NSW GOVERNMENT | Planning & Infrastructure

COALPAC CONSOLIDATION PROJECT (10_0176)
ADDENDUM REPORT – 7 AUGUST 2013

PROPOSED CHANGES TO THE PROJECT

On 23 July 2013, Coalpac Pty Ltd (Coalpac) submitted a revised proposal for the Coalpac Consolidation Project to the Department involving:

- a contraction of the open cut boundary to provide an average setback of 466 m from the significant pagoda formations in the south eastern portion of the site (see Figure 1 and 3);
- a 66 hectare (ha) reduction in the highwall mining footprint between the significant pagoda formations in the south eastern portion of the site; and
- a revised biodiversity offset strategy for the project.

A copy of Coalpac's submission describing the proposed changes to the mine plan is provided in Attachment 1, and the revised biodiversity offset strategy is provided in Attachment 2.

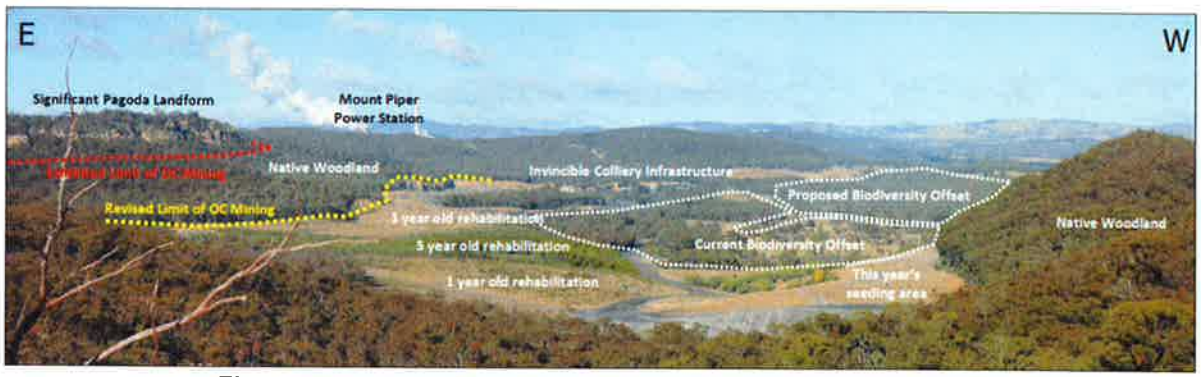

Figure 1: *Proposed Setback from Significant Pagoda Formations*

As can be seen from Figure 1, the proposed changes remove the majority of the proposed open cut mining in the proximity of the more significant pagoda formations within the project area. The exception is two areas covering 12.9 hectares adjacent to existing open cut mining pits where high quality coal would be recovered and overburden used to fill and rehabilitate the three existing mining voids on the site (see Figure 2 and Area "A" and "B" on Figure 3).

