



COALPAC CONSOLIDATION PROJECT

# RESPONSE TO THE PAC REVIEW REPORT

for  
**Coalpac Pty Limited**  
March 2013

**COALPAC CONSOLIDATION PROJECT**  
**APPLICATION NUMBER: 10\_0178**

**RESPONSE TO THE PLANNING ASSESSMENT**  
**COMMISSION REVIEW REPORT**

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8 March 2013

*For:*

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**COALPAC CONSOLIDATION PROJECT (Application Number: 10\_0178)**  
**RESPONSE TO THE**  
**PLANNING ASSESSMENT COMMISSION REPORT**

**1 INTRODUCTION**

This document has been prepared to fulfil a request from the Department of Planning and Infrastructure (DP&I) to Coalpac Pty Limited (Coalpac) dated 18 December 2012 seeking a response to the Planning and Assessment Commission (PAC) Review Report of the Coalpac Consolidation Project (PAC Review Report). It includes discussion and clarification on matters raised by the PAC Review Report as well as reducing the scale and intensity of the Coalpac Consolidation Project as exhibited and reviewed by the PAC (the Exhibited Project).

It is structured as follows:

- **Section 1** provides some historic, social and economic context of the Exhibited Project as assessed by the PAC and summarises the environmental planning assessment process of the Project to date as well as the process for determination of the project application;
- **Section 2** responds to the PAC Review Report by describing a 'Contracted Project' proposed by Coalpac "*to avoid minimise and/or offset*" the identified impacts of the Project as originally proposed;
- **Section 3** details the assessment processes applied to EA and the Contracted Project and includes a summary of the key environmental impact assessments completed for the Contracted Project;
- **Section 4** provides a response to the recommendations made in the PAC Review Report in consideration of Contracted Project;
- **Section 5** provides a justification for the Contracted Project; and
- **Section 6** lists the documents referred to in the preparation of this report.

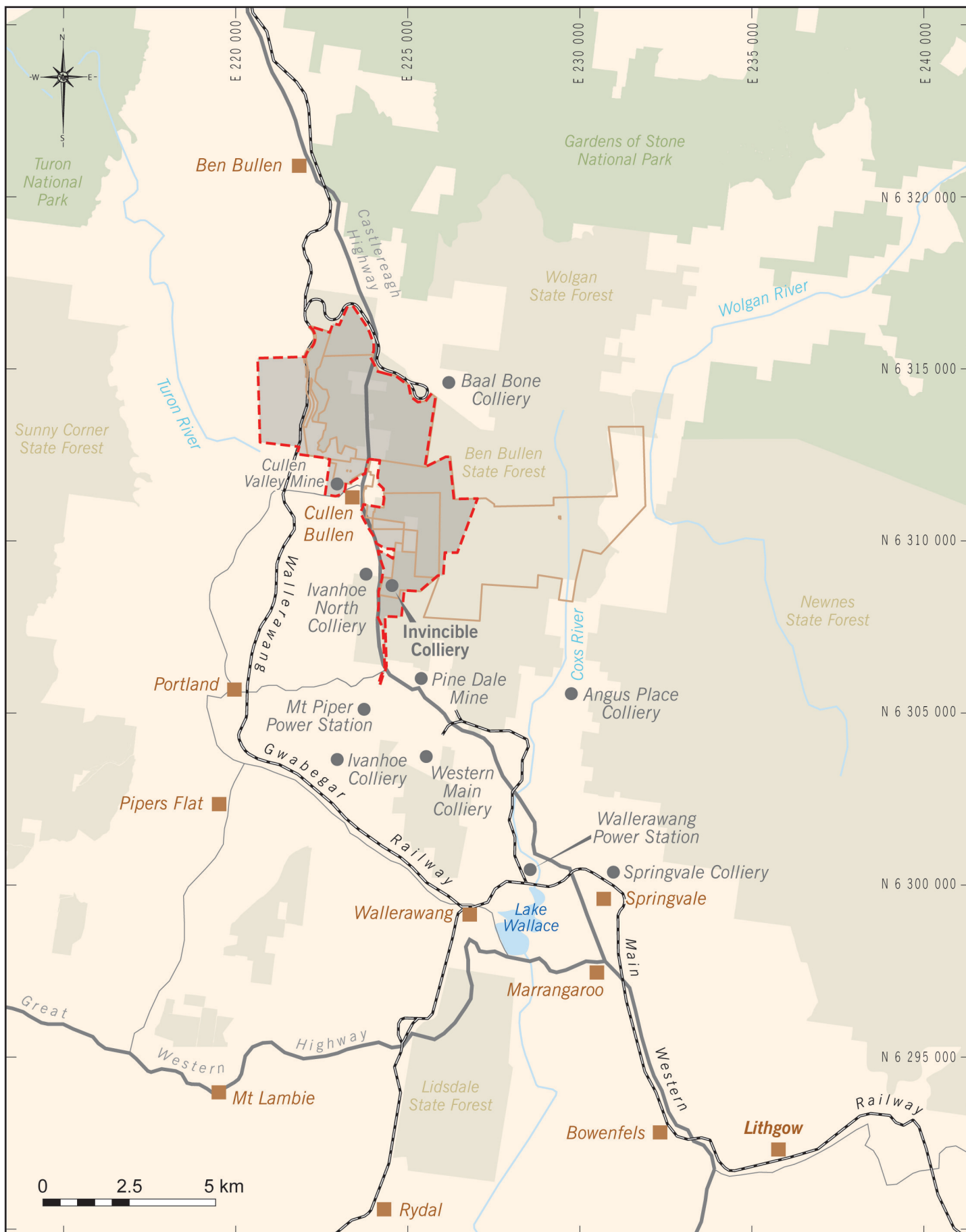
## 1.1 PROJECT BACKGROUND

*This section provides a brief historic, social and economic perspective of both Cullen Valley Mine and Invincible Colliery in the context in which the environmental planning consideration of the application for the approval of the Exhibited Project is to be considered.*

