



ASSESSMENT REPORT

PROPOSED WERRIS CREEK OPEN CUT COAL MINE

File No: S03/03677

1. SUMMARY

Werris Creek Coal Pty Limited (the Applicant) is proposing to develop an open cut coal mine about 4 kilometres (km) south of the town of Werris Creek in the Liverpool Plains local government area (see Figures 1 & 2).

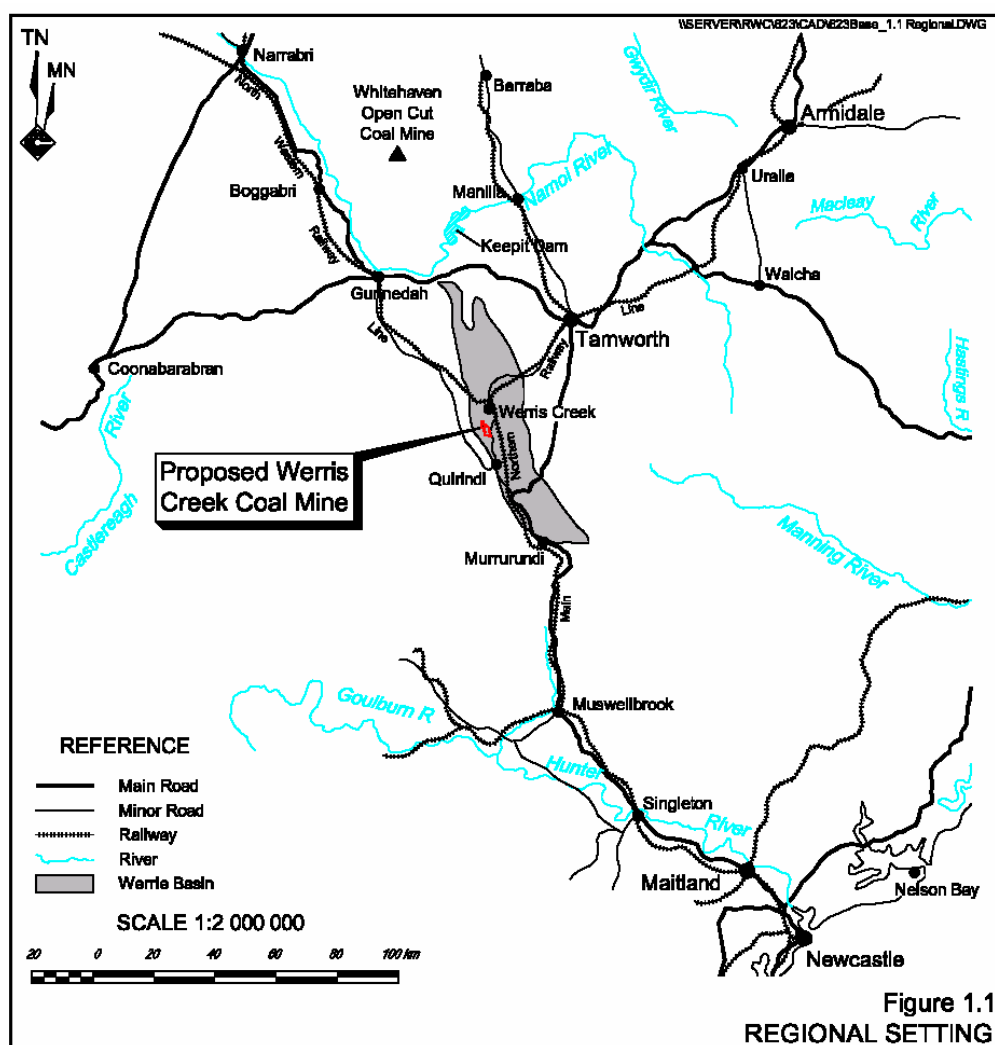


Figure 1: Regional Setting

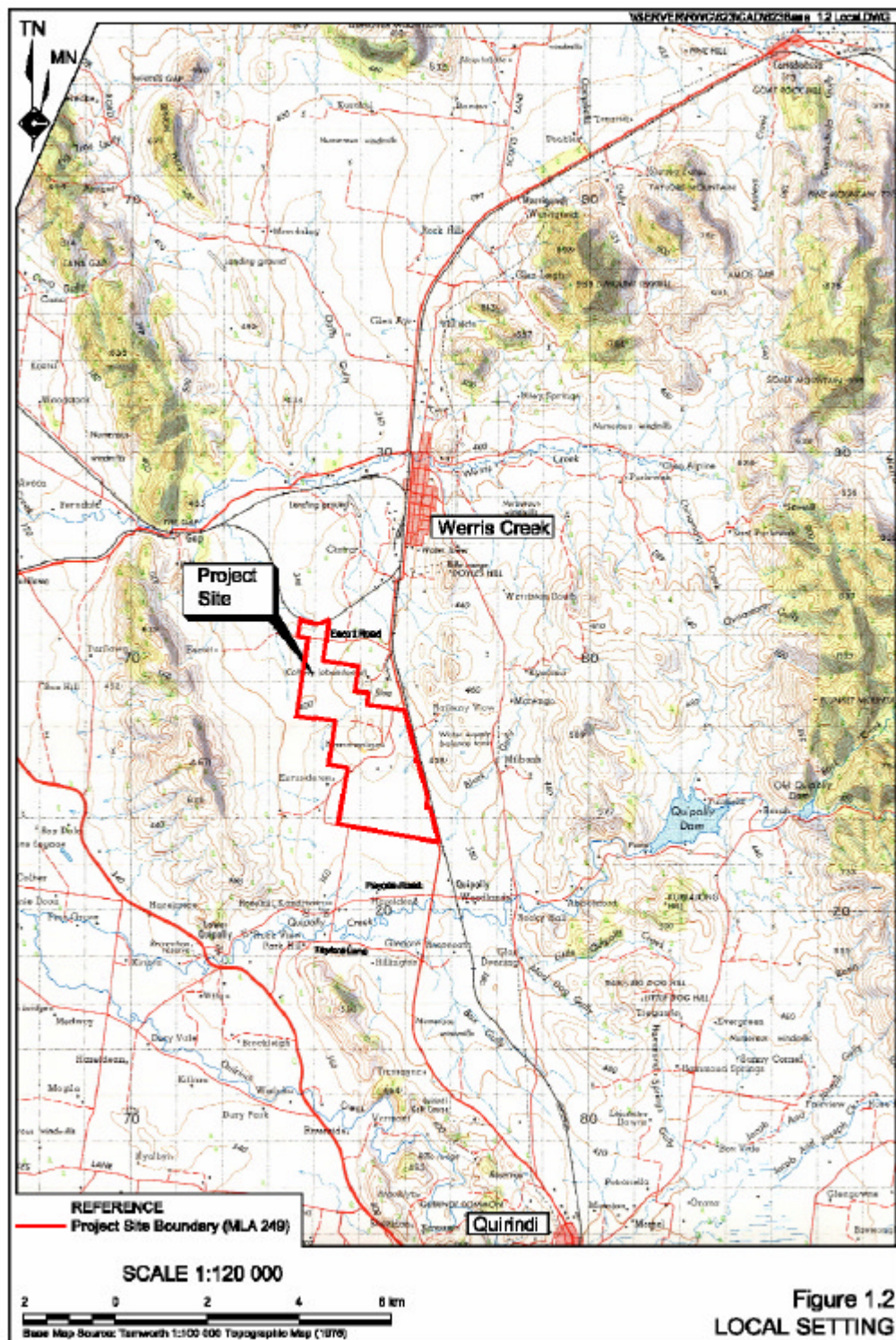


Figure 2: Local Setting

The proposal involves:

- carrying out open cut mining operations over a period of up to 15 years to extract up to 9.8 million tonnes of coal from an area of about 70 hectares at a maximum rate of 2 million tonnes a year;
- establishing an out-of-pit waste dump to the south of the proposed open cut mining pit;
- establishing coal processing area (with a crusher, screens and stockpiles) and administration offices to the west of the proposed open cut mining pit;

- establishing a new rail load out facility and coal storage adjacent to the rail spur line off the Main Northern Railway Line to the north of the proposed mine; and
- developing a mine access road off the Werris Creek-Quirindi Road, and a haul road from the proposed coal processing area to the new rail load out facility.

Essentially, the Applicant would extract the coal from the open cut pit; crush, size and stockpile it in the coal processing area; and then either truck it to domestic markets (about 30,000 tonnes a year) or the new rail load out facility where it would be loaded on trains and railed to Newcastle for export.

The proposal has a capital value of \$10 million; would generate \$500 million in revenue, \$230 million in taxes, and \$30 million in royalties; and employ 70 people during operations.

Under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act), the proposal is classified as State significant, integrated and designated development, and the Minister is the consent authority.