Figure 2: *Mining Void 205*

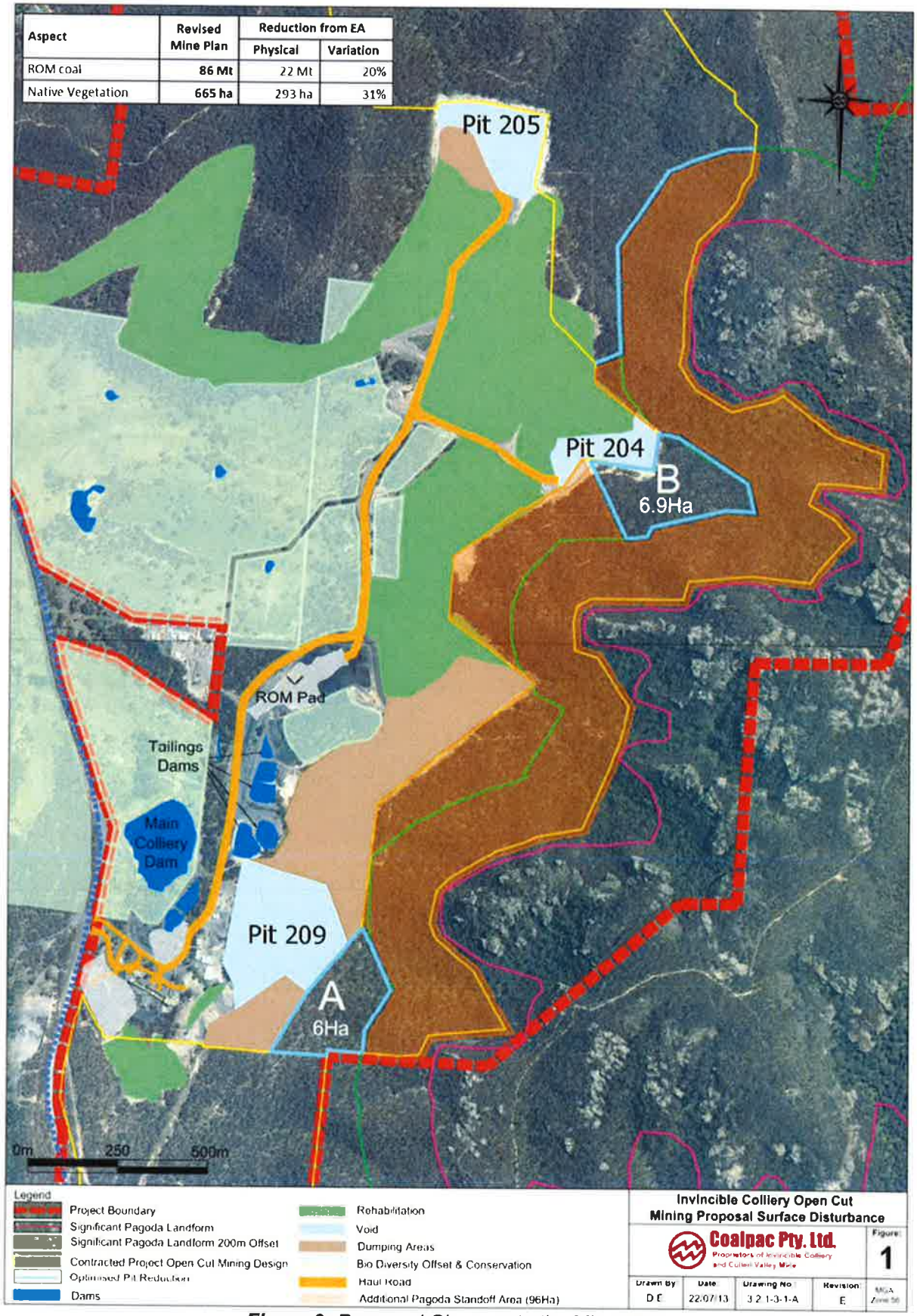

Figure 3: *Proposed Changes to the Mine Plan*

REVISED MINE PLAN

The proposed changes to the mine plan would reduce the run-of-mine (ROM) coal production from the project by a further 10 million tonnes (Mt) to a total of 86 Mt. This means that Coalpac has now reduced the total ROM coal production for the mine by around 22 Mt (or 20% of the coal resource) since the project was first exhibited.

It is also important to note that the south eastern part of the site contains the highest quality coal in the project area. Under the original proposal this high quality coal would have been used to blend with coal extracted from other parts of the site which contain poorer quality coal. Consequently, excising the areas near the significant pagoda formations from the mine plan would result in a higher relative reduction in total *saleable* coal production from the mine of around 25% (i.e. a reduction from 80 to 60 Mt in total saleable coal).

Coalpac has also advised the Department that the reduction in coal quality and total volume would remove any potential for coal to be exported as Coalpac would need to meet its domestic coal supply contracts, especially to the nearby Mount Piper Power Station. This would affect the overall profitability of the project, and may alter the life of the mine depending on the ability of Coalpac to obtain additional domestic supply contracts.

