

# Project Approval

## Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning, the Planning Assessment Commission of NSW approves the project application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/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 project.

Member of the Commission

Member of the Commission

Member of the Commission

Sydney

2014

### SCHEDULE 1

**Application Number:**

11\_0062

**Proponent:**

Anglo American Metallurgical Coal Pty Ltd

**Approval Authority:**

Minister for Planning

**Land:**

See Appendix 1

**Project:**

Drayton South Coal Project

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## DEFINITIONS

Annual review	The review required by condition 4 of schedule 5
ARI	Average Recurrence Interval
ARTC	Australian Rail Track Corporation Ltd
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in EA, and depicted conceptually in the figure in Appendix 6
Blast misfire	The failure of one or more holes in a blast pattern to initiate
BSAL	Biophysical Strategic Agricultural Land, as defined in the <i>Upper Hunter Strategic Regional Land Use Plan</i> and the <i>Interim Protocol for Site Verification and Mapping of Biophysical Strategic Agricultural Land</i> , as may be updated from time to time
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in schedules 1 to 5 inclusive
Council	Muswellbrook Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning & Environment
DPI	Department of Primary Industries
Drayton mine complex	The combined operations of the project, including the Drayton South coal mine, the Drayton mine and rail transport on the Antiene Rail Spur
Drayton mine	Open cut mining operations at the Drayton mine undertaken in accordance with the project approval PA 06_0202
DRE	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services
EEC	Endangered ecological community, as defined under the TSC Act and/or EPBC Act
EA	Environmental Assessment titled <i>Drayton South Coal Project Environmental Assessment</i> (7 volumes) dated November 2012 and associated: <ul style="list-style-type: none"> <li>• response to submissions titled <i>Drayton South Coal Project Response to Submissions</i> (2 volumes) dated May 2013;</li> <li>• preferred project report titled <i>Drayton South Coal Project Preferred Project Report</i> (1 volume) dated August 2013;</li> <li>• justification report titled <i>Drayton South Coal Project Justification</i> (1 volume) dated February 2014; and</li> <li>• retracted mine plan titled <i>Drayton South Coal Project Consequential Environmental Impact Statement for Retracted Mine Plan</i> (1 volume) dated March 2014.</li> </ul>
EPA	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	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or implement
Heritage Branch	Heritage Branch of the OEH
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that: <ul style="list-style-type: none"> <li>• causes or threatens to cause material harm to the environment; and/or</li> <li>• breaches or exceeds the limits or performance measures/criteria in this approval</li> </ul>
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this approval 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 approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where run-off may have come into contact with coal or carbonaceous material (synonymous with 'dirty water')
Minimise	Reduce adverse impacts to the smallest extent practicable by implementing all reasonable and feasible mitigation measures
Mining operations	Includes the removal and emplacement of overburden and extraction, processing, handling, storage and transport of coal on site

Minister	Minister for Planning, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the project
MSB	Mine Subsidence Board
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Noise sensitive areas	Locations within the site that have the potential to generate increased noise levels at privately-owned residences (e.g. land near the boundary of the site, and elevated land and higher areas of overburden emplacements that are not effectively shielded by intervening topographic features)
NOW	NSW Office of Water within DPI
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	Office of Environment and Heritage within the Department of Planning & Environment
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Primary operational areas	The lower, flatter and more intensively utilised portions of the Coolmore and Woodlands Thoroughbred Horse Studs where horse breeding activities generally occur (i.e. excludes Trig Hill and the elevated portions of the Coolmore stud)
Previous EAs	The previous environmental impact assessments for open cut operations at the Drayton mine, as listed in Appendix 3
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The project as described in the EA
Proponent	Anglo American Metallurgical Coal Pty Ltd, or any person who seeks to carry out the approved project under this approval
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	Reasonable relates to the application of 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
Rehabilitation	The restoration of land disturbed by the project to a good condition, to ensure it is safe, stable and non-polluting
Residence	For the purposes of this instrument, a residence includes existing or approved dwelling or buildings at the date of this approval offering overnight accommodation located within the Coolmore and Woodlands Thoroughbred Horse Studs and the Arrowfield Estate
RFS	Rural Fire Service
RMS	Roads and Maritime Services
ROM	Run-of-mine
Secretary	Secretary of the Department, or nominee
Site	The land defined in Appendix 1
TSC Act	<i>Threatened Species Conservation Act 1995</i>
VPA	Voluntary Planning Agreement

## **SCHEDULE 2 ADMINISTRATIVE CONDITIONS**

### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.

### **TERMS OF APPROVAL**

2. The Proponent shall carry out the project generally in accordance with the:
  - (a) EA;
  - (b) conditions of this approval.

*Note: The general layout of the project is shown in Appendix 2.*

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
  - (a) any strategies, plans, programs, reviews, reports, audits or correspondence that are submitted in accordance with this approval (including any stages of these documents);
  - (b) any reviews, reports or audits commissioned by the Department regarding compliance with this approval; and
  - (c) the implementation of any actions or measures contained in these documents.

### **LAPSING OF APPROVAL**

5. If the project has not been physically commenced within 5 years of the date of this approval, then this project approval shall lapse.

### **LIMITS ON APPROVAL**

#### **Mining Operations**

6. The Proponent may carry out mining operations on the site for 21 years from the granting of the Mining Lease for the project.

*Notes:*

- *This condition allows for a 12 month construction period and a 20 year mine life.*
- *Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of both the Secretary and DRE. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.*

#### **Coal Extraction and Transportation**

7. The Proponent shall not extract or process more than 7 million tonnes of ROM coal from the site in a calendar year.
8. The Proponent shall:
  - (a) transport all coal from the site by rail; and
  - (b) restrict coal transport on the Antiene Rail Spur to a maximum of:
    - 7 million tonnes of product coal in a calendar year; and
    - 12 train movements a day, except to the extent that an agreement has been made with the Mt Arthur mine to use some of its approved capacity, and where a copy of this agreement has been provided to the Secretary.

*Note: For the avoidance of doubt, each train entering and exiting the site is classified as 2 train movements, and a day refers to the 24 hours from midnight to midnight the next day.*

### **SURRENDER OF CONSENTS**

9. By the end of June 2015, or as otherwise agreed by the Secretary, the Proponent shall surrender all existing development consents and project approvals for the Drayton mine and Antiene Rail Spur identified in Appendix 3 in accordance with sections 75YA and 104A of the EP&A Act, and to the satisfaction of the Secretary.

Prior to the surrender of the existing consents and approvals, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of those consents and approvals.

*Notes: This approval will apply to all components of the existing Drayton mine operations and rail traffic on the Antiene Rail Spur from the date of approval. However, any existing management and monitoring plans/strategies/programs/protocols/committees under the existing approvals for the Drayton mine will continue to apply until the approval of the comparable plan/strategy/program/ protocol/committee under this approval.*

#### **NOTIFICATION OF COMMENCEMENT**

10. At least 1 month prior to physically commencing any development under this approval, the Proponent shall notify the Department in writing that it proposes to commence the project.

#### **STRUCTURAL ADEQUACY**

11. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and MSB.

*Notes:*

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates (where applicable) for the proposed building works. Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*
- *The project is located in the Muswellbrook Mine Subsidence District. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the MSB's approval before constructing any improvements on the site.*

#### **DEMOLITION**

12. The Proponent shall ensure that all demolition work undertaken in relation to the project is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

#### **PROTECTION OF PUBLIC INFRASTRUCTURE**

13. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

*Note: This condition does not apply to any damage to public infrastructure subject to compensation payable under the Mine Subsidence Compensation Act 1961, or to damage to roads caused as a result of general road usage.*

#### **ACCESS TO LAND**

14. If any mining company in the area is investigating the potential to use infrastructure associated with the project, such as the Antiene rail spur, on commercial terms in order to avoid the costs and environmental impacts of constructing new infrastructure for its project, the Proponent shall consult with the company about the potential to reach a mutually acceptable agreement to the satisfaction of the Secretary.

#### **OPERATION OF PLANT AND EQUIPMENT**

15. The Proponent shall ensure that all plant and equipment used on site, or to monitor the performance of the project, is maintained and operated in a proper and efficient manner.

#### **STAGING AND UPDATING STRATEGIES, PLANS OR PROGRAMS**

16. To ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project, the Proponent may submit revised strategies, plans or programs required under this approval at any time. With the agreement of the Secretary, the Proponent may also submit any strategy, plan or program required by this approval on a staged basis.

The Secretary may approve a revised strategy, plan or program required under this approval, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Proponent may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this approval.

*Notes:*

- *While any strategy, plan or program may be submitted on a staged basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

- *For the avoidance of doubt, existing approved management plans, strategies or monitoring programs for the Drayton mine and Antiene Rail Spur will continue to apply until the approval of a similar plan, strategy or program under this approval (see condition 8 above).*

## **COMMUNITY ENHANCEMENT**

17. By the end of June 2015, unless the Secretary agrees otherwise, the Proponent shall enter into a Voluntary Planning Agreement (VPA) with Muswellbrook Shire Council in accordance with:
  - (a) Division 6 of Part 4 of the EP&A Act; and
  - (b) the terms of the Proponent's offer in Appendix 10.

### SCHEDULE 3 ENVIRONMENTAL CONDITIONS - GENERAL

#### ACQUISITION UPON REQUEST

1. Upon receiving a written request for acquisition from an owner of the land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 5-6 of schedule 4.

Table 1: Land subject to acquisition upon request

Acquisition Basis	Property
Noise	411

Notes: To interpret the land referred to in Table 1, see the figure in Appendix 4.

#### ADDITIONAL MITIGATION UPON REQUEST

2. Upon receiving a written request from the owner of the residences listed in Table 1 or Table 2, the Proponent shall implement additional noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the noise impacts of the project on the residence.

If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Table 2: Land subject to additional mitigation upon request

Mitigation Basis	Residence
Noise	390, 398, 400, 401, 402, 403, 418, 419, 420E, 420W, 421, 423, 425, 443, 444, 446

Note: To interpret the land referred to in Table 2, see the figure in Appendix 4.

#### NOISE

##### Construction – Edderton Road Realignment

3. The Proponent shall manage noise from the construction of the Edderton Road Realignment in accordance with the noise management levels defined in Table 2 of the *Interim Construction Noise Guideline*.
4. Unless the Secretary agrees otherwise, the Proponent may only undertake the construction of the Edderton Road Realignment between:
  - (a) 7 am to 6 pm, Monday to Friday; and
  - (b) 8 am to 1 pm on Saturdays.

In seeking any variations to the construction hours, the Proponent shall submit an Out of Hours Work Protocol to the Secretary. This protocol must:

- (a) be prepared in consultation with the EPA and any landowners who may be affected by the proposed variation; and
- (b) address the relevant requirements of the *Interim Construction Noise Guideline*.

##### Noise Criteria

5. Except for the noise-affected land in Table 1, the Proponent shall ensure that the noise generated by the project, excluding the noise generated by the construction works for the Edderton Road realignment, does not exceed the criteria in Table 3 at any residence on privately-owned land.



Table 3: Noise criteria dB(A)

<b>Residence</b>	<b>Day / Evening / Night <i>L<sub>Aeq</sub>(15min)</i></b>	<b>Night <i>L<sub>A1</sub>(1min)</i></b>
418	40 / 40 / 40	45
390, 398	40 / 40 / 39	45
402, 403, 420W, 421, 423	39 / 39 / 39	45
401, 419, 420E, 424, 425	38 / 38 / 38	45
399	38 / 38 / 37	45
400, 427	37 / 37 / 37	45
444	36 / 36 / 36	45
387	36 / 36 / 35	45
Other privately-owned residences (including Coolmore and Woodlands Studs, and Arrowfield Estate)	35	45

Note: To interpret the land referred to in Table 3, see the figures in Appendix 4.

Noise generated by the project is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time). Appendix 5 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

### Operating Conditions

6. The Proponent shall:
  - (a) implement best management practice, including all reasonable and feasible mitigation measures, to minimise the construction, operational, low frequency, road and rail noise of the project, including mitigation measures to:
    - minimise peak noise levels from rail wagon bunching and stretching;
    - avoid the use of mobile plant on elevated and exposed sections of the overburden emplacements and in other noise sensitive areas at night; and
    - avoid drilling in higher elevations (less than 6 metres below natural ground surface) in noise-sensitive areas at night;
  - (b) ensure any new mobile plant or equipment is commissioned as noise attenuated units and that any existing equipment operating in noise sensitive areas is fitted with appropriate noise attenuation;
  - (c) 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 approval;
  - (d) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply (see Appendix 5);
  - (e) ensure that the Antiene Rail Spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL;
  - (f) use its best endeavours to ensure that rolling stock is selected to minimise noise;
  - (g) co-ordinate noise management with any nearby mines (including Mt Arthur) to minimise cumulative noise impacts; and
  - (h) carry out regular attended monitoring to determine whether the project is complying with the relevant conditions of this approval, to the satisfaction of the Secretary.

### Noise Management Plan

7. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this approval;
  - (c) describe the noise management system in detail; and
  - (d) include a monitoring program that:
    - evaluates and reports on:
      - the effectiveness of the noise management system;
      - compliance with the noise criteria in this approval; and

- compliance with the noise operating conditions;
- includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time noise monitoring program can be used as a better indicator of compliance with the noise criteria in this approval and trigger for further attended monitoring); and
- defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

## BLASTING

### Blasting Criteria

8. The Proponent shall ensure that blasting on site does not cause exceedances of the criteria in Table 5.

*Table 5: Blasting criteria*

<b>Location</b>	<b>Airblast overpressure (dB(Lin Peak))</b>	<b>Ground vibration (mm/s)</b>	<b>Allowable exceedance</b>
Residence on privately-owned land <sup>a</sup>	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
All public infrastructure <sup>b</sup>	-	25	0%

*a Unless otherwise agreed with the relevant owner/s of the residence, and the Proponent has advised the Department in writing of the terms of this agreement.*

*b Unless otherwise agreed with the relevant infrastructure provider or owner, and the Proponent has advised the Department in writing of the terms of this agreement.*

### Blasting Hours

9. The Proponent shall only carry out blasting on site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

### Blasting Frequency

10. The Proponent may carry out a maximum of:
- 2 blasts a day; and
  - 5 blasts a week, averaged over a calendar year, at the site.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

*Notes:*

- *For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.*
- *For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast.*

### Property Inspections

11. If the Proponent receives a written request from the owner of any privately-owned land within 3 kilometres of any approved open cut mining pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Proponent shall:
- commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
    - establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and
    - identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and
  - give the landowner a copy of the new or updated property inspection report.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.

## Property Investigations

12. If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Proponent shall:
- commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and
  - give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damage to the satisfaction of the Secretary.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.

## Operating Conditions

13. The Proponent shall:
- implement best management practice to:
    - protect the safety of people and livestock in the areas surrounding blasting operations;
    - protect public or private infrastructure/property in the surrounding area from damage from blasting operations; and
    - minimise the dust and fume emissions of any blasting;
  - ensure that blasting on the site does not damage heritage items, and develop specific measures to protect Strowan Homestead, Edderton Homestead, Bowfield Homestead, Randwick Homestead, Plashett Homestead, Woodlands Homestead and Arrowfield Cottage from any blasting impacts;
  - operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site;
  - use all reasonable endeavours to co-ordinate the timing of blasting at the site to minimise disturbance of the operations at the nearby horse studs (Coolmore and Woodlands Thoroughbred Horse Studs) during pre-planned events and activities;
  - use all reasonable endeavours to co-ordinate the timing of blasting at the site with any nearby mines (including Mt Arthur) to minimise cumulative blasting impacts; and
  - carry out regular monitoring to determine whether the project is complying with the relevant conditions of this approval,
- to the satisfaction of the Secretary.