The Applicant lodged a Development Application (DA) and Environmental Impact Statement (EIS) for the proposal with the Department on 9 August 2004. The Department subsequently notified and exhibited the DA and EIS in accordance with the relevant requirements of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

During the exhibition period, the Department received 28 submissions on the proposal: 6 from Government agencies, 1 from a special interest group and 21 from members of the public (7 in support of the project and 14 raising concerns). These submissions raised concerns about the potential air, noise, blasting, water, traffic, general amenity, flora and fauna, and visual impacts of the proposal as well as the potential interactions with adjacent landowners.

During the assessment process the Department consulted extensively with the DEC and the Liverpool Plains Shire Council.

The Department has assessed the EIS and various submissions on the proposal, and recommends that the Minister approve the DA subject to strict conditions.

2. CURRENT SITUATION

2.1 Prior Coal Mining in the Area

Underground mining at the Werris Creek Colliery, located to the north of the proposed mining activities associated with the current proposal was conducted between 1925 and 1963. No mining activity has occurred since 1963.

Exploration drilling identified 7 coal seams and interburden layers with a combined thickness of 130 metres (m) with an in-situ overburden/interburden to coal ratio (bcm:tonne) of less than 6:1.

The boundary of Mining Lease Application 249 (MLA 249) has been used to define the area to which the DA applies (see Figure 3). The total resource within MLA 249 is estimated at 10.1 Mt, which reduced to 9.8 Mt of recoverable resources following a redesign of the proposed open cut mine to avoid a site of Aboriginal heritage significance.