REVISED BIODIVERSITY OFFSETS STRATEGY

The additional setback from the pagoda formations in the south eastern portion of the site would reduce the clearing of native vegetation by a further 97 ha to a total of 665 ha. The clearing associated with the project has been reduced through the assessment process as follows:

- Exhibited Project – 958 ha;
- Preferred Project Report – 762 ha; and
- Final Contracted Project – 665 ha.

This represents a total reduction in the clearing associated with the project of around 31% when compared to the exhibited project.

Coalpac has also strengthened its biodiversity offset strategy to compensate for the ecological impacts associated with the project. The biodiversity offset strategy presented in the Preferred Project Report (PPR) included 4 properties with 2,040 ha of native vegetation with a further commitment to secure an additional 1,000 ha of suitable land to achieve an overall offset ratio of 4:1 (i.e. 4 hectares of offset woodland for each hectare to be cleared). The PPR also canvassed a number of additional properties that could be secured to deliver the additional 1,000 ha of offsets.

In its most recent submission, Coalpac has identified 4 additional offset properties that would deliver approximately 2,000 ha of remnant native vegetation (see Figure 4):

- Hartley Vale – 77 ha;
- Wolgan – 483 ha;
- Hassan's Wall – 697 ha; and
- Singlong Grange – 744 ha.

Consequently, if all 8 of the proposed offset areas are secured, the strategy would deliver in excess of 4,000 ha of remnant native vegetation (i.e. equivalent to an offset ratio of around 6:1).

