

Annexure A

**Project Approval**

**Section 75J of the *Environmental Planning and Assessment Act 1979***

The Land and Environment Court of New South Wales approves the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

10 November 2011

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**SCHEDULE 1**

<b>Application Number:</b>	08_0203
<b>Proponent:</b>	Duralie Coal Pty Limited
<b>Land:</b>	See Appendix 1
<b>Project:</b>	Duralie Extension Project

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November 2012 Modification in Blue  
December 2014 Modification in Red

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## DEFINITIONS

Annual Review	The review required by Condition 3 in Schedule 5
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in Schedules 2 to 5 inclusive
CPI	Consumer Price Index
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
DRE	Division of Resources and Energy within DTIRIS
DTIRIS	Department of Trade and Investment, Regional Infrastructure and Services
EA	Environmental Assessment titled <i>Duralie Extension Project</i> , dated January 2010, as modified by the associated response to submissions dated 25 March 2010 and 12 July 2010 and the correspondence by or on behalf of the Proponent dated 12 March 2010, 9 April 2010, 30 June 2010, 12 and 19 July 2010 and 31 August 2010
EA (Mod 1)	Environmental Assessment titled <i>Duralie Rail Hours Modification</i> , dated April 2012 and associated response to submissions dated 17 May 2012 and 24 May 2012.
EA (Mod 2)	Environmental Assessment titled <i>Duralie Open Pit Modification</i> , dated July 2014 and associated response to submissions dated August 2014
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence
Evening	The period from 6pm to 10pm
Exceptional Circumstances	Circumstances when ARTC determines that the shuttle train must operate on the North Coast railway between midnight and 1am because there have been significant disruptions to the services on the railway over the last 12 hours or where there have been power outages at either the Stratford or Duralie mines that have materially affected the operation of the shuttle train on the North Coast railway
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
GLC	Great Lakes Council
GSC	Gloucester Shire Council
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Irrigation Area	The irrigation area depicted in the figure in Appendix 4
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to noise and air quality conditions in Schedules 3 and 4 it means 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 active mining areas and infrastructure areas, synonymous with dirty water
Mining Operations	Includes the removal of overburden and the extraction, processing, handling, storage and transportation of coal
Minister	Minister for Planning & Environment, or delegate
Mitigation	Activities associated with reducing the impacts of the project
Negligible	Small and unimportant, such as to not be worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water within the Department of Primary Industries
OEH	Office of Environment and Heritage
Offset area	The land covered by the Offset Strategy
Offset strategy	The biodiversity conservation and enhancement program described in the EA and depicted generally in the figure in Appendix 5; as well as the implementation of the offset that was required under the previous development consent for the mine (DA168/99), which is also depicted generally in the figure in Appendix 5. The obligations in the offset strategy do not extend to buildings and infrastructure

	complexes, formed roads, the railway, water bodies and road easements that occur within the offset area that existed on the date of this approval.
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The development described in the EA
Proponent	Duralie Coal Pty Limited, or its successors
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 treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
Remediation	Activities associated with partially or fully repairing, or controlling the environmental consequences of this impact
RMS	<b>Roads and Maritime Services</b>
Secretary	<b>Secretary of the Department, or nominee</b>
Site	The land listed in Appendix 1
Statement of Commitments	The Proponent's commitments in Appendix 9
Surface development area	The approximate area of incremental major surface development (including open pit, waste rock emplacement, soil stockpiles and Auxillary Dam No. 2 embankment raise and inundation areas) that would result from the approval of the Duralie Extension Project as shown in Appendix 2.

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. 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;
  - (a1) EA (Mod 1);
  - (a2) EA (Mod 2);
  - (b) statement of commitments; and
  - (c) conditions of approval

*Notes:*

- *The general layout of the project is shown in Appendix 2; and*
- *The statement of commitments is reproduced in Appendix 9*

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 reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these documents.

### LIMITS ON APPROVAL

5. The Proponent may carry out mining operations on site until 31 December 2021.

*Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the **Secretary** and the Director-General of DTIRIS. 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.*

6. The Proponent shall not extract more than 3 million tonnes of coal from the site in a calendar year.
7. The Proponent shall ensure that:
  - (a) all coal is transported from the site by rail;
  - (b) no more than 5 laden trains leave the site each day; and
  - (c) no more than 4 laden trains leave the site each day, when averaged over a 12 month period.
8. The Proponent shall:
  - (a) only dispatch shuttle trains from the site between 6am and 10pm;
  - (b) only receive shuttle trains on site between 6am and midnight; and
  - (c) only operate shuttle trains on the North Coast railway between midnight and 1am in exceptional circumstances.
- 8A. Within 12 hours of operating shuttle trains on the North Coast railway between midnight and 1am in exceptional circumstances, the Proponent shall provide a detailed explanation of the exceptional circumstances on its website.

### SURRENDER OF CONSENTS

9. By the end of December 2011, or as otherwise agreed by the **Secretary**, the Proponent shall surrender all existing development consents for the site in accordance with Section 104A of the EP&A Act.
10. Prior to the surrender of these consents, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of these consents.

## STRUCTURAL ADEQUACY

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

*Notes:*

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

## DEMOLITION

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

## OPERATION OF PLANT AND EQUIPMENT

13. The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM

14. With the approval of the **Secretary**, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

*Note: While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the operations on site are covered by suitable strategies, plans or programs at all times.*

15. Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall continue to implement the existing strategies, plans or programs that apply to any development on site.

## CONTRIBUTIONS TO COUNCIL

16. For the period from the end of December 2010 until the completion of mining operations on site, the Proponent shall pay GLC the following contributions each year:
  - (a) \$59,688.09 for the maintenance of The Bucketts Way;
  - (b) \$11,022.58 for a structural inspection of the bridges on The Bucketts Way (between its intersection with Clarence Town Road and the mine access road);
  - (c) \$120,000 for the Karuah Catchment Management Program; and
  - (d) \$100,000 for the provision of community infrastructure.

These contributions must be indexed according to the CPI at the time of each payment.

If no mining operations occur on site in a calendar year, then the Proponent is not required to pay these contributions.

17. For the period from the end of December 2010 until the completion of mining operations on site, the Proponent shall pay GSC the following contributions each year:
  - (a) \$15,000 for specified community works that have been agreed to between GSC and the Proponent;
  - (b) \$15,000 for the GSC Community Education Fund for an annual trade apprenticeship, traineeship, scholarship or equivalent; and
  - (c) \$10,000 for the provision of community infrastructure.

These contributions must be indexed according to the CPI at the time of each payment.

If no mining operations occur on site in a calendar year, then the Proponent is not required to pay these contributions.

## SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

### 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

117 - Holmes	125 (1) - Zulumovski
118 - Moylan	125 (2) - Zulumovski
122 - White	128 - Hare Scott

Note: To identify the locations referred to in Table 1, see the figure in Appendix 3.

### NOISE

#### Noise Criteria

2. Except for the land referred to in Table 1, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 2: Noise criteria dB(A)

Location	Day	Evening	Night	
	$L_{Aeq}(15\text{ minute})$	$L_{Aeq}(15\text{ minute})$	$L_{Aeq}(15\text{ minute})$	$L_{A1}(1\text{ minute})$
172 - Lyall	35	39	40	45
126 – Hamann Pixalu PL	35	35	39	45
123 – Oleksiuk & Carmody				
173 – Trigg & Holland	35	36	37	45
116 - Weismantel				
127 – Fisher-Webster	35	35	37	45
131(1) - Relton				
180 (1) - Thompson	35	36	36	45
95 - Smith & Ransley	35	35	36	45
144 - Wielgosinski				
169 - Williams	35	36	35	45
177 - Thompson				
All other privately-owned land	35	35	35	45

Notes:

- To identify the locations referred to in Table 2, see the figure in Appendix 3; and
- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

#### Noise Acquisition Criteria

3. If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in Conditions 5-6 of Schedule 4.

Table 3: Noise acquisition criteria dB(A)  $L_{Aeq}(15\text{ min})$

Location	Day	Evening	Night
All privately-owned land	40	40	40

Notes:

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy; and
- For this condition to apply, the exceedances of the criteria must be systemic.

## Additional Noise Mitigation Measures

4. Upon receiving a written request from the owner of any residence:
  - (a) On the land listed in Table 1;
  - (b) On the land listed as 123, 126 and 172 on the figure in Appendix 3;
  - (c) On the land listed as R2, R4-R12 on the figure in Appendix 3;
  - (d) On privately-owned land where subsequent noise monitoring shows that noise generated by the project is greater than or equal to  $L_{Aeq}$  (15 min) 38 dB(A); or
  - (e) On privately-owned land between the Stratford and Duralie mines where the maximum passby rail traffic noise from the Project exceeds 85 dB(A),the Proponent shall implement additional noise mitigation measures (such as double glazing, insulation and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible.

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.

## Rail Noise

5. By the end of December 2011, or as otherwise agreed by the Secretary, the Proponent shall only use locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in the ARTC's EPL (No. 3142).

## Operating Conditions

6. The Proponent shall:
  - (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational, low frequency and rail noise generated by the project; and
  - (b) regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance 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 EPA, and submitted to the Secretary for approval within 3 months of the date of this approval, unless otherwise agreed by the Secretary;
  - (b) describe the noise mitigation measures that would be implemented to ensure compliance with conditions 2-6 of Schedule 3 of this approval, including:
    - a real-time noise management system that employs both reactive and proactive mitigation measures;
    - a detailed program for the replacement and attenuation of existing plant on site; and
    - the specific measures that would be implemented to minimise the rail noise impacts of the project, and in particular:
      - the braking and train horn impacts of the project;
      - the use of the shuttle train during the approved night-time hours;
    - the construction of earth bund walls around evaporative fan units located on the waste rock emplacement area; and
  - (c) include a noise monitoring program that:
    - uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project;
    - includes a program to evaluate the effectiveness of the noise mitigation measures referred to in 7(b) above;
    - includes a protocol for determining exceedances of the relevant conditions of this approval; and
    - includes a program to monitor the actual sound power levels of the plant on site, compare it with the benchmark levels used in the EA, and evaluate the effectiveness of any attenuation.

*Note: The effectiveness of the Noise Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit, the plan is to be revised to ensure it remains up to date (see Condition 4 of Schedule 5).*



## BLASTING

### Blasting Criteria

8. The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 4.

Table 4: 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	115	5	5% of the total number of blasts over a period of 12 months
	120	10	0%
Mammy Johnson's Grave	-	5	0%
Former Weismantel's Inn	-	10	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, 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 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approved of the **Secretary**.

### Blasting Frequency

10. The Proponent shall not carry out more than:
- 1 blast a day on site, unless an additional blast is required following a blast misfire; and
  - 3 blasts a week on site, averaged over any 12 month period.

### Property Inspections

11. If the Proponent receives a written request for the owner of any privately-owned land within 2 kilometres of the 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 report updated, then within 2 months of receiving this request the Proponent shall:
- commission a suitably qualified, experienced and independent person, whose appointment has been approved by the **Secretary**, to:
    - establish the baseline condition of the buildings and/or structures on the land, or update the previous property inspection report;
    - identify any 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.

### Property Investigations

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

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

If the Proponent or 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:
  - (a) implement best blasting practice on site to:
    - protect the safety of people and livestock in the surrounding area;
    - protect public or private property in the surrounding area; and
    - minimise the dust and fume emissions from blasting on site; and
  - (b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the **Secretary**.
14. The Proponent shall not carry out any blasting within 500 metres of:
  - (a) a public road without the approval of Council; and
  - (b) the North Coast Railway without the approval of ARTC.
15. The Proponent shall not carry out blasting within 500 metres of any privately-owned land or land not owned by the Proponent unless:
  - (a) the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of the terms of this agreement; or
  - (b) the Proponent has:
    - demonstrated to the satisfaction of the **Secretary** that the blasting can be carried out without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and
    - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.

### **Blast Management Plan**

16. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the **Secretary**. This plan must:
  - (a) be prepared in consultation with EPA, and submitted to the **Secretary** for approval within 3 months of the date of this approval, unless otherwise agreed by the **Secretary**;
  - (b) describe the blast mitigation measures that would be implemented to ensure compliance with conditions 8-15 of this Schedule;
  - (c) describe the measures that would be implemented to ensure the public can get up-to-date information on the proposed blasting schedule on site or any road closures; and
  - (d) include a blast monitoring program to evaluate the performance of the project.

*Note: The effectiveness of the Blast Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 4 of Schedule 5).*

### **AIR QUALITY & GREENHOUSE GAS**

#### **Odour**

17. The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

#### **Greenhouse Gas Emissions**

18. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the **Secretary**.

#### **Air Quality Assessment Criteria**

19. The Proponent shall ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 5, 6 or 7 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

*Table 5: Long term 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 6: Short term criterion for particulate matter.

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

Table 7: Long term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
<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 5-7:

- <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, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

### Air Quality Acquisition Criteria

20. If particulate matter emissions generated by the project exceed the criteria in Tables 8, 9 or 10 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in accordance with the procedures in Conditions 5-6 of Schedule 4.