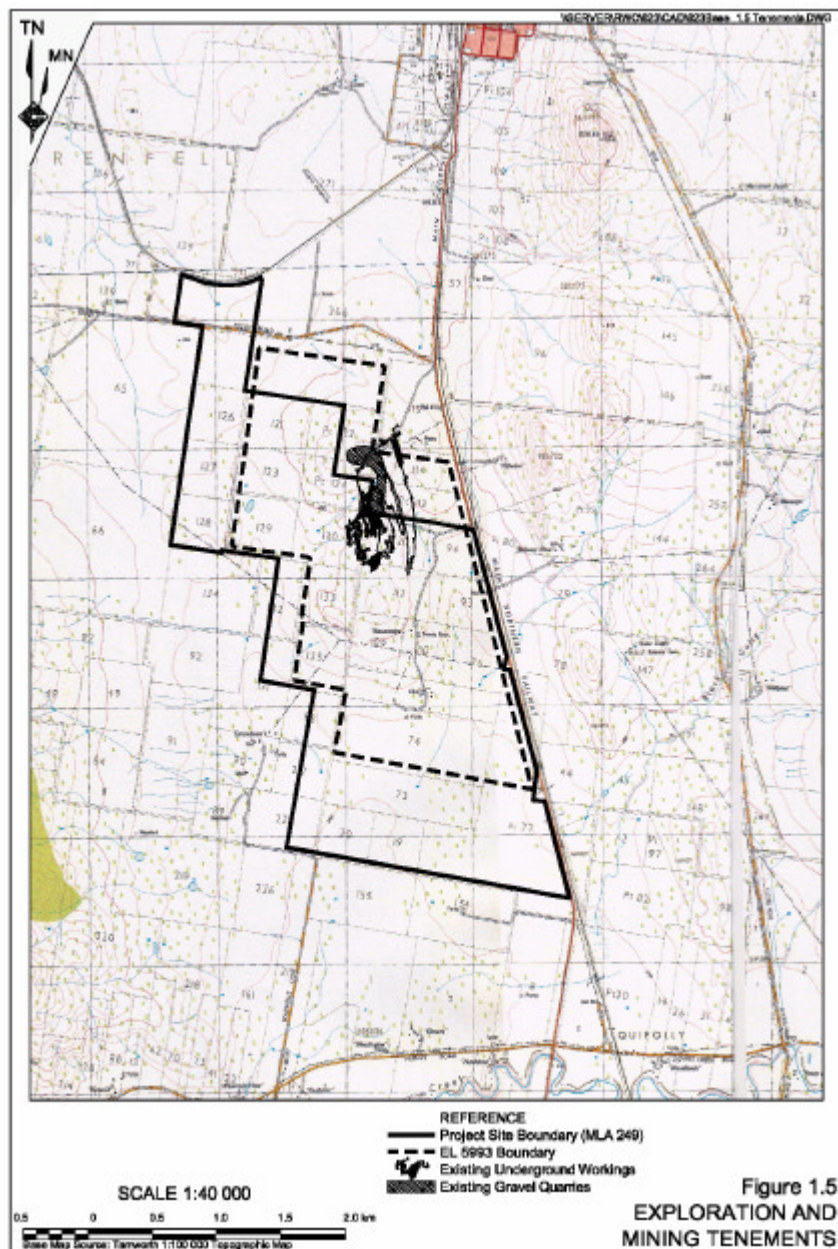


Figure 3: Project Site Boundary and Mining Tenements

2.2 Surrounding Land Use and Ownership

Land use in the Werris Creek area consists of smaller scale mixed farming, involving a combination of cropping (generally wheat, oats or lucerne) and cattle grazing, trending to larger more intensive agriculture further onto the Liverpool Plains. Mixed farming land use typifies the larger properties of “Narrawolga” and “Escott” with similar style agriculture undertaken, but to lesser degrees, on other properties surrounding the project site. To the south of the project site, between Taylors Lane and Paynes Road, a number of landholders are dependent on irrigation to sustain relatively high intensity lucerne cropping and cattle grazing.

Within this general environment of mixed farming are several other current or previous land uses. These include:

- gravel extraction quarries managed by Liverpool Plains Shire and Tamworth Regional Councils (see Figure 4);

- a zeolite processing plant, operated by Zeolite Australia Pty Ltd, and servicing a zeolite mine located to the west of the project site;
- rural-residential style residences on non-commercial farming properties; and
- coal mining at the former Werris Creek Colliery (see Figure 3). Relics of the colliery's surface facilities are located on the "Preston Park" property.

Land ownership in the vicinity of the proposed Werris Creek coal mine is shown in Figure 4. All mining operations and associated infrastructure would occur on land owned, or under agreement to be purchased by, the Applicant.

