

Development Consent

Section 89E of the *Environmental Planning & Assessment Act 1979*

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

These conditions are required to:

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

Member of the Commission

Member of the Commission

Member of the Commission

Sydney

2015

SCHEDULE 1

Application Number:

SSD-6465

Applicant:

Mt Thorley Operations Pty Limited

Consent Authority:

Minister for Planning

Land:

See Appendix 1

Development:

Mt Thorley Continuation Project

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	5
Obligation to Minimise Harm to the Environment	5
Terms of Consent	5
Limits on Consent	5
Commencement of Development Under This Consent	5
Structural Adequacy	6
Demolition	6
Protection of Public Infrastructure	6
Operation of Plant and Equipment	6
Updating & Staging Strategies, Plans or Programs	6
Community Enhancement	6
ENVIRONMENTAL PERFORMANCE CONDITIONS	8
Acquisition Upon Request	8
Noise	8
Additional Noise Mitigation Upon Request	8
Blasting	12
Air Quality	14
Meteorological Monitoring	16
Water	16
Biodiversity	18
Heritage	22
Transport	24
Visual	25
Bushfire Management	26
Waste	26
Rehabilitation	26
ADDITIONAL PROCEDURES	28
Notification of Landowners/Tenants	28
Independent Review	28
Land Acquisition	29
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	31
Environmental Management	31
Reporting	32
Auditing	33
Access to Information	34
APPENDIX 1: SCHEDULE OF LAND	23
APPENDIX 2: DEVELOPMENT LAYOUT PLANS	27
APPENDIX 3: LAND OWNERSHIP PLANS	32
APPENDIX 4: HERITAGE	35
APPENDIX 5: REHABILITATION PLANS	38
APPENDIX 6: NOISE COMPLIANCE ASSESSMENT	39

DEFINITIONS

Aboriginal stakeholders	Cultural Heritage Working Group and any Aboriginal groups registered for cultural heritage consultation for the development
Annual review	The review required by condition 3 of schedule 5
Applicant	Mt Thorley Operations Pty Limited, or any person who seeks to carry out the development approved under this consent
BCA	Building Code of Australia
Blast misfire	The failure of one or more holes in a blast pattern to initiate
CCC	Community Consultative Committee
Conditions of this consent	Conditions contained in schedules 1 to 5 inclusive
Council	Singleton Shire Council
CMA	Hunter-Central Rivers Catchment Management Authority
CPI	Australian Bureau of Statistics 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
Development	The development as described in the EIS
DRE	Division of Resources and Energy within the NSW Department of Trade & Investment
EIS	Environmental Impact Statement titled <i>Mount Thorley Operations 2014 Environmental Impact Statement</i> (5 volumes) dated June 2014 and associated response to submissions titled <i>Mount Thorley Operations 2014 Response to Submissions</i> (2 volumes) dated 10 November 2014
EEC	Endangered ecological community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or implement
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that: - causes or threatens to cause material harm to the environment; and/or - breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
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 and infrastructure areas
Mining operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site
Mining company	Mining, extractive industry or petroleum company
Minister	Minister for Planning, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the development
MSB	Mine Subsidence Board
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water within the Department of Primary Industries
OEH	Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>

Privately-owned land	Land that is not owned by the Crown or a mining company (or its subsidiary)
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, and ensure it is safe, stable and non-polluting
RFS	Rural Fire Service
RMS	Roads and Maritime Services
ROM coal	Run-of-mine coal
Secretary	Secretary of the Department, or nominee
Site	The land listed in Appendix 1
Loders Creek Aboriginal Cultural Heritage Conservation Area	The area depicted on Figure 9 in Appendix 4

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant 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 development.

TERMS OF CONSENT

2. The Applicant shall:
 - (a) carry out the development generally in accordance with the EIS; and
 - (b) the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.
3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant shall comply with any reasonable requirement/s of the Secretary arising from:
 - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Mining Operations

5. The Applicant may carry out mining operations on site for 21 years from the date of commencement of development under this consent.

Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Secretary and the DRE. Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

Coal Extraction

6. The Applicant shall not extract more than 10 million tonnes of ROM coal from the Mt Thorley mine in a calendar year.

Coal Transport

7. The Applicant shall:
 - (a) not transport any coal produced at the development by public road; and
 - (b) ensure that the coal produced on site is only sent to the Mt Thorley Coal Loader for transport by rail to export and/or domestic markets.

COMMENCEMENT OF DEVELOPMENT UNDER THIS CONSENT

8. The Applicant shall:
 - (a) notify the Secretary in writing of the date of commencement of development under this consent; and
 - (b) may only commence development under this consent once the Secretary has agreed in writing that all prerequisites to the commencement of development under this consent have been met.

SURRENDER OF EXISTING DEVELOPMENT CONSENT

9. By the end of January 2017, unless the Secretary agrees otherwise, the Applicant shall surrender the existing development consent (DA-34/95) for the Mt Thorley mine in accordance with Section 104A of the EP&A Act.

Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-34/95.

STRUCTURAL ADEQUACY

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

Notes:

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

DEMOLITION

11. The Applicant shall ensure that all demolition work on site is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

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

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

OPERATION OF PLANT AND EQUIPMENT

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

UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Applicant may:
- (a) submit any strategy, plan or program required by this consent on a progressive basis; and
 - (b) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the Warkworth mine.

To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

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

COMMUNITY ENHANCEMENT

15. TBC

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

ACQUISITION UPON REQUEST

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

Table 1: Land subject to acquisition upon request

Acquisition Basis	Receiver
Noise	144, 146, 149, 915

Note: To interpret the land referred to in Table 1, see the applicable figures in Appendix 3.

NOISE

Noise Criteria

- Except for the land in Table 1, the Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise Criteria dB(A)

Location	Land	Day (L_{Aeq} (15min))	Evening (L_{Aeq} (15min))	Night (L_{Aeq} (15min))	Night (L_{A1} (1 min))
Bulga	75	40	40	40	50
	42, 53, 55, 56, 57, 58, 60, 62, 63, 64, 65, 66, 71, 72, 73, 82, 210, 211, 236, 252, 920	39	39	39	49
	13, 16, 17, 19, 21, 24, 30, 31, 32, 33, 35, 36, 37, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 52, 54, 61, 67, 70, 74, 80, 84, 89, 215, 234, 235, 237, 238, 243, 254, 255, 903, 917, 918, 919, 929	38	38	38	48
	18, 20, 22, 23, 26, 28, 29, 38, 39, 230, 231, 253, 921, 922	37	37	37	47
	12, 14, 15, 226, 227, 228, 229, 909, 928, 936	36	36	36	46
	All other residences on privately owned land	35	35	35	45
Milbrodale	111	37	37	37	47
	All other residences on privately owned land	35	35	35	45
Warkworth	All other residences on privately owned land	38	38	38	48
Maison Dieu	All other residences on privately owned land	35	35	35	45
Gouldsville, Long Point	126, 262	38	38	38	48
	All other residences on privately owned land	35	35	35	45
Hambledon Hill/ Wylies Flat	All other residences on privately owned land	35	35	35	45
Mt Thorley	148	39	39	39	49
	190	38	38	38	48
	150	37	37	37	47
	All other residences on privately owned land	35	35	35	45

Note: To interpret the land referred to in Table 2, see the applicable figures in Appendix 3.

Noise generated by the development is to be measured in accordance with the relevant requirements

of the *NSW Industrial Noise Policy* (as may be updated from time-to-time). Appendix 6 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

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

ADDITIONAL NOISE MITIGATION UPON REQUEST

3. Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 3, the Applicant shall implement additional noise mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy*. They must also be reasonable and feasible and proportionate with the level of predicted impact.

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

Table 3: Land subject to additional noise mitigation upon request

Mitigation Basis	Characterisation of Impact	Receiver
Noise	Moderate	148, 190

Notes:

- To interpret the land referred to in Table 3, see the applicable figures in Appendix 3.
- Definitions of marginal and moderate mitigation are given in the *Voluntary Land Acquisition and Mitigation Policy*.

Operating Conditions

4. The Applicant shall:
 - (a) implement best management practice to minimise the operational, low frequency and road noise of the development;
 - (b) operate a comprehensive noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
 - (c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 6); and
 - (d) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

Noise Management Plan

5. The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to the commencement of any development under this consent;
 - (b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;
 - (c) describe the proposed noise management system in detail;
 - (d) include a noise monitoring program that:
 - evaluates and reports on:
 - o the effectiveness of the noise management system;
 - o compliance against the noise criteria in this consent; and
 - o compliance against the noise operating conditions;
 - includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time noise monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance with the noise criteria in this consent); and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

BLASTING

Blasting Criteria

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

Table 4: *Blasting criteria*

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

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

Blasting Hours

7. The Applicant shall only carry out blasting on site between 7am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

Blasting Frequency

8. The Applicant may carry out a maximum of:
 - (a) 2 blasts a day; and
 - (b) 6 blasts a week, averaged over a calendar year, at the site.

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

Notes:

- For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.
- For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast.
- In circumstances of recurring unfavourable weather conditions (following planned but not completed blast events), to avoid excess explosive sleep times and minimise any potential environmental impacts, the Applicant may seek agreement from the Secretary for additional blasts to be fired on a given day.

9. The Applicant shall not carry out more than 1 blast a day within 500 metres of the Putty Road.

Property Inspections

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

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

Property Investigations

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

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

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

Operating Conditions

12. During mining operations on site, the Applicant shall:
- implement best management practice to:
 - protect the safety of people and livestock in the surrounding area;
 - protect public or private infrastructure/property in the surrounding area from any damage; and
 - minimise the dust and fume emissions of any blasting;
 - ensure that blasting on the site does not damage any historic heritage sites;
 - minimise the frequency and duration of any road closures, and avoid road closures during peak traffic periods; and
 - 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.

Note: To identify the historic heritage sites referred to in this condition, see the applicable figure in Appendix 4.

