, monitor, maintain and report on the implementation and effectiveness of the visual impact mitigation measures.</i> <p><i>B78. The Visual Impact Management Plan must be submitted for approval within 12 months of commencement of development under this consent.</i></p> <p><i>B79. The Applicant must implement the Visual Impact Management Plan as approved by the Planning Secretary.</i></p> <p><i>B80. Upon receiving a written request from the owner of any residence on privately-owned land which is within 2 kms of mine landforms and has, or would have, significant direct view of the mining operations on site, the Applicant must implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.</i></p> <p><i>If within three months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.</i></p> <p>Note: <i>Except in exceptional circumstances, the Planning Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 2 kilometres from the mining operations.</i></p>	<p>This document.</p> <p>Section 1.1.2</p> <p>Sections 5.5.4 and 5.5.2 Section 5.5</p> <p>Section 5.4</p> <p>Section 5.5.1</p> <p>Sections 5.1, 5.3 and 5.5.1</p> <p>Section 5.5.6</p> <p>Section 6</p> <p>Section 8.2</p> <p>Section 1.1</p> <p>Section 1.1</p> <p>Section 5.6</p>

2.2.2 Management Plan (General) Requirements

Part D, Condition D5 of Development Consent SSD 10418 outline general management plan requirements. Table 4 presents these requirements and indicates where each is addressed within this VIMP.

**Table 4
General Management Plan Development Consent SSD 10418 Conditions**

MPO Development Consent SSD 10418 Part D	Section where addressed in this VIMP document
<p><i>D5. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:</i></p> <ul style="list-style-type: none"> <i>(a) summary of relevant background or baseline data;</i> <i>(b) details of:</i> <ul style="list-style-type: none"> <i>(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);</i> <i>(ii) any relevant limits or performance measures and criteria; and</i> <i>(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</i> <i>(c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);</i> <i>(d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</i> <i>(e) a program to monitor and report on the:</i> <ul style="list-style-type: none"> <i>(i) impacts and environmental performance of the development; and</i> <i>(ii) effectiveness of the management measures set out pursuant to condition D4(c);</i> <i>(f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</i> <i>(g) a program to investigate and implement ways to improve the environmental performance of the development over time;</i> <i>(h) a protocol for managing and reporting any:</i> <ul style="list-style-type: none"> <i>(i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion;</i> <i>(ii) complaint; or</i> <i>(iii) failure to comply with other statutory requirements;</i> <i>(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and</i> <i>(j) a protocol for periodic review of the plan.</i> <p>Note: <i>The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p align="center">Section 3</p> <p align="center">Section 2</p> <p align="center">Section 4</p> <p align="center">Section 4</p> <p align="center">Section 2</p> <p align="center">Section 5</p> <p align="center">Sections 6 and 8</p> <p align="center">Section 7</p> <p align="center">Section 8</p> <p align="center">Section 9.1</p> <p align="center">Section 9.2</p> <p align="center">Section 9.3</p> <p align="center">Section 9.4</p> <p align="center">Section 8.2</p>

3 VISUAL ENVIRONMENT

3.1 EXISTING VISUAL ENVIRONMENT

The visual environment of the MPO and surrounds was described in detail in the MPO EIS (ERM Mitchell McCotter, 1997), the MOD 1 EA (EMGA Mitchell McLennan, 2010), the MOD 3 EA (MACH Energy, 2017b), the MOD 4 EA (MACH Energy, 2017c) and the Project EIS (MACH Energy, 2021). The local regional environment surrounding the MPO is dominated by existing mining activities with agricultural and pastoral land uses, and areas of remnant woodland. The township of Muswellbrook is located to the south-east of the MPO site. The landscape within the MPO site is surmounted by the peak of Mount Pleasant at an elevation of approximately 360 metres (m) Australian Height Datum (AHD) and the radiating drainage lines from this peak have formed a series of well-modulated ridges.

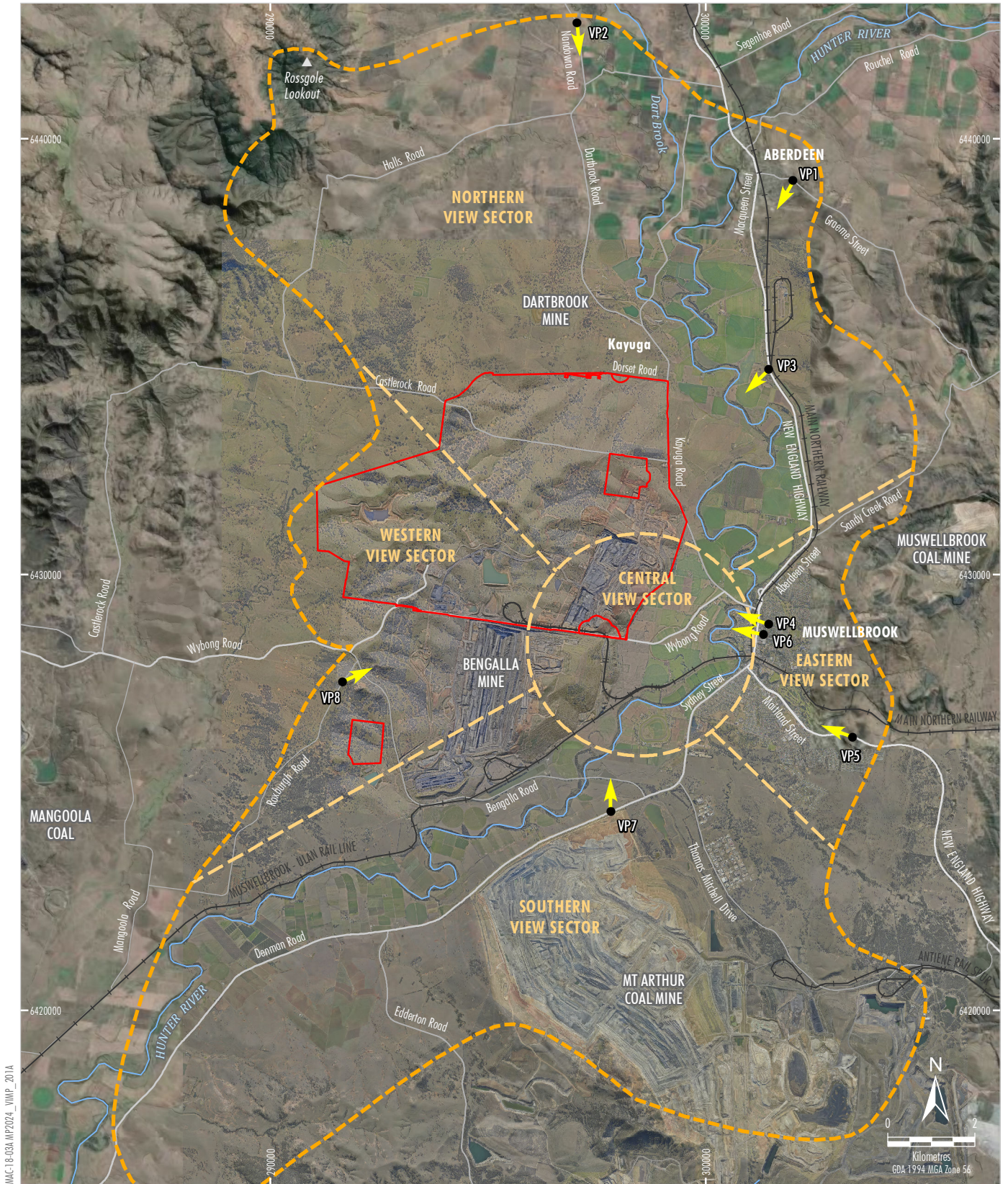
The predicted visual disturbance footprint associated with the MPO is described in Section 3.3.

Representative viewpoints identified in past visual assessments listed above for the MPO have been considered in relation to the predicted visual disturbance of the MPO (Section 3.3).

Visual analysis for the Visual and Landscape Assessment (VPA, 2020) for the Project EIS was conducted from the following key local viewpoints (Figure 11):

- Viewpoint 1 – Graeme Street (Aberdeen).
- Viewpoint 2 – Nandowra Street.
- Viewpoint 3 – New England Highway (North).
- Viewpoint 4 – St Heliers Street and Sowerby Street (Muswellbrook).
- Viewpoint 5 – New England Highway (East).
- Viewpoint 6 – Hill Street (Muswellbrook).
- Viewpoint 7 – Denman Road.
- Viewpoint 8 – Roxburgh Road.

Due to the neighbouring Bengalla Mine immediately to the south, the Mt Arthur Coal Mine approximately 6 km further to the south of the MPO, as well as other intervening topography, views of the MPO current and proposed disturbance footprint are obscured from southerly viewpoints. This is with the exception of Wybong Road which runs along the southern and south-eastern boundary of the MPO, permitting views of the southern extent of the South Pit open cut area, water management infrastructure, the rail loop and the Mine Infrastructure Area (MIA) (Figures 3 to 10).



MACH-18-038.MP2024_VIMP_201A

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Primary Visual Catchment Boundary
 - View Sector Boundary
 - Viewpoint

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 Project Viewpoints and
 Visual Simulation Locations

Figure 11

3.1.1 Sensitive Viewpoints

A Visual and Landscape Assessment was completed for the Project EIS by VPA (2020). For the purpose of assessing the potential visual impacts of the Project, VPA (2020) defined a primary visual catchment (Figure 11). The primary visual catchment is defined by the topography including:

- adjacent foothills to the south-west through to the north-west;
- the surrounding ranges and foothills directly north; and
- north-east of Aberdeen, the ranges running north-south to the east of the New England Highway.

The primary visual catchment is further defined by Muswellbrook and adjacent hills to the east and by the existing Mt Arthur Coal Mine to the south.

The primary visual catchment has been divided into the following visual sectors adopted for previous visual assessments for the previously approved MPO (Figure 11) (VPA, 2020):

- the Central Sector that includes the rural foothills and Hunter River floodplain immediately to the east of the existing MPO and west of Muswellbrook;
- the Northern Sector that includes the foothills and northern Hunter River floodplain, the town of Aberdeen, and Kayuga;
- the Eastern Sector that includes the town of Muswellbrook and adjoining foothills;
- the Southern Sector that includes the foothills and mine areas south of the Project and southern Hunter River floodplain; and
- the Western Sector that includes the foothills in the vicinity of Wybong Road.

A field assessment was undertaken which included visits to previously assessed viewpoints, while expanded field assessment captured additional viewpoints in the context of the Project. The following locations were assessed in order to characterise views of the Project from key local vantage points (Figure 11):

- Aberdeen (Location 1);
- Nandowra Road (Location 2);
- New England Highway (Location 3 and 5);
- Muswellbrook (Location 4 and 5);
- Denman Road (Location 7); and
- Roxburgh Road (Location 8).

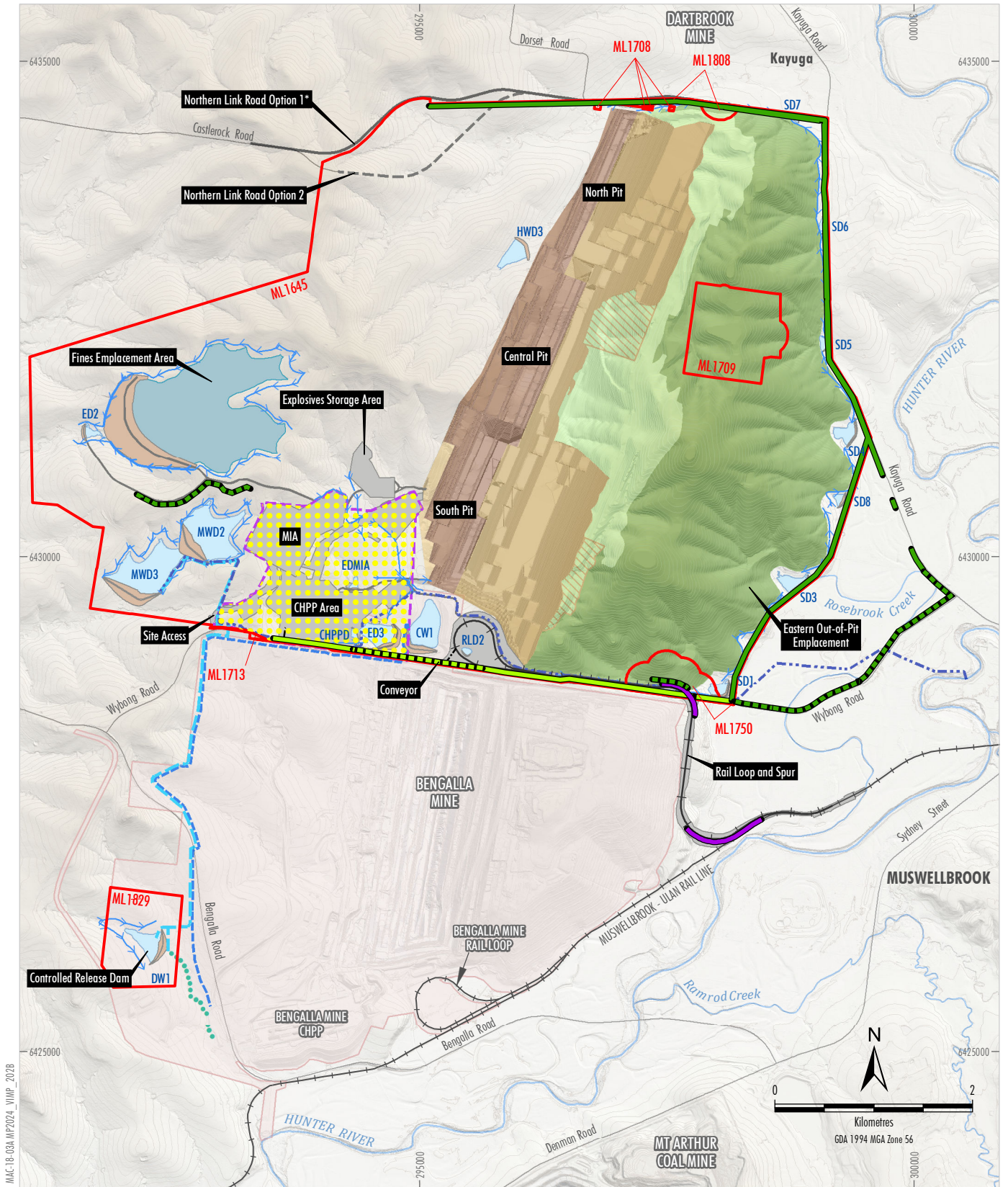
The potential visual impacts of the Project at key receptors are discussed in Section 3.3.1.

3.2 EXISTING TREATMENT

Since the commencement of operations on-site in 2003, visual landscaping has progressively been undertaken. This landscaping was initiated by the previous owners of the MPO and has been subsequently continued by MACH Energy. The existing landscape treatment which has occurred to date is presented on Figure 12 and includes:

- tree screen infill planting along key roads with views of the MPO such as Kayuga Road and Dorset Road (Plates 1 - 4);
- tree planting along the main MPO site entrance, access road, operations office carpark and infrastructure areas (Rail Loop 2 Train Load-Out);
- screen planting along MPO controlled land east of the site and west of Kayuga Road;
- screen planting along MPO controlled land immediately east of the Eastern Out of Pit Emplacement and within ML 1645;
- construction of buildings within the MIA which have been subject to visual treatment (Section 5.4) (Plates 5 and 6);
- implementation of visual bunding/screen planting along Wybong Road on the southern edge of the MPO (Plate 7); and
- targeted replanting of previously planted tree screening areas.

MACH Energy implements accelerated progressive rehabilitation of the existing waste rock emplacement to minimise the potential extent and duration of visual effects of the MPO. The effectiveness of the progressive rehabilitation strategy is demonstrated on Figure 13.



MAC:18-03A-IMP2024_VIMP_202B

Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation) Provisional General Arrangement 2047 (SSD 10418)
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Revised Infrastructure Area Envelope
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline
 - Landscape Plan
 - Interspersed Screen *
 - Existing Screen Planting
 - Proposed Screen Planting
 - Existing Bund/Screen Planting
 - Proposed Bund/Screen Planting
 - Existing Light Screen Location

- * Preferred alignment subject to landholder access.
- ** The Mine Infrastructure Area will be interspersed with additional tree plantings and will be constructed with a view to retain existing stands of trees for shielding purposes.

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Landscape Plan

Figure 12



Plate 1: Dorset Road (near intersection with Kayuga Road) looking west.



Plate 2: Kayuga Road (near intersection with Castlerock Road) looking north.



Plate 3: Kayuga Road (near Collins Lane) looking north.



Plate 4: Kayuga Road (between Collins Lane and Castlerock Road) looking south.



Plate 5: Workshop within the Mine Infrastructure Area.



Plate 6: Workshop and associated buildings within the Mine Infrastructure Area.

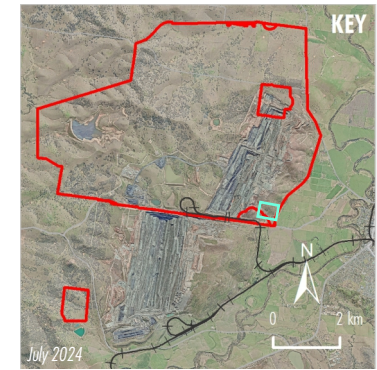


Plate 7: Visual bunding/screen planting along Wybong Road.

3.3 VISUAL IMPACTS

The potential visual impacts from the proposed operations of the MPO are detailed in the MPO EIS (ERM Mitchell McCotter, 1997), MOD 1 EA (EMGA Mitchell McLennan, 2010), MOD 3 EA (MACH Energy, 2017b), MOD 4 EA (MACH Energy, 2017c) and the Project EIS (MACH Energy, 2021). The MPO has resulted in a number of changes to the existing landscape, including:

- excavation of open cut pits;
- establishment of a MIA, including CHPP, workshop and administration buildings;
- construction of a Fines Emplacement Area;
- establishment of an overburden emplacement/visual bund on the eastern extent of the mining area using overburden from the open cut pits;
- construction of a number of mine water dams and sedimentation dams;
- establishment of a mine access road and various mine haul roads;
- establishment of a rail loop and train load out facilities in the southern extent of the MPO area, and subsequent removal and decommissioning; and
- relocation and operation of the rail spur and rail loop to connect with the Muswellbrook-Ulan railway to the east of the MPO.



LEGEND
 [Red outline] Mining Lease Boundary (Mount Pleasant Operation)
 [Cyan outline] Rehabilitation Progression Area

Source MACH (2024, 2020)



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 MOUNT PLEASANT OPERATION
 Rehabilitation Progression
 Drone Photographs
 September 2019 - October 2020

Figure 13

3.3.1 Visual and Landscape Assessment (2020)

The Visual and Landscape Assessment completed by VPA (2020) assessed the components of the Project with the potential to cause visual effects additional to those identified for the existing MPO. The existing MPO will result in a number of changes to existing landscape (Figures 4 to 10), including:

- expansion of open cut and associated disturbance, including:
 - vegetation clearance and topsoil stripping;
 - drilling and blasting;
 - overburden and interburden material removal and handling;
 - coal mining;
- development of the integrated waste rock emplacement landform, including higher elevations and changes to extents;
- relinquishment of MACH Energy existing approvals to construct the North West and South West Out of Pit Emplacements¹;
- construction of new ancillary infrastructure and associated disturbance;
- upgrades to infrastructure and associated disturbance and potential night-lighting;
- progressive development of Fines Emplacement Area;
- Northern Link Road realignment and associated disturbance;
- rail movements and potential night-lighting; and
- extension of the durations of mining operations.

Direct Visual Impacts

The Project expansion in elevation and scale of the integrated waste rock emplacement landform and associated activities (including lighting) would alter the visual impacts of the existing MPO from nearby rural properties. There would be moderate cumulative impacts due to the extension of duration of the mine operations that would be evident in the local and sub-regional area (VPA, 2020). These impacts would be mitigated through progressive rehabilitation. Section 5 describes the measures to mitigate impacts of the Project.

Lighting

As assessed in the Visual and Landscape Assessment (VPA, 2020), it is expected that the potential diffuse light effects of the Project would extend further north in comparison to the existing levels creating more localised visual impacts. However, the nature of the diffuse light effects would be consistent with the existing effects of the MPO and other developments in the vicinity of the Project (e.g. Bengalla Mine and Mt Arthur Coal Mine).

Any potential impact associated with night-lighting required for the Project (i.e. for safety reasons) would be similar to those for the existing MPO. These potential impacts would be practically minimised through the implementation of mitigation measures in consideration of *AS/NZS 4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting* (Section 5.3).

¹ The North West and South West Out-of-Pit Emplacements were assessed in the MPO EIS (ERM Mitchell McCotter, 1997).

With the implementation of these measures for the Project, the visual impact of night-lighting on sensitive receivers would continue to be similar to that of the existing MPO.

Integrated Waste Rock Emplacement Landform

Haulage overburden and interburden material, and coarse rejects from the CHPP, would continue to be strategically placed within mined out voids and the Eastern Out of Pit Emplacement to develop the final landform (VPA, 2020). Overburden material would also be placed along selected boundary areas of the open cuts (e.g. the northern boundary of the North Pit) in advance of mining activities to act as a safety bund (i.e. to prevent accidental access by passing tourists and the local community), as well as assisting in reducing direct views of the open cut pit from publicly accessible locations and/or act as a noise bund.

The integrated waste rock emplacement landform incorporates geomorphic drainage design principles for hydrological stability and varying macro and micro-relief on the eastern face to be more natural in appearance particularly from viewpoints to the east, north-east and south-east.