Table 8: Long term acquisition criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
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 9: Short term acquisition criteria for particulate matter

Pollutant	Averaging period	<sup>d</sup> Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 150 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>

Table 10: Long term acquisition criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
<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 8-10:

- <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, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

### Additional Dust Mitigation Measures

21. Upon receiving a written request from the owner of any residence:
- on the land listed as 125(1) and 125(2) in the figure in Appendix 3; or
  - on privately-owned land where subsequent air quality monitoring shows that the dust generated by the project is greater than or equal to the applicable criteria in Tables 5, 6 or 7 on a systemic basis, the Proponent shall implement additional dust mitigation measures (such as a first flush roof system,

internal or external air filters, and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible.

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.

- 21A. Within 3 months of the date of this approval, the Proponent shall submit a study of the dust emissions from the laden trains associated with the Project to the **Secretary**. This study must:
- (a) be carried out by a suitably qualified and experienced expert whose appointment has been endorsed by the **Secretary**;
  - (b) include consultation with the EPA, the Department and the residents in close proximity to the railway line;
  - (c) assess the scale, nature and significance of the dust emissions of the laden trains;
  - (d) identify any reasonable and feasible mitigation measures that could be implemented to reduce the dust emissions from these trains;
  - (e) recommend the implementation of any specific measures; and
  - (f) be accompanied by the Proponent's response to any recommendations in the study.

If, following review of the study, the **Secretary** directs the Proponent to implement additional mitigation measures to reduce the dust emissions of the laden trains associated with the Project, then the Proponent shall implement these measures to the satisfaction of the **Secretary** and, within one month of such direction, update the Air Quality & Greenhouse Gas Management Plan for the Project to include a detailed program for the implementation of these measures and monitoring of compliance.

### **Operating Conditions**

22. The Proponent shall:
- (a) implement best practice air quality management on site, including all reasonable and feasible measures to minimize the off-site odour, fume and dust emissions generated by the project, including any emissions from spontaneous combustion;
  - (b) minimize any visible air pollution generated by the project;
  - (c) regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval,
- to the satisfaction of the **Secretary**.

### **Air Quality & Greenhouse Gas Management Plan**

23. The Proponent shall prepare and implement an Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the **Secretary**. This plan must:
- (a) be prepared in consultation with EPA, and submitted to the Secretary for approval within 3 months of the date of this approval, unless otherwise agreed by the Secretary; and
  - (b) describe the measures that would be implemented to ensure compliance with conditions 17-22 of Schedule 3 of this approval, including the proposed real-time air quality management system; and
  - (c) include an air quality monitoring program that:
    - uses a combination of real-time monitors, high volume samplers and dust deposition gauges to evaluate the performance of the project; and
    - includes a protocol for determining exceedances with the relevant conditions of this approval.

*Note: The effectiveness of the Air Quality & Greenhouse Gas Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 4 of Schedule 5).*

### **METEOROLOGICAL MONITORING**

24. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in 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.

### **SOIL AND WATER**

#### **Water Discharges**

25. The Proponent shall ensure that:
- (a) mine water or runoff from the irrigation area is not discharge directly into Mammy Johnsons River; and
  - (b) all surface water discharges from the site comply with section 120 of the POEO Act or, if an EPL

has been issued regulating water discharges from the site, the discharge limits (both volume and quality) set for the project in the EPL.

### Base Flow Offsets

26. The Proponent shall offset the loss of any base flow to Mammy Johnsons River. This condition does not apply if the **Secretary** determines this loss to be negligible.

### Compensatory Water Supply

27. The Proponent shall provide compensatory water supply to any landowner of privately-owned land whose water licence entitlements are impacted (other than an impact that is negligible) as a result of the project, 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 attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified.

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**.

### Irrigation

28. The **Proponent** shall carry out irrigation:
- (a) only in the irrigation area; and
  - (b) in accordance with the irrigation system, including the irrigation management plan, in the approved Surface Water Management Plan under Condition 29 of Schedule 3.

### Water Management Plan

29. 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 EPA and NOW by suitably qualified and experienced persons whose appointment has been approved by the Secretary, and submitted to the Secretary within 3 months of the date of this approval.

In addition to the standard requirements for management plans (see Condition 2 of Schedule 5), this plan must include:

- (a) a Site Water Balance that:
  - includes details of:
    - sources of water supply;
    - water use on site;
    - water management on site; and
    - reporting procedures; and
  - describes what measures would be implemented to minimise potable water use on site; and
- (b) a Surface Water Management Plan that includes:
  - a detailed description of the water management system on site, including the:
    - clean water diversion systems;
    - erosion and sediment controls;
    - water storages; and
    - irrigation system;
  - an irrigation management plan for the irrigation system under the water management system, which includes:
    - salinity trigger levels for controlling discharges from the irrigation areas to Coal Shaft Creek and the unnamed tributary, representing the 80<sup>th</sup> percentile value of the relevant data set for the creek/unnamed tributary and Mammy Johnsons River in accordance with the methodology in ANZECC/ARMCANZ (2000), Australian Water Quality Guidelines for Fresh and Marine Water Quality, National Water Quality Management Strategy; and
    - provision of an automated first flush system for the additional irrigation areas (Northern Areas) shown in the figure in Appendix 4;
  - a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;
  - detailed plans, including design objectives and performance criteria, for:
    - the reconstruction of Coal Shaft Creek;
    - design and management of the final voids;
    - reinstatement of drainage lines on the rehabilitated areas of the site; and
    - control of any potential water pollution from the rehabilitated areas of the site;

- performance criteria, including trigger levels for investigating any potentially adverse impacts, for the following:
    - the water management system;
    - surface water quality of the Unnamed Tributary, Coal Shaft Creek and Mammy Johnsons River;
    - the stream and vegetation health of the Unnamed Tributary, Coal Shaft Creek and Mammy Johnsons River; and
    - channel stability of the reconstructed Coal Shaft Creek;
  - performance criteria for surface water quality attributes relevant to water quality impacts on biological diversity and aquatic ecological integrity, including salinity, heavy metals, sediment load, pH, hardness and biological oxygen demand;
  - trigger levels representing the 80<sup>th</sup> percentile value of the relevant reference data set in accordance with the methodology in ANZECC/ARMCANZ (2000), Australian Water Quality Guidelines for Fresh and Marine Water Quality, National Water Quality Management Strategy, to determine the levels for investigating any potentially adverse impacts;
  - a program to monitor:
    - the effectiveness of the water management system;
    - surface water flows and quality in the Unnamed Tributary, Coal Shaft Creek and Mammy Johnsons River, including utilization of existing monitoring sites together with an additional monitoring site in Mammy Johnsons River immediately downstream of the mixing zone of the confluence of Coal Shaft Creek and Mammy Johnsons River;
    - the stream and riparian vegetation health of the unnamed tributary, Coal Shaft Creek and Mammy Johnsons River; and
    - a channel stability of the reconstructed Coal Shaft Creek;
  - a program of ecotoxicity testing of water in water storages on-site and at selected water monitoring sites in Mammy Johnsons River and macroinvertebrate sampling at selected monitoring sites in Mammy Johnsons River;
  - a plan to respond to any exceedances of the performance criteria and mitigate and/or offset any adverse surface water impacts of the project; and
- (c) a Groundwater Management Plan, which includes:
- a groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
  - a program to monitor:
    - groundwater inflows to the open cut mining operations;
    - the impacts of the project on:
      - the alluvial aquifers including investigating the potential for direct interface between mine spoil and alluvium and assessment of any consequential impact on alluvial and surface water;
      - base flows to Mammy Johnsons River;
      - any groundwater bores on privately-owned land; and
    - the seepage/leachate from water storages or backfilled voids on site; and
  - a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and
  - a plan to respond to any exceedances of the assessment criteria, including,
    - if a direct interface between mine spoil and alluvium is identified, development of a trigger action response plan (TARP) for potential salinity impacts on alluvial and surface water sources; and
    - a plan to offset the loss of any base flow to Mammy Johnsons River caused by the project.

*Note: The effectiveness of the Water Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 4 of Schedule 5).*

## BIODIVERSITY

### Giant Barred Frog

30. The Proponent shall ensure that the project has no more than a negligible impact on the local Giant Barred Frog population.
31. The Proponent shall prepare a Giant Barred Frog Study to the satisfaction of the **Secretary**. This study must:
  - (a) be prepared, in consultation with OEH, by a suitably qualified and experienced person, whose appointment has been endorsed by the **Secretary**;
  - (b) be submitted to the **Secretary** for approval within 2 months of this approval;
  - (c) investigate the extent of the Giant Barred Frog population in the Mammy Johnsons River Catchment;
  - (d) assess the condition of the Giant Barred Frog habitat where it is recorded within the Catchment, including the presence of any Chytrid fungus;
  - (e) analyse the age structure of the frog population and the health of tadpoles; and

- (f) document the relevant hydrological conditions both prior to and during the study, including rainfall, water flows and quality in Mammy Johnsons River, both upstream and downstream of the confluence of Mammy Johnsons River and Coal Shaft Creek, and in Coal Shaft Creek.
- 31A. The Proponent shall review and expand the Giant Barred Frog Study approved under Condition 31 into a longitudinal study of the life cycle of the 'population' of the Giant Barred Frog over the lifetime of the mine and for a 5 year period after the mine ceases to operate (the Giant Barred Frog Long-term Study). The Giant Barred Frog Long-term Study must include to include:
- (a) clarification as to what exactly constitutes 'the population' of the Giant Barred Frog for the purposes of monitoring, and that this is the population at the location most susceptible to impacts from the mine;
  - (b) baseline data collected for sites (transects) below and above the site to be used for comparison with data collected in the future;
  - (c) testing to determine if any changes to Giant Barred Frog populations identified downstream of the site on the monitoring transects are a result of impacts from the mining operation;
  - (d) a requirement for detailed capture/recapture studies using 'Pollocks robust design' at sites above and below the confluence of Coal Shaft Creek and Mammy Johnsons River, and at a series of control sites in the upper reaches of the catchment;
  - (e) a requirement that individual frogs encountered during the study should be tagged (or scanned);
  - (f) a requirement that transects be of a fixed length (at least 200m), and that the area searched on each occasion be the same;
  - (g) a requirement that transects are to be randomly selected;
  - (h) a requirement that testing be conducted on a minimum of three nights, on four occasions per season (12 visits to each transect in each season) over the life of the mine, and for a 5 year period after the mine ceases to operate;
  - (i) a requirement that individual frogs encountered during the study be swabbed for the presence of the Chytrid fungus;
  - (j) a requirement that weather conditions and search effort should be recorded during each census at the transect site.
32. The Proponent shall prepare and implement a Giant Barred Frog Management Plan to the satisfaction of the **Secretary**. This plan must:
- (a) be prepared in consultation with OEH by a suitably qualified and experienced person, whose appointment has been endorsed by the Director-General;
  - (b) be submitted to the **Secretary** for approval within 3 months of the date of this approval;
  - (c) include a summary of the Giant Barred Frog Study;
  - (d) establish performance measures for evaluating the impact of the project on the local Giant Barred Frog population;
  - (e) describe the measures that would be implemented to minimise the potential spread of Chytrid fungus, including training of staff in site hygiene management in accordance with the NPWS *Hygiene Protocol for the Control of Disease in Frogs 2001*;
  - (f) include a program to monitor the potential impact of the project on the local frog population, which includes:
    - detailed performance indicators for the project, with reference to the performance measures established in (d) above;
    - annual monitoring of the frog population and its habitat during the breeding season along Mammy Johnson River both upstream and downstream of the confluence of Mammy Johnsons River and Coal Shaft Creek;
    - trigger levels for further investigation; and
  - (g) a contingency plan that would be implemented if monitoring suggests the frog population downstream of the confluence of Mammy Johnsons River and Coal Shaft Creek is declining due to the project, which may include a revision of the first flush salinity trigger or the implementation of additional water quality controls.

### Biodiversity Offsets

33. The Proponent shall implement the offset strategy and achieve the broad completion criteria in **Table 11** to the satisfaction of the **Secretary**.

*Table 11: Offset Strategy Completion Criteria*

<b>Domain</b>	<b>Completion Criteria</b>
Enhancement Areas (i.e. existing remnant vegetation)	Areas of existing remnant vegetation within the offset area (299 ha) have been conserved and enhanced.
Revegetation Areas	357.5 ha of revegetated woodland/open woodland habitat areas and 36 ha of revegetated forest habitat areas as a self-sustaining ecosystem.  The methodology for determining a self-sustaining ecosystem shall be to the satisfaction of the

	Secretary.  Woodland/open woodland and forest revegetation areas that provide habitat resources for the threatened species by including the flora species referred to in approval conditions 35 to 38.
Direct links between the Offset Area and Rehabilitation Area	Native vegetation has been established which directly links vegetation areas of the offset area with the Rehabilitation area.

### Habitat for Threatened Fauna Species

34. The Proponent shall ensure that the offset area:
- provides suitable habitat for all the threatened fauna species recorded in the surface development area, namely the Swift Parrot, Brown Treecreeper (eastern subspecies), Speckled Warbler, Grey-crowned Babbler (eastern subspecies), Varied Sittella and Squirrel Glider; and
  - includes the following habitat types:
    - Woodland/open woodland;
    - Forest; and
    - Riparian forest.