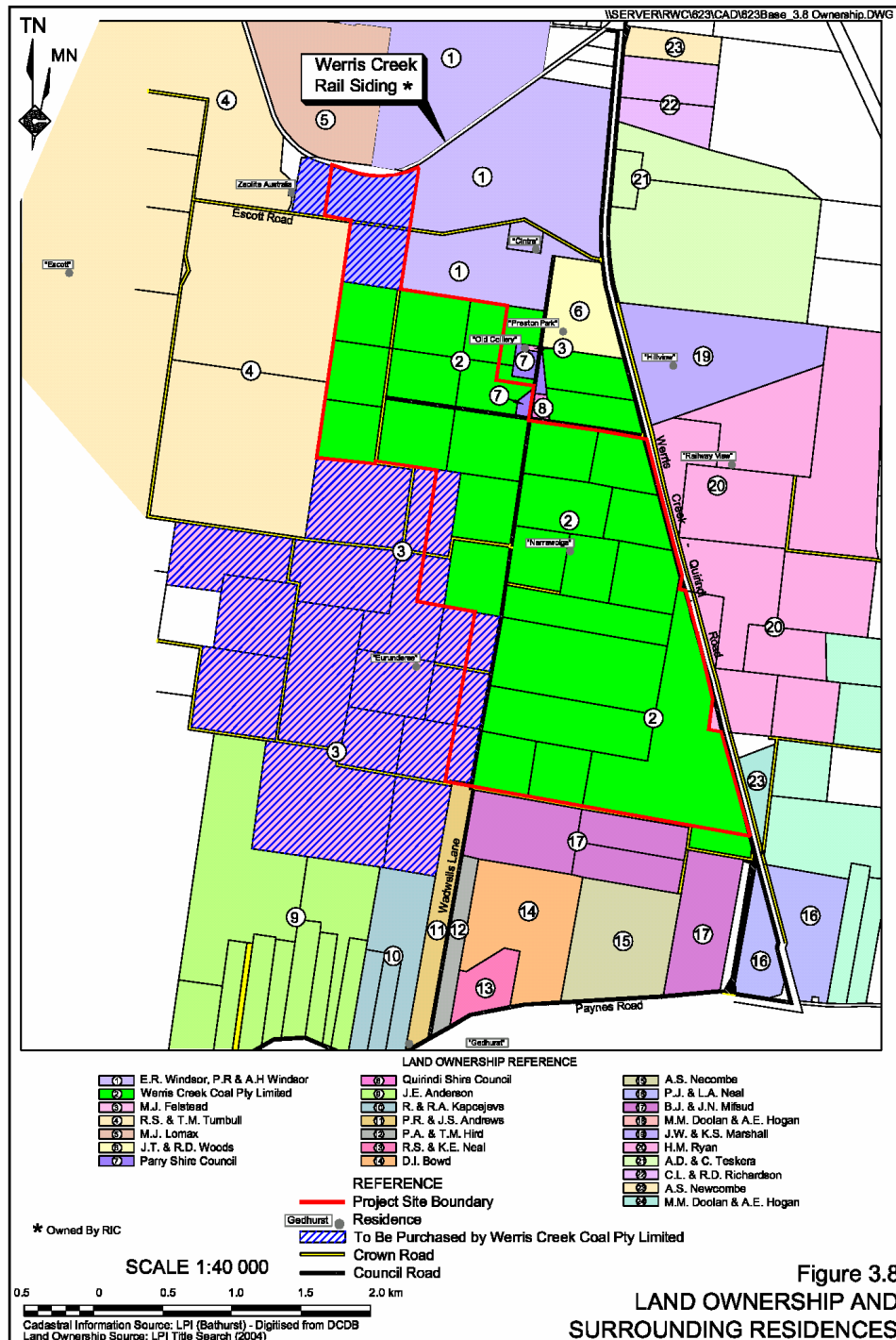


Figure 4: Land Ownership

3. PROPOSED DEVELOPMENT

3.1 Outline of the Proposal

The proposal involves the (see Figure 5):

- construction of a mine access road, rail load-out road and a mine entrance to the Quirindi – Werris Creek Road;
- coal mining by open cut mining methods over an area of approximately 70 ha identified by the “limit of mining”. The excavation would be up to 150 m deep and contained within an area of 700 m x 800 m;
- programmed placement of overburden and interburden materials from the open cut mine, initially to an out-of-pit overburden emplacement and subsequently into, and over, those areas where coal mining has been completed;
- on-site size reduction and screening of the mined coal within a coal processing area west of the open cut mine;
- construction and operation of a rail load-out facility adjacent to, and over, the disused rail siding to the south of Werris Creek (referred to as the “Werris Creek rail siding”);
- transportation of domestic product coal from the coal processing area by trucks via the mine access road and the Quirindi – Werris Creek Road;
- installation of a range of services, structures and transportable buildings; and
- progressive shaping and rehabilitation of the mine area and other areas of disturbance.

The hours of operation for the proposal would vary depending on the activity. Vegetation clearing, soil removal, rehabilitation work and coal loading to trucks for domestic markets would occur between 7 am and 6 pm. Coal processing and transport to the rail load-out facility would occur between 7 am and 10 pm. Mining activities, and train loading would require 24-hour operations Monday to Saturday. Train loading and dispatch would be dependent on train scheduling and may occur 24 hours a day, 7 days a week.

The proposed Werris Creek Coal Mine would have a mine life of about 7 years.

4. STATUTORY CONTEXT

4.1 Environmental Planning and Assessment Act 1979

4.1.1 State Significant Development

Under the Minister's declaration of 29 June 2001, the proposal is classified as State significant development under Section 76(7) of the EP&A Act, because it involves a new coal mine that requires a new mining lease under section 63 of the *Mining Act 1992*.

4.1.2 Integrated Development

The proposal is classified as integrated development, under Section 91 of the EP&A Act because it requires additional approvals under the:

- *Water Act 1912*;
- *Protection of the Environment Operations Act 1997*; and
- *Roads Act 1993*.

4.1.3 Designated Development

The proposal is classified as designated development, under Section 77A of the EP&A Act, because it meets the criteria for an open cut coal mine in Schedule 3 of the EP&A Regulation.