### Notes:

- For the location of the heritage items referred to in condition 13(b), refer to Appendix 8
- The system referred to in condition 13(c) should include the option for interested members of the public to be provided with an SMS text message alert, notifying them of the day's blasting schedule. If for any reason, the scheduled blast is to be fired 30 minutes prior to or 30 minutes after the original notification, or has been cancelled, a further text message should be sent to these individuals. The Proponent should also use its best endeavours to consult with the Coolmore and Woodlands Thoroughbred Horse Studs to ensure these operations are included in any SMS system alerts.

14. The Proponent shall not undertake blasting on site within 500 metres of any public road or any land outside the site not owned by the Proponent, unless the Proponent has:
- a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Proponent has advised the Department in writing of the terms of this agreement; or
  - demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock or damaging the infrastructure and/or other buildings and structures, and updated the Blast Management Plan to include the specific mitigation measures that would be implemented while blasting is being carried out within 500 metres of the infrastructure or land.

## Blast Management Plan

15. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the owners of Coolmore and Woodlands Thoroughbred Horse Studs and the EPA, and submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this approval, including establishing site specific blasting thresholds to minimise the impacts on horses at the Coolmore and Woodlands Thoroughbred Horse Studs;
  - include a detailed protocol for ongoing consultation with the owners of the Coolmore and Woodlands Thoroughbred Horse Studs about blasting activities on the site;

- (d) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the applicable roads authority, that includes provisions for:
  - minimising the duration of closures, both on a per event basis and weekly basis;
  - avoiding peak traffic periods as far as practicable; and
  - coordinating with neighbouring mines to minimise the cumulative effect of road closures;
- (e) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site (if relevant); and
- (f) include a monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions of this approval.

## AIR QUALITY

### Air Quality Criteria

16. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Tables 6, 7 and 8 at any residence on privately-owned land.

*Table 6: Long term impact assessment criteria for particulate matter*

<b>Pollutant</b>	<b>Averaging period</b>	<b><sup>d</sup> Criterion</b>
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>

*Table 7: Short term impact assessment criterion for particulate matter*

<b>Pollutant</b>	<b>Averaging period</b>	<b><sup>d</sup> Criterion</b>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>

*Table 8: Long term impact assessment criteria for deposited dust*

<b>Pollutant</b>	<b>Averaging period</b>	<b>Maximum increase in deposited dust level</b>	<b>Maximum total deposited dust level</b>
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Tables 6-8:

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the project on its own).

<sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

<sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.

### Mine-owned Land

17. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Tables 6, 7 and 8 at any occupied residence on mine-owned land (including land owned by another mining company) unless:
- (a) 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 schedule 4 of this approval;
  - (b) the tenant of any land owned by the Proponent can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;
  - (c) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining company) of the actual particulate emissions at the residence; and
  - (d) 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,
- to the satisfaction of the Secretary.

## Operating Conditions

18. The Proponent shall:
- (a) implement best management practice to minimise the off-site odour, fume, spontaneous combustion and dust emissions of the project;
  - (b) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;
  - (c) minimise any visible off-site air pollution generated by the project;
  - (d) minimise the surface disturbance on the site;
  - (e) 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 approval;
  - (f) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d above under Tables 6-8);
  - (g) co-ordinate air quality management with any nearby mines (including Mt Arthur) to minimise cumulative air quality impacts; and
  - (h) carry out regular monitoring to determine whether there is compliance with the relevant conditions of this approval,
- to the satisfaction of the Secretary.

## Air Quality Management Plan

19. The Proponent shall prepare and implement an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this approval;
  - (c) describe the air quality management system in detail;
  - (d) include an air quality monitoring program that:
    - adequately supports the air quality management system;
    - evaluates and reports on the:
      - the effectiveness of the air quality management system;
      - compliance with the air quality criteria;
      - compliance with the air quality operating conditions; and
    - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

## METEOROLOGICAL MONITORING

20. For the life of the project, the Proponent shall ensure that there is a meteorological station in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
  - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, unless a suitable alternative is approved by the Secretary following consultation with the EPA.

## WATER

### Water Supply

21. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations on site to match its available water supply.

*Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain all necessary water licences for the project.*

22. Prior to the commencement of mining operations in any area that has the potential to affect the hydrology of a third order stream catchment, the Proponent shall demonstrate that it has adequate water access licences to account for the maximum predicted volume of water to be used by the project for that mining area (in addition to any other water use for the project), to the satisfaction of NOW.

*Note: The predicted water demand shall be based on updated groundwater and water balance modelling that refines the groundwater inflows and other water use, based on monitoring data.*

## Compensatory Water Supply

23. The Proponent shall provide a compensatory water supply to any landowner of privately-owned land whose water supply is adversely and directly impacted as a result of the project (other than an impact that is predicted in the EA, minor, or negligible), in consultation with NOW, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the project. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner.

If the Proponent 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 Secretary for resolution.

If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Secretary.

*Note: The Water Management Plan (see condition 26) is required to include trigger levels for investigating potentially adverse impacts on water supplies.*

## Water Pollution

24. Unless an EPL or the EPA authorises otherwise, the Proponent shall comply with Section 120 of the POEO Act and the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

## Water Management Performance Measures

25. The Proponent shall comply with the performance measures in Table 9 to the satisfaction of the Secretary.

*Table 9: Water management performance measures*

<b>Feature</b>	<b>Performance Measure</b>
Water management – General	<ul style="list-style-type: none"> <li>Minimise the use of clean water on site</li> <li>Minimise the need for make-up water from external supplies</li> <li>Where required, obtain make-up water preferentially from the porous hard rock aquifer</li> </ul>
Hunter River and Saddlers Creek alluvial aquifers	<ul style="list-style-type: none"> <li>Negligible environmental consequences to the alluvial aquifer beyond those predicted in the EA, including: <ul style="list-style-type: none"> <li>negligible change in groundwater levels;</li> <li>negligible change in groundwater quality; and</li> <li>negligible impact to other groundwater users</li> </ul> </li> </ul>
Construction and operation of infrastructure	<ul style="list-style-type: none"> <li>Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction</i> including <i>Volume 1</i>, <i>Volume 2A – Installation of Services</i> and <i>Volume 2C – Unsealed Roads</i></li> <li>Design, install and maintain any infrastructure within 40 m of watercourses generally in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land (DPI 2007)</i>, or its latest version</li> <li>Design, install and maintain any creek crossings generally in accordance with the <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (NSW Fisheries, 2003) and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries 2003), or their latest versions</li> </ul>
Clean water diversion & storage infrastructure	<ul style="list-style-type: none"> <li>Design, install and maintain the clean water system to capture and convey the 100 year ARI flood (except for temporary highwall dams)</li> <li>Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site</li> </ul>
Sediment dams	<ul style="list-style-type: none"> <li>Design, install and maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> and <i>Volume 2E Mines and Quarries</i></li> <li>Design, install and maintain dams to capture site runoff and minimise any sediment and salt loads from entering nearby watercourses, including Ramrod Creek, Saddlers Creek, Saltwater Creek, and the Hunter River</li> </ul>

<b>Feature</b>	<b>Performance Measure</b>
Mine water storages	<ul style="list-style-type: none"> <li>Design, install and maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24)</li> <li>On-site storages (including mine infrastructure dams, groundwater storage and treatment dams) are suitably designed, installed and maintained to minimise permeability</li> </ul>
Tailings storage	<ul style="list-style-type: none"> <li>Design and maintain tailings storage areas to encapsulate and prevent the movement of tailings seepage/leachate offsite, except to the extent identified in the EA.</li> </ul>
Overburden emplacements	<ul style="list-style-type: none"> <li>Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material</li> <li>Design, install and maintain emplacements to prevent and/or manage long term saline groundwater seepage</li> <li>Ensure adequate freeboards within all pit voids at all times to minimise the risk of discharge to surface waters</li> </ul>
Flood levees	<ul style="list-style-type: none"> <li>Design, install and maintain flood levees, as required, to exclude flows for all flood events up to and including the Probable Maximum Flood level</li> </ul>
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> <li>Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards</li> </ul>
Creek realignment and restoration works	<ul style="list-style-type: none"> <li>No net loss of creek length</li> <li>Flows to mimic pre-project flows for all flood events up to and including the 1 in 100 year ARI</li> <li>Incorporate erosion control measures based on vegetation and engineering revetments</li> <li>Incorporate persistent/permanent pools for aquatic habitat</li> <li>Revegetate with suitable native species</li> </ul>
Saddlers Creek aquatic and riparian ecosystem	<ul style="list-style-type: none"> <li>Develop site-specific in-stream water quality objectives in accordance with ANZECC 2000 and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW</i> procedures (DECC 2006), or its latest version</li> </ul>

### Water Management Plan

26. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with NOW and EPA, by suitably qualified and experienced persons whose appointment has been approved by the Secretary;
  - be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - in addition to the standard requirements for management plans (see condition 3 of schedule 5), this plan must include a:
    - Water Balance that:
      - includes details of:
        - sources and security of water supply, including contingency planning for future reporting periods;
        - water use and management on site;
        - any off-site water transfers;
        - reporting procedures, including the preparation of a site water balance for each calendar year;
      - describes the measures that would be implemented to minimise clean water use by the project;
    - Salt Balance that:
      - includes details of:
        - sources of saline material on the site;
        - saline material and saline water management on site;
        - reporting procedures, including the preparation of a salt balance for each calendar year; and
      - describes the measures that would be implemented to minimise short term and long term discharge of saline water from the site;
    - Erosion and Sediment Control Plan, that:
      - is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition, 2004* (Landcom), or its latest version;
      - identifies activities that could cause soil erosion, generate sediment or affect flooding;

- 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 erosion and sediment control structures and flood management structures; and
  - describes what measures would be implemented to maintain the structures over time.
- (iv) Surface Water Management Plan, that includes:
- detailed baseline data on water flows and quality in the creeks and waterbodies that could be affected by the project;
  - a detailed description of the water management system on site;
  - detailed plans, including design objectives and performance criteria, for the:
    - Saddlers Creek restoration works;
    - realignment of sections of any third order creeks impacted by the project;
    - emplacement areas for tailings, acid forming and potentially acid forming materials, and saline and sodic materials;
    - re-establishment of free draining second and third order creeks, and their associated catchments, in the final post-mining landform; and
    - final voids for the project (see the Rehabilitation objectives in Table 11);
  - surface water assessment criteria, including trigger levels for investigating any potentially adverse impacts, for the following:
    - the water management system, including mine water storages and sediment dams;
    - surface water users supplies;
    - downstream surface water quality;
    - downstream flooding impacts; and
    - stream and riparian vegetation health;
  - a program to monitor and report on:
    - the effectiveness of the water management system;
    - impacts on downstream water users, including salinity monitoring in the Hunter River upstream and downstream of the discharge point;
    - surface water flows and quality, as well as stream and riparian vegetation health in the watercourses that could be affected by the project; and
    - downstream flooding impacts;
  - reporting procedures for the results of the monitoring program; and
  - a plan to respond to any exceedances of the performance criteria, and mitigate any adverse surface water impacts of the project;
- (v) Groundwater Management Plan, that includes:
- detailed baseline data on groundwater levels, yield and quality in the region and privately-owned groundwater bores that could be affected by the project;
  - a detailed description of the groundwater management system on site;
  - detailed plans, including design objectives and performance criteria, for the:
    - emplacement areas for tailings, acid forming and potentially acid forming materials, and saline and sodic materials;
    - final voids for the project (see the Rehabilitation objectives in Table 11);
  - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts, for the following:
    - the Hunter River and Saddlers Creek alluvial aquifers and the Permian hard rock aquifer;
    - groundwater users bores;
    - groundwater inflows to the mining operations;
    - seepage/leachate from water storages, emplacements, backfilled voids and final voids; and
    - groundwater dependent ecosystems;
  - a program to monitor and report on:
    - groundwater inflows to the mining operations;
    - the seepage/leachate from water storages, emplacements, backfilled voids and final void;
    - background changes in groundwater yield/quality against mine-induced changes;
    - impacts of the project on:
      - regional and local (including alluvial) aquifers;
      - groundwater supply of potentially affected landowners; and
      - groundwater dependent ecosystems and riparian vegetation; and
  - a plan to respond to any exceedances of the groundwater assessment criteria, and mitigate any adverse groundwater impacts of the project;
- (vi) a program to validate the water balance, salt balance, surface water model and groundwater model for the project every 3 years, and compare against monitoring results with modelled predictions; and
- (vii) a protocol that has been prepared, using all reasonable endeavours, in consultation with the owners of any nearby mines (including Mt Arthur) to:



- minimise cumulative water quantity and quality impacts;
- review opportunities of water sharing between the mines;
- co-ordinate water quality monitoring programs where practicable;
- undertake joint investigations/studies in relation to complaints/exceedances of trigger levels where cumulative impacts are considered likely; and
- co-ordinate modelling programs for validation, re-calibration and re-running of water models.

## BIODIVERSITY

### Biodiversity Offset Strategy

27. The Proponent shall implement the biodiversity offset strategy described in the EA, summarised in Table 10 and shown conceptually in Appendix 6, to the satisfaction of the Secretary.

*Table 10: Summary of the biodiversity offset strategy*

Area	Offset Name	Minimum Size hectares (ha)
On-site Offsets	Drayton Wildlife Refuge	117
	Northern Offset Area	12
	Southern Offset Area	88
	Eastern Offset Area	92
	Ridgeline Conservation Area	174
	Saddlers Creek Restoration and Enhancement Area	250
	Drayton South Rehabilitation Area	1,319
Off-site Offsets	Offsite Offset Area	1,643
<b>Total Area</b>		<b>3,695</b>

*Note: To identify the areas referred to in Table 10, see the applicable figures in Appendix 6.*

### Threatened Species

28. The Proponent shall ensure that the biodiversity offset strategy and/or the rehabilitation strategy for the project focus on the re-establishment of:
- significant and/or threatened flora communities, including:
    - Central Hunter Box-Ironbark Woodland;
    - Narrabeen Footslopes Slaty Gum Woodland;
    - Hunter Floodplain Red Gum Woodland;
    - Upper Hunter White Box-Ironbark Grassy Woodland; and
  - significant and/or threatened flora species, including:
    - Pine Donkey Orchid (*Diuris tricolor*);
    - Tiger Orchid (*Cymbidium canaliculatum*);
    - Weeping Myall (*Acacia pendula*); and
  - habitat for other significant/threatened flora and fauna species.

### Long Term Security of Offsets

29. The Proponent shall make suitable arrangements for the long term protection of the offset areas in Table 10, to the satisfaction of the Secretary. These arrangements must be implemented by:
- the end of June 2015, unless the Secretary agrees otherwise, for all on-site and off-site offsets excluding the Drayton South Rehabilitation Area; and
  - the end of June 2035, unless the Secretary agrees otherwise, for the Drayton South Rehabilitation Area.