Mining commenced at what is now known as the Cullen Valley Mine in the late 1880's and coal mining operations (by both open cut and underground methods) have been conducted, under various names, for approximately 120 years. Coal mining at Invincible Colliery commenced in 1901 with an underground operation occurring until 1998. Open cut coal mining commenced on the site at this time and continues today.

The existing Coalpac operations at Cullen Valley Mine and Invincible Colliery (Coalpac Mines) which recover coal via open cut processes are principally located within the Ben Bullen State Forest (BBSF), with some operations in adjoining privately owned land (see **Figure 1**). Impacts to the BBSF from existing operations include disturbance required for mine infrastructure areas, open cut mining activities, overburden emplacement and coal stockpiles, tailings and water management and other environmental management infrastructure. Rehabilitation is undertaken progressively following the completion of active mining and related activities, with some rehabilitated areas approaching 11 years in age.

Disturbance to the BBSF is partially related to the environmental costs for past coal recovery and partially related to the ability to recover the remaining coal resource of some 108 Million tonnes Run of Mine (Mt ROM) identified in the 'Coalpac Consolidation Project Environmental Assessment' (Hansen Bailey 2012) (EA). As a result of previous and current mining operations, some of the environmental costs of the Project have already been incurred (i.e. the completion of the recovery of the remaining available coal resource will be at a lesser environmental cost than would otherwise be the case if this was a new development proposal).



--- Project Boundary

— Coalpac Mining Authorities

Hansen Bailey



## COALPAC CONSOLIDATION PROJECT

Regional Locality

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Figure  
**1**



The consolidation and the continuation of mining at the Coalpac Mines as proposed will deliver ongoing economic and social benefits to the local community, the region and the State.

Lithgow has been the centre of mining in the western coalfields for over 100 years and has provided the workforce, accommodation, infrastructure and other support services for the coal industry, along with its surrounding communities such as Cullen Bullen.

The Coalpac Mines are critical to the supply of coal for the operation of the Mt Piper Power Station (MPPS) which provide 11% of energy sold in the NSW region of the National Energy Market. The development of the power stations in the region was supported by the abundant local resource of domestic quality coal. It is not considered practical or cost effective to haul coal by rail into the area and therefore locally supplied coal remains essential to the reliable and economic supply of feed coal to the MPPS and Wallerawang Power Station (WPS) facilities.

The recent closure in 2012 of the Centennial Coal operated Lamberts Gully Mine, Airly Mine, and Ivanhoe North Mine and Xstrata's Baal Bone Colliery places further importance on the Coalpac Mines as a provider of local feed coal for the continued operation of MPPS and WPS.

There is no certainty that the other proposed coal mining developments in the vicinity of Coalpac Mine's existing operations will proceed. The Neubeck Coal Project proposed by Centennial Coal and Energy Australia's Pinedale Extension Project are both open cut mine proposals that are still in the very early stages of their assessment processes, having received Director-General's Requirements (DGRs) from DP&I in 2012.

There have been 12 submissions made to the DP&I in response to the PAC Review Report. Importantly NSW Treasury (31 January 2013) in their submission to the DP&I following the PAC Review Report, stated:

*"Apart from a relatively small supply from the Pine Dale coal mine, there are no other economic sources of coal supply to these power stations. The Centennial company would increase its market power over the local electricity generation in the event this Project did not proceed. In the future, this could push up offer prices for coal supply to the Mt Piper and Wallerawang stations and reduce the volumes on offer."*

NSW Treasury also concluded:

*"Consumers will benefit from any reduction in electricity prices that is a consequence of Coalpac's supplying Delta Electricity. This is a desirable outcome. It is clearly a policy priority for both the NSW Government and the Commonwealth Government to try and reduce upward pressure on electricity prices."*

Delays in the determination of the Exhibited Project application have already resulted in the scaling back of mining operations at both Coalpac Mines, including ceasing production at Cullen Valley Mine in December 2012 with the termination of 49 positions. Coal recovery is planned to cease at Invincible Colliery at the end of March 2013 with both mines then being placed on Care and Maintenance status, resulting in the termination of a further 46 Coalpac employees and the suspension of existing service contracts which support some 60 jobs. With the loss of a total of 95 employees and the commensurate multiplier at 3:1 (conservatively) it is estimated that up to 276 job losses could result. The full effect of these job losses will fall on the local community which has already borne the job losses from the closure of three Centennial Coal mines and Xstrata's Baal Bone Colliery as noted above.

Closure of the Coalpac Mines under existing approvals will trigger the requirement for mine closure plans and the rehabilitation of both sites. Continuation of the Contracted Project as proposed will ensure the development of an optimal final landform and the completion of best practice rehabilitation that is compatible with the surrounding environment and ecology.