The integrated waste rock emplacement landform would be vertically higher than the approved landform from the MPO EIS (ERM Mitchell McCotter, 1997) by approximately 40 m (approximately 360 m AHD at the highest point in comparison of a maximum approved height of up to 320 m AHD) but provides a more natural upper profile. The additional elevation provides both additional waste rock emplacement capacity and facilitates the objective to develop a more natural landform in both vertical and horizontal profile (VPA, 2020).

Aberdeen

Previous assessments determined that the previously approved MPO would result in high visual impacts on viewing locations within Aberdeen. The increased elevation of the integrated waste rock emplacement landform would increase the level of visibility and the percentage of view occupied by the Project, however the visual impacts during the construction and operation of the Project on viewing locations within Aberdeen would continue to be high/moderate. The design of the integrated waste rock emplacement landform profile would minimise the contrast with the surrounding setting reducing the visual impact of the Project to low in the long-term (VPA, 2020).

Rural Residences and Land

Previous visual assessments determined that high visual impacts would occur at rural properties on the Hunter River flood plain due to the previously approved MPO. Within the Northern sector, the Project would continue to have high visual impacts on rural residences (including to Kayuga Homestead) with views of the Project during construction and operation, which would reduce to low visual impacts in the long-term (VPA, 2020). Local topographic features that limit views include the mine landforms of the Bengalla Mine with an existing elevation of 300 m AHD and rolling hills and ridges to the north and west of the Project.

The topography of Muswellbrook provides for viewing opportunities from the many elevated vantage points with western outlooks. Most lower locations within the town are screened by adjoining buildings and/or vegetation. This screening effect can also be important in relation to individual rural residences where adjoining sheds, homestead gardens and/or trees can create foreground screens. This screening effect may be diminished when viewing locations are situated in more elevated locations. Established rehabilitation on the eastern face would reduce the visual effect to low, and to very low in the long-term. Planting densities are higher than existing views of the surrounding agricultural areas.

A summary of the potential visual impacts of the Project in the context of the previously approved MPO is provided in Table 5. Additionally, the proposed management measures to mitigate the visual impact of the above mine areas are detailed in Section 5.5.

Table 5
Summary of Potential Visual Impacts of the Project

Receiver	Visual Sensitivity	Representative Visual Effect		Visual Impact		
		During Project	Long-term	Approved	During Project	Long-term
Central Sector						
Rural Residences	H	H	L	H	H	M/L
Horse Studs (Abbey and Balmoral Park)*	H	H	L	H	H	M/L
Muswellbrook Racecourse	H	H	L	H	H	M/L
Sydney Road*	M	H	L	H/M	H/M	M/L
Kayuga Road	M	H	L	H	H/M	M/L
Wybong Road	M/L	H	L	H/M	M	L
Racecourse Road*	M/L	H	L	M/L	M	L
Rural Land	L	H	L	L	M/L	L
Northern Sector						
Momberri-Scone Rural Landscape	L	M	VL	L	M/L	L/VL
Aberdeen	H/M	M	VL	H	H/M	L
Rural Residences	H	H	VL	H	H	L
Horse Studs	Nil	Nil	Nil	Nil	Nil	Nil
Rossgole Lookout*	M	L	VL	M/L	M/L	VL
New England Highway	M	H	VL	H	H/M	VL
Northern Railway Line	M	H	VL	H	H/M	VL
Rural Land	L	L	VL	L	L	VL
Eastern Sector						
Muswellbrook	H	H	L	H	H	M/L
Rural Residences	H	H	L	H	H	M/L
New England Highway	H	M	L	H	H/M	M/L
Northern Railway Line	H	L	L	H	M/L	M/L
Southern Sector						
Heritage-listed Homesteads*	H/M	M	VL	M	H/M	M/L
Edinglassie Stud	H/M	L	VL	M	M/L	L
Other Horse Studs*	Nil	Nil	Nil	Nil	Nil	Nil
Tourist Features*	Nil	Nil	Nil	Nil	Nil	Nil
Muswellbrook-Jerrys Plains Landscape Conservation Area	M	M	VL	M	M	VL
Rural Residences	H/M	M	VL	M	H/M	M/L
Denman Road*	M	L	VL	M	M/L	L
Thomas Mitchell Drive*	L	L	VL	L	L	L
Rural Land	L	M	VL	L	M/L	VL
Western Sector						
Rural Residences	H	H	L	M	H	L
Wybong Road	M/L	H	L	M	H/M	L
Roxburgh Road	M/L	H	L	L	M	L
Rural Land	L	H	L	L	M/L	VL

Source: MACH Energy, 2021.

* Receptors that were not assigned a visual impact as part of the previous visual assessments for the previously approved MPO, that have been assigned a visual impact for direct comparison with the Project.

H – High, M – Moderate, L – Low, VL – Very Low.

4 OBJECTIVES AND PERFORMANCE CRITERIA

The objectives of this VIMP are to:

- comply with the conditions of Development Consent DA 92/97 (prior to its surrender) and Development Consent SSD 10418 which relate to visual management (Tables 1 and 3);
- manage the visual impacts of the MPO to comply with performance criteria (Table 6);
- ensure that MPO’s management measures undertaken (Section 5) are consistent with the works outlined in the Rehabilitation Strategy; and
- modify management actions (if required) following the review of monitoring results against performance criteria, to ensure the objectives continue to be met over the life of the MPO.

The performance criteria for visual management of the MPO are presented in Table 6 below.

**Table 6
Performance Criteria**

Parameter	Target	Key Performance Indicator
Visual Bunding	Bunding provides sufficient visual screening from sensitive viewpoints.	Visual bunding installed (Figure 12) to assist screening of mine components from sensitive viewpoints (Figure 11).
Screen Planting	Plantings provide sufficient visual screening from sensitive viewpoints.	Screen plantings installed at sufficient density (Section 5.1) to assist screening of mine components from sensitive viewpoints (Figure 12).
Lighting Screens	Screens provide sufficient light screening from sensitive viewpoints.	Lighting screens installed (Figure 12) to minimise direct train lighting impacts from sensitive viewpoints (Figure 11).
Building Treatments	Key infrastructure would blend as far as practicable with the surrounding landscape.	Mine infrastructure is built as per designs which prioritise minimising visual impacts (including paint colours and specifications) (Section 5.4).
Lighting	Minimise lighting emissions as far as practicable from the MPO.	Designing and constructing lighting to minimise off-site impacts (Section 5.3) and in compliance with Australian Standard (AS) 4282 (INT) 1997 – <i>Control of Obtrusive Effects of Outdoor Lighting</i> .
Progressive rehabilitation	Progressive rehabilitation of the existing waste rock emplacement to minimise the potential extent and duration of visual effects of the MPO.	The rehabilitation performance indicators and completion criteria included in the MPO Rehabilitation Management Plan prepared in accordance with the NSW <i>Mining Amendment (Standard Conditions of Mining Leases) – Rehabilitation Regulation 2021</i> .

A monitoring program to comply with the objectives and performance indicators proposed above is outlined in Section 6.

5 MANAGEMENT MEASURES

The visual impacts of the construction works, infrastructure, and mining operations described in Section 3.3, will be mitigated through visual and landscape treatments in the form of screen planting, bunding, fencing, and light screens at strategic locations within and surrounding the MPO area. These landscape treatments will be designed with consideration of Part B, Condition B76 under Development Consent SSD 10418 and Schedule 2, Condition 45 of Development Consent DA 92/97 (until its surrender) visual management criteria. Further, the landscape treatments will be designed to integrate with MPO's Rehabilitation Strategy to provide additional ecological benefits where possible and assist to minimise wind, dust, and noise emissions from the MPO.

Existing and proposed landscape treatments, in the form of screen planting and visual bunding, are presented on Figure 12, in conjunction with the provisional general arrangement of the MPO at 2047. Additional reasonable and feasible tree screening at key on-site locations will be provided on an as-needed basis throughout the life of the Project (Section 5.7).

The implementation of the remaining proposed landscape treatments will occur progressively prior to mining operations ceasing at the end of the mine life. Landscape treatments and associated activities that occur during each calendar year will be summarised in the MPO Annual Review (Section 8.1).

5.1 SCREEN PLANTING

Screen planting will include a mix of trees and shrubs of varying heights and widths to provide adequate visual shielding. Native trees and shrubs will be primarily selected for planting, with an aim to ensure that the screening species are consistent with endemic species in the surrounding area. Suitable non-endemic species will also be utilised where appropriate. New screen planting areas will be planted at a minimum density (to provide adequate visual screening) based on the species used. A planting protocol for screened areas is provided in Section 5.1.2.

Based on native seed availability, supply, cost and suitability, flora species to be used in screening will also include those typical of the NSW listed *White Box Yellow Box Blakely's Red Gum Woodland* endangered ecological community. An indicative tree and shrub species list is provided in Table 7.

Areas of existing screen plantings are shown in Plates 1 - 4 and Plate 7.

Quarterly routine inspections and appropriate maintenance will be undertaken on vegetation screens in accordance with Section 6.

5.1.1 Weed Control

General weed control measures will be undertaken on screen planting areas and include:

- ensuring machinery hygiene protocols are implemented for all machinery working on/around the screening areas to control the spread of weeds;
- undertaking routine inspections of screen planting areas;
- ensuring maintenance staff (i.e. weed and land management contractors) are knowledgeable in the identification of weed species prevalent in the Upper Hunter area, especially for weed species identified as priority under the *Biosecurity Act 2015* and for weeds of national significance under the *Australian Weeds Strategy 2017-2027* (Commonwealth of Australia, 2017);
- where monitoring identifies a potential invasive and priority weed species in screening areas, weed removal will be undertaken as soon as practicable by:
 - physical removal (i.e. cultivation, slashing or mulching); and/or

- targeted chemical spraying using herbicides;
- where chemical spraying is utilised, consideration of appropriate measures to ensure the safety and effectiveness of spraying will be undertaken (i.e. approval of an appropriate contractor and chemicals, timing of application during active growth, as well as consideration of surrounding land uses and prevailing weather conditions to reduce spread).

Where weed removal has been undertaken, success will be assessed via visual inspections and follow up weed removal where necessary.

**Table 7
Indicative Species List**

Scientific Name	Common Name
Trees	
<i>Allocasuarina luehmannii</i>	Bulloak
<i>Angophora floribunda</i>	Rough-barked Apple
<i>Brachychiton populneus</i> ssp <i>populneus</i>	Kurrajong
<i>Callistemon salignus</i>	Willow Bottlebrush
<i>Casuarina cunninghamiana</i>	River Sheoak
<i>Corymbia maculata</i>	Spotted Gum
<i>Eucalyptus albens</i>	White Box
<i>Eucalyptus blakelyi</i>	Blakely's Red Gum
<i>Eucalyptus camaldulensis</i>	River Red Gum
<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark
<i>Eucalyptus dawsonii</i>	Slaty Gum
<i>Eucalyptus microcarpa</i>	Western Grey Box
<i>Eucalyptus moluccana</i>	Grey Box
<i>Eucalyptus melliodora</i>	Yellow Box
<i>Eucalyptus punctata</i>	Grey Gum
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Melaleuca bracteata</i>	Black Tea-tree
<i>Melaleuca linariifolia</i>	Flax-leaved Paperbark
<i>Melaleuca styphelioides</i>	Prickly-leaved Tea Tree
Shrubs	
<i>Acacia amblygona</i>	Fan-leaf Wattle
<i>Acacia decora</i>	Western Silver Wattle
<i>Acacia decurrens</i>	Green Wattle
<i>Acacia falcata</i>	Sickle Wattle
<i>Acacia filicifolia</i>	Fern-leaved Wattle
<i>Acacia implexa</i>	Hickory Wattle
<i>Acacia salicina</i>	Cooba
<i>Dodonaea viscosa</i>	Sticky Hop-bush
<i>Breynia oblongifolia</i>	Coffee Bush
<i>Lissanthe strigosa</i>	Peach Heath
<i>Exocarpos cupressiformis</i>	Native Cherry
<i>Bursaria spinosa</i>	Native Blackthorn
<i>Pultenaea cunninghamii</i>	Spiny Bush-pea

Table 7 (Continued)
Indicative Species List

Scientific Name	Common Name
Grasses	
<i>Aristida vagans</i>	Threeawn Speargrass
<i>Austrodanthonia fulva</i>	Wallaby Grass
<i>Cymbopogon refractus</i>	Barbed Wire Grass
<i>Dianella longifolia</i> var. <i>longifolia</i>	Pale Flax-lily
<i>Dichondra repens</i>	Kidney Weed
<i>Lomandra filiformis</i>	Wattle Mat-rush
<i>Lomandra multiflora</i>	Many-flowered Mat-rush
<i>Stipa</i> spp.	Spear Grass
<i>Themeda australis</i>	Kangaroo Grass

5.1.2 Planting Protocol

General measures which will be undertaken during screen planting to improve planting survival rate and visual amenity include:

- Designing screen planting to include a mix of species at a range of mature heights in order to establish effective screening coverage (i.e. including a range of grasses, shrubs and tree species).
- Designing screen planting areas to incorporate multiple rows in succession (i.e. successive rows of grasses, shrubs and trees) to reduce noise, wind movement and visual impacts from the MPO.
- Implementing planting preparation where deemed appropriate (e.g. soil scarifying/ripping on areas of compacted soils).
- Preferentially undertaking screen plantings outside of winter months to improve survival rates.
- Limiting stock within screen planting areas to short term low impact grazing.
- Introducing nest boxes across areas of screen plantings to enhance the planting areas for use by endemic woodland birds.

The design/management of screen planting areas will also be informed by the [Hunter Bushland Resource Kit](#) (Hunter Catchment Management Trust, 2003) and *Where land meets water resource kit: a guide to riparian management in the Hunter Valley* (Hunter-Central Rivers Catchment Management Authority, 2007).

5.2 VISUAL BUNDS

Implementation of visual bunds was committed to in the MPO EIS (ERM Mitchell McCotter, 1997) and discussed in the Project EIS (MACH Energy, 2021), and is also stipulated in conditions of Development Consent DA 92/97 (prior to its surrender) and Development Consent SSD 10418. Bunds have generally been proposed in more sensitive areas where close views require immediate screening or where the additional height will be needed to lift the vegetative screens (i.e. along Wybong Road which lies directly adjacent to the southern extent of the MPO area [Figure 12] and along the northern boundary of North Pit).

Where necessary, screen planting will be implemented on bund structures (Figure 12) to consolidate the visual effect of the bunds. Screen planting will be undertaken on bund structures with an aim to achieve a groundcover of 70% or more, in order to reduce the likelihood of weed infestations. When screen planting along a visual bund, a layer of topsoil will be introduced and keyed in prior to seed planting, to assist vegetation establishment. An appropriate topsoil depth will be implemented along the bund, with an aim for topsoil depths above 100 millimetres (considering subsoil quality, topsoil availability, shape and erosion protection). Where topsoil is not readily available for use, an organic growth material or equivalent will be utilised.

Bunds will be formed using material from a number of sources (e.g. surplus material stockpiled during road construction, excess material from pre-clearance activities etc.). Bunds will be constructed with an aim to achieve batter slopes that are no steeper than 2.5:1 horizontal to vertical, to more effectively establish groundcover vegetation (with consideration given to space, access, infrastructure, height and erosion).

5.2.1 Bund Stabilisation

Routine inspections will be undertaken on visual bunds in accordance with Section 6. Where inspections identify areas of slope failure or uncontrolled erosion, maintenance works will be undertaken as soon as practicable, including:

- the addition of further material and consolidation of the bund;
- if the failure is identified to be due to water erosion, implementation of further drainage structures within the bund;
- removal of vegetation adjacent to the bund which may be compromising bund stability; and
- where continuous failure of the bund occurs, consulting with an appropriate specialist (e.g. rehabilitation specialist, geotechnical specialist, or agronomist) to consider measures to repair the bund (e.g. reconfiguring the bund design, altering the bund material etc.).

Follow up inspections of the bund will be undertaken to ensure the success of re-stabilisation works.

5.3 LIGHTING

In accordance with Schedule 3, Condition 45 of Development Consent DA 92/97 (prior to its surrender) and Part B, Condition B76 of Development Consent SSD 10418, all external lighting will be designed and constructed using all feasible measures to minimise the off-site lighting impacts of the MPO. This will include:

- appropriate direction of lights (including consideration of mounting heights);
- where feasible, use of shielded fittings;
- use of anti-reflective paint to minimise light spill surfaces;
- upward light spill would be minimised and lighting would generally be directed either downwards, or away from the potentially sensitive receptors (e.g. Muswellbrook);
- night-lighting would be restricted to the minimum required for operational and safety requirements to avoid over-lighting;
- in-pit mobile lighting rigs would not shine directly above the pit wall and other mobile lighting rigs would not shine above the horizontal (except where required for emergency safety purposes);
- where feasible, energy efficient lighting would be used for any new fixed lighting installed;
- where floodlights are required, asymmetric beams would be used;

- where feasible, fixed lights would not be directed towards reflective surfaces;
- lighting would potentially use warm white colours for fixed lighting, where available and if compliant with industrial lighting standards;
- development and implementation of lighting plans by the mining contractor;
- no outdoor lights shine above the horizontal;
- flood lighting directed towards mine workings and to avoid direct lighting towards site boundaries;
- the use of timers and/or automatic sensors to switch off lighting when it is not needed;
- limiting the use of high beam lighting for vehicles travelling along haul roads, especially when travelling within close proximity to mine boundaries/adjacent roads;
- adjusting mine lighting to reduce visual impacts if site lighting is observed to be affecting off-site areas, or if lighting complaints are received; and
- establishment of train lighting screens, visual bunds and screen planting, in accordance with MOD 4 EA (MACH Energy, 2017c), to minimise direct lighting impacts on the Muswellbrook township and mitigate potential safety impacts along Wybong Road.

As required by Schedule 2, Condition 45 of Development Consent DA 92/97 and Part B, Condition B76 of Development Consent SSD 10418, lighting at the MPO will continue to be designed to comply with AS/NZS 4282:2019 – *Control of Obtrusive Effects of Outdoor Lighting* or its latest version.

MACH Energy commissioned RWDI Australia Pty Ltd (RWDI) in 2024 to prepare an engineering report regarding light emissions in conjunction with the design of major infrastructure components in the CHPP. The findings determined that the potential impact associated with lighting of the Project would be similar to what was assessed for the previously approved MPO (RWDI, 2024). No additional on-site management measures were proposed based on the conclusion of this report as the Project would not create a significant new source of light spill for the assessed nearby receptors (e.g. receptors 43, 43b and 47) and would be expected to continue to comply with the requirements of AS/NZS 4282:2019 – *Control of Obtrusive Effects of Outdoor Lighting*.

Lighting impact mitigation measures relevant to rail infrastructure is further described in Section 5.5.6.

In addition to monitoring the light management measures, periodic lighting audits will be undertaken following modifications to plant or equipment, to measure their effectiveness.

5.4 BUILDING TREATMENT

In accordance with Part B, Condition B76(f) of Development Consent SSD 10418, all key/visually obtrusive buildings and structures (including ancillary infrastructure) within the MPO area will be designed to minimise their visual impacts on the surrounding environment through:

- the use of non-reflective and textured building materials to avoid glare;
- the use of colours that complement the surrounding landscape (i.e. primarily green and beige, unless high visibility colors have been deemed necessary for safety reasons) to assist in assimilating infrastructure components into the setting); and
- maintaining all storage areas in an orderly condition and locating these areas as far as practicable from visually sensitive areas.

Construction of the workshop and associated buildings (incorporating the above visual treatments) has commenced in the MIA, as shown in Plates 5 and 6.

5.5 SPECIFIC VISUAL TREATMENT FOR MINE AREAS

5.5.1 Active Mining Area

Initially, overburden emplacements will be developed to the east of the open cut pits (Figure 3). Consistent with the MPO Rehabilitation Strategy, Rehabilitation Management Plan and supporting Annual Rehabilitation Report and Forward Program², progressive rehabilitation of the overburden emplacements will occur as areas become available for rehabilitation. During construction of the overburden emplacements, it will be progressively shaped to a naturalistic form and vegetated with endemic grasses and trees, characteristic of a woodland/grassland community.

As rehabilitation of the overburden emplacement progresses, it will act as an environmental bund, assisting to screen the open cut pits from the township of Muswellbrook, Wybong Road and Kayuga Road, the New England Highway, and the Main Northern Railway to the east (Figure 10). MACH Energy will prioritise construction of the lower batters of the overburden emplacements to final landform profile and the early revegetation of these batters to progressively minimise visual impacts at Muswellbrook and other viewpoints to the east.

In consultation with MSC, MACH Energy has developed design principles for the final landform as part of MOD 3, and in particular for the overburden emplacements, to minimise visual impacts from the east. These design principles were also applied to the Project EIS (MACH Energy, 2021). Accordingly, MACH Energy has undertaken a comprehensive approach to landform design based on the following key design principles:

- The emplacement landform would be designed to look less “engineered” when viewed from Muswellbrook (i.e. incorporation of macro-relief to avoid simple blocky forms).
- Surface water drainage from the emplacement landform would incorporate micro-relief to increase drainage stability and avoid major engineered drop structures where practical.
- MACH Energy would progressively develop and revegetate the final landform, to reduce visual impacts in Muswellbrook and other local vantage points.
- The final void (and associated drainage network) would be shaped to reflect a less engineered profile that is more consistent with the surrounding natural environment.
- The final void has been designed as a long-term groundwater sink to maximise groundwater flows from the Eastern Out of Pit Emplacement to the final void.
- The Project has been designed to reduce the potential for visual effects by maximising the topographic shielding of the evening and night-time mining operations by the Eastern Out of Pit Emplacement.
- MACH Energy would continue to progressively develop and revegetate the final landform to reduce visual impacts in Muswellbrook, and continue to monitor the performance of rehabilitation and implement remediation, as required.
- Landform profiling and rehabilitation of the Eastern Out of Pit Emplacement would continue to be undertaken progressively over the life of the Project (as evident at the existing MPO).