### Biodiversity Management Plan

30. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with OEH, and be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (b) describe the short, medium, and long term measures that would be implemented to:
    - manage the remnant vegetation and fauna habitat on the site and in the offset areas;
    - implement the biodiversity offset strategy;
    - integrate the implementation of the biodiversity offset strategy to the greatest extent practicable with the rehabilitation of the Drayton mine complex;
    - include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
  - (d) include a detailed description of the measures that would be implemented over the next 3 years for:
    - enhancing the quality of existing vegetation and fauna habitat in the disturbance and biodiversity offset areas, including through revegetation and/or the promotion of regeneration of canopy, sub-canopy (if relevant), understorey and ground strata;
    - creating native vegetation and fauna habitat in the biodiversity offset areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);
    - maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources – for beneficial reuse in the enhancement of the biodiversity offset areas or rehabilitation area;
    - managing any potential conflicts between the proposed enhancement works in the biodiversity offset strategy areas and any Aboriginal heritage values (both cultural and archaeological) in these areas;
    - collecting and propagating seed;
    - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
    - minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
    - salvaging, transplanting and/or propagating threatened flora (including Weeping Myall and Tiger Orchid) and native grassland, in accordance with the *Guidelines for the Translocation of Threatened Plants in Australia* (Vallee *et al.*, 2004);
    - managing salinity using best practice management measures;
    - controlling weeds and feral pests;
    - controlling erosion;
    - managing grazing and agriculture;
    - controlling access; and
    - bushfire management; and
    - rehabilitate creeks and drainage lines on the site (both inside and outside the disturbance areas), to ensure no net loss of aquatic habitat;
  - (e) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;
  - (f) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
  - (g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

### Conservation Bond

31. Within 6 months of the approval of the Biodiversity Management Plan, unless otherwise agreed by the Secretary, the Proponent shall 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 shall be determined by:
- (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and

- (b) employing a suitably qualified and experienced person to verify the calculated costs, to the satisfaction of the Secretary.

The calculation of the Conservation Bond must be submitted to the Department for approval at least 1 month prior to the lodgment of the bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the completion of the relevant works.

*Note: Alternative funding arrangements for long-term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond. The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy.*

## **HERITAGE**

### **Protection of Aboriginal Heritage Items**

32. Unless otherwise authorised under the NP&W Act, the Proponent shall ensure that the project does not cause any direct or indirect impact on the identified Aboriginal heritage items located outside the approved project disturbance area.

### **Aboriginal Heritage Management Plan**

33. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with OEH, Aboriginal stakeholders and relevant landowners, and be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (c) include the following for the management of Aboriginal heritage:
    - ensure any workers on site receive suitable heritage inductions prior to carrying out any project on site, and that suitable records are kept of these inductions;
    - a program and description of the measures/procedures that would be implemented for:
      - protecting, monitoring and/or managing (including any proposed archaeological investigations and/or salvage measures) Aboriginal cultural heritage on site;
      - undertaking test and salvage excavation at sites within the disturbance boundary as having high scientific significance and representative sites identified as potential archaeological deposits (PADs) to inform archaeological research;
      - managing the discovery of any new Aboriginal objects or skeletal remains during the project;
      - maintaining and managing reasonable access for relevant Aboriginal stakeholders to heritage items on site;
      - ongoing consultation and involvement of relevant Aboriginal stakeholders in the conservation and/or management of Aboriginal cultural heritage on the site; and
    - a strategy for the storage of heritage items salvaged on site, both during the project and in the long term.

### **Historic Heritage Management Plan**

34. The Proponent shall prepare and implement a Historic Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the Heritage Branch, Council, local historical organisations and relevant landowners, and be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (b) include the following for the management of historic heritage:
    - management plans/strategies for the heritage items identified in condition 13(b);
    - ensure any workers on site receive suitable heritage inductions prior to carrying out any project on site, and that suitable records are kept of these inductions;
    - a program and description of the measures/procedures that would be implemented for:
      - photographic and archival recording of any directly impacted heritage items (including the fence and Nissan Hut with Stockyard);
      - protecting the other heritage items outside the project disturbance area;
      - pre-blast and ongoing risk-based dilapidation surveys (subject to landowner access arrangements) of the 7 heritage homesteads/cottages shown in Appendix 3;
      - monitoring, notifying and managing the effects of blasting on potentially affected heritage items;

- managing the discovery of any new historic heritage items during the project; and
- additional archaeological excavation and/or recording of any significant heritage items requiring demolition.

## TRANSPORT

### Monitoring of Coal Transport

35. The Proponent shall:
- (a) keep accurate records of the:
    - amount of coal transported from the site (on a monthly basis);
    - date and time of each train movement generated by the project; and
  - (b) make these records available on its website at the end of each calendar year.

### Railway Crossing

36. The Proponent shall implement all reasonable and feasible measures to minimise delays at the railway crossing on Antiene Railway Station Road, to the satisfaction of the Secretary

### Thomas Mitchell Drive

37. The Proponent shall 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 Contributions Study prepared by GHD titled, *"Thomas Mitchell Drive Contributions Study, December 2013"* (or its latest version), unless otherwise agreed with the Secretary.

For Thomas Mitchell Drive, the contributions must:

- (a) be paid to Council by end of March 2015 for the upgrade works; and
- (b) be paid to Council in accordance with the maintenance schedule established in accordance with the Contributions Study during the life of the project, 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) by 30 June 2016, unless otherwise agreed with the Secretary.

Notes:

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

### Edderton Road

38. The Proponent shall realign Edderton Road and its intersection with the Golden Highway, to the satisfaction of the relevant road authority, prior to the commencement of any mining operations within 200 m of this road (other than activities associated with site establishment, bulk earthworks or infrastructure supply).

Notes:

- *The realignment works identified above include all road furniture and safety requirements required to meet relevant road standards, to the satisfaction of the relevant roads authorities.*
- *If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Secretary for resolution.*

## VISUAL

### Additional Visual Impact Mitigation

39. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and infrastructure on-site during the project, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of the mining operations and infrastructure from the residences on the privately-owned land.

These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.

If within 3 months of receiving this request, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Notes:

- *The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.*
- *The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (i.e. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).*
- *Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 4 kilometres from the mining operations.*

## **Operating Conditions**

40. The Proponent shall:
- (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project, including establishing and maintaining a vegetation buffer between the Golden Highway and the Redbank Pit, and tree screening and/or landscaping along visually impacted sections of Thomas Mitchell Drive, Edderton Road and the Golden Highway;
  - (b) ensure that the dragline on the site is not visible from the primary operational areas of the Coolmore and Woodlands Thoroughbred Horse Studs at any time during the life of the project;
  - (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;
  - (e) ensure that all external lighting associated with the project complies with relevant Australian Standards including *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version; and
  - (f) take all reasonable and feasible measures to shield views of mining operations and associated equipment from users of public roads and privately-owned residences,
- to the satisfaction of the Secretary.

## **Visual Impact Management Plan**

41. The Proponent shall prepare and implement a Visual Impact Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with Council, RMS, and the owners of the Coolmore and Woodlands Thoroughbred Horse Studs, and be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (c) include description of the measures that would be implemented for:
    - minimising the visual impacts on the Coolmore and Woodlands Thoroughbred Horse Studs;
    - establishing and maintaining a vegetation buffer between the Golden Highway and the Redbank Pit;
    - establishing and maintaining tree screening and/or landscaping along visually impacted sections of the Thomas Mitchell Drive, Edderton Road and the Golden Highway;
    - monitoring the performance of the visual impact mitigation measures, including interim and final completion criteria for evaluating the performance of the vegetation buffer and the tree screening along public roads and triggers for remedial action (if necessary), to ensure these measures effectively reduce the visibility of the project.

## **BUSHFIRE MANAGEMENT**

42. The Proponent shall:
- (a) ensure that the project is suitably equipped to respond to any fires on site; and
  - (b) assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site.

## **WASTE**

43. The Proponent shall:
- (a) implement all reasonable and feasible measures to minimise the waste (including coal rejects and tailings) generated by the project;
  - (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of;
  - (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
  - (d) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.

## HIGHWALL MINING

44. The Proponent shall ensure that all highwall mining associated with the project:
- is designed to remain long term safe and stable; and
  - does not result in any measurable subsidence at the surface (i.e. less than 20 mm of subsidence),  
to the satisfaction of DRE.

## REHABILITATION

### Rehabilitation Objectives

45. The Proponent shall rehabilitate the site to the satisfaction of DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (and shown conceptually in Appendix 9), and comply with the objectives in Table 11.

Table 11: Rehabilitation objectives

Feature	Objective
Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms</li> <li>Constructed landforms drain to the natural environment (excluding the final void)</li> <li>Minimise long term groundwater seepage zones</li> <li>Minimise visual impact of final landforms as far as is reasonable and feasible</li> </ul>
Final voids	<ul style="list-style-type: none"> <li>Minimise to the greatest extent practicable: <ul style="list-style-type: none"> <li>the size and depth of final voids</li> <li>the drainage catchment of final voids</li> <li>risk of flood interaction for all flood events up to and including the Probable Maximum Flood.</li> </ul> </li> </ul>
Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless DRE agrees otherwise</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>Restore or maintain land capability generally as described in the EA, including within the Agricultural Land Reserve shown conceptually in Appendix 7 and Rehabilitation Areas shown conceptually in Appendix 9</li> <li>Restore the 3 ha area of BSAL disturbed by the project</li> </ul>
Rehabilitation areas and other vegetated land	<ul style="list-style-type: none"> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems that comprise at least: <ul style="list-style-type: none"> <li>719 ha of Central Hunter Box-Ironbark Woodland; and</li> <li>600 ha of Narrabeen Footslopes Slaty Gum Woodland.</li> </ul> </li> <li>Establish areas of self-sustaining: <ul style="list-style-type: none"> <li>aquatic habitat, within the diverted and/or re-established creek lines and retained water features;</li> <li>habitat for threatened flora and fauna species; and</li> <li>wildlife corridors, as far as is reasonable and feasible and as generally shown on the figure in Appendix 9</li> </ul> </li> </ul>
Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise adverse socio-economic effects associated with mine closure</li> </ul>

### Rehabilitation Strategy

46. The Proponent shall prepare and implement a Rehabilitation Strategy for the Drayton mine complex to the satisfaction of the Secretary. This strategy must:
- be prepared in consultation with DRE and Council, and be submitted to the Secretary for approval by end of December 2015, unless the Secretary agrees otherwise;
  - include a revised rehabilitation plan for the Drayton mine complex that is consistent with and builds on the rehabilitation objectives in Table 11, including opportunities for increasing the areas of woodland and habitat connectivity within the rehabilitated landscape at the Drayton mine;
  - include an indicative schedule for the staged rehabilitation of the Drayton mine complex, with a detailed schedule for the rehabilitation of the Drayton mine; and

- (d) investigate the options (including a detailed justification for the preferred option) for:
- rejects and tailings emplacement for the Drayton mine complex; and
  - managing spontaneous combustion at the Drayton mine.

*Note: The strategy should build on the proposed rehabilitation strategy shown in Appendix 9.*

### **Progressive Rehabilitation**

47. The Proponent shall rehabilitate the site progressively as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilization and rehabilitation strategies shall be employed when areas prone to dust generation cannot be permanently rehabilitated.

*Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the project.*

### **Rehabilitation Management Plan**

48. The Proponent shall prepare and implement a Rehabilitation Management Plan for the Drayton mine complex to the satisfaction of DRE. This plan must:
- (a) be prepared in consultation with the Department, NOW, OEH, DPI, Council and the CCC;
  - (b) be submitted to DRE for approval by end of June 2015, unless the Secretary agrees otherwise;
  - (c) be prepared in accordance with any relevant DRE guideline;
  - (d) describe how the rehabilitation of the site would be achieve the outcomes described in the Rehabilitation Strategy and be integrated with the biodiversity offset strategy for the Drayton mine complex;
  - (e) include a detailed Tailings Management Plan and soil balance for the project;
  - (f) include a detailed plan for reinstatement and review of the proposed:
    - agricultural land capability across the Drayton mine complex, including a protocol for periodic trials to demonstrate that the land capability is being achieved;
    - 3 ha of BSAL to be disturbed by the project, including a protocol for verification of the reinstated land as BSAL;
    - woodland rehabilitation areas and fauna habitat;
  - (g) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
  - (h) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform (including final voids) and final land use;
  - (i) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
  - (j) include a research program that seeks to improve the understanding and application of rehabilitation techniques and methods in the Hunter Valley for EECs, including Central Hunter Box-Ironbark Woodland;
  - (k) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
  - (l) build to the maximum extent practicable on the other management plans required under this approval.
-

## **SCHEDULE 4 ADDITIONAL PROCEDURES**

### **NOTIFICATION OF LANDOWNERS/TENANTS**

1. Within 2 months of this approval, the Proponent shall:
  - (a) notify in writing the owner of:
    - the land listed in Table 1 of schedule 3 that they have the right to require the Proponent to acquire their land at any stage during the project;
    - the residences listed in Table 2 of schedule 3 that they are entitled to ask the Proponent to install additional noise mitigation measures at the residence; and
    - any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask the Proponent 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 approval; and
  - (c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.
2. Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Proponent, the Proponent shall:
  - (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 NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
  - (b) advise the prospective tenants of the rights they would have under this approval, to the satisfaction of the Secretary.
3. As soon as practicable after obtaining monitoring results showing:
  - (a) an exceedance of any relevant criteria in schedule 3, the Proponent shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the project is again complying with the relevant criteria; and
  - (b) an exceedance of the relevant air quality criteria in schedule 3, the Proponent shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

### **INDEPENDENT REVIEW**

4. If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and
  - if the project is not complying with these criteria then:
    - determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land;
    - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

### **LAND ACQUISITION**

5. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall 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 project, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - 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 or



reasonable costs that have resulted from the implementation of the additional noise mitigation measures in condition 2 of schedule 3;

- (b) the reasonable costs associated with:
  - relocating within the Muswellbrook, Singleton or Upper Hunter local government areas, or to any other local government area determined by the Secretary; and
  - obtaining 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.

However, if at the end of this period, the Proponent 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 Secretary for resolution.

Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- consider submissions from both parties;
- 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 paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the 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 Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.

If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Secretary determines otherwise.

- 6. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 5 above, 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.

## **SCHEDULE 5**

### **ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

#### **ENVIRONMENTAL MANAGEMENT**

##### **Environmental Management Strategy**

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval prior to carrying out any development under this approval, unless the Secretary agrees otherwise;
  - (b) provide the strategic framework for environmental management of the project;
  - (c) identify the statutory approvals that apply to the project;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise;
    - respond to any non-compliance;
    - respond to emergencies; and
  - (f) include:
    - copies of any strategies, plans and programs approved under the conditions of this approval; and
    - a clear plan depicting all the monitoring to be carried out in relation to the project.