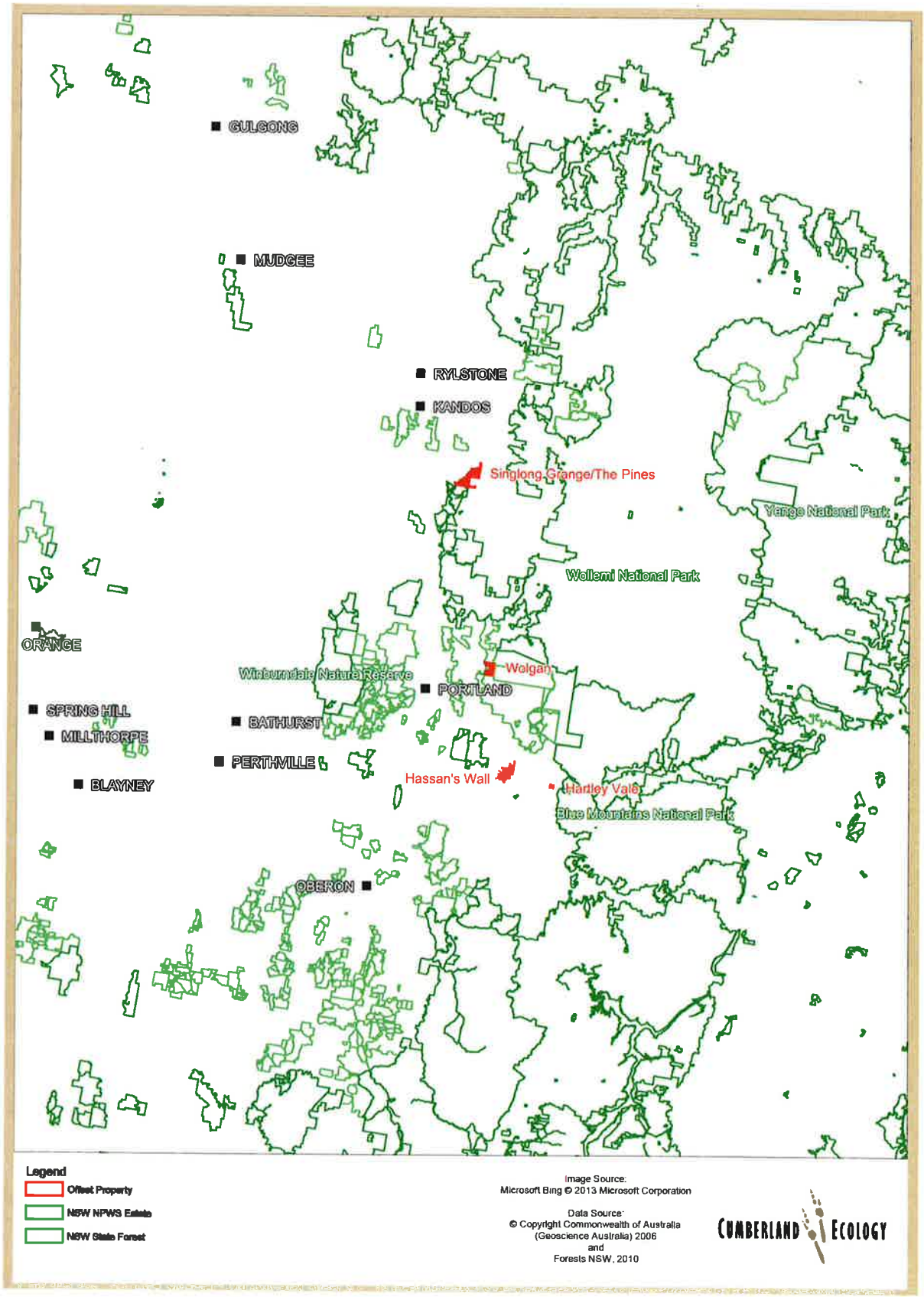

Figure A.3. Additional Offset Properties Overview

Figure 4: *Proposed Additional Biodiversity Offsets*

CONSIDERATION

The Department considers that the proposed changes to the mine plan would have a number of advantages including:

- retaining a greater proportion of the native woodland on the slopes below some of the most significant pagoda formations in the project area;
- reducing the biodiversity impacts of the project and the impacts on the scenic values of a proportion of the pagodas adjacent to the active mining areas; and
- allowing the existing open cut mining voids at Invincible Colliery to be filled, capped and appropriately rehabilitated (see Pits 204, 205 and 209 in Figure 5 below).

The Department supports the proposed changes, and believes that they go some way towards reducing the overall impacts of the project on biodiversity and the pagoda landform complex. However, the proposed changes do not alter the bulk of the proposed mine plan to the north of Invincible and on the western side of the Castlereagh Highway to the north of Cullen Bullen. This can be seen in Figure 5 which illustrates how the proposed changes to the mine plan are confined to a small portion of the total open cut and highwall mining area.