A conceptual final landform and further discussion on the specific macro and micro-relief proposed for the final landform are presented in the Project EIS (MACH Energy, 2021).

² As of 1 August 2022, MPO operates under a Rehabilitation Management Plan along with the supporting Annual Rehabilitation Report and Forward Program, which has replaced the Mining Operations Plan (1 July 2021 – 30 June 2023).

As vegetation of the overburden emplacements will take a number of years to establish, strategic localised screen plantings will continue to be implemented to the east of the MPO area, along Kayuga Road and Wybong Road (Figure 12). This screen planting will assist in shielding the Active Mining Area from the east during the rehabilitation establishment phase of the overburden emplacements.

As described in Section 3.2, a visual bund with tree and shrub screen planting has been established along a portion of the eastern extent of Wybong Road. This bund and screen planting will assist in shielding the Active Mining Area from Wybong Road, as well as from other areas to the south.

5.5.2 Mine Infrastructure Area

The MIA is located in the south-west corner of the MPO area (Figures 3 and 4) and includes the CHPP and associated coal stockpiles and conveyor system, workshops, administration buildings, employee facilities and internal mine access roads. The rail loading facility including a rail loop spur from the Muswellbrook – Ulan Rail Line is currently located on the southern side of Wybong Road (Figure 3) and was relocated as part of MOD 4.

The MIA has been constructed to minimise, as far as practical, the clearance of existing stands of trees and to utilise the existing topography as much as possible. As outlined in the MPO EIS (ERM Mitchell McCotter, 1997), planting of native trees will be interspersed throughout the MIA to improve the aesthetics of the area and enhance the surrounding environment (Figure 12).

The Infrastructure Area Envelope would be revised for the Project to reflect approved disturbance areas that may be used for infrastructure, as well as removal of an area where no infrastructure is proposed to be developed for the Project (Figure 2). The MIA would be expanded in stages from its current size of approximately 8 hectares, to approximately 12 hectares, to accommodate the additional mobile equipment and facilities that would be required as the mining rate increases (Figure 14a) (MACH Energy, 2021).

The upgrades to the infrastructure as part of the Project would be well integrated with the existing setting at the existing MPO during construction and operations, with limited contrast or change. Further, the upgraded infrastructure would be located adjacent to the existing mine infrastructure which is west of the integrated waste rock emplacement landform, which would shield potential views of the infrastructure from the north and east of the Project, as well as shield these viewpoints from potential night-lighting impacts of fixed and mobile equipment. Additionally, as outlined in the Project EIS (MACH Energy, 2021), parts of the Project final landform would potentially be conducive to high-intensity agricultural use (e.g. existing MIA). These areas would be rehabilitated to pasture using appropriate grass species.

As construction and rehabilitation of the overburden emplacement progresses, the rehabilitated emplacements will assist in shielding the MIA from viewpoints to the east of the site, including Kayuga Road and Wybong Road, and the township of Muswellbrook.

The MIA is most visible from the south, positioned directly north of Wybong Road. The existing visual bund and screen plantings along Wybong Road currently assists in shielding proportions of the MIA from Wybong Road. As construction and mining progresses, the existing bund will be extended along the southern boundary of the MPO area, adjacent to Wybong Road. Screen plantings will be established along the bund, where necessary, to increase shielding of the MIA from Wybong Road (Figure 12).

Buildings within the MIA have been designed to minimise visual impacts, consistent with the treatments outlined in Section 5.4. As described in Section 5.4, construction of various buildings incorporating visual building treatments has been completed in the MIA, as shown on Plates 5 and 6.

5.5.3 Fines Emplacement Area

The Fines Emplacement Area is located to the north-west of the MIA (Figures 3 and 4). As outlined in the MPO EIS (ERM Mitchell McCotter, 1997), the area is located within a gully and will be largely screened from public viewpoints by the topography and existing remnant woodland vegetation.

Notwithstanding, visual screening is proposed from areas to the south via planting along the Fines Emplacement Area access road (Figure 12). This will consist of planting tree and shrub species. An indicative species list for screen planting is outlined in Table 7.

Six embankment raises of the Fines Emplacement Area would be required over the life of the Project (Figure 14b), which would result in an ultimate crest height of approximately 299 m AHD. At full capacity, the Fines Emplacement Area would have a total disturbance area of approximately 166 hectares. The Fines Emplacement Area would be located well to the west of the integrated waste rock emplacement landform, which would shield potential views of the area from the north and east (VPA, 2020).

5.5.4 Water Storage Dams

Water storage dams on the site consist of mine water and sediment dams. As shown on Figures 3 and 4, the water storage dams for the site are primarily situated in the south and east of the MPO area. The dams in the southern extent of the site will be shielded from viewpoints to the south through the proposed/existing visual bunding along Wybong Road, and to the east from the overburden emplacement/visual bund (Figure 12). The sedimentation dams situated on the eastern side of the overburden emplacement will be shielded from the east via the existing/proposed screen planting along Kayuga Road and Wybong Road (Figure 12).

Additional water storages would be developed west of the Infrastructure Area Envelope (Figure 2), as part of the Project (MACH Energy, 2021). The additional water storages would be located where a second (southern) fines emplacement area was assessed and approved as part of the MPO EIS (ERM Mitchell McCotter, 1997). Mine Water Dam 2 (MWD2) would be developed early in the Project life to increase on-site water storage capacity, Mine Water Dam 3 (MWD3) would be developed later in the mine life if required when the mine intersects the existing MWD. The existing MWD would ultimately be mined-through as part of the Project and would be replaced by MWD3, when required. The MWDs are connected to the Discharge Dam (DW1) which is located to the west of Bengalla Road and is intended to facilitate controlled releases to the Hunter River. DW1 and its associated pipeline are approved for construction under the development consent for the Bengalla Continuation Project (SSD 5170). The provisional general arrangement for the MPO at 2025 (as per Development Consent DA 92/97 [Attachment 1]), showing the proposed additional water storages are shown on Figure 3. The provisional general arrangement of the MPO at 2026 to 2047 (as per Development Consent SSD 10418 [Attachment 2]), showing the proposed additional water storages are shown on Figures 4 to 10.

The additional water storages would be located adjacent to the existing mine infrastructure which is west of the integrated waste rock emplacement landform, which would shield potential views of the infrastructure from the north and east of the Project, as well as shield these viewpoints from potential night-lighting impacts of fixed and mobile equipment (VPA, 2020).

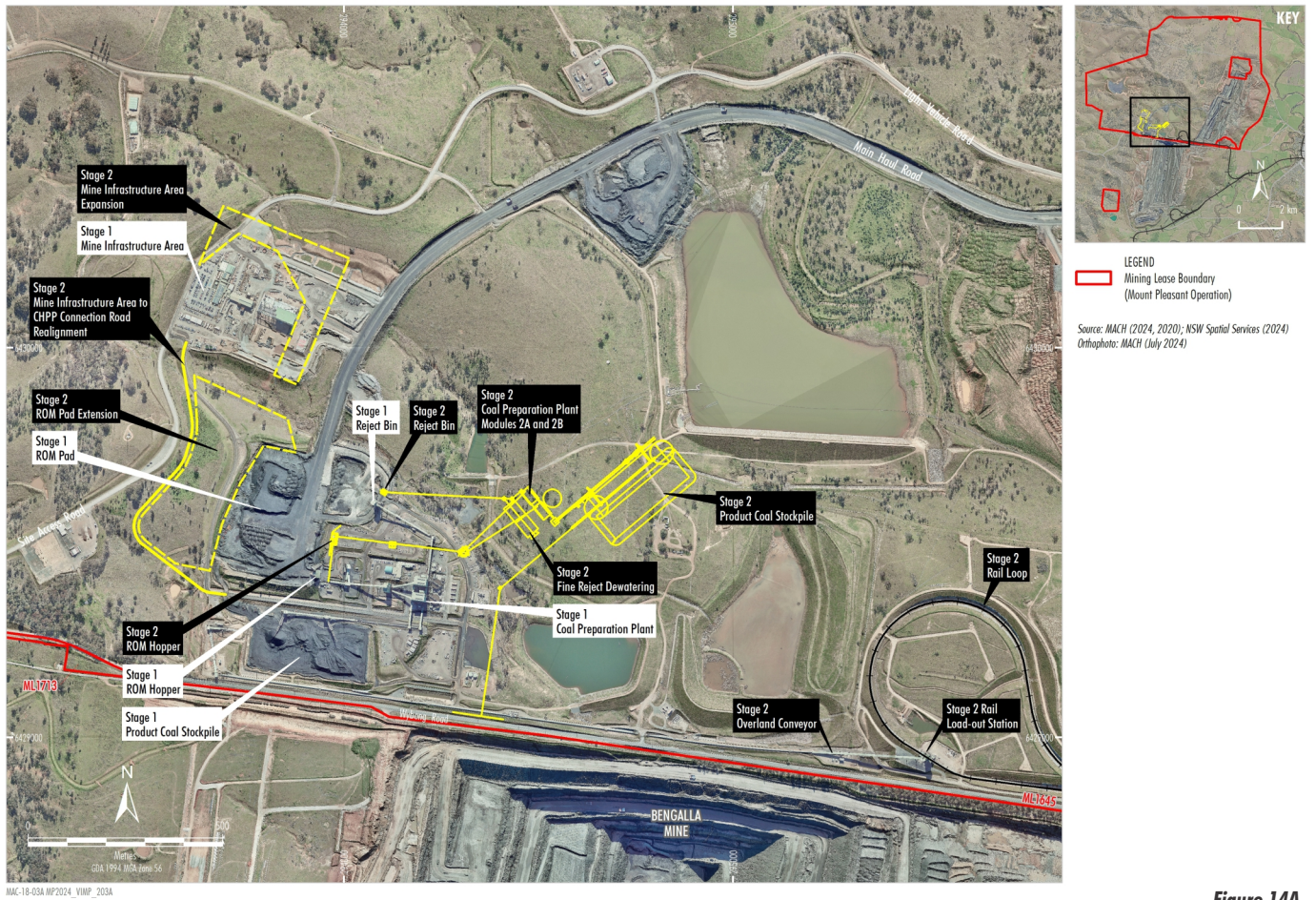


Figure 14A
Existing and Proposed Mine Infrastructure Area Components

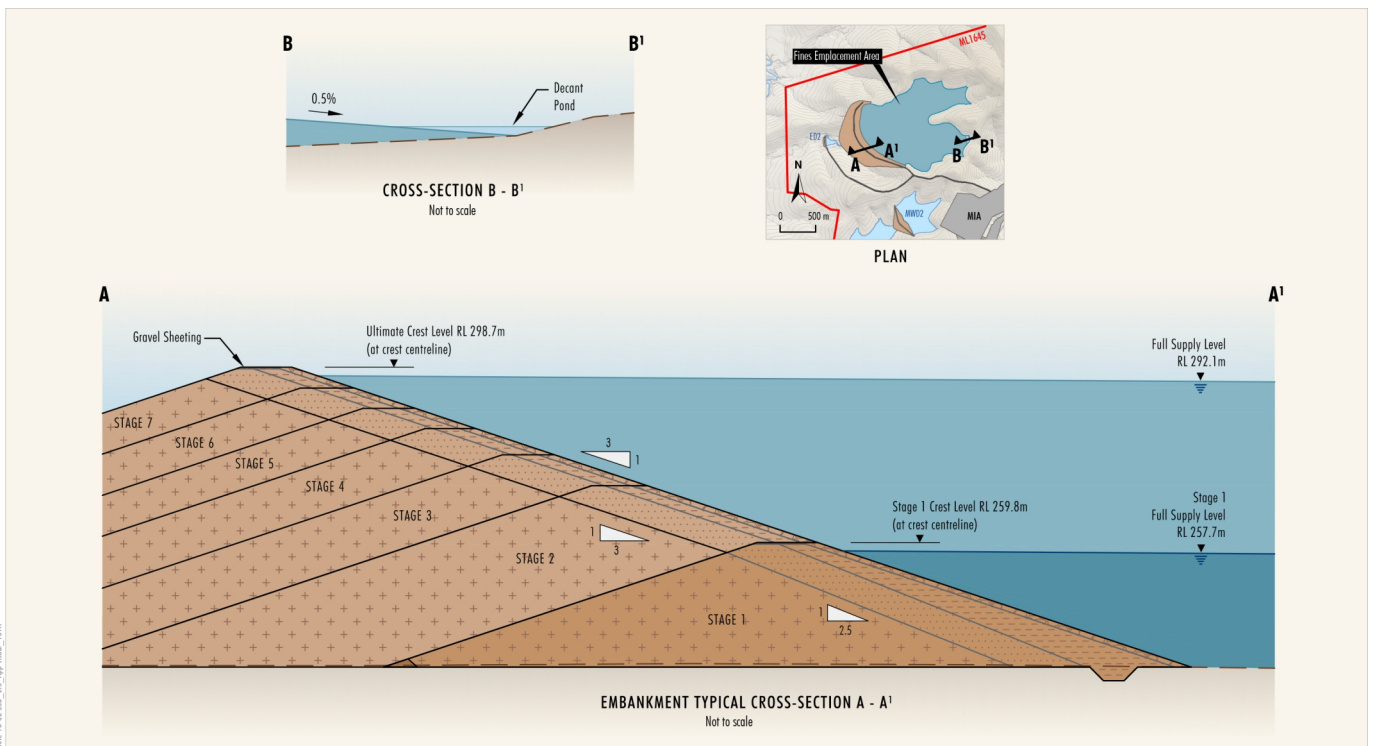


Figure 14B
Fines Emplacement Area Indicative Cross-sections

5.5.5 Site Access/Haul Roads

The site access road is constructed in the southern extent of the site, linking the MIA with Wybong Road to the south. The mine access road is shielded by natural topography and will be visually enhanced by completing the visual bund proposed along the northern edge of Wybong Road (Figure 12).

The majority of the mine haul/access roads are located in close proximity to the MIA and open cut pits. Haul roads and other site access roads are most visible from the south at Wybong Road. Completing the proposed/existing visual bund and targeted screen plantings along Wybong Road will assist shielding these internal roads. As outlined in Section 5.5.3, the proposed screen plantings along a section of internal road to the Fines Emplacement Area, will shield viewpoints to the south (Figure 12).

The development of the integrated waste rock emplacement to screen development of open cut, infrastructure and haul roads during early stages of the Project has been incorporated into the design of the Project (VPA, 2020). Haulage of Project ROM coal would continue to use internal haul roads.

5.5.6 Rail Infrastructure

As part of MOD 4, the rail spur, rail loop, train load-out facility and product conveyor was relocated (Attachment 1). A portion of the north-east section of the relocated rail spur immediately east of the Bengalla Mine is below natural ground level.

Train lighting screens have been established to minimise direct train lighting impacts on the Muswellbrook township from the relocated rail infrastructure. The rail lighting screens have been constructed using metal posts and horizontal panels of light-coloured autoclaved aerated concrete (AAC).

Two ground level headlight screens have been established on the eastern side of the rail spur at the following locations (labelled as “*Existing Light Screen Location*” on Figure 12):

- where the rail spur turns south across Wybong Road; and
- where the rail spur turns east from Overton Road to the Muswellbrook – Ulan Rail Line and is elevated above natural ground level.

These ground level headlight screens were designed to be higher than the train headlight level (Plate 8) and consistent with the treatments outlined in Section 5.4.

MACH Energy have agreement from the Rail Service Provider for train headlights to be turned-off with only ditch/fog lights operating when travelling east towards Muswellbrook. Signage is also installed requesting locomotive headlights be dimmed to reduce light impacts when locomotives are exiting the site.

MACH Energy engaged EMM Consulting (EMM) in April 2022 to complete a review of rail light screening assessment. The assessment required EMM to verify that the design of the rail servicing MPO and as-built light screening minimised the potential for train headlights to impact residents of Muswellbrook. The EMM assessment report included a site visit which identified areas that may need tree planting to strengthen the screening ability. The recommendations included:

- tree planting along the rail and access road;
- tree planting north of the Wybong Road overpass; and
- tree planting west of the Wybong Road overpass.

In response to the recommendations, additional screen planting to the ground level headlight screen immediately north of Wybong Road were undertaken to assist with integration of the headlight screens over time. Supplementary screen planting at the following locations were also undertaken to mitigate visual impacts associated with the relocated rail infrastructure:

- between the access road running along Wybong Road and the relocated rail spur; and
- to the west of the Wybong Road rail overpass and between the relocated rail spur and Wybong Road.

The screen plantings commenced in autumn 2022 and was completed in spring 2023.

Overhead rail lighting screens considered as part of MOD 4 EA were reassessed to not be necessary following final detailed design of the rail (AECOM, 2020; EMM, 2022).

The site visit also identified a potential impact of the trains headlight indirectly impacting on Muswellbrook as the train descends toward the Wybong Road overpass. This potential impact was not addressed in the Visual Assessment by VPA (2018) or in the assessments by AECOM (2020). Recommendations for the indirect light included:

- verify duration of trains in that location with train operation plans;
- verify the intensity of the headlight spill within Muswellbrook:
 - visually verify how much light is visible from Muswellbrook during night operation; and
 - measure light during train operation at night.
- consult with MSC representatives to discuss the potential/real light visibility after site verification; and
- potentially require train operators to dim headlight while trains are on the spur rail.

MACH Energy will undertake another lighting audit in November 2024. This audit will include:

- verification of train duration when descending towards the Wybong Road overpass;
- verification of intensity of the train headlight spill within Muswellbrook; and
- assessment of the need for train operators to dim headlights while trains are on the rail spur.

The lighting audit will be presented to MSC representatives for discussion within 3 months of receiving the final audit report or at an alternative time agreed with MSC. In the event the audit results require additional mitigation measures these will be discussed with MSC prior to being implemented at the MPO.

MACH Energy will undertake light audits as required thereafter as described in Section 8.2 of this VIMP.

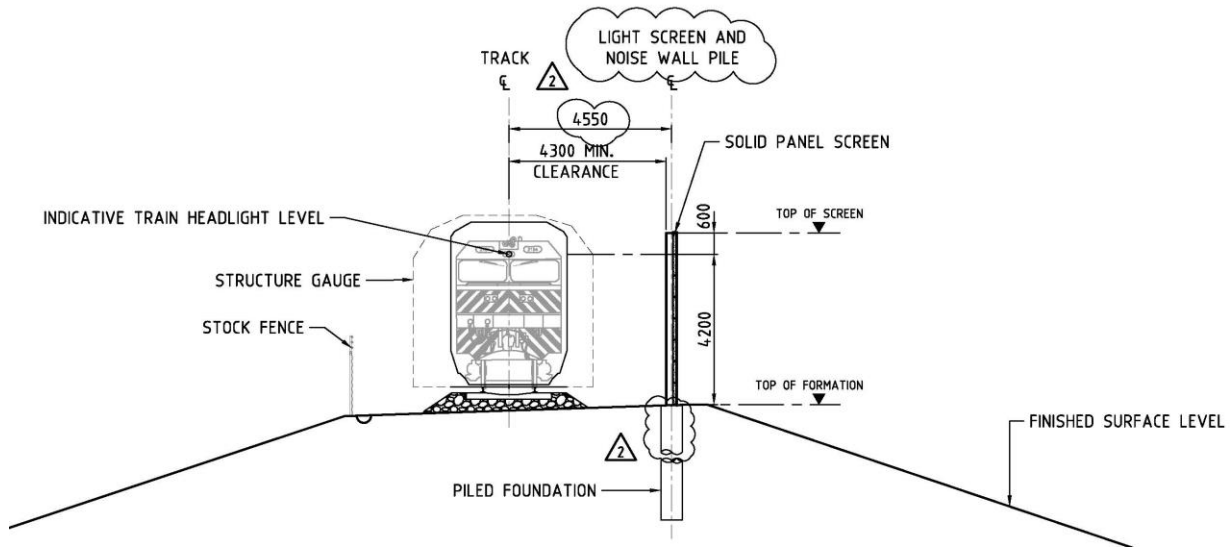


Plate 8: Ground level headlight screen design (AECOM, 2020).

Rehabilitation

MACH Energy will prioritise the rapid rehabilitation of disturbed areas (e.g. establishment of a cover crop on rail batters) to reduce visual contrast of these elements with the surrounding area.

Furthermore, additional native tree and shrub species will be established between the ground level lighting screens and Muswellbrook to improve visual integration over time. This will be achieved with planting programs occurring in autumn and spring annually. Planting methods will include tube stock hand planting in targeted areas.

5.5.7 Re-transmission Facility

A DTV re-transmission facility will be constructed and operated on MACH Energy-owned land within the Development Consent DA 92/97 and Development Consent SSD 10418 area and east of the approved waste rock emplacement (Attachment 1). MACH Energy will incorporate the following mitigation measures into the design of the re-transmission facility:

- The tower/mast would be painted in a neutral colour such as pale grey, as it would be predominantly seen against the sky.
- The shed that would house ancillary infrastructure would be painted in a green colour in consideration of the prevailing pasture in the vicinity of the re-transmission facility.

5.6 PRIVATELY OWNED LAND

Development Consent DA 92/97

In accordance with Schedule 3, Condition 46 of Development Consent DA 92/97 (prior to its surrender), upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, a significant direct view of the mining operations on-site³, MACH Energy will implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the privately-owned land in consultation with the landowner. These mitigation measures will be feasible and reasonable, with an aim toward minimising the visibility of mining operations from the residence.