##### **Adaptive Management**

2. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Proponent 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 remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

##### **Management Plan Requirements**

3. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria;
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the project;
    - effectiveness of any management measures (see c above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences;
  - (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and

- exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

### Annual Review

4. By the end of March each year, following commencement of the development under this approval, or as otherwise agreed with the Secretary, the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. This review must:
- (a) describe the project that was carried out in the previous calendar year, and the project that is proposed to be carried out over the next year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:
    - the relevant statutory requirements, limits or performance measures/criteria;
    - the monitoring results of previous years; and
    - the relevant predictions in the EA;
  - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the project;
  - (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

### Revision of Strategies, Plans and Programs

5. Within 3 months of:
- (a) the submission of an annual review under condition 4 above;
  - (b) the submission of an incident report under condition 7 below;
  - (c) the submission of an audit under condition 9 below;
  - (d) the approval of any modification to the conditions of this approval; or
  - (e) a direction of the Secretary under condition 4 of schedule 2;
- the Proponent shall review and, if necessary, revise the strategies, plans, and programs required under this approval to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval, unless otherwise agreed with the Secretary.

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

### Community Consultative Committee

6. The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and be operating prior to carrying out any development under this approval.

#### Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *The CCC should be comprised of an independent chair and appropriate representation from the Proponent, Council, and the local community.*
- *The CCC required under this condition should be a new committee that ensures adequate representation of the local community in proximity of both the existing Drayton mine and the Drayton South mining area.*

## REPORTING

### Incident Reporting

7. The Proponent shall immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

### Regular Reporting

8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

## AUDITING

9. Within a year of commencing development under this approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
- be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - include consultation with the relevant agencies and the Coolmore and Woodlands Thoroughbred Horse Studs;
  - assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);
  - review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
  - recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

*Note: This audit team must be led by a suitably qualified auditor, and include visual, noise, air quality, ecology experts, and any other fields specified by the Secretary.*

10. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Proponent must implement these recommendations, to the satisfaction of the Secretary.

## ACCESS TO INFORMATION

11. The Proponent shall:
- make the following information publicly available on its website:
    - the EA;
    - current statutory approvals for the project;
    - approved strategies, plans or programs required under the conditions of this approval;
    - a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
    - a complaints register, which is to be updated on a monthly basis;
    - minutes of CCC meetings;
    - the last five annual reviews;
    - any independent environmental audit, and the Proponent's response to the recommendations in any audit; and
    - any other matter required by the Secretary;
  - keep this information up to date, and
  - investigate and report on reasonable and feasible measures to make predictive meteorological data and real time monitoring data publicly available on its website, to the satisfaction of the Secretary.

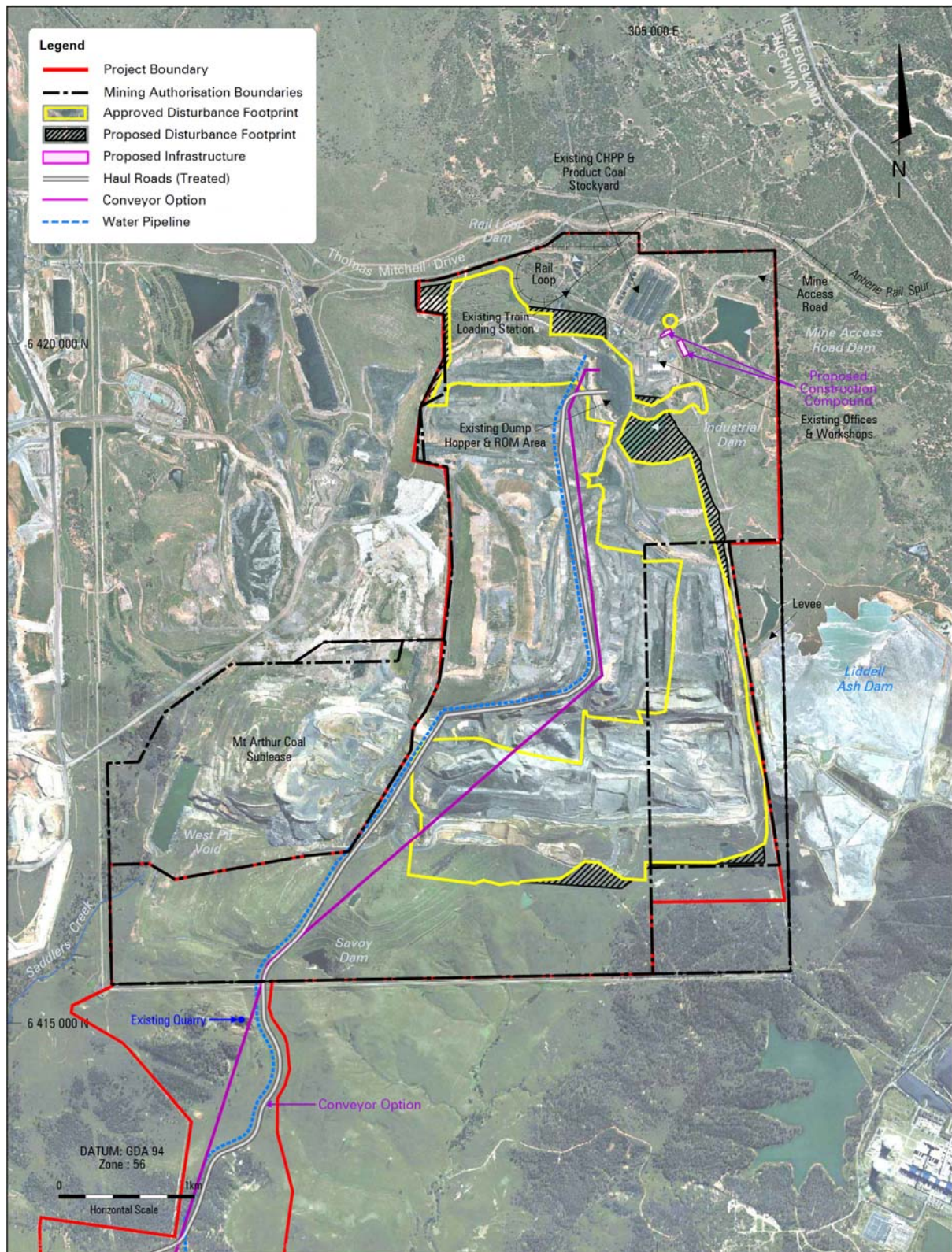
## APPENDIX 1 SCHEDULE OF LAND

Lot	DP	Lot	DP
1	1004725	1	1004725
3	1004725	41	1105798
1	247510	1	1159371
2	616024	2	1159371
5	843635	1	238862
8	843635	22	241179
22	1018587	44	241179
321	625513	45	241179
4	701496	46	241179
6	701496	1	532672
9	701496	1	556370
12	701496	1	752486
13	701496	180	812852
14	701496	31	1156564
21	545087	2	1095515
64	850818	23	225426
65	850818	Edderton Road	
7	29950	Various Crown roads	
9	843635	Various sections of Council roads	
21	1018587	New England Highway (Antiene Rail Spur overpass)	
1	1095515		

**Note:** The cadastral information for the lands to which the PPR applies was sourced from the NSW LPI records database.

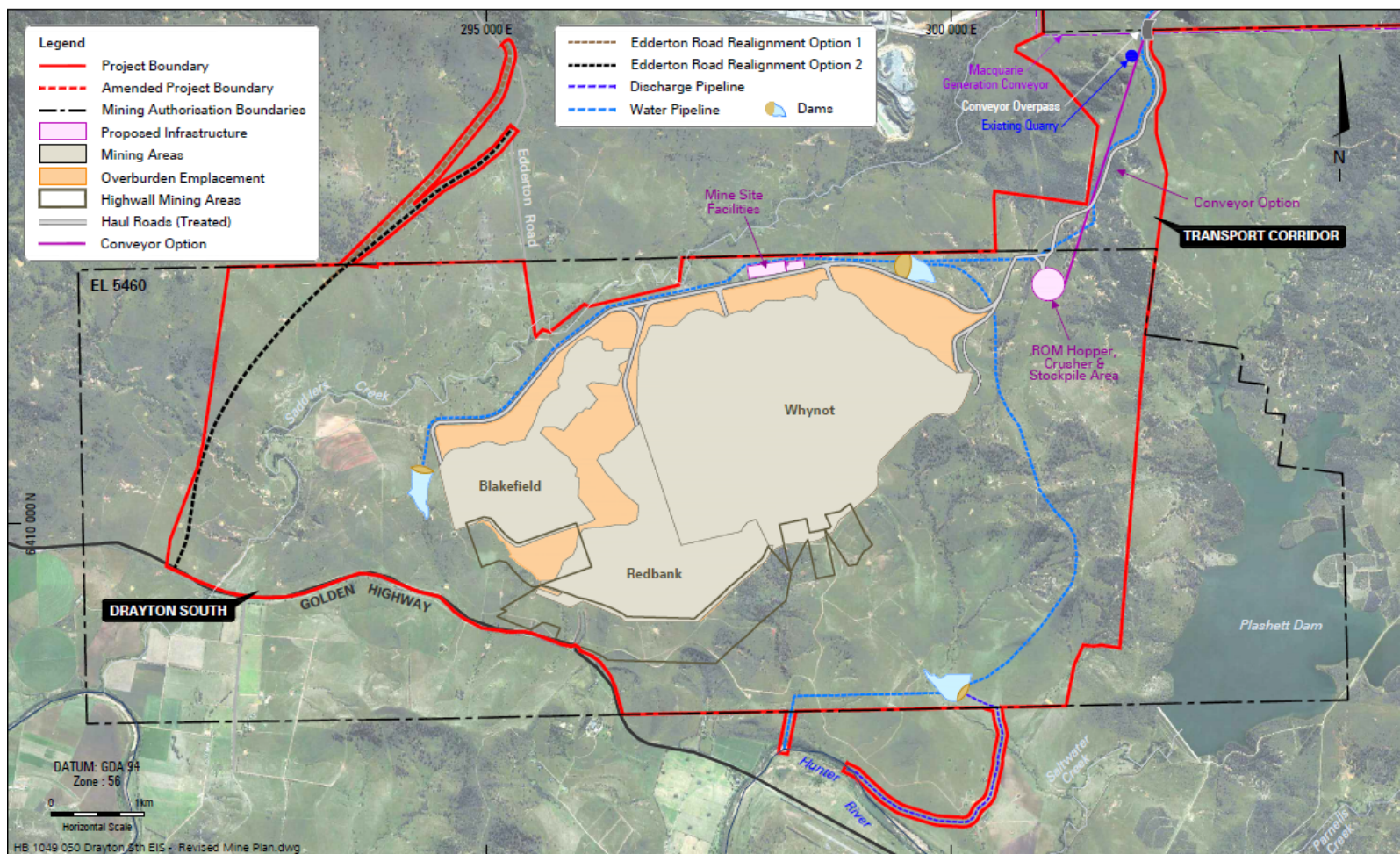


## APPENDIX 2 GENERAL LAYOUT OF PROJECT



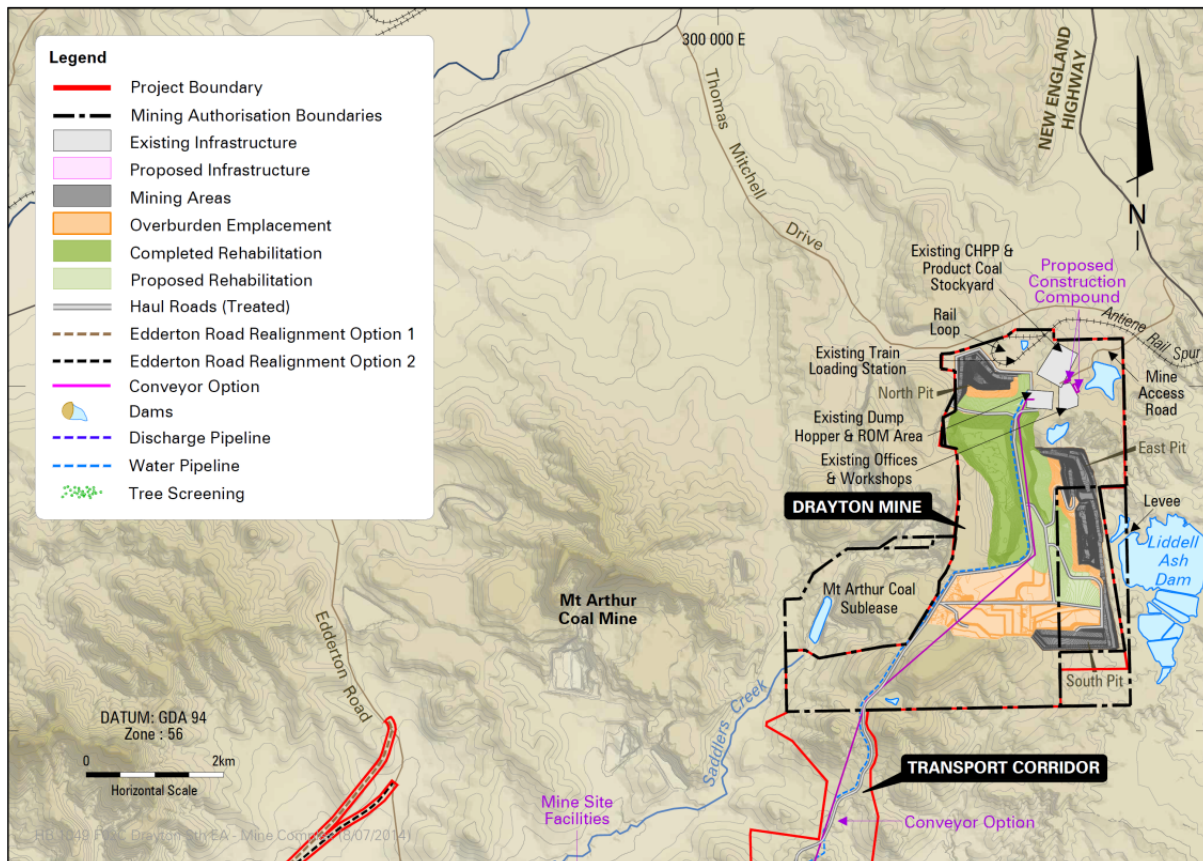
**Figure 2A: General Project Layout – Drayton Mine**