#### *Swift Parrot / Brown Treecreeper/ Grey-crowned Babbler*

35. The Proponent shall ensure that the offset area:
- provides appropriate habitat resources for the Swift Parrot, Brown Treecreeper and Greycrowned Babbler;
  - contains a total of 174ha of the following vegetation types<sup>1</sup>:
    - Spotted Gum – Grey Ironbark forest dry open forest of the lower foothills of the Barrington Tops, North Coast;
    - Grey Box – Forest Red Gum – Grey Ironbark open forest of the hinterland ranges of the North Coast; and
    - Sydney Peppermint – Smooth-barked Apply shrubby open forest on coastal hills and plains of the southern North Coast and northern Sydney Basin; and
  - the revegetation areas within the offset area contains:
    - Winter flowering eucalypts (such as Spotted Gum [*Corymbia maculata*], Narrow-leaved Ironbark [*Eucalyptus crebra*], White Stringybark [*Eucalyptus globoidea*]) as habitat resources for the Swift Parrot.
    - Species typical of open eucalypt woodlands (such as Spotted Gum [*Corymbia maculata*], Red Ironbark [*Eucalyptus fibrosa*], Grey Ironbark [*Eucalyptus siderophloia*] as habitat resources for the Grey-crowned Babbler; and
    - Appropriate understorey species (such as tussock grasses).

#### *Speckled Warbler*

36. The Proponent shall ensure that the offset area:
- provides appropriate habitat resources for the Speckled Warbler;
  - contains a total of 126ha of Spotted Gum - Grey Ironbark forest dry open forest of the lower foothills of the Barrington Tops, North Coast<sup>1</sup>; and
  - the revegetation areas within the offset area includes *Eucalyptus* species, tussock grasses and shrub species as habitat resources for the Speckled Warbler.

#### *Varied Stilleta*

37. The Proponent shall ensure that the offset area:
- provides appropriate habitat resources for the Varied Sittella;
  - contains a total of 172ha of the following vegetation types<sup>1</sup>:
    - Spotted Gum – Grey Ironbark forest dry open forest of the lower foothills of Barrington Tops, North Coast; and
    - Sydney Peppermint – Smooth-barked Apple shrubby open forest on coastal hills and plains of the southern North Coast and northern Sydney Basin.
  - the revegetation areas within the offset area includes species typical of eucalypt forests and woodlands, especially rough-barked species, smooth-barked gums and *Acacia* species as habitat resources for the Varied Stilleta.

#### *Squirrel Glider*

38. The Proponent shall ensure that the offset area:
- provides appropriate habitat resources for the Squirrel Glider;



- (b) contains a total of 128ha of the following vegetation types<sup>1</sup>:
    - Spotted Gum - Grey Ironbark forest dry open forest of the lower foothills of the Barrington Tops, North Coast; and
    - Sydney Peppermint - Smooth-barked Apple shrubby open forest on coastal hills and plains of the southern North Coast and northern Sydney Basin.
  - (c) the revegetation areas within the offset area includes species typical of woodland/forest (such as Spotted Gum [*Corymbia maculata*], Red Ironbark [*Eucalyptus fibrosa*], Grey Ironbark [*Eucalyptus siderophloia*]) as habitat resources for the Squirrel Glider.
39. Hollow bearing habitat features must be introduced into the areas of habitat resources and the revegetation areas identified in approval condition 38.

*Note: For clarity, the total areas included in approval conditions 35-38 are not cumulative, whereby the area of habitat resources provided for one of the fauna species identified in approval condition 35 may be the same for all species mentioned in approval conditions 35 to 38.*

### Endangered Ecological Communities

40. The Proponent shall ensure that the offset area contains at least:
- 2 ha of Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions.
  - 10 ha of River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions (Cabbage Gum Floodplain Forest).
  - 19 ha of Lowland Forest on Floodplain in the NSW North Coast Bioregion.

*Note: See the mapped areas in the figure in Appendix 5.*

### Operating Conditions

41. The Proponent must:
- (a) not destroy, damage, remove or harm any native flora or fauna in the offset area; or
  - (b) not carry out in the offset area or the vicinity of the offset area any activity that may cause, or is likely to result in, or will or might threaten the viability of, native flora or fauna in the offset area, or threaten the success of the offset strategy; and
  - (c) ensure that its agents, contractors, licensees and invitees (and use best endeavours to ensure that any other persons) also comply with condition 41(a) and (b).

### Long Term Security of Offset

42. Within 12 months of the date of this approval, unless otherwise agreed by the **Secretary**, the Proponent shall either:
- (a) enter into a conservation agreement pursuant to s 69B of the *National Parks and Wildlife Act 1974* relating to the offset area, recording the obligations assumed by the Proponent under the conditions of this approval in relation to the offset area, and register that agreement pursuant to s 69F of the *National Parks and Wildlife Act 1974*; or
  - (b) cause to be registered against the titles of the offset area a public positive covenant and/or restriction on the use of the land, in favour of the Director-General, requiring the proponent to implement and observe the conditions of this approval in relation to the offset area.

The conservation agreement or the public positive covenant and/or restriction on the use of the land in relation to the offset area, shall remain in force in perpetuity.

### Biodiversity Management Plan

43. 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 by suitably qualified and experienced persons whose appointment has been approved by the **Secretary**;
  - (b) be submitted to the **Secretary** for approval within 3 months of the date of this approval;  
**(b1) be approved by the Secretary prior to the commencement of clearing in EA (Mod 2);**
  - (c) describe how the offset strategy and its implementation will be integrated with other strategies, plans and programs required under this approval, including the Giant Barred Frog Management Plan, Water Management Plan and Rehabilitation Management Plan, and their implementation;
  - (d) include:

<sup>1</sup> Note: Vegetation types referred to in Conditions 35 to 38 are to be in accordance with the Vegetation Types in the Hunter/Central Rivers as described in the Office of Environment and Heritage (2011) *Threatened Species Profile Databases for the Swift Parrot, Brown Treecreeper (eastern subspecies), Speckled Warbler, Grey-crowned Babbler (eastern subspecies) and Brush-tailed Phascogale*. <http://threatenedspecies.environment.nsw.gov.au/tsprofile/>

- a description, based on field surveys, and in consultation with OEH, of the biodiversity values of the vegetation communities in the offset area, including remnant vegetation and derived grasslands, including as habitat for the threatened species that are recorded in the surface development area;
- a description of the biodiversity values to be lost through clearing of vegetation communities in the surface development area, including remnant vegetation and derived grasslands, including as habitat for the threatened species that are recorded in the surface development area;
- a description of the short, medium and long term measures that would be implemented to:
  - implement the Offset Strategy;
  - maintain and enhance biodiversity values in the offset area to offset the loss of biodiversity values in the surface development area;
  - provide and enhance suitable habitat in the offset area for the threatened species that are recorded in the surface development area;
  - manage the remnant vegetation and habitat on the site (including in the offset area);
- detailed completion criteria, as well as performance criteria for the measuring the short, medium and long term success of the Offset Strategy;
- the measures described in the EA and in the expert report of Dr Goldney dated 7 April 2011 in Land and Environment Court proceedings No 10090 of 2011 to avoid or mitigate impacts on biological diversity, native flora and fauna and threatened species;
- a detailed description of the measures that would be implemented in the short, medium and long term to implement the Offset Strategy, including the procedures to be implemented for:
  - implementing revegetation and regeneration within the offset area, including establishment of canopy, understorey and ground strategy;
  - the introduction of hollow bearing habitat features;
  - controlling weeds and feral pests, including the engagement of appropriately qualified contractors;
  - managing grazing and agriculture, including provision to exclude livestock grazing from existing treed areas and Endangered Ecological Communities within the offset area;
  - controlling vehicular access to minimise the potential for vehicle strike of native fauna; and
  - bushfire management;
- a description of the measures that would be implemented in the short, medium and long term to manage the remnant vegetation and habitat on site, including the procedures to be implemented for:
  - protecting vegetation and soil outside the disturbance areas;
  - rehabilitating creeks and drainage lines on the site (both inside and outside the disturbance areas), to ensure no net loss of stream length and aquatic habitat;
  - managing salinity;
  - undertaking pre-clearance surveys including for threatened species;
  - if pre-clearance surveys identify any breeding pair of threatened species, including the Varied Sittella, deferral of clearing of their habitat until the breeding site is vacated;
  - managing impacts on fauna;
  - landscaping the site, and particularly the land adjoining public roads, to minimise visual and lighting impacts;
  - collecting and propagating seed;
  - salvaging and reusing material from the site for habitat enhancement;
  - controlling weeds and feral pests, including the engagement of appropriately qualified contractors;
  - controlling vehicular access to minimise the potential for vehicle strike of native fauna; and
  - bushfire management;
- a Vegetation Clearing Plan (VCP) that must include the following:
  - clear delineation of disturbance areas and restriction of clearing to the minimum area necessary to undertake the approved activities;
  - a methodology for recording the approximate size and number of hollow bearing trees to be removed and their replacement with the same number of nesting boxes of appropriate sizing within similar vegetation within the Project site or offset lands;
  - a methodology for the management of hollow bearing trees during vegetation clearing to minimize impacts on hollow dependent fauna which may be present;
  - provision for a suitably trained or qualified person to the satisfaction of the Director-General to be present during the felling of identified hollow bearing trees to provide assistance with the care of any injured fauna;
  - provision for the checking of any animals found and recording of the species, number and condition (age class, pregnant or lactating females etc) and for details to be provided to the National Parks and Wildlife Service and Department within 3 months of the clearing event;
  - provision for the annual inspection of the nesting boxes for the life of the mine. An inspection report shall be prepared and include a review of the condition and use of the nesting boxes;
  - provision for the checking of vegetation to be cleared for threatened species and recording of the species, number and condition and for details to be provided to the National Parks and Wildlife Service and the Department within 3 months of the clearing event;

- a description of the contingency measures that would be implemented to improve the performance of the offset strategy and the detailed performance criteria that are not being met in any given year; and
- details of who would be responsible for monitoring, reviewing, and implementing the plan;
- a program to monitor and report on the effectiveness of the measures in the Biodiversity Management Plan and conditions 33–43 of this approval, and the performance of the Offset Strategy, with summary reporting to be carried out annually and comprehensive reporting every three years following the independent environmental audit (see condition 8 of Schedule 5).

### Conservation Bond

44. Within 6 months of the approval of the Biodiversity Management Plan, the Proponent shall lodge a conservation bond with the Department to ensure that the offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:
- calculating the full cost of implementing the offset strategy; and
  - employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the **Secretary**.

If the offset strategy is completed to the satisfaction of the **Secretary**, the **Secretary** will release the conservation bond.

If the offset strategy is not completed to the satisfaction of the **Secretary**, the **Secretary** will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the offset strategy.

45. After each Independent Environment Audit (see Condition 8 of Schedule 5), the Proponent shall review and adjust the sum of the bond to the satisfaction of the **Secretary**.

### HERITAGE

46. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the **Secretary**. This plan must:
- be prepared in consultation with OEH, the Aboriginal community, Heritage Branch, Council, and any local historical organisations;
  - be submitted to the **Secretary** for approval within 3 months of the date of this approval, unless otherwise agreed by the **Secretary**;
  - describe the program/procedures that would be implemented for:
    - recording, salvaging and/or managing the Aboriginal sites and potential archaeological deposits within the project disturbance area;
    - conserving, managing and monitoring Aboriginal sites DM2, DM4, DM6, DM 9, DM 10 and 38-1-0033;
    - minimising the potential impacts of the project on Aboriginal site 38-1-0034, DM7 and DM8;
    - responding to the discovery of any new Aboriginal objects or skeletal remains during the project;
    - enabling the Aboriginal community to access the archaeological sites on site; and
    - involving the Aboriginal community in the conservation and management of Aboriginal cultural heritage on the site.
  - include the following for the Weismantel Inn:
    - a baseline dilapidation survey;
    - photographic and archival recording;
    - a program to monitor the effects of the project on the inn; and
    - a contingency plan that would be implemented if the monitoring indicates that the project is adversely affecting the condition of the inn.

*Notes:*

- To identify the heritage sites referred to in this condition, see the figure in Appendix 6.
- The effectiveness of the Heritage Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 4 in Schedule 5)

### TRANSPORT

#### Access

47. Prior to the closure of Cheerup Road and the portion of Duralie Road within the project area, the Proponent shall construct a suitable access road to property No. 143 (Madden) to the satisfaction of the **Secretary**. However, this condition does not apply if the Proponent purchases the property.

#### Monitoring of Coal Transport

48. The Proponent shall keep accurate records of:
- (a) the amount of coal transported from the site each month, and make these records publically available on its website at the end of each calendar year; and
  - (b) the:
    - number of train movements to and from the site each day;
    - date and time of each train movement to the site between 10pm and midnight; and
    - instances when the shuttle train is operated on the North Coast railway between midnight and 1am in exceptional circumstances.and make these records publically available on its website on a fortnightly basis.

## VISUAL

### Visual Amenity and Lighting

49. The Proponent shall:
- (a) minimise visual impacts, and particularly the off-site lighting impacts, of the project; and
  - (b) ensure that all external lighting associated on site complies with *Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the **Secretary**.

### Additional Visual Mitigation Measures

50. Upon receiving a written request from the owner of:
- (a) the land listed as 125(1), 125(2), and 116 on the figure in Appendix 3; or
  - (b) any residence on privately-owned land which has, or would have, significant direct views of the mining operations on site,
- the Proponent shall implement visual mitigation measures (such as landscaping treatments or perimeter bunding) on the land in consultation with the owner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence on the land.