Following consultation with the landowner, if within 3 months of receiving the request MACH Energy and the landowner cannot agree on measures to be implemented, or there is a dispute about the implementation of the measures, MACH Energy will refer the issue to the Planning Secretary of the DPHI for resolution.

Development Consent SSD 10418

In accordance with Part B, Condition B80 of Development Consent SSD 10418, upon receiving a written request from the owner of any residence on privately-owned land which is within 2 km of mine landforms and has, or would have, significant direct view of the mining operations on site, MACH Energy will implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.

Following consultation with the landowner, if within 3 months of receiving the request MACH Energy and the landowner cannot agree on measures to be implemented, or there is a dispute about the implementation of the measures, MACH Energy will refer the issue to the Planning Secretary of the DPHI for resolution.

Except in exceptional circumstances, the Planning Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 2 km from the mining operations.

5.7 ADDITIONAL TREATMENT MEASURES

Additional on-site and off-site management measures and treatments for the open cut mining areas may include (VPA, 2020):

- Existing trees and vegetation screening outside of the open cut mine clearing zone will be maintained and protected by creating vehicle and machinery exclusion zones.
- On-site stockpiles will be created for mulched vegetation and appropriate topsoil storage will be formed to maintain viability of soil for rehabilitation works.
- Provision of additional reasonable and feasible tree screening at key on-site locations on an as-needed basis.
- The prioritisation of landform shaping activities on the eastern side of the integrated waste rock emplacement landform during the day, where practicable.
- Complete progressive rehabilitation of the eastern face of the waste rock emplacement to provide a visual and landscape buffer to ongoing activity within the Project area as seen from residences to the north and east, most significantly Muswellbrook. This would be undertaken by:
 - seeding the rehabilitation area with a native seed mix including native grass, shrub and tree

³ In accordance with Development Consent DA 92/97, except in exceptional circumstances this signifies residences within 3 km of the mining operations.

species and temporary cover crop species as soon as practicable after topsoil application, so that natural grassland colouring and texture can be achieved following landform establishment; and

- planting tubestock (including ground, middle and upper stratum species of the target native vegetation communities when suitable climatic conditions prevail), with irregular densities and mosaic patterning to emulate the structure of surrounding vegetation communities and to avoid mass plantings of regular patterning.
- Maintaining plant establishment where necessary to achieve screening and revegetation outcomes in the long-term and install signage denoting the rehabilitation area to restrict access and minimise potential for disturbance to rehabilitation area (Section 7).

Off-site treatment may include roadside and residential planting. Off-site treatments have been previously implemented at the MPO along Wybong Road, Kayuga Road and Dorset Road. Project off-site mitigation measures may include the development of additional roadside or at-receiver tree screens.

6 LANDSCAPE MONITORING

Routine inspections (i.e. at least annually, but also opportunistically and quarterly for vegetation screens) of the MPO landscape treatment areas will be undertaken to ensure that landscape treatments are consistent with the objectives of this VIMP, and the performance indicators outlined in Table 6. The landscape monitoring program and proposed actions as a result of monitoring (where necessary) are outlined in Table 8.

**Table 8
Landscape Monitoring Program**

Parameter	Monitoring Proposed	Remedial Actions
Screen Planting	<p>Routine visual inspection of screen planting areas (Figure 12) to ensure that tree/shrub species are in suitable condition and provide sufficient screening (through reviewing planting logs and monitoring survival rate).</p> <p>Routine inspections of screen planting will initially be undertaken at least quarterly, to highlight areas requiring attention during early growth stages (i.e. during the first year of growth). As screen planting becomes more established, inspections will be carried out on a quarterly basis.</p>	<ul style="list-style-type: none"> If monitoring indicates that tree/shrub species within screen planting areas have not been planted at a minimum density of 2000 stems/hectare (from planting logs) or have a survival rate lower than 50%, maintenance works (e.g. reseeded, watering and application of fertiliser where necessary) will be undertaken until adequate shielding is achieved. The maintenance works can include: <ul style="list-style-type: none"> change of plant species; replantation of tree/shrubs; thinning; and infill planting.
Visual Bunds	<p>Routine (bi-annual) visual inspection of visual bunds to ensure that bunds:</p> <ul style="list-style-type: none"> Are sufficiently stable and no uncontrolled erosion is occurring. With tree screens have tree/shrub species which are in suitable condition (through measuring screen planting groundcover percentage). With tree screens do not contain a prevalence of weed species (through measuring weed groundcover percentage). 	<ul style="list-style-type: none"> If monitoring indicates that slope failure or uncontrolled erosion has/will occur, stabilisation works will be undertaken (Section 5.2.1). If monitoring indicates that groundcover of mature screen planting areas on visual bunds is less than 70%, maintenance works (e.g. reseeded, watering and application of fertiliser where necessary) will be undertaken until adequate shielding is achieved. If monitoring indicates that weeds constitute 20% or greater of the groundcover in mature screen planting areas, weed control measures will be undertaken (Section 5.1.1).
Light Screens	<p>Routine visual inspection of light screens to ensure all screens are kept in an orderly condition (i.e. metal posts and horizontal panels of AAC maintained in suitable condition, paint maintained etc.).</p>	<ul style="list-style-type: none"> If required, maintenance works will be undertaken on screens which are found to be in a poor condition and are deemed to be having a negative visual impact on the vicinity.
MIA	<p>Routine visual inspection of the MIA to ensure that the interspersed tree plantings are in suitable condition, and the infrastructure area is consistent with mine plans.</p>	<ul style="list-style-type: none"> If required, maintenance works and reseeded will be undertaken on tree plantings interspersed within the MIA which are found to be in poor condition.
Site Infrastructure	<p>Routine visual inspection of infrastructure areas to ensure all infrastructure is kept in an orderly condition (i.e. paint maintained, tidy work areas etc.).</p>	<ul style="list-style-type: none"> If required, maintenance works will be undertaken on infrastructure areas which are found to be in an unsuitable condition and are deemed to be having a negative visual impact on the vicinity.

**Table 8 (Continued)
Landscape Monitoring Program**

Parameter	Monitoring Proposed	Remedial Actions
Rehabilitation	<p>Rehabilitation monitoring at the MPO is undertaken in accordance with the MPO Rehabilitation Management Plan.</p> <p>A rehabilitation monitoring program has been implemented at MPO under the Rehabilitation Monitoring Manual (RMM) to assess rehabilitation, identify developing trends and to confirm rehabilitation is on track to achieve final land use objectives.</p> <p>The current monitoring program (as of July 2022) includes a total of 22 rehabilitation sites and 12 analogue sites that are monitored each year.</p> <p>Various monitoring programs and inspection procedures are in place, as outlined in the MPO Rehabilitation Management Plan, including monthly site-wide drone surveys, annual ortho-imagery and more frequent LiDAR surveys if required, as well as the MPO surface water monitoring program (which includes sediment dams) and rehabilitation monitoring program (which includes visual inspection monitoring process).</p>	<ul style="list-style-type: none"> • The RMM will include a Rehabilitation Trigger Action Response Plan for actions required to be undertaken should rehabilitation monitoring results indicate that the rehabilitation area is not trending towards meeting the performance indicators and completion criteria. • In relation to landform revegetation failure, if required, maintenance works and reseedling will be undertaken on tree plantings where necessary to achieve screening and revegetation outcomes. • Pest management processes. • Engagement of a suitably qualified person to inspect affected rehabilitation area and recommend appropriate management actions including whether re planting/ re seeding is a feasible option considering conditions. • Target dates for completing deficient rehabilitation will align with the Rehabilitation Trigger Action Response Plans, depending on the severity.

The results of the monitoring program and any necessary maintenance works undertaken on the landscape treatment parameters will be presented in the relevant MPO Annual Review (Section 8.1).

7 CONTINGENCY PLAN

7.1 CONTINGENCY MEASURES

Key risks to the success of landscaping treatments and proposed contingency measures to mitigate these risks are outlined in Table 9.

**Table 9
Contingency Plan**

Risk	Contingency Measure
Inadequate weed control leading to widespread failure of screen plantings.	<ul style="list-style-type: none"> • Increase frequency of routine inspections and application of control measures. • Review weed control measures (Section 5.1.1) and consult with an appropriate rehabilitation specialist to introduce more appropriate control measures. • Replant tree and shrubs species as required to provide adequate shielding.
Adverse weather conditions (e.g. drought, bushfire, flooding etc.) leading to failure of tree screening species.	<ul style="list-style-type: none"> • Replant tree screening using species identified as adapted to local climatic conditions and more suited towards adverse weather events (e.g. <i>Eucalyptus crebra</i> [Narrow-leaved Ironbark], <i>Eucalyptus blakelyi</i> [Blakely's Red Gum] etc. [Table 7]).
Insufficient screening identified in screen planting areas.	<ul style="list-style-type: none"> • Additional screen planting, with a focus on introducing species to thicken established screen planting (i.e. further introduction of understorey species if screen planting does not adequately shield at lower heights) or improving current screen planting through infill planting or thinning.
Uncontrolled erosion of visual bunds leading to widespread slope failure.	<ul style="list-style-type: none"> • Consult with a rehabilitation specialist and consider measures to redesign bunds to avoid future failure (Section 5.2.1). • Repair and reinstate bunds as required.
Pest/insect disturbance leading to failure of screen plantings.	<ul style="list-style-type: none"> • Consider use of approved pesticides during early stages of screen planting growth. • Increase frequency of routine inspections and maintenance works to ensure establishment of vegetation. • Replant tree and shrubs species as required to provide adequate shielding.
Repeated complaints of adverse night-time lighting impacts from the MPO.	<ul style="list-style-type: none"> • Identify the site area/activity associated with the complaints and implement appropriate control measures (Section 5.3). Additional control measures will be investigated where complaints persist. • Ensure all site staff completing night-time operations are aware of the visual control measures required to be undertaken (Section 5.3), as well as MACH Energy's statutory obligations regarding lighting impacts (Section 2.1.1).
Repeated complaints regarding the negative visual impact of the MPO.	<ul style="list-style-type: none"> • Consult with the complainant and implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the privately-owned land experiencing the impacts in accordance with Section 5.6. • Where treatments on privately-owned land are not feasible or where public land is affected, consideration of further landscape treatments on-site to ameliorate the impact.
Repeated complaints regarding direct lighting impact from the rail spur.	<ul style="list-style-type: none"> • Identify the site area associated with the complaints and inspect relevant lighting screens and screen planting in accordance with Section 6. Additional control measures will be investigated where complaints persist.
Rehabilitation objectives not being met.	<ul style="list-style-type: none"> • Consult the Rehabilitation Trigger Action Response Plan (MPO Rehabilitation Management Plan) which identifies the proposed contingency strategies in the event on unexpected variations or impacts to rehabilitation outcomes.

7.2 ADAPTIVE MANAGEMENT

In accordance with Part D, Condition D4 of Development Consent SSD 10418 and Schedule 5, Condition 1A of Development Consent DA 92/97 (prior to its surrender), MACH Energy will assess and manage impacts to comply with the criteria and/or performance measures outlined in Section 4.

Where any non-compliance with the criteria and/or performance measures occurs, at the earliest opportunity, MACH Energy will:

- take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- consider all reasonable and feasible options for remediation and submit a report to DPHI describing these options and preferred remediation measures; and
- implement remediation measures as directed by the Planning Secretary.

8 REVIEW AND IMPROVEMENT OF ENVIRONMENTAL PERFORMANCE

8.1 ANNUAL REVIEW

In accordance with Condition 3, Schedule 5 of Development Consent DA 92/97 (prior to its surrender) and Part D, Condition D11 of Development Consent SSD 10418, MACH Energy will review and evaluate the environmental performance of the MPO by the end of March each year (for the preceding calendar year) (or other such timing as agreed by the Planning Secretary of the DPHI).

In relation to landscape management, the MPO Annual Review will:

- include a summary of all landscape treatments undertaken in the past year;
- include a summary of the monitoring undertaken in accordance with the VIMP in the past year;
- identify any visual-related non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
- include a summary of visual-related complaints received in the past year;
- identify any trends in the visual monitoring data over the life of the MPO; and
- describe what visual-related measures will be implemented over the next year to improve the environmental performance of the MPO.

Copies of the approved MPO Annual Review will be submitted to MSC and made available to the Community Consultative Committee and any interested person upon request, in accordance with Part D, Condition D12 of Development Consent SSD 10418 and Condition 11, Schedule 5 of Development Consent DA 92/97 (prior to its surrender). The MPO Annual Review will also be made publicly available on the MACH Energy website (<https://machenergyaustralia.com.au/>).

As mentioned in Part D, Condition D11 of Development Consent SSD 10418 (above) relating to MPO Annual Reviews, MACH Energy will include a comprehensive review of environmental performance at the MPO in accordance with Part A, Condition A2 of Development Consent SSD 10418 requires that:

A2. The development may only be carried out:

- (a) in compliance with the conditions of this consent;*
- (b) in accordance with all written directions of the Planning Secretary;*
- (c) generally in accordance with the EIS and EAs;*
- (d) generally in accordance with the Development Layout in Appendix 2.*

8.2 VISUAL IMPACT MANAGEMENT PLAN REVISION

8.2.1 Development Consent DA 92/97

In accordance with Schedule 5, Condition 4 of Development Consent DA 92/97 (prior to its surrender), this VIMP will be reviewed, and if necessary, revised (to the satisfaction of the Planning Secretary of the DPHI), within three months of the submission of:

- an MPO Annual Review (Condition 3, Schedule 5 of Development Consent DA 92/97);
- an incident report (Condition 7, Schedule 5 of Development Consent DA 92/97);
- an Independent Environmental Audit (IEA) (Condition 9, Schedule 5 of Development Consent DA 92/97); and
- any modification to the conditions of Development Consent DA 92/97 (prior to its surrender).

Within four weeks of conducting any such revision, MACH Energy will advise the Planning Secretary of the DPHI of the outcomes of the review and submit any revised documents to the Planning Secretary of the DPHI for approval.

As described in Section 5.5.6, MACH Energy will undertake a lighting audit as part of the commissioning of the relocated rail infrastructure. The VIMP will be reviewed and revised as required following any change as described in this Section.

The monitoring and maintenance procedures relating to the visual impact mitigation infrastructure (Section 6) would also be revised if necessary.

In accordance with Condition 4A, Schedule 5 of Development Consent 92/97 (prior to its surrender), MACH Energy may submit a revised VIMP for the approval of the Planning Secretary at any time and may also submit any revision to this VIMP required under Development Consent DA 92/97 on a staged basis.

If agreed with the Planning Secretary of the DPHI, a revision to this VIMP required under Development Consent DA 92/97 (prior to its surrender) may be prepared without undertaking consultation with all parties nominated under the relevant Condition of Development Consent DA 92/97.

This VIMP will be made publicly available on the MACH Energy website, in accordance with Condition 11, Schedule 5 of Development Consent DA 92/97 (prior to its surrender).

8.2.2 Development Consent SSD 10418

In accordance with Part D, Condition D7 of Development Consent SSD 10418 this VIMP will be reviewed, and if necessary revised (to the satisfaction of the Planning Secretary), within three months of:

- the submission of an incident report under Part D, Condition D9 or D10 of Development Consent SSD 10418;
- the submission of an MPO Annual Review under Part D, Condition D11 of Development Consent SSD 10418;
- the submission of an IEA under Part D, Condition D13 of Development Consent SSD 10418;
- the approval of any modification of the conditions of Development Consent SSD 10418; or
- notification of a change in development phase under Part A, Condition A12 of Development Consent SSD 10418.

In accordance with Part D, Condition D8 of Development Consent SSD 10418, within 6 weeks of conducting any such review, the Planning Secretary will be advised of the outcomes of the review and any revised documents submitted to the Planning Secretary for approval.

In accordance Part A, Condition A24 of Development Consent SSD 10418, MACH Energy may submit a revised VIMP for the approval of the Planning Secretary at any time and may also submit any revision to this VIMP on a staged basis.

In accordance with Part A, Condition A25 of Development Consent SSD 10418, if agreed with the Planning Secretary, a revision to this VIMP required under Development Consent SSD 10418 may be prepared without undertaking consultation with all parties nominated under the relevant conditions of Development Consent SSD 10418.

8.3 INDEPENDENT ENVIRONMENTAL AUDIT

In accordance with Condition 9, Schedule 5 of Development Consent DA 92/97, an IEA of the MPO will be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Planning Secretary.

The IEA will assess the environmental performance of the MPO and review the adequacy of this VIMP. If necessary, appropriate measures or actions to improve the environmental performance of the MPO or this VIMP will be recommended.

9 REPORTING PROCEDURES

In accordance with Condition 2, Schedule 5 of Development Consent DA 92/97 (prior to its surrender) and Part D, Condition D5(h) of Development Consent SSD 10418, MACH Energy has developed protocols for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria.

These protocols are described in detail in the [MPO EMS](#).

In accordance with Condition 8, Schedule 5 of Development Consent DA 92/97 (prior to its surrender) and Part D, Conditions D15 and D16 of Development Consent SSD 10418, MACH Energy will provide regular reporting on the environmental performance of the MPO on the MACH Energy website (<https://machenergyaustralia.com.au/>).

9.1 INCIDENT REPORTING

An incident is defined as an occurrence or a set of circumstances that causes or threatens to cause material harm to the environment and/or breaches or exceeds the limits or performance measures/criteria in Development Consent DA 92/97 (prior to its surrender) and Development Consent SSD 10418.

In the event that review of monitoring data, or a complaint indicates an incident has occurred, the incident will be reported in accordance with Part D, Condition D9 of Development Consent SSD 10418 and Schedule 5, Condition 7 of Development Consent DA 92/97 (prior to its surrender). The Planning Secretary will be notified in writing via the Major Projects website immediately after MACH Energy becomes aware of an incident. The notification will identify the Project name and development application number and set out the location and nature of the incident.

In accordance with Part D, Condition D10 of Development Consent SSD 10418, within seven days of becoming aware of a non-compliance, MACH Energy will notify DPHI of the non-compliance. The notification must be made in writing via the [Major Projects Website](#) and will:

- identify the MPO (including the Development Application number and name);
- set out the condition of Development Consent SSD 10418 that the incident is non-compliant with;
- describe the location and nature of the incident;
- the reason for the non-compliance (if known); and
- what actions have been, or will be, undertaken to address the non-compliance.

9.2 COMPLAINTS

MACH Energy maintains a Community Hotline (1800 886 889), which is dedicated to the receipt of community complaints. The Community Hotline is publicly advertised in a variety of MACH Energy's public communication tools and is available during operating hours (i.e. 24/7), to receive any complaints. Communication received from the hotline is recorded in a Community and Stakeholder Engagement Database.

MACH Energy has developed a procedure that outlines its commitment to receiving, responding to and maintaining a record of phone calls from the community. This procedure is supported by a Community and Stakeholder Engagement Register. This is described in MPO EMS.

In accordance with Part D, Condition D17 of Development Consent SSD 10418 and Schedule 5, Condition 11 of Development Consent DA 92/97 (prior to its surrender), a complaints register will be made available on the MACH Energy website (<https://machenergyaustralia.com.au/>) and updated monthly.

9.3 NON-COMPLIANCE WITH STATUTORY REQUIREMENTS

In accordance with Part D, Condition D5(h) of Development Consent SSD 10418 and Schedule 5, Condition 7A of Development Consent DA 92/97 (prior to its surrender), a protocol for managing and reporting non-compliances with statutory requirements has been developed as a component of MPO EMS and is described below.

Compliance with all approval plans and procedures is the responsibility of all personnel (staff and contractors) employed on or in association with MACH Energy and the Project. In accordance with Part A, Condition A2 of Development Consent SSD 10418 and Schedule 2, Condition 2 of Development Consent DA 92/97 (prior to its surrender), MACH Energy will carry out the development in accordance with:

- the conditions of Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender)⁴;
- all written directions of the Planning Secretary;
- Statement of Commitments (Appendix 3 of Development Consent DA 92/97);
- the 1997 EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4), the Project EIS; and
- with the Development Layout in Appendix 2 of Development Consent SSD 10418 (Attachment 2).

MACH Energy will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

As described in Section 9.1, MACH Energy will report incidents in accordance with Part D, Condition D9 of Development Consent SSD 10418 and Schedule 5, Condition 7 of Development Consent DA 92/97 (prior to its surrender).

A review of compliance with all conditions in Development Consent SSD 10418, Development Consent DA 92/97 (prior to its surrender) and relevant MLs will be undertaken prior to (and included within) each MPO Annual Review (Section 8.1).

Additionally, in accordance with Part D, Condition D13 of Development Consent SSD 10418 and Schedule 5, Condition 9 of Development Consent DA 92/97 (prior to its surrender), an IEA (Section 8.3) will be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary of DPHI to assess whether MACH Energy is complying with the requirements in Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender).

⁴ In accordance with Part A, Condition A4 of Development Consent SSD 10418, the conditions in Development Consent SSD 10418 and directions of the Planning Secretary prevail to the extent of inconsistency, ambiguity or conflict between them and any document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

9.4 ACCESS TO INFORMATION

In accordance with Part D, Condition D17 of Development Consent SSD 10418 and Schedule 5, Condition 11 of Development Consent DA 92/97 (prior to its surrender), the MACH Energy website will be maintained as a tool for the provision of information to stakeholders and interested parties about the operation and environmental performance of the MPO. Information required by MACH Energy to be available on the website is outlined in MPO EMS.