In fact the proponent contends that rehabilitation would be completed to a level where the area could ultimately be contributed to the NSW conservation estate in the future.

## **1.2 ASSESSMENT PROCESS**

*This section provides a summary of the environmental planning assessment process of the Project to date (including the preparation of the EA and public exhibition process), an overview of the PAC Review process and the process for determination of the project application.*

### **1.2.1 Project Application**

The Coalpac project application (No. 10\_0178) for the approval of the Project under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) was accepted by the then Minister for Planning in October 2010.

Despite the repeal of Part 3A the environmental planning assessment of the Project continues under the former Part 3A as a 'transitional Part 3A project', consistent with the applicable transitional provisions.

### **1.2.2 Environmental Assessment**

On 16 December 2010 the Director-General of DP&I issued his 'environmental assessment requirements' (DGRs) for the 'environmental assessment' of the Exhibited Project.

The Exhibited Project was declared a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). The Department of Sustainability, Environment, Water, Populations and Communities (SEWPAC) accredited the NSW Part 3A assessment process for the Project resulting in the environmental assessment of the Project being required to satisfy the requirements of both the NSW and the Commonwealth legislation.

To ensure that the environmental assessment provided an appropriate consideration of relevant matters of National Environmental Significance, the Director General issued supplementary requirements for the environmental assessment under section 75F of the EP&A Act on 19 April 2011.

The *Coalpac Consolidation Project Environmental Assessment* was prepared by Hansen Bailey in accordance with EP&A Act, the requirements of DP&I, the DGRs and in accordance with the relevant Government policies and guidelines.

The EA relied upon specialist consultant reports to support the appropriate environmental planning assessment of the Exhibited Project, which involved extensive consultation with all relevant stakeholders, the local community, Council and all relevant State and Federal Government agencies. These reports were completed for the EA in accordance with all statutory and regulatory requirements and relevant Government policies and guidelines as required by the DGRs and by applying current best practice.

Numerous exchanges occurred with Government agencies during the preparation of the EA and the Response to Submissions (RTS) (see **Section 1.2.3**) to ensure that their respective assessment standards and required environmental outcomes would be achieved in the environmental planning assessment and operation of the Project.

Following consultation with other regulators, the DP&I determined that the EA adequately addressed the DGRs, relevant NSW government policies, procedures and guidelines and placed the project on public exhibition on the 10 April 2012.

It is noted that, prior to the completion of the EA, 27.6 Mt of accessible ROM coal was sterilised in the process of ensuring DP&I and OEH concerns over amenity and ecological impacts would be minimised. This coal sterilisation represented a projected loss of \$1.2 billion dollars in revenue forgone to all stakeholders, including the NSW Government and the people of NSW.

### **1.2.3 Public Exhibition and Response to Submissions**

The public exhibition of the project from 10 April 2012 to 1 June 2012 resulted in a total of 938 submissions from 15 government agencies, 899 individuals (comprised of 10 “Comments” and 758 “Objectors”) and 132 “Supporters”.

On 8 June 2012, DP&I requested that Coalpac provide the Department its response to submissions (RTS). Coalpac and its experts consulted further with the community and Government agencies and the RTS document was submitted on 10 August 2012.

The Exhibited Project considered by the PAC and the subject of the PAC Review Report is described at Section 3.2 of the PAC Review Report.

#### 1.2.4 Ministers Request for Review

On 22 July 2012 the Minister requested that the PAC:

1. *“Carry out a review of the Coalpac Consolidation Project, and:*
  - (a) *consider the Environmental Assessment of the project, all issues raised in submissions on the project, and any information provided on the project during the course of the review;*
  - (b) *assess the merits of the project as a whole, paying particular attention to the potential:*
    - *local health and amenity impacts of the project, particularly dust, noise and blasting impacts;*
    - *biodiversity impacts of the project;*
    - *water resource impacts of the project; and*
  - (c) *recommend appropriate measures to avoid, minimise and/or offset these impacts.*
2. *Conduct public hearings during the carrying out of the review*
3. *Submit its final report on the review to me by 14 November 2012, unless the Director-General of the Department of Planning and Infrastructure agrees otherwise.”*

#### 1.2.5 PAC Review Report

On 14 December the PAC delivered its Review Report.

The PAC Review Report stated that *“The Commission has found that, when the merits of the project are considered as a whole, the benefits of the project are substantially outweighed by the breadth and potential magnitude of the impacts. The commission therefore recommends that the project should not be approved.”*

The PAC also states that *“The Commission has provided a suite of recommendations under the individual sections of this review, and a summary list is provided at section 9.5. These recommendations were prepared as each individual issue was considered and before the commission determined its position on the merits of the project as a whole, which is that the project should not be approved”.*

PAC goes on to state that *“The recommendations therefore represent minimum requirements or limitations that the Commission considers necessary to deal with the individual impacts identified”* and that *“Their existence responds to the Minister’s request to the PAC to recommend appropriate measures to avoid, minimise and/or offset these impacts”.*

### **1.2.6 The Remaining Process**

Importantly, the PAC also commented that it “...recognises that this review is only one step in the assessment and determination process for this project”.

