

Development Consent

Section 4.36 of the Environmental Planning and Assessment Act 1979

The Independent Planning Commission of NSW (the Commission), as the declared consent authority under clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* and section 4.5(a) of the *Environmental Planning and Assessment Act 1979*, approves the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development

[Name of Commissioner]

Member of the Commission

[Name of Commissioner]

Member of the Commission

Sydney

2020

SCHEDULE 1

Application Number:	SSD 8642
Applicant:	Mangoola Coal Operations Pty Limited
Consent Authority:	The Independent Planning Commission NSW
Site:	The land defined in Appendix 1
Development:	Mangoola Coal Continued Operations Project

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RECOMMENDED

DEFINITIONS

Aboriginal object	Has the same meaning as the definition of the term in section 5 of the NP&W Act
Aboriginal place	Has the same meaning as the definition of the term in section 5 of the NP&W Act
Annual Review	The review required by condition D11
Applicant	Mangoola Coal Operations Pty Limited, or any person carrying out any development under this consent
Approved disturbance area	The area identified as such on the Development Layout
ARI	Average Recurrence Interval
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
BCS	Biodiversity, Conservation and Science Directorate within the Department
BCT	NSW Biodiversity Conservation Trust
Blast misfire	The failure of one or more holes in a blast pattern to initiate
Calendar year	A period of 12 months from 1 January to 31 December
CCC	Community Consultative Committee required by condition A20
CHPP	Coal handling and preparation plant
Conditions of this consent	Conditions contained in Schedule 2
Construction	All physical works to enable mining operations to be carried out, including demolition and removal of buildings or works, and erection of buildings and other infrastructure permitted by this consent
Council	Muswellbrook Shire Council
CPI	Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition A13
Day	The period from 7.00 am to 6.00 pm on Monday to Saturday, and 8.00 am to 6.00 pm on Sundays and Public Holidays
Decommissioning	The deconstruction or demolition and removal of works installed as part of the development
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning, Industry and Environment
Development	The development described in the documents listed in condition A2(c), as modified by the conditions of this consent
Development Layout	The plans in Appendix 2 of this consent
DPIE Crown Lands	Crown Lands Group within the Department
DPIE Water	Water Group within the Department
EEC	Endangered ecological community, as defined under the BC Act
EIS	The Environmental Impact Statement titled <i>Mangoola Coal Continued Operations Project</i> , prepared by Umwelt (Australia) Pty Limited, dated July 2019, submitted with the application for consent for the development, including the Applicant's response to submissions, dated 18 December 2019, and additional information provided by the Applicant on 14 February 2020, 17 March 2020, 1 April 2020, 19 June 2020 and 27 July 2020 in support of the application.
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>

EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6 pm to 10 pm
Feasible	Means what is possible and practical in the circumstances
Fisheries NSW	Fisheries Branch of the Primary Industries Group within the Department
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
Heavy vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
Heritage NSW	Heritage NSW within Department of Premier and Cabinet
Heritage item	<p>An Aboriginal object, an Aboriginal place, or a place, building, work, relic, moveable object, tree or precinct of heritage significance, that is listed under any of the following:</p> <ul style="list-style-type: none"> the State Heritage Register under the <i>Heritage Act 1977</i>; a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>; a Local Environmental Plan under the EP&A Act; the World Heritage List; the National Heritage List or Commonwealth Heritage List under the EPBC Act; or anything identified as a heritage item under the conditions of this consent
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Laden trains	Trains transporting mining products or materials to or from the site
Land	Has the same meaning as the definition of the term in section 1.4 the EP&A Act, except for where the term is used in the noise and air quality conditions in PART B of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Mangoolia Coal Continued Operations Project Biodiversity Offset Strategy	The in perpetuity/long-term conservation and management of the Applicant's offset sites described in the EIS and depicted conceptually in Appendix 6
Mangoolia Coal Project Biodiversity Offset Strategy	The in perpetuity/long-term conservation and management of the Applicant's offset sites that were established in accordance with PA 06_0014
Mangoolia Coal Project	Mangoolia Coal Project approved under PA 06_0014, as modified
Material harm	<p>Is harm to the environment that:</p> <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) <p>This definition excludes "harm" that is authorised under either this consent or any other statutory approval</p>
MEG	Regional NSW – Mining, Exploration and Geoscience
Mine-Owned Land	Land owned by a mining, petroleum or extractive industry company (or its subsidiary or related party)
Mine closure	Decommissioning and final rehabilitation of the site following the cessation of mining operations
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff may have come into contact with carbonaceous or saline material

Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development		
Mining operations	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden, tailings and reject material		
Minister	NSW Minister for Planning and Public Spaces, or delegate		
Minor	Not very large, important or serious		
Mitigation	Activities associated with reducing the impacts of the development		
Negligible	Small and unimportant, such as to be not worth considering		
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays		
Noise sensitive areas	Areas where mining operations are being carried out that have potential to lead to increased noise at privately-owned residences, such as elevated areas or areas near the boundary of the site		
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent		
'Non-road' equipment	mobile	diesel	Mobile equipment used in mining operations that is fitted with a diesel engine with a capacity >30 litres and that is self-propelled or transportable and primarily designed for off-road use
NP&W Act	<i>National Parks and Wildlife Act 1974</i>		
NRAR	NSW Natural Resources Access Regulator		
Over-dimensional	Over-mass, over-size or over-length vehicles		
PA	Planning agreement within the meaning of the term in section 7.4 of the EP&A Act		
Planning Secretary	Planning Secretary under the EP&A Act, or nominee		
POEO Act	<i>Protection of the Environment Operations Act 1997</i>		
Privately-owned land	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary or related party)		
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.		
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements		
Registered Aboriginal Parties	As described in the <i>National Parks and Wildlife Regulation 2009</i>		
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting		
Residence	Existing or approved dwelling at the date of grant of this consent		
Resources Regulator	NSW Resources Regulator		
RFS	NSW Rural Fire Service		
ROM	Run-of-mine		
Site	The land defined in Appendix 1		
Thomas Mitchell Drive Contributions Study	The Contributions Study prepared for the Department by GHD and titled, " <i>Thomas Mitchell Drive Contributions Study, May 2015</i> " as amended by the supplementary report dated August 2018 (or its latest version as amended from time to time)		
TfNSW	Transport for NSW		

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

TERMS OF CONSENT

- 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
 - (d) generally in accordance with the Development Layout in Appendix 2.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
 - (b) the implementation of any actions or measures contained in any such document referred to in condition A3(a).
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a 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.

LIMITS OF CONSENT

Mining operations

- A5. Mining operations may be carried out on the site until 31 December 2030.

Notes:

- Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to mining operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations until the rehabilitation of the site and other requirements have been carried out to the required standard.
- Mining operations and rehabilitation are also regulated under the Mining Act 1992.

Coal Extraction and Transportation

- A6. A maximum of 13.5 million tonnes of ROM coal may be extracted from the site in any calendar year.
- A7. A maximum of 13.5 million tonnes of ROM coal from the site may be processed in any calendar year.
- A8. Product coal may only be transported from the site by rail.
- A9. A maximum of 10 laden trains may leave the site in any 24 hour period.

Hours of Operation

- A10. The Applicant may undertake the development 24 hours a day, 7 days a week, except for:
- (a) gravel screening and crushing as described in condition A11; and
 - (b) blasting operations as described in condition B13.
- A11. The Applicant may only undertake gravel screening and crushing operations on the site between 7 am and 6 pm Monday to Friday, and between 8 am and 1 pm on Saturdays. No gravel screening and crushing operations are allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.

Identification of Approved Disturbance Area

- A12. Within three months of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must provide to the Department a survey plan of the boundaries of the approved disturbance areas.

NOTIFICATION OF COMMENCEMENT

- A13. The date of commencement of each of the following phases of the development must be notified to the Department in writing, at least two weeks before that date:
- (a) commencement of development under the consent;
 - (b) commencement of construction under the consent;
 - (c) commencement of mining operations under the consent;
 - (d) cessation of mining operations (i.e. mine closure); and
 - (e) any period of suspension of mining operations (i.e. care and maintenance).
- A14. If the phases of the development are to be further staged, the Department must be notified in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

SURRENDER OF EXISTING CONSENTS OR APPROVALS

- A15. Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender the existing project approval for the Mangoola Coal Project (PA 06_0014) in accordance with the EP&A Regulation.
- A16. Upon the commencement of development under this consent, and before the surrender of existing development consents or project approvals required under condition A15, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents or approvals.

Note: *This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&A Act or Part 6 of the EP&A Act as applies from 1 September 2018. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.*

PLANNING AGREEMENT

- A17. Within six months of the date of commencement of development, or other timeframe agreed by the Planning Secretary, the Applicant must enter into a PA with Council in accordance with:
- (a) Division 7.1 of Part 7 of the EP&A Act; and
 - (b) the terms of the Applicant's offer to Council in Appendix 10.
- A18. If the Applicant and Council do not enter into a PA within the timeframe under condition A17, then within a further 3 months, the Applicant must make a Section 7.12 of the EP&A Act contribution to Council of \$525,688. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the *Muswellbrook Shire Council Section 94A Development Contributions Plan 2010*.
- A19. If there is any dispute between the Applicant and Council in regard to conditions A17 and A18 then either party may refer the matter to the Planning Secretary for resolution.

COMMUNITY CONSULTATIVE COMMITTEE

- A20. Before the commencement of construction, or other timeframe agreed by the Planning Secretary, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects* (2019). The CCC must continue to operate during the life of the development, or other timeframe agreed by the Planning Secretary.

Notes:

- *The CCC is an advisory committee only.*
- *In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.*

- A21. With the approval of the Planning Secretary, the Applicant may combine the CCC required by this consent with any CCC previously established for the Mangoola Coal Project.

EVIDENCE OF CONSULTATION

- A22. Where conditions of this consent require consultation with an identified party, the Applicant must:
- (a) consult with the relevant party prior to submitting the subject document; and
 - (b) provide details of the consultation undertaken to the Department, including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

APPLICATION OF EXISTING MANAGEMENT PLANS

A23. Prior to the approval of management plans under this consent, the Applicant must continue to implement any equivalent or similar management plan/s required under PA 06_0014, to the satisfaction of the Planning Secretary.

STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

A24. With the approval of the Planning Secretary, the Applicant may:

- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
- (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);
- (c) combine any strategy, plan, program or Annual Review required by this consent with any similar strategy, plan, program or Annual Review required under the Mangoola Coal Project (PA 06_0014); and
- (d) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

A25. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

A26. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.

PROTECTION OF PUBLIC INFRASTRUCTURE

A27. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:

- (a) repair, or pay the full costs associated with repairing, any public infrastructure^a that is damaged by carrying out the development; and
- (b) relocate, or pay the full costs associated with relocating, any public infrastructure^a that needs to be relocated as a result of the development.

^a This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition A17 or A18, or to damage that has been compensated under the Mining Act 1992.

DEMOLITION

A28. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001).

STRUCTURAL ADEQUACY

A29. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

OPERATION OF PLANT AND EQUIPMENT

A30. All plant and equipment used on site, or to monitor the performance of the development must be:

- (a) maintained in a proper and efficient condition; and
- (b) operated in a proper and efficient manner.

COMPLIANCE

A31. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

APPLICABILITY OF GUIDELINES

A32. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) in the condition.

A33. Notwithstanding Condition A32, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to

or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

CROWN LAND

A34. The Applicant must consult with DPIE – Crown Lands prior to undertaking any development on Crown land or Crown roads.

Notes:

- *Under section 265 of the Mining Act 1992, the Applicant is required to enter into a compensation agreement with DPIE – Crown Lands prior to undertaking any mining operations or related activities on Crown Land or Crown Roads within a mining lease.*
- *Under section 141 of the Mining Act 1992, the Applicant is required to enter into an access arrangement with DPIE – Crown Lands prior to undertaking any prospecting operations on Crown land or Crown roads within an exploration licence.*

PART B SPECIFIC ENVIRONMENTAL CONDITIONS

NOISE

Noise Criteria

- B1. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence on privately-owned land.

Table 1: Noise criteria dB(A)

Noise Assessment Location ^a	Day <i>L_{Aeq}</i> (15 min) (Years 1 and 2)	Day <i>L_{Aeq}</i> (15 min) (Year 3 onward)	Evening <i>L_{Aeq}</i> (15 min)	Night	
				<i>L_{Aeq}</i> (15 min)	<i>L_{A1}</i> (1 min)
171,176, 144	40	40	40	40	52
25, 128, 154, 193, 125A, 182B	40	40	38	38	52
261	42	40	38	38	52
54, 79, 114, 141, 151, 192, 206, 321, 125C, 182A, 241A, 241C, 190, 157	40	40	37	37	52
165, 177, 106B, 104, 166, 178, 251, 253, 260, 112B, 183C, 184A, 147, 112A, 112C, 240, 241B	40	40	36	36	52
134A	44	40	39	39	52
109A - F	43	40	39	39	52
263	42	40	39	39	52
164	40	40	35	39	52
Other privately-owned residences	40	40	35	35	52
Wybong Hall and Anglican Church	48	48	48	48	-

^a The Noise Assessment Locations referred to in Table 1, are shown in Appendix 3.

Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry* (EPA, 2017). The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B34 and as defined in Part D of the *Noise Policy for Industry* (EPA, 2017) apply to the noise criteria in Table 1.

- B2. The noise criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Temporary Construction Noise Limits

- B3. With the written agreement of the Planning Secretary, the Applicant may seek temporary construction noise limits above the noise criteria in Table 1, including for construction works outside of standard hours. In order to seek a temporary construction noise limit, the Applicant must develop a Construction Noise Protocol to the satisfaction of the Planning Secretary. This protocol must:
- be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;
 - specify the construction works to which the temporary construction noise limits would apply and provide justification for these limits; and
 - address the relevant requirements of the *Interim Construction Noise Guideline* (DECC, 2009).
- B4. The Applicant must continue to operate in accordance with the noise criteria in Table 1 until and unless a Construction Noise Protocol for the specified construction works is approved by the Planning Secretary.
- B5. The Applicant must implement any Construction Noise Protocol approved by the Planning Secretary.

Road Traffic Noise

- B6. Upon receiving a written request from the owner of a residence listed in Table 2, (except where a negotiated noise agreement is in place for road traffic noise), the Applicant must implement noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner to minimise the impacts of road traffic noise. These additional mitigation measures must be reasonable and feasible, directed at mitigating the traffic noise impacts of the Project and must consider any existing mitigation installed under the Mangoola Coal Project (PA 06_0014).

If within 3 months of receiving this request from the landowner, the Applicant and the landowner 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.

Table 2: *Receivers subject to Road Noise Mitigation upon request*

Mitigation Basis	Receiver ID
Road Traffic Noise	R246#, R249 and R251

#Mitigation works have been implemented at this receiver under PA 06_0014

Noise Operating Conditions

- B7. The Applicant must:
- take all reasonable steps to minimise noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as road and on-site rail noise associated with the development;
 - implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas;
 - take all reasonable steps to minimise the noise impacts of the development in noise sensitive areas during the evening and night;
 - operate a comprehensive noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
 - take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;
 - only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in any relevant rolling stock operator's EPL and use reasonable endeavours to ensure that rolling stock is selected to minimise noise;
 - carry out regular attended noise monitoring (at least once a month, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and
 - regularly assess the noise monitoring data and modify operations on the site to ensure compliance with the relevant conditions of this consent.

Noise Management Plan

- B8. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
 - describe the measures to be implemented to ensure:
 - compliance with the noise criteria and operating conditions of this consent;
 - best practice management is being employed; and
 - noise impacts of the development are minimised during noise-enhancing meteorological conditions;
 - describe the measures to minimise development related road traffic noise generated on public roads;
 - describe the noise management system in detail; and
 - include a monitoring program that:
 - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;
 - monitors noise at locations representative of the most affected residences;

- (iii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;
- (iv) adequately supports the noise management system;
- (v) includes a protocol for distinguishing noise emissions of the development from any neighbouring developments; and
- (vi) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.

B9. The Applicant must not commence mining operations north of Wybong Road until the Noise Management Plan is approved by the Planning Secretary.

B10. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

BLASTING

Blasting Criteria

B11. The Applicant must ensure that blasting on the site does not cause exceedances of the criteria at the locations in Table 3.

Table 3: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned land ^a	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
Yarlett ^a Wybong Cemetery ^a Wybong Hall ^a Yarraman ^a	133	5	0%
Anvil Rock ^a The Book ^a	-	50	0%
Aboriginal Rock Shelter Sites ^a	-	50	0%
500kV transmission line pylons – tension towers	-	50	0%
500kV transmission line pylons – suspension towers 11 kV transmission line – timber poles	-	100	0%
Prescribed Water Dams	-	50	0%
Prescribed Tailings Dams	-	100	0%
Public Roads, Telecommunication infrastructure and cables		100	0%
All other public infrastructure		50 (or a limit determined by the structural design methodology in AS 2187.2 - 2006, or its latest version, or other alternative limit for public infrastructure, to the satisfaction of the Planning Secretary)	0%

^a The locations referred to in Table 3 are shown in Appendix 4.

- B12. The blasting criteria in Table 3 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the blasting criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Blasting Hours

- B13. The Applicant must only carry out blasting on the site between 9 am and 5 pm (Monday to Saturday inclusive). No blasting is allowed on Sundays, public holidays or any other time without the prior written approval of the Planning Secretary.

Blasting Frequency

- B14. The Applicant may carry out a maximum of:
- (a) 2 single blast events^a a day; and
 - (b) 6 single blast events^a a week, averaged over a calendar year.
- B15. Condition B14 does not apply to single blast events^a that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

^a Within conditions B14 and B15, 'single blast event' means a blast which involves either a single detonation or a number of individual blasts fired in quick succession in a discrete area of the development. Should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast event.

Property Inspections

- B16. If the Applicant receives a written request from the owner of any privately-owned land within 3 kilometres of any approved open cut mining pit on the site for a property inspection to establish the baseline condition of any buildings and structures on their land, or to have a previous property inspection updated, then within 2 months of receiving this request, or other timeframe agreed by the Planning Secretary, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
 - (i) establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and
 - (ii) identify measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and structures; and
 - (b) give the landowner a copy of the new or updated property inspection report.
- B17. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.