If within 3 months of receiving this request from the owner, the Proponent and the owner can not 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.

51. Unless the **Secretary** agrees otherwise, the Proponent shall:
- (a) screen the views of the project as far as is practicable from the section of Bucketts Way marked in red on the figure in Appendix 7 within 6 months of the date of this approval, in consultation with the RTA, Council and any relevant landowners;
  - (b) maintain the screen **and associated vegetation** during the life of the project; and to the satisfaction of the **Secretary**

## WASTE

52. The Proponent shall:
- (a) minimise the waste generated by the project; and
  - (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of, to the satisfaction of the **Secretary**.
53. The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the **Secretary**. This plan must be submitted to the **Secretary** within 3 months of the date of this approval, unless otherwise agreed by the **Secretary**.

## BUSHFIRE MANAGEMENT

54. The Proponent shall:
- (a) ensure that the project is suitably equipped to respond to any fires on site; and
  - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the surrounding area.

## REHABILITATION

### Rehabilitation Objectives

55. The Proponent shall rehabilitate the site to the satisfaction of the **Secretary** of DTIRIS. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (and depicted conceptually in the figures in Appendix 7), and comply with the objectives in **Table 12**.

Table 12: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole of the disturbed lane and water)	Safe, stable & non-polluting, fit for the purpose of the intended post-mining land use(s).
Surface Infrastructure	To be decommissioned and removed, unless the Secretary agrees otherwise.
Coal Shaft Creek Diversion	Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than prior to mining.
Landforms	<p>Final landforms sustain the intended land use for the post-mining domain(s).</p> <p>Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post-mining landscape.</p> <p>Final landforms incorporate design relief patterns and principles for consistent with natural drainage.</p>
Other land affected by the project	<p>Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of:</p> <ul style="list-style-type: none"> <li>• local native plant species; and</li> <li>• a landform consistent with the surrounding environment.</li> </ul>
Water quality	<p>Water retained on site is fit for the intended land use(s) for the post-mining domain(s).</p> <p>Water discharged from site is consistent with the baseline ecological, hydrological and geomorphic conditions of the creeks prior to mining disturbance. Water management is consistent with the regional catchment management strategy.</p>
Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establishes and complements regional and local biodiversity.
Final void	Safe, stable and non-polluting
Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting of vegetation).
Community	Minimise the adverse socio-economic effects associated with mine closure.

### Progressive Rehabilitation

56. The Proponent shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.

### Rehabilitation Management Plan

57. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the **Secretary** of DTIRIS. This plan must:
- be prepared in consultation with the Department, OEH, NOW, Council and the CCC;
  - be prepared in accordance with any relevant DRE guideline;
  - build, to the maximum extent practicable, on the other management plans required under this approval;
  - address all aspects of mine closure and rehabilitation, including post-mining land use domains, rehabilitation objectives, completion criteria and rehabilitation monitoring and management;
  - provide for scientific knowledge gained during the rehabilitation, to be made publicly available;
  - be submitted to the **Secretary** of DTIRIS for approval within 3 months of the date of this approval, unless otherwise agreed by the **Secretary**.

## SCHEDULE 4 ADDITIONAL PROCEDURES

### NOTIFICATION OF LANDOWNERS

1. Within 1 month of the date of this approval, the Proponent shall notify in writing the owners of:
  - (a) the land listed in Table 1 in Condition 1 of Schedule 3 that they have the right (under Condition 1 of Schedule 3) to require the Proponent to acquire their land at any stage during the project;
  - (b) any residence on the land listed in Table 1 in Condition 1 or in Condition 4(b) or (c) of Schedule 3 that they are entitled (under Condition 4 of Schedule 3) to ask for additional noise mitigation measures to be implemented at their residence at any stage during the project;
  - (c) any privately-owned land within 2 kilometres of the approved open cut mining pit on site that they are entitled (under Condition 11 of Schedule 3) to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous inspection report updated;
  - (d) any residence on the land listed as 125(1) and 125(2) on the figure in Appendix 3 that they are entitled (under Condition 21 of Schedule 3) to ask for additional dust mitigation measures to be implemented at their residence at any stage during the project; and
  - (e) the owner the land listed as 125(1), 125(2), and 116 on the figure in Appendix 3 or any residence on privately-owned land which has (or would have) significant direct views of the mining operations on site, that they are entitled (under Condition 50 of Schedule 3) to ask for additional visual mitigation measures to be implemented on their land at any stage during the project
  
- 1A. Within 1 month of the approval of the first modification to the conditions of this approval, the Proponent shall prepare a Consultation Plan for the implementation of additional noise mitigation measures at the residences listed in Condition 4(c) of Schedule 3. This plan must provide for:
  - (a) notifying the land owners of these residences that they are entitled to ask for additional noise mitigation measures to be implemented at their residence at any stage during the project;
  - (b) explaining the sorts of mitigation measures that could be implemented to these residences;
  - (c) following up the initial notification of these owners with detailed discussions about the potential implementation of suitable mitigation measures;
  - (d) explaining to these land owners that they have the right to refer the matter to the **Secretary** for resolution if there is a dispute about what measures should be implemented or the implementation of any agreed measures.

The Plan is to be made publicly available on the Proponent's website and the plan shall be implemented to the satisfaction of the **Secretary**.

2. Within 2 weeks of obtaining monitoring results showing:
  - (a) an exceedence of the relevant criteria in any condition in Schedule 3, the Proponent shall notify the affected landowner and tenants in writing of the exceedence, and provide monitoring results to each of these parties until the project is complying with the relevant criteria again;
  - (b) an exceedence of the relevant noise acquisition criteria in Condition 3 of Schedule 3, the Proponent shall notify the relevant owner in writing that they have the right (under Condition 3 of Schedule 3) to require the proponent to acquire their land;
  - (c) an exceedence of the relevant noise mitigation criteria in Condition 4(d) or (e) of Schedule 3, the Proponent shall notify the relevant owner in writing that they are entitled (under Condition 4 of Schedule 3) to ask for additional noise mitigation measures to be installed at their residence;
  - (d) an exceedence of the relevant air quality criteria in Schedule 3, the Proponent shall send the affected landowners and tenants (including the tenants of any mine-owned land) a copy of the NSW Health fact sheet entitled "*Mine Dust and You*" (as may be updated from time to time); and an
  - (e) exceedence of the relevant air quality criteria in Condition 20 of Schedule 3, the Proponent shall notify the relevant owner in writing that they have the right (under Condition 20 of Schedule 3) to require the Proponent to acquire their land; and
  - (f) an exceedence of the relevant dust mitigation criteria in Condition 21 of Schedule 3, the Proponent shall notify the relevant owner in writing that they are entitled (under Condition 21 of Schedule 3) to ask for additional dust mitigation measures to be implemented at their residence.

### INDEPENDENT REVIEW

3. If an owner of privately-owned land considers the project to be exceeding the relevant 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 person, 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 criteria in Schedule 3; and
  - if the project is not complying with these criteria, then 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.
4. If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the **Secretary**.

If the independent review determines that the project is not complying with the relevant criteria in Schedule 3, then the Proponent shall:

- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; or
- (b) secure a written agreement with the landowner to allow exceedences of the relevant criteria, to the satisfaction of the **Secretary**.

If the independent review determines that the project is not complying with the relevant acquisition criteria in Schedule 3, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in Conditions 5–6 below.

## 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 on the land at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of any additional noise mitigation measures under Condition 4 of Schedule 3;
- (b) the reasonable costs associated with:
- relocating within the Great Lakes or Gloucester 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 disputing 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 within 3 months of the date of this approval, unless otherwise agreed by the **Secretary**;
  - (b) provide the strategic framework for the 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 during the course of the project;
    - 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 required to be carried out under the conditions of this approval.

**Management Plan Requirements**

2. 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
    - exceedences of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

*Note: The **Secretary** may waive some of these requirements if they are unnecessary or unwarranted.*

**Annual Review**

3. By the end of December 2011, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the **Secretary**. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development 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 past 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 past 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**

- 4. Within 3 months of:
  - (a) the submission of an annual review under Condition 3 above;
  - (b) the submission of an incident report under Condition 6 below;
  - (c) the submission of an audit under Condition 8 below;
  - (d) any modification to the conditions of this approval (unless the conditions require otherwise); **or**
  - (e) **prior to the commencement of clearing in EA (Mod 2)**, the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of 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**

- 5. The Proponent shall establish and operate a new Community Consultative Committee (CCC) for the project 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 to the satisfaction of the **Secretary**. This CCC must be operating within 3 months of the date of this approval.

*Note:*

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval;*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community; and*
- *With the approval of the **Secretary**, this CCC may be combined with the current CCC for the Stratford coal mine.*

### **REPORTING**

#### **Incident Reporting**

- 6. The Proponent shall notify the **Secretary** and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the 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.

#### **Regular Reporting**

- 7. 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, and to the satisfaction of the **Secretary**.

### **AUDITING**

#### **Independent Environmental Audit**

- 8. By the end of December 2011, 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:
  - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the **Secretary**;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the approvals in (c) above; and
  - (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the approvals in (c) above.

*Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the **Secretary**.*

9. Within 6 weeks of the completion of 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.
- 9A. By the end of December 2013, and with every Independent Environmental Audit thereafter, unless the **Secretary** directs otherwise, the Proponent shall commission and pay the full cost of a Rail Haulage Audit of the project. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent experts whose appointment has been endorsed by the **Secretary**;
  - (b) review the existing rail haulage operations and determine whether all reasonable and feasible measures are being implemented to minimise the:
    - noise and dust impacts of these operations;
    - use of the shuttle train during the approved night-time hours;
    - dispatch of trains from the site between 9.25pm and 1am the following day; and
  - (c) recommend appropriate measures or actions to improve the efficiency of these rail haulage operations and minimise their associated impacts; and
  - (d) evaluate the use of the exceptional circumstances provision in condition 8 of schedule 2, and the associated reporting on any use of this provision on the Proponent's website (see condition 8A in schedule 2).
- 9B. Within 6 weeks of the completion of 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.

#### **ACCESS TO INFORMATION**

10. Within 1 month of the date of this approval, the Proponent shall:
- (a) make copies of the following publicly available on its website:
    - the documents referred to in Condition 2 of Schedule 2;
    - all relevant statutory approvals for the project;
    - all approved strategies, plans, programs and studies required under the conditions of this approval;
    - the monitoring results of the project, reported in accordance with the specifications in any approved strategies, plans, programs or studies required under the conditions of this or any other approval;
    - a complaints register, which is to be updated on a monthly basis;
    - the agenda papers and minutes of CCC meetings;
    - the annual reviews required under this approval;
    - any audit of the project required under this approval, and the Proponent's response to the recommendations in any audit report;
    - any other matter required by the **Secretary**; and
  - (b) keep this information up-to-date, to the satisfaction of the **Secretary**.

**APPENDIX 1  
SCHEDULE OF LAND**

<b>Tenure Type</b>	<b>Lot Number</b>	<b>Deposited Plan Number</b>
FREEHOLD	1	595876
FREEHOLD	4	595876
FREEHOLD	6	876013
FREEHOLD	12	95773
FREEHOLD	19	95688
FREEHOLD	22	95765
FREEHOLD	Part of 1	1103426
FREEHOLD	Part of 1	1127503
FREEHOLD	Part of 1	986142
FREEHOLD	Part of 30	95765
FREEHOLD	Part of 125	95694
FREEHOLD	Part of 126	95695
FREEHOLD	Part of 130	95768
FREEHOLD	Part of 131	95773
FREEHOLD	Part of 136	95698
FREEHOLD	Part of 636	95742
FREEHOLD	Part of 705	95759
FREEHOLD	Part of C	160430
FREEHOLD (Great Lakes Council)	Severed land resumed for public road	N/A
FREEHOLD (Private subdivision road reserves or owned by Great Lakes Council)	Roads located within and between the above parcels of land	N/A
STATE RAIL AUTHORITY OF NSW	Rail corridor located within and adjacent to the above titles	N/A