It is then anticipated that following receipt of DP&I's Assessment Report, the Minister, under a general delegation already made by him for the exercise of his determination power of such applications under the EP&A Act, will refer the project application to the PAC for determination.

The determination PAC will be made up of different PAC members than those who conducted the Review.

## 2 CONTRACTED PROJECT

*This section responds to the PAC Review Report by describing a Contracted Project proposed by Coalpac “to avoid minimise and/or offset” the identified impacts of the Project as originally proposed. It also describes revised monitoring and management initiatives and a Statement of Commitments for the Contracted Project.*

### 2.1 CONTEXT

Coalpac has reviewed the PAC Review Report and responds to it in three parts.

The first component is a positive response to the PAC’s findings through a reduction in scale and intensity through a Contracted Project. To achieve this, Coalpac has adjusted its mine plan, removed elements of the Exhibited Project and varied its proposed methods of operation, adjusted its proposed biodiversity offset strategy and provides additional environmental commitments and controls. These adjustments to the proposed mine plan and environmental management commitments are described below in **Section 2.2** as the ‘Contracted Project’.

The second component relates to Coalpac’s rejection of the PAC’s statement that “...*After considering the benefits and the impacts of the Project as a whole the Commission is in no doubt that the impacts substantially outweigh the benefits and the Commission recommends that the Project not be approved*” on the basis that that the “review” was misguided as to the basis on which it was required to be conducted under the EP&A Act, resulting in the unwarranted conclusion as to the ‘merit’ of the Exhibited Project.

The PAC “review” was in error in that it:

- Accepted environmental assessment based on methodology other than is appropriate to the assessment of development under the EP&A Act;
- Did not apply Government policy, standards, practices and procedures in the assessment of the Exhibited Project as required under the EP&A Act and by the DGRs (particularly in the case of air quality, noise, ecology and economic assessment);
- Ventured into areas of policy and wider recommendations more relevant to Government (particularly in the areas of air quality, noise and economic impact assessment);
- Rejected proper reports, modelling or representations by qualified parties (particularly in the key technical areas of blasting, geotechnical design and ecology and in the case of electricity pricing and submissions by Delta Electricity and Energy Australia); and
- Recommended that a determination of the Project cannot progress until the Commission’s policy recommendations have been determined.

Thirdly, it would appear that one of the reasons for the PAC’s conclusion over the merits of the Exhibited Project were related to their assessment of conservation values, including both geological and ecological conservation values, which mostly related to the flora and fauna said to occur on and around the pagoda areas.

It is critical for this Approval Application to note that, as at the date of this report, no NSW Government policy or decision has been adopted or proposed to conserve the BBSF as a State Conservation Area.

Discussion of these three material points along with Coalpac's comment and support for adoption of the greater majority of the PAC's detailed recommendations through its contraction of the Exhibited Project can be found in **Section 4**.

## **2.1 DEVELOPMENT OF CONTRACTED PROJECT**

The Contracted Project as prepared in response to the issues noted in the PAC Review Report is proposed by Coalpac for determination of the project application.

Coalpac's independent expert consultants have reviewed the resultant reduction in environmental impacts from the Contracted Project. The results of the revised assessment reports are discussed below in **Section 3** and are appended to this document.

In light of the PAC Review Report often dismissing the advice of Hansen Bailey and the specialists who prepared impact assessments for the EA, further advice from experts in the various disciplines of contention has been sought in the form of supplementary reports and peer reviews.

These supplementary reports and peer reviews have considered the key issues noted by the PAC and assessed the updated impact studies for the Contracted Project in order to reduce any uncertainty over the documentation put forward. The key issues that were subject to supplementary reports and peer review and a list of who conducted each is as follows:

- Highwall Mining Geotechnical Design - Dr. Bruce Hebblewhite Professor of Mining Engineering, University of New South Wales;
- Slope Stability of Sandstone Cliffs – Mr. Paul Maconochie of GeoTek Solutions;
- Pagoda Geomorphology – Mr. Andrew Markham of Hydrobiology;
- Broad-Headed Snake Habitat – Dr. Arthur White of Biosphere Environmental Consultants; and
- Economics – Dr. Jeff Bennett, Professor of Environmental Management in the Crawford School, Australian National University.

Hansen Bailey has assessed the environmental planning acceptability of the Contracted Project (with the assistance of its scientific experts and peer reviewers), considering the key changes to environmental impacts assessed in the Exhibited Project and the issues raised in the PAC Review. The definitive conclusions of this assessment are included in **Section 3** below.

The material changes to the Exhibited Project as reviewed by the PAC are indicated on the revised mine plan for Year 2 as shown on **Figure 2** and include:

1. Removal of the Hillcroft Mining Area and associated access infrastructure (including the Wallerawang-Gwabegar Rail Line overpass bridge and Red Springs Road crossing);
2. Removal of the sand extraction component of the Exhibited Project located in the Cullen Valley mining area, including the requirement for associated crushing and screening infrastructure and the transport of product sand by road from the site to market;
3. Reduction of the open cut mining footprint to avoid the area of Clandulla Geebung habitat previously located in the north western mining area at Cullen Valley Mine;
4. Reduction of the open cut mining footprint in relation to the Significant Pagoda Landforms (SPL) to improve ecological outcomes;
5. Reduction of the highwall mining footprint to avoid rock formations within the SPL to improve perceived ecological, heritage and geotechnical outcomes;
6. Implementation of a robust blast management system specifically tailored to further minimise the potential for blasting impacts to any SPL and Sandstone Outcrop;
7. Enhancement of the BOS proposed for any residual ecological impacts; and
8. Commitments with regard to the monitoring, management and operation of the Contracted Project.