Property Investigations

- B18. If the owner of any privately-owned land within 3 kilometres of any approved open cut mining pit on the site or any other landowner where the Planning Secretary is satisfied an investigation is warranted, claims in writing that buildings or structures on their land have been damaged as a result of blasting on the site, then within 2 months of receiving this written claim, or other timeframe agreed by the Planning Secretary, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and
 - (b) give the landowner a copy of the property investigation report.
- B19. If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary.
- B20. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution.

Blast Operating Conditions

- B21. The Applicant must:
- (a) take all reasonable steps to:
 - (i) ensure the safety of people and livestock from blasting impacts of the development;
 - (ii) protect public and private infrastructure and property in the vicinity of the site from blasting damage associated with the development; and
 - (iii) minimise blast-related dust and fume emissions;

- (b) ensure that blasting on the site does not result in greater impacts to heritage items^a than those predicted in the document/s listed in condition A2(c), and develop specific measures to protect heritage items from any blasting damage associated with the development;
- (c) operate a comprehensive blast management system that uses a combination of meteorological forecasts and predictive blast modelling to guide the planning of blasts to minimise blasting impacts;
- (d) minimise the frequency and duration of any public road closures for blasting, and use all reasonable efforts to avoid road closures during peak traffic periods;
- (e) operate a suitable system to enable interested members of the public to get up-to-date information on the proposed blasting schedule on the site and any associated road closures, including notification via SMS message of the blasting schedule and associated road closures for that day and any variations to that schedule and closures;
- (f) use all reasonable efforts to co-ordinate the timing of blasting at the site with any nearby mines to minimise cumulative blasting impacts; and
- (g) carry out regular blast monitoring to determine whether the development is complying with the relevant conditions of this consent.

^a The locations of the heritage items referred to in paragraph (b) are shown in Appendix 7.

B22. The Applicant must not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the Applicant has:

- (a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or
- (b) demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Blast Management Plan to include specific mitigation measures to be implemented while blasting is being carried out within 500 metres of the road or land.

Blast Management Plan

B23. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) describe the blast management system and the measures that will be implemented to ensure compliance with the blasting criteria and conditions of this consent;
- (c) include a Blast Fume Management Strategy for:
 - (i) minimising blast fume emissions;
 - (ii) rating and recording blast fume events; and
 - (iii) reporting significant blast fume events to the Department and the EPA;
- (d) include a Road Closure Management Plan for any blasting within 500 metres of a public road, that has been prepared in consultation with relevant roads authorities and includes provisions for:
 - (i) minimising the duration of closures, both on a per event basis and weekly basis;
 - (ii) avoiding peak traffic periods as far as reasonable; and
 - (iii) co-ordinating closures with nearby mines to minimise the cumulative effect of road closures;
- (e) identify any agreed alternative ground vibration limits for public or private infrastructure in the vicinity of the site (if relevant);
- (f) include a strategy to monitor, mitigate and manage the effects of blasting on heritage items, particularly those identified in Appendix 7, including details of baseline (i.e. pre-blasting) and ongoing risk-based dilapidation surveys (subject to landowner access arrangements);
- (g) include a monitoring program for evaluating and reporting on compliance with the relevant conditions of this consent;
- (h) include a protocol for identifying any blast-related exceedance, incident or non-compliance and for notifying the Department, the EPA and relevant stakeholders of these events;
- (i) include public notification procedures to enable members of the public, particularly surrounding residents, to get up-to-date information on the proposed blasting schedule; and
- (j) include a protocol for investigating and responding to blast-related complaints.

- B24. The Applicant must not undertake any blasting north of Wybong Road until the Blast Management Plan is approved by the Planning Secretary.
- B25. The Applicant must implement the Blast Management Plan as approved by the Planning Secretary.

AIR QUALITY AND GREENHOUSE GAS

Odour

- B26. The Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

Air Quality Criteria

- B27. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 4 at any residence on privately-owned land.

Table 4: Air quality criteria

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	Annual	^{a, c} 25 µg/m ³
	24 hour	^b 50 µg/m ³
Particulate matter < 2.5 µm (PM _{2.5})	Annual	^{a, c} 8 µg/m ³
	24 hour	^b 25 µg/m ³
Total suspended particulate (TSP) matter	Annual	^{a, c} 90 µg/m ³

Notes:

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

^c Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.

- B28. The air quality criteria in Table 4 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Mine-owned Land

- B29. Particulate matter emissions generated by the development must not exceed the criteria listed in Table 4 at any occupied residence on mine-owned land (including land owned by another mining company) unless:
- the tenant and landowner (if the residence is owned by another mining company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under PART C of this consent;
 - the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving 14 days notice;
 - air quality monitoring is regularly undertaken to inform the tenant and landowner (if the residence is owned by another mining company) of the likely particulate matter emissions at the residence; and
 - data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.

Air Quality Operating Conditions

- B30. The Applicant must:
- take all reasonable steps to:
 - minimise odour, fume and particulate matter (including PM₁₀ and PM_{2.5}) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;
 - manage and minimise the risk of spontaneous combustion;
 - improve energy efficiency and reduce greenhouse gas emissions of the development;
 - minimise visible off-site air pollution generated by the development; and
 - minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;

- (b) ensure that all 'non-road' mobile diesel equipment used in undertaking the development includes reasonable and feasible diesel emissions reduction technology;
- (c) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
- (d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to Table 4 above);
- (e) minimise air quality impacts of the development on air quality-affected land referred to in Table 10 and Table 11 for as long as the land remains privately-owned (i.e. until it is acquired);
- (f) make all reasonable efforts to co-ordinate air quality management on the site with the air quality management at nearby mines to minimise cumulative air quality impacts;
- (g) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent; and
- (h) regularly assess meteorological and air quality monitoring data, and modify operations on the site to ensure compliance with the relevant conditions of this consent.

Air Quality and Greenhouse Gas Management Plan

- B31. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
 - (b) describe the measures to be implemented to ensure:
 - (i) compliance with the air quality criteria and operating conditions of this consent;
 - (ii) best practice management is being employed to:
 - minimise the development's air quality impacts;
 - minimise the development's Scope 1 and 2 greenhouse gas emissions; and
 - improve the development's energy efficiency; and
 - (iii) the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
 - (c) describe the air quality management system in detail; and
 - (d) include an air quality monitoring program, undertaken in accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007), that:
 - (i) establishes a diesel combustion emissions baseline;
 - (ii) uses monitors to evaluate the performance of the development against the air quality criteria in this consent and to guide day to day planning of mining operations;
 - (iii) adequately supports the air quality management system; and
 - (iv) includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of these events.
- B32. The Applicant must not commence mining operations north of Wybong Road until the Air Quality and Greenhouse Gas Management Plan is approved by the Planning Secretary.
- B33. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan as approved by the Planning Secretary.

METEOROLOGICAL MONITORING

- B34. Prior to the commencement of construction and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007); and
 - (b) is capable of measuring meteorological conditions in accordance with the *NSW Noise Policy for Industry* (EPA, 2017),
- unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

WATER

Water Supply

B35. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.

B36. The Applicant must not use any licensable water from the Wybong Creek Water Source for mining purposes.

Note: *This restriction does not apply to water used outside the project disturbance area for revegetation purposes associated with implementation of the Biodiversity Offset Strategy, or to any licensable water within the project disturbance area that is collected as an incidental result of approved mining activities.*

B37. The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.

Note: *Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development, including during rehabilitation and post mine closure.*

Compensatory Water Supply

B38. Prior to commencing construction, the Applicant must notify the owners of the bores listed in Table 5^a that they may request monitoring of the listed bore to determine the level of drawdown from the development. In the event that monitoring data records drawdown of more than 2 metres as a result of the development, the Applicant must provide compensatory water in accordance with conditions B40 to B44.

Table 5: Private bore monitoring

Bore ID ^b	Receiver ID
Bore 1	R261
Bore 2	R157
Bore 3	R130
GW080507	R144
GW201589	
GW078502	R83

^a The receiver ID's and bore locations referred to in Table 5 are shown in Appendix 3.

B39. Prior to the commencement of mining operations north of Wybong Road under this consent, the Applicant must notify owners of licensed privately-owned groundwater bores that are predicted to have a drawdown of greater than 2 metres as a result of the development that they may be eligible for compensatory water under conditions B40 to B44.

B40. The Applicant must provide a compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is minor or negligible) as a result of the development, in consultation with DPIE Water, and to the satisfaction of the Planning Secretary.

B41. The compensatory water supply measures must provide an alternative long term supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.

B42. If the Applicant and the landowner cannot agree on whether the loss of water is attributed to the development or 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.

B43. If the Applicant is unable to provide an alternative long term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary.

Notes:

- *The Water Management Plan (see condition B49) is required to include trigger levels for investigating potentially adverse impacts on water supplies.*
- *The burden of proof that any loss of water supply is not due to mining impacts rests with the Applicant.*

B44. In the event of any complaint relating to a privately-owned licenced groundwater bore which may, in the opinion of the Planning Secretary, have been adversely and directly impacted as a result of the development (other than an impact that is minor or negligible), the Applicant must, as soon as practicable, facilitate the provision of a temporary

water supply, pending the outcome of any groundwater investigation and/or the provision of an alternative long term supply of water as required under conditions B40 and B41, to the satisfaction of the Planning Secretary.

Water Discharges

- B45. The Applicant must ensure that all surface discharges from the site comply with:
- discharge limits (both volume and quality) set for the development in any EPL; or
 - relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.
- B46. The Applicant must implement all reasonable and feasible measures on the site to minimise the need to discharge saline water to the Hunter River under the Hunter River Salinity Trading Scheme.

WATER MANAGEMENT PERFORMANCE MEASURES

- B47. The Applicant must ensure that the development complies with the performance measures in Table 6.

Table 6: Water management performance measures

Feature	Performance Measure
Water management – General	<ul style="list-style-type: none"> Maintain separation between clean, dirty (i.e. sediment-laden) and mine water management systems Minimise the use of clean and potable water on the site Maximise water recycling, reuse and sharing opportunities Minimise the use of make-up water from external sources Design, install, operate and maintain water management systems in a proper and efficient manner Minimise risks to the receiving environment and downstream water users
Alluvial aquifers	<ul style="list-style-type: none"> Negligible impacts to alluvial aquifers as a result of the development, beyond those predicted in the document/s listed in condition A2(c), including: <ul style="list-style-type: none"> negligible change in groundwater levels; negligible change in groundwater quality; and negligible impact to other groundwater users, Maintain appropriate setbacks in accordance with the <i>Aquifer Interference Policy</i> (DPI, 2012)
Erosion and sediment control works	<ul style="list-style-type: none"> Design, install and maintain erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction</i> including <i>Volume 1: Blue Book</i> (Landcom, 2004), <i>Volume 2A: Installation of Services</i> (DECC, 2008), <i>Volume 2C: Unsealed Roads</i> (DECC, 2008), <i>Volume 2D: Main Road Construction</i> (DECC, 2008) and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008) Design, install and maintain any creek crossings in accordance with the <i>Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management</i> (DPI, 2013) and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries 2003) Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for <i>Controlled Activities on Waterfront Land</i> (DPI Water, 2012)
Clean water diversions and storage infrastructure	<ul style="list-style-type: none"> Design, install and maintain the clean water system to capture and convey the 100 year ARI flood Maximise, as far as reasonable, the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site
Flood protection works	<ul style="list-style-type: none"> Design, install and maintain flood levees to protect mining areas from a 100 year ARI flood event and ensure no increased flooding impacts on roads or privately-owned land beyond that predicted in the document/s listed in condition A2(c) Design the Wybong Road haul road overpass to include drainage measures to maintain appropriate flood management of Wybong Road, as described in the document/s listed in condition A2(c)
Sediment dams	<ul style="list-style-type: none"> Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>2E Mines and Quarries</i> (DECC, 2008) and the requirements under the POEO Act or <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i>
Mine water storages	<ul style="list-style-type: none"> Design, install and maintain mine water storage infrastructure to avoid unlicensed or uncontrolled discharge of mine water New storages designed to contain the 100 year ARI storm event and minimise permeability

Feature	Performance Measure
	<ul style="list-style-type: none"> • Ensure adequate freeboards within all mine water storage dams and voids at all times to minimise the risk of discharge to surface waters
Raw water dam	<ul style="list-style-type: none"> • Water levels must be managed so that the Raw Water Dam does not discharge water from the premises except in a 1 in 250 Annual Exceedance Probability 72-hour rainfall event or greater
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> • Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard
Tailings storages	<ul style="list-style-type: none"> • Design and maintain tailings storage areas to encapsulate and prevent the movement of tailings seepage/leachate
Overburden emplacements	<ul style="list-style-type: none"> • Design, install and maintain emplacements to encapsulate and prevent migration of acid forming and potentially acid forming materials, and saline and sodic material • Design, install and maintain out-of-pit emplacements to prevent and/or manage long term saline seepage
Aquatic and riparian ecosystems	<ul style="list-style-type: none"> • Negligible environmental consequences beyond those predicted in the document/s listed in condition A2(c) • Maintain or improve baseline channel stability of Big Flat Creek • Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006)

B48. The performance measures in Table 6 apply to the entire site, including all landforms constructed under previous development consents. However, these performance measures do not require any additional earthmoving works to be undertaken for landforms that have been approved and constructed under previous consents, except where those earthworks are required for the establishment of a stable and non-polluting landform.

WATER MANAGEMENT PLAN

B49. The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with DPIE Water;
- (c) describe the measures to be implemented to ensure that the Applicant complies with the water management performance measures (see Table 6);
- (d) utilise existing data from the Mangoola Coal Project, existing monitoring programs and, where practicable, other nearby mines;
- (e) include a:
 - (i) **Site Water Balance** that includes details of:
 - predicted annual inflows to and outflows from the site;
 - sources and security of water supply for the life of the development (including authorised entitlements and licences);
 - water storage capacity;
 - water use and management on the site, including any water transfers or sharing with neighbouring mines;
 - licensed discharge points and limits; and
 - reporting procedures, including the annual preparation of an updated site water balance;
 - (ii) **Salt Balance** that includes details of:
 - sources of saline material on the site;
 - saline material and saline water management on the site;
 - measures to minimise discharge of saline water from the site;
 - a program to notify all downstream landowners within 2 kilometres of the discharge point prior to discharging saline water to the Hunter River; and
 - reporting procedures, including the annual preparation of an updated salt balance;

- (iii) **Erosion and Sediment Control Plan** that:
- is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book* (Landcom, 2004) and *Volume 2E: Mines and Quarries* (DECC, 2008);
 - identifies activities that could cause soil erosion, generate sediment or affect flooding;
 - includes a program to review the adequacy of existing flood protection works, and ensure they comply with the relevant performance measures listed in Table 6;
 - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
 - describes the location, function, and capacity of all erosion and sediment control structures and flood management structures; and
 - describes what measures would be implemented to maintain (and if necessary decommission) the structures over time;
- (iv) **Surface Water Management Plan** that includes:
- detailed baseline data on surface water flows and quality of watercourses and/or water bodies potentially impacted by the development, including:
 - stream and riparian vegetation health;
 - channel stability (geomorphology); and
 - water supply for other surface water users;
 - a detailed description of the surface water management system;
 - details of the water licensing requirements for all water storages (i.e. exempt, harvestable rights or licenced);
 - detailed plans, design objectives and performance criteria for water management infrastructure, including:
 - any approved creek diversions or restoration works associated with the development;
 - water run-off diversions and catch drains;
 - water storages and sediment dams;
 - emplacement areas;
 - backfilled pits and any final voids for the development; and
 - reinstated drainage networks on rehabilitated areas of the site;
 - an erosion and scour monitoring and maintenance program for the Big Flat Creek riparian corridor;
 - surface water performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for:
 - water supply for other water users;
 - downstream surface water flows and quality;
 - downstream flooding impacts;
 - stream and riparian vegetation health; and
 - post-mining water pollution from rehabilitated areas of the site;
 - a program to monitor and evaluate:
 - compliance with the relevant performance measures listed in Table 6 and the performance criteria in this plan;
 - controlled and uncontrolled discharges and seepage/leachate from the site;
 - impacts on water supply for other water users;
 - surface water inflows, outflows and storage volumes, to inform the Site Water Balance; and
 - the effectiveness of the surface water management system and the measures in the Erosion and Sediment Control Plan;
 - reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results; and
 - a trigger action response plan to respond to any exceedances of the relevant performance measures or performance criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development;
- (v) **Groundwater Management Plan** that includes:
- detailed baseline data of groundwater levels, yield and quality for groundwater resources and groundwater dependent ecosystems potentially impacted by the development, including groundwater supply for other water users;

- a detailed description of the groundwater management system;
 - groundwater performance criteria, including trigger levels for identifying and investigating any potentially adverse groundwater impacts (or trends) associated with the development, on:
 - regional and local aquifers (alluvial and hard rock); and
 - groundwater supply for other water users such as licensed privately-owned groundwater bores;
 - a program to monitor and evaluate:
 - compliance with the relevant performance measures listed in Table 6 and the performance criteria in this plan;
 - water loss/seepage from water storages into the groundwater system, including from any final voids;
 - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;
 - the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development;
 - impacts on groundwater dependent ecosystems;
 - impacts on groundwater supply for other water users; and
 - the effectiveness of the groundwater management system;
 - a contingency plan for isolating the Big Flat Creek alluvium from Anvil Creek alluvium and mining areas in the event that it is required;
 - reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results;
 - a trigger action response plan to respond to any exceedances of the relevant performance measures and groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and
 - a program to periodically validate the groundwater model for the development, including an independent review of the model every 3 years (unless otherwise agreed by the Planning Secretary), and comparison of monitoring results with modelled predictions; and
- (vi) a protocol to report on the measures, monitoring results and performance criteria identified above, in the Annual Review referred to in condition D11.

B50. The Applicant must not commence mining operations north of Wybong Road until the Water Management Plan is approved by the Planning Secretary.

B51. The Applicant must implement the Water Management Plan as approved by the Planning Secretary.