13. The Applicant shall not undertake blasting on site within 500 metres of:
- any public road; or
 - any land outside the site that is not owned by the Applicant,
- unless:
- the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or
 - the Applicant has:
 - o demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and
 - o 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 road or land.

Blast Management Plan

14. The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to carrying out any development under this consent;
 - describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;
 - include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;
 - include a monitoring program for evaluating the performance of the development, including:
 - compliance with the applicable criteria;
 - avoiding any blasting impacts on the historic heritage items referred to in condition 12 above; and
 - minimising the fume emissions from the site.

AIR QUALITY

Air Quality Criteria

15. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately owned land.

Table 5: Long term impact assessment criteria for particulate matter

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

Table 6: Short term impact assessment criterion for particulate matter

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

Table 7: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase² in deposited dust level	Maximum total⁴ deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 5-7

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

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

^c 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; and

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

Mine-owned Land

16. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any occupied residence on mine-owned land (including land owned by another mining or petroleum company, unless and to the extent that:
- the tenant and landowner (if the residence is owned by another mining or petroleum company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;
 - the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;
 - air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or petroleum company) of the particulate emissions at the residence; and
 - data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property,
- to the satisfaction of the Secretary.

Operating Conditions

17. The Applicant shall:
- implement all reasonable and feasible measures to minimise the:
 - odour, fume and dust emissions of the development; and
 - release of greenhouse gas emissions from the development;
 - operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
 - minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and
 - co-ordinate the air quality management on site with the air quality management at nearby mines (including the Warkworth, Bulga, Wambo and Hunter Valley Operations mines) to minimise any cumulative air quality impacts,

to the satisfaction of the Secretary.

Air Quality Management Plan

18. The Applicant shall prepare and implement a detailed Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval prior to carrying out any development under this consent;
 - (b) describe the measures that would be implemented to ensure compliance with relevant air quality criteria and operating conditions of this consent;
 - (c) describe the proposed air quality management system; and
 - (d) include an air quality monitoring program that:
 - adequately supports the proactive and reactive air quality management system;
 - evaluates and reports on:
 - o the effectiveness of the air quality management system; and
 - o compliance with the air quality operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and
 - (e) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Warkworth, Bulga, Wambo and Hunter Valley Operations mines) to minimise the cumulative air quality impacts of these mines and the development.

METEOROLOGICAL MONITORING

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

WATER

Water Supply

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

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.

Compensatory Water Supply

21. The Applicant shall provide a compensatory water supply to the owner of any privately-owned land whose basic landholder water rights as defined in the *Water Management Act 2000* are adversely and directly impacted as a result of the development. This supply must be provided in consultation with NOW, and to the satisfaction of the Secretary.

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

If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

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

Note: The Water Management Plan (see condition 25) is required to include trigger levels for investigating potentially adverse impacts on water supplies.

Water Discharges

22. Unless an EPL or the EPA authorises otherwise, the Applicant shall ensure that all surface water discharges from the site comply with the:
- (a) discharge limits (both volume and quality) set for the development in any EPL; and
 - (b) relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

Note: For the avoidance of doubt, it is noted that the EPA will determine the cumulative allowable salinity discharges to the Hunter River catchment, according to rules of the Hunter River Salinity Trading Scheme and the respective quantities of tradeable salinity credits held by participants in the scheme (including the Bulga mine and other nearby mining operations).

Water Transfers

23. The Applicant may receive water from, and transfer water to, the Warkworth mine, Bulga mine, Hunter Valley Operations mine and Redbank Power Station.

Water Management Performance Measures

24. The Applicant shall comply with the performance measures in Table 8 to the satisfaction of the Secretary.

Table 8: Water management performance measures

Feature	Performance Measure
Water management – General	Minimise the use of clean water on site Minimise the need for make-up water from external supplies Maximise the use of mine water
Construction and operation of infrastructure	Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction</i> including <i>Volume 1</i>, <i>Volume 2A – Installation of Services</i> and <i>Volume 2C – Unsealed Roads</i> Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land (DPI 2007)</i>, or its latest version Design, install and maintain any creek crossings generally in accordance with the <i>Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013)</i> and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003)</i>, or their latest versions
Clean water diversion & storage infrastructure	Design, install and maintain the clean water system to capture and convey the 100 year ARI flood Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site
Sediment dams	Design, install and maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i>
Mine water storages	Design, install and maintain mine water storage infrastructure to ensure no unlicensed or uncontrolled discharge of mine water off-site (except in accordance with condition 20) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters
Flood mitigation measures	Design, install and maintain flood mitigation measures along the western side of the development, to ensure there is adequate freeboard between the Probable Maximum Flood level in Wollombi Brook and the crest levee or peak of the flood mitigation infrastructure Residual impacts downstream must be managed in an appropriate manner
Overburden emplacements	Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material Design, install and maintain emplacements to prevent offsite migration of saline groundwater seepage
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards
Loders Creek	Maintain or improve baseline channel stability Improve riparian health

Water Management Plan

25. The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the EPA, NOW and OEH and submitted to the Secretary for approval prior to carrying out any development under this consent; and
 - (b) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:
 - (i) Site Water Balance that:
 - includes details of:
 - o sources and security of water supply, including contingency planning for future reporting periods;
 - o water use and management on site, including details of water sharing between neighbouring mining operations;
 - o any off-site water transfers and discharges;
 - o reporting procedures, including the preparation of a site water balance for each calendar year; and
 - investigates and implements all reasonable and feasible measures to minimise water use on site;
 - (ii) Surface Water Management Plan, that includes:
 - detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development;
 - a detailed description of the water management system on site, including the:
 - o clean water diversion systems;
 - o erosion and sediment controls (mine water system); and
 - o mine water management systems including irrigation areas;
 - detailed plans, including design objectives and performance criteria, for:
 - o design and management of final voids;
 - o design and management for the emplacement of coal reject materials;
 - o reinstatement of drainage lines on the rehabilitated areas of the site; and
 - o control of any potential water pollution from the rehabilitated areas of the site;
 - performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the development:
 - o mine water management system;
 - o surface water quality of Loders Creek; and
 - o channel stability, stream and riparian vegetation health of Loders Creek;
 - a program to monitor and report on:
 - o the effectiveness of the mine water management system; and
 - o surface water flows and quality, stream and riparian vegetation health in Loders Creek potentially affected by the development;
 - a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and
 - (iii) Groundwater Management Plan, which includes:
 - detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development;
 - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor and report on:
 - o groundwater inflows to the open cut pits;
 - o the seepage/leachate from water storages, emplacements, backfilled voids, and final voids;
 - o the impacts of the development on:
 - regional and local (including alluvial) aquifers;
 - groundwater supply of potentially affected landowners;
 - groundwater dependent ecosystems and riparian vegetation;
 - base flows to Wollombi Brook;
 - a plan to respond to any exceedances of the groundwater assessment criteria; and
 - a program to validate the groundwater model for the development, including an independent review of the model with every independent environmental audit, and compare the monitoring results with modelled predictions.

HERITAGE

Protection of Heritage Items

26. The Applicant shall protect the heritage items identified in Table 1 of Appendix 4.

Loders Creek Aboriginal Cultural Heritage Conservation Area

27. Within 3 years of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant shall enter into a conservation agreement or agreements pursuant to section

69B of the *National Parks and Wildlife Act 1974* relating to the Loders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreement/s pursuant to section 69F of the *National Parks and Wildlife Act 1974*.

Note: The location of the conservation area is shown in the figure in Appendix 4.

Aboriginal Heritage Management Plan

28. The Applicant shall prepare and implement an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with OEH and Aboriginal stakeholders, and submitted to the Secretary for approval prior to carrying out any development under this consent;
 - (b) include a program to:
 - salvage, investigate and/or manage Aboriginal sites and potential archaeological deposits within the project disturbance area;
 - assess and remove scarred trees within the disturbance area;
 - protect and monitor Aboriginal sites outside the project disturbance area;
 - manage the discovery of any new Aboriginal objects or skeletal remains during the development;
 - facilitate access to archaeological sites on site for Aboriginal stakeholders; and
 - Aboriginal stakeholders are consulted and involved in the conservation and management of Aboriginal cultural heritage on the site.

TRANSPORT

Monitoring of Coal Transport

29. The Applicant shall:
- (a) keep records of the amount of coal transported from the development in each calendar year; and
 - (b) make these records available on its website at the end of each calendar year.

VISUAL

Operating Conditions

30. The Applicant shall:
- (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users;
 - (b) establish and maintain an effective vegetative screen along the boundary of the site that adjoins public roads;
 - (c) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version; and
 - (d) monitor and report on the effectiveness of these measures, to the satisfaction of the Secretary.

Additional Visual Impact Mitigation

31. Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development, the Applicant shall implement additional visual mitigation measures (such as landscaping or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities.

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

Notes:

- *The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from significantly affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.*
- *The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (i.e. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).*
- *Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 5 kilometres from the mining operations.*

BUSHFIRE MANAGEMENT

32. The Applicant shall:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - assist the Rural Fire Service and emergency services as much as practicable if there is a fire in the vicinity of the site.

WASTE

33. The Applicant shall:
- implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the development;
 - ensure that the waste generated by the development is appropriately stored, handled and disposed of; and
 - monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.

REHABILITATION

Rehabilitation Objectives

34. The Applicant shall rehabilitate the site to the satisfaction of the DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in the figure in Appendix 5), and comply with the objectives in Table 9.