Detailed plans showing the reduction in the proposed open cut and highwall mining footprint are presented below in **Figure 3** and **Figure 4** for the Cullen Valley and East Tyldesley mining areas and **Figure 5** and **Figure 6** for the Invincible mining area.

The full layout of the Exhibited Project as described in the EA is presented below in **Figure 7** (reproduced from the EA). Revised layout plans for the Contracted Project, showing the maximum extent of the modified open cut mining and highwall mining footprints now proposed are shown on **Figure 7A** and **Figure 7B** respectively. The area to be disturbed by open cut mining has contracted by approximately 196 ha or 20% from the EA assessed by the PAC.

Further explanation of this and a description of each of the above changes are provided below in **Section 2.2.1** to **Section 2.2.7**.

In addition to the reduction in the environmental effects of the Exhibited Project as assessed by the PAC, the above changes result in a reduction in the coal reserve proposed to be extracted by approximately 11.6 Mt ROM coal. This represents a reduction in the coal reserve by 10.7% of that in the EA assessed by the PAC and a loss of up to \$800 M (undiscounted) in revenue for Coalpac.

A summary of these reductions over the life of the Contracted Project is provided in **Table 1**.



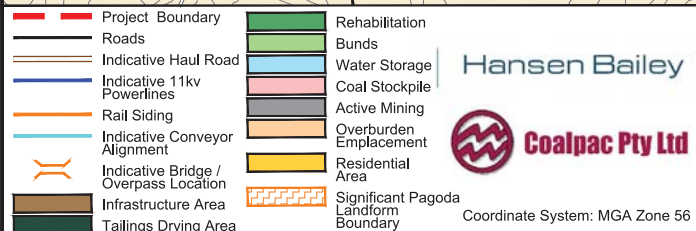
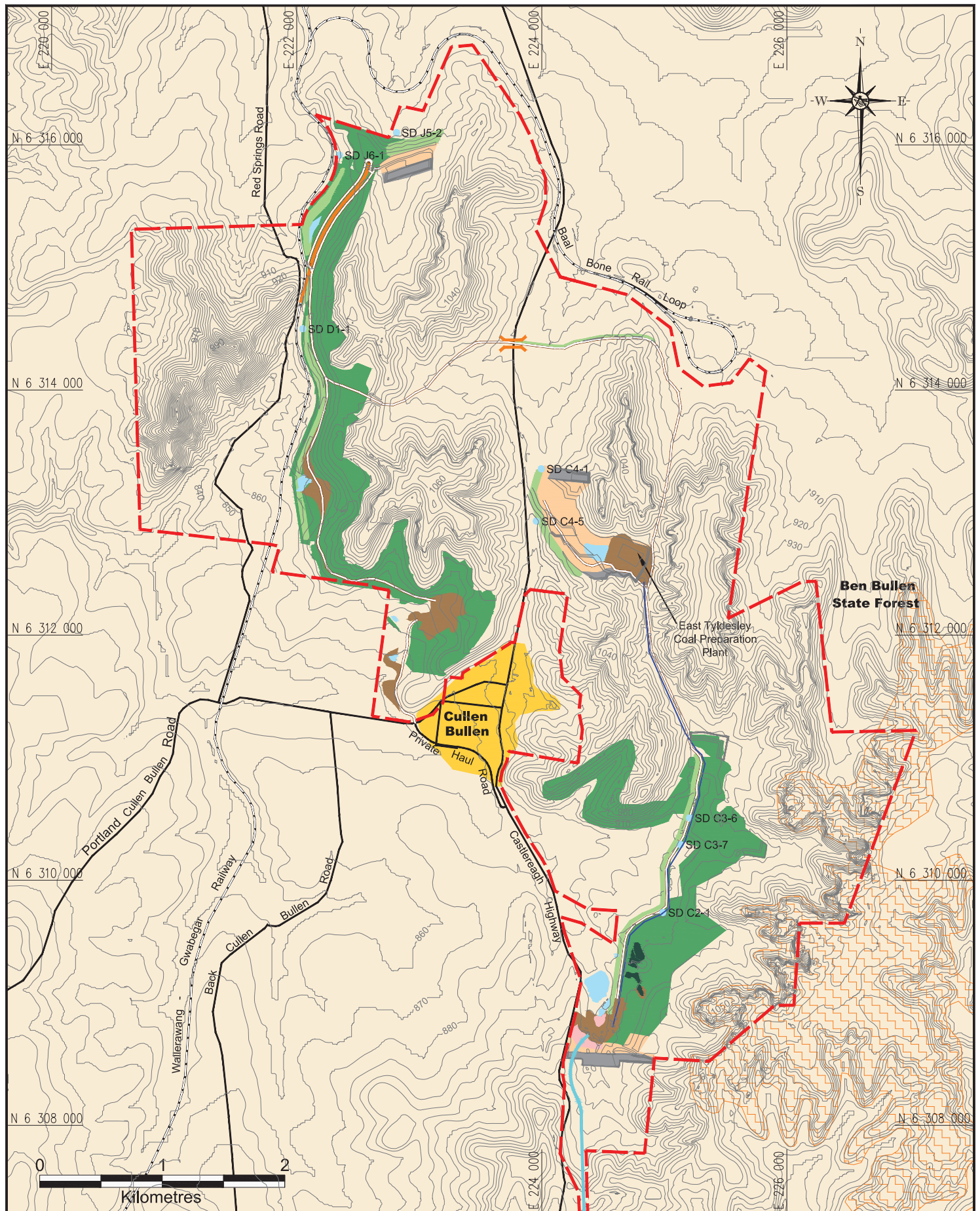
**Table 1**  
**Contracted Project Coal Reserve Impacts**