BIODIVERSITY

Biodiversity Credits Required

B52. Prior to the commencement of mining operations north of Wybong Road, or other timeframe agreed by the Planning Secretary, the Applicant must retire the biodiversity credits specified in Table 7 below. The retirement of credits must be carried out in consultation with BCS and in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.

Table 7: Biodiversity credit requirements

Credit Type	Credits Required
Ecosystem Credits	
HU812 Forest Red Gum grassy open forest on floodplains of the lower Hunter	1,874
HU816 Spotted Gum – Narrow-leaved Ironbark shrub – grass open forest of the central and lower Hunter	369
HU817 Narrow-leaved Ironbark – Bull Oak – Grey Box shrub – grass open forest of the central and lower Hunter	13,457
HU821 Blakely's Red Gum – Narrow-leaved Ironbark – Rough-barked apple shrubby woodland of the Hunter	253
HU906 Bull Oak grassy woodland of the central Hunter Valley	1,597
HU945 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley	168

Species Credits	
Wybong Leek Orchid (<i>Prasophyllum petilum</i>)	8,983
Pine Donkey Orchid (<i>Diuris tricolor</i>)	17,238
Southern Myotis (<i>Myotis Macropus</i>)	20
Large-eared pied bat (<i>Chalinolobus dwyeri</i>)	27

Note: The credits in Table 7 were calculated in accordance with Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014) and may need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, if the credits are to be retired in accordance with the Biodiversity Offsets Scheme of the BC Act.

- B53. The Applicant must implement the Mangoola Coal Continued Operations Project Biodiversity Offset Strategy for the development as described in the document/s listed in condition A2(c) and shown conceptually in Appendix 6.

Threatened Species

- B54. The Applicant must continue to implement the mitigation and management measures described in the approved Translocation Plan for Orchids and Other Threatened Flora, dated September 2012 and prepared by Umwelt for the Mangoola Coal Project disturbance area, to the satisfaction of the Planning Secretary.

Rehabilitation Offsets

- B55. Within 10 years of the cessation of mining operations, or other timeframe agreed by the Planning Secretary, the Applicant must make suitable arrangements for the long term protection of the ecological mine rehabilitation area described in the document/s listed in condition A2(c), to the satisfaction of the BCT. If the rehabilitation area does not meet the listing criteria of the targeted Plant Community Type or the completion criteria, then the Applicant must retire the relevant deficient biodiversity credits in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.

Note: The rehabilitation offset performance and completion criteria form a component of the Rehabilitation Management Plan required under condition B90.

Biodiversity Management Plan

- B56. The Applicant must prepare a Biodiversity Management Plan to the satisfaction of the Planning Secretary. This plan must:
- be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
 - be prepared in consultation with BCS;
 - describe the short, medium, and long term measures to be undertaken to manage the remnant vegetation and fauna habitat on the site and in any offset areas;
 - describe how biodiversity management would be integrated with similar measures within other management plans, including the Rehabilitation Management Plan referred to in condition B90;
 - include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and include triggers for remedial action, where these performance or completion criteria are not met;
 - include strategy that describes how the biodiversity credits in Table 7 will be identified, secured and retired;
 - describe the measures to be implemented within the approved disturbance areas to:
 - minimise the amount of clearing;
 - minimise impacts on fauna, including undertaking pre-clearance surveys;
 - provide for the salvage, transplanting and/or propagation of threatened flora found during pre-clearance surveys, in accordance with the *Guidelines for the Translocation of Threatened Plants in Australia* (Vallee et al., 2004); and
 - maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;
 - describe the measures to be implemented on the site to:
 - minimise impacts to threatened ecological communities listed under the BC Act and EPBC Act, and contribute to conservation strategies for these communities;
 - minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber and hollow-bearing trees;
 - enhance the quality of vegetation, vegetation connectivity and wildlife corridors including through the assisted regeneration and/or targeted revegetation of appropriate canopy, sub-canopy, understorey and ground strata;

- (iv) introduce naturally scarce fauna habitat features such as nest boxes and salvaged tree hollows and promote the use of these introduced habitat features by threatened fauna species;
- (v) manage any potential conflicts with Aboriginal heritage values;
- (vi) protect vegetation and fauna habitat outside of the approved disturbance areas;
- (vii) manage the collection and propagation of seed from the local area;
- (viii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;
- (ix) control feral pests with consideration of actions identified in relevant threat abatement plans;
- (x) control erosion;
- (xi) manage any grazing and agriculture;
- (xii) control access to vegetated or revegetated areas; and
- (xiii) manage bushfire hazards;
- (i) include a seasonally-based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify improvements that could be implemented to improve biodiversity outcomes;
- (j) identify the potential risks to the successful implementation of the biodiversity offset requirements, and include a description of the contingency measures to be implemented to mitigate these risks, including provisions for alternative direct and/or supplementary offset measures where regeneration of EECs and/or the propagation/translocation of threatened flora do not meet performance and completion criteria; and
- (k) include details of who would be responsible for monitoring, reviewing, and implementing the plan; and
- (l) identify the measures that would be implemented to ensure the continued implementation of the biodiversity offset and rehabilitation requirements identified under the Mangoola Coal Project (PA 06_0014), with a particular focus on the re-establishment of:
 - (i) significant and/or threatened plant communities, including:
 - Ironbark Woodland Complex;
 - Bulloak Woodland;
 - Paperbark Woodland;
 - Slaty Box Woodland;
 - Forest Red Gum Riparian Woodland;
 - Rough Barked Apple Woodland;
 - Swamp Oak Riparian Forest; and
 - Weeping Myall Woodland
 - (ii) significant and/or threatened plant species, including:
 - *Goodenia macbarronii*;
 - *Diuris tricolor*;
 - *Prasophyllum petilum*;
 - *Pterostylis praetermissa*;
 - *Cymbidium canaliculatum*;
 - *Bothriochloa biloba*;
 - *Acacia pendula*;
 - *Androcalva rosea*; and
 - *Pomaderris queenslandica*; and
 - (iii) significant and/or threatened animal species, including molluscan fauna.

B57. The Applicant must not commence mining operations north of Wybong Road until the Biodiversity Management Plan is approved by the Planning Secretary.

B58. The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.

Conservation Bond

B59. Within 6 months of the approval of the Biodiversity Management Plan referred to in condition B56 above, or other timeframe agreed by the Planning Secretary, the Applicant must lodge a Conservation Bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria in the Biodiversity Management Plan. The sum of the bond must be determined by:

- (a) calculating the full cost of implementing the Biodiversity Offset Strategy at third party rates (other than land acquisition costs); and
- (b) employing a suitably qualified, independent and experienced person to verify the calculated costs.

B60. The calculation of the Conservation Bond must be submitted to the Department for approval at least 2 months prior to the lodgement of the bond.

B61. The Conservation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:

- (a) any update or revision to the Biodiversity Management Plan;
- (b) the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the Biodiversity Offset Strategy have been made; or
- (c) in response to a request by the Planning Secretary,

B62. If the Biodiversity Offset Strategy is completed generally in accordance with the performance and completion criteria in the Biodiversity Management Plan, to the satisfaction of the Planning Secretary, or if alternate funding arrangements are provided under a long term security arrangement, the Planning Secretary will release the Conservation Bond.

B63. If the Biodiversity Offset Strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all, or part of, the Conservation Bond, and arrange for the completion of the relevant works.

Notes:

- The sum of the Conservation Bond may be reviewed in conjunction with any revision to the Biodiversity Offset Strategy.
- Offset areas secured via a Conservation Agreement and credits retired by way of payment into the BCT do not require lodgement of a conservation bond.

HERITAGE

Protection of Aboriginal Heritage

B64. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage items located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).

Note: Identified heritage items are shown in the figures in Appendix 7.

B65. If suspected human remains are discovered on the site, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.

B66. The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.

Aboriginal Cultural Heritage Management Plan

B67. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with Heritage NSW and Registered Aboriginal Parties;
- (c) describe the measures to be implemented on the site or within any offset areas to:
 - (i) comply with the heritage-related operating conditions of this consent;
 - (ii) ensure all workers receive suitable Aboriginal cultural heritage training/inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
 - (iii) protect, monitor and manage identified Aboriginal objects and Aboriginal places (including as part of any proposed archaeological investigation of potential subsurface objects and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);
 - (iv) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
 - (v) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
 - (vi) maintain and manage reasonable access for relevant Aboriginal stakeholders to visit Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
 - (vii) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and
- (d) include a strategy for the care, control and storage of Aboriginal objects salvaged on the site, both during the life of the development and in the long term.

B68. The Applicant must not commence mining operations north of Wybong Road until the Aboriginal Cultural Heritage Management Plan is approved by the Planning Secretary.

B69. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.

Historic Heritage Management Plan

- B70. The Applicant must prepare a Historic Heritage Management Plan for the development, in respect of all non-Aboriginal cultural heritage items, to the satisfaction of the Planning Secretary. This strategy must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
 - (b) be prepared in consultation with the Heritage NSW, Council and relevant landowners and in accordance with the relevant Heritage NSW guidelines;
 - (c) build upon the approved Conservation Management Strategy prepared for the Mangoola Coal Project;
 - (d) describe how historic heritage values of the site would be recorded and preserved;
 - (e) identify all heritage items in the vicinity of the site and include a statement of significance for each item;
 - (f) describe the measures to be implemented on the site or within any offset areas to:
 - (i) ensure all workers on the site receive suitable heritage inductions prior to carrying out any activities which may cause impacts to historic heritage, and that suitable records are kept of these inductions;
 - (ii) protect heritage items located outside the approved disturbance area, particularly 'Castle Hill', from impacts of the development, beyond those predicted in the document/s listed in condition A2(c);
 - (iii) protect Anvil Hill Rock and "The Book" rock formations from the effects of blasting;
 - (iv) undertake photographic/archival recording of any items of heritage significance predicted to be impacted by the development, prior to disturbance; and
 - (v) manage any new heritage items discovered during the life of the development;
 - (g) include a program to monitor the effects of blasting on the heritage items; and
 - (h) include a strategy for the care, control and storage of heritage relics salvaged from the site.
- B71. The Applicant must not commence mining operations north of Wybong Road until the Historic Heritage Management Plan is approved by the Planning Secretary.
- B72. The Applicant must implement the Historic Heritage Management Plan as approved by the Planning Secretary.

VISUAL

- B73. The Applicant must implement additional visual impact mitigation measures, as described in the report titled *Anvil Hill Coal Mine Visual Impact Mitigation Report* (Hansen Bailey 2008), if requested in writing by the residents in Table 8. These mitigation measures must be:
- (a) reasonable and feasible and aimed at reducing the visibility of the Mangoola Coal Project from significantly affected residences; and
 - (b) implemented in consultation with the landowner and to the satisfaction of the Planning Secretary.

Table 8: Visual Mitigation

Mitigation	Receiver ID
Visual Mitigation	104, 110, 124, 125A, 125B, 125C, 134A, 134D, 134C, 182, 183A, 183B, 183C, 191, 193, 200, 227, 240, 241A, 241B and 241C.

- B74. The Applicant must:
- (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) 2019 – Control of Obtrusive Effects of Outdoor Lighting*;
 - (f) implement a landscaping strategy to shield public views of the development that includes a road-side tree planting and/or maintenance schedule for all vegetation screens and bunds shown in Appendix 8; and
 - (g) ensure that the visual appearance of any new buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.

Visual Impact Management Plan

- B75. The Applicant must prepare a Visual Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
 - (b) describe the measures to be implemented to minimise and manage the visual and off-site lighting impacts of the development;
 - (c) include a landscaping strategy to reasonably minimise or shield public views of the development from key vantage points in the public and/or private domain, that includes a road-side tree planting and maintenance schedule; and
 - (d) include a program to monitor, maintain and report on the implementation and effectiveness of the visual impact mitigation measures to the satisfaction of the Planning Secretary.
- B76. The Applicant must not commence mining operations north of Wybong Road until the Visual Impact Management Plan is approved by the Planning Secretary.
- B77. The Applicant must implement the Visual Impact Management Plan as approved by the Planning Secretary.

WASTE

- B78. The Applicant must:
- (a) take all reasonable steps to minimise the waste (including coal rejects and tailings) generated by the development;
 - (b) classify all waste in accordance with the *Waste Classification Guidelines* (EPA, 2014);
 - (c) dispose of all waste at appropriately licensed waste facilities;
 - (d) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
 - (e) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review referred to in condition D11.
- B79. Except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

DANGEROUS GOODS

- B80. The Applicant must ensure that the storage, handling, and transport of:
- (a) dangerous goods is carried out in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*; and
 - (b) explosives are managed in accordance with the requirements of the Resources Regulator.

BUSHFIRE MANAGEMENT

- B81. The Applicant must:
- (a) ensure that the development:
 - (i) provides for asset protection in accordance with the relevant requirements in the *Planning for Bush Fire Protection* (RFS, 2019) guideline; and
 - (ii) ensure that there is suitable equipment to respond to any fires on the site; and
 - (b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.
- B82. Prior to commencing mining operations under this consent, the Applicant must prepare a Bushfire Management Plan for the development in consultation with RFS. This plan must include a:
- (a) contact person and 24 hour contact phone number;
 - (b) schedule and description of proposed bushfire mitigation works, including:
 - (i) location of managed and unmanaged vegetation within the site;
 - (ii) location of water supply; and
 - (iii) internal access roads;
 - (c) plan identifying the location and storage of bulk flammable liquids and materials;
 - (d) 'hot works' management plan, including:
 - (i) circumstances when 'hot works' are limited or prohibited; and
 - (ii) safety measures to be implemented when 'hot works' are being conducted; and
 - (e) emergency/evacuation plan in accordance with the *Guidelines for the Preparation of Emergency/Evacuation Plans* (RFS) and Australian Standard AS3745 *Planning for Emergencies in Facilities*.

B83. The Applicant must implement the Bushfire Management Plan in consultation with RFS.

REHABILITATION

Rehabilitation Objectives

B84. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the documents listed in condition A2(c) and shown in Appendix 9, and must comply with the objectives in Table 9.

Table 9: Rehabilitation objectives

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Fit for the intended post-mining land use/s • Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> • Establish/restore self-sustaining native woodland ecosystems • Establish local plant community types, with a particular focus on the plant communities and species shown in Appendix 9 • Establish: <ul style="list-style-type: none"> – riparian habitat within any diverted and/or re-established creek lines and retained water features; – habitat, feed and foraging resources for threatened fauna species; and – vegetation connectivity and wildlife corridors, as far as is reasonable and feasible
Areas proposed for agricultural land	<ul style="list-style-type: none"> • Establish/restore grassland areas to support sustainable agricultural activities • Use species found in the local area that are suitable for pasture production • Achieve land and soil capabilities that suitable for the intended post-mining land-use • Located adjacent to surrounding agricultural land, where practicable
Final Landform	<ul style="list-style-type: none"> • Stable and sustainable for the intended post-mining land use/s • Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable • Incorporate relief patterns and design principles consistent with natural drainage that mimic natural topography and mitigate erosion • Maximise surface water drainage to the natural environment (i.e. free draining landforms with the exception of final void catchments) • Minimise visual impacts, where practicable
Final voids	<ul style="list-style-type: none"> • Designed as long term groundwater sink to limit the release of saline water into the surrounding environment, as described in the documents listed in condition A2(c), unless further mine planning and final landform design processes identify a more suitable outcome for the final voids (see condition B87) • Optimise the size and depth of final voids to ensure the final landform is stable and non-polluting • Minimise to the greatest extent practicable: <ul style="list-style-type: none"> – the size and depth; – the drainage catchment of final voids; – any high wall instability risk; and – the risk of flood interaction • Maximise potential for beneficial reuse, where practicable
Creek restoration works	<ul style="list-style-type: none"> • Engineered to be hydraulically and geomorphologically stable • Incorporate erosion control measures based on vegetation and engineering revetments • Incorporate structures for aquatic habitat • Revegetate with suitable native species
Surface infrastructure of the development	<ul style="list-style-type: none"> • To be decommissioned, removed and rehabilitated, unless the Resources Regulator agrees otherwise
Rehabilitation materials	<ul style="list-style-type: none"> • Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and reused as rehabilitation resources, to the greatest extent practicable
Water quality	<ul style="list-style-type: none"> • Water retained on the site is fit for the intended post-mining land use/s

Feature	Objective
	<ul style="list-style-type: none"> Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation
Community	<ul style="list-style-type: none"> Ensure public safety Minimise adverse socio-economic effects associated with mine closure

B85. The rehabilitation objectives in Table 9 apply to the entire site, including all landforms constructed under either this consent or previous consents. However, the Applicant is not required to undertake any additional earthmoving works on landforms that have been approved and constructed under previous consents, except where those earthworks are required for the establishment of a stable, non-polluting and free-draining landform.

Progressive Rehabilitation

B86. The Applicant must rehabilitate^a the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

^a This condition does not prevent further disturbance at some later stage of the development of areas that have been rehabilitated.

Rehabilitation Strategy

B87. The Applicant must prepare a Rehabilitation Strategy for all land disturbed by the development to the satisfaction of the Planning Secretary. This strategy must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with the Resources Regulator and Council;
- (c) build upon the Rehabilitation Objectives in Table 9, describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including mine closure, final landform (including final voids), post-mining land use/s and water management;
- (d) align with strategic rehabilitation and mine closure objectives and address the principles of the *Strategic Framework for Mine Closure* (ANZMEC and MCA, 2000);
- (e) describe how the rehabilitation measures would be integrated with the measures in the Biodiversity Management Plan referred to in condition B56 and the Visual Impact Management Plan referred to in condition B75;
- (f) describe how rehabilitation will be integrated with the mine planning process, including a plan to address premature or temporary mine closure;
- (g) include indicative mine plans and scheduling for life-of-mine rehabilitation showing each rehabilitation domain;
- (h) include details of target vegetation communities and species to be established within the proposed revegetation areas;
- (i) investigate opportunities to refine and improve the final landform and final void outcomes over time;
- (j) include a risks and opportunities assessment and risk register;
- (k) include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the site (including the final void), that:
 - (i) align with regional and local strategic land use planning objectives and outcomes;
 - (ii) support a sustainable future for the local community;
 - (iii) utilise existing mining infrastructure, where practicable; and
 - (iv) avoid disturbing self-sustaining native ecosystems, where practicable;
- (l) include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes;
- (m) investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure; and
- (n) include a program to periodically review and update this strategy at least every three years.