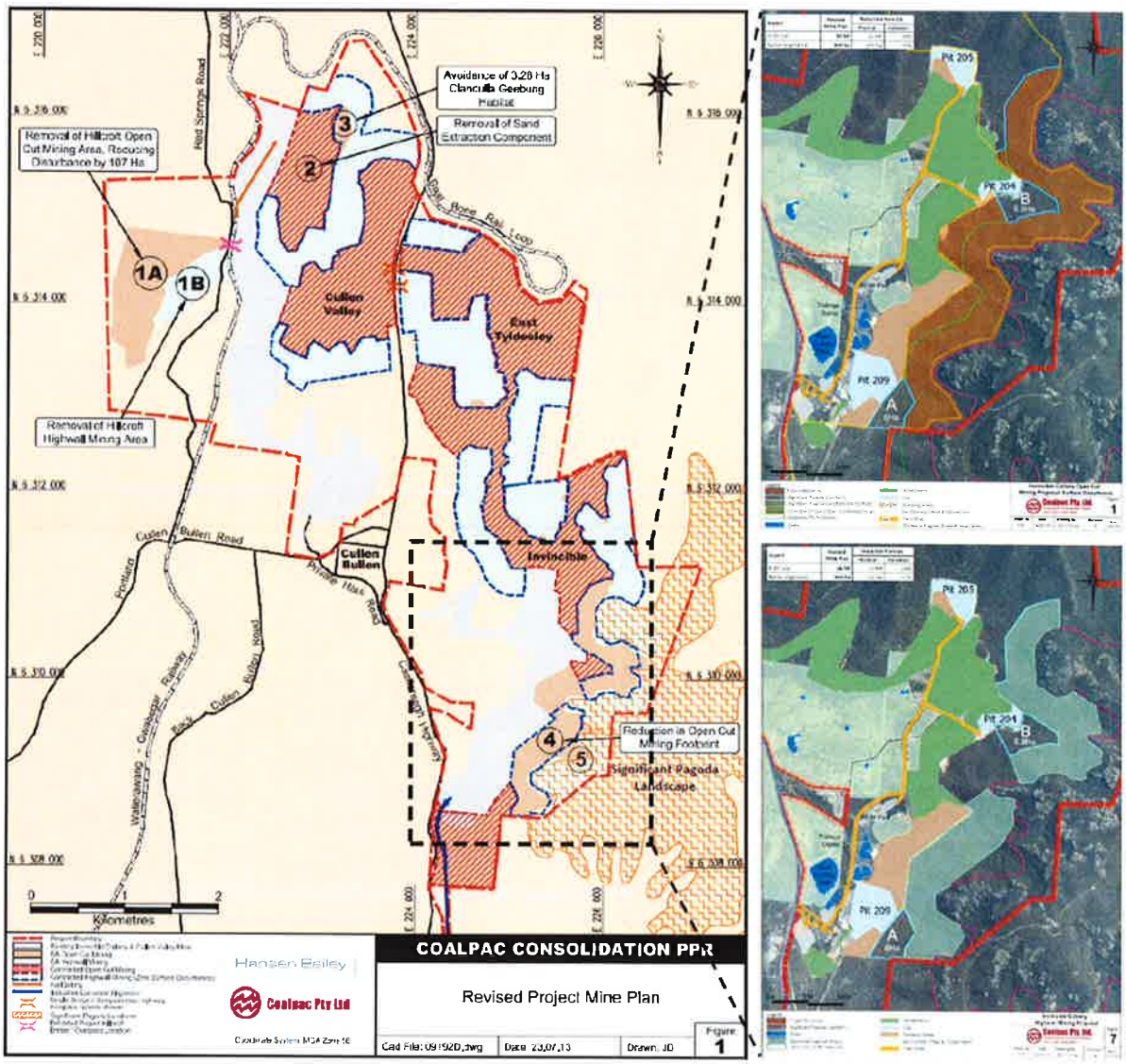

Figure 5: *Contracted Mining Area*
*[**Note** that recent changes to mine plan only apply within the inset, and other parts of the mine plan remain unaltered]*

In proposing these changes, Coalpac continues to rely on a narrow definition of pagodas which focuses almost exclusively on what it terms the 'Significant Pagoda Landform' (SPL). Under this definition, SPLs are defined as a complex that creates a continuous landform typically greater than 10 ha in area, comprising (as a minimum) large rock formations that are typically up to 60 metres in height or greater. Coalpac defines the remaining smaller rock formations in the project area as 'Sandstone Outcrops' rather than pagodas.

However, the Department maintains its position that attaching a level of significance through the application of an arbitrary threshold of height and area is not appropriate, nor is it supported in the scientific literature. On the contrary, the majority of the project site was mapped as "pagoda country" by Dr Haydn Washington & Robert Wray in 2011, and there are numerous examples of rock formations on the escarpments which occur throughout the project area that can be characterised as pagodas of significance.

Consequently, the Department is satisfied that the vast majority of the project site is properly characterised as a 'pagoda landform complex'. This landform comprises a complex arrangement of habitats characterised by a convoluted line of towering rock faces that give way to rocky steep slopes and these in turn give way to forested slopes and valley floors dominated by various eucalypt vegetation communities. All components contribute to the overall significance of the pagoda landform complex, and any impacts to components of the landform complex have the potential to compromise the significance of the landform complex as a whole.