<b>Mining Area(s) - Method</b>	<b>Open Cut ROM Coal Loss (Mt)</b>	<b>Highwall Mining ROM Coal Gain (Mt)<sup>1</sup></b>	<b>Total ROM Coal Reduction (Mt)</b>
Hillcroft - Open Cut	2.9	0.00	2.9
Hillcroft - Highwall Mining	0.8	0.00	0.8
Cullen Valley - Open Cut	0.7	0.2	0.5
Cullen Valley - Highwall Mining	0.1	0.00	0.1
East Tyldesley / Invincible - Open Cut	2.1	0.00	2.1
East Tyldesley / Invincible - Highwall Mining	5.6	0.4	5.2
<b>TOTAL</b>	<b>12.2</b>	<b>0.6</b>	<b>11.6</b>

*1. Increase in highwall mining method reserves due to partial replacement of open cut mining with highwall mining*

The Contracted Project will also have materially less health and amenity impacts on Cullen Bullen township and its surrounds. For example, the remodelled Contracted Project will result in a 50% reduction in fine particulate dust emissions on Cullen Bullen in Year 2 (worst case year) and a material reduction in predicted noise emissions, particularly to the west and north-west of the Project Boundary where there will be a 25% reduction in properties significantly affected and a 33% reduction in properties moderately and mildly affected by noise.

The Contracted Project noise impact results are such that no private residences where an agreement is not in place will be significantly impacted. Coalpac intends to negotiate a management zone agreement with those moderately affected landholders. Importantly, noise levels in the Cullen Bullen school yard will remain below the 45 LAeq (1 hour) criteria.