B88. The Applicant must not commence mining operations north of Wybong Road until the Rehabilitation Strategy is approved by the Planning Secretary.

B89. The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.

Rehabilitation Management Plan

B90. The Applicant must prepare a Rehabilitation Management Plan for the development, in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This plan must:

- (a) be prepared in consultation with the Department and Council;
- (b) be prepared in accordance with any relevant Resources Regulator Guidelines;
- (c) include detailed performance indicators and completion criteria for each rehabilitation domain, and triggers for remedial actions;
- (d) include an overview of the identified risks to achieving successful rehabilitation;
- (e) describe the measures to be implemented on the site to achieve the Rehabilitation Objectives in Table 9, the requirements of the Rehabilitation Strategy referred to in condition B87 and the criteria in paragraph (c);
- (f) include a program to monitor, independently audit and report on progress against the criteria in paragraph (c) and the effectiveness of the measures in paragraph (d);
- (g) describe any further studies, work, research or consultation that will be undertaken to expand the site-specific rehabilitation knowledge base, reduce uncertainty and improve rehabilitation outcomes; and
- (h) outline intervention and adaptive management techniques to ensure rehabilitation remains on a trajectory of achieving the Rehabilitation Objectives, Rehabilitation Completion Criteria and the Final Landform in the Rehabilitation Management Plan as soon as reasonably practical.

TRANSPORT

Monitoring of Coal Transport

B91. The Applicant must:

- (a) keep accurate records of the:
 - (i) amount of coal transported from the site (on a daily basis); and
 - (ii) date and time of each train movement generated by the development; and
- (b) publish these results in the Annual Review.

Train Movements and Refuelling

B92. The Applicant must:

- (a) restrict train movements to/from site to a maximum of 20 train movements a day (ie. 10 trains in; 10 trains out);
- (b) use reasonable endeavours to ensure that its rail spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with relevant noise limits imposed in any relevant rolling stock operator's EPL; and
- (c) only refuel trains on site that are directly associated with the coal transport operations of the development.

Road Maintenance

B93. The Applicant must:

- (a) prepare a pre-dilapidation survey of the road transport route prior to the commencement of any construction or decommissioning works;
- (b) prepare a post-dilapidation survey of the road transport route within 1 month of the completion of construction or decommissioning works, or other timeframe agreed by the applicable roads authority; and
- (c) rehabilitate and/or make good any construction and decommissioning related damage identified in the post-dilapidation survey prepared under condition B93(b) within 2 months of completing the post-dilapidation survey, or other timeframe agreed by the applicable roads authority,

to the satisfaction of the applicable roads authority.

B94. If the construction and/or decommissioning of the development is to be staged, the obligations in this condition apply to each stage.

B95. If there is a dispute about the scope of any remedial works or the implementation of the works, then either party may refer the matter to the Planning Secretary for resolution.

Thomas Mitchell Drive

B96. After the commencement of construction (as notified under condition A13(b)), the Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive, and the upgrade of the Thomas Mitchell Drive/Denman Road intersection, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Thomas Mitchell Drive Contributions Study, unless otherwise agreed with the Planning Secretary.

For Thomas Mitchell Drive, the contributions must:

- (a) be paid to Council by the end of the financial year in which construction commences for the upgrade works; and
- (b) be paid to Council in accordance with the maintenance schedule established in accordance with the Thomas Mitchell Drive Contributions Study during the life of the development (commencing from the year construction commences as notified under condition A13(b)), unless otherwise agreed with Council.

For the Thomas Mitchell Drive/Denman Road intersection, the contributions must be paid to the relevant road authority undertaking the works (or if another mining company is undertaking the works, to that mining company) within three months of the completion of the intersection upgrade works to the satisfaction of TfNSW and Council, unless otherwise agreed with the Planning Secretary.

Notes:

- If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.
- In making a determination about the applicable contribution/s under condition B96, the Planning Secretary shall take into account the contributions already paid and currently required to be paid towards the upgrade and maintenance of the local road network and any associated Voluntary Planning Agreement with Council.

Restriction on Transport Routes

B97. The Applicant must ensure that

- (a) all over-dimensional vehicle access to and from the site is via Wybong Road east of the mine access road; and
- (b) all heavy vehicle access to and from the site is via Wybong Road east of the mine access road,

unless the applicable roads authority agrees otherwise.

Note: The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimension vehicles on the road network.

B98. Project related traffic must not use Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road to get to or from the site, except in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

B99. Project-related heavy vehicle traffic must not use Wybong Road west of the mine access road (to the intersection with the Golden Highway) to access the site, except during construction and decommissioning, or in any emergency to avoid the loss of lives, property and/or prevent environmental harm.

B100. Condition B98 does not apply to any employees that reside on Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road, or the infrequent use of the roads for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.

Wybong Post Office Road

B101. Prior to undertaking mining operations within 200 m of Wybong Post Office Road, unless otherwise agreed to by the Planning Secretary, the Applicant must close the affected section of Wybong Post Office Road and either:

- (a) realign the affected section of Wybong Post Office Road as described in the EIS and shown conceptually in Appendix 2, to the satisfaction of the applicable roads authority; or
- (b) provide a financial contribution to Council equivalent to the cost of the works identified in subparagraph (a) that is to be directed towards the implementation of Council's preferred approach to addressing road network issues associated with the closure of the affected section of Wybong Post Office Road.

Note: Under the Roads Act 1993, the Applicant may require separate approvals from appropriate roads authorities prior to closure, construction or dedication of public roads.

B102. If there is any dispute between the Applicant and Council in implementing the requirements of condition B101, then either party may refer the matter to the Planning Secretary for resolution.

Traffic Management Plan

B103. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with TfNSW and Council;
- (c) include details of all transport routes and traffic types to be used for development-related traffic;
- (d) include details of flood warning signage, including flood depth indicators, in the vicinity of the haul road overpass;

- (e) include a protocol for undertaking pre and post-dilapidation surveys and repairing any roads identified in the dilapidation surveys to have been damaged during construction and/or decommissioning works;
- (f) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during the construction, operation and decommissioning phases of the development, including:
 - (i) temporary traffic controls, including detours and signage (where relevant);
 - (ii) notifying the local community about development-related traffic impacts;
 - (iii) minimising potential for conflict with school buses and stock movements;
 - (iv) access and car parking arrangements;
 - (v) staggering shift changes with other mining operations in the locality, where practicable, to minimise impacts during AM and PM peak traffic periods;
 - (vi) responding to any emergency repair requirements or maintenance during construction and/or decommissioning; and
 - (vii) a traffic management system for managing over-dimensional vehicles; and
- (g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
 - (i) adhere to posted speed limits or other required travelling speeds;
 - (ii) adhere to the designated transport routes; and
 - (iii) implement safe driving practices.

B104. If the construction and/or decommissioning of the development is to be staged, the obligations in condition B103 apply to each stage of construction and/or decommissioning.

B105. The Applicant must not commence mining operations north of Wybong Road until the Traffic Management Plan is approved by the Planning Secretary.

B106. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

Social Impact Management Plan

B107. The Applicant must prepare a Social Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s;
- (b) be prepared in consultation with Council, the CCC, local affected communities and other interested stakeholders;
- (c) identify both positive and negative social impacts resulting from the development and following mine closure, both locally and regionally;
- (d) specify adaptive management and mitigation measures to avoid, minimise, and/or mitigate negative social impacts;
- (e) identify opportunities to secure and enhance positive social impacts from the development, including opportunities to assist in maintaining community services and facilities;
- (f) include a stakeholder engagement plan to guide the evaluation and implementation of social impact management and mitigation measures; and
- (g) include a program to monitor, review and report on the effectiveness of these measures, including updating the plan 3 years prior to mine closure.

B108. The Applicant must not commence mining operations north of Wybong Road until the Social Impact Management Plan is approved by the Planning Secretary.

B109. The Applicant must implement the Social Impact Management Plan as approved by the Planning Secretary.

PART C ADDITIONAL PROCEDURES

ACQUISITION UPON REQUEST

- C1. Upon receiving a written request for acquisition from the owner of the privately-owned land^a listed in Table 10, the Applicant must acquire the land in accordance with the procedures in conditions C12 to C19, inclusive.

Table 10: Land subject to acquisition upon request

Acquisition Basis	Land
Noise	R25, R66, R110, R130, R139, R148, R205
Noise and Air Quality	R83

^aThe location of the land referred to in Table 10 is shown in Appendix 3.

ADDITIONAL MITIGATION UPON REQUEST

- C2. Upon receiving a written request for mitigation from the owner of any residence on the privately-owned land^a listed in Table 10 or Table 11, the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development* (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise and/or air quality impacts of the development. The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.

Table 11: Land subject to additional mitigation upon request

Mitigation Basis	Land
Noise	R128, R144, R154, R171, R176, R193, R261, R263, R109A, R109B, R109C, R109D, R109E, R109F, R125A, R134A, R182B, R164, R177, R251, R174A, R174B

^aThe locations of the land referred to in Table 11 are shown in Appendix 3.

- C3. 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 Planning Secretary for resolution.
- C4. For the life of the development, the Applicant must continue to contribute to reasonable maintenance and recurrent operating costs associated with the noise mitigation measures installed at privately-owned residences under the Mangoola Coal Project and as described in the documents listed in condition A2(c). The contribution to ongoing maintenance and recurrent operating costs must be consistent with any existing agreement between the Applicant and the relevant landowner.

NOTIFICATION OF LANDOWNERS/TENANTS

- C5. Within one month of the date of this consent, the Applicant must:
- (a) notify in writing the owner of:
 - (i) the land listed in Table 10 that they have the right to require the Applicant to acquire their land at any stage during the development;
 - (ii) the residences on the land listed in Table 10 and Table 11 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and
 - (iii) any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask the Applicant for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
 - (b) notify the tenants of any mine-owned land of their rights under this consent; and
 - (c) send a copy of the fact sheet entitled “*Mine Dust and You*” (NSW Health, 2017) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria identified in condition B27 at any time during the life of the development.
- C6. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
- (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled “*Mine Dust and You*” (NSW Health, 2017); and

- (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.

NOTIFICATION OF EXCEEDANCES

- C7. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.
- C8. For any exceedance of any air quality criterion in PART B of this consent, the Applicant must also provide to any affected land owners and/or tenants a copy of the fact sheet entitled "*Mine Dust and You*" (NSW Health, 2017).

INDEPENDENT REVIEW

- C9. If a landowner considers the development to be exceeding any relevant noise, blasting or air quality criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
- C10. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
- C11. If the Planning Secretary is satisfied that an independent review is warranted, within 3 months of the Planning Secretary's decision, or other timeframe agreed by the Planning Secretary, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
 - (i) consult with the landowner to determine their concerns;
 - (ii) conduct monitoring to determine whether the development is complying with the relevant criteria in PART B of this consent; and
 - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and
 - (b) give the Planning Secretary and landowner a copy of the independent review; and
 - (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

LAND ACQUISITION

- C12. Within 3 months of receiving a written request for acquisition from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:
 - (i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - (ii) presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise and/or air quality mitigation measures in condition C2;
 - (b) the reasonable costs associated with:
 - (i) relocating within the Muswellbrook local government area, or to any other local government area agreed to by the Planning Secretary; and
 - (ii) obtaining independent legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
 - (c) reasonable compensation for any disturbance caused by the land acquisition process.
- C13. If, within two months of the binding written offer being made under condition C12, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.
- C14. Upon receiving a request, under condition C13, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:
- (a) consider submissions from both parties;
 - (b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in condition C12;
 - (c) prepare a detailed report setting out the reasons for any determination; and
 - (d) provide a copy of the report to both parties.

- C15. Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.
- C16. However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition C12, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.
- C17. Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination.
- C18. If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.
- C19. The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions C12 to C18 inclusive, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.

PART D ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

- D1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
- (a) provide the strategic framework for environmental management of the development;
 - (b) identify the statutory approvals that apply to the development;
 - (c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (d) set out the procedures to be implemented to:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - (ii) receive record, handle and respond to complaints;
 - (iii) resolve any disputes that may arise during the course of the development;
 - (iv) respond to any non-compliance and any incident;
 - (v) respond to emergencies; and
 - (e) include:
 - (i) references to any strategies, plans and programs approved under the conditions of this consent; and
 - (ii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.
- D2. The Applicant must not commence mining operations north of Wybong Road until the Environmental Management Strategy is approved by the Planning Secretary.
- D3. The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.

Adaptive Management

- D4. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement reasonable remediation measures as directed by the Planning Secretary.

Management Plan Requirements

- D5. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
- (a) summary of relevant background or baseline data;
 - (b) details of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures and criteria; and
 - (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;
 - (c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);
 - (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
 - (e) a program to monitor and report on the:
 - (i) impacts and environmental performance of the development; and
 - (ii) effectiveness of the management measures set out pursuant to condition D4(c);
 - (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;
 - (g) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (h) a protocol for managing and reporting any:
 - (i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion;
 - (ii) complaint; or
 - (iii) failure to comply with other statutory requirements;
 - (i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and
 - (j) a protocol for periodic review of the plan.

Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

- D6. The Applicant must ensure that management plans prepared for the development are consistent with the conditions of this consent and any EPL issued for the site.

REVISION OF STRATEGIES, PLANS AND PROGRAMS

- D7. Within three months of:
- (a) the submission of an incident report under condition D9;
 - (b) the submission of an Annual Review under condition D11;
 - (c) the submission of an Independent Environmental Audit under condition D12;
 - (d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or
 - (e) notification of a change in development phase under condition A13;

the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.

- D8. If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

Note: *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

REPORTING AND AUDITING

Incident Notification

- D9. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

Non-Compliance Notification

- D10. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Annual Review

- D11. By the end of March each year after the commencement of development, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the previous calendar, and the development that is proposed to be carried out over the current calendar year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:
 - (i) relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this consent;
 - (iii) monitoring results of previous years; and
 - (iv) relevant predictions in the document/s listed in condition A2(c);
 - (c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
 - (d) evaluate and report on:
 - (i) the effectiveness of the noise and air quality management systems;
 - (ii) compliance with the performance measures, criteria and operating conditions of this consent; and
 - (iii) the status of translocated plants and vegetation quadrat data from orchid monitoring sites;
 - (e) identify any trends in the monitoring data over the life of the development;
 - (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (g) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.
- D12. Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.

Independent Environmental Audit

- D13. Within one year of commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:
- (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary;
 - (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary;
 - (c) be carried out in consultation with the relevant agencies and the CCC;
 - (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
 - (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
 - (f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
 - (g) be conducted and reported to the satisfaction of the Planning Secretary.
- D14. Within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.

Monitoring and Environmental Audits

- D15. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

- D16. Noise, blast and/or air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plan/s.

ACCESS TO INFORMATION

- D17. Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must:

- (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:
 - (i) the documents referred to in condition A2(c) of this consent;
 - (ii) all current statutory approvals for the development;
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;
 - (iv) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
 - (v) minutes of CCC meetings;
 - (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
 - (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - (viii) a summary of the current phase and progress of the development;
 - (ix) contact details to enquire about the development or to make a complaint;
 - (x) a complaints register, updated monthly;
 - (xi) the Annual Reviews of the development;
 - (xii) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant’s response to the recommendations in any audit report;
 - (xiii) any other matter required by the Planning Secretary; and
- (b) keep such information up to date, to the satisfaction of the Planning Secretary.