## APPENDIX 2 PROJECT LAYOUT PLANS



Figure 2: Project General Arrangement

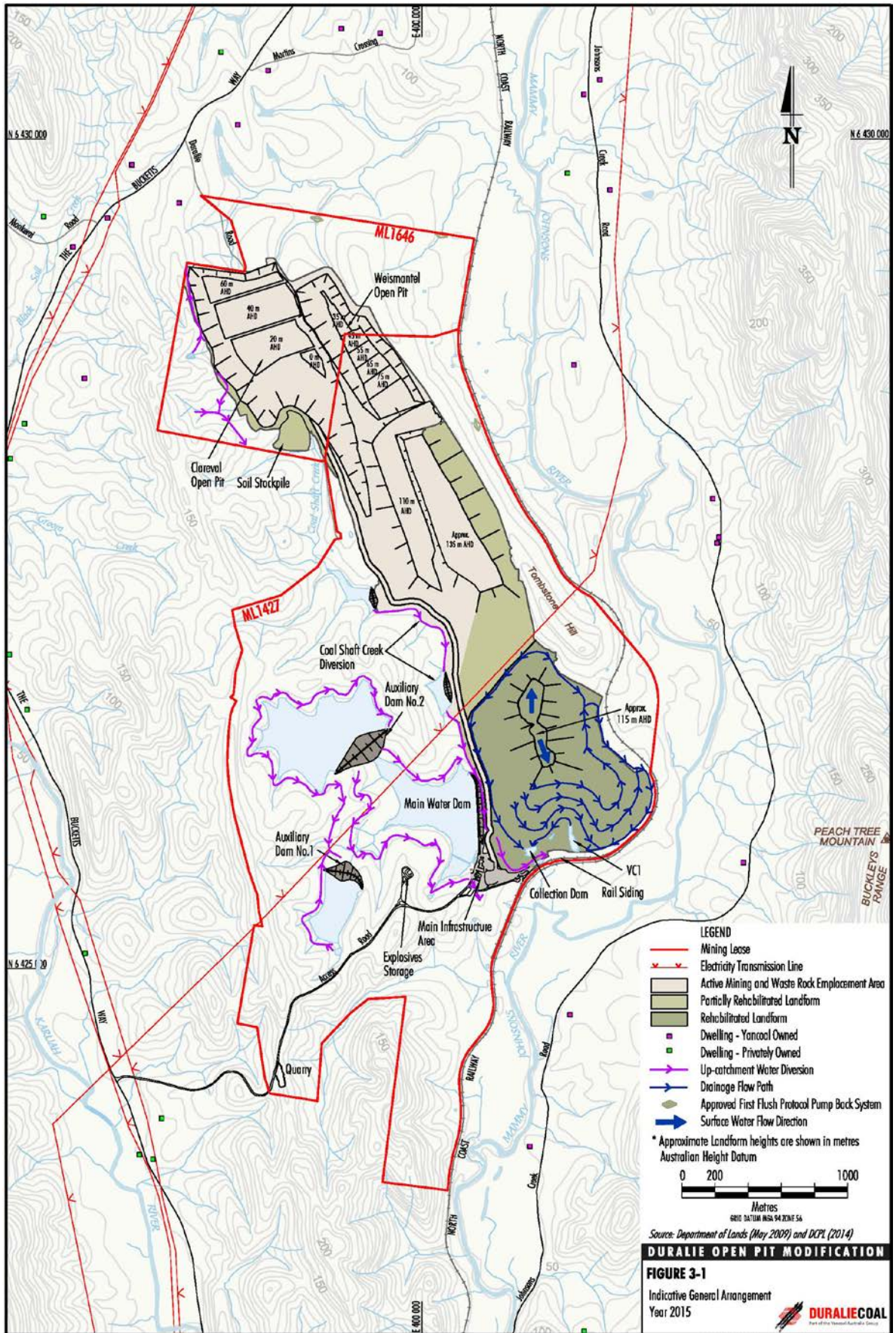


Figure 3: Project General Arrangement 2015

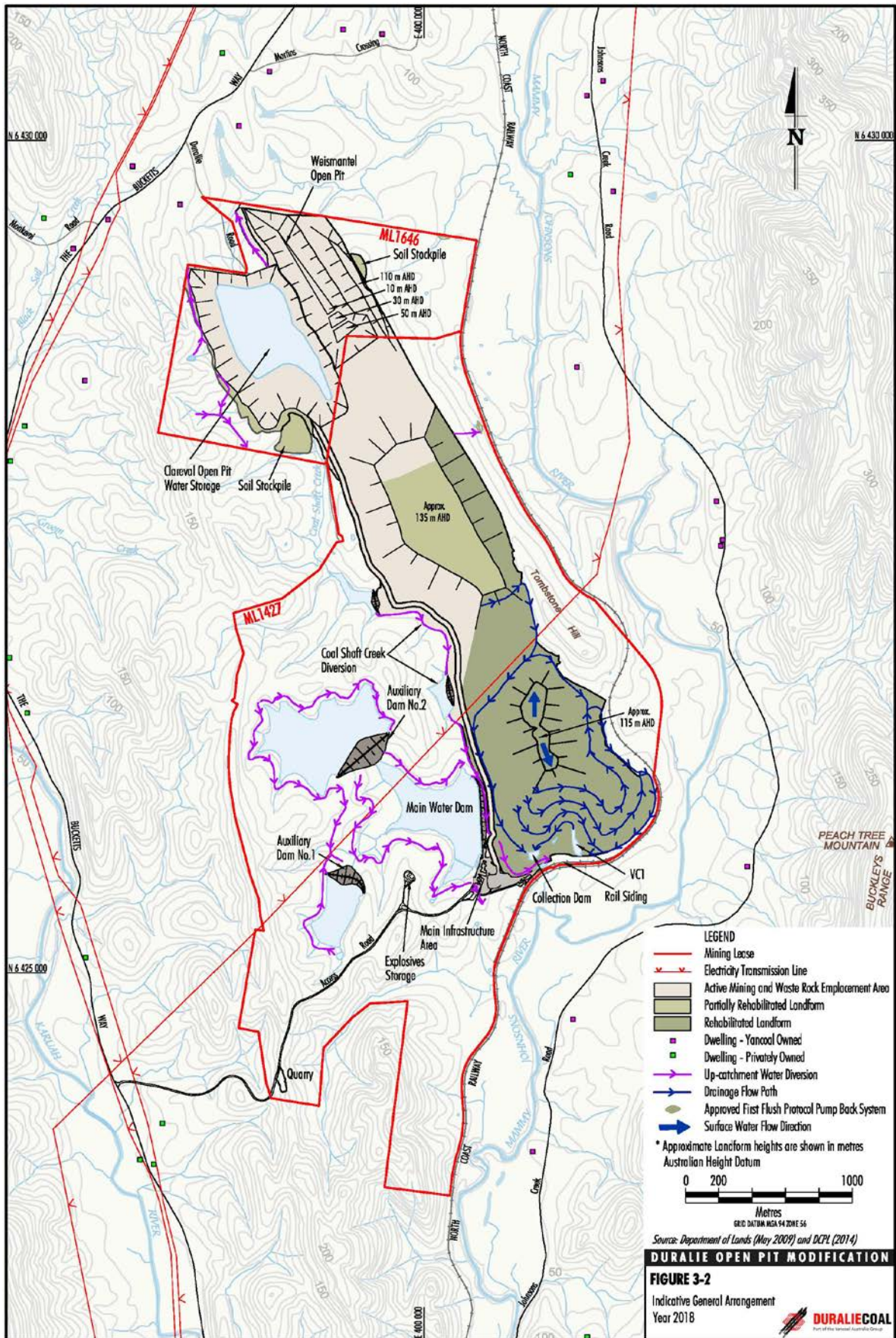


Figure 4: Project General Arrangement 2018

### APPENDIX 3 LAND OWNERSHIP PLANS

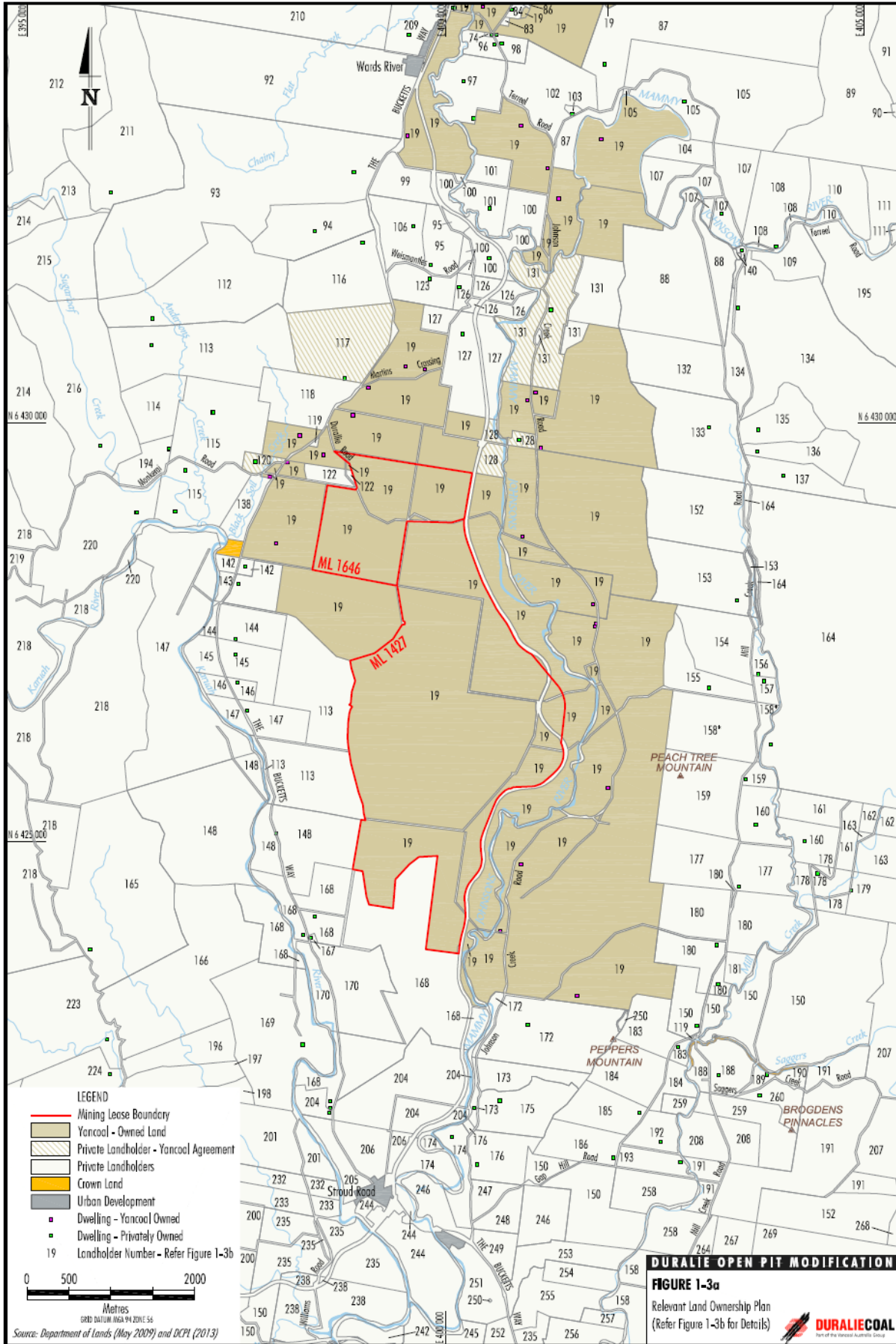


Figure 5: Land Ownership Plan



<u>Reference</u>	<u>Land Owner</u>	<u>Reference</u>	<u>Land Owner</u>	<u>Reference</u>	<u>Land Owner</u>
19	Yancoal Australia Limited	138	P. W. M. Moylan, B. D. Moylan,	194	J. & C. L. Kellehear
74	D. L. & D. W. Melmeth		G. O. Moylan, S. C. M. Newton &	195	Shulgin Investments Pty Ltd
83	Cemetery		M. J. Moylan	196	E. D. Sanders
84	A.W. & C.M. Hart	140	D. C. Bennett & D. M. Stark	197	H. R. & D. A. Moorehouse
86	J. Andersen	142	P. G. Madden	198	Aspenview Enterprises Pty Limited
87	Pacific Property Investments Ltd	144	D. J. Wielgosinski	200	G. J. & S. G. Trappel
88	V. S. Edwards	145	C.W. & J. I. Edwards	201	I. G. Wilson
89	D. J. Robertson	146	M. A. Bragg	204	M. C. Jones
90	W. A. & J. A. Thomson	147	S. Edwards	205	J. S. & K. L. Brafield
91	Hunter Water Corporation	148	D. J. McAndrew	206	M. A. Watkins
92	Sejon No 4 Pty Ltd	150	R. N. & T. E. Rumbel	207	P. Trenchev
93	K. V. & P. M. Howard	152	D. M. Lowrey	208	C. A. Bowden
94	B. V. & P. O. Howard	153	L. & R. K. Paul	209	D. M. Chapman
95	D. J. Smith & S. Ransley	154	J. R. Morgan	210	Heatscape Pty Limited
96	H. T. & M. B. Turnbull	155	M. & R. Guberina	211	B. & B. I. Irwin
97	S. W. Davis	156	T. R. J. & B. Hope	212	P. & N. V. Makaroff
98	I. D. Partelle & M. M. Ramsay	157	C. N. & S. D. Stephenson	213	E. A. & P. Hillard
99	K. MacFarlane	158	B. Gilbert	214	K. G. Sneddon
100	K. S. Richards	159	T. R. Waterer	215	Monkerai Holdings Pty Limited
101	K. M. & D. B. Holloway	160	P. & M. E. Kenney	216	D. M. Matcham
102	W. R. Kerslake	161	D. G. Hutchison	218	D. K. & J. A. Holdings Pty. Limited
103	G. L. Macedo	162	L. Partridge	219	C. A. Olsen
105	R. M. Edwards	163	M. A. & C. H. Hockings & C. H. Willcox	220	T. G. Lindfield and Associates Pty. Limited
106	R. A. James	164	Gorton Timber Co. Limited	223	F., E., R., D. M. & G. Ferraro
107	P. G. Spencer	165	ESOR Nominees Pty Limited	232	I. G. Wilson
108	A. G. & M. A. Tersteeg	166	A. J. & A. L. Daniel	233	R. G. Wilson
109	R. J. Bathgate & M. L. Levey	167	M. & S. M. Ravagnani	235	M. J. Brafield
110	G. W. Lewis & A. J. Moore	168	V. R. & E. K. Schultz	238	H. R. Kerr
111	T. J. Somerville & C. D. Martin	169	R. D. K. & N. L. Williams	242	M. M. Gorton
112	S. R. Hogeveen	170	I. K. & M. J. Schultz	244	R. R. & M. J. Lawrence
113	C. W. & J. I. Edwards	172	S. J. & J. E. Lyall	245	N. Curtis
114	H. Paliokas	173	S. M. Trigg, J. M. Trigg, M. J. Holland,	246	P. & S. A. Margery
115	P. W. M. & B. D. & G. O. & M. J. Moylan &		B. J. Holland, M. Trigg & S. C. Trigg	247	N. J. Alexander & T. L. Sauerbier
	S. C. M. Newton	174	D. C. Carroll	248	R. B. & J. M. Eastoe
116	G. R. Weismantel	175	S. G. Thomas	249	P. Margery
117	E. D. Holmes and L. M. Holmes	176	J. D. Thompson	250	Midcoast County Council
118	P. W. M. Moylan	177	W. J. Thompson	251	B. R. Warner
119	Great Lakes Council	178	N. E. Hitchcock & E. E. Coldham	252	D. K. Pritchard
120	M. J. & C. A. Mahony	179	I. Mellar	253	E. & J. A. Allan
122	S. White	180	K. J. Dennis	254	D. N. & D. T. Young
123	J. L. Oleksiuk & K. P. Carmody	181	G. J. Thompson	255	G. W. Bevan & C. A. Bevan
126	H. L. & M. R. Hamann - Pivalu Pty Limited	183	M. H. & E. V. Elfid	256	M. I. Butler
127	A. J. Fisher-Webster	184	B. J. & M. C. Gay	257	H. Butler
128	D. R. & B. Hare-Scott	185	A. W. Raine & T. Hilleard	258	G. K. & A. G. Brown
131	W. L. Relton	186	K. B. & J. N. Farnham	259	C. A. Bowen
132	A. T. Gorton	188	T. E. Rumbel	260	D. & J. Roberts
133	R. J. Gorton	189	H. J. Gillard	264	K. Pepper & S. M. Lyall
134	Duzmen Pty Ltd	190	B. Clayton	267	D. L. & T. L. Fordham
135	P. J. Ayliffe	191	A. M. Mokeeff	268	Hudrow Pty Limited
136	D. P. Pickles	192	S. & A. F. Vajda	269	The Minister for Forestry
137	T. J. Lord	193	N. & C. M. Smith		