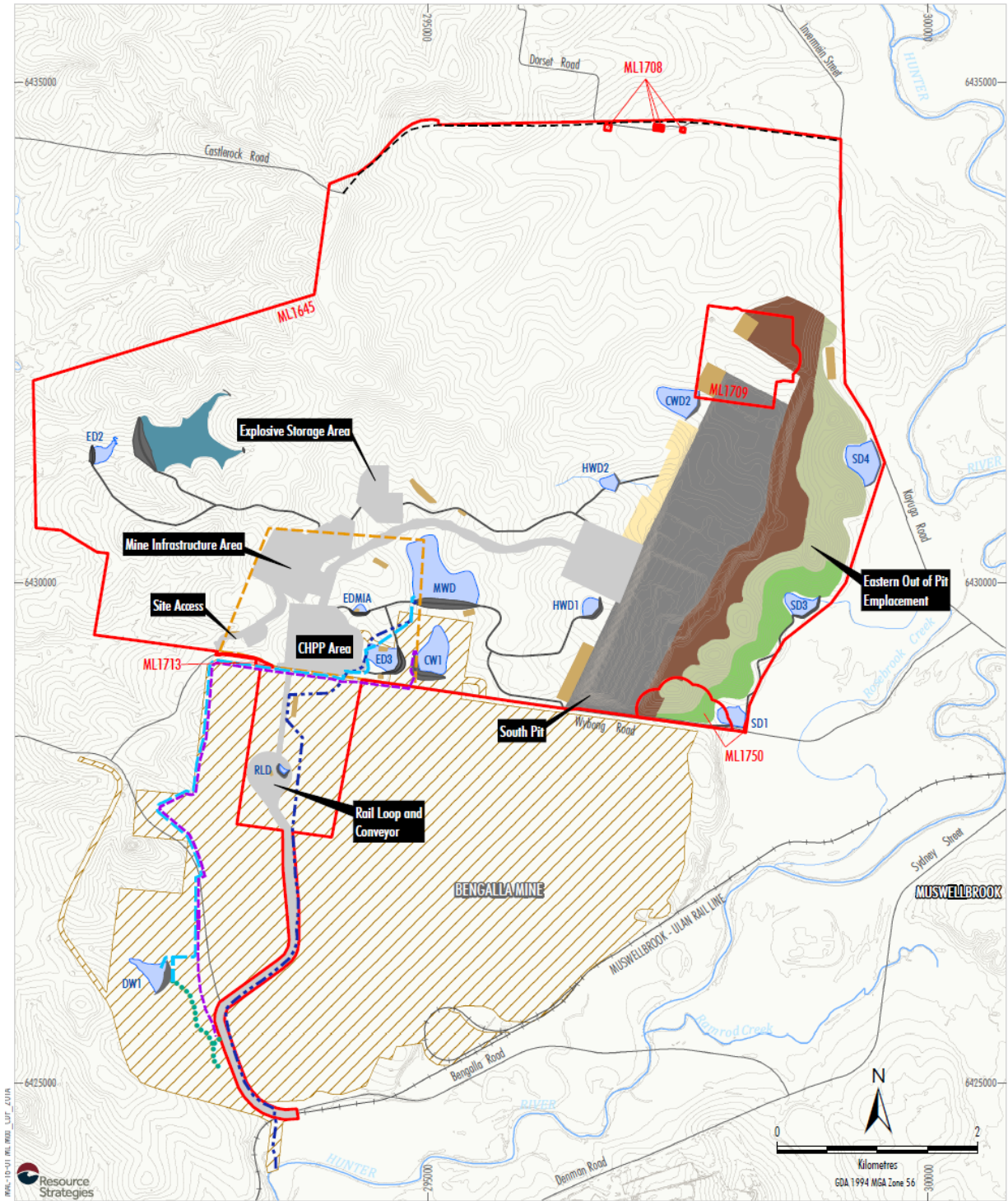
10 REFERENCES

- AECOM (2020) *MPRL Stage 02 – Rail Light Screening Assessment*.
- Commonwealth of Australia (2017) *Australian Weeds Strategy 2017 – 2027. Invasive Plants and Animal Committee. Department of Agriculture and Water Resources*.
- EMGA Mitchell McLennan (2010) *Mount Pleasant Project Modification Environmental Assessment Report*. Prepared for Coal & Allied Operations Pty Ltd.
- EMM Consulting Pty Ltd (2022) *MACH Energy Mount Pleasant Review of Rail Light Screening Assessment*. Prepared for MACH Energy.
- Environmental Resources Management Mitchell McCotter (1997) *Mount Pleasant Operation Environmental Impact Statement*. Prepared for Coal & Allied Operations Pty Ltd.
- Hunter Catchment Management Trust (2003) *Hunter Bushland Resource Kit*.
- Hunter-Central Rivers Catchment Management Authority (2007) *Where land meets water resource kit: a guide to riparian management in the Hunter Valley*.
- MACH Energy Australia Pty Ltd (2017a) *Mount Pleasant Operation (DA 92/97) – South Pit Haul Road Modification*.
- MACH Energy Australia Pty Ltd (2017b) *Mount Pleasant Operation – Mine Optimisation Modification Environmental Assessment*.
- MACH Energy Australia Pty Ltd (2017c) *Mount Pleasant Operation – Rail Modification Environmental Assessment*.
- MACH Energy Australia Pty Ltd (2021) *Mount Pleasant Optimisation Project Environmental Impact Statement*.
- RWDI Australia Pty Ltd (2024) *Mount Pleasant Optimisation Project Light Spill Potential Desktop Review*.
- VPA Visual Planning and Assessment (2018) *Mount Pleasant Operation Rail Modification Visual Assessment*.
- VPA Visual Planning and Assessment (2020) *Mount Pleasant Optimisation Project Visual and Landscape Assessment*.

ATTACHMENT 1

APPENDIX 2 OF DEVELOPMENT CONSENT DA 92/97

APPENDIX 2
FIGURE 1 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2021

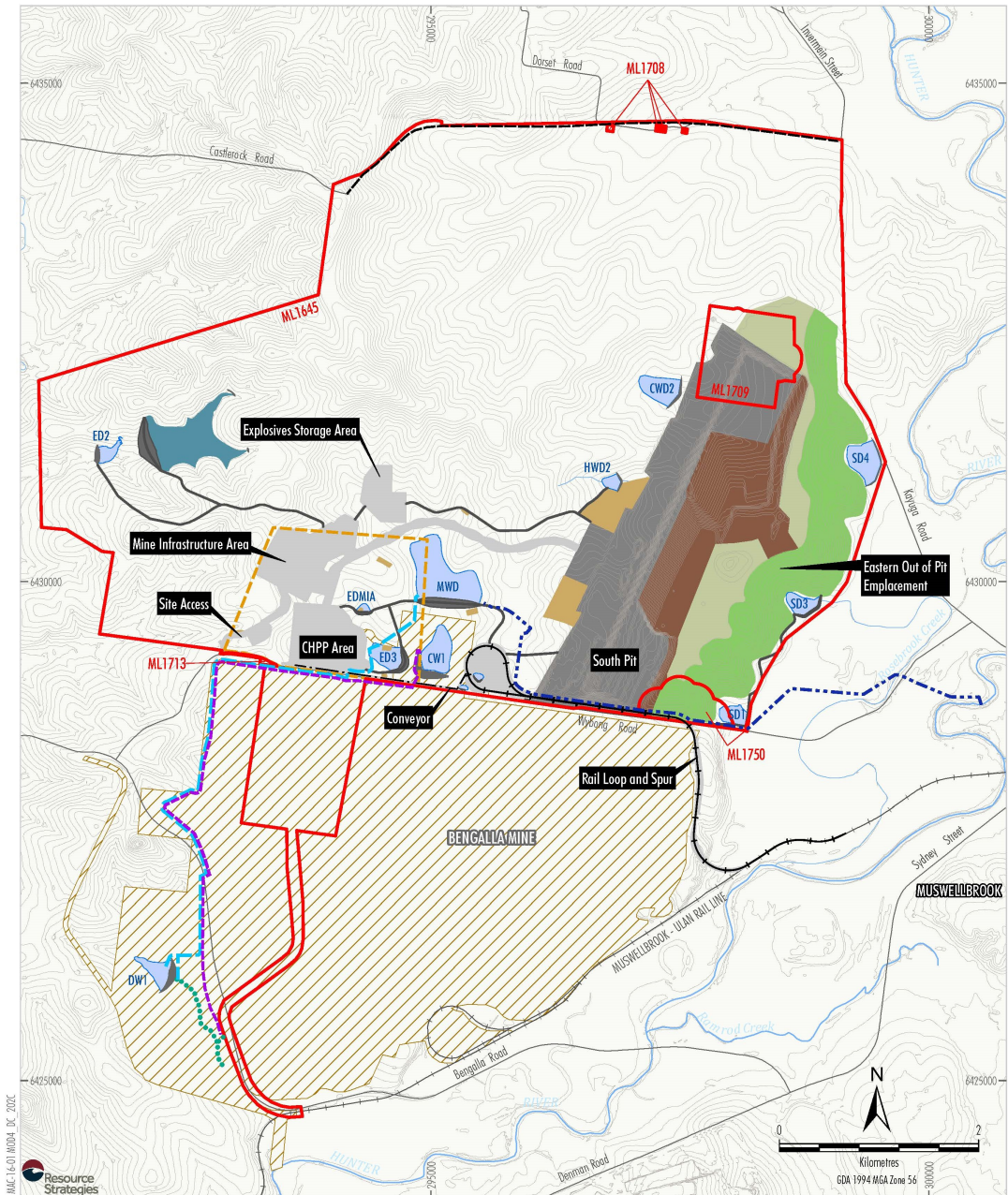


- | | |
|--|--|
| Mining Lease Boundary | Indicative Water Pipeline Alignment |
| Bengalla Mine Approved Disturbance Boundary (SSD-5170) | MPO Hunter River Supply Pipeline |
| Infrastructure Area Envelope | MPO DW1 Pipeline (Bi-directional) |
| Active Stripping Area | Bengalla Mine CW1 Pipeline |
| Active Mining Area | Approximate Extent of Scour Protection |
| Active Overburden Emplacement Area | Water Dam |
| Topsoil Stockpile | Fines Emplacement Area |
| Initial Rehabilitation | |
| Established Rehabilitation | |
| Infrastructure and Borrow/Stockpile Area | |
| Access Road | |
| Northern Link Road | |

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); MACH Energy (2017)

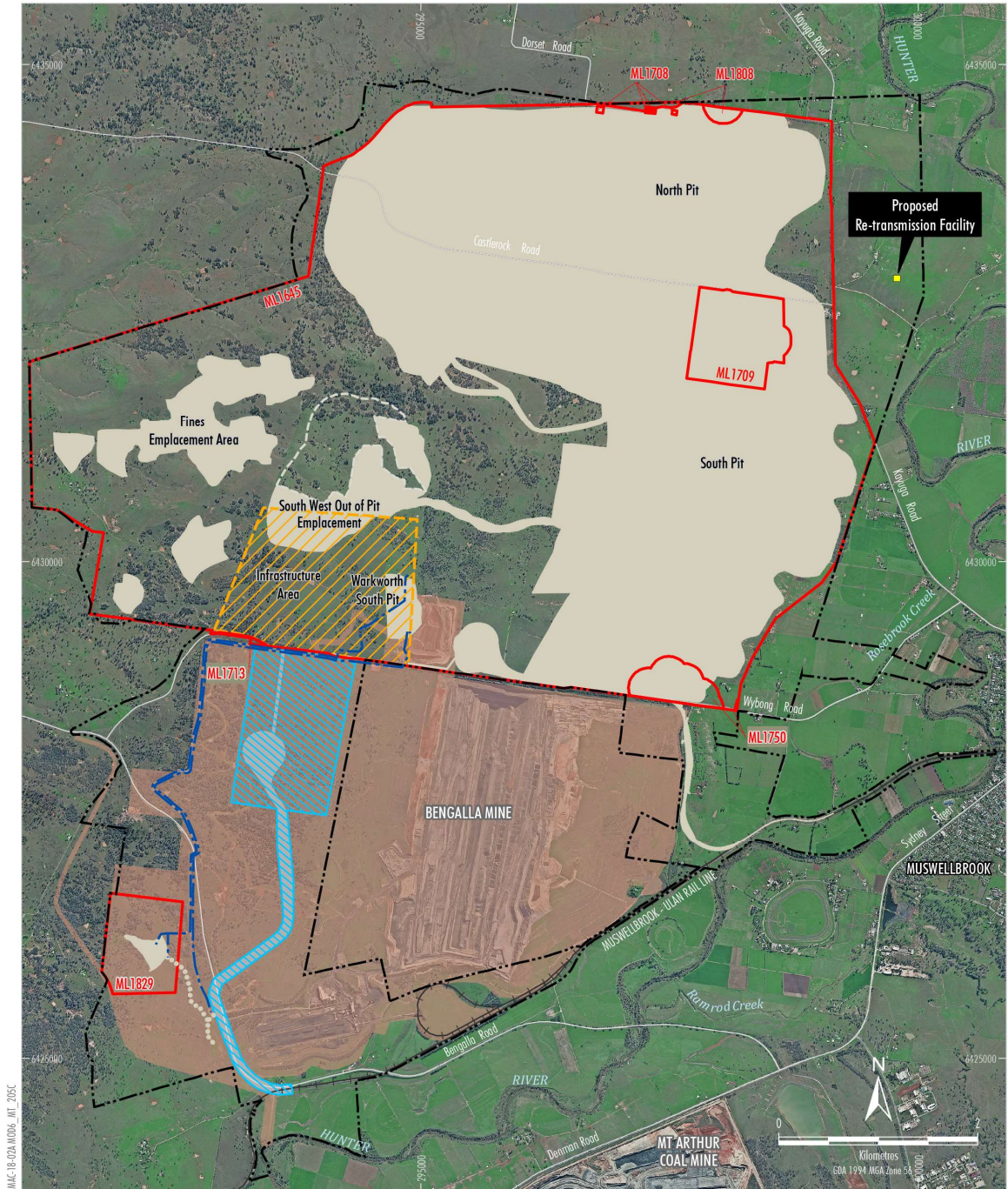
MACHEnergy
MOUNT PLEASANT OPERATION

FIGURE 2 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2025



<p>LEGEND</p> <ul style="list-style-type: none"> Mining Lease Boundary Bengalla Mine Approved Disturbance Boundary (SSD-5170) Infrastructure Area Envelope Active Mining Area Active Overburden Emplacement Area Topsoil Stockpile Initial Rehabilitation Established Rehabilitation Infrastructure and Borrow/Stockpile Area Access Road Northern Link Road 	<p>Indicative Water Pipeline Alignment</p> <ul style="list-style-type: none"> MPO Hunter River Supply Pipeline MPO DW1 Pipeline (Bi-directional) Bengalla Mine CW1 Pipeline Approximate Extent of Scour Protection Water Dam Fines Emplacement Area 	<p>Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); MACH Energy (2018)</p> <p>MACHEnergy MOUNT PLEASANT OPERATION</p>
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FIGURE 3 - APPROVED SURFACE DISTURBANCE PLAN



MAC-18-02A-MOD6_Mt_205C

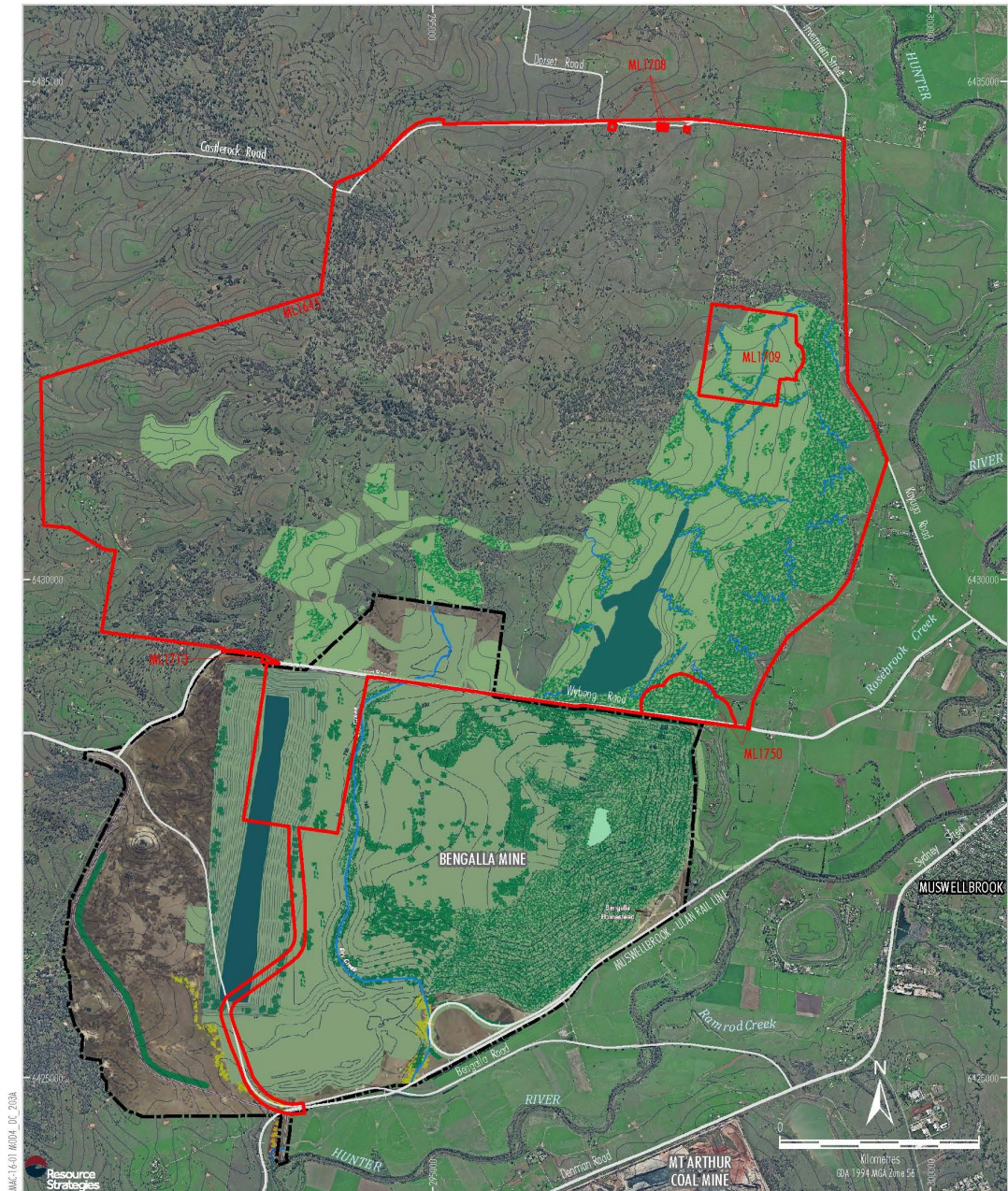
- LEGEND**
- Development Consent Boundary (DA 92/97)
 - Mining Lease Boundary
 - Approximate Extent of Approved Surface Development ¹
 - Indicative Water Pipeline Alignment
 - Area Relinquished for Overburden Emplacement and Major Infrastructure
 - Infrastructure Area Envelope
 - Infrastructure to be removed under the Terms of Condition 37, Schedule 3
 - Indicative Existing Coal Transport Infrastructure
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

NOTE
 1. Excludes some project components such as water management infrastructure, infrastructure within the Infrastructure Area Envelope, offsite coal transport infrastructure, road diversions, access tracks, topsoil stockpiles, power supply, temporary offices, signalling, other ancillary works and construction disturbance.

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2018); Department of Planning and Environment (2016); MACH Energy (2017)
 Orthophoto: MACH Energy (Aug 2016)

MACHEnergy
 MOUNT PLEASANT OPERATION
 Revised Approved Surface Disturbance Plan

FIGURE 4 - CONCEPTUAL FINAL LANDFORM



- Resource Strategies
- LEGEND**
- Mt Pleasant Mining Lease Boundary
 - Final Void
 - Final Rehabilitation
 - Bengalla Mine Conceptual Final Landform *
 - Project Boundary (Appendix 2 of Development Consent SSD-5170) (Dated 23 December 2016)
 - Dry Creek
 - Final Void Lake
 - Rehabilitation
 - Rehabilitation Class III
 - Indicative Tree Screens (or equivalent)
 - Treed Rehabilitation
 - Indicative Restorative Area
- * Digitised from Appendix 9 of Development Consent (SSD-5170) and amended in the Mount Pleasant Operation (HPP) area.