APPENDIX 1 SCHEDULE OF LAND

Lot	DP	Owner
1	957501	Minister for Public Works
1	1003300	Mangoola Coal Operations Pty Ltd
1	1014899	Mangoola Coal Operations Pty Ltd
1	1123727	Mangoola Coal Operations Pty Ltd
1	1152687	Mangoola Coal Operations Pty Ltd
1	1178289	Mangoola Coal Operations Pty Ltd
1	121350	Mangoola Coal Operations Pty Ltd
1	360377	Mangoola Coal Operations Pty Ltd
1	727239	Mangoola Coal Operations Pty Ltd
1	950763	Mangoola Coal Operations Pty Ltd
1	995693	Mangoola Coal Operations Pty Ltd
10	1152687	Mangoola Coal Operations Pty Ltd
100	805458	Mangoola Coal Operations Pty Ltd
101	805458	Mangoola Coal Operations Pty Ltd
11	112946	Mangoola Coal Operations Pty Ltd
11	1152683	Mangoola Coal Operations Pty Ltd
11	842072	Mangoola Coal Operations Pty Ltd
111	531273	Mangoola Coal Operations Pty Ltd
112	531273	Mangoola Coal Operations Pty Ltd
12	1152682	Mangoola Coal Operations Pty Ltd
12	230283	Mangoola Coal Operations Pty Ltd
12	594674	Mangoola Coal Operations Pty Ltd
13	240086	Mangoola Coal Operations Pty Ltd
14	240086	Mangoola Coal Operations Pty Ltd
144	750968	Mangoola Coal Operations Pty Ltd
15	1166900	Mangoola Coal Operations Pty Ltd
7004	93189	Mangoola Coal Operations Pty Ltd
15	240086	Mangoola Coal Operations Pty Ltd
154	750968	Mangoola Coal Operations Pty Ltd
155	750968	Mangoola Coal Operations Pty Ltd
156	750968	Mangoola Coal Operations Pty Ltd
16	240086	Mangoola Coal Operations Pty Ltd
160	750968	Mangoola Coal Operations Pty Ltd
162	750968	Mangoola Coal Operations Pty Ltd
17	240086	Mangoola Coal Operations Pty Ltd
173	750968	Mangoola Coal Operations Pty Ltd
177	750968	Mangoola Coal Operations Pty Ltd
178	750924	Mangoola Coal Operations Pty Ltd
179	750924	Mangoola Coal Operations Pty Ltd
18	240086	Mangoola Coal Operations Pty Ltd
18	996754	Mangoola Coal Operations Pty Ltd
185	750924	Mangoola Coal Operations Pty Ltd
187	750924	Mangoola Coal Operations Pty Ltd
188	750924	Mangoola Coal Operations Pty Ltd

Lot	DP	Owner
2	1152687	Mangoola Coal Operations Pty Ltd
2	1193978	Mangoola Coal Operations Pty Ltd
2	1193998	Mangoola Coal Operations Pty Ltd
20	240086	Mangoola Coal Operations Pty Ltd
201	706571	Mangoola Coal Operations Pty Ltd
204	750968	Mangoola Coal Operations Pty Ltd
205	750968	Mangoola Coal Operations Pty Ltd
209	750968	Mangoola Coal Operations Pty Ltd
21	240086	Mangoola Coal Operations Pty Ltd
21	622786	Mangoola Coal Operations Pty Ltd
21	706943	Mangoola Coal Operations Pty Ltd
21	711164	Mangoola Coal Operations Pty Ltd
21	8090	Mangoola Coal Operations Pty Ltd
210	750968	Mangoola Coal Operations Pty Ltd
211	750968	Mangoola Coal Operations Pty Ltd
212	750968	Mangoola Coal Operations Pty Ltd
215	750968	Mangoola Coal Operations Pty Ltd
216	750968	Mangoola Coal Operations Pty Ltd
2170	706389	Mangoola Coal Operations Pty Ltd
2171	706389	Mangoola Coal Operations Pty Ltd
218	750968	Mangoola Coal Operations Pty Ltd
22	240086	Mangoola Coal Operations Pty Ltd
22	622786	Mangoola Coal Operations Pty Ltd
22	706943	Mangoola Coal Operations Pty Ltd
22	8090	Mangoola Coal Operations Pty Ltd
227	750968	Mangoola Coal Operations Pty Ltd
912	588390	Mangoola Coal Operations Pty Ltd
229	726283	Mangoola Coal Operations Pty Ltd
199	750968	Mangoola Coal Operations Pty Ltd
23	240086	Mangoola Coal Operations Pty Ltd
23	622786	Mangoola Coal Operations Pty Ltd
230	869334	Mangoola Coal Operations Pty Ltd
257	706955	Mangoola Coal Operations Pty Ltd
3	1152687	Mangoola Coal Operations Pty Ltd
3	1193998	Mangoola Coal Operations Pty Ltd
3	7590	Mangoola Coal Operations Pty Ltd
31	735121	Mangoola Coal Operations Pty Ltd
32	735121	Mangoola Coal Operations Pty Ltd
32	750968	Mangoola Coal Operations Pty Ltd
36	1183354	Mangoola Coal Operations Pty Ltd
36	750924	Mangoola Coal Operations Pty Ltd
39	750968	Mangoola Coal Operations Pty Ltd
4	1152687	Mangoola Coal Operations Pty Ltd
4	587737	Mangoola Coal Operations Pty Ltd

Lot	DP	Owner
189	750968	Mangoola Coal Operations Pty Ltd
19	240086	Mangoola Coal Operations Pty Ltd
190	750968	Mangoola Coal Operations Pty Ltd
191	750968	Mangoola Coal Operations Pty Ltd
192	750968	Mangoola Coal Operations Pty Ltd
193	750968	Mangoola Coal Operations Pty Ltd
194	750968	Mangoola Coal Operations Pty Ltd
195	750968	Mangoola Coal Operations Pty Ltd
196	750968	Mangoola Coal Operations Pty Ltd
198	750968	Mangoola Coal Operations Pty Ltd
634	748470	Mangoola Coal Operations Pty Ltd
651	263080	Mangoola Coal Operations Pty Ltd
652	263080	Mangoola Coal Operations Pty Ltd
653	263080	Mangoola Coal Operations Pty Ltd
654	263080	Mangoola Coal Operations Pty Ltd
655	263080	Mangoola Coal Operations Pty Ltd
656	633417	Mangoola Coal Operations Pty Ltd
657	633417	Mangoola Coal Operations Pty Ltd
658	633417	Mangoola Coal Operations Pty Ltd
659	633417	Mangoola Coal Operations Pty Ltd
7	1152687	Mangoola Coal Operations Pty Ltd
8	1152687	Mangoola Coal Operations Pty Ltd
93	750968	Mangoola Coal Operations Pty Ltd
97	750968	Mangoola Coal Operations Pty Ltd
45	750968	Mangoola Coal Operations Pty Ltd
46	750968	Mangoola Coal Operations Pty Ltd
5	1152687	Mangoola Coal Operations Pty Ltd
163	750968	Mangoola Coal Operations Pty Ltd
3	1193978	Mangoola Coal Operations Pty Ltd

Lot	DP	Owner
4	729944	Mangoola Coal Operations Pty Ltd
40	750968	Mangoola Coal Operations Pty Ltd
41	531030	Mangoola Coal Operations Pty Ltd
41	750968	Mangoola Coal Operations Pty Ltd
41	805505	Mangoola Coal Operations Pty Ltd
41	850807	Mangoola Coal Operations Pty Ltd
42	531030	Mangoola Coal Operations Pty Ltd
42	750968	Mangoola Coal Operations Pty Ltd
42	805505	Mangoola Coal Operations Pty Ltd
501	521971	Mangoola Coal Operations Pty Ltd
6	1152687	Mangoola Coal Operations Pty Ltd
62	750968	Mangoola Coal Operations Pty Ltd
62	833005	Mangoola Coal Operations Pty Ltd
63	750924	Mangoola Coal Operations Pty Ltd
633	748470	Mangoola Coal Operations Pty Ltd
88	750968	Mangoola Coal Operations Pty Ltd
9	1152687	Mangoola Coal Operations Pty Ltd
911	588390	Mangoola Coal Operations Pty Ltd
Sections of Crown Roads, Council Roads, the bed and banks of the Hunter River and the Muswellbrook-Ulan Rail Line		

APPENDIX 2 DEVELOPMENT LAYOUT PLANS

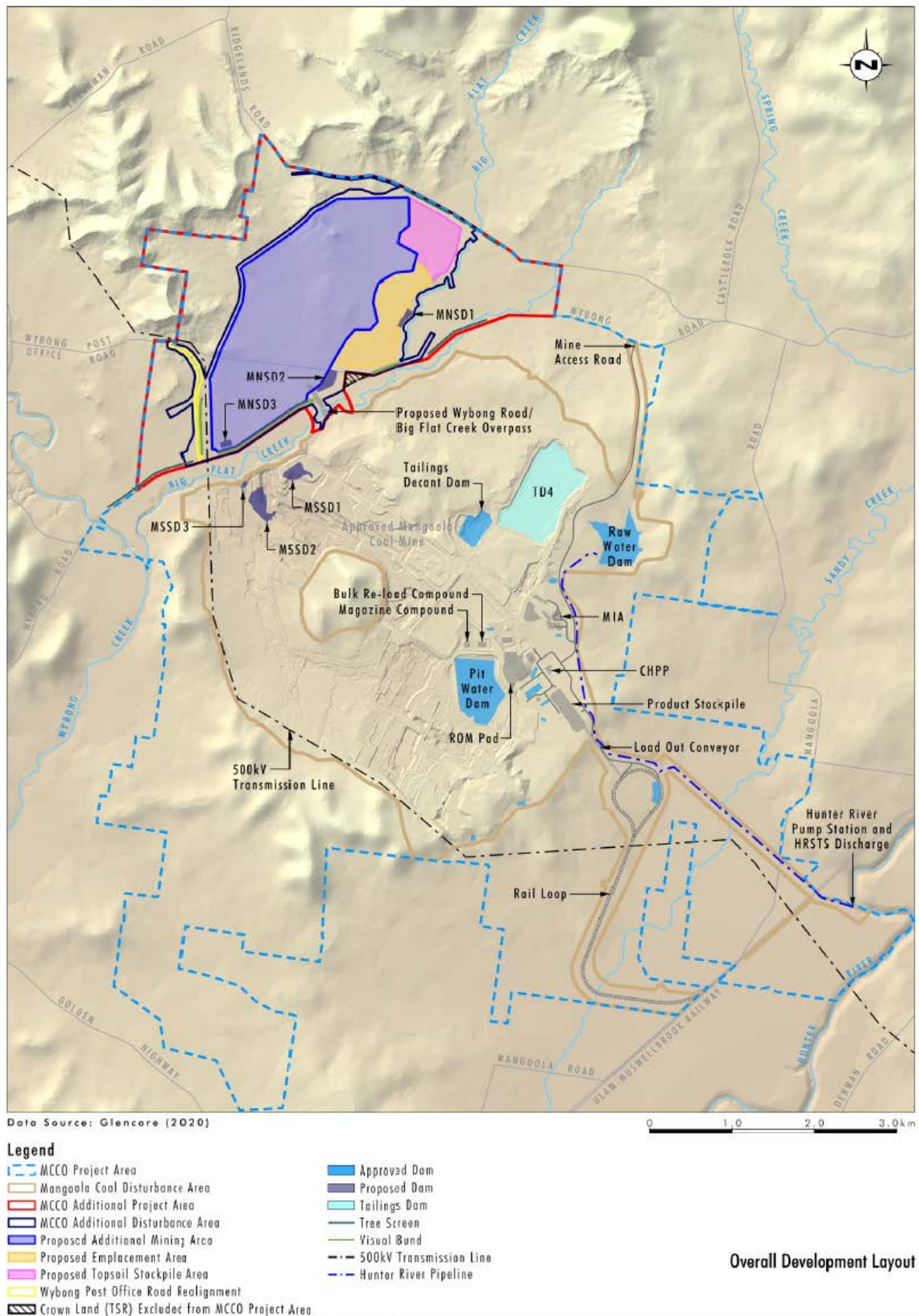


Figure 1: Overall Development Layout

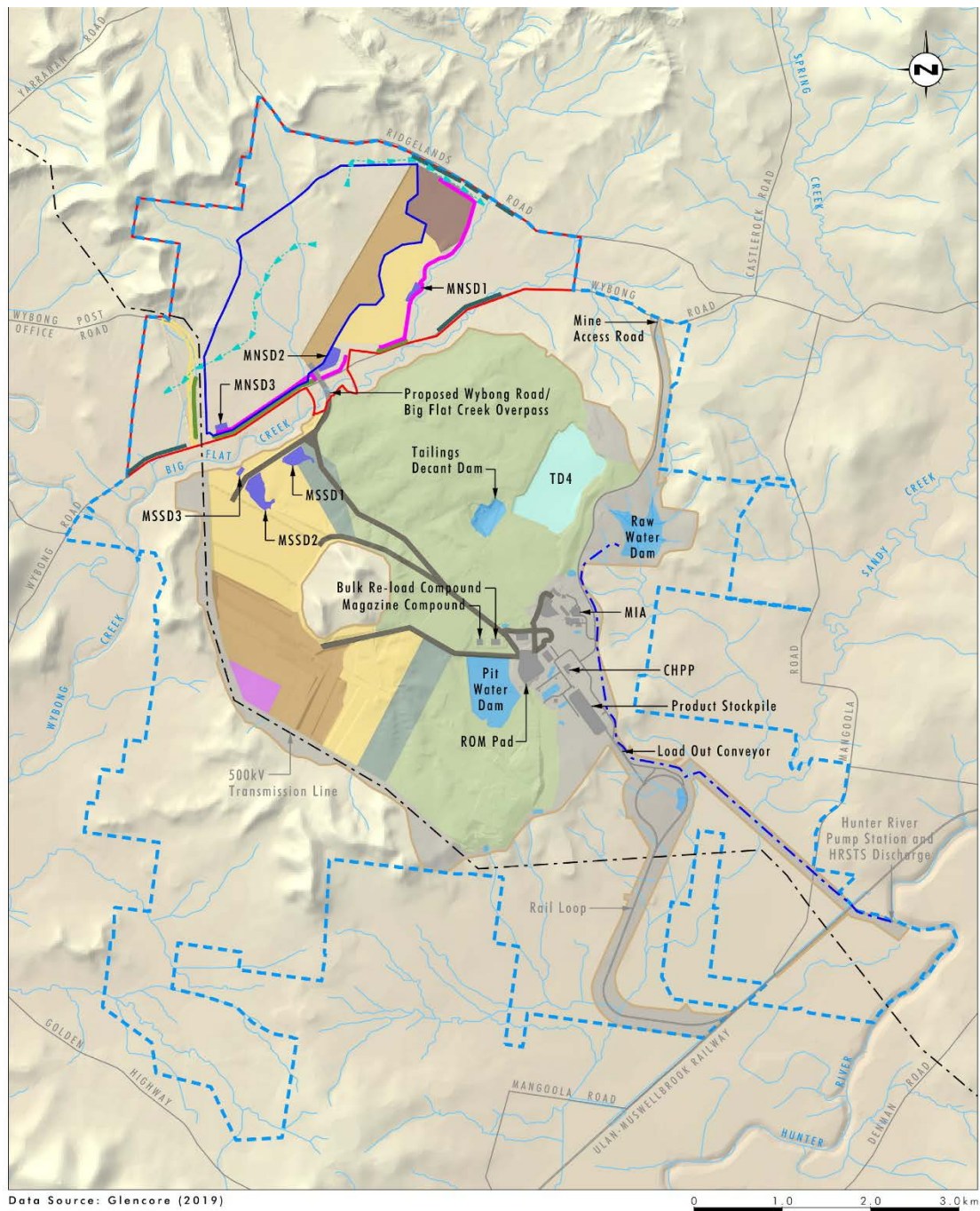
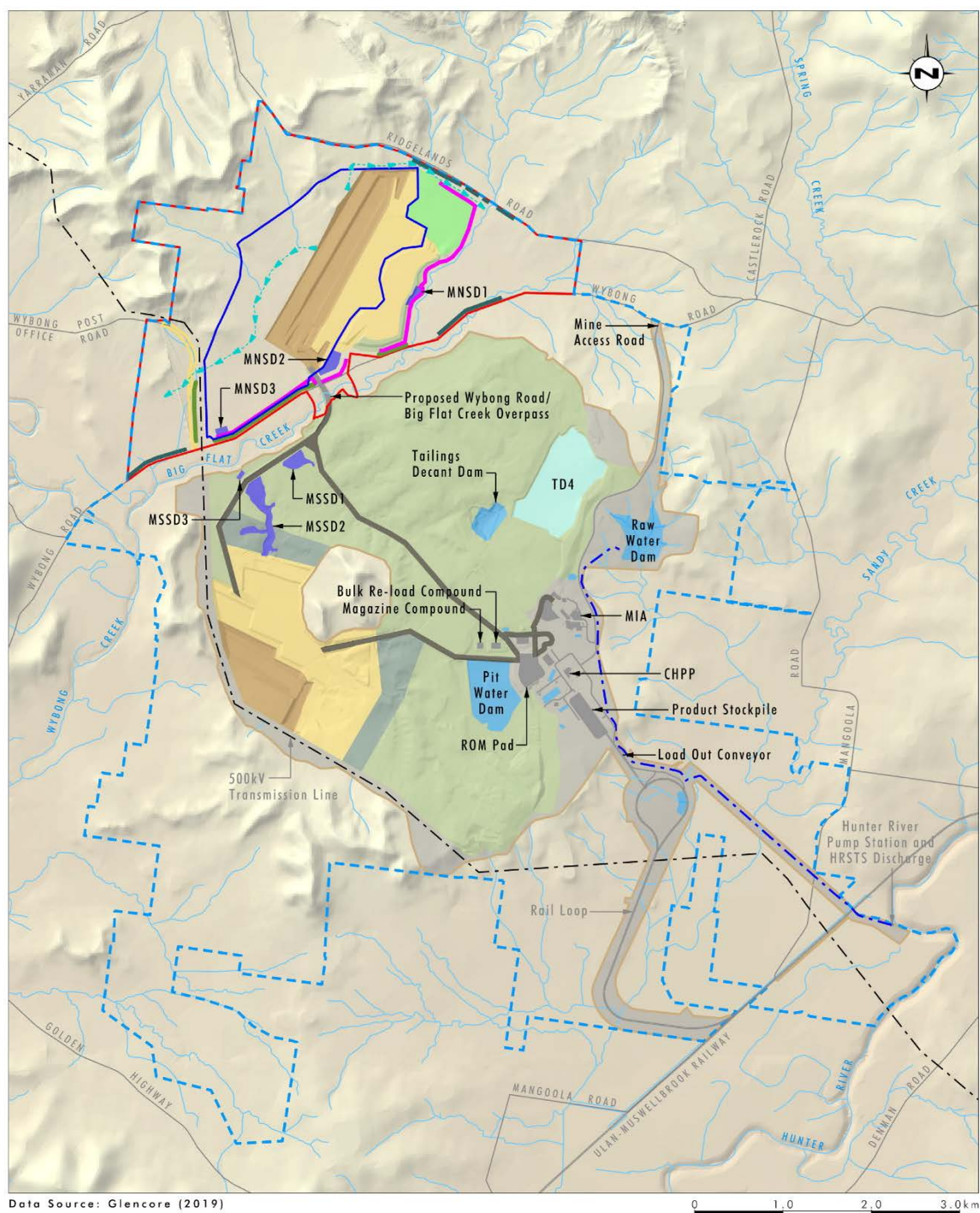


FIGURE 3.3
Conceptual Stage Plan
Project Year 1

Figure 2: Development Layout - Year 1



- Legend**
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> MCCO Project Area Approved Mangooka Coal Mine Disturbance Area MCCO Additional Project Area Proposed Additional Mining Area Wybong Post Office Road Realignment Hunter River Pipeline Clean Water Diversion Drain Flood Levee | <ul style="list-style-type: none"> Tree Screen Visual Bund Infrastructure Infrastructure Domain Active Mining Overburden Emplacement - Active Overburden Emplacement - Reshaped Rehabilitation | <ul style="list-style-type: none"> Rehabilitation - Temporary Approved Dam Proposed Dam Tailings Dam Haul Road |
|--|--|---|

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FIGURE 3.4
Conceptual Stage Plan
Project Year 3