Source: DCPL (2014) and Department of Lands (2009)

**DURALIE OPEN PIT MODIFICATION**

**FIGURE 1-3b**

Relevant Land Ownership List



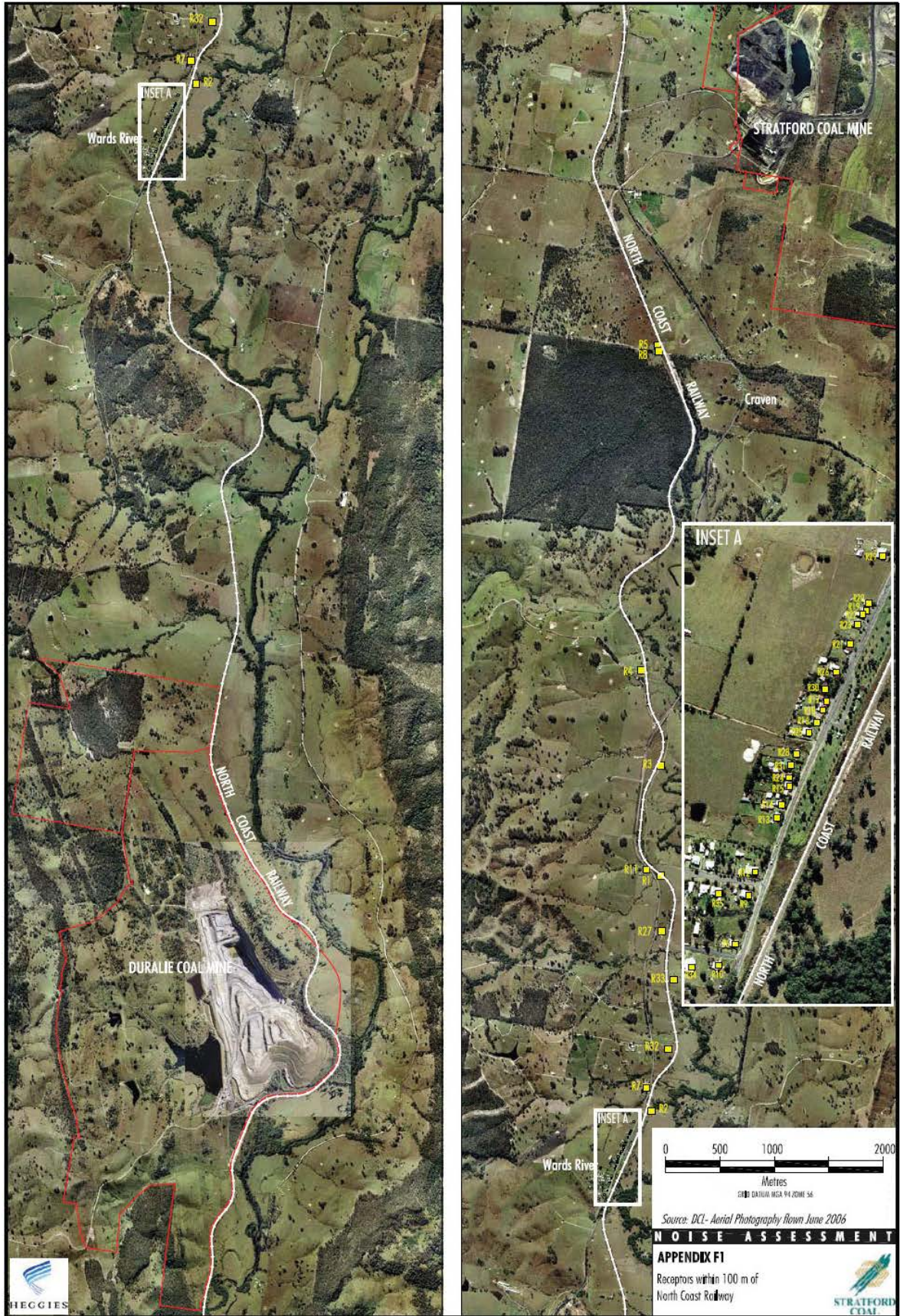
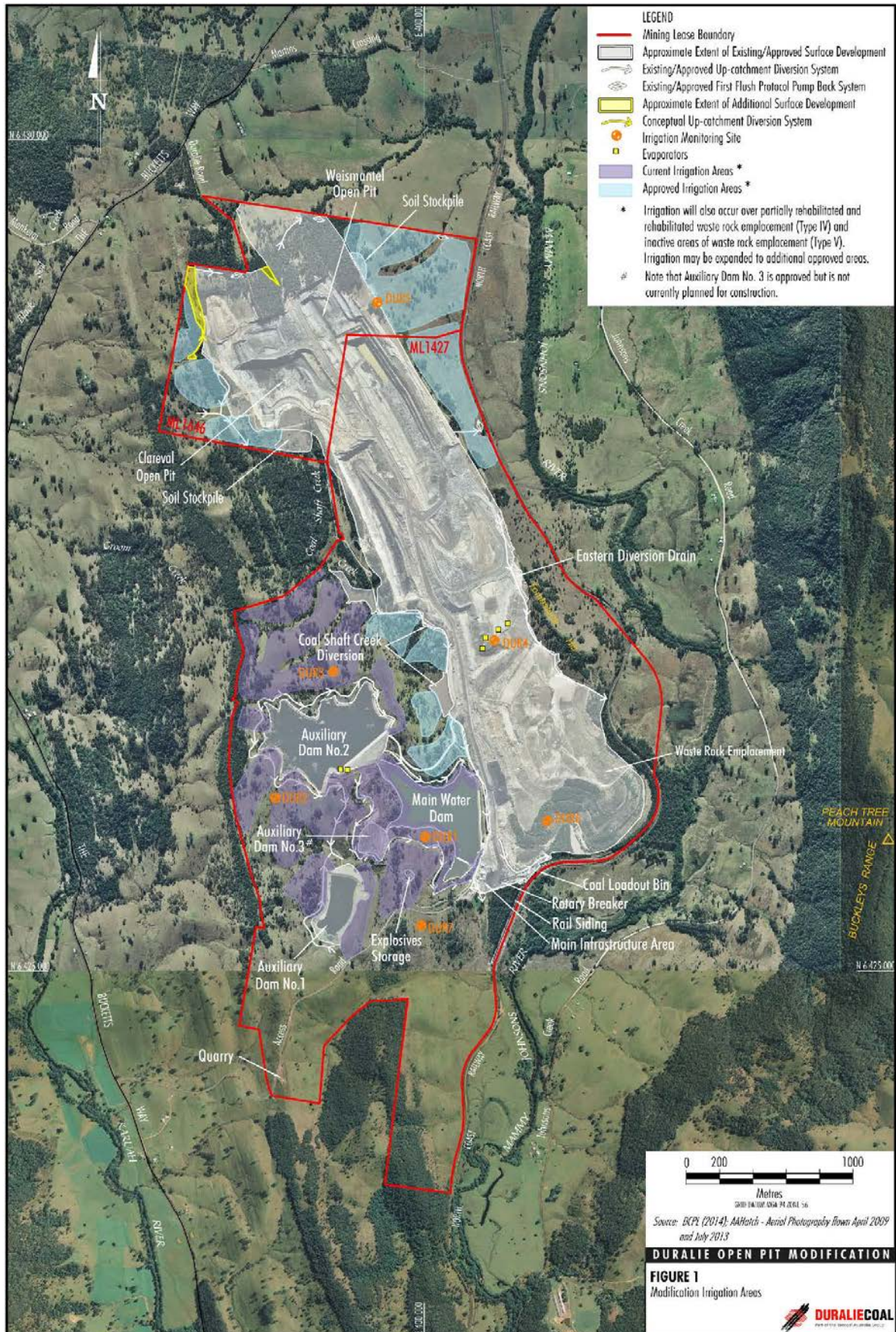


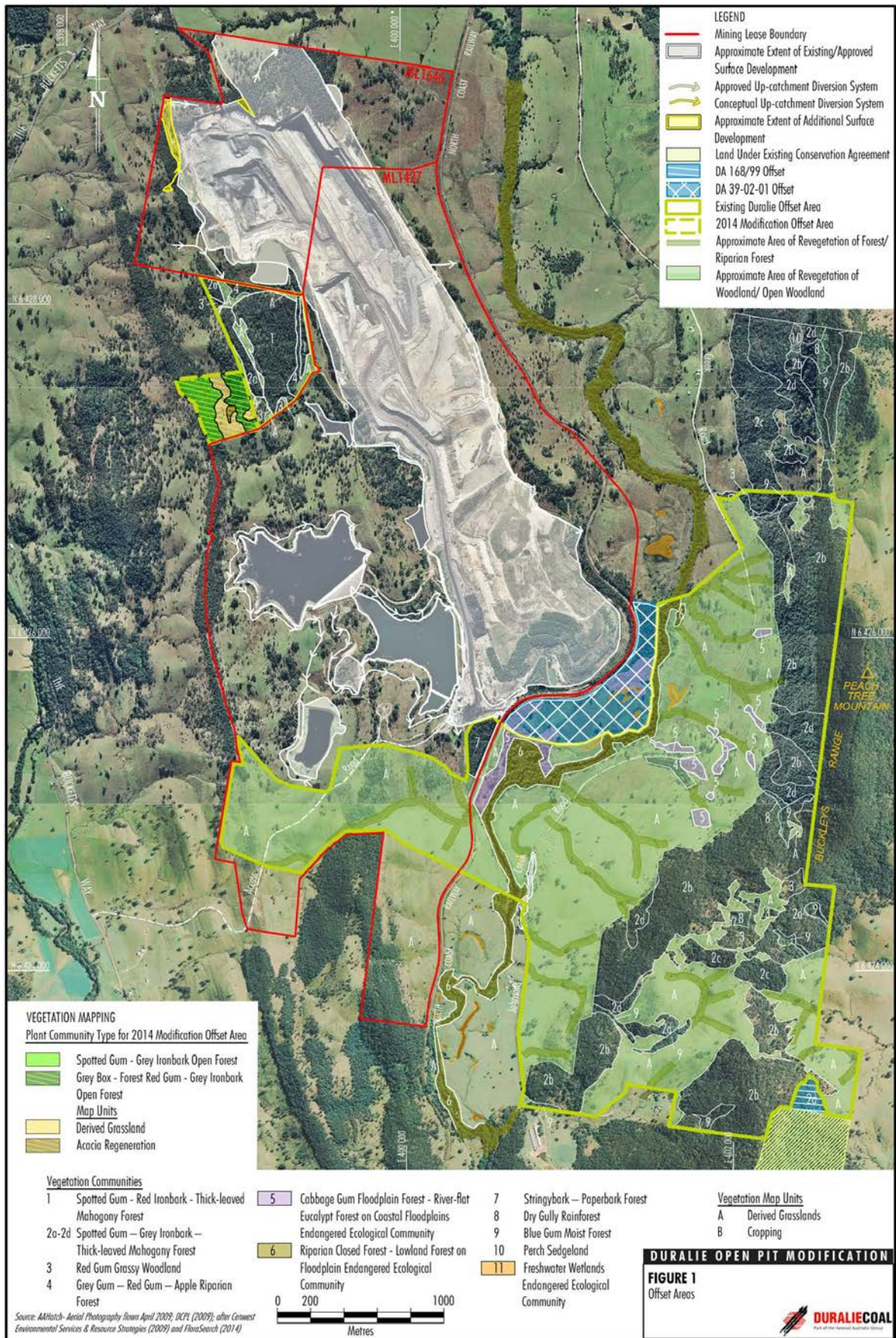
Figure 6: Receptors within 100 m of North Coast Railway