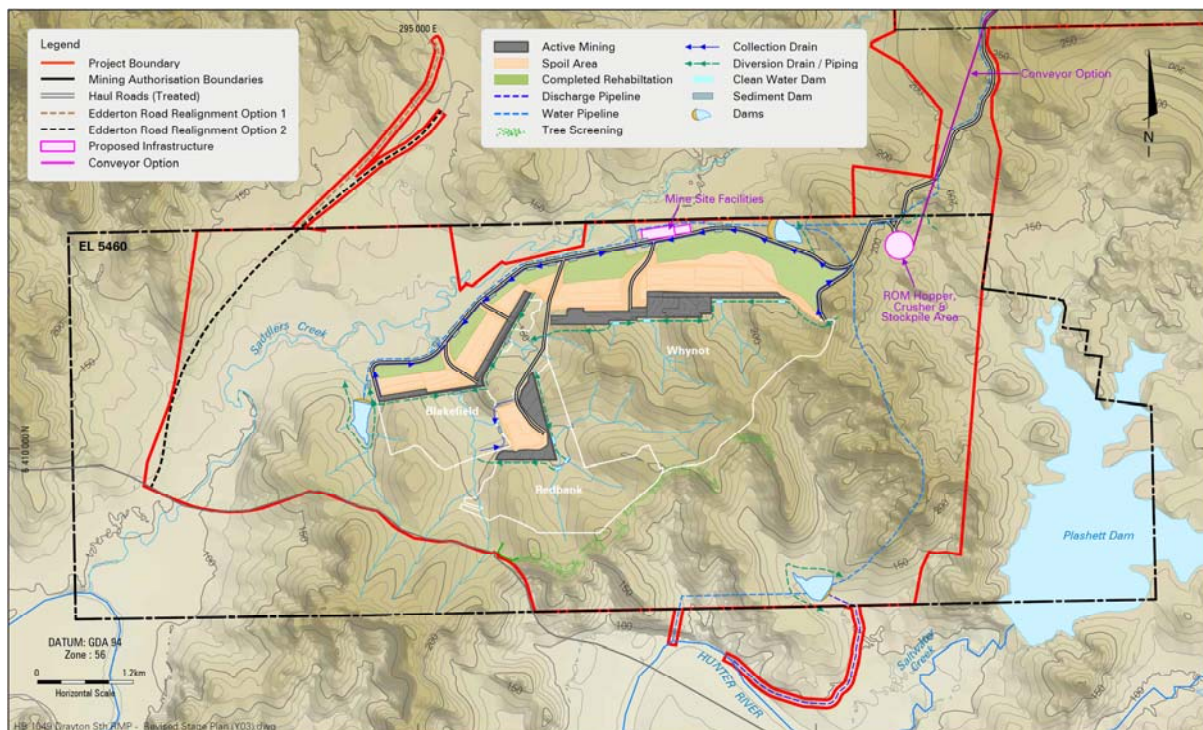


**Figure 2B:** General Project Layout – Drayton South



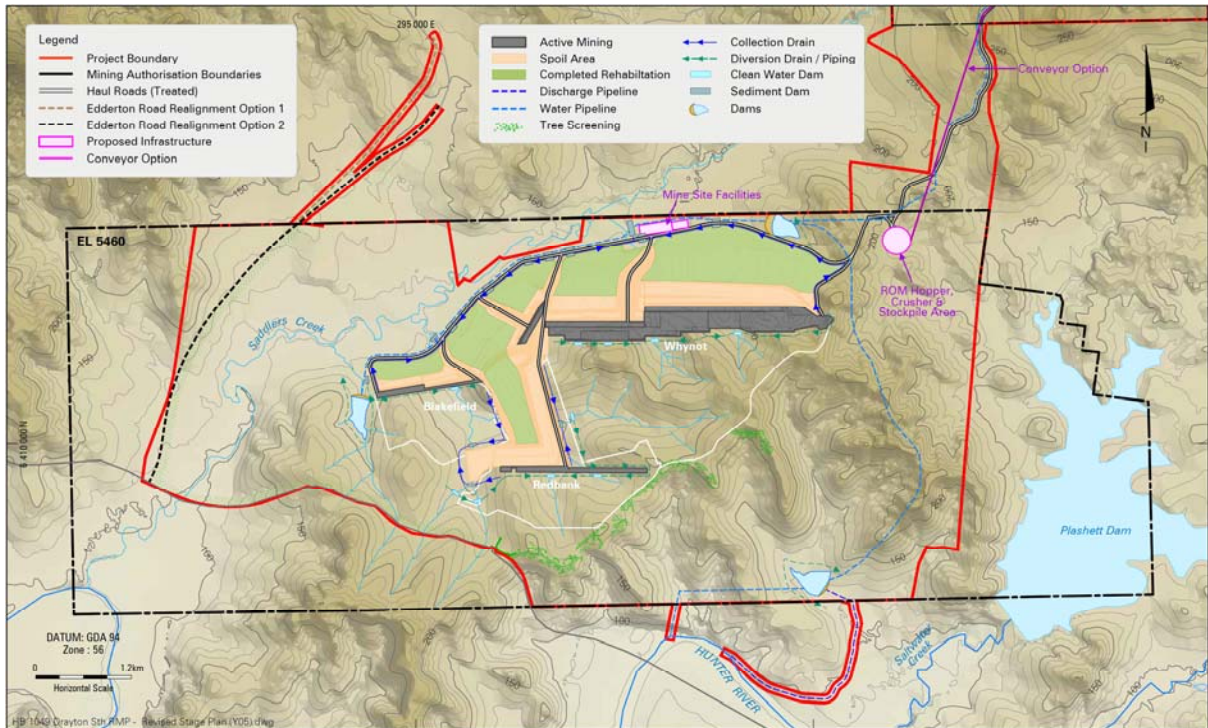


**Figure 2C: Year 3 Mine Plan – Drayton Mine**

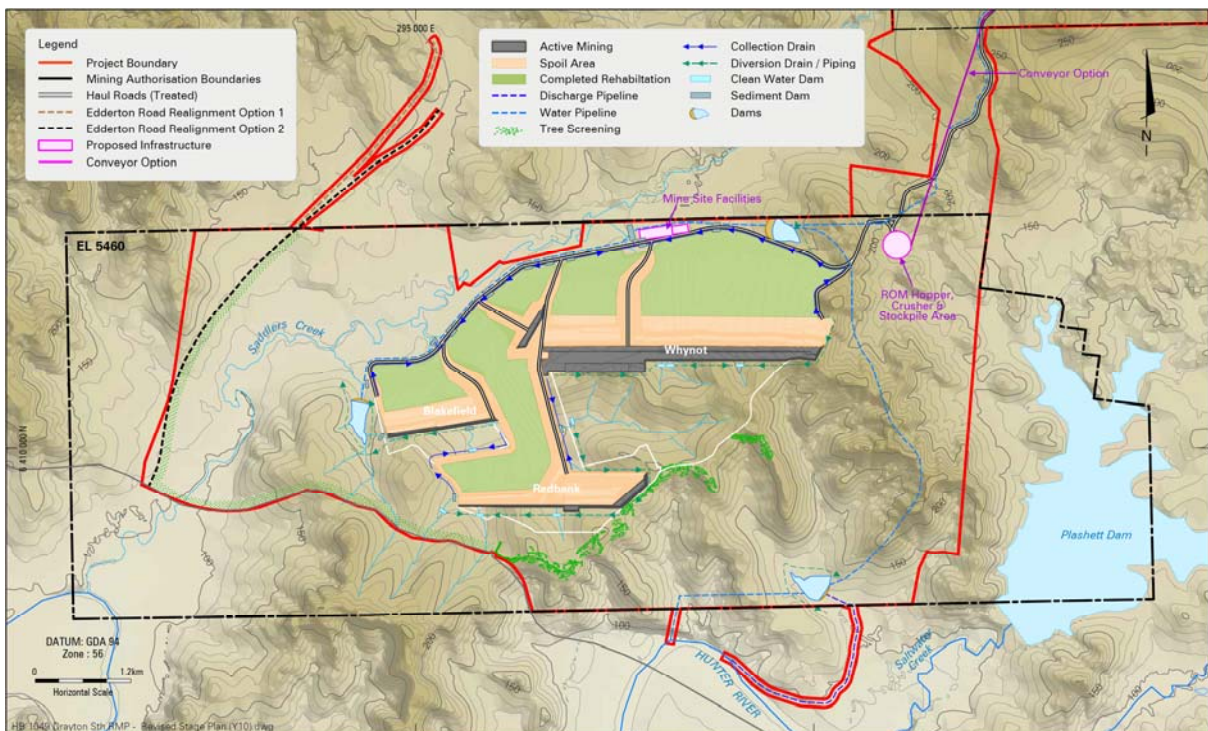


**Figure 2D: Year 3 Mine Plan – Drayton South**



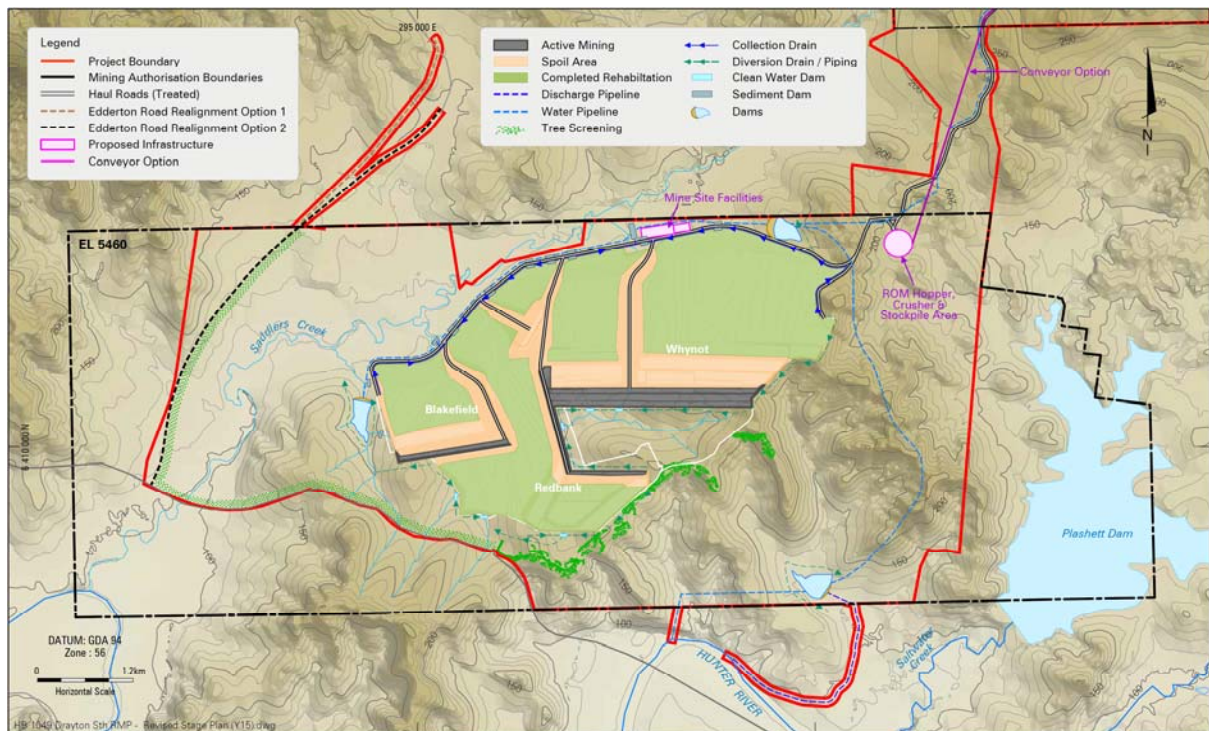


**Figure 2E: Year 5 Mine Plan**

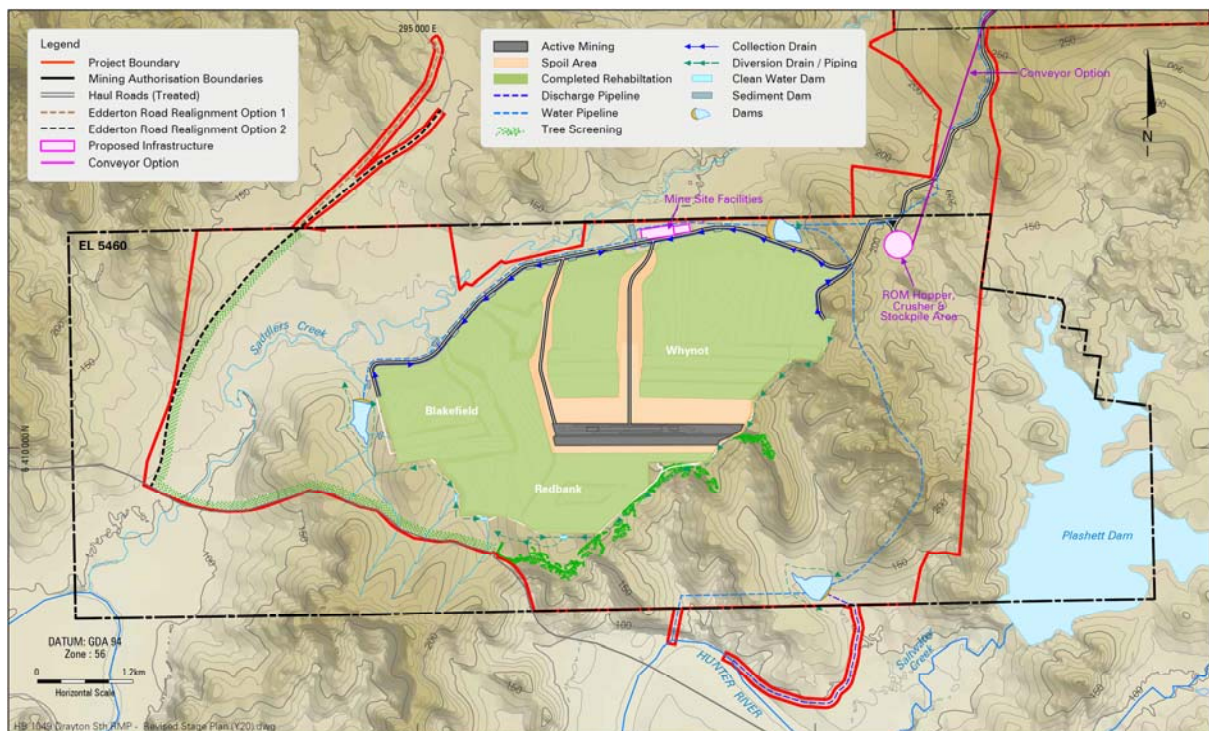


**Figure 2F: Year 10 Mine Plan**





**Figure 2G: Year 15 Mine Plan**



**Figure 2H: Year 20 Mine Plan**

### **APPENDIX 3 PREVIOUS EAs**

#### **Drayton Mine Extension**

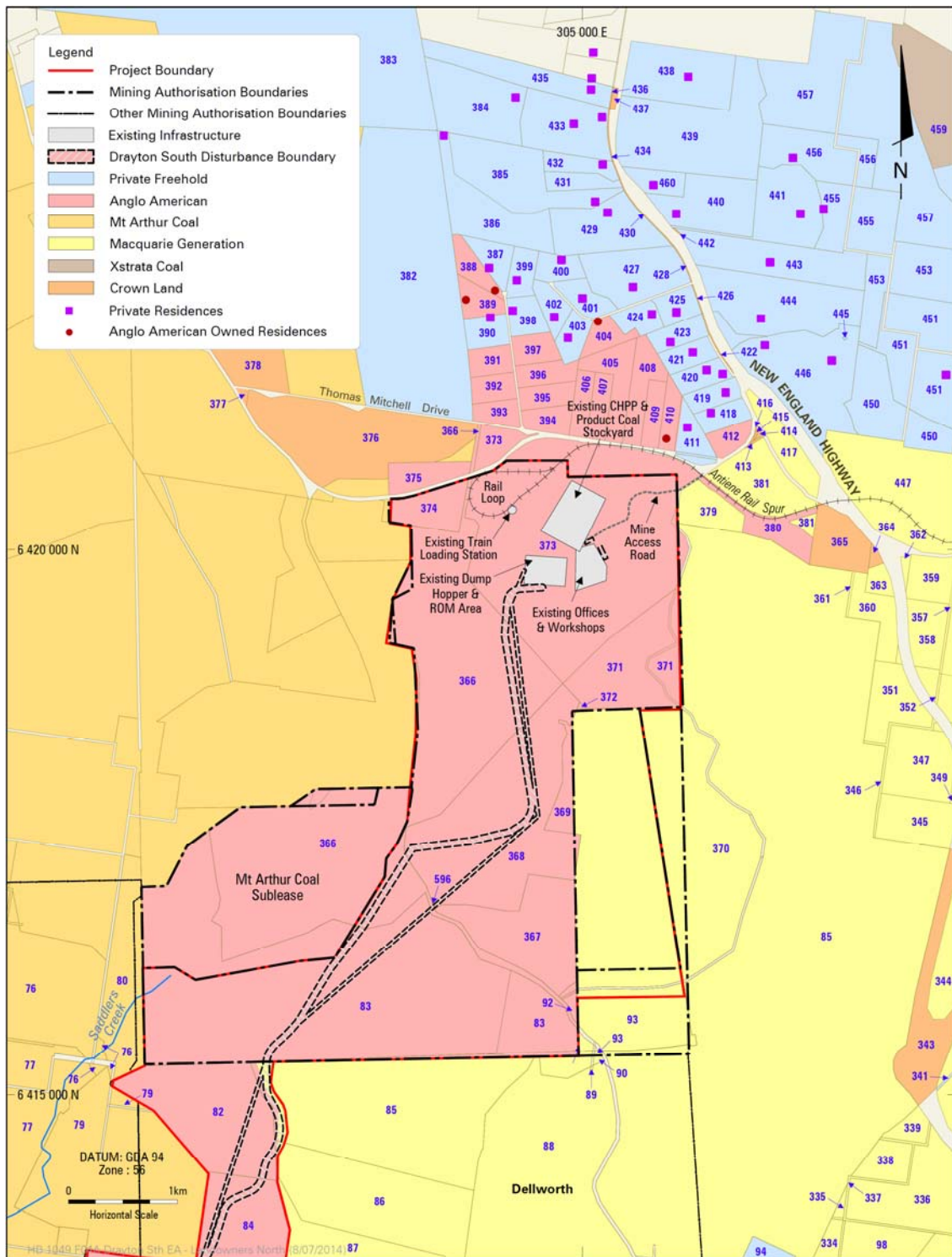
Project Application 06\_0202 and Environmental Assessment titled *Drayton Mine Extension*, dated June 2007, and prepared by Hansen Bailey, as amended by the following:

- the modification application (Mod 1) and accompanying Environmental Assessment, titled *Drayton Mine - Project Approval Modification* and dated July 2009; and
- the modification application (Mod 2) and accompanying Environmental Assessment, titled *Drayton Mine - East Pit Tailings Emplacement & Explosives Storage Facility* and dated July 2011.

#### **Increased Coal Transport Tonnage Using the Existing Drayton Rail Loop and Antiene Rail Spur**

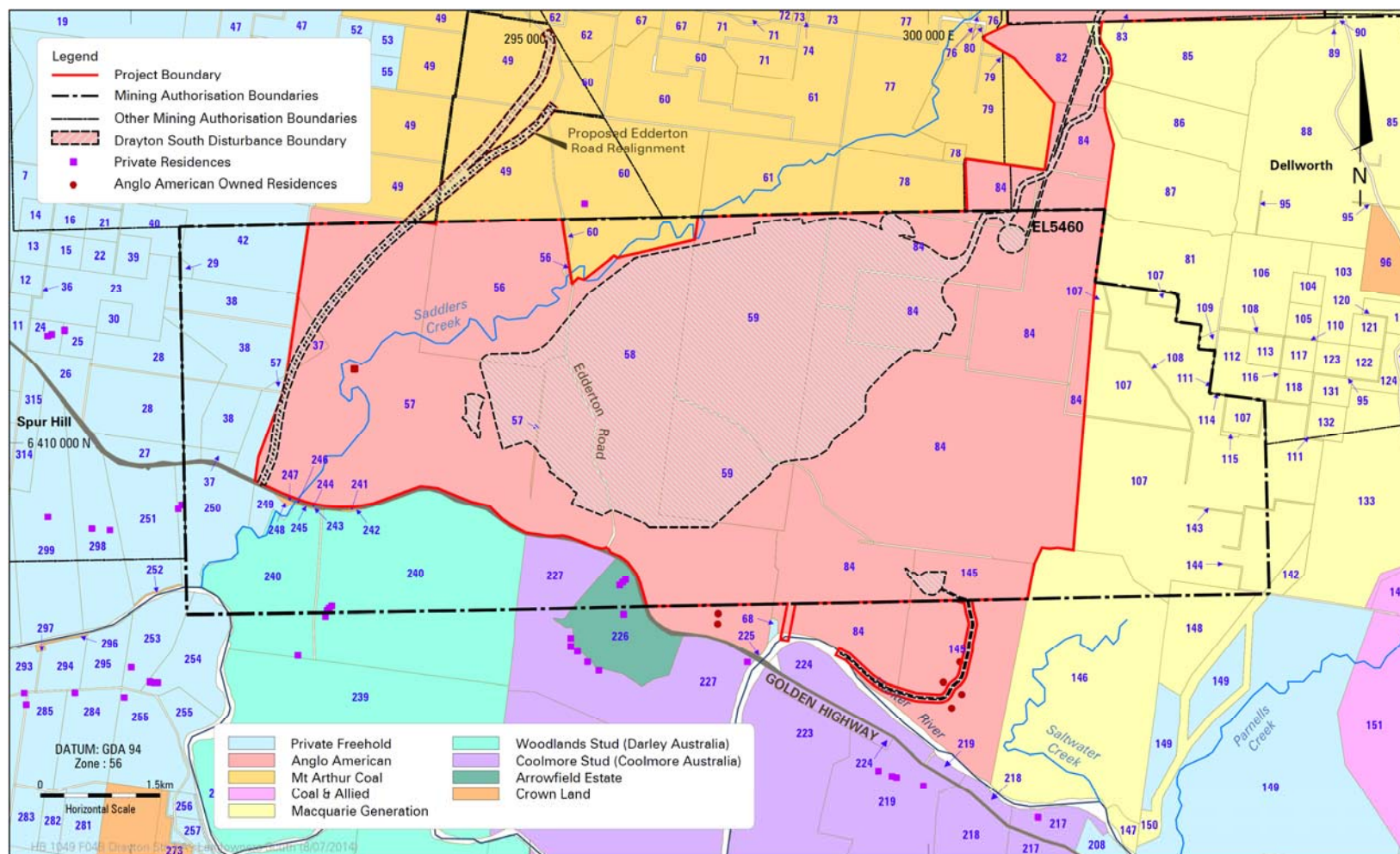
Project Application 106-04-00 and Environmental Impact Statement titled *Antiene Joint User Rail Facility* and dated March 2000, and prepared by Umwelt (Australia) Pty Ltd.

## APPENDIX 4 RECEIVER LOCATION PLANS



**Figure 4A: Receiver Locations (North)**





**Figure 4B: Receiver Locations (South)**

## **APPENDIX 5 NOISE COMPLIANCE ASSESSMENT**

### **Applicable Meteorological Conditions**

1. The noise criteria in Table 3 of the conditions are to apply under all meteorological conditions except the following:
  - (a) during periods of rain or hail;
  - (b) average wind speed at microphone height exceeds 5 m/s;
  - (c) wind speeds greater than 3 m/s measured at 10 m above ground level; or
  - (d) temperature inversion conditions greater than 3°C/100 m.

### **Determination of Meteorological Conditions**

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.

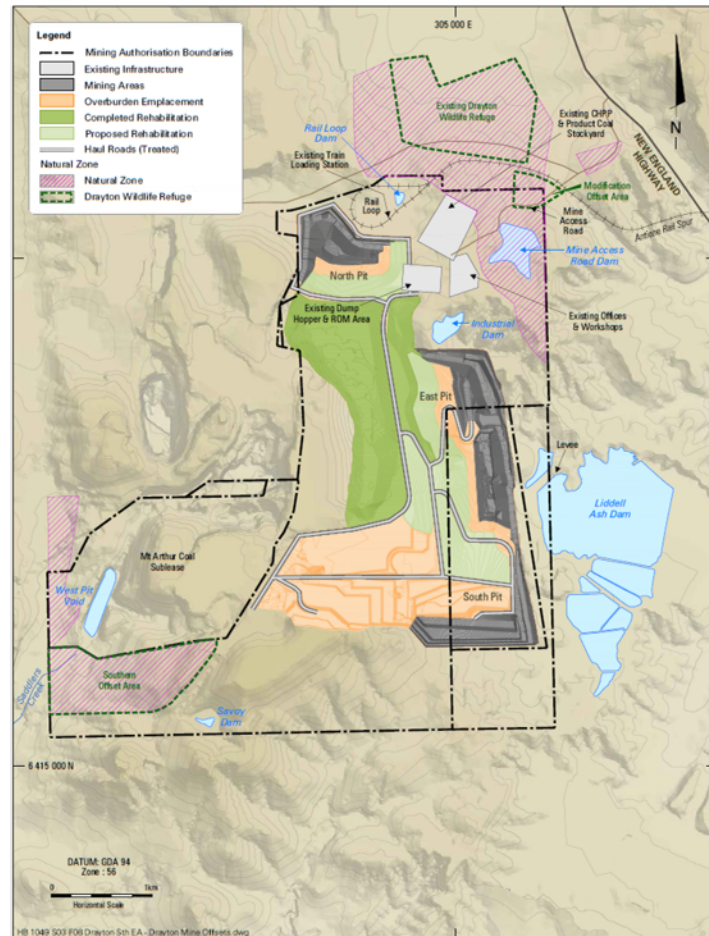
### **Compliance Monitoring**

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.
4. This monitoring must be carried out at least once a month (at least two weeks apart), unless the Secretary directs otherwise.

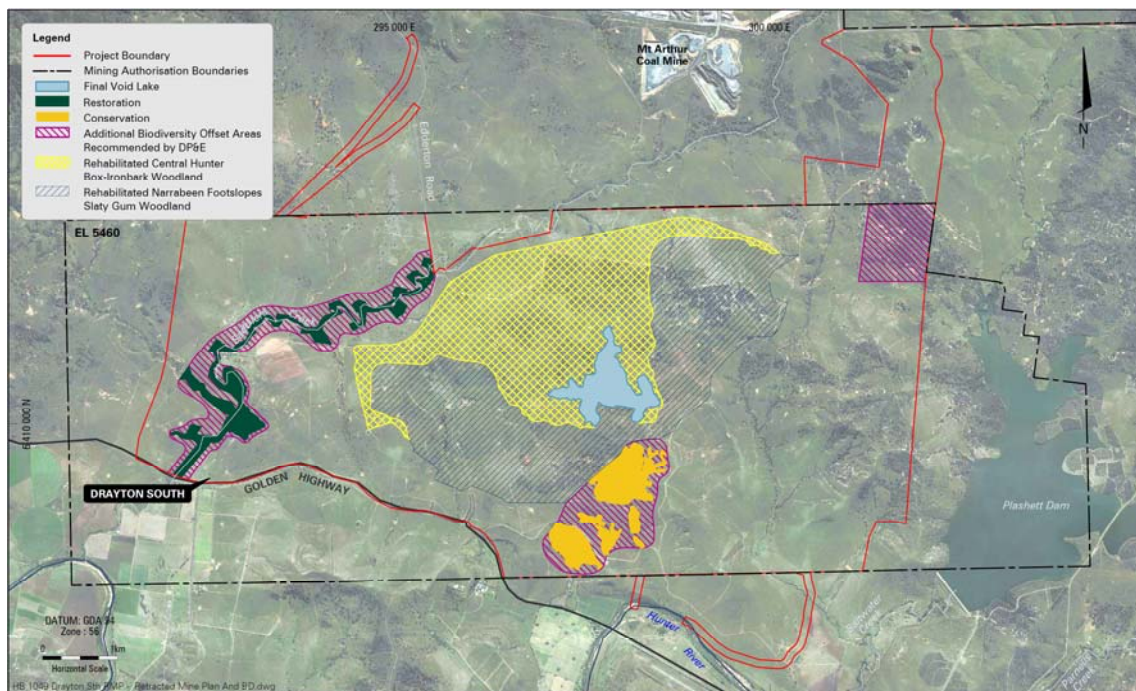
*Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the project.*

5. Unless the Secretary agrees otherwise, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
  - (a) monitoring locations for the collection of representative noise data;
  - (b) meteorological conditions during which collection of noise data is not appropriate;
  - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
  - (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

## APPENDIX 6 BIODIVERSITY OFFSET STRATEGY

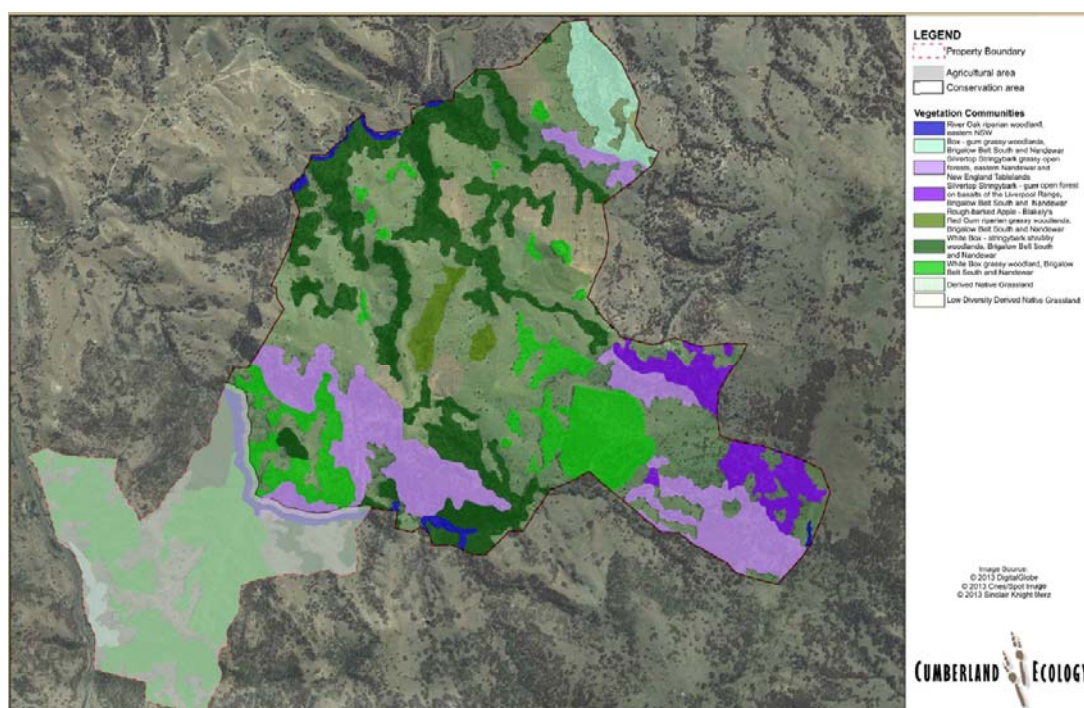
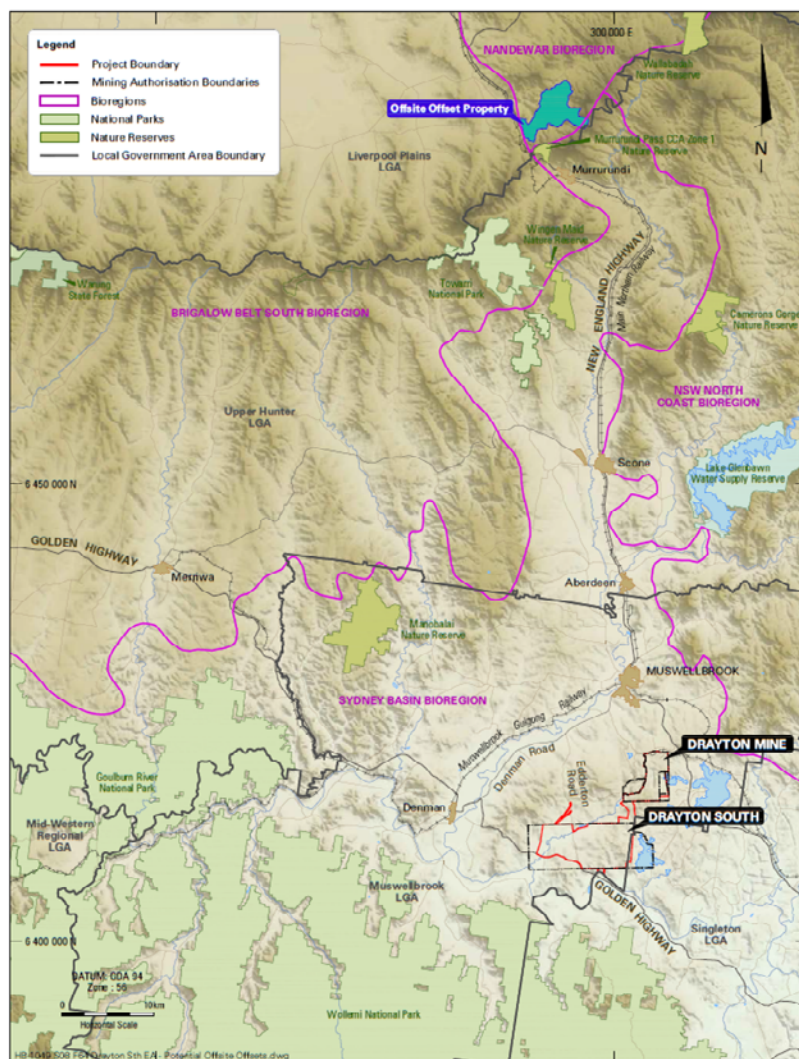