Table 9: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	- Safe, stable and non-polluting - Final landforms to: - be designed to minimise the visual impacts of the development; - be in keeping with the natural terrain features of the area; - be integrated with the rehabilitated landforms of surrounding mines; - incorporate micro-relief; and - avoid straight run drainage drop structures
Revegetation	Vegetation to be established with at least 483 ha of Central Hunter Grey Box - Ironbark Woodland EEC
Surface infrastructure	To be decommissioned and removed, unless the DRE agrees otherwise
Community	- Ensure public safety - Minimise the adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

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

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

Rehabilitation Management Plan

36. The Applicant shall prepare and implement a Rehabilitation Management Plan for the development to the satisfaction of the DRE. This plan must:
- be submitted to the DRE for approval prior to carrying out any development under this consent;
 - be prepared in consultation with the Department, NOW, OEH, Council and the CCC;
 - be prepared in accordance with any relevant DRE guideline;
 - describe how the rehabilitation of the site would be integrated with the implementation the biodiversity offset strategy;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
 - describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform, and final land use;
 - include interim rehabilitation where necessary to minimise the area exposed for dust generation;

- (h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
 - (i) build to the maximum extent practicable on the other management plans required under this consent.
-

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS/TENANTS

1. Within 1 month of the date of this consent, the Applicant shall:
 - (a) notify in writing the owners of:
 - the land listed in Table 1 of schedule 3 that they have the right to require the Applicant to acquire their land in accordance with the procedures in conditions 5-6 below at any stage during the development;
 - any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and
 - any privately-owned land within 2 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
 - (b) notify the tenants of any mine-owned land of their rights under this consent (see condition 16 of schedule 3); and
 - (c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.
2. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant shall:
 - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
 - (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.
3. As soon as practicable after obtaining monitoring results showing:
 - (a) an exceedance of any relevant criteria in schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and
 - (b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

INDEPENDENT REVIEW

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

If the Secretary is satisfied that an independent review is warranted, then the Applicant shall:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in schedule 3; and
 - if the development is not complying with these criteria then:
 - o determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land;
 - o 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 within 2 months of the Secretary's decision, unless the Secretary agrees otherwise.

LAND ACQUISITION

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

- presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise mitigation measures in condition 3 of schedule 3;
- (b) the reasonable costs associated with:
 - relocating within the Muswellbrook, Singleton or Cessnock local government area, 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 Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.

Upon receiving such a request, the Secretary shall 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 Applicant shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the Applicant 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 Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.

6. The Applicant 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 Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval prior to carrying out any development under this consent;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (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 mine development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

Adaptive Management

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

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

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

Management Plan Requirements

3. The Applicant shall ensure that the management plans required under this consent 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 development 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 development;
 - 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 development over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and

- (h) a protocol for periodic review of the plan.

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

Annual Review

4. By the end of March each year, the Applicant shall review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:
- describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
 - include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the EIS;
 - identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - identify any trends in the monitoring data over the life of the development;
 - identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - describe what measures will be implemented over the next year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

5. Within 3 months of the submission of an:
- annual review under condition 4 above;
 - incident report under condition 7 below;
 - audit report under condition 9 below; or
 - any modification to the conditions of this consent (unless the conditions require otherwise),
- the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.

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 development.

Community Consultative Committee

6. The Applicant shall operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version). It may also be combined with any CCC for the Warkworth mine.

Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.
- In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.

REPORTING

Incident Reporting

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

Regular Reporting

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

AUDITING

Independent Environmental Audit

9. Within 1 year of the commencement of development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. 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 development and assess whether it is complying with the requirements in this consent 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 abovementioned approvals; and
 - (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.

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

10. Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant 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

11. From the commencement of development under this consent, the Applicant shall:
- (a) make copies of the following publicly available on its website:
 - the EIS;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years, if applicable);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - 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

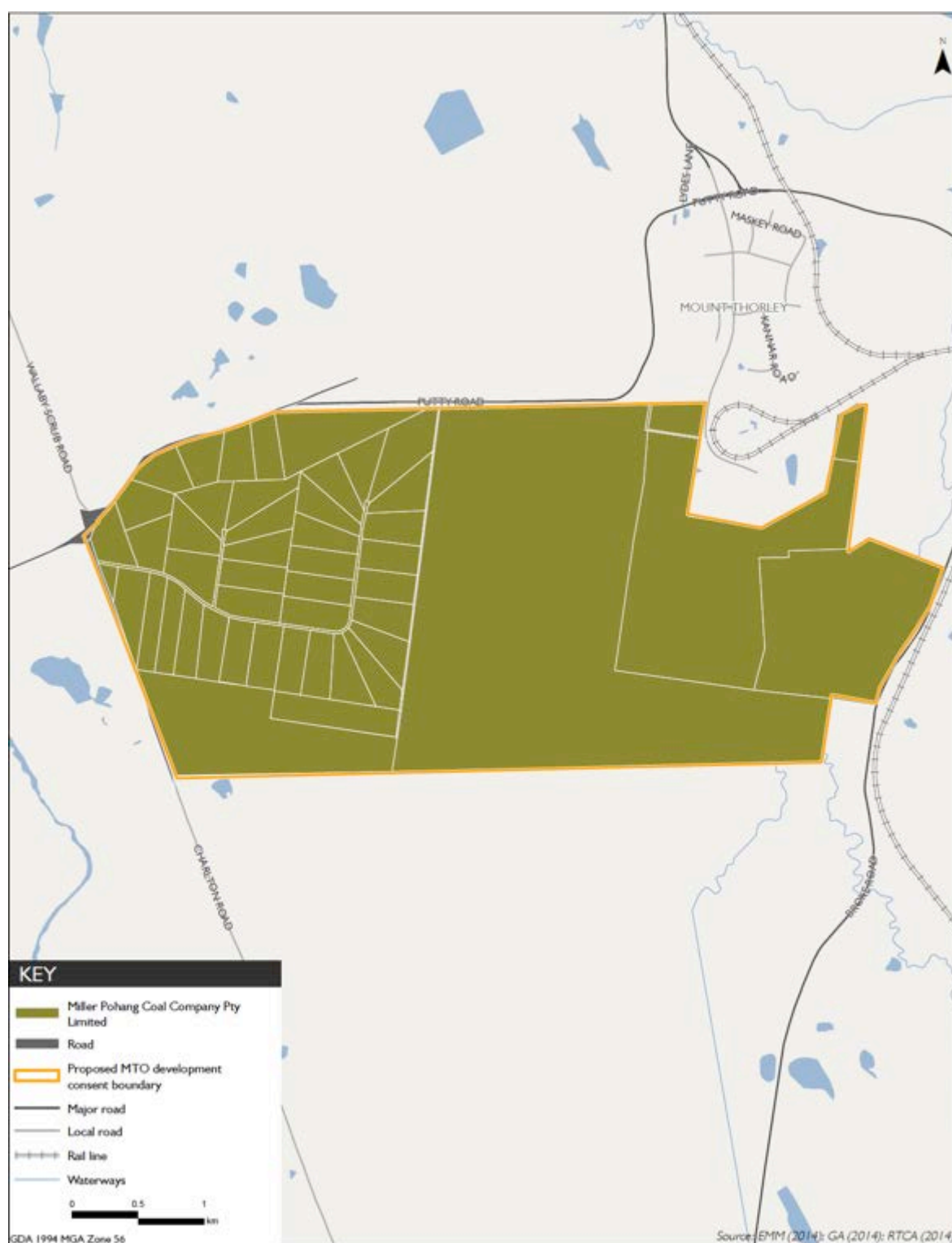


Figure 1: Land Ownership Plan Within the Development Application Area

LOT	DP	OWNER
1	45576	Miller Pohang Coal Company Pty Limited
36	755270	Miller Pohang Coal Company Pty Limited
29	248429	Miller Pohang Coal Company Pty Limited
28	248429	Miller Pohang Coal Company Pty Limited
271	600747	Miller Pohang Coal Company Pty Limited
8	251238	Miller Pohang Coal Company Pty Limited
1	42614	Miller Pohang Coal Company Pty Limited
37	248429	Miller Pohang Coal Company Pty Limited
39	248429	Miller Pohang Coal Company Pty Limited
3	247340	Miller Pohang Coal Company Pty Limited
1	247340	Miller Pohang Coal Company Pty Limited
555	609997	Miller Pohang Coal Company Pty Limited
35	248429	Miller Pohang Coal Company Pty Limited
17	658927	Miller Pohang Coal Company Pty Limited
41	248429	Miller Pohang Coal Company Pty Limited
43	248429	Miller Pohang Coal Company Pty Limited
6	247340	Miller Pohang Coal Company Pty Limited
8	247340	Miller Pohang Coal Company Pty Limited
19	247339	Miller Pohang Coal Company Pty Limited
46	248429	Miller Pohang Coal Company Pty Limited
708	749857	Miller Pohang Coal Company Pty Limited
22	263943	Miller Pohang Coal Company Pty Limited
2	42614	Miller Pohang Coal Company Pty Limited
9	247340	Miller Pohang Coal Company Pty Limited
7	247340	Miller Pohang Coal Company Pty Limited
272	600747	Miller Pohang Coal Company Pty Limited
271	260663	Miller Pohang Coal Company Pty Limited
38	248429	Miller Pohang Coal Company Pty Limited
4	247340	Miller Pohang Coal Company Pty Limited
2	247340	Miller Pohang Coal Company Pty Limited
56	755270	Miller Pohang Coal Company Pty Limited
36	248429	Miller Pohang Coal Company Pty Limited
42	248429	Miller Pohang Coal Company Pty Limited
12	247340	Miller Pohang Coal Company Pty Limited
14	247340	Miller Pohang Coal Company Pty Limited
34	248429	Miller Pohang Coal Company Pty Limited
18	247340	Miller Pohang Coal Company Pty Limited
16	247340	Miller Pohang Coal Company Pty Limited
31	248429	Miller Pohang Coal Company Pty Limited
10	247340	Miller Pohang Coal Company Pty Limited
44	248429	Miller Pohang Coal Company Pty Limited

LOT	DP	OWNER
33	248429	Miller Pohang Coal Company Pty Limited
11	247340	Miller Pohang Coal Company Pty Limited
30	248429	Miller Pohang Coal Company Pty Limited
5	247340	Miller Pohang Coal Company Pty Limited
13	247340	Miller Pohang Coal Company Pty Limited
45	248429	Miller Pohang Coal Company Pty Limited
273	260663	Miller Pohang Coal Company Pty Limited
15	247340	Miller Pohang Coal Company Pty Limited
17	247340	Miller Pohang Coal Company Pty Limited
40	248429	Miller Pohang Coal Company Pty Limited
32	248429	Miller Pohang Coal Company Pty Limited
1	43422	Miller Pohang Coal Company Pty Limited