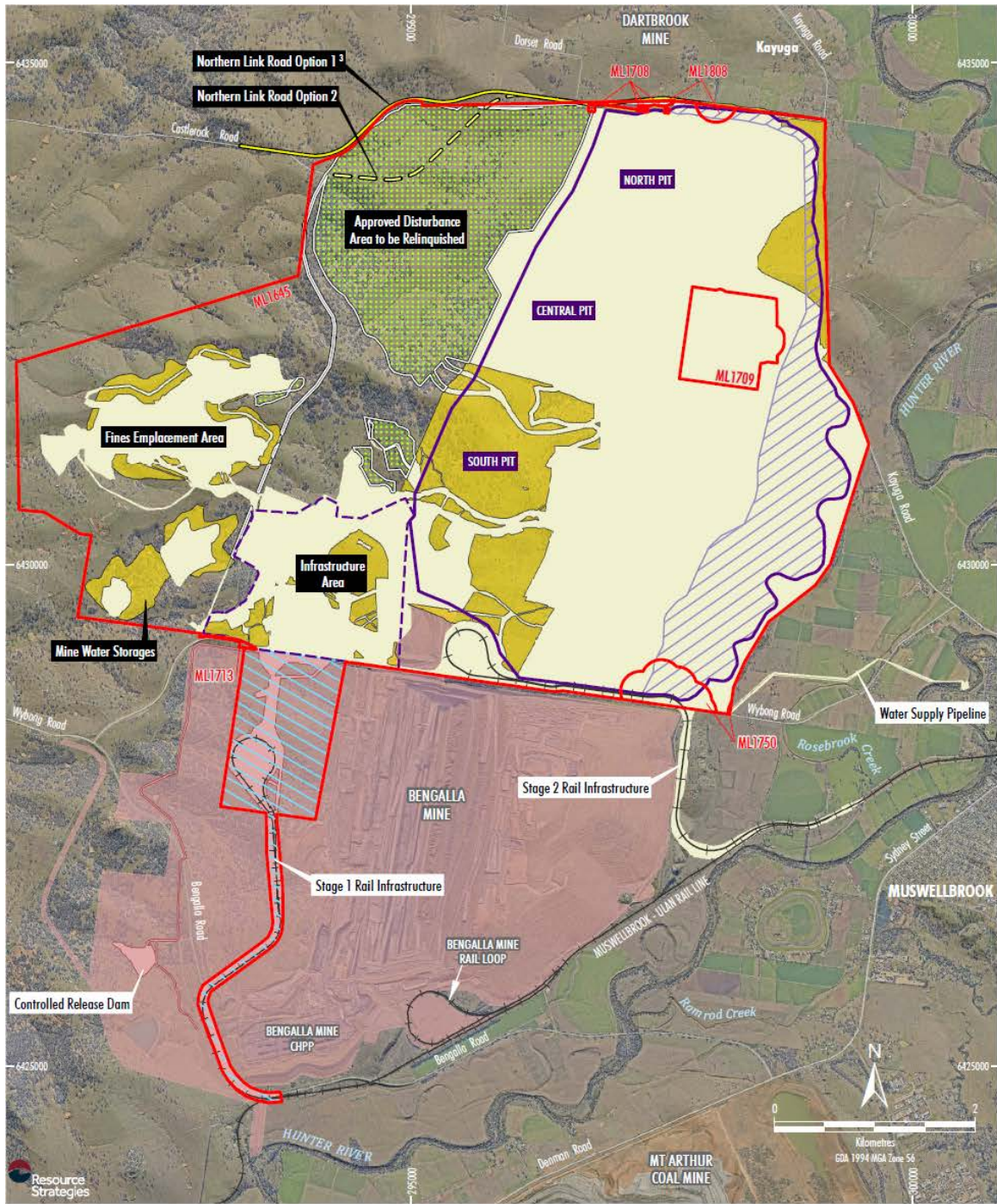
Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); Department of Planning and Environment (2016); MACH Energy (2017)
 Orthophoto: MACH Energy (Aug 2016)

MACHEnergy
 MOUNT PLEASANT OPERATION
 Conceptual Final Landform
 (2026)

ATTACHMENT 2

APPENDIX 2 OF DEVELOPMENT CONSENT SSD 10418

APPENDIX 2 DEVELOPMENT LAYOUT PLANS



- LEGEND**
- Existing Mine Elements**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Project Continuation of Existing/Approved Surface Development (DA92/97) ¹
 - Infrastructure to be removed under the Terms of Condition 37, Schedule 3 (DA92/97)
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) ¹
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished ²
 - Approximate Additional Disturbance of Project Extensions ¹
 - Northern Link Road Option 1 Centreline ³
 - Northern Link Road Option 2 Centreline
 - Approximate Extent of Project Open Cut and Waste Rock Placement Landforms
 - Approximate Extent of Project Out-of-Pit Waste Employment
 - Revised Infrastructure Area Envelope

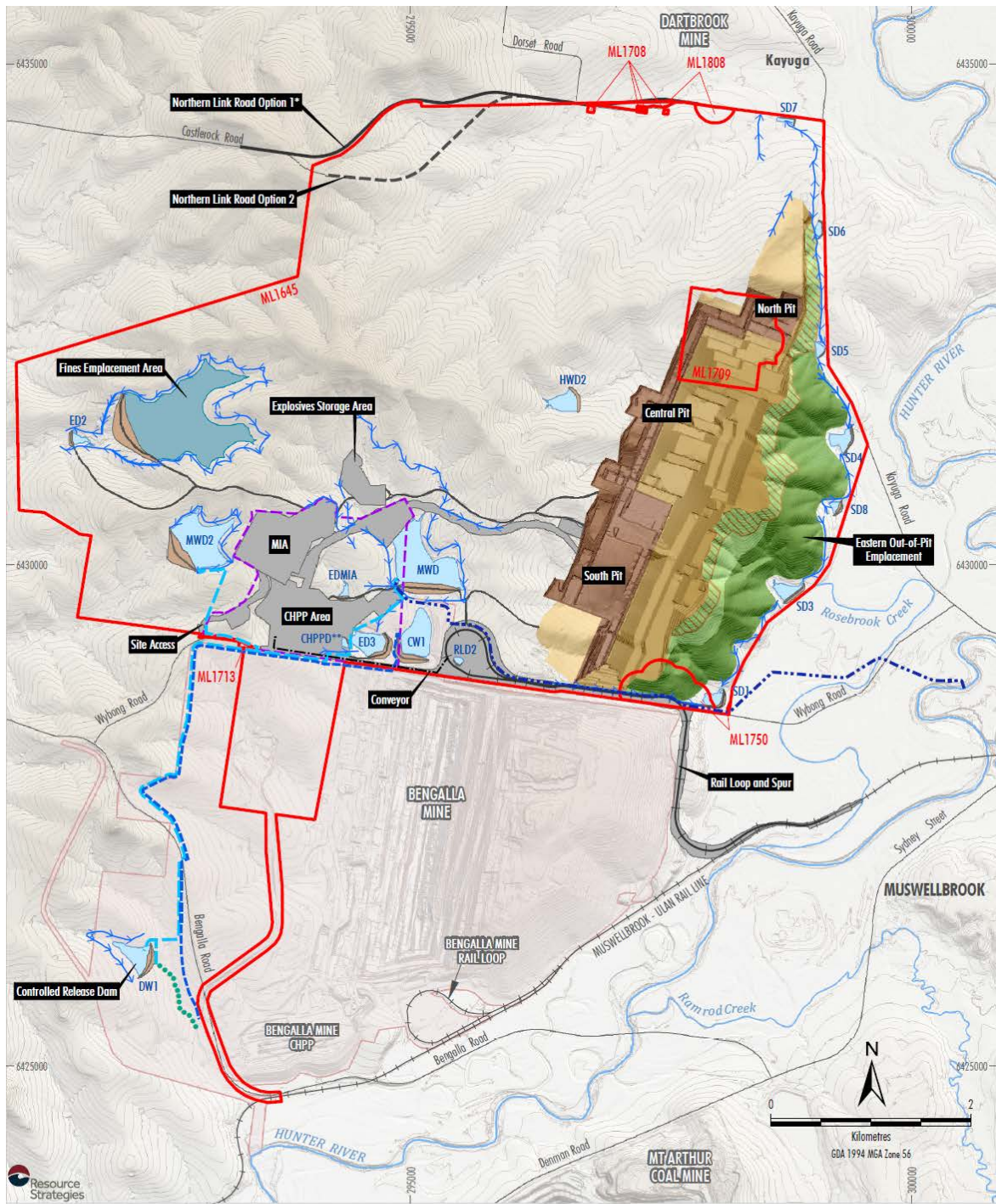
- NOTES**
1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
 2. Subject to detailed design of Northern Link Road alignment.
 3. Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020); Department of Planning and Environment (2016) Orthophoto: MACH (2020)

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 General Arrangement of the Project

Figure 3-1

Figure 1: General Project Arrangement



Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

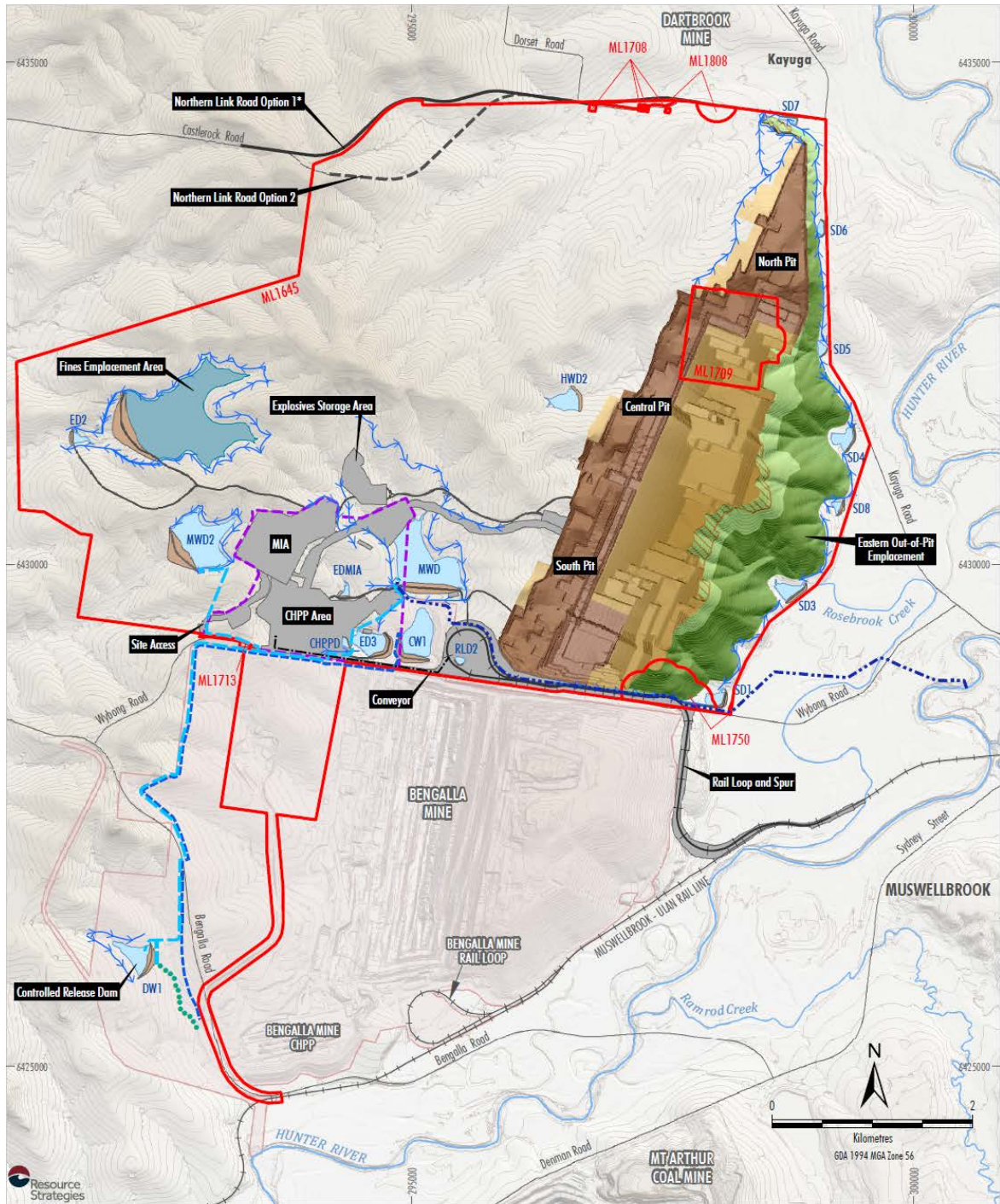
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection
- Indicative Water Pipeline Alignment
- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.
 ** Coal Handling and Preparation Plant Dam.

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2026

Figure 3-4

Figure 2: General Project Arrangement – 2026



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - ▭ Fines Emplacement Area
 - ▭ Water Dam
 - ⋯ Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline

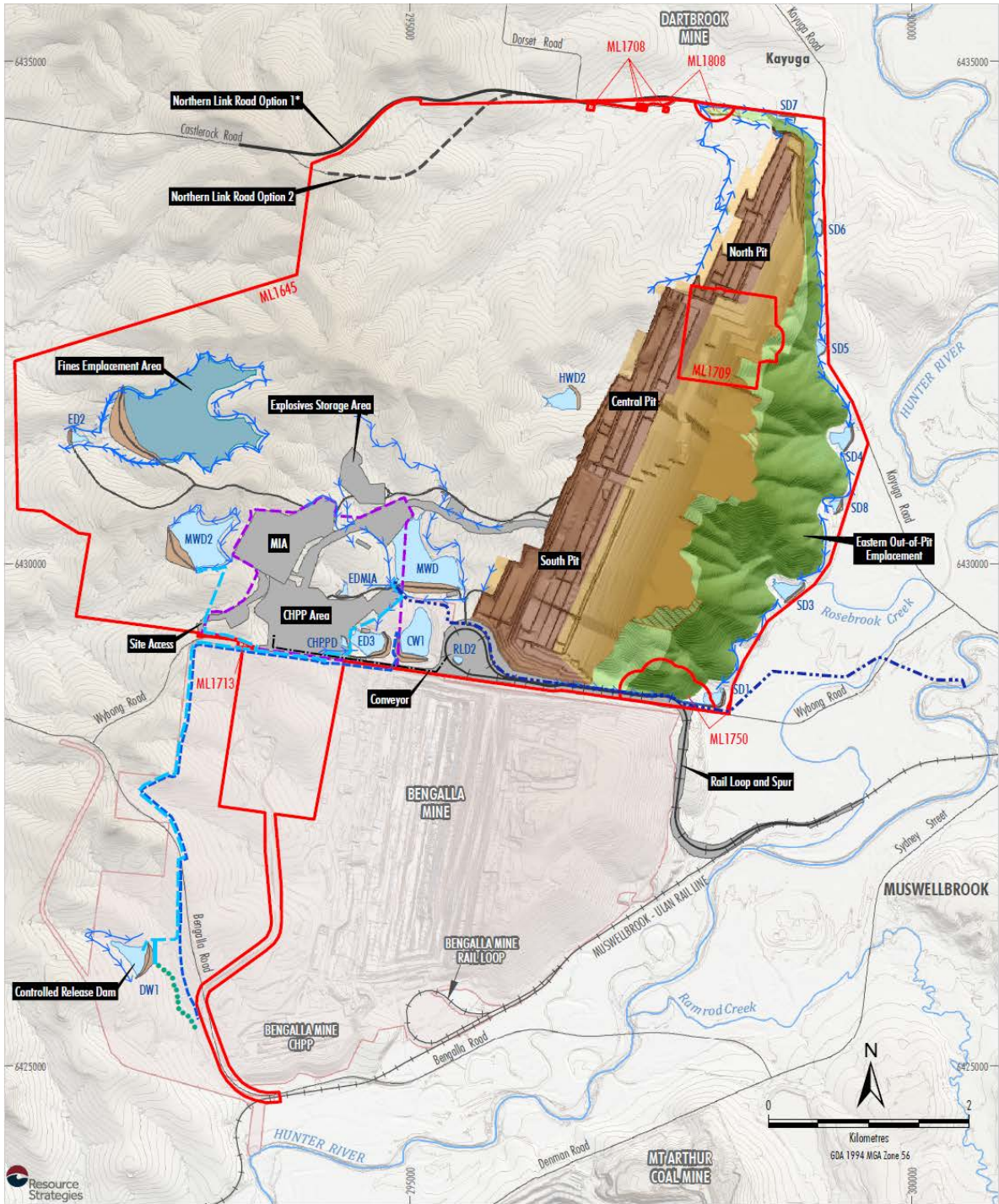
* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2028

Figure 3-5

Figure 3: General Project Arrangement – 2028



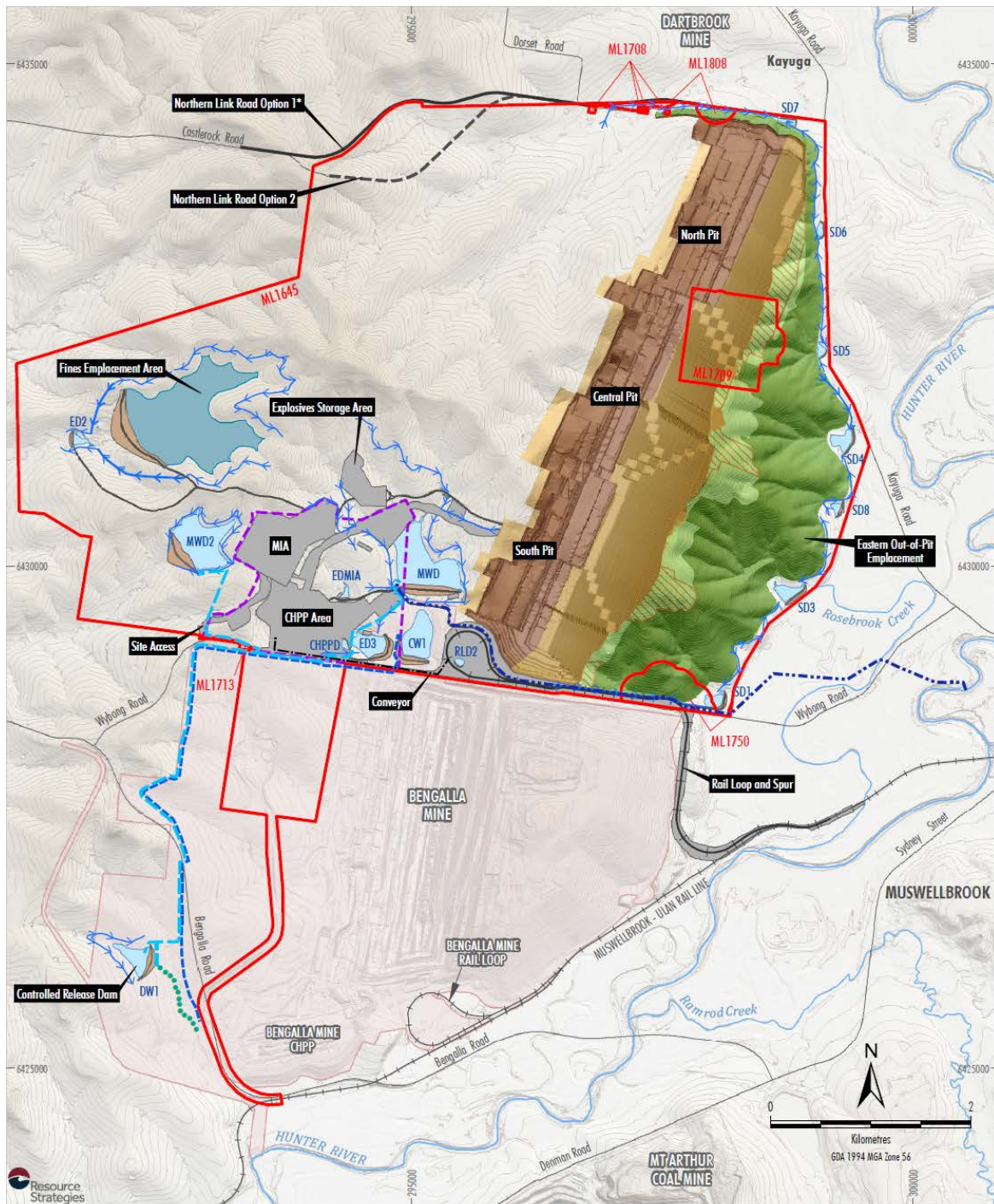
Source: MACH (2020); NSW Spatial Services (2020)

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline
- * Preferred alignment subject to landholder access.