**Figure 6A:** On-site Biodiversity Offset Areas – Drayton Mine



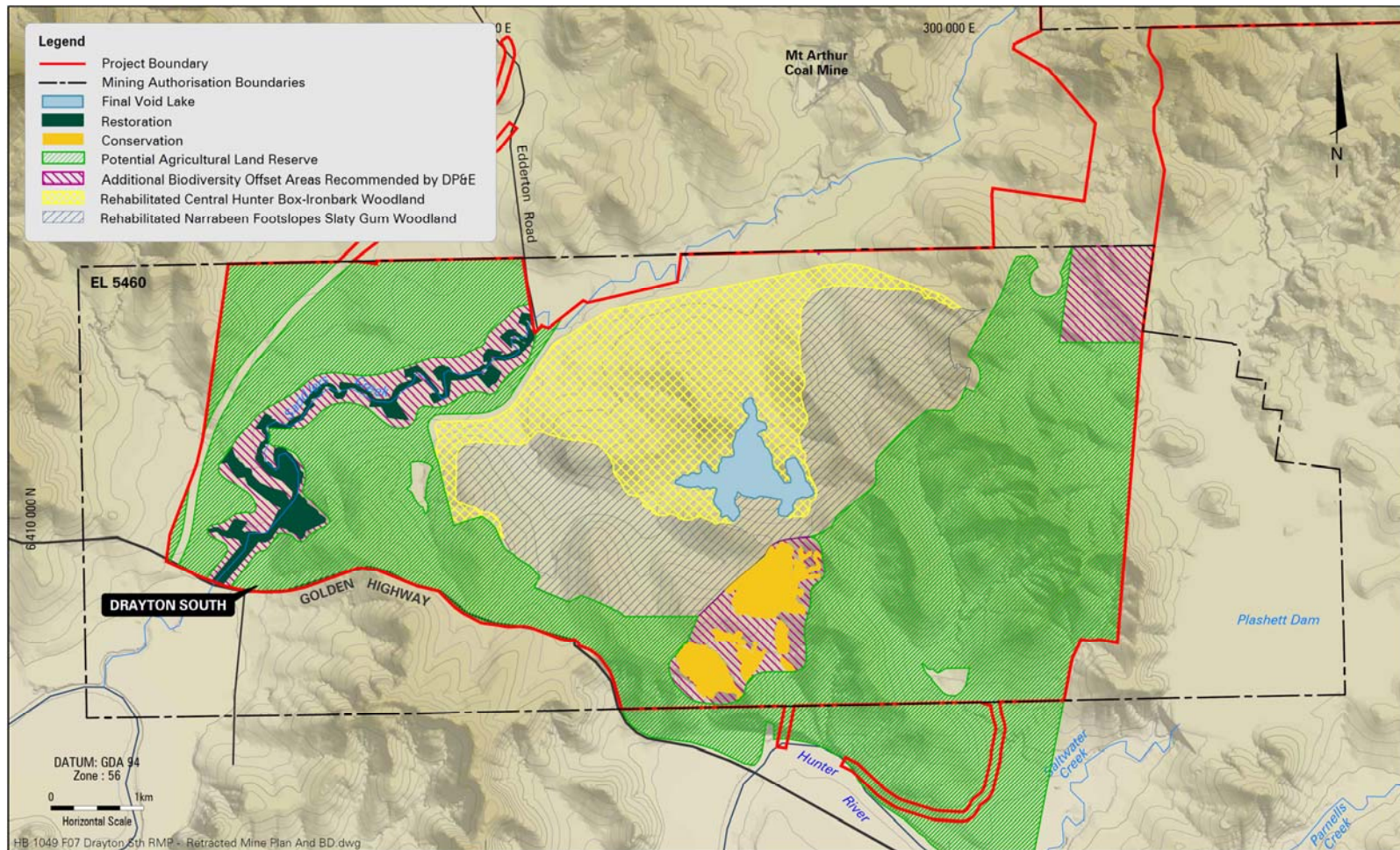
**Figure 6B:** On-site Biodiversity Offset Areas – Drayton South