APPENDIX 2 DEVELOPMENT LAYOUT PLANS

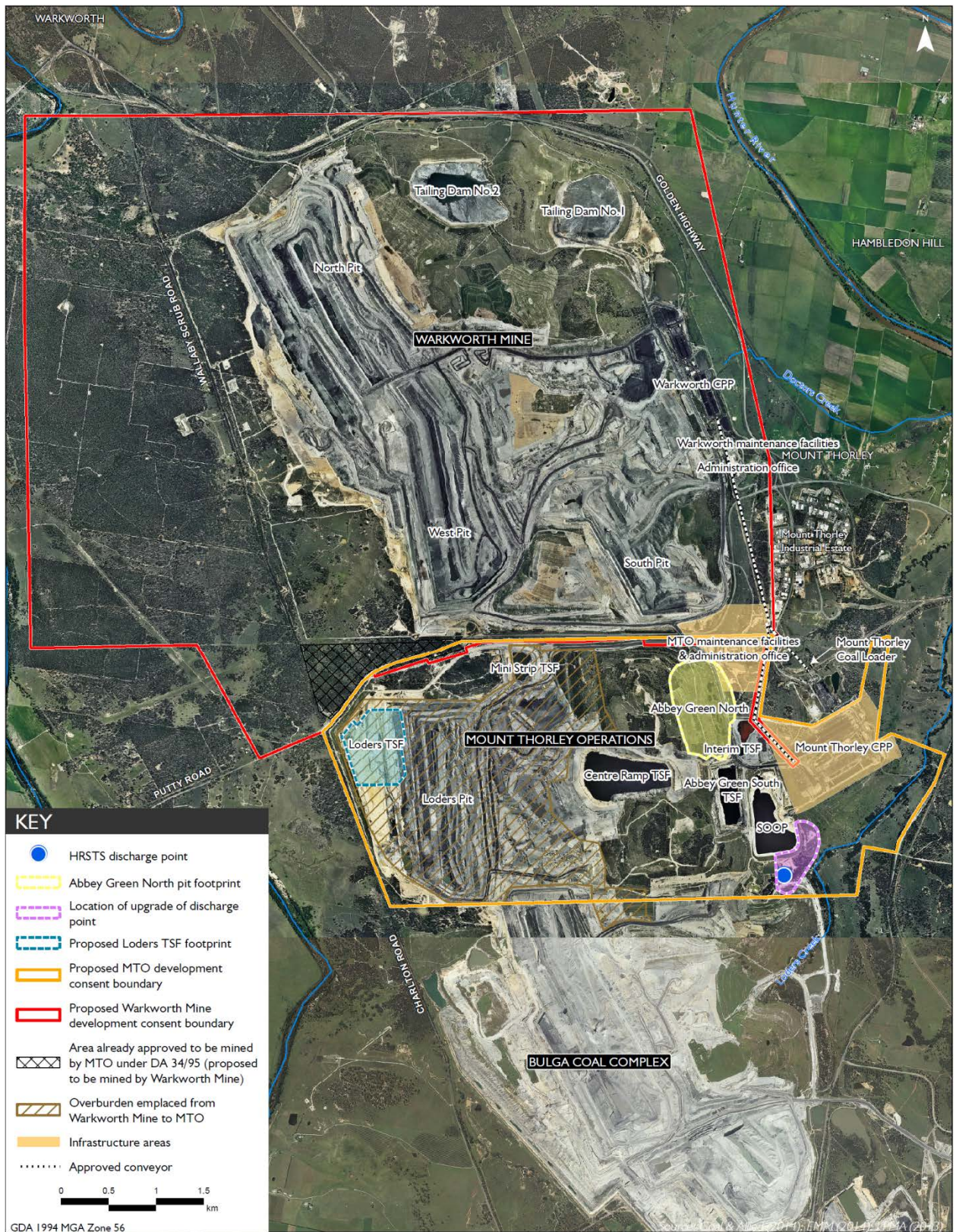


Figure 2: Project Layout

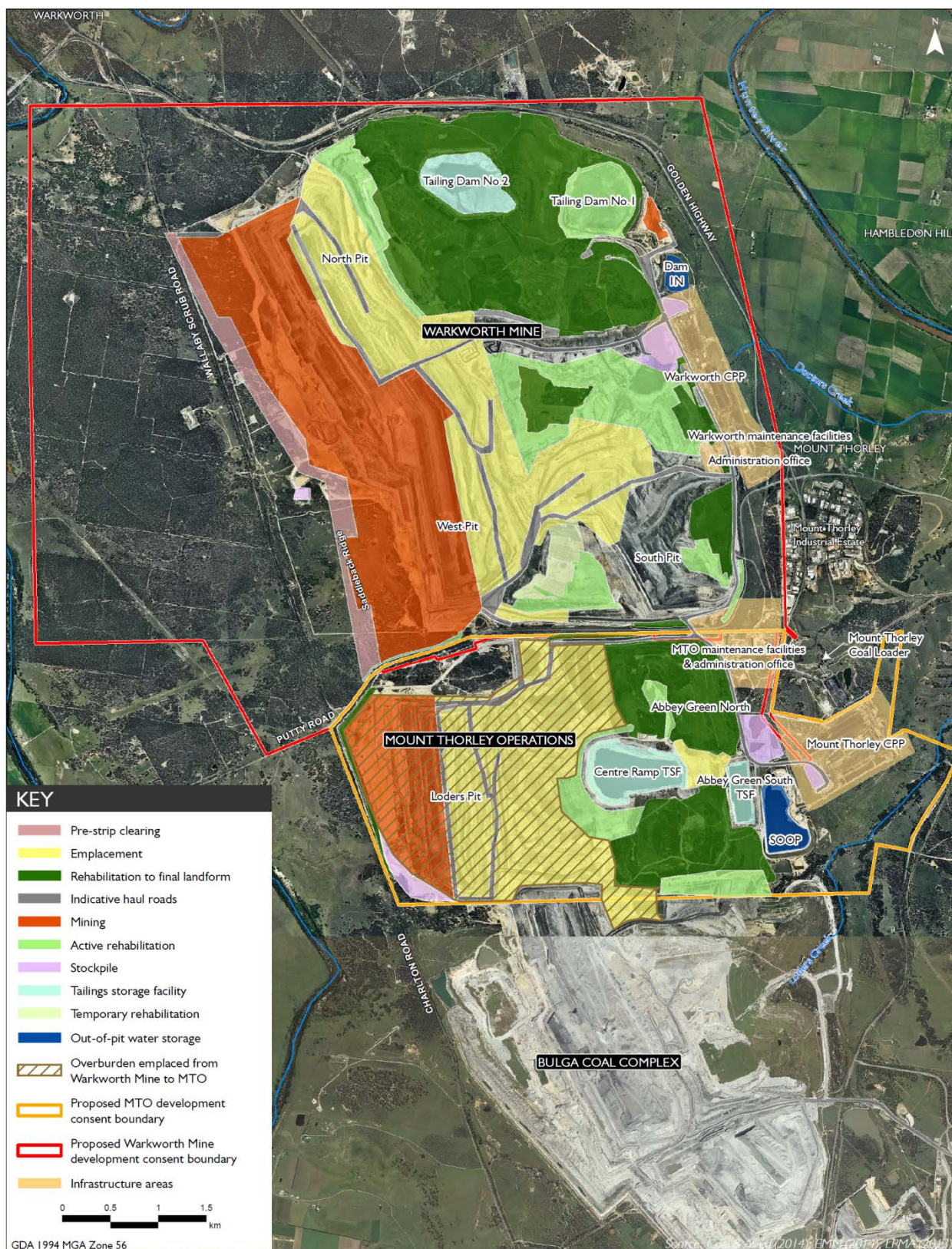


Figure 3: Conceptual Mine Plan - Year 3

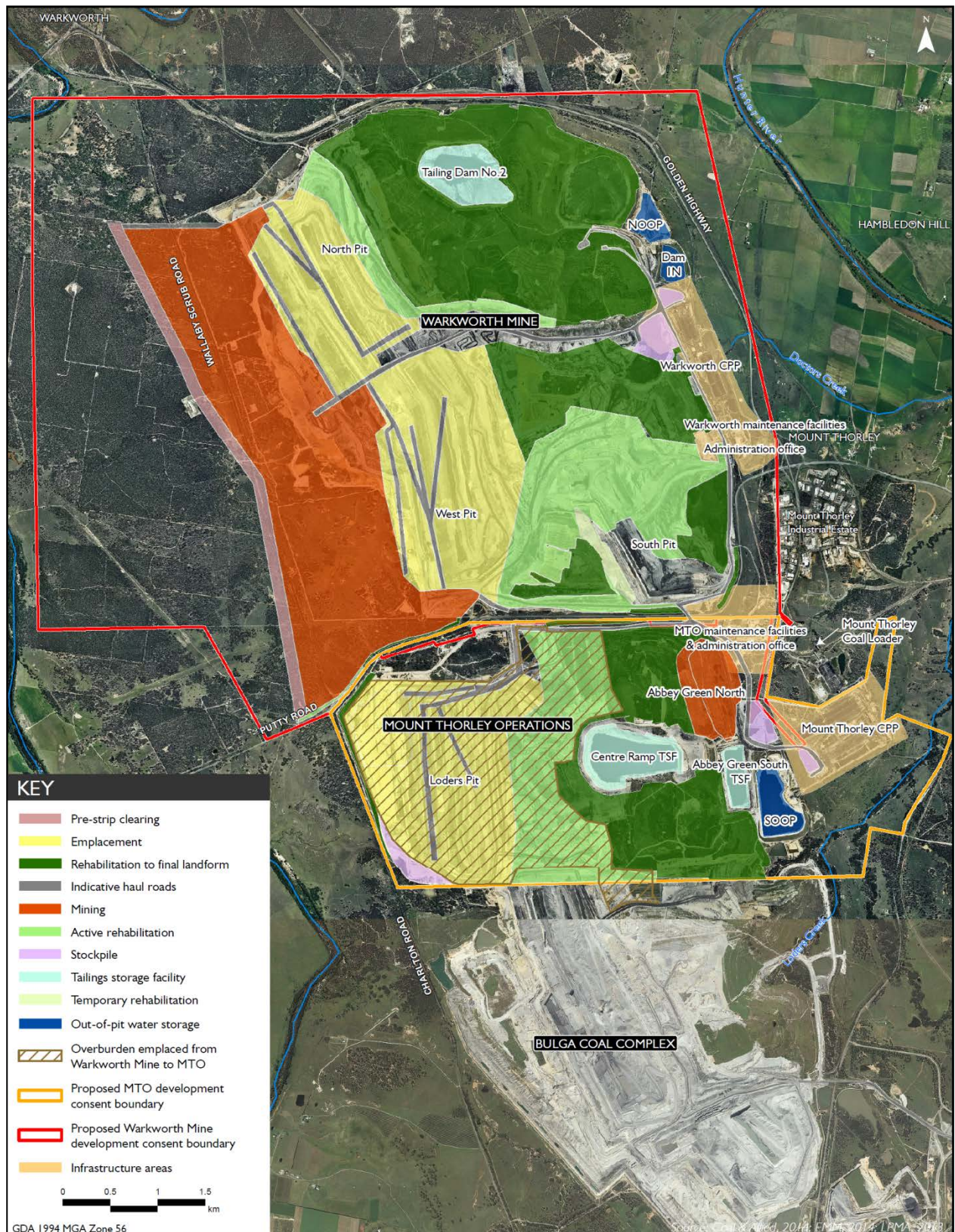


Figure 4: Conceptual Mine Plan - Year 9

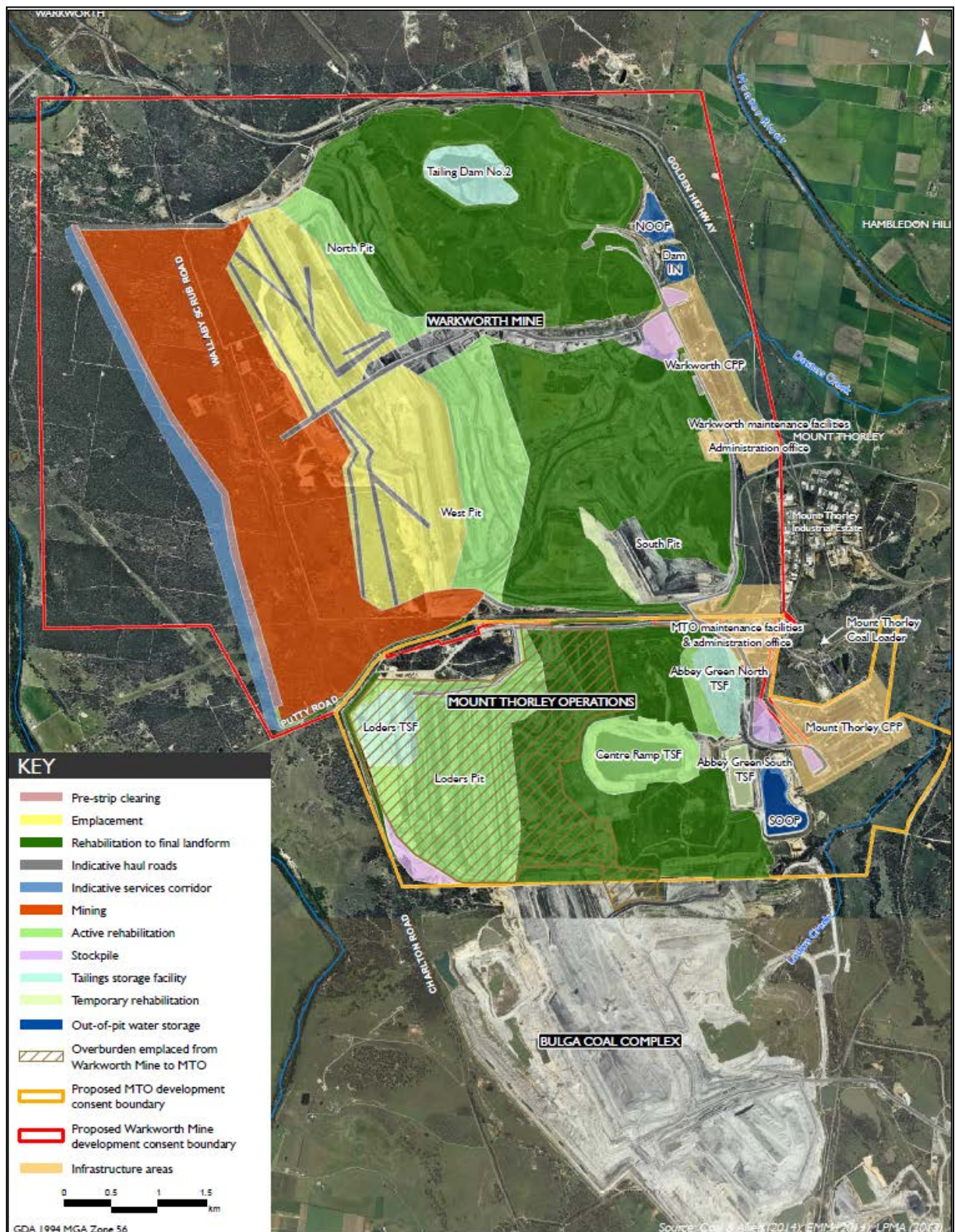


Figure 5: Conceptual Mine Plan - Year 14

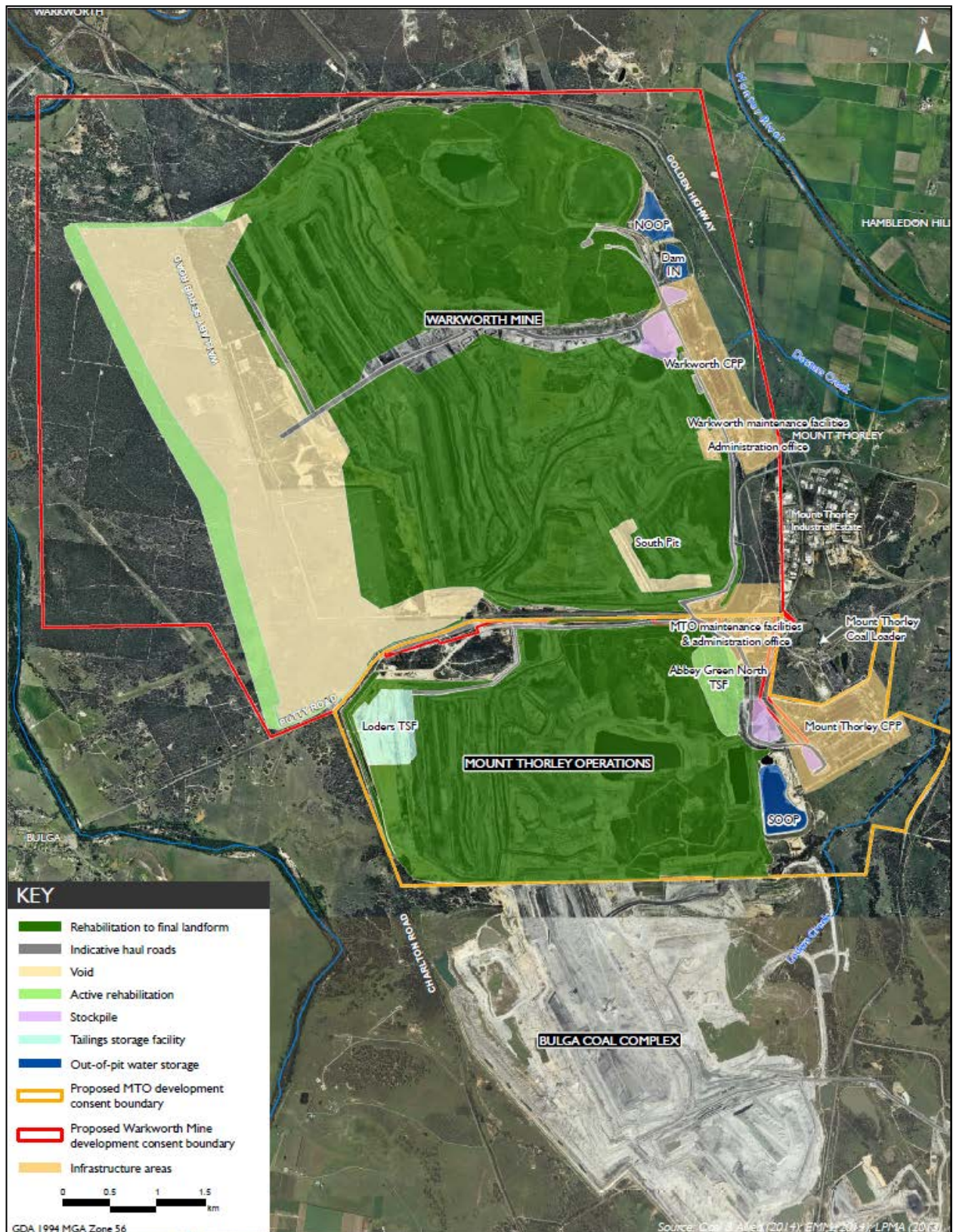


Figure 6: Conceptual Mine Plan - Year 21

APPENDIX 3 LAND OWNERSHIP PLANS

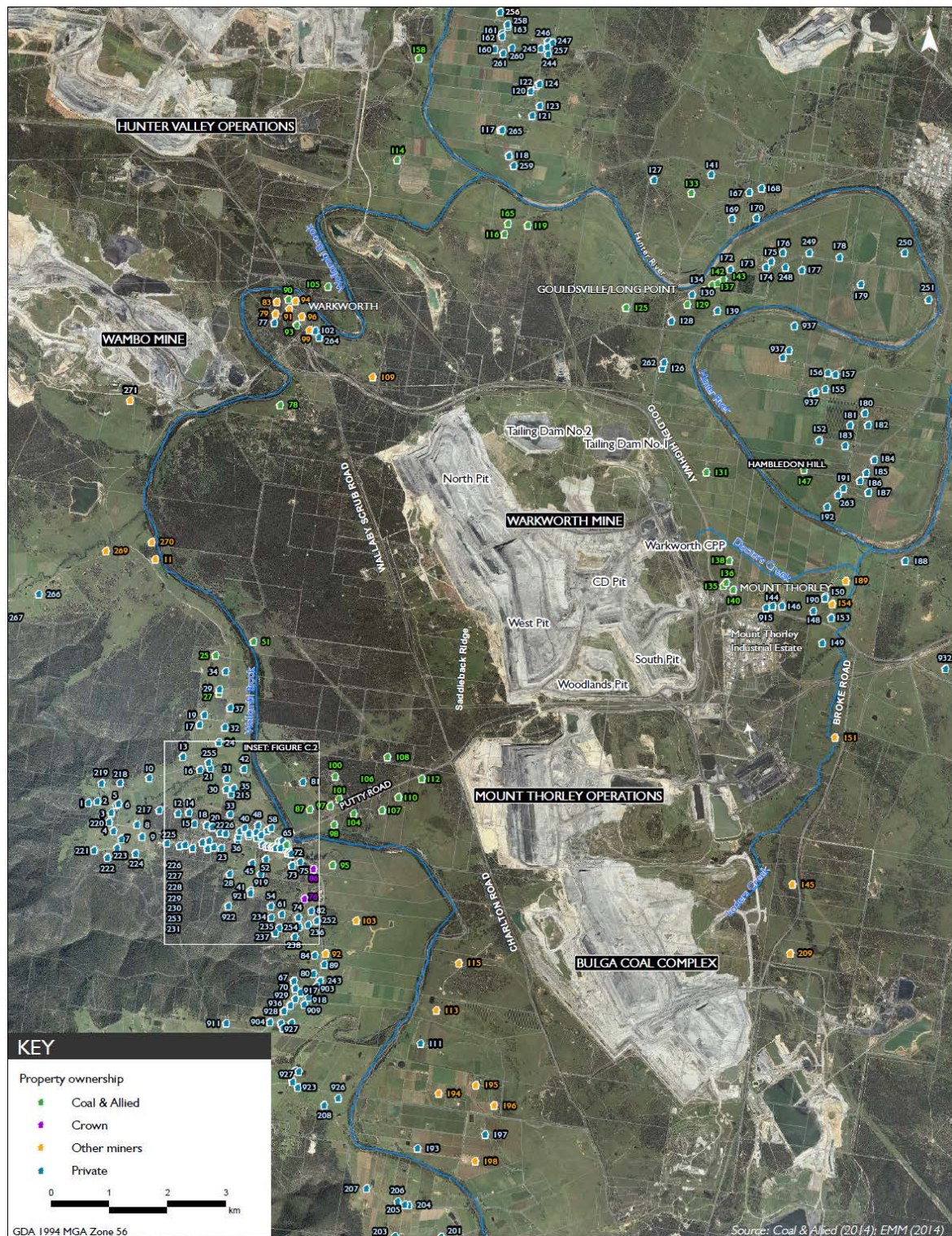


Figure 7: Surrounding Residences

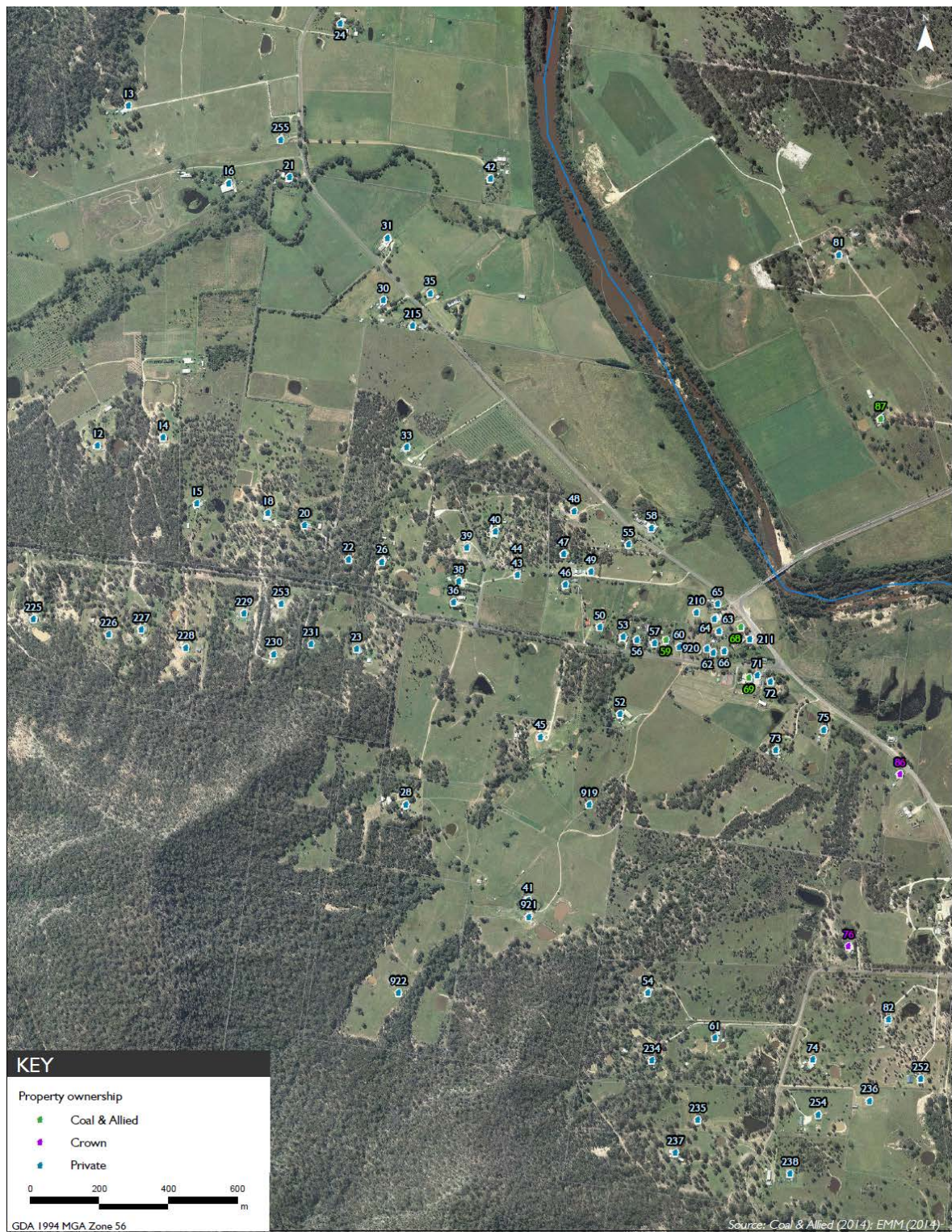


Figure 8: Surrounding Residences – South West (Bulga)

Assessment location ID	Property owner
1	Judith Leslie
2	Shayne Aaron Currie
3	Charleroi Pty Limited
4	Graeme O'Brien & Susann Florence O'Brien
5	Daniel Bruce Jones