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2031

Figure 3-6

Figure 4: General Project Arrangement - 2031



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - - - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - - - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline

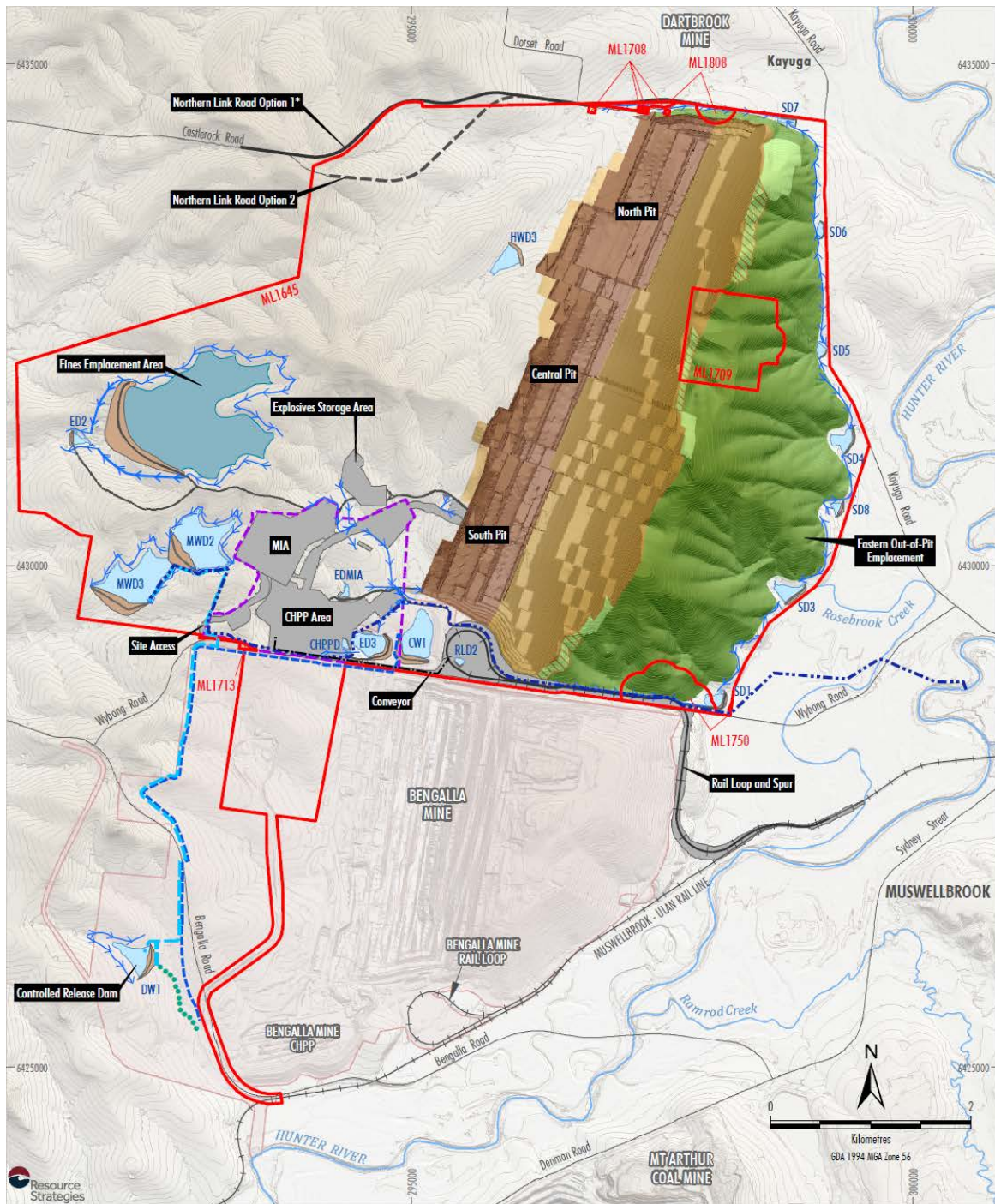
* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2034

Figure 3-7

Figure 5: General Project Arrangement - 2034



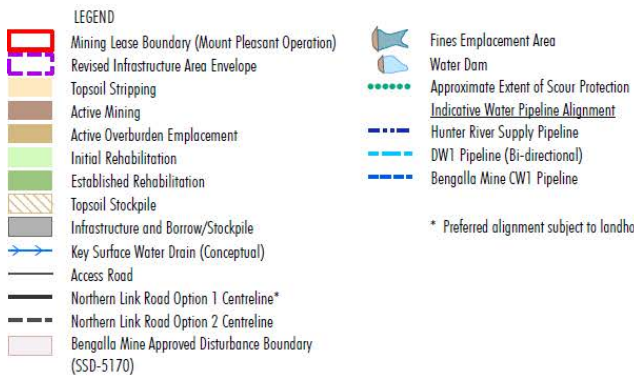
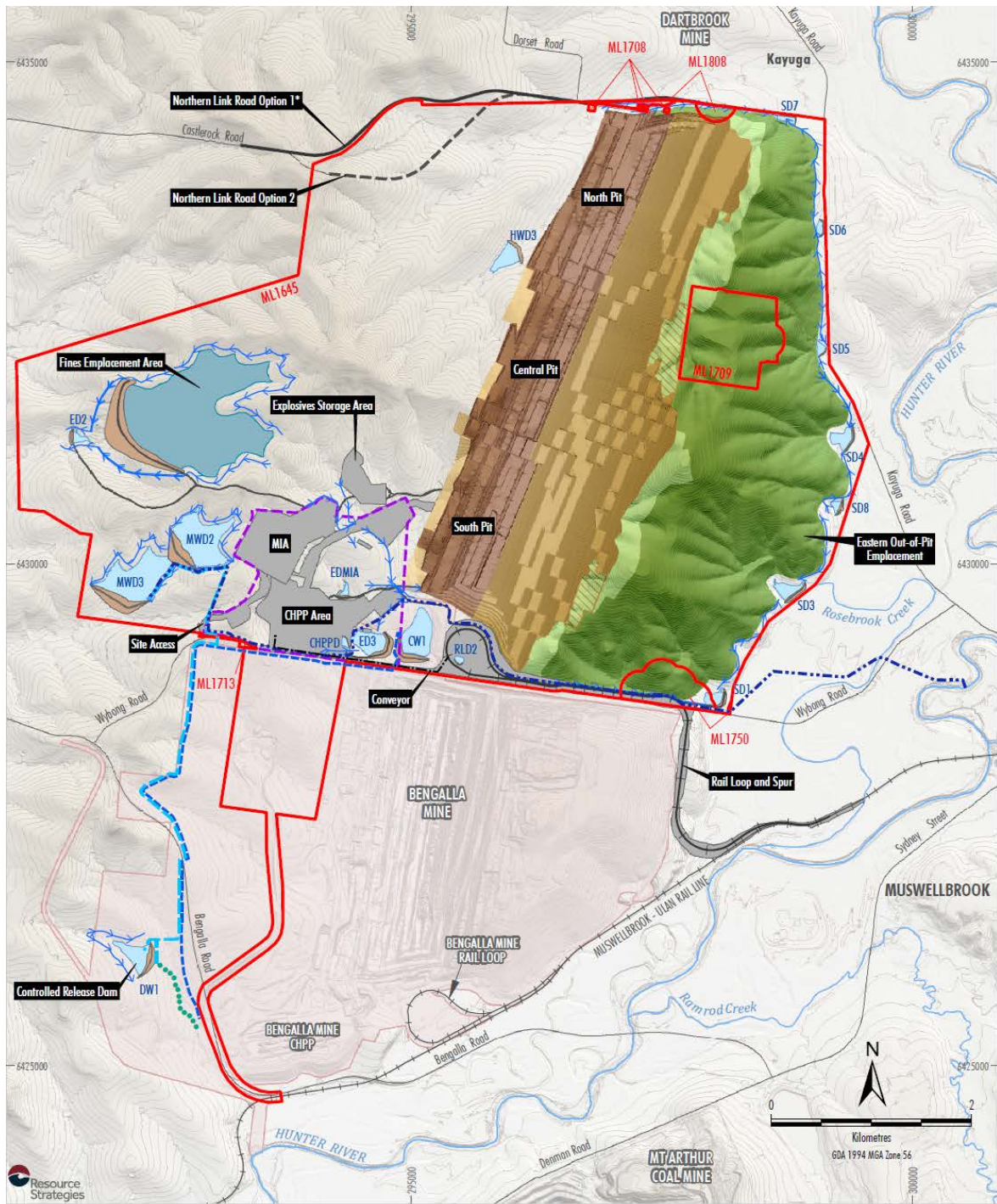
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface Water Drain (Conceptual)
 - Access Road
 - Northern Link Road Option 1 Centreline*
 - Northern Link Road Option 2 Centreline
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Fines Emplacement Area
 - Water Dam
 - Approximate Extent of Scour Protection
 - Indicative Water Pipeline Alignment
 - Hunter River Supply Pipeline
 - DW1 Pipeline (Bi-directional)
 - Bengalla Mine CW1 Pipeline
- * Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2041

Figure 3-8

Figure 6: General Project Arrangement - 2041



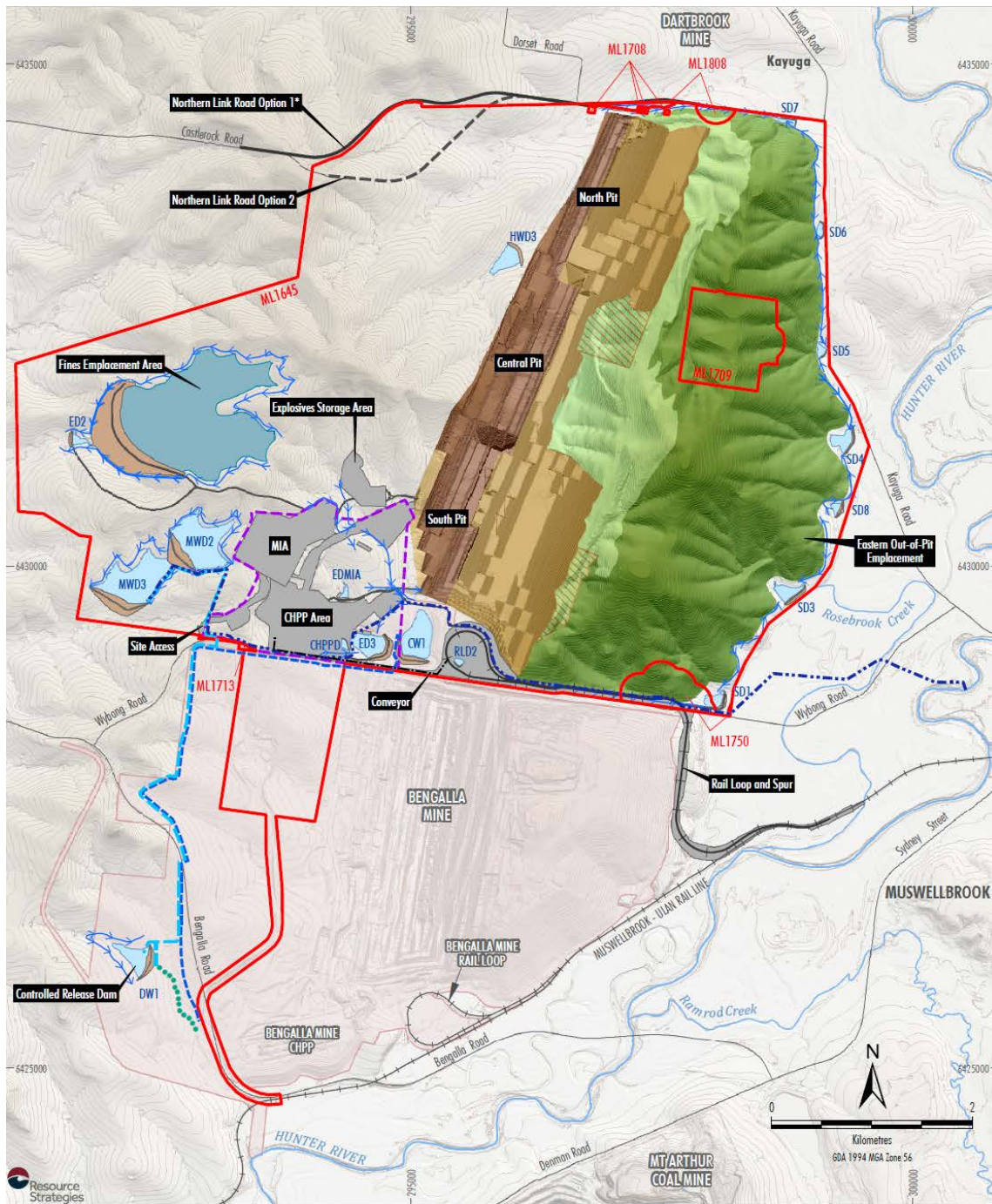
* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2044

Figure 3-9

Figure 7: General Project Arrangement - 2044



Source: MACH (2020); NSW Spatial Services (2020)



MACHEnergy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Provisional General Arrangement
 2047

Figure 3-10

Figure 8: General Project Arrangement – 2047

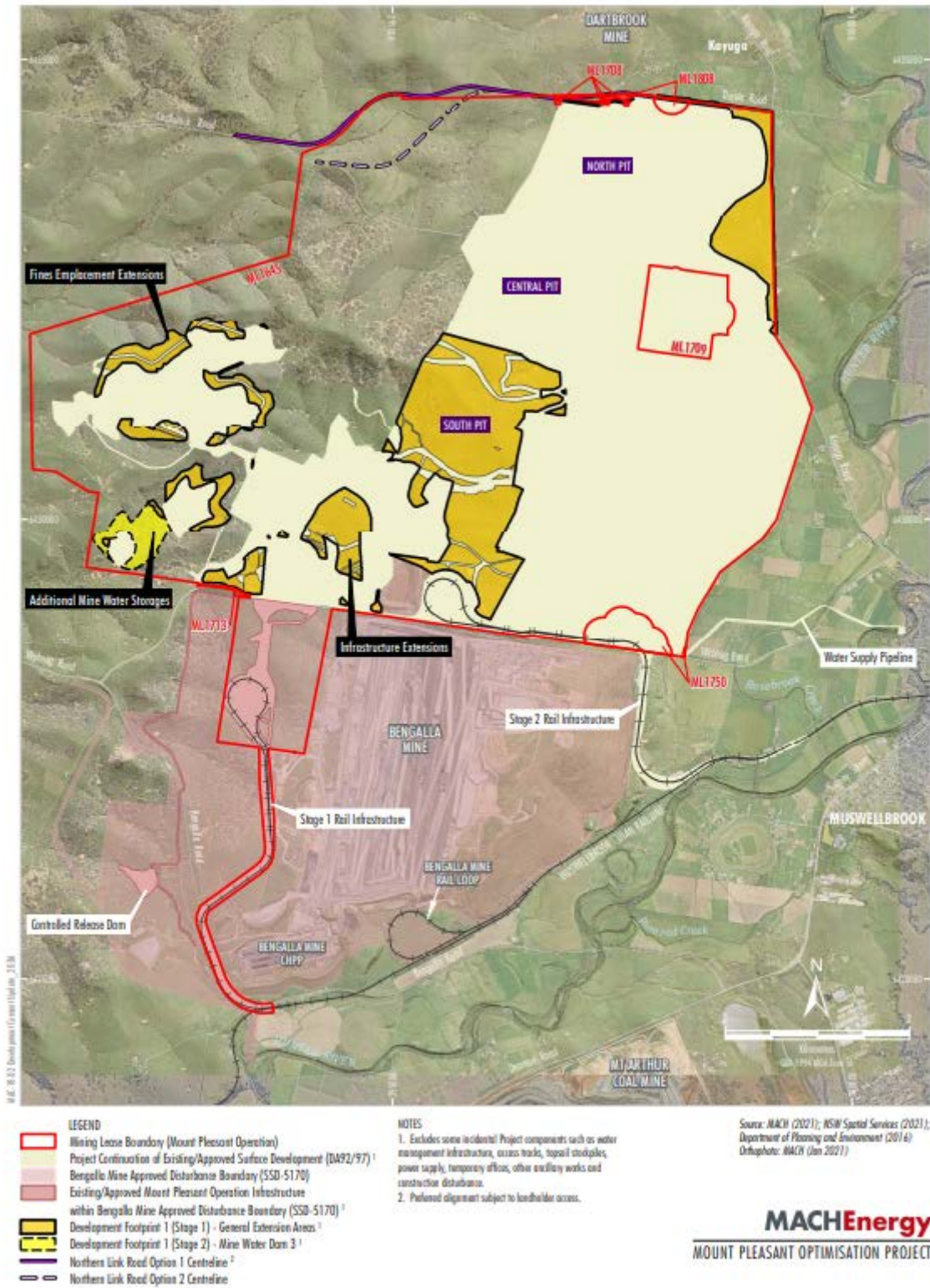
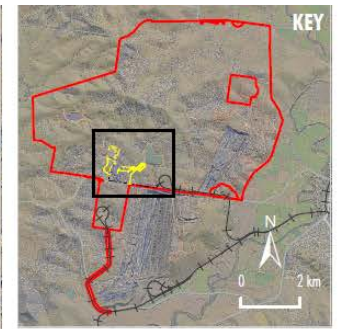
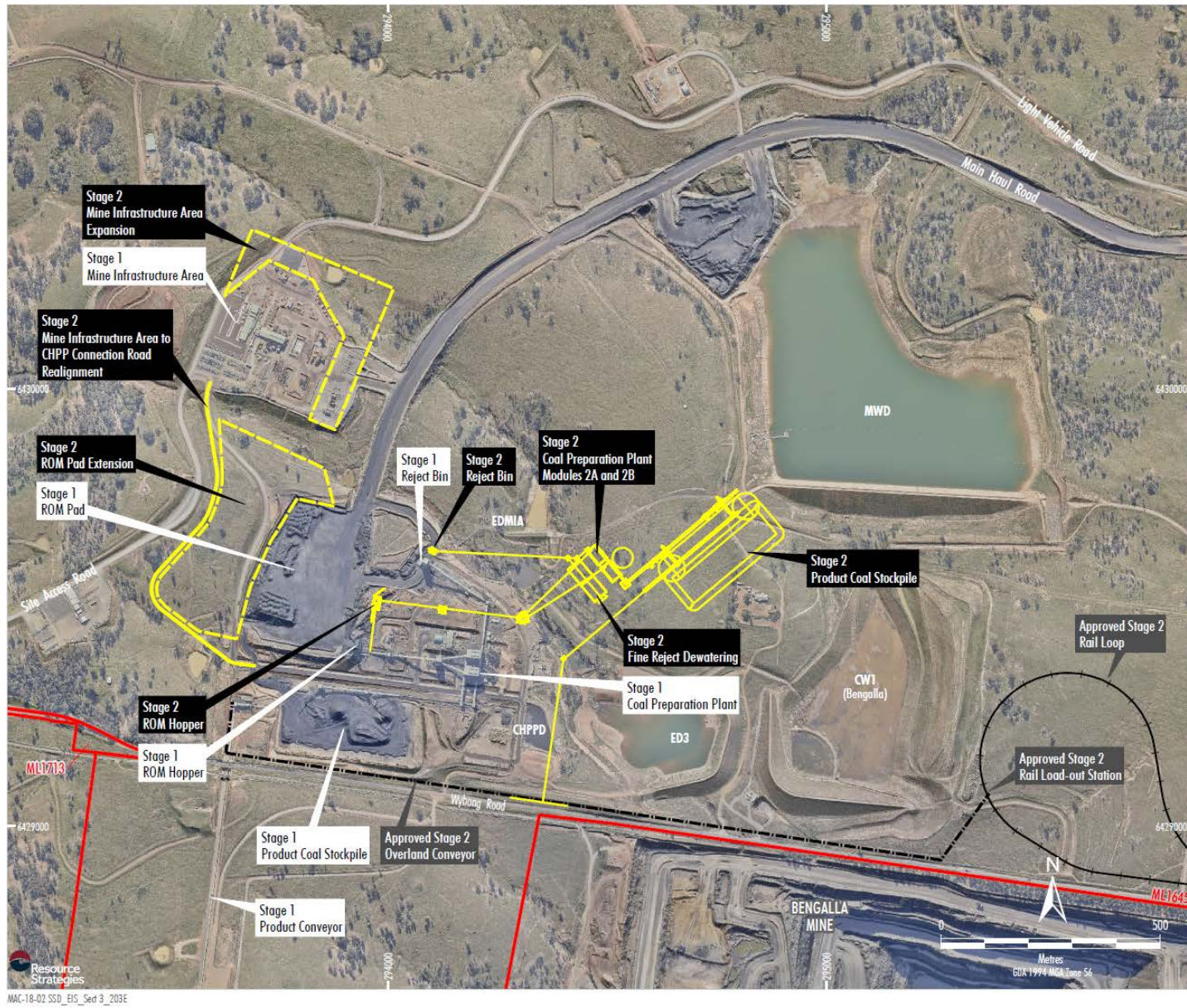


Figure 9: Staging of Project Disturbance Areas



LEGEND
 Mining Lease Boundary (Mount Pleasant Operation)

Source: MACH (2020); NSW Spatial Services (2020)
 Orthophoto: MACH (July 2020)

MACH Energy
 MOUNT PLEASANT OPTIMISATION PROJECT
 Indicative Materials Handling and Mine Infrastructure Area Layout

Figure 3-12

Figure 10: Indicative Mine Infrastructure Area Layout

APPENDIX A
CONSULTEE FEEDBACK – KEY CORRESPONDENCE

Enquiries
Please ask for Tracy Ward
Direct 02 6549 3700
Our reference CM 24/69201

07 November 2024

Andrew Reid
Superintendent – Environment Operations
MACH Energy

Dear Mr Reid,

Reference is made to 'Mount Pleasant Operation (SSD 10418) – Visual Impact Management Plan (Version 4)' (VIMP). The VIMP and consultation with Council is required under Condition B77 of SSD 10418.

Council Staff appreciate the opportunity to provide feedback on the VIMP and its comments are as follows:

- Staff request that timings are added to visual bund inspections and suggest that these be undertaken on a bi-annual basis.
- A target date for the completion of any remediation works for failing rehabilitation should be included.
- There appears to be a typographical error in Table 6 in reference to screen plantings being at sufficient density to assist with screening of mine equipment. The table states this is shown in Figure 11, staff believe this should be Figure 12.
- Staff note the following 'Camera installations are ongoing with the electrical team and have commenced being installed this year with a camera at the corner of Kayuga and Wybong Road. A camera is planned to be installed at 417 Wybong Road (MACH Energy -owned property) this year'.

Should you need to discuss the above, please contact Tracy Ward (Sustainability Officer) on 02 6549 3700 or email council@muswellbrook.nsw.gov.au.

Yours faithfully



Theresa Folpp
Environmental Planning Officer

Mount Pleasant Operation – Visual Impact Management Plan (SSD 10418) – Muswellbrook Shire Council

Consultation Details	Comment Received from Muswellbrook Shire Council	Relevant Section in the VIMP	MACH Energy Response
Tracy Ward – Sustainability Officer (MSC) – 7 November 2024	Staff request that timings are added to visual bund inspections and suggest that these be undertaken on a bi-annual basis.	Section 6 (Table 8)	Table 8 has been updated to include timing of visual bund inspections.
	A target date for the completion of any remediation works for failing rehabilitation should be included.	Section 6 (Table 8)	Table 4 has been updated to include ‘Progressive rehabilitation’ as a performance criterion. Additionally this has been linked to Table 8, which has been updated to include reference to the existing monitoring undertaken to manage rehabilitation at the MPO under the MPO Rehabilitation Management Plan . To note, target dates for completing deficient rehabilitation will align with the Rehabilitation Trigger Action Response Plans which are detailed in the MPO Rehabilitation Management Plan (and Rehabilitation Monitoring Manual), depending on the severity.
	There appears to be a typographical error in Table 6 in reference to screen plantings being at sufficient density to assist with screening of mine equipment. The table states this is shown in Figure 11, staff believe this should be Figure 12.	Section 4 (Table 6)	Table 6 has been updated to correctly reference Figure 12.
	Staff note the following ‘Camera installations are ongoing with the electrical team and have commenced being installed this year with a camera at the corner of Kayuga and Wybong Road. A camera is planned to be installed at 417 Wybong Road (MACH Energy -owned property) this year’.	-	Noted.