Figure 3: Development Layout - Year 3

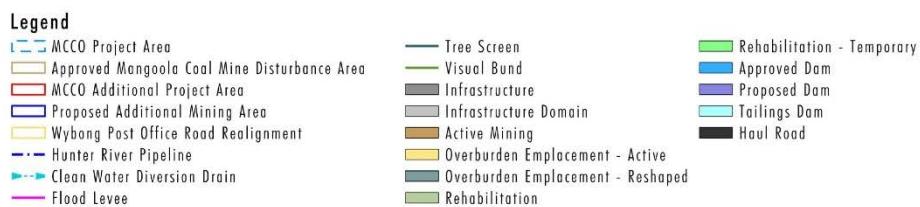
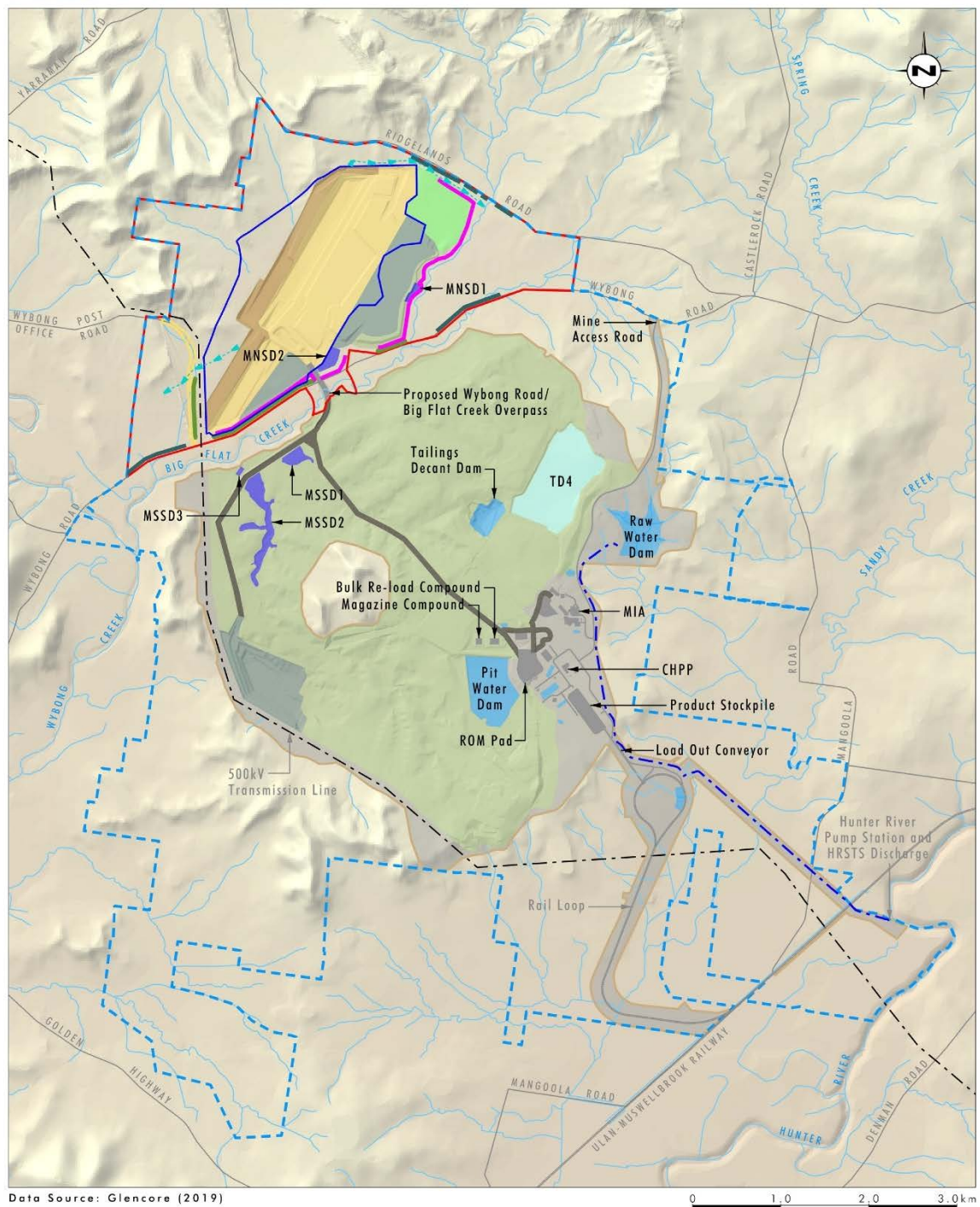


FIGURE 3.5
Conceptual Stage Plan
Project Year 5

Figure 4: Development Layout - Year 5

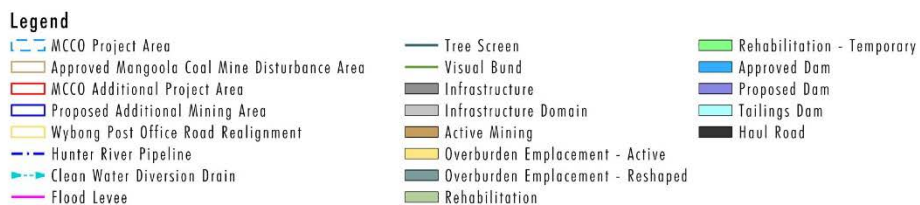
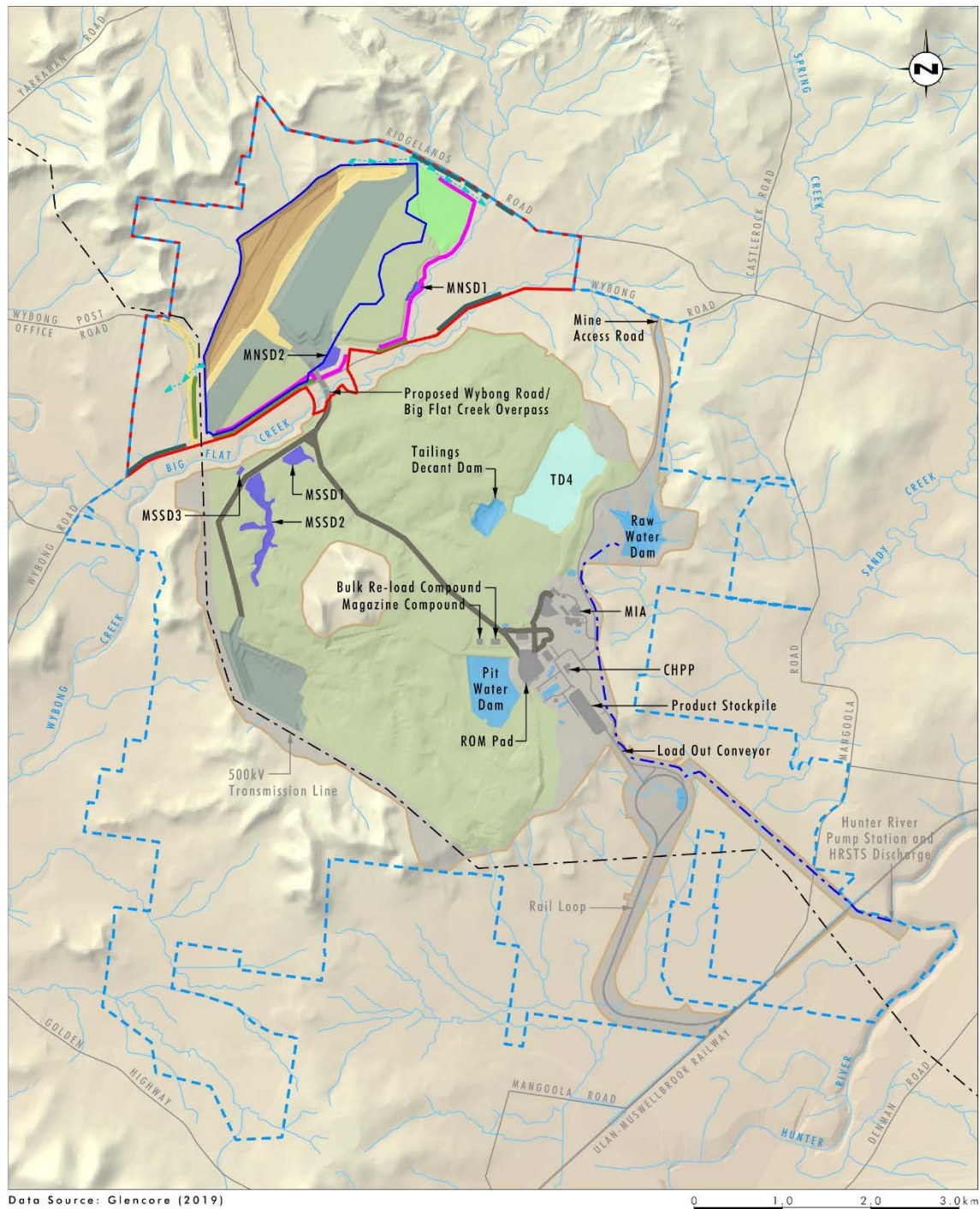