## APPENDIX 4 IRRIGATION AREA



**Figure 7: Project Irrigation Areas**

## APPENDIX 5 OFFSET STRATEGY



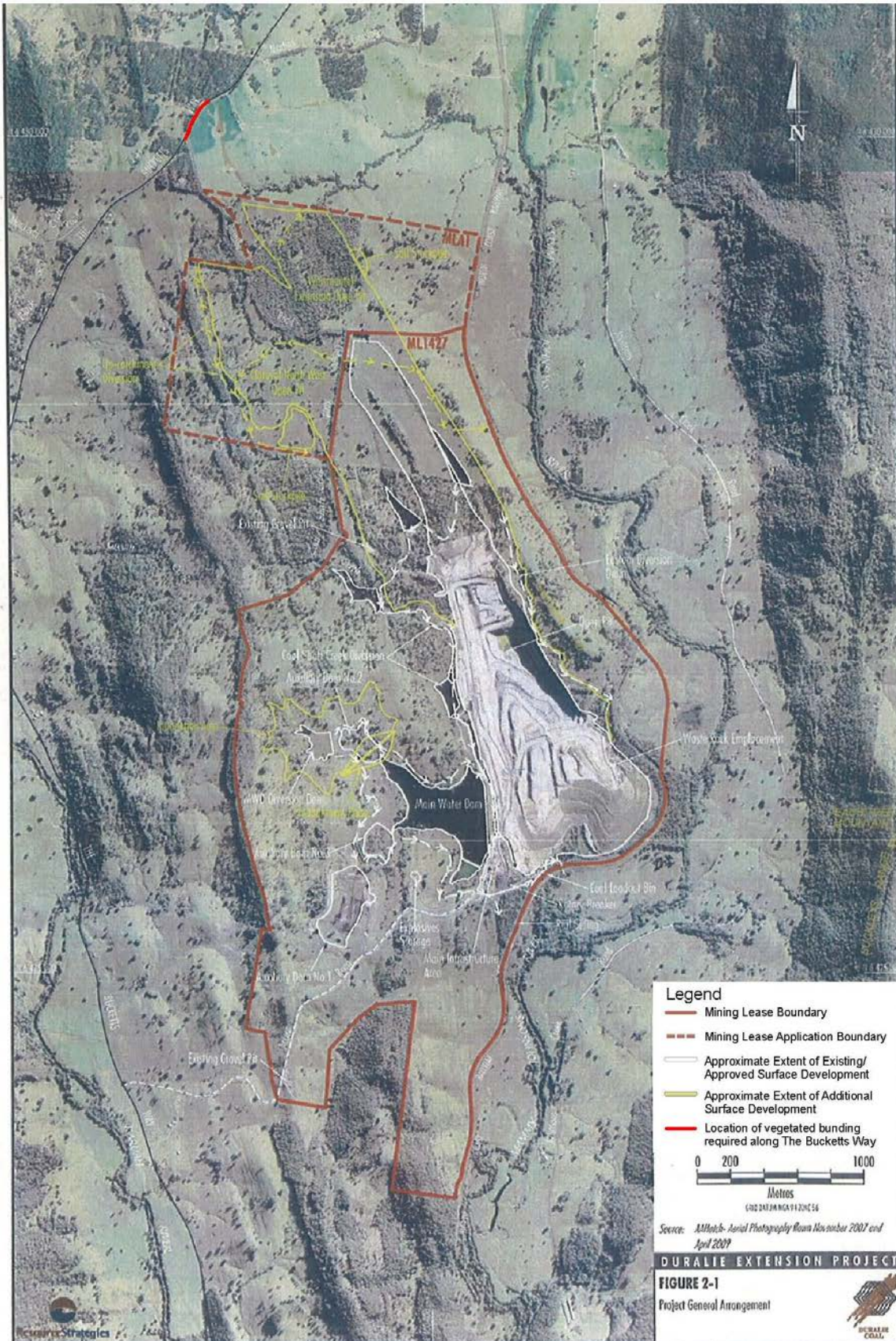
**Figure 8: Proposed Offset Arrangement**

## APPENDIX 6 HERITAGE SITES

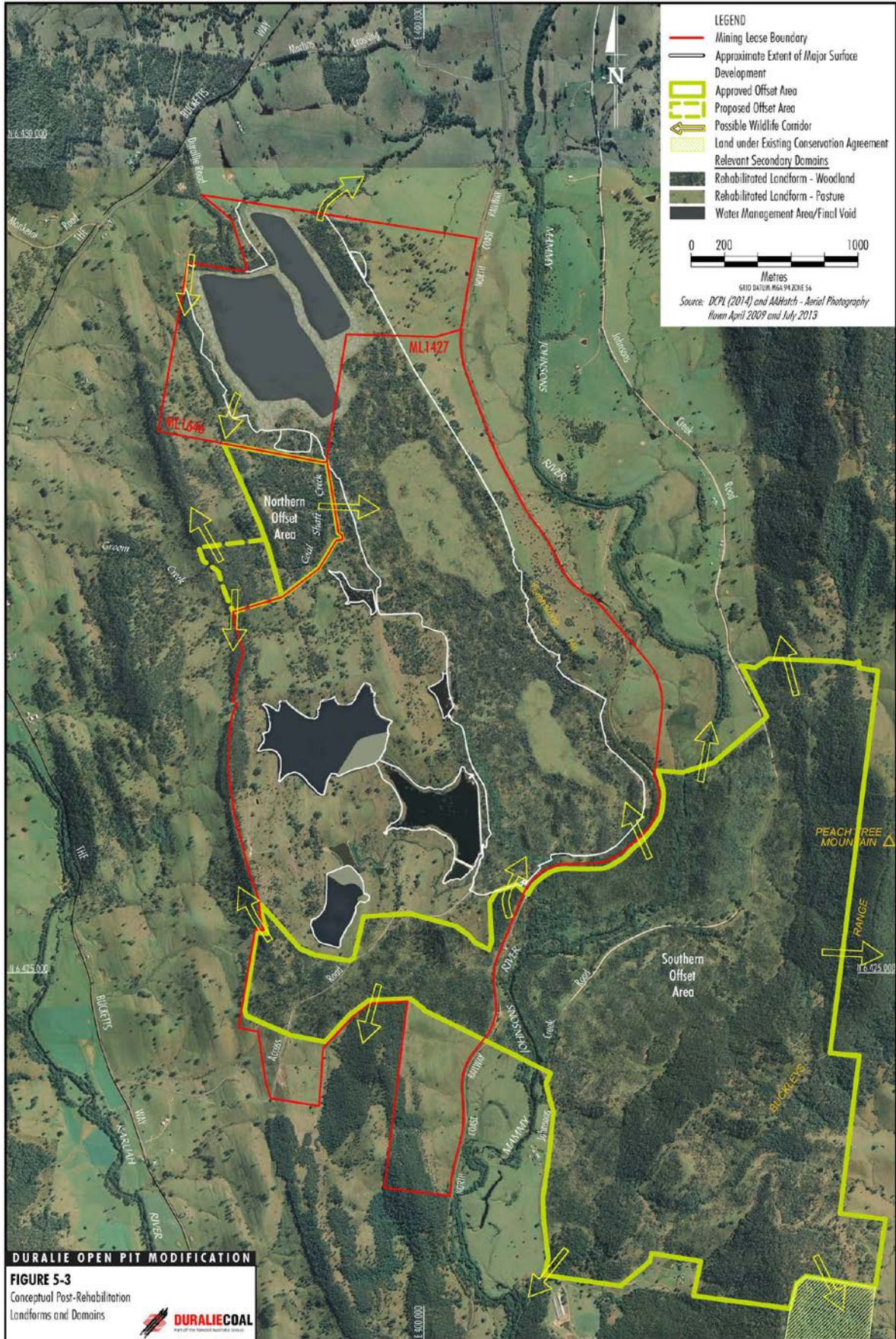


**Figure 9:** Aboriginal Heritage Sites identified within the Study Area

**APPENDIX 7  
INDICATIVE LOCATION OF VISUAL SCREEN ON BUCKETTS WAY**



**APPENDIX 8  
CONCEPTUAL REHABILITATION PLAN**



**Figure 10: Indicative Final Landform**

## APPENDIX 9 STATEMENT OF COMMITMENTS

### SOC1. STATEMENT OF COMMITMENTS

In accordance with the Director-General's Environmental Assessment Requirements, this section provides a statement of Duralie Coal Pty Ltd's (DCPL's) commitments in relation to the Duralie Extension Project (the Project).

#### SOC1.1 PROPOSED PROJECT ENVIRONMENTAL MANAGEMENT, MONITORING AND REPORTING

The environmental assessment provided in Section 4 in the Main Report of the EA outlines proposed environmental management and offset measures for the Project including those relevant to land resources, groundwater, surface water, noise, blasting, air quality, greenhouse gas emissions, terrestrial and aquatic ecology, Aboriginal heritage, non-Aboriginal heritage, road transport, socio-economics, hazard and risk and visual character. Where relevant, environmental monitoring proposals are also provided in Section 4.

DCPL will review and revise the existing management and monitoring plans to incorporate the Project and address the revised management plan requirements of the Project Approval.

The existing monitoring programme at the Duralie Coal Mine (DCM) will be augmented to address additional Project disturbance areas and extensions. Figure SOC-1 shows the location of environmental monitoring sites proposed to be maintained for the Project.

Environmental management, monitoring and reporting will be conducted in accordance with the Project Approval conditions, with the final monitoring details (locations, parameters and frequencies) to be provided in the relevant management plans.

#### SOC1.2 SPECIFIC ENVIRONMENTAL COMMITMENTS

Environmental mitigation measures to be implemented for the Project are described in Section 4. Key commitments include:

- provision of alternative landholder access as a result of local road closures;
- design, construction and management of the post-mining alignment of Coal Shaft Creek;

- management of on-site waters;
- management and mitigation of operational noise;
- management of DCM run-of-mine (ROM) coal rail transport noise;
- monitoring of temperature inversions for noise compliance monitoring;
- management and mitigation of potential blasting impacts; and
- provision of ecological offset measures for the Project.

These are described further below.

#### *Alternative Landholder Access*

The entire length of Cheerup Road and approximately one kilometer of Duralie Road (within Mining Lease Application 1) will be closed as a result of the Project. The formal process for road closure will be conducted in accordance with the requirements of the Great Lakes Council (GLC).

These local road closures will result in the loss of existing public road access for one privately owned lot.

#### *DCPL Commitment*

DCPL will provide an alternative access route to the access-affected property in consultation with the relevant landholder and the GLC.