MSC consultation from Version 3 (Development Consent DA 92/97)

From: [Andrew Reid](#)
To: project1@machenergy.in.consultationmanager-preview.com
Cc: [Chris Masters](#); [Mariah Lane](#)
Subject: Fw: Mount Pleasant Operation - Revised Draft VIMP
Date: Thursday, 5 May 2022 5:05:05 PM
Attachments: [image001.png](#)
[Outlook-v4s4lfix.png](#)
[Outlook-0ojirtxb.png](#)

Consultation Record

From: Andrew Reid <Andrew.Reid@machenergy.com.au>
Sent: Thursday, May 5, 2022 5:03 PM
To: Sharon Pope (Sharon.Pope@muswellbrook.nsw.gov.au)
<Sharon.Pope@muswellbrook.nsw.gov.au>
Cc: Richard Bailey <Richard.Bailey@machenergy.com.au>
Subject: Fw: Mount Pleasant Operation - Revised Draft VIMP

Dear Sharon,

Further to my email to you on 25 February 2022, we have now completed a study to assess the visual impact of trains travelling at night along the new spur rail and conducted a quantitative lighting audit of the Mount Pleasant Operation.

Visual screening of the rail infrastructure, and specifically the headlight beam emanating from the locomotives as they enter and depart the new train loadout, was identified early in the approvals process as needing mitigation. A visual assessment prepared by Van Pelt & Allen (VPA) Visual Planning and Assessment (2018) as part of the MOD 4 approval identified the trains' headlights as a visual impact to Muswellbrook. The visual assessment also recommended screen structures as the preferred method of mitigating the impacts.

Subsequent studies by AECOM (2020) provided a technical analysis based on a theoretical beam of light from the locomotive's position on the track. These studies determined the final locations and extents of the constructed screens.

MACH has now undertaken a peer review of the as-built design and recreated the technical analysis done by AECOM. This was done by creating longitudinal sections along the path of the headlight beam. The study confirmed the findings of the analysis by AECOM. Based on a headlight beam of 4.2 m above and parallel to the track, the embankments and constructed screens contained the direct light spill from the train.

Furthermore, a night-time site audit was undertaken during one of the first night train loading operations in March 2022 to verify the theoretical studies and examine the direct and indirect light spill to external receptors. This quantitative assessment followed a sitewide lighting and visual impact assessment supporting the VIMP review and found that illuminance at all viewpoints were within the allowable criteria set out by AS 4282, therefore off-site lighting impacts originating from MPO are deemed to be compliant with Schedule 3 Condition 45(c) of DA 92/97 MOD4.

There are three areas that require tree planting to strengthen the screening, especially around the edges of the constructed screens. Planting of tree screens has commenced, and will continue into the spring tree planting campaign in September 2022. Since the commencement of night train operations in March 2022 there have been more than 60 train loading operations at night with zero calls/complaints received at MPO. Complaints can be made directly to site via the Community Hotline 24 hours a day, 7 days a week on 1800 886 889 or via the website on info@machenergyaustralia.com.au. The hotline number is available on the MACH Energy website, the MACH Energy Community newsletter and advertisements in local media.

The revised Visual impact Management Plan (VIMP) is being submitted via the DPIE portal this week. In accordance with Condition 47, Schedule 3 of Development Consent DA 92/97, the Muswellbrook Shire Council is a relevant consultee for the VIMP. Accordingly, it would be greatly appreciated if the MSC could provide confirmation of the consultation via return email or via the portal response in relation to this review.

A copy of the Mount Pleasant Operation Lighting Audit is available on request.

Do not hesitate to contact me if you have any questions.

Kind Regards,

Andrew

ANDREW REID

SUPERINTENDENT ENVIRONMENT (OPERATIONS)

Mount Pleasant Operation

Andrew.Reid@machenergy.com.au

+61 411 440 912

 Mount Pleasant Operation Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873	 <p>www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441</p>			
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From: Andrew Reid <Andrew.Reid@machenergy.com.au>

Sent: Tuesday, March 8, 2022 1:01 PM

To: Sharon Pope (Sharon.Pope@muswellbrook.nsw.gov.au)
<Sharon.Pope@muswellbrook.nsw.gov.au>

Cc: Richard Bailey <Richard.Bailey@machenergy.com.au>
Subject: Re: Mount Pleasant Operation - Revised Draft VIMP

Hi Sharon,

Further to my email last month, MACH are continuing to progress the rail commissioning.

Rail loading/calibration activities are continuing during the day, however we have not yet had a night train on the track to assess night-time lighting and noise impacts.

I will keep you advised of the outcomes and any changes to the draft VIMP, if any as soon as they become available.

Any questions let me know.

Kind Regards,

Andrew

ANDREW REID

SUPERINTENDENT ENVIRONMENT (OPERATIONS)

Mount Pleasant Operation

Andrew.Reid@machenergy.com.au

+61 411 440 912

<p>www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441</p>	<p>MACHEnergy Mount Pleasant Operation Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873</p>			
<p> Accountability</p>	<p> Respect</p>	<p> Integrity</p>	<p> Care</p>	<p> Delivery</p>

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From: Andrew Reid <Andrew.Reid@machenergy.com.au>
Sent: Friday, February 25, 2022 1:14 PM
To: Sharon Pope (Sharon.Pope@muswellbrook.nsw.gov.au)
<Sharon.Pope@muswellbrook.nsw.gov.au>
Cc: Richard Bailey <Richard.Bailey@machenergy.com.au>
Subject: Fw: Mount Pleasant Operation - Revised Draft VIMP

Hi Sharon,

As discussed, please find attached the draft Mount Pleasant Operation (MPO) Visual Impact

Management Plan (VIMP) for the Muswellbrook Shire Council's review.

The VIMP has been updated to include additional details regarding visual impact management measures relevant to MOD 4 rail infrastructure following completion of detailed design and approval of the Construction Environmental Management Plan.

The key updates made to the revised VIMP, compared to the previously approved version, include the following:

- Updated Section 5.5.6 to include details regarding screening of the MOD 4 rail infrastructure.
- Updated Figure 5 to show the established ground level headlight screens and the new screen planting.
- Updated Table 5 to update the materials used for the ground level headlight screen.
- Updated Section 8.2 to update the VIMP revision commitment (i.e. review following the final rail engineering and lighting audits, rather than following completion of a detailed design and approval of the CEMP).
- Updated Section 5.4 to also refer to structures, including ancillary infrastructure.
- Added reference to the existing screen planting along MPO controlled land immediately east of the Eastern Out of Pit Emplacement and within ML 1645 in Section 3.2.
- Updated Sections 2.1 and 2.2 to revise the description of the current VIMP.
 - Added brief discussion regarding the unincorporated Mount Pleasant Joint Venture in Section 1,

Please note that MACH Energy is in the process of undertaking light audits as part of the commissioning of the relocated rail infrastructure. The VIMP will be reviewed and revised (if necessary) to include any additional light management that may be proposed and installed as a result of the audit. The final draft of the VIMP will be sent to you for the purpose of consultation following the completion of the audits and subsequent review of the plan.

In the meantime, please do not hesitate to contact me with any queries you may have regarding the current draft.

Kind Regards,

Andrew

ANDREW REID

SUPERINTENDENT ENVIRONMENT (OPERATIONS)

Mount Pleasant Operation

Andrew.Reid@machenergy.com.au

[+61 411 440 912](tel:+61411440912)

 <p>www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441</p>	<p>MACHEnergy Mount Pleasant Operation</p> <p>Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873</p>			
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From: [Chris Masters](#)
To: [Theresa Folpp](#)
Cc: [Mariah Lane](#)
Subject: RE: 2021 VIMP monitoring and treatments
Date: Friday, 13 May 2022 4:13:00 PM
Attachments: [image001.png](#)

Hi Theresa,

Apologies for the delay I have been on leave and now off sick.

I will be back online on Monday to discuss all things VIMP and I can send you the below.

Could you please give me a call on my mobile Monday morning anytime that suits you outside of 11-12 ?

Thanks,

CHRIS MASTERS
SENIOR ENVIRONMENTAL ADVISOR
Mount Pleasant Operation
chris.masters@machenergy.com.au
m: +614 39 130 527

 Mount Pleasant Operation Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873	www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441			
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From: Theresa Folpp <Theresa.Folpp@muswellbrook.nsw.gov.au>
Sent: Friday, 6 May 2022 10:27 AM
To: Chris Masters <Chris.Masters@machenergy.com.au>
Subject: 2021 VIMP monitoring and treatments

Hi Chris,

I am in the process of reviewing the MPO Visual Impact Management Plan and was wondering if you could provide the Annual Review summary of any visual / landscape monitoring or treatments / associated activities that occurred in 2021?

Just trying to get an idea of the types of work that has been undertaken to date.

Regards,

Theresa

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Muswellbrook Shire Council ABN 86 864 180 944

Enquiries
Please ask for Theresa Folpp
Direct 02 6549 3700
Our Ref MTP MOD4

18 May 2022

Chris Masters
Senior Environmental Advisor
MACH Energy Australia Pty Ltd

Dear Chris

Mount Pleasant Operation Visual Impact Management Plan (VIMP)
Muswellbrook Shire Council comments on VIMP

Reference is made to the following:

- Mount Pleasant Operation Visual Impact Management Plan (MACH, 2022) (VIMP)
- Request to provide advice on the VIMP submitted to Council via Major Projects Portal

The VIMP has been prepared to satisfy the requirements under Development Consent DA 92/97 and specifically Condition 47, Schedule 3.

The current version of the VIMP (dated 2022) has been prepared to include additional details regarding visual impact management measures relevant to MOD4 rail infrastructure. Key updates compared to the previously approved version, include:

- Section 5.5.6 - includes detail regarding screening of rail infrastructure;
- Figure 5 - shows established ground level headlight screens and new screen planting;
- Table 5 - shows material used for the ground level headlight screen;
- Section 8.2 - update revision commitment (i.e. review following the final rail engineering and lighting audits, rather than following completion of a detailed design and approval of the CEMP);
- Section 5.4 - reference to structures, including ancillary infrastructure;
- Section 3.2 - reference to existing screen planting along MPO controlled land immediately east of the Eastern Out of Pit Emplacement within ML 1645;
- Sections 2.1 - revise VIMP description; and
- Section 1 - brief discussion on the unincorporated Mount Pleasant Joint Venture.

Council staff comments are provided in the table below.

Council staff appreciates the opportunity to comment and would be pleased to provide additional information if requested. Should you need to discuss the above, please contact Theresa Folpp, Development Compliance Officer on 02 6549 3700 or email council@muswellbrook.nsw.gov.au.

Yours faithfully



Theresa Folpp
Development Compliance Officer

Table 1: Visual Impact Management Plan - Matters raised by Muswellbrook Shire Council

Ref	Matter Detail
1	<p>Clarify timing for when visual treatments (proposed bund/screen plantings) shown in Figure 5 and described in KPI's (Table 3) will be complete. The timing of completion is not clear in the VIMP or Rehabilitation Management Plan (RMP). Table 2 in the RMP states that "visual screens comprising mounding or bunding are established as per the VIMP....in Landform Establishment Phase". The MOP Plans do not include the bund/screen plantings shown in Figure 5 of the VIMP. Clarification could include a description that quarterly inspections inform infill and reporting of status in the Annual Review / associated tracking against the targets and KPIs in Table 3 of the VIMP and reporting in the Annual Review.</p>
Confirmation required for Council records	
1	<p>Confirm process for closing out each of the EMM (2022) Lighting Audit recommendations (shown below) in the VIMP i.e will the VIMP be updated to address / close out outstanding recommendations once stakeholders and engineers have provided a response.</p> <ul style="list-style-type: none"> • Tree plantings in three locations; • Verify duration of trains in that location with train operation plans; • Verify the intensity of the headlight spill within Muswellbrook <ul style="list-style-type: none"> ○ Visually verify how much light is visible from Muswellbrook during night operation; and ○ Measure light during train operation at night. • Consult with Council representatives to discuss the potential/real light visibility after site verification; and • Potentially require train operators to dim headlight while trains are on the rail spur.
2	<p>Continue to progress recommendations from the 2020 Independent Environmental Audit regarding installation of a camera facing operation for use by MACH and contractors to assist in visual complaints.</p>
3	<p>Corner of Wybong and Kayuga Roads – proposed intersection upgrades to be confirmed (see email from Chris Lauritzen and Richard Finlay-Jones dated 18/05/22).</p>
4	<p>Provide figures showing cross sections, topography and screening for section 7,8,9 and 13 of rail line, consistent with Attachment B Figure 5.2 of EMM (2022) Lighting Audit.</p>

1 June 2022

Muswellbrook Shire Council
Campbell's Corner 60 – 82 Bridge Street,
Muswellbrook NSW 2333

Attention: Theresa Folpp – Development Compliance Officer
Via Theresa.Folpp@muswellbrook.nsw.gov.au

Dear Theresa,

RE: Muswellbrook Shire Council (MSC) comments on the Mount Pleasant Operation (MPO) Visual Impact Management Plan (VIMP)

We refer to the Muswellbrook Shire Council (**MSC**) letter received on 18 May 2022 following submission of the Visual Impact Management Plan (VIMP) via the Department of Planning and Environment (**DPE**) Major Projects Portal.

MACH Energy's responses to matters raised by MSC are included in **Table 1** of this letter.

Please do not hesitate to contact the undersigned on 0439 130 527 should you wish to further discuss any of these items. If MSC has no other queries or matters, please confirm this via email to chris.masters@machenergy.com.au.

Yours sincerely,



Chris Masters

Senior Environmental Advisor

Table 1: Visual Impact Management Plan - Matters raised by Muswellbrook Shire Council

Ref	Matter Detail	MACH Energy Responses
1	<p>Clarify timing for when visual treatments (proposed bund/screen plantings) shown in Figure 5 and described in KPI's (Table 3) will be complete. The timing of completion is not clear in the VIMP or Rehabilitation Management Plan (RMP). Table 2 in the RMP states that "visual screens comprising mounding or bunding are established as per the VIMP...in Landform Establishment Phase". The MOP Plans do not include the bund/screen plantings shown in Figure 5 of the VIMP. Clarification could include a description that quarterly inspections inform infill and reporting of status in the Annual Review / associated tracking against the targets and KPIs in Table 3 of the VIMP and reporting in the Annual Review.</p>	<p>The majority of the plantings described in the VIMP have either already been planted or are scheduled to be planted in 2022. MACH Energy would be happy to share the status of plantings with MSC on a quarterly or six monthly basis, however has concerns with the VIMP stating the specific timing on the basis of the past 3 years having alternating periods of extreme dry and wet conditions, thus making planting impractical.</p> <p>There are also statutory and safety considerations with the plantings adjacent to the rail spur, which may delay plantings, or at least constrain planting timing opportunities.</p> <p>The planting described in the VIMP is for Visual Impact purposes and not for mining rehabilitation for future relinquishment by the Resources Regulator, and a such is not specifically warranted being included in the MPO Mining Operations Plan (MOP) 2022 – 2023. Please also note that MACH Energy is being transitioned by the Resource Regulator to the new Rehabilitation Management Plan system which has very specific criteria for its figures and plans.</p> <p>MACH Energy agrees with the comments regarding infill plantings. Table 5 of Section 6 in the VIMP documents specifies regarding infill planting monitoring and inspections.</p> <p>MACH Energy also agrees to including additional detail regarding performance of infill planting in future Annual reporting.</p>
	<p>Confirmation required for Council records</p>	<p>MACH Energy Responses</p>
1	<p>Confirm process for closing out each of the EMM (2022) Lighting Audit recommendations (shown below) in the VIMP i.e will the VIMP be updated to address / close out outstanding recommendations once stakeholders and engineers have provided a response.</p> <ul style="list-style-type: none"> • Tree plantings in three locations; • Verify duration of trains in that location with train operation plans; • Verify the intensity of the headlight spill within Muswellbrook <ul style="list-style-type: none"> ○ Visually verify how much light is visible from Muswellbrook during night 	<p>MACH Energy is in the process of working through the recommendations outlined in the internal lighting audit undertaken by EMM as per its commitment to reducing any lighting impacts or emissions where reasonably practicable and maintain compliance with DA 92/97 and Environmental Protection Licence (EPL) 20850. MACH Energy commits to ongoing consultation and dialog with MSC as these recommendations are progressed.</p>

	<p>operation; and</p> <ul style="list-style-type: none"> ○ Measure light during train operation at night. ● Consult with Council representatives to discuss the potential/real light visibility after site verification; and ● Potentially require train operators to dim headlight while trains are on the rail spur. 	
2	<p>Continue to progress recommendations from the 2020 Independent Environmental Audit regarding installation of a camera facing operation for use by MACH and contractors to assist in visual complaints.</p>	<p>Camera installations are ongoing with the electrical team and have commenced being installed this year with a camera at the corner of Kayuga and Wybong Road. A camera is planned to be installed at 417 Wybong Road (MACH Energy -owned property) this year.</p>
3	<p>Corner of Wybong and Kayuga Roads – proposed intersection upgrades to be confirmed (see email from Chris Lauritzen and Richard Finlay-Jones dated 18/05/22).</p>	<p>Correspondence has been received and noted. No action required. Any proposed future tree screen planting in this area will be put on hold until the potential intersection upgrades is resolved. Internal control to prevent planting beyond that of environmental staff being informed is the Ground Disturbance Permit (GDP) Procedure, which requires “Land & Property Team” sign-off. This area is managed by Chris Lauritzen – General Manager Resource Development who supervises the Land & Property Team.</p>
4	<p>Provide figures showing cross sections, topography and screening for section 7,8,9 and 13 of rail line, consistent with Attachment B Figure 5.2 of EMM (2022) Lighting Audit.</p>	<p>The sections mentioned are all along the new rail bridge near where the rail joins the existing Muswellbrook – Ulan rail line. The reason that cross sections at these locations were not included is because the screen wall has already been constructed and is not proposed or conceptual. Based on the locomotive headlight height and the wall design parameters, the existing screen wall blocks light from the locomotive’s headlight. The existing screen wall also extends west along the rail spur to overlap with the natural topography of the hillside to block light as locomotives travels south (from the site to the main line) toward the bridge. To the east (towards Muswellbrook), the existing screen wall extends to a point where the new spur rail is parallel with the existing Muswellbrook – Ulan rail line, and therefore the light from the headlights at this location will travel along the same vector (and elevation) as headlights on the existing main rail line (i.e. no additional impact).</p>

From: [Chris Masters](#)
To: [Theresa Folpp](#)
Cc: [Richard Bailey](#); [Sharon Pope](#)
Subject: RE: MSC Comments on MACH Response re. revised VIMP
Date: Wednesday, 22 June 2022 10:30:00 AM
Attachments: [image001.png](#)

Hi Theresa,

Thanks and yes we will provide the below information in the Annual Review. We will likely provide the photos of the areas in key locations as an Annex in the Annual Review document.

You are also more than welcome to visit the Operation at any time.

Regards,

CHRIS MASTERS
SENIOR ENVIRONMENTAL ADVISOR
Mount Pleasant Operation
chris.masters@machenergy.com.au
m: +614 39 130 527

 <p>www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441</p>	 <p>MACHEnergy Mount Pleasant Operation</p> <p>Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873</p>			
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From: Theresa Folpp <Theresa.Folpp@muswellbrook.nsw.gov.au>
Sent: Wednesday, 22 June 2022 9:58 AM
To: Chris Masters <Chris.Masters@machenergy.com.au>
Cc: Richard Bailey <Richard.Bailey@machenergy.com.au>; Sharon Pope <Sharon.Pope@muswellbrook.nsw.gov.au>
Subject: RE: MSC Comments on MACH Response re. revised VIMP

Hi Chris,

If remaining planting is due to be completed in 2022, and infill planting/monitoring and inspections are to be discussed in the Annual Review, Council staff are happy that this will satisfy the objectives of the VIMP. Council staff look forward to reviewing the additional detail regarding performance of the plantings / infill planting (including monitoring and inspections) in the Annual Review to monitor the progress of the treatments. Could you please include progress photos from key sensitive locations in the Annual Review, or to Council, whichever you prefer?

Other than the abovementioned, Council staff have no further comment.

Please let me know if you require any further information.

Regards,
Theresa

From: Chris Masters <Chris.Masters@machenergy.com.au>
Sent: Wednesday, 1 June 2022 10:29 AM
To: Theresa Folpp <Theresa.Folpp@muswellbrook.nsw.gov.au>
Cc: Richard Bailey <Richard.Bailey@machenergy.com.au>
Subject: Doc 1399741 MACH Energy Responses to MSC Comments re. revised VIMP

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Hi Theresa,

Please see MACH Energy responses to the Muswellbrook Shire Council comments (received 18 May 2022) on the revised Visual Impact Management Plan (submitted 5 May 2022 via DPE portal).

Thanks,

CHRIS MASTERS
SENIOR ENVIRONMENTAL ADVISOR
Mount Pleasant Operation
chris.masters@machenergy.com.au
m: +614 39 130 527

 <p>www.machenergy.com.au 1100 Wybong Road PO Box 351 MUSWELLBROOK NSW 2333 MACH Energy Australia Pty Ltd ABN: 34 608 495 441</p>	 <p>Mount Pleasant Operation Community Hotline: 1800 886 889 Blasting Hotline: 1800 931 872 General Enquiries: 1800 931 873</p>			
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Muswellbrook Shire Council ABN 86 864 180 944