FIGURE 3.6
Conceptual Stage Plan
Project Year 8

Figure 5: Development Layout - Year 8

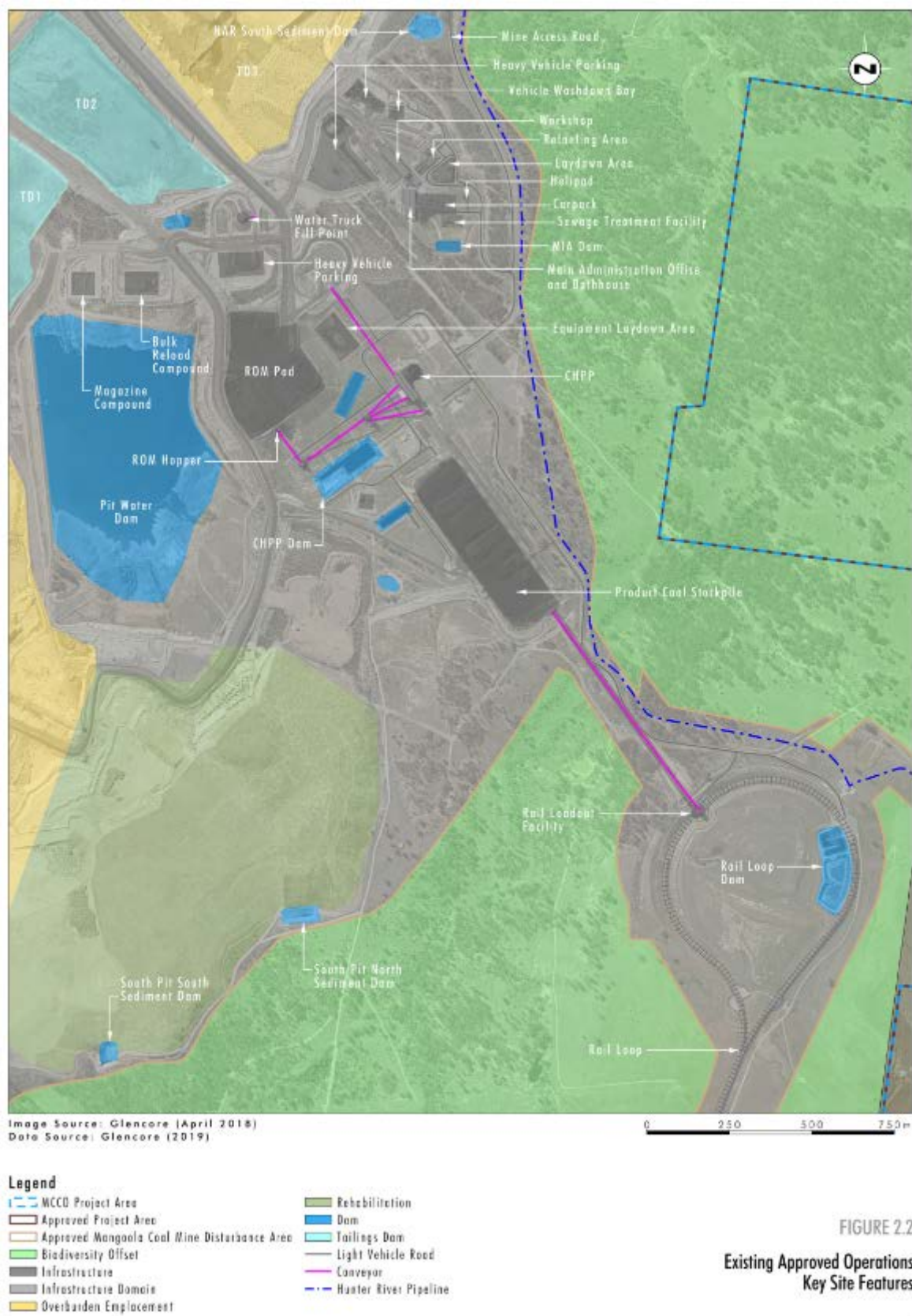


Figure 6: Development Layout – Mine Infrastructure Areas

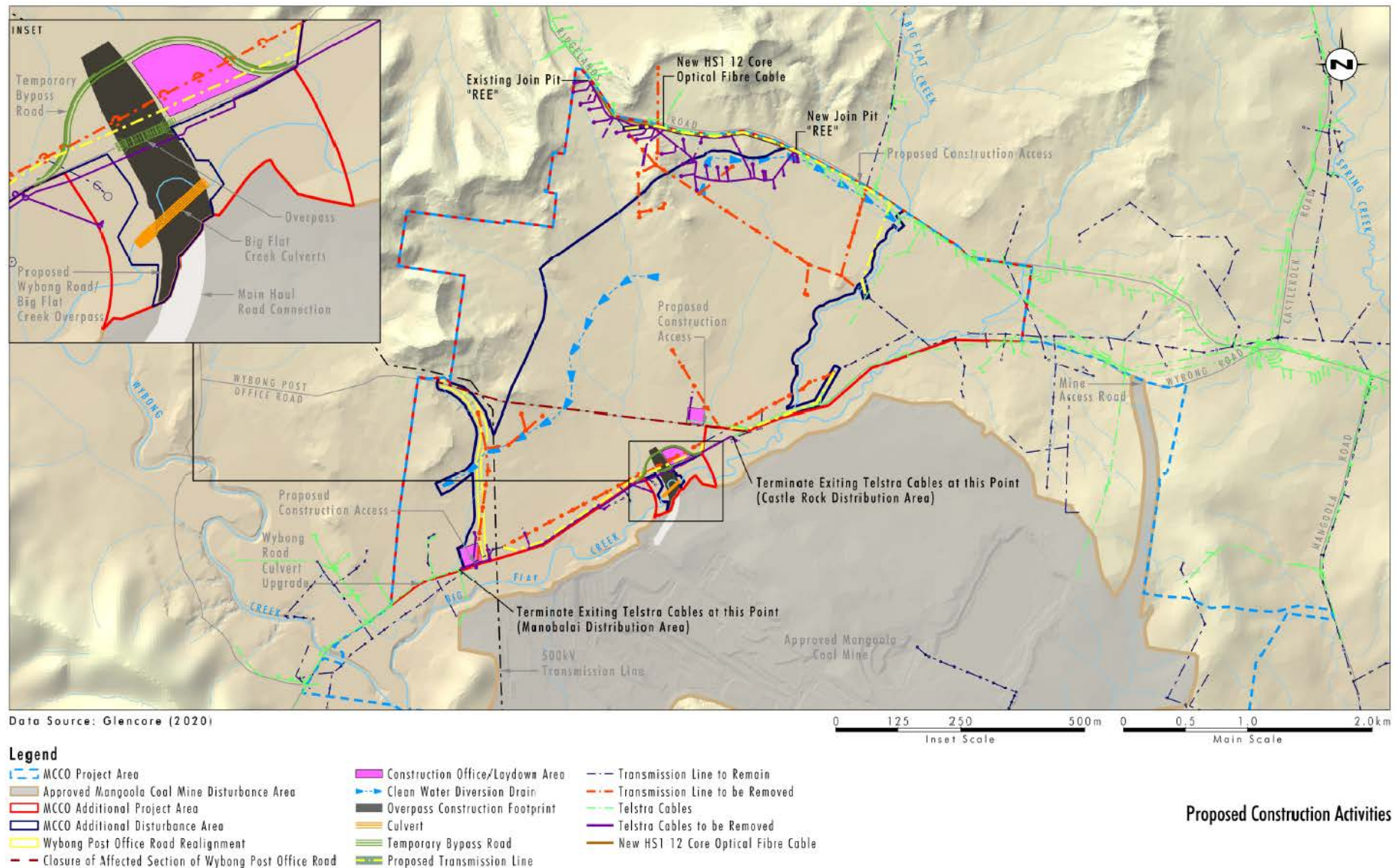


Figure 7: Development Layout – Construction Activities

APPENDIX 3 GROUNDWATER BORE LOCATIONS

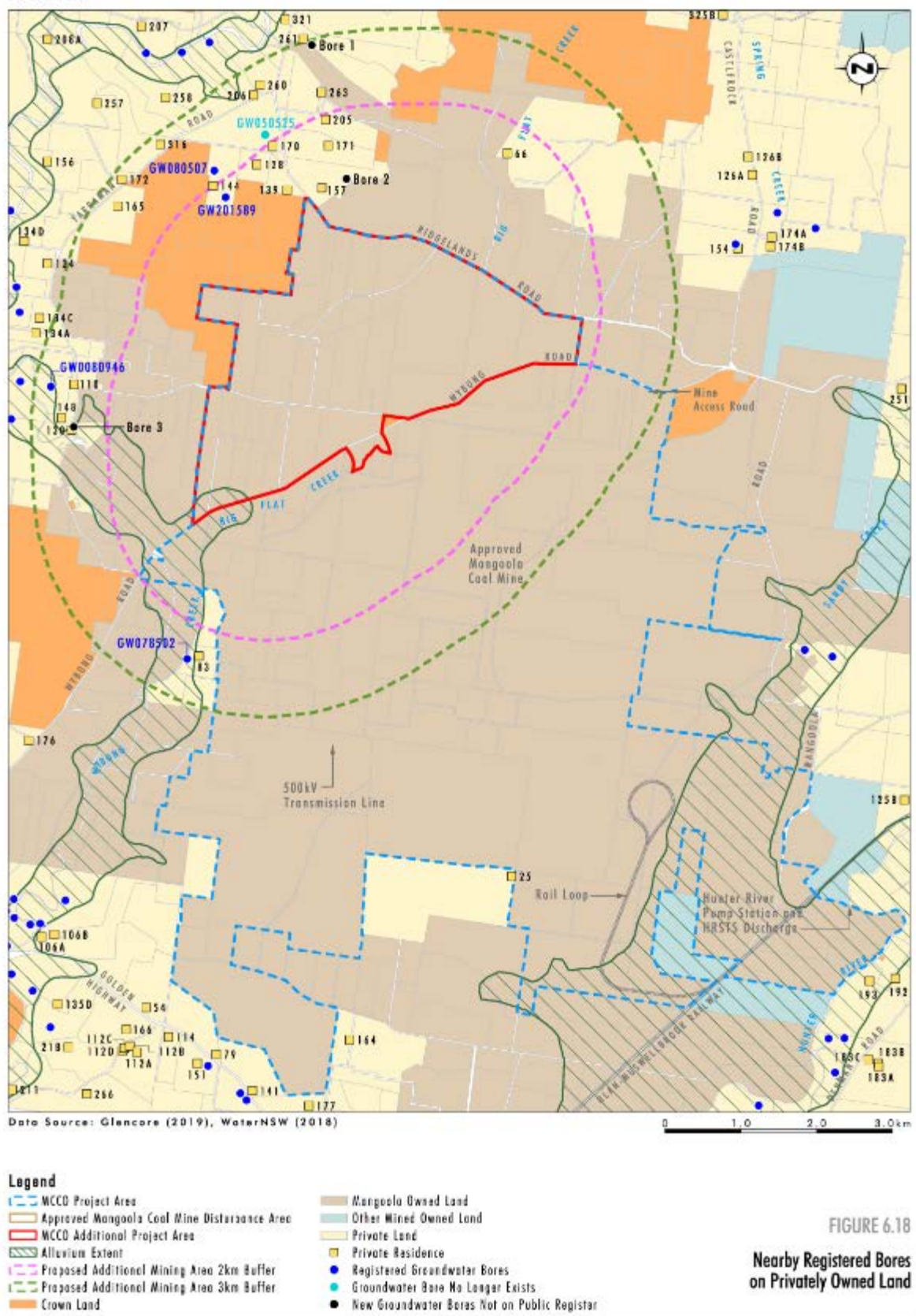


Figure 8: Bores on Privately Owned Land

APPENDIX 4 BLAST SENSITIVE LOCATIONS

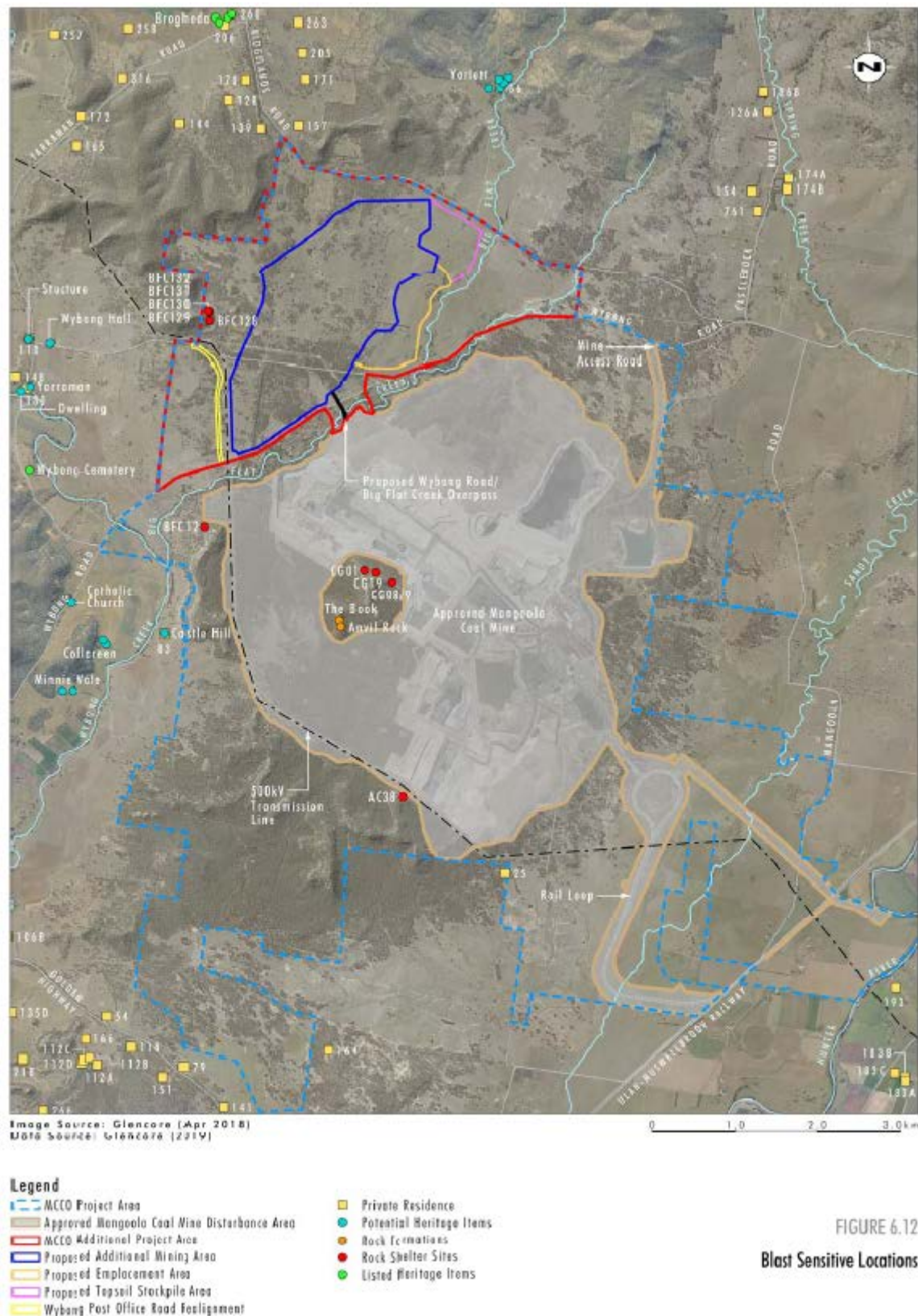


FIGURE 6.12
Blast Sensitive Locations

Figure 9: Blast Sensitive Locations

APPENDIX 5 RECEIVER LOCATIONS

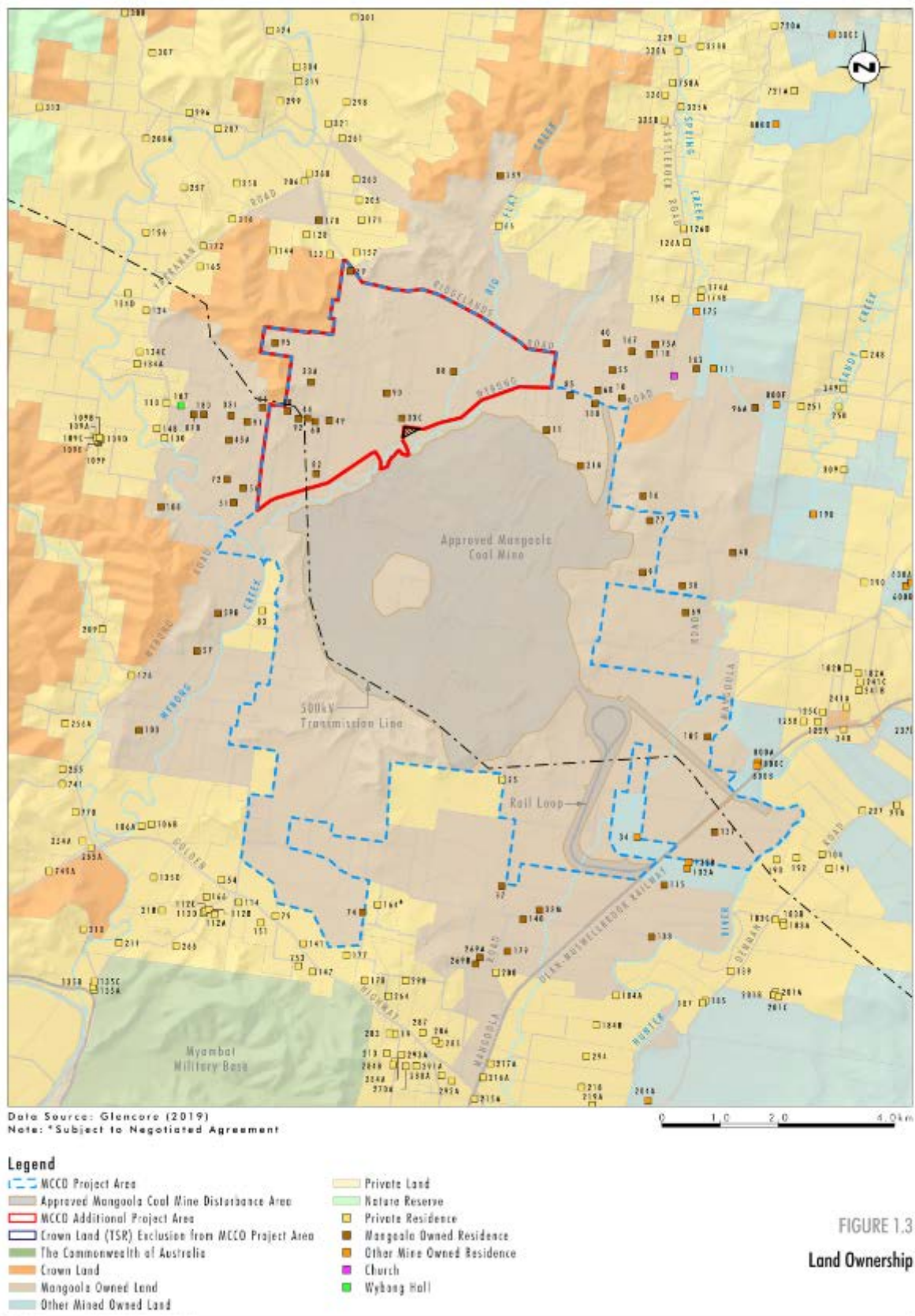


Figure 10: Receiver Zones and Locations

APPENDIX 6 BIODIVERSITY OFFSET STRATEGY

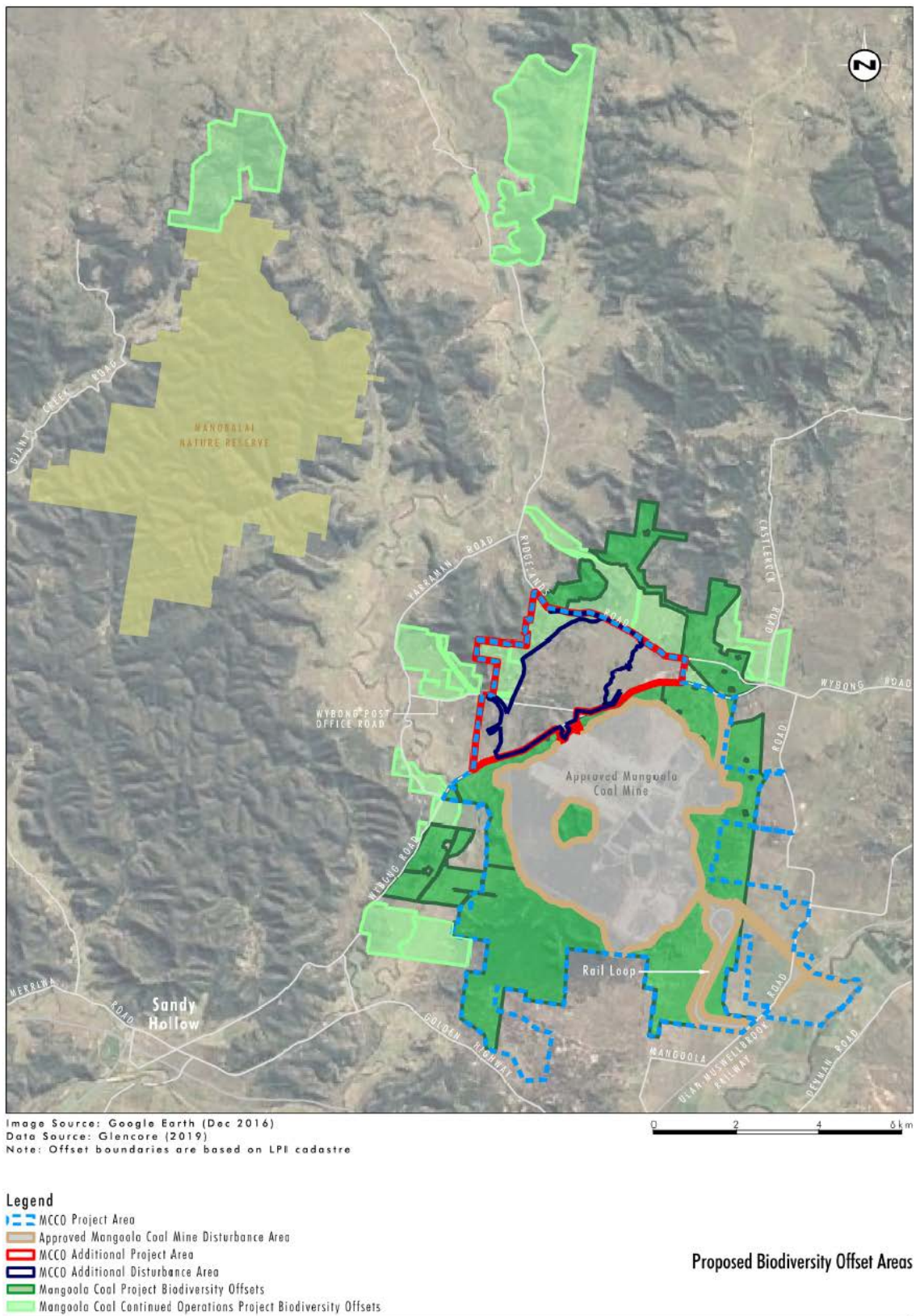
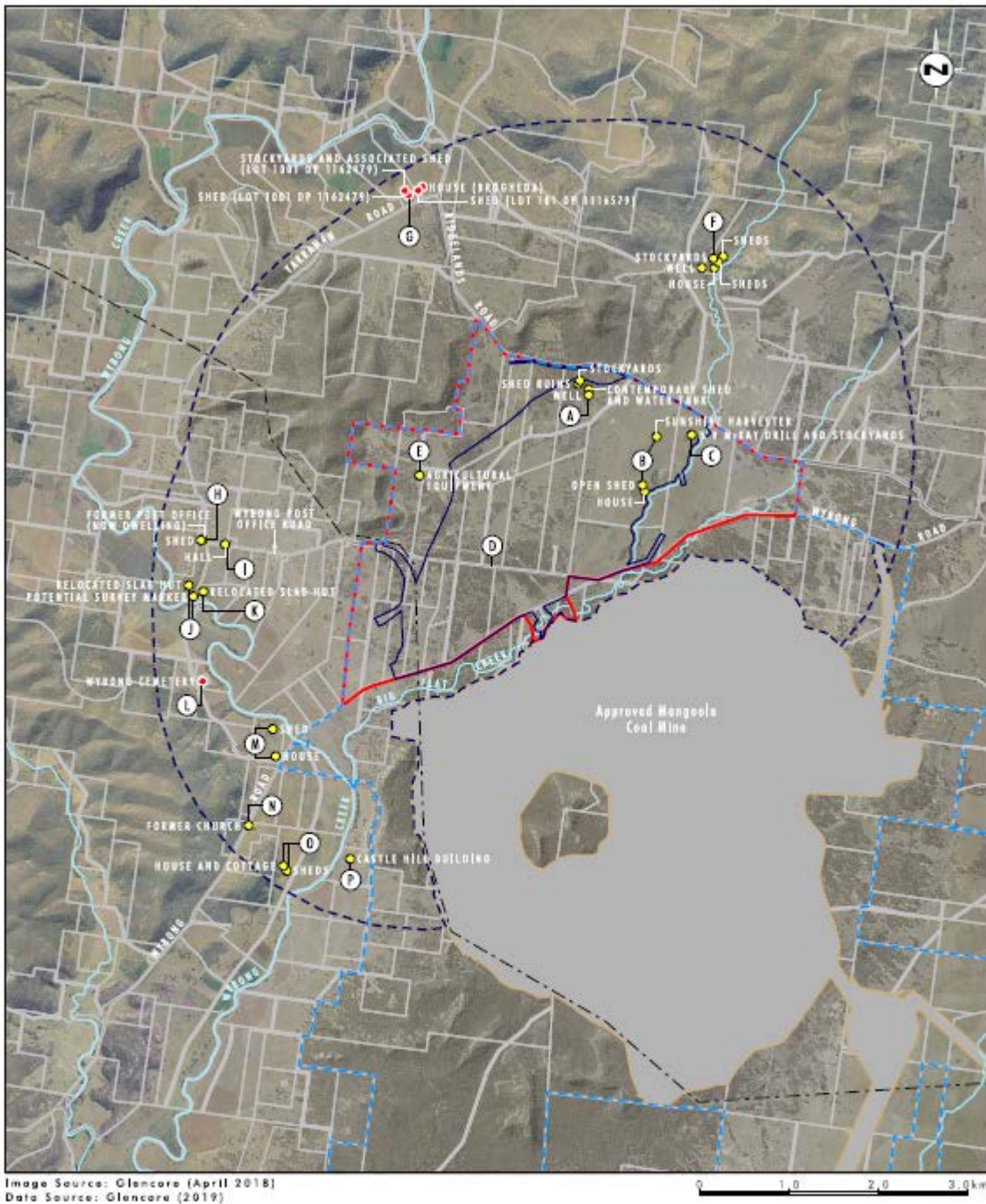


Figure 11: On-site and Off-site Biodiversity Offset Areas

APPENDIX 7 HERITAGE SITES



- Legend**
- MCCO Project Area
 - Approved Mangoola Coal Mine Disturbance Area
 - MCCO Additional Project Area
 - MCCO Additional Disturbance Area
 - Historic Heritage Study Area
 - Listed Historical Heritage Items
 - Potential Historical Heritage Items

FIGURE 6.28
Listed Heritage Items and
Properties/Items/Structures Identified
to be of Potential Heritage Significance