#### *On-site Water Management*

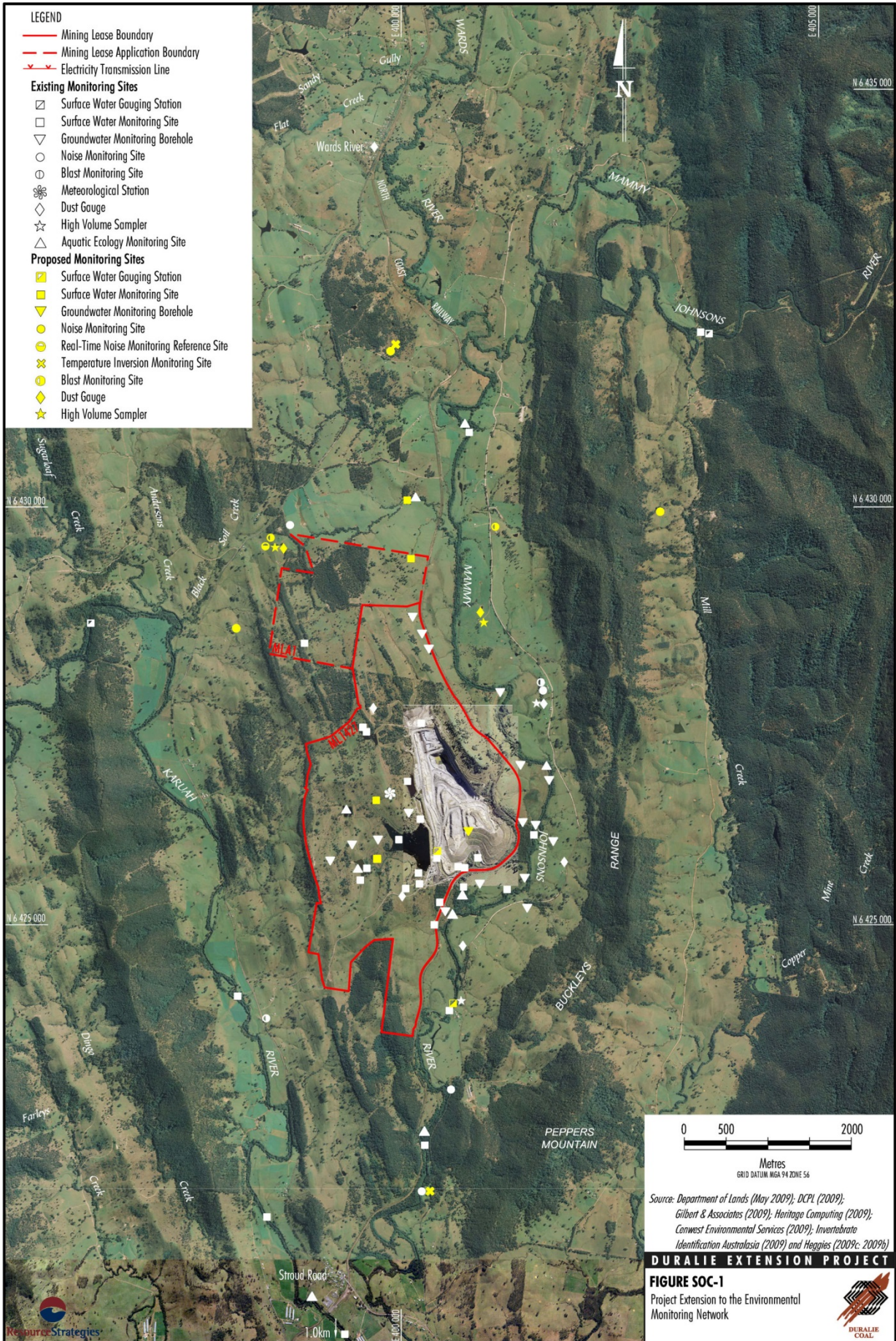
The original proposal for the Project incorporated a controlled release of excess mine water to the Mammy Johnsons River and additional irrigation areas to the east of the Mammy Johnsons River.

During the assessment of the Project water balance and refinement of engineering and mine planning it was determined that an off-site controlled mine water release and irrigation areas to the east of Mammy Johnsons River was not required.

#### *DCPL Commitment*

DCPL will maintain and extend current water management measures (e.g. on-site water storage, beneficial use of contained water for irrigation and diversion of runoff from upstream sources) in accordance with the conditions of the Project Approval and Environment Protection Licence.





### **Coal Shaft Creek – Reconstruction**

Coal Shaft Creek has been diverted around the existing Weismantel open pit to allow mining at the DCM. The Project surface water management system will include the continued use of the Coal Shaft Creek Diversion.

#### *DCPL Commitment*

Following the completion of mining activities at the DCM, a final alignment of Coal Shaft Creek will be established, stabilized and revegetated prior to relinquishment of ML 1427. DCPL commits to a final alignment with the following components:

- a reworked section of the existing Coal Shaft Creek Diversion channel;
- a reconstructed meandering channel within a corridor over the in-pit waste rock emplacement; and
- a drop-down section between the two above components.

DCPL commits to the development of a Surface Water Management Plan to document the final design of the post-mining alignment of Coal Shaft Creek.

Throughout the Project life, further analysis will be conducted into the geotechnical, hydrological and hydraulic design of the final alignment focusing on long-term stability, seepage management and the creation of habitat. The outcomes of this analysis will inform the final detailed design of the post-mining alignment and reconstruction of Coal Shaft Creek.

### **DCM ROM Coal Rail Transport Noise**

There will be a slight increase in the number of DCM ROM coal rail movements to the Stratford Coal Mine from approximately 950 to 1,125 per annum and the current hours of operation of the train (7:00 am to 10:00 pm) will be extended by some four hours (i.e. 7:00 am to 2:00 am) with the written approval of the **Secretary** of the Department in accordance with the Project Approval.

#### *DCPL Commitment*

DCPL commits to replacing the existing locomotives on the DCM ROM coal transport train with GL class locomotives (or equivalent) which are quieter than the existing DCM locomotives from Year 2 of the Project (or sooner, subject to contract arrangements).

### **Operational Noise Management and Mitigation Measures**

Due to the extension of mining operations to the north and west and the increase in the mobile fleet, the Project has the potential to result in additional noise

emissions at nearby residences.

#### *DCPL Commitment*

DCPL commits to adopting the following noise management and mitigation measures to appreciably reduce noise emissions associated with the Project:

- mobile equipment necessary to meet Project ROM coal production will be low noise emission standard, including up to 16 CAT 785XQ haul trucks and attenuation of other plant items (i.e. excavator, drill and grader);
- the use of two existing CAT 789 haul trucks will be restricted to daytime operations only;
- XQ D10 dozers (rather than D10 dozers) will be used in the northern extent of the Clareval North West open pit and waste rock emplacement;
- only two unattenuated D10 dozer will be used on site;
- (deleted)
- (deleted)
- (deleted)
- (deleted)
- the height of the waste rock emplacement will be restricted to relative level 135 m.

#### Noise Management Zone (1 to 5 A-weighted decibels [dBA] above Project-Specific Criteria)

For private residences within the Noise Management Zone, DCPL will implement reasonable and feasible acoustical mitigation (which may include measures such as enhanced glazing, insulation and/or air-conditioning), in consultation with the relevant landowner, where compliance noise monitoring shows Project noise levels are 3 to 5 dBA above Project-specific noise criteria.

#### Noise Affectionation Zone (>5 dBA above Project-Specific Criteria)

For private residences within the Noise Affectionation Zone, the following additional noise management procedures will be implemented for the Project:

- implementation of reasonable and feasible acoustical mitigation at receivers (which may include measures such as enhanced glazing, insulation and/or air-conditioning), in consultation with the relevant landowner, where compliance noise monitoring shows Project noise levels are greater than 5 dBA above Project-specific noise criteria; and
- negotiated agreements with landowners where required.

### ***Direct Temperature Inversion Measurement***

The noise limits stipulated in the existing DCM Development Consent (DA 168/99) with respect to temperature inversions, state:

*The noise emission limits...apply under all meteorological conditions except for:  
...temperature inversions with a strength of greater than 3°C/100 m for all receivers...*

It is anticipated that should the Project be approved, the presence and strength of temperature inversions will be relevant to determine the application of noise criteria in accordance with the Industrial Noise Policy.

#### ***DCPL Commitment***

DCPL will install suitable monitoring equipment to provide for continuous real-time measurement of temperature lapse rate in accordance with the Industrial Noise Policy.

For the purposes of determining Project operational noise compliance at nearby private residences, the results of the direct temperature inversion monitoring will be converted to a temperature gradient (degrees Celcius [°C]/100 m) for comparison to the inversion strength conditions applicable under the Project Approval.

### ***Management of Potential Blasting Impacts***

Consistent with the Blast Management Plan, DCPL commits to appropriate blast designs addressing aspects including total charge size, instantaneous charge size, delay between the hole explosive initiation, direction of initiation, type and quantity of stemming material and geology to minimize potential blasting impacts at nearby receivers.

DCPL commits to notifying the occupants of residential receivers within 2 kilometres (km) of a proposed blast prior to the blast occurring. In addition, DCPL will establish an exclusion zone around blast events, including the positioning of sentries on public access points for privately owned properties within 500 m of a blast event. DCPL also commits to notifying the occupants of residential receivers within 2 km of Project active mining areas that they are entitled to a structural property inspection by a suitably qualified, experienced and independent person.

### ***Ecological Offset Measures***

Approximately 87 hectares (ha) of natural vegetation communities and 109 ha of derived grassland will be cleared for the Project.

### ***DCPL Commitment***

DCPL commits to the provision of an area to offset the potential impacts of the Project and maintain or improve the biodiversity values of the surrounding region in the medium to long-term.

DCPL proposes an offset area which is located on freehold Gloucester Coal Ltd/DCPL owned land (Figure SOC-2), which is currently managed for pastoral purposes. Table SOC-1 provides a summary of the proposed offset.

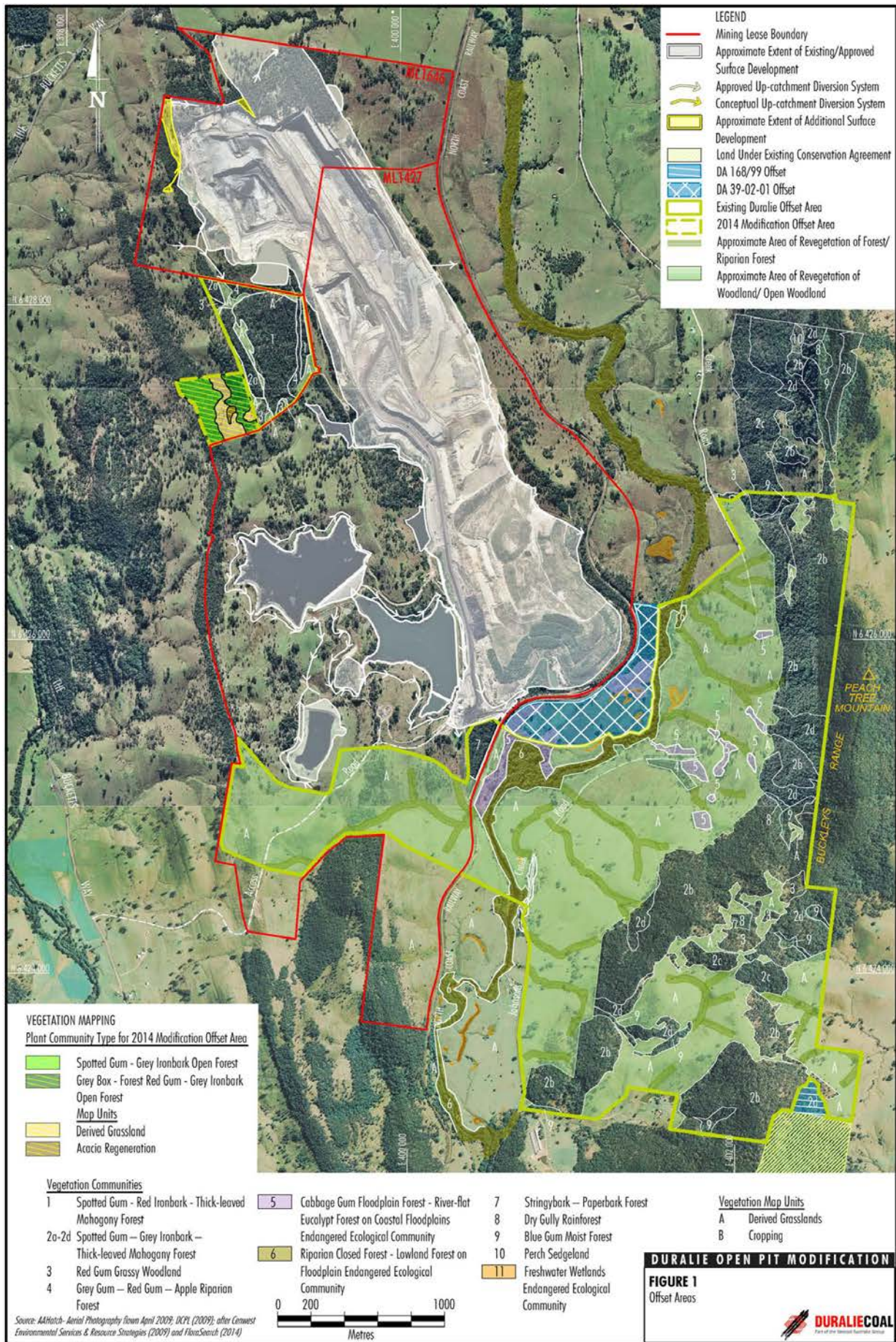


Figure SOC-2: Offset Areas

**Table SOC-1  
Summary of the Offset Proposal**

<b>Area</b>	<b>Description</b>	<b>Approximate Area (ha)</b>
Enhancement Area	Enhancement of existing areas of native vegetation communities through natural regeneration and management for conservation	299
Revegetation Area	Re-establishment of woodland, open woodland, forest and riparian forest in derived grasslands by selective planting and fencing for natural regeneration	393.5
<b>Total Area Conserved (ha)</b>		<b>692.5</b>

DCPL commits to make suitable payments to provide appropriate long-term security for the offset area to the satisfaction of the **Secretary** of the **NSW Department of Planning and Environment**.

A Biodiversity Management Plan will be prepared by a suitably qualified person(s) to facilitate the revegetation and regeneration of native vegetation and habitats and provide a framework for continued management and monitoring of the offset area. The Biodiversity Management Plan will be prepared to the satisfaction of the **Secretary** of the **NSW Department of Planning and Environment**.

The proposed offset area will be independently audited or reviewed at intervals as described in the Biodiversity Management Plan. The audits/reviews will be conducted by a suitably qualified person(s) to:

- assess compliance with the Biodiversity Management Plan;
- assess the performance of the offset area;
- review the adequacy of the management measures and monitoring programme; and
- recommend actions or measures to improve the performance of the offset, Biodiversity Management Plan, or monitoring programme, if required.