## COALPAC CONSOLIDATION PROJECT

### Conceptual Year 2 Mine Plan

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Figure  
**2**



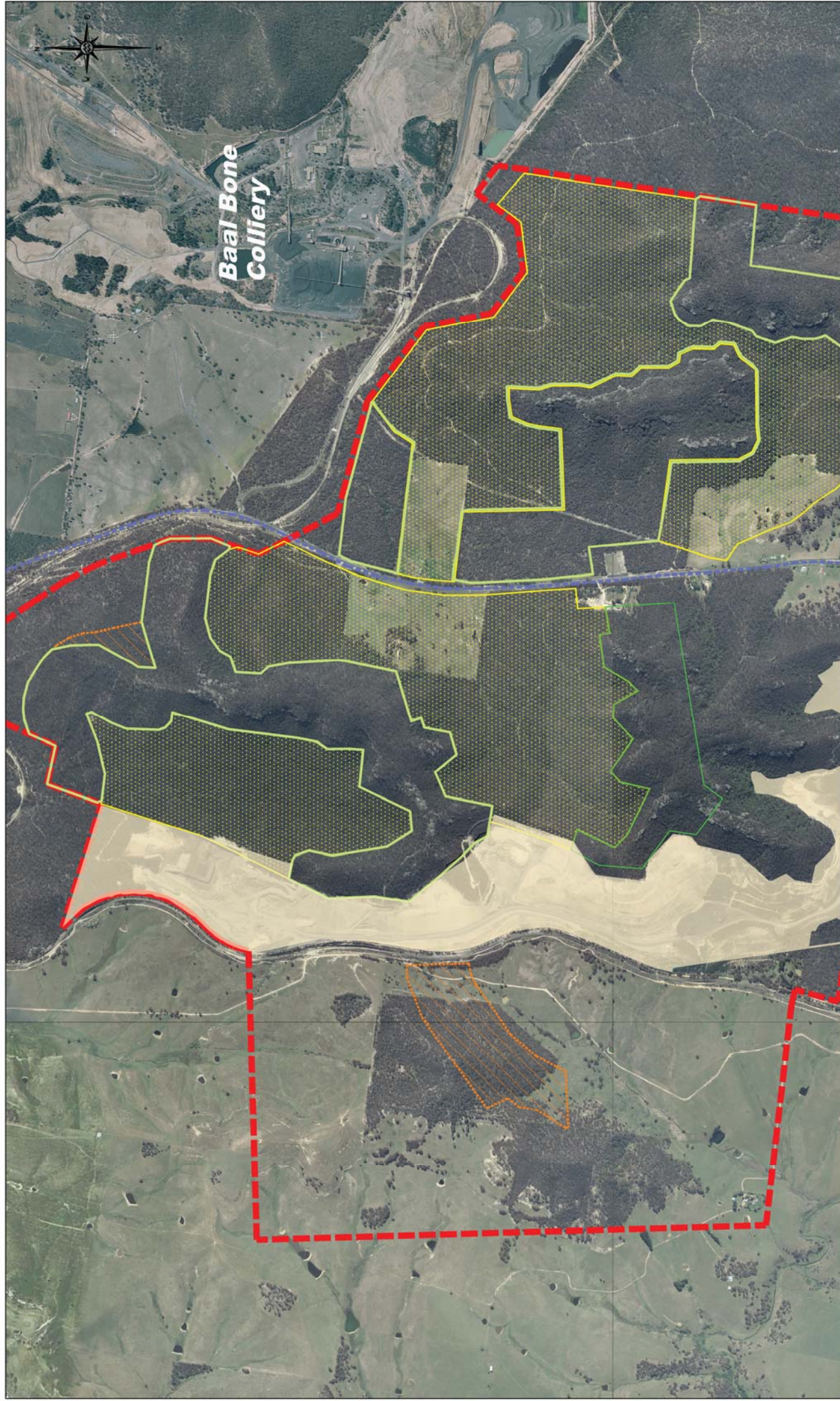


- Legend
- Project Boundary
  - EA Open Cut Mining Design
  - Contracted Project Open Cut Mining Design
  - Open Cut Loss

Existing Cullen Valley Mine

Cullen Valley & East Tyldesley Open Cut Method Comparison		Figure: <b>3</b>	MGA Zone 56
 <b>Coalpac Pty. Ltd.</b> Proprietors of Invinible Colliery and Cullen Valley Mine		Revision: F	
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### Legend

Project Boundary

Contracted Project Open Cut Design

## Highwall Mining Loss

Contracted Project Highwall Mining Design (All Seams)

Contracted Project Highwall Mining Design (KAT - IR Only)

Existing Cullen Valley Mine

## Cullen Valley & East Tyldesley Highwall Mining Method Comparison

Figure:

**Coalpac Pty. Ltd.**  
Proprietors of Invincible Colliery  
and Cullen Valley Mine

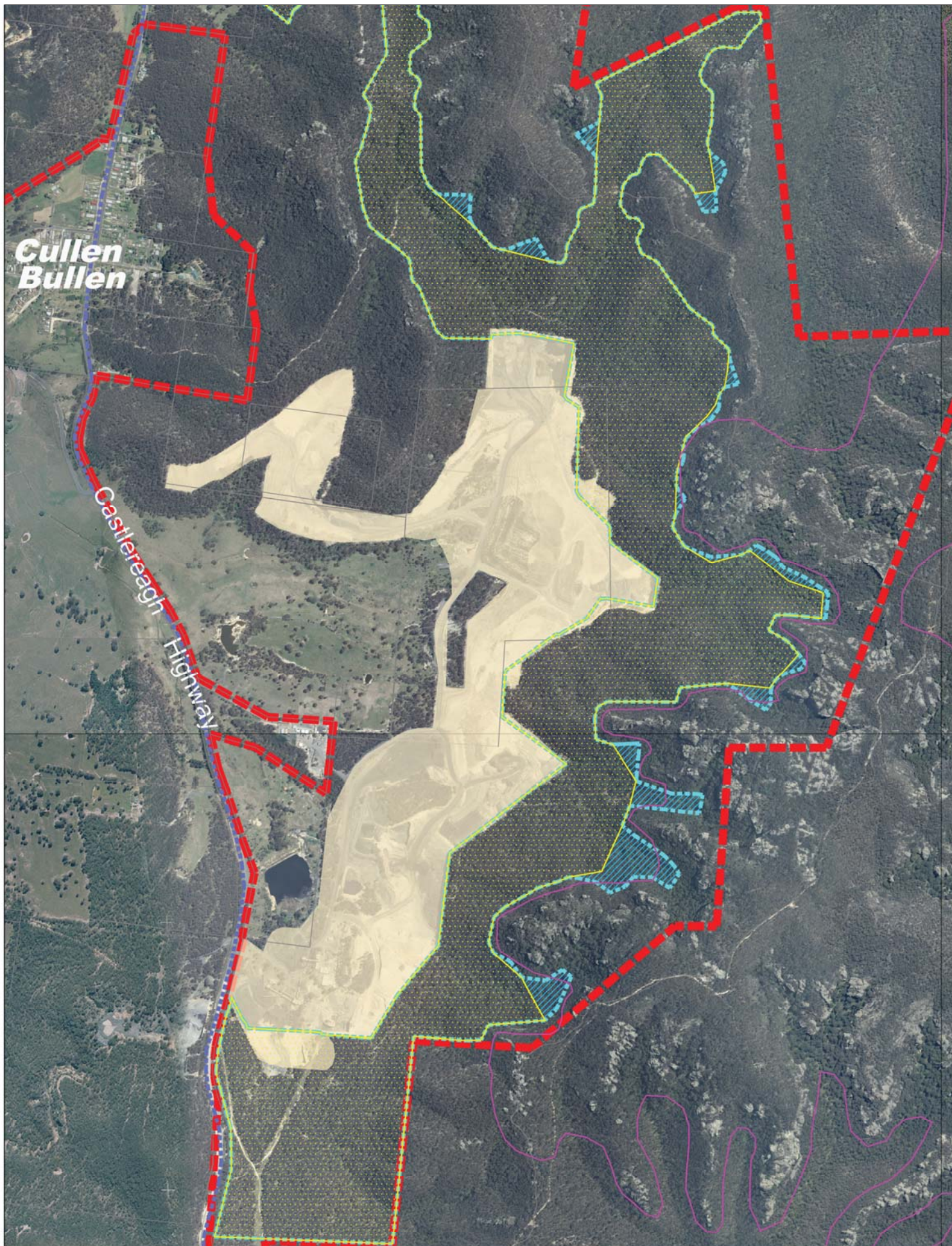
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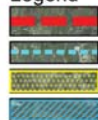
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#### Legend