6	Russell James Doidge, Trinette Louise Reid
7	Darral Keith Margery & Annette Gaye Margery
8	Laurence Fletcher, Margaret Ann Fletcher
9	Donald Bruce Roser
10	Andrew Mark Robey, Kim Luanne Robey
11	Wambo Mining Corporation Pty. Limited
12	Ronald Alexander Corino, Pauline Rayner
13	Ilario Francisco Circosta, Maria Angela Circosta*
14	Karin Margaret Hunt
15	William Lindsay Gordon Slaney, Peta Slaney
16	Leona Ann Williams
17	George David Lianos, Honor Claire Lianos
18	Barry John Anderson, Melissa Gai Anderson
19	Denis Cyril Maizey, Elaine Margaret Maizey
20	Gregory William Banks, Marion Elizabeth Banks
21	Gregory William Banks, Marion Elizabeth Banks
22	Elizabeth Mackenzie
23	Peter Jason Kolatchew, Heidi Kolatchew
24	Ronald Garry Bailey, Fiona Susan Bailey
25	William George Joseph Lambkin, Dawn Lambkin*
26	Barbara Gae Harrison, Trevor Eric Harrison
27	Warkworth Mining Limited
28	Hubert George Upward
29	Ilario Francisco Circosta, Maria Angela Circosta*
30	Damien Michael Hanson, Danielle Louise Hanson
31	Gregory Malcolm Caban
32	Paul Mark Dunn, Susan Joy Urwin
33	Ian Norris Bartholomew, Annette Maria Bartholomew
34	Allan Clyde Lepisto, Nerida Lepisto
35	Lawrence Malcolm Caban, Rhonda Beryl Caban
36	Raymond Carl Powell
37	Gregory Paul Crowe
38	Benjamin John Street, Jami Ann Street
39	Gregory John Mcnaught
40	Margaret Player, John MacLachlan Player
41	Hubert George Upward
42	Mark Anthony Lancaster, Debbie Marie Lancaster
43	Geoffrey Allen Burgess, Betty Joy Burgess
44	Barry Fogwell
45	Adam Charles Cameron
46	Jason Phillip Horn
47	Philip Adamthwaite
48	Brett James Gallagher, Rebecca Louise Gallagher