Based on the information provided by Coalpac in its Preferred Project Report, the Department is confident that the structural integrity of the pagodas could be maintained if the mine were to proceed. However, protecting the pagodas from structural damage does not preserve the pagoda landform complex, and the revised project would almost completely remove the slopes and valleys beneath the pagoda formations over a large area (see Figure 6). In so doing, the biodiversity, scenic and geo-heritage values of the area that have been identified by the Planning Assessment Commission as internationally significant would essentially be destroyed.

While acknowledging that the rehabilitation of the site would not replicate the biodiversity and landscape values that would be lost, Coalpac maintains that its proposal to progressively rehabilitate the site with suitable native woodland species, together with its offsite biodiversity offset strategy, would substantially mitigate the impacts of the project in the medium to long term.

During a recent site inspection, the Department was able to evaluate the existing rehabilitation of the previous mining areas at Invincible and Cullen Valley. It is clear that there are some areas of rehabilitation that are progressing well with a reasonable level of floristic diversity. However, there are also other areas where rehabilitation has been less successful with very limited floristic diversity and evidence of localised instability and soil erosion.

In this case, the risks to successful rehabilitation are increased due to the relatively steep slopes that would need to be rehabilitated along the edges of the proposed open cut mining area to properly integrate with the slopes below the pagoda formations. Furthermore, even though the active mining areas would be progressively rehabilitated, the proposed mine life is 21 years, and it would take 50 to 100 years for the biodiversity and landscape values of the site to recover assuming that the rehabilitation is broadly successful. This highlights the inherent uncertainty associated with mine site rehabilitation, and the fact that rehabilitation is unlikely to ever be able to replicate the biodiversity and landscape values that would be lost if the mine proceeds.