Project Boundary

EA Open Cut Mining Design

Contracted Project Open Cut Mining Design

Open Cut Loss



Existing Invincible Colliery



Significant Pagoda Landform

#### Invincible Colliery Open Cut Mining method Comparison



**Coalpac Pty. Ltd.**  
Proprietors of Invincible Colliery  
and Cullen Valley Mine

Figure:

**5**

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D.E

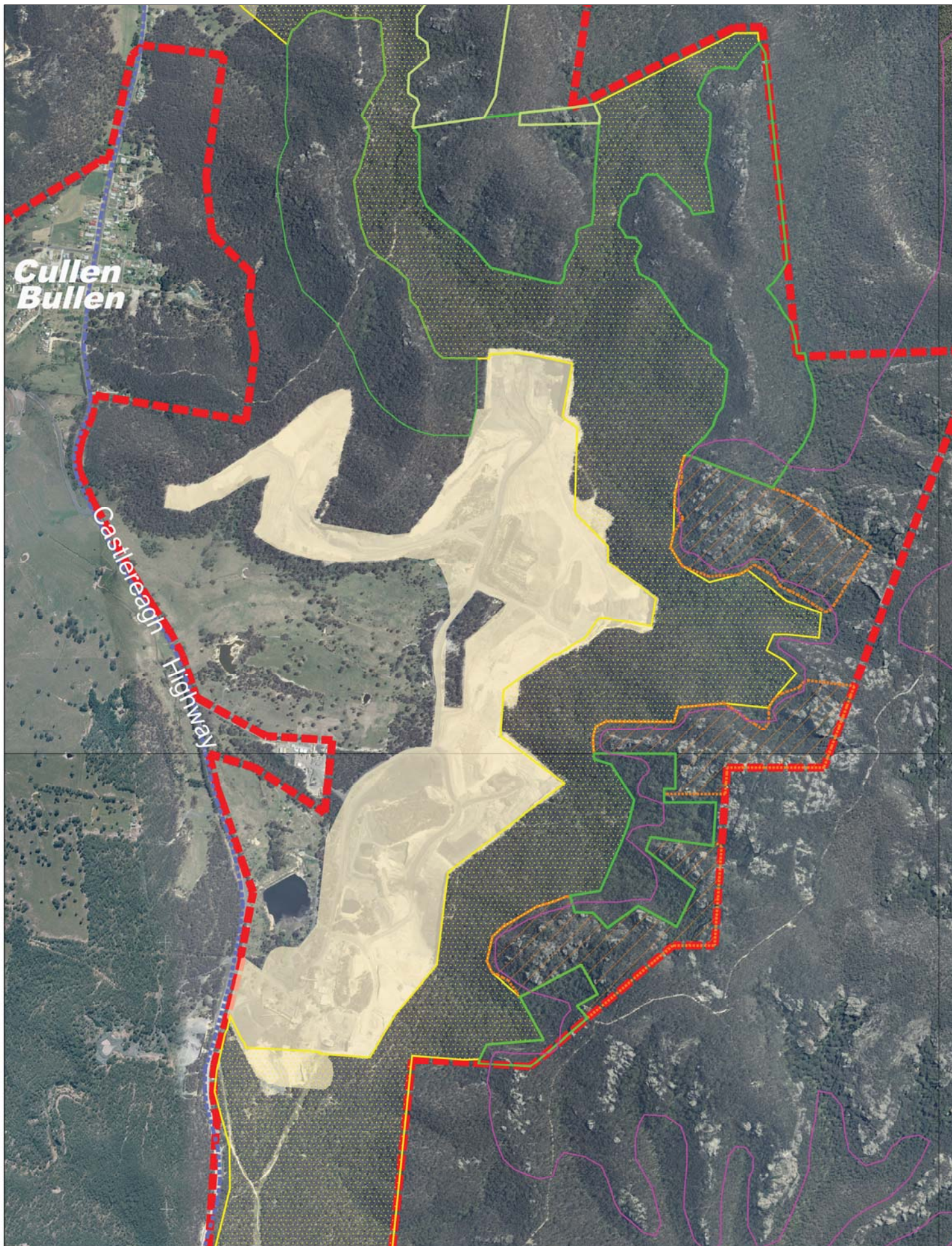
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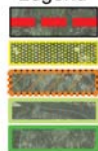
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MGA  
Zone 56





#### Legend



Project Boundary

Contracted Project Open Cut Design

Highwall Mining Loss

Contracted Project Highwall Mining Design (All Seams)

Contracted Project Highwall Mining Design (KAT - IR Only)



Existing Invincible Colliery



Significant Pagoda landform

#### Invincible Colliery Highwall Mining Method Comparison



**Coalpac Pty. Ltd.**  
Proprietors of Invincible Colliery  
and Cullen Valley Mine

Figure:

**6**

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Zone 56