Assessment location ID	Property owner
49	John Thompson, Delwyn Kay Jackson
50	Bradley Richard Sales, Sharon Ann Bellamy
51	Warkworth Mining Limited
52	Stewart James Mitchell, Marie Clare Mitchell
53	Robert McLaughlin
54	Christopher Stanley Neville & Elizabeth Ann Neville
55	Robert John Evans
56	Leonard Walter Mclachlan, Noelene Rita Mclachlan
57	Paul William Harris, Tracey Anne Swindail
58	David Andrew Gregory
59	Warkworth Mining Limited
60	Vaughan Thomas Cagney, Candice Rose Albert
61	Darrell Stanley Kaizer
62	Dwi Octaviani
63	Margueriette Ann Henneberry, Paul Andrew Burgess
64	Dusko Dragicevic, Milan Dragicevic
65	Gordon Keith Grainger, Selma Rosalind Grainger
66	Michael Vivian Bendall, Sue-Ellen Bendall
67	Michael Shane Dawson & Suzana Dawson
68	Warkworth Mining Limited
69	Warkworth Mining Limited
70	Peter Francis Ritchie And Fiona Jennifer Ritchie
71	Robert Ian Hedley, Jan Maree Louis
72	Frank Henry Turnbull
73	Phillip Joseph Reid, Carol Reid
74	Ronald Guy Godyn, Anne-Marie Godyn
75	Lindsay Robert Smith, Jillian Maree Smith
76	The State Of New South Wales
77	William Joseph Kelly, Marie Joyce Kelly, Lawrence Kelly
78	Warkworth Mining Limited
79	Wambo Mining Corporation Pty. Limited
80	Dimitrious Vikas & Joy Mary Vikas
81	Agl Energy Limited
82	Stephen Glenn Williamson, Nicole Leanne Highett
83	Xstrata Coal Pty Limited
84	Mary Veronica Thompson
86	The State Of New South Wales
87	Andre Marc Renaud, Noela Mary Renaud*
89	Bryan Dudley Medhurst
90	Coal & Allied Operations Pty Limited
91	Wambo Coal Pty Limited
92	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
93	Coal & Allied Operations Pty Limited
94	Wambo Coal Pty Limited
95	Miller Pohang Coal Company Pty Limited
96	Wambo Mining Corporation Pty. Limited
97	Warkworth Mining Limited
98	Miller Pohang Coal Company Pty Limited

Assessment location ID	Property owner
99	Wambo Coal Pty Limited
100	Miller Pohang Coal Company Pty Limited
101	Miller Pohang Coal Company Pty Limited
102	Brian Edward Kennedy, John Griffiths
103	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
104	Miller Pohang Coal Company Pty Limited
105	Coal & Allied Operations Pty Limited
106	Miller Pohang Coal Company Pty Limited
107	Miller Pohang Coal Company Pty Limited
108	Miller Pohang Coal Company Pty Limited
109	Xstrata Coal (Nsw) Pty Limited
110	Miller Pohang Coal Company Pty Limited
111	Ian Wallace Russell
112	Miller Pohang Coal Company Pty Limited
113	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
114	Coal & Allied Operations Pty Limited
115	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
116	Coal & Allied Operations Pty Limited
117	Phillip John Algie, Colleen Ann Maree Algie
118	Robert John Algie
119	Coal & Allied Operations Pty Limited
120	Russell John Wenham, Janelle Susan Wenham
121	Julie Gai Ernst, Gregory John Ernst
122	Stephen Douglas Edwards, Terri-Anne Howard, Joselyn Vida Clifton
123	Neil Robert Nelson, Glenda Joy Nelson
124	Stephen Douglas Edwards, Terri-Anne Howard, Joselyn Vida Clifton
125	Coal & Allied Operations Pty Limited
126	Peter Glen Stuart
127	Noel Francis Riley, Elaine Roslyn Riley
128	Warren John Welsh, Adam John Young
129	Coal & Allied Operations Pty Limited
130	Francescantonio Ventra, Joanne Ventra
131	Warkworth Mining Limited
133	Coal & Allied Operations Pty Limited
134	Andrew Arthur Barrett, Nicole Maree Kenny
135	Warkworth Mining Limited
136	Warkworth Mining Limited
137	Coal & Allied Operations Pty Limited
138	Warkworth Mining Limited
139	Kevin Denis Hartcher, Linda Anne Hartcher
140	Warkworth Mining Limited
141	Warren Thomas Barry, Lesley Una Barry
142	Coal & Allied Operations Pty Limited
143	Coal & Allied Operations Pty Limited
144	Jason Cyril Rumbel, Rebecca Ruth Rumbel
145	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
146	Paul Henry Russell
147	Warkworth Mining Limited

Assessment location ID	Property owner
148	Dorothy Clare Russell
149	Timothy Peter Hedley
150	Keith David Isaac, Sharon Ann Isaac
151	Bulga Coal Management Pty Limited
152	Graham Edwin Berry, Elizabeth Anne Berry
153	Thomas William Kermode, Kathleen May Kermode
154	Bulga Coal Management Pty Limited
155	Trevor Keith Berry, Graham Edwin Berry
156	Jean Mary O'Hara
157	Jean Mary O'Hara
158	Coal & Allied Operations Pty Limited
160	Elizabeth Stuart Bowman
161	Wyoming Holsteins Pty Limited
162	Wyoming Holsteins Pty Limited
163	Wyoming Holsteins Pty Limited
165	Coal & Allied Operations Pty Limited
167	Nathan James Laing
168	Stuart Francis Nichol Wright, Pamela Lynn Wright
169	Harold Douglas Hobden
170	John Marcheff
172	John Stuart Gough, Lynette Jean Gough
173	Michael John Wellard, Faye Denise Wellard
174	Margaret Anne Neal
175	Bradley John Halter
176	Michael Raymond Mapp, Shirley Maree Mapp
177	Greig Andrew Delaney
178	Craig Ian Flissinger, Catherine Anne Flissinger
179	Tickalara Pty. Limited
180	Bruce Graham Moore
181	David Charles Vassallo, Sheree Ann Vassallo
182	Robert Francis Holstein And Andrea Terry Holstein
183	Paul Anthony Cavanough, Jacinta Jade Dawkins
184	Campbell Stuart Ball And Gail Agnes Ball
185	Leonard Dale Franks
186	Leonard Dale Franks
187	Keith Heuston Pty. Limited
188	Comserve (No.932) Pty Ltd
189	Bulga Coal Management Pty Limited
190	Keith David Isaac, Sharon Ann Isaac
191	Robert John Vidler, Coral May Vidler
192	Jean Mary O'Hara
193	Robert Kennedy
194	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
195	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
196	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
197	Robert Kennedy
198	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
199	Adrian Garton, Susan Jean Garton

Assessment location ID	Property owner
200	Karren Anne Mccraw, Kenneth Ian Mccraw
201	Richard James Owens
202	Richard James Owens
203	Grapemen Holdings Pty Limited
204	Brenda Joan Tanner
205	Victoria Ann Foster
206	Theo Poulos, Maria Poulos
207	John Stephen Tulloch
208	Cybele Genevieve Orton
209	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
210	Meria Violet Ford
211	Mike Dean Silk, Antoinette Silk
215	Allan Wayne Louis, Cheryl Anne Louis
217	Packtron Packaging Pty Limited
218	Phillip John Haerse, Elizabeth Rae Haerse
219	Philip Geoffrey Carroll
220	George Jiri Tlaskal
221	Christina Mary Metlikovec
222	John Vincent Putland
223	Andrew Glenn Upward
224	Rex Wayne Davis, Heather Anne Davis
225	Anthony and Trudie Seibel – Barnes
226	Neale Mccallum, Julie Marie Mcnaughton
227	Ian Wyn Jones, Karen Michelle Jones
228	Jason Peter Passlow, Belinda Louise Lee
229	Maurice Francis Chapman, Nellie Vera Chapman
230	Paul Dermot Byrne O'Toole, Melissa Jane O'Toole
231	Mark Mcalpin Roser, Nicole Roser
234	Robert John Bridge, Kylie Terese Bridge
235	Garrett James Walters & Clare Joanne Gowans
236	Scott Francis Ryan
237	Leslie Carol Krey
238	Raymond George Caban, Kathryn Louise Caban
243	John Patrick Cant, Cherie Margaret Cant
244	Todd Anthony Mills, Sharron Ann Mills
245	Chriss Ivan Maskey
246	Paul Raymond Burley, Catherine Maree Burley
247	Tony Zanardi, Sandra Maree Zanardi
248	Keith Joseph Horne
249	Thomas William Watson, Betty Watson
250	John Michael Woods
251	Frederick John & Carole Maria Flinn
252	Jaques Family Investments Pty Limited
253	Stuart Edward Reakes
254	Peter William Shore & Melanie Louise Shore
255	Ilario Francisco Circosta, Maria Angela Circosta*
256	Bruce Eric Moxey, Thea Anne Moxey
257	Robert John Algie

Assessment location ID	Property owner
258	Wyoming Holsteins Pty Limited
259	Robert John Algie
260	Wyoming Holstiens Pty. Limited
261	Wyoming Holstiens Pty. Limited
262	Peter Glen Stuart
263	John Klasen, Ruth Anne Klasen
264	George Robert Miller
265	Phillip John Algie, Colleen Ann Maree Algie
266	Ronald Wayne Fenwick
267	Kenneth Max Brosi
268	Kenneth Max Brosi, Julie Anne Brosi & Pauline June Mcloughlin
269	Wambo Mining Corporation Pty Limited
270	Wambo Mining Corporation Pty Limited
271	Wambo Mining Corporation Pty Limited
903	Adam John Baker
904	Allan Mark Brasington, Judith Anne Brasington
905	Cameron Michael Turner, Melissa Jayne Harris
909	Emanuel Victor Vassallo
911	Gary Dale Harris
915	Jason Cyril Rumbel, Rebecca Ruth Rumbel
917	John Robert Lamb
918	Joseph Vassallo, Doris Vassallo
919	Kenneth Neil Cameron
920	Lindsay Gordon Harris, Jillian May Ferguson
921	Melanie Caban, Keiran Lionel Caban
922	Melanie Evelyn Upward
923	Michelle Maria Brennan
926	Paul William Mackay, Suzanne Elizabeth Mackay
927	Phillip John Gunter, Leona Mary Gunter
928	Sarah Elizabeth Purser, Stirling Owen Keayes
929	Simon James Beavis
932	Stephen Dennis Tipping
936	Thomas Charles Jackson, Susan Gai Jackson
937	Trevor Keith Berry, Graham Edwin Berry