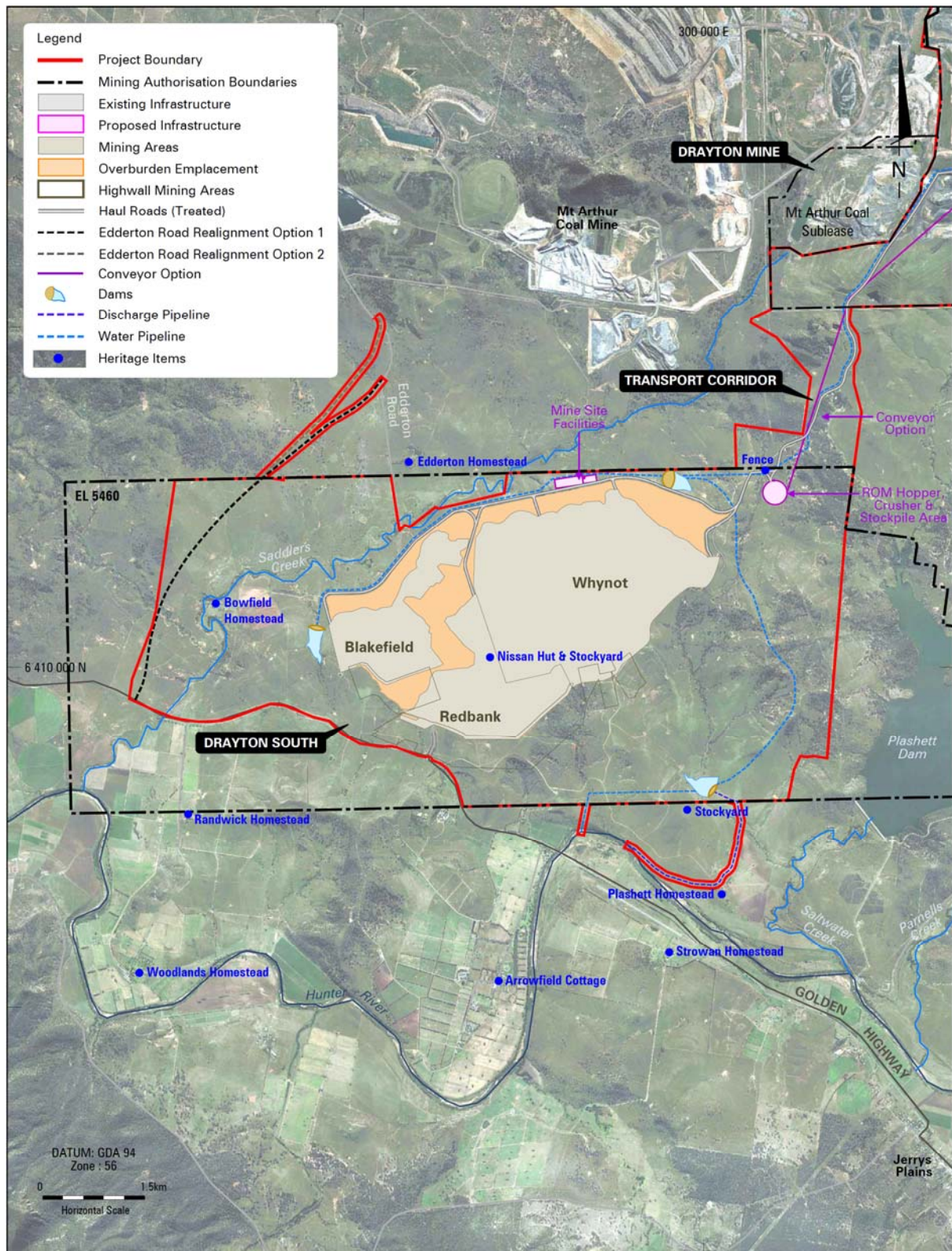
## APPENDIX 7 AGRICULTURAL LAND RESERVE



**Figure 7: Agricultural Land Reserve – Drayton South**



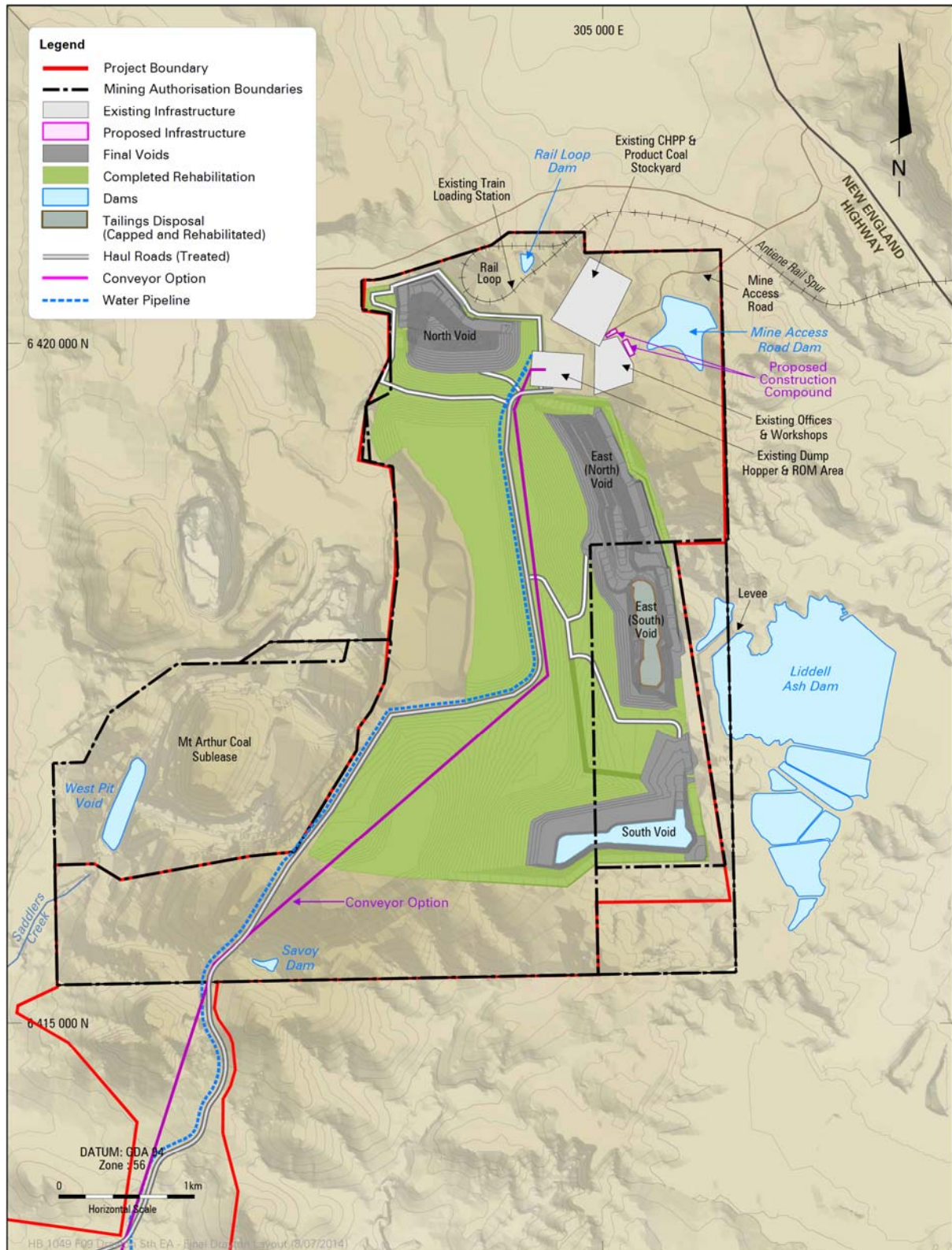
## APPENDIX 8 HISTORIC HERITAGE SITES



**Figure 8: Historic Heritage Sites**

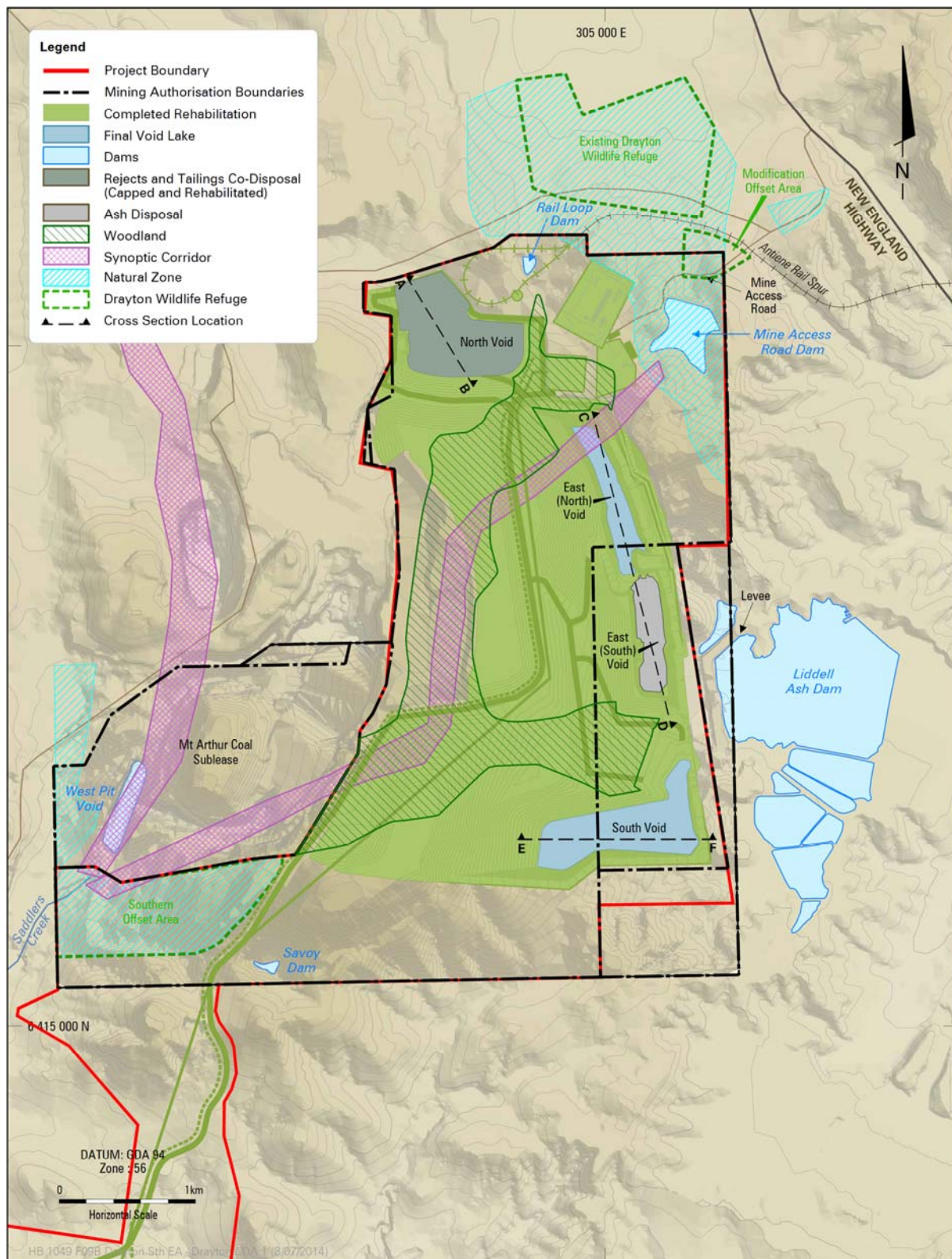


## APPENDIX 9 REHABILITATION PLAN



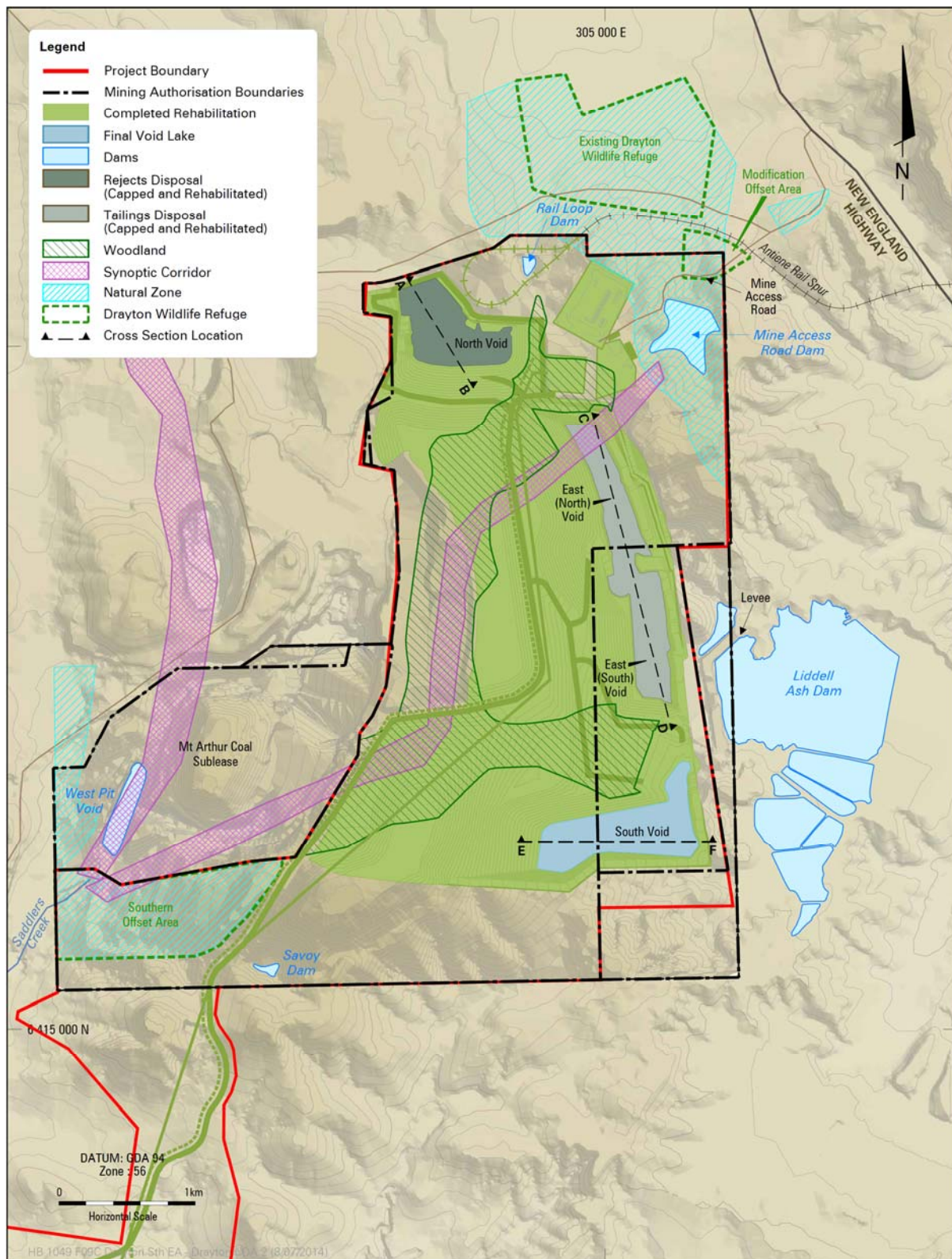
**Figure 9A:** Conceptual Interim-Final Landform – Drayton Mine (2017)





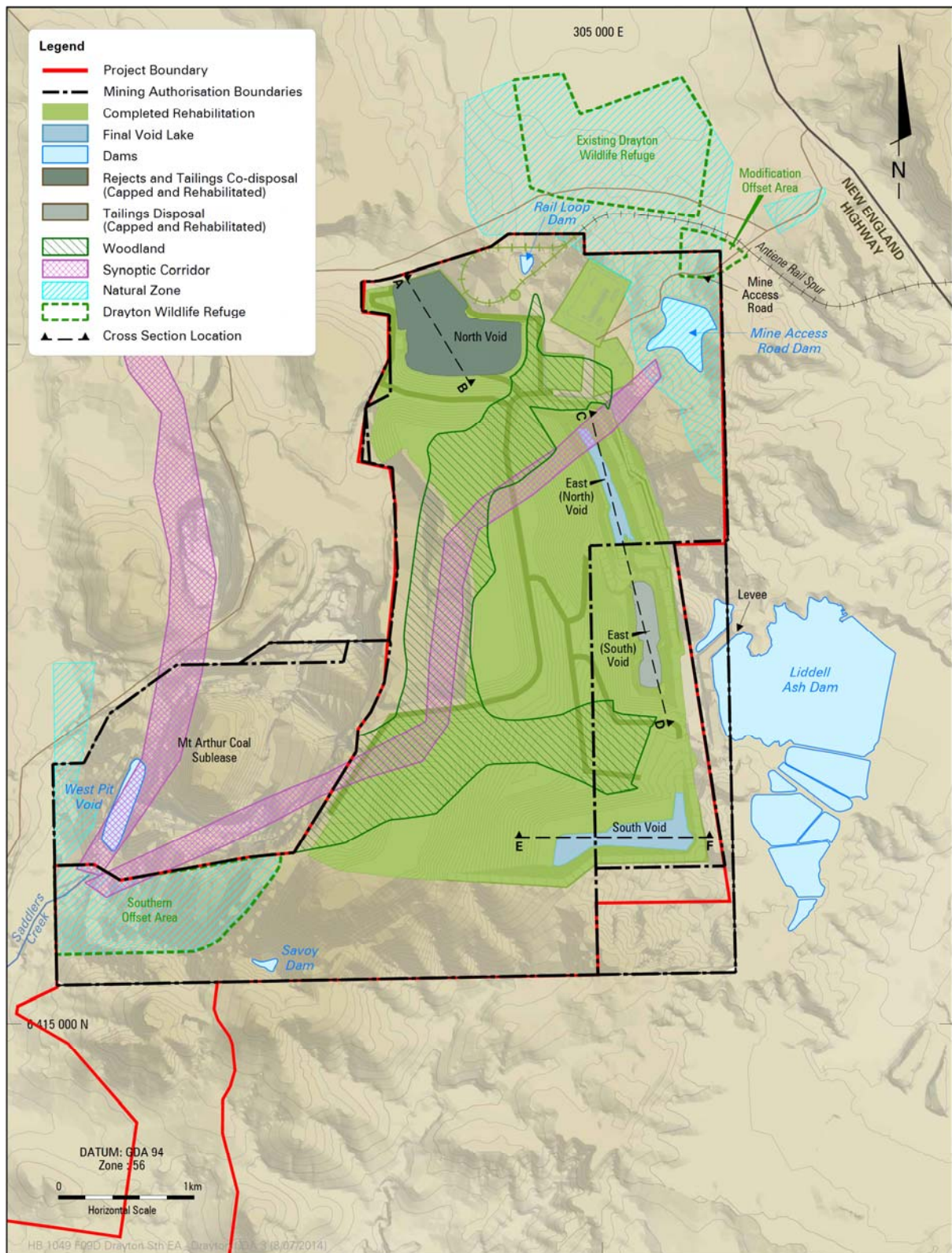
**Figure 9B:** Conceptual Final Landform – Drayton Mine (Mine Closure) - Option 1





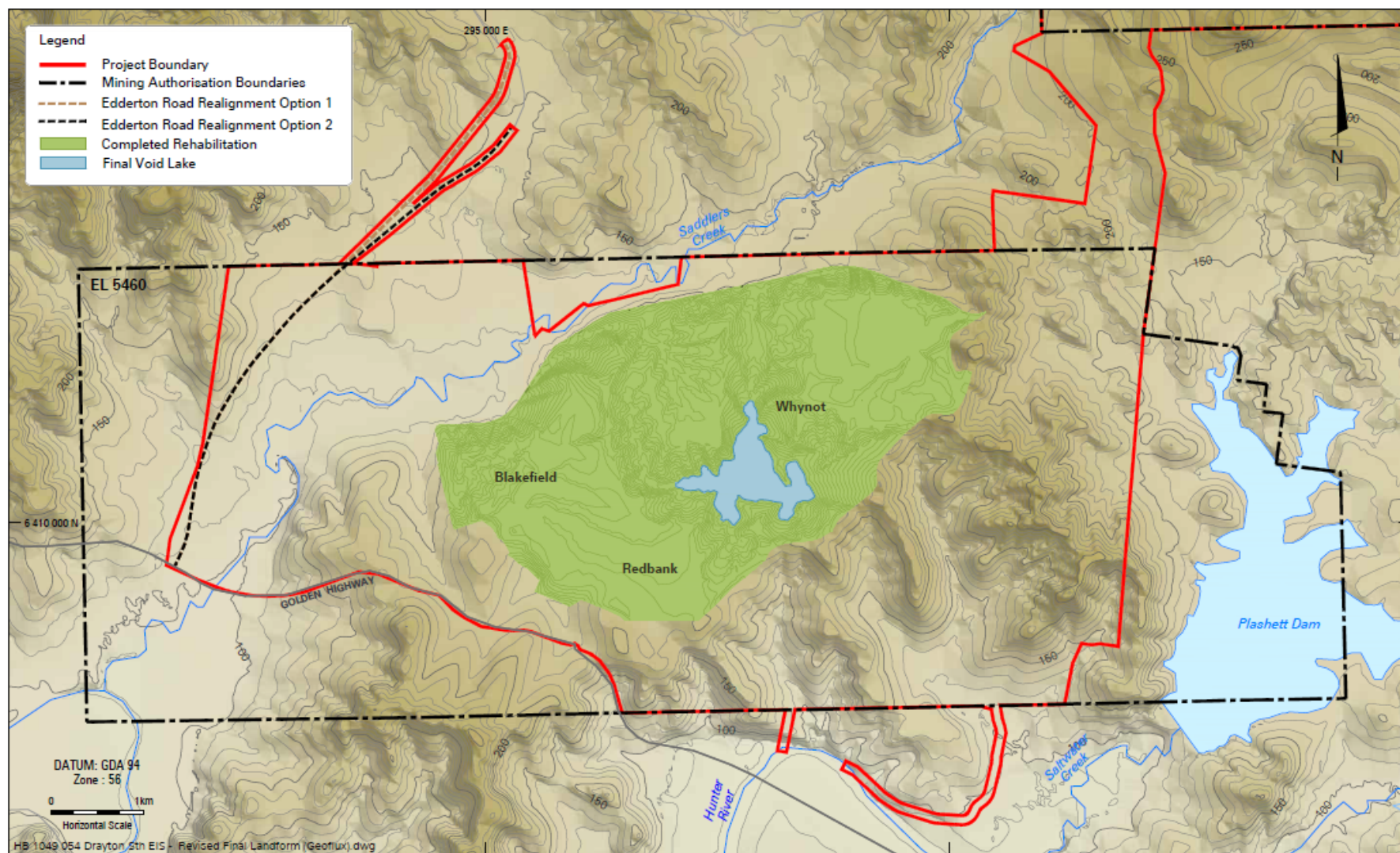
**Figure 9C:** Conceptual Final Landform – Drayton Mine (Mine Closure) - Option 2





**Figure 9D: Conceptual Final Landform – Drayton Mine (Mine Closure) - Option 3**





**Figure 9E: Conceptual Final Landform – Drayton South**

**APPENDIX 10**  
**GENERAL TERMS OF PROPONENT'S VPA OFFER**

<b>Development Contribution</b>	<b>Intended Use</b>	<b>Payment Details</b>
<b>\$50,000 per annum + CPI</b>	Contribution to Council road maintenance program	First annual payment payable 30 days after the effective date. Thereafter on each anniversary of that date.
<b>\$290,000 per annum + CPI</b>	Community Fund Amount. A proposal which will have an economic, social (health & education) or environmental benefit for the community in the Muswellbrook Local Government area and surrounds (namely Jerrys Plains).	First annual payment payable 30 days after the effective date. Thereafter on each anniversary of that date. The contribution would not be payable for any year that the project has not produced product.
<b>\$15,000 per annum + CPI</b>	Environmental contributions to assist in the monitoring of planning impacts of the project.	First annual payment payable 30 days after the effective date. Thereafter on each anniversary of that date.
<b>3 Apprentices per annum</b>	Anglo American to use its best endeavours to engage 3 apprentices per annum for the life of the mine sourced from residents of the Muswellbrook Shire, Aberdeen or Jerry Plains	