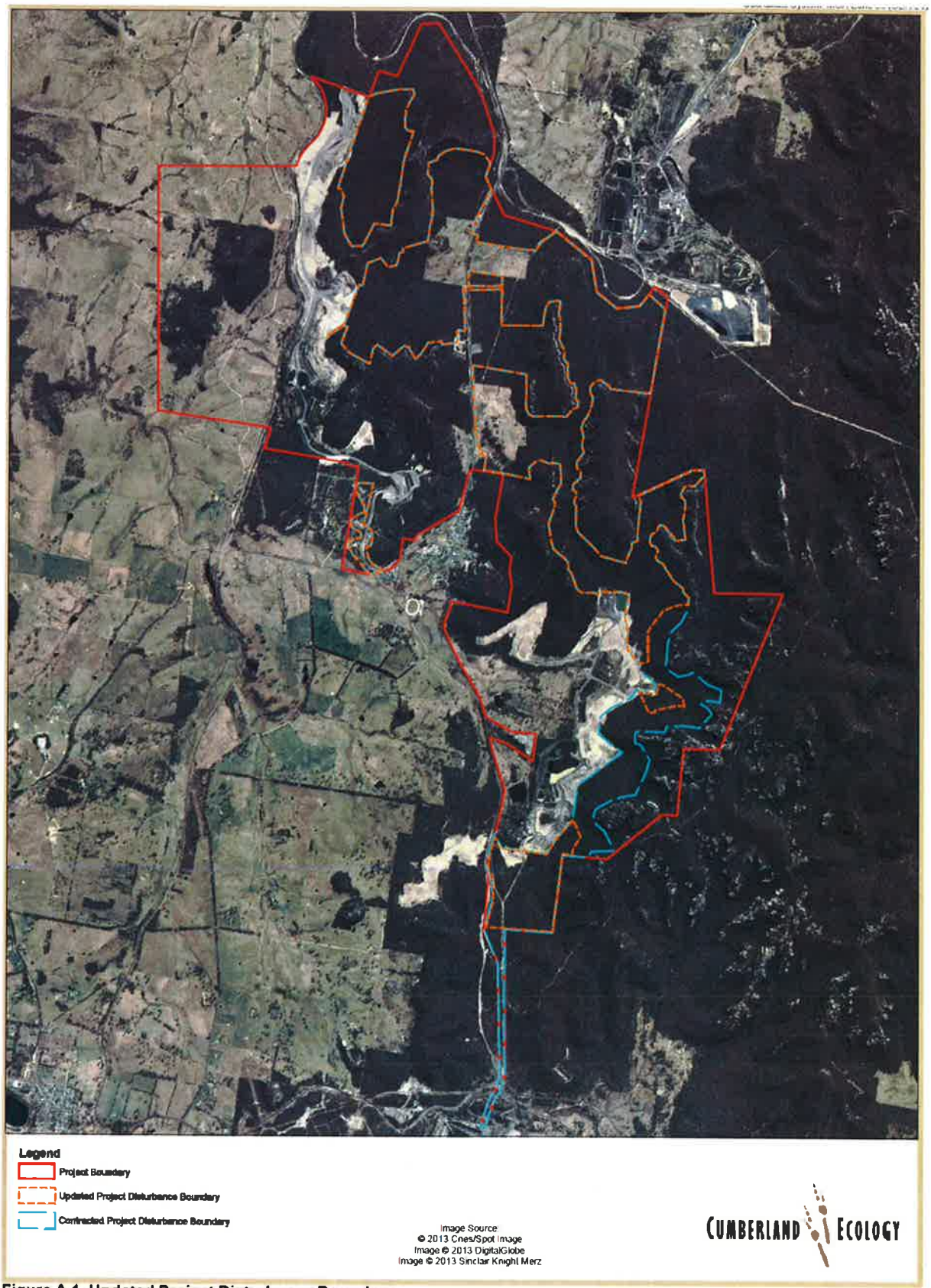

Figure A.1. Updated Project Disturbance Boundary

Figure 6: *Revised Open Cut Mining Footprint*

In regard to biodiversity offsets, the Department agrees that offsets can be used to compensate for the loss of biodiversity values associated with mining projects in NSW where these impacts cannot be avoided. In this case, the Department believes that the biodiversity offset strategy proposed by Coalpac is robust and consistent with what would typically be acceptable to offset the biodiversity impacts of a mining project of this scale.

Based on the information recently provided by Coalpac, it appears that the additional offset properties comprise good quality remnant native vegetation, and in the case of the Hassans Wall area, significant sandstone escarpments and possibly pagoda rock formations. The Department also notes that the additional offsets focus on strengthening the 'like for like' compensation for particular vegetation communities which is supported by the Department. However, the Department notes that two of the potential offset areas are already in public ownership (i.e. Hassan's Wall and Wolgan Gap). Consequently, while the areas may hold important biodiversity and geodiversity values worth conserving, the Department does not see how protecting these areas would significantly improve biodiversity or geodiversity values in the area, and hence compensate for the loss of these values on the site as a result of mining.

Notwithstanding the above, the Department believes that before the adequacy of biodiversity offsets are contemplated, the acceptability of the loss of the biodiversity values associated with a particular site must be evaluated. In this case, the Department maintains that the biodiversity, scenic and geo-heritage values associated with the site are of the highest order, and the Department agrees with the Planning Assessment Commission that the area constitutes a landscape of *special significance* that warrants the highest level of protection so that these values can be preserved.

ECONOMIC CONSIDERATIONS

The Department acknowledges that the project would result in substantial economic benefits in the local area and more broadly for NSW, and if the Coalpac Consolidation Project does not proceed, the following direct economic benefits would be lost:

- $123 million of capital investment;
- $200 million in royalty payments to the NSW Government; and
- 120 direct jobs and up to 400 indirect jobs in the region.