** at date of document publication private residence status still being determined on land transfer and have been treated as mine owned properties in the EIS.*

APPENDIX 4
HERITAGE

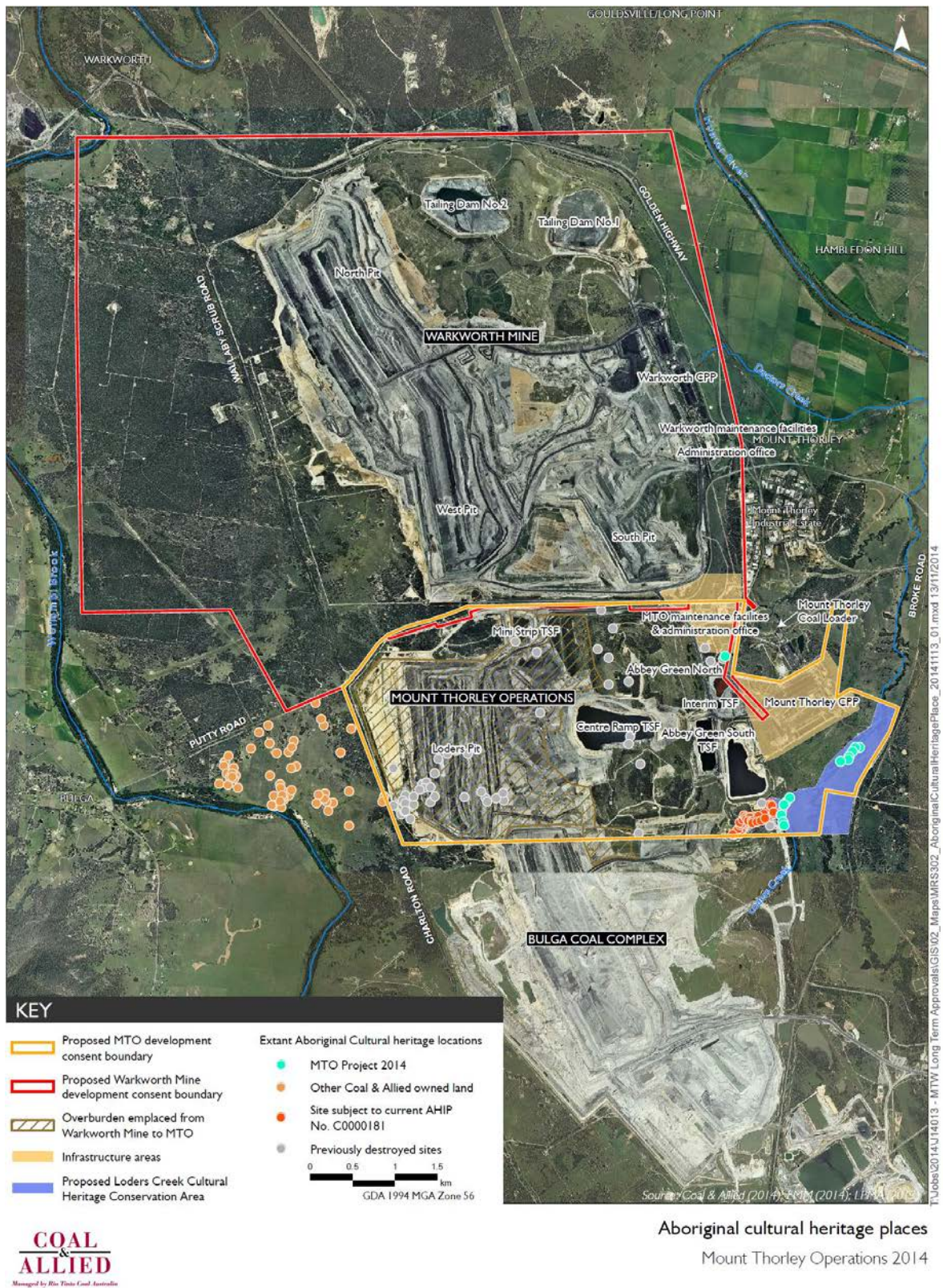


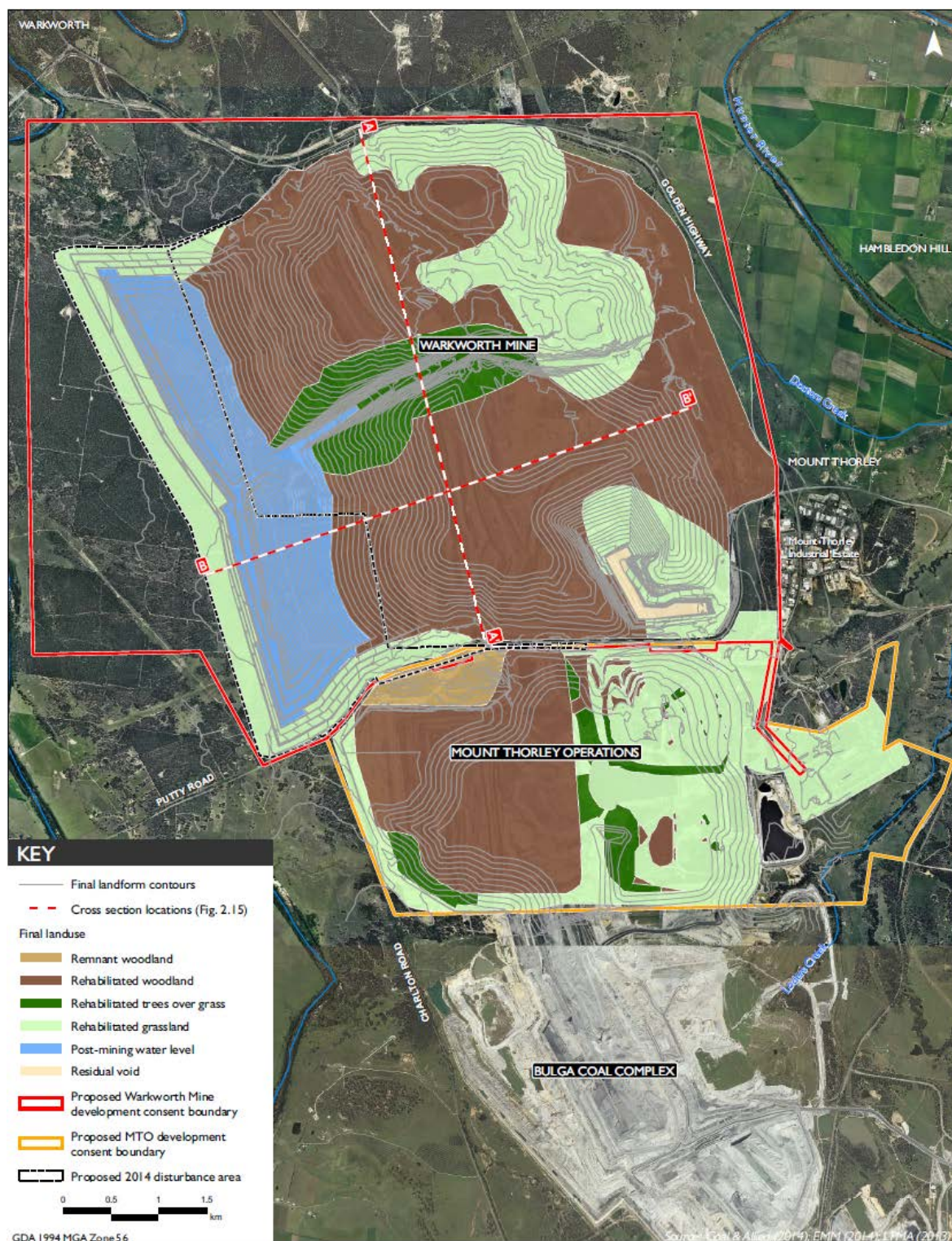
Figure 9: Extant Aboriginal Sites and Loders Creek Aboriginal Cultural Heritage Conservation Area

Table 1: Aboriginal Cultural Heritage Sites to be Protected

Details of extant only Aboriginal cultural heritage places within the MTO 2014 proposal area [NB: this is derived from Table 13 from the WCP EIS, vol. 5, Appx M, ACH study]

AHIMS No	Restricted	Place Name	Place Type	PAD	Status
37-6-0312	-	MT 26	Stone Artefact Scatter	-	Valid
37-6-0313	-	MT 27	Stone Artefact Scatter	-	Valid
37-6-0314	-	MT 28	Stone Artefact Scatter	-	Valid
37-6-0315	-	MT 29	Stone Artefact Scatter	-	Valid
37-6-0316	-	MT 30	Stone Artefact Scatter	-	Valid
37-6-0317	-	MT 31	Stone Artefact Scatter	-	Valid
37-6-0318	-	MT 32	Stone Artefact Scatter	-	Valid
37-6-0319	-	MT 33	Isolated Stone Artefact/s	-	Valid
37-6-0656	-	B73	Stone Artefact Scatter	-	Valid
37-6-0658	-	B 75	Stone Artefact Scatter	-	Valid
37-6-0659	-	B 76	Stone Artefact Scatter	-	Valid
37-6-0660	-	B 77	Stone Artefact Scatter	-	Valid
37-6-2717	-	AG-PAD-1	PAD	Yes	Partially Destroyed

APPENDIX 5 REHABILITATION PLAN



Final landuse and contours
Warkworth Continuation 2014
Environmental Impact Statement
Figure 2.16

Figure 10: Indicative Final Landform and Land Use

APPENDIX 6 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of schedule 3 are to apply under all meteorological conditions except the following:
 - a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

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

Compliance Monitoring

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.
4. This monitoring must be carried out at least 12 times a year, unless the Secretary directs otherwise.
5. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - a) monitoring locations for the collection of representative noise data;
 - b) meteorological conditions during which collection of noise data is not appropriate;
 - a) equipment used to collect noise data, and conformance with Australian Standards relevant to such equipment; and
 - c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.