Figure 12: European Heritage Sites identified in the EIS

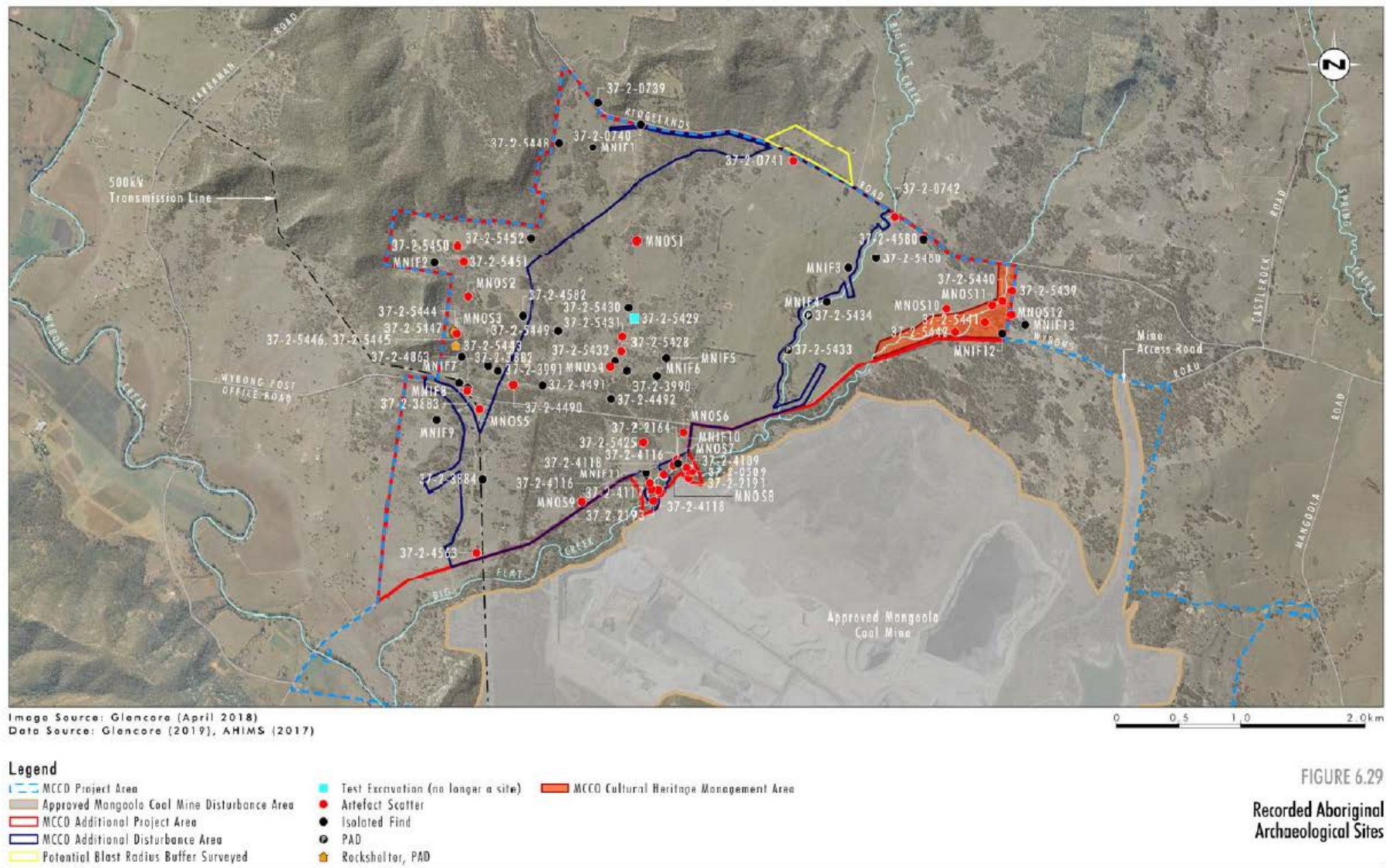
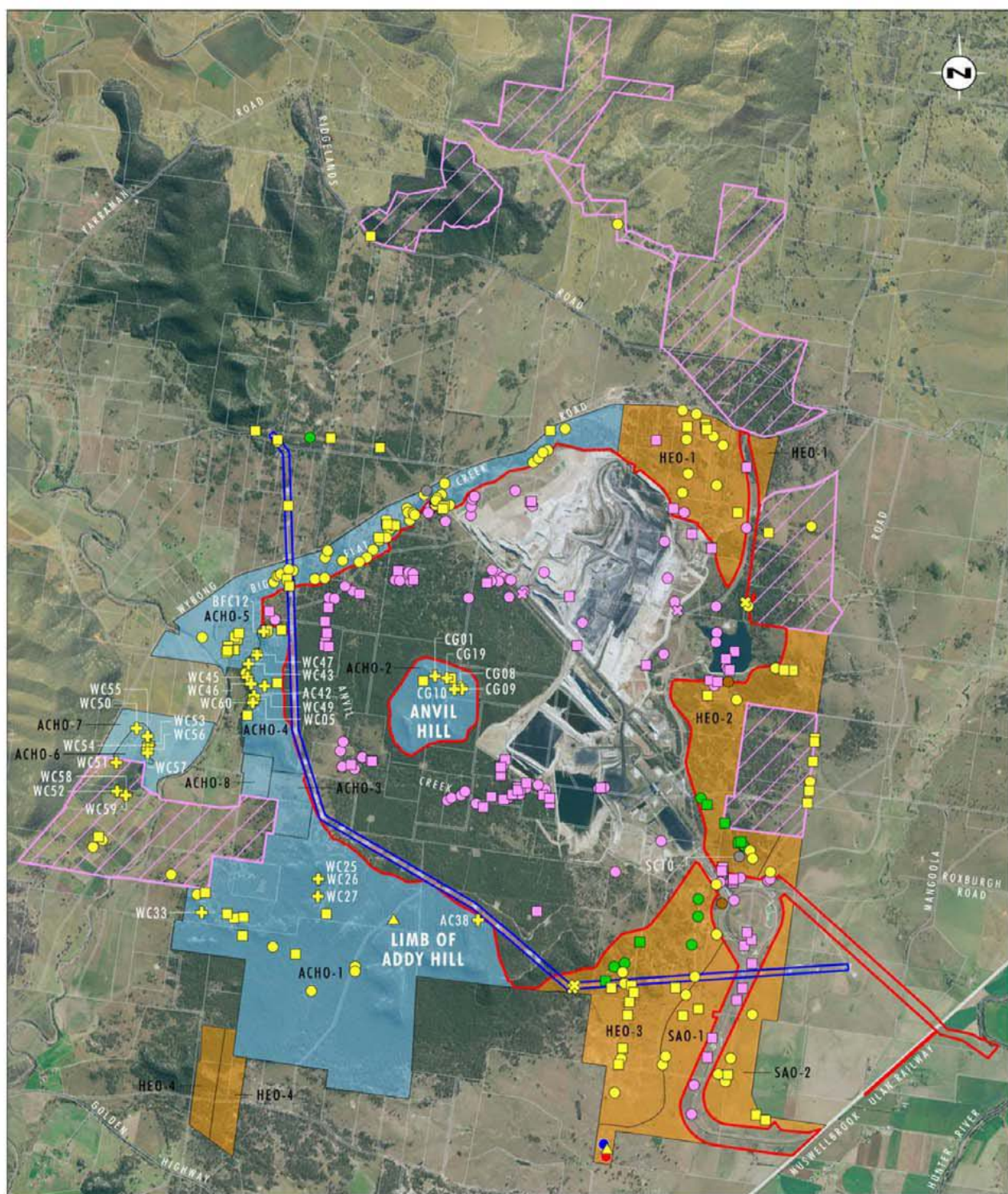


Figure 13: Aboriginal Heritage Sites identified in the EIS



Source: Dept. of Lands (2003), Mangoola Coal (2013)

Legend

- Approved Project Disturbance Boundary
- ▨ Corridor
- ▨ Other Offset Areas
- ▨ Aboriginal Cultural Heritage Offset Areas
- Approved 500kV Transmission Line Easement
- Artefact scatter with PAD Salvaged under AHIP#3220
- Artefact scatter with PAD Valid
- Artefact scatter Salvaged under PA 06-0014
- Artefact scatter Salvaged under PA 10-0002

- Artefact scatter Valid
- Artefact scatter Valid - partial salvage only under PA06-0014
- Artefact scatter Valid - partial temporary salvage under PA 10-0002
- Isolated artefact Salvaged under PA 06-0014
- Isolated artefact Salvaged under PA 10-0002
- Isolated artefact Valid
- PAD Valid
- ▲ Rockshelter Valid
- ★ Scarred tree Salvaged under PA 06-0014
- ★ Scarred tree Valid

APPENDIX 7

Location of Known Sites within Mangoola Coal Project Area

Figure 14: Aboriginal Heritage Sites identified under the Mangoola Coal Project

APPENDIX 8 VISUAL MITIGATION

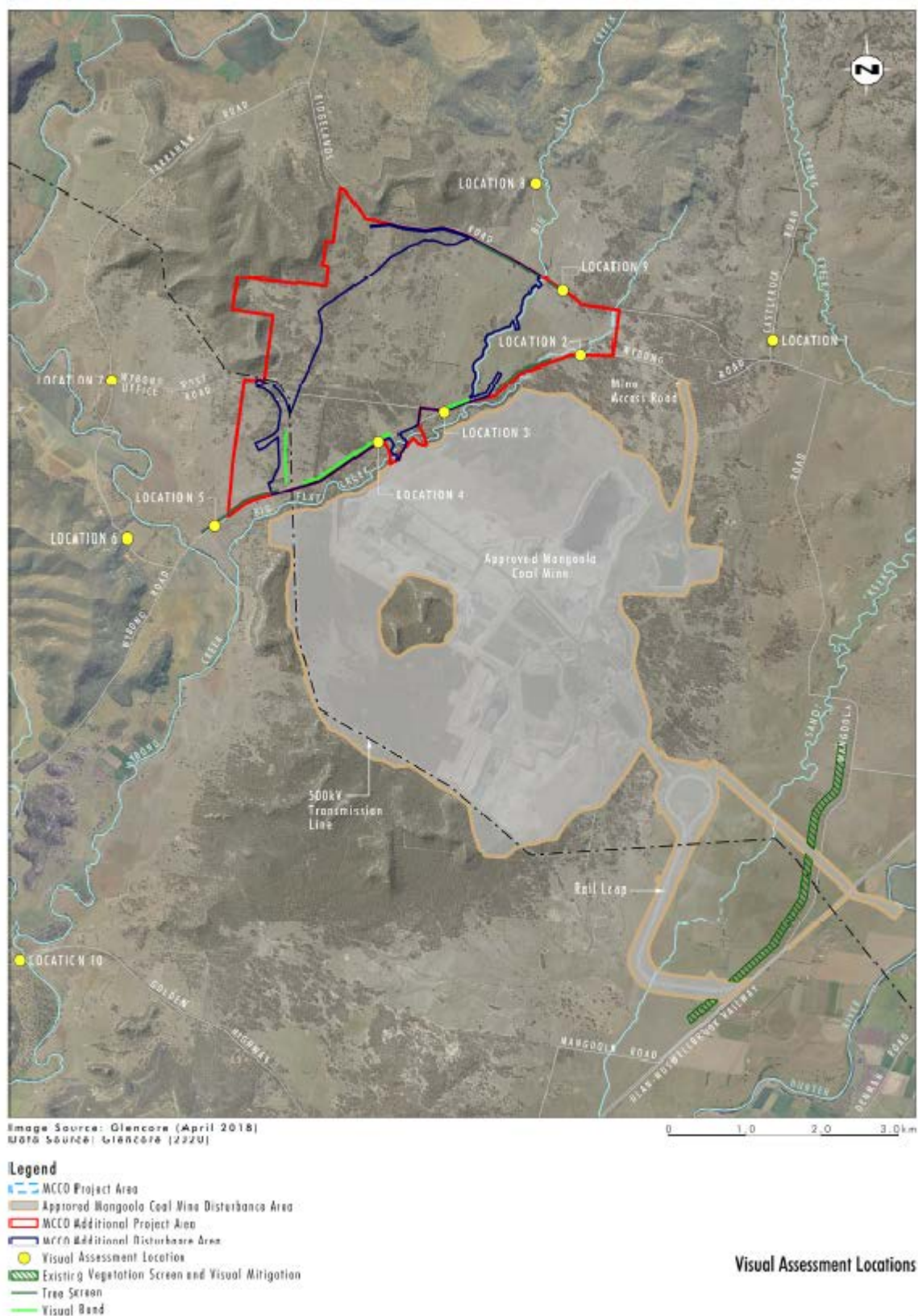
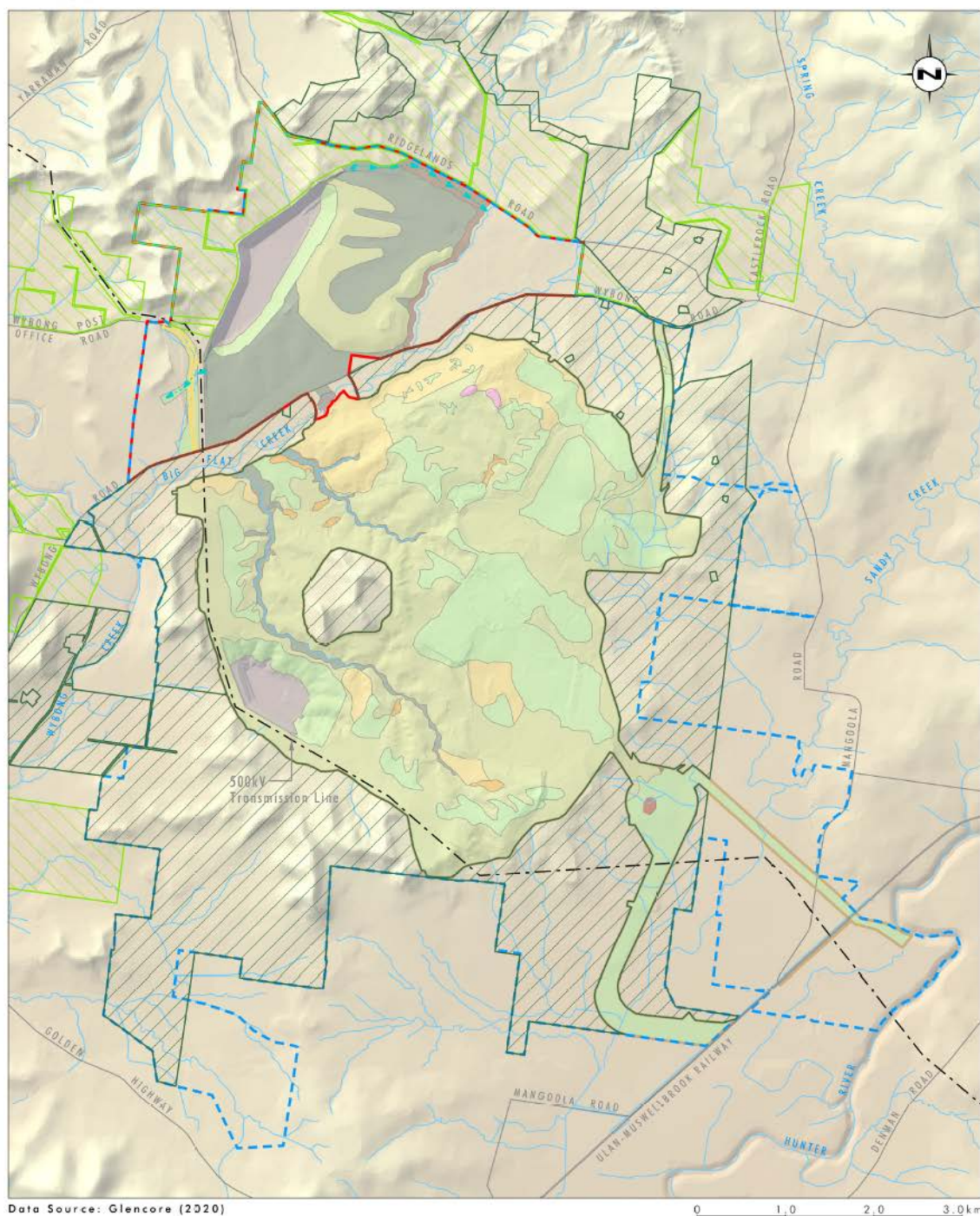


Figure 15: Vegetation screen locations

APPENDIX 9 REHABILITATION PLAN



Legend

- MCCO Project Area
- Approved Mangoola Coal Mine Disturbance Area
- MCCO Additional Project Area
- Wybong Post Office Road Realignment
- Final Void
- Forest Redgum Riparian Woodland
- Grassland
- Ironbark Woodland Complex

- Paperbark Woodland
- Slaty Box Woodland
- Spotted Gum Open Forest
- Swamp Oak Forest
- Weeping Myall Woodland
- Mangoola Coal Project Biodiversity Offsets
- Mangoola Coal Continued Operations Project Biodiversity Offsets

Conceptual Final
Rehabilitation

Figure 16: Final Landform Rehabilitation

APPENDIX 10 GENERAL TERMS OF APPLICANT'S VPA OFFER

<i>Applicant's Contribution</i>	<i>Intended Use</i>	<i>Payment Details</i>
\$58,887	Wybong Road Maintenance	To be paid annually with the contribution to be adjusted subject to CPI indexation during Mining Operations and for period of 12 months following the end of Mining Operations.
\$253,467	General mine affected road maintenance	To be paid annually with the contribution to be adjusted subject to CPI indexation during Mining Operations and for period of 12 months following the end of Mining Operations.
\$22,948	Council environmental management and monitoring	To be paid annually with the contribution to be adjusted subject to CPI indexation during Mining Operations and for period of 12 months following the end of Mining Operations.
\$379,697	Additional Environmental and Community Projects	To be paid annually with the contribution to be adjusted subject to CPI indexation during Mining Operations and for period of 12 months following the end of Mining Operations.
-	Local apprenticeships	Employment of six apprentices a year, to be sourced from residents within the Muswellbrook Shire and Aberdeen Shire