Coalpac also has a contract with Energy Australia to supply up to 2.5 million tonnes of coal a year to the Mount Piper Power Station until 2029, which represents approximately 60% of the supply requirements for Mount Piper over this period. Consequently, if the project does not proceed, the opportunity to provide a reliable and relatively low cost supply of coal for the nearby Mount Piper Power Station would also be lost.

However, the Department notes that at least 160 million tonnes of recoverable coal has been identified in the immediate vicinity of the Mount Piper and Wallerawang Power Stations, which represents more than 25 years of supply for the power stations. Consequently, the Department is satisfied that there are a range of alternative coal reserves that could be extracted to supply the power stations for the foreseeable future.

Nonetheless, the Department acknowledges that almost all of the alternative recoverable reserves in the short to medium term are associated with mines owned and operated by Centennial Coal. Energy Australia has advised the Department that it would cost approximately 30% more to source coal from Centennial rather than Coalpac, and independent modelling commissioned by Energy Australia indicates this could increase retail electricity prices in NSW by between 4 and 12%.

The Department does not dispute these findings, but notes that the quantum and duration of the increase in retail electricity prices would depend on a number of factors that fluctuate over time, including:

- the demand for electricity in the National Electricity Market;
- investment in additional electricity generation assets;
- the exchange rate for the Australian dollar; and
- international demand for coal and the associated export price of coal, which would affect the price of coal for domestic electricity generation.

CONCLUSION

Following its assessment of the proposed changes to the project, the Department remains satisfied that:

- the majority of the site for the Coalpac Consolidation Project is fundamentally unsuitable for an open cut coal mining operation;
- from a use planning perspective, the highest and best use of the site should be for conservation purposes;
- the mitigation and rehabilitation measures proposed by Coalpac do not overcome the inherent incompatibility of open cut mining with preserving the significant conservation values of the site; and
- the environmental consequences of extracting the 86 million tonnes of coal from the site are proportionally much more significant than extracting the same volume of coal from a mine with a more conventional open cut design or from an underground mine.

Notwithstanding the above, the Department acknowledges that the project would result in substantial economic benefits in the local area and more broadly for NSW. However, the Department believes that the merit assessment of this project is not simply a matter of choosing between the value of the coal and the environmental value of the site. Rather, from a broad public interest perspective, the merits are more accurately articulated as a choice about what is the most appropriate coal to extract.

In this regard, the Department acknowledges extracting coal from the Coalpac site has a number of economic advantages when compared to extracting coal from other reserves. However, the Department is satisfied that there are a range of alternative coal reserves that could be extracted to supply the power stations for the foreseeable future, and the environmental consequences of extracting coal from these alternative reserves would be far less than proceeding with the Coalpac Consolidation Project.

The Department considers that the merits of the project remain finely balanced, and that it may be possible to obtain approval for a more modest extension involving limited mining to the east of the Invincible Colliery and to the west of the Castlereagh Highway. Such a proposal has some merit in that it would largely avoid the pagoda landform complex, enable the existing mining voids on the site to be appropriately filled and rehabilitated, and create a suitable final landform.

At this stage, however, the Coalpac Consolidation Project has been through an exhaustive assessment process, including a review by the Planning Assessment Commission, public hearings, proceedings in the NSW Land and Environment Court, and various changes to the mine plan. The Department believes it is now time to conclude the assessment process for this project, and to consider any further proposals by Coalpac to develop resources in the area through a separate application process under the *Environmental Planning Assessment Act 1979*.

In summary, the Department believes that the recent changes proposed Coalpac do not reduce the environmental impacts of the overall project sufficiently to alter its view that the impacts of the project outweigh its benefits, and that the Coalpac Consolidation Project **should not be approved in its current form**.

RECOMMENDATION

It is RECOMMENDED that the Planning Assessment Commission:

- considers the findings and recommendations of this addendum report;
- refuses the project in its current form; and
- signs the attached instrument of project refusal.

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8.8.13

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8/8/13

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26.9.13