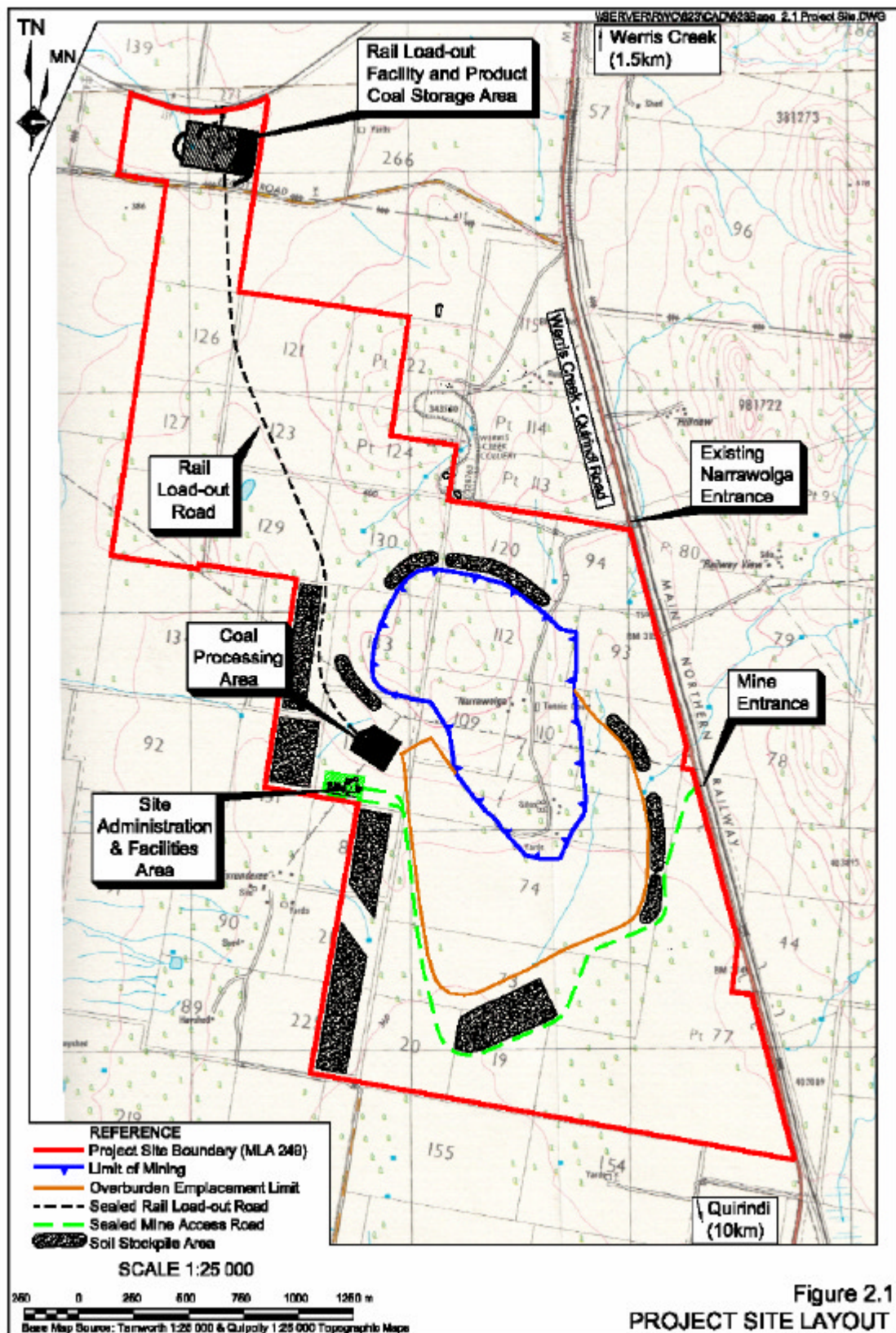


Figure 5: Project Site Layout

4.1.4 Permissibility

The proposal is permissible with consent under the *Quirindi Local Environmental Plan 1991* and the *Parry Local Environmental Plan 1987*. These are the relevant Local Environmental Plans (LEPs) for the proposal.

After the DA was lodged, amalgamation of local government areas has resulted in all of the proposed development being contained within the recently-created Liverpool Plains Shire.

4.1.5 Environmental Planning Instruments

The following planning instruments and policies are relevant to the proposal:

- *State Environmental Planning Policy No. 11 - Traffic Generating Developments;*
- *State Environmental Planning Policy No. 34 – Major Employment - Generating Industrial Development;*
- *State Environmental Planning Policy No. 44 - Koala Habitat;*
- *Draft Orana Regional Environmental Plan No. 1 - Siding Springs;*
- *Quirindi Local Environmental Plan 1991; and*
- *Parry Local Environmental Plan 1987.*

The relevant requirements of these planning instruments and policies have been assessed in Section 1.5 of the EIS. The Department has reviewed this assessment and is satisfied that the proposal satisfies the relevant requirements of the applicable environmental planning instruments and policies.

5. CONSULTATION

The Applicant lodged a DA and EIS for the proposal with the Department on 9 August 2004.

The Department subsequently:

- notified all residents who could be affected by the proposal in writing;
- notified Liverpool Plains Shire Council, the Nungaroo Local Aboriginal Land Council (LALC) and all the relevant State Government agencies;
- advertised the exhibition of the DA and EIS in the *Northern Daily Leader* and the *Quirindi Advocate* on 2 separate occasions; and
- exhibited the DA and EIS at 5 locations between 12 August 2004 and 15 September 2004.

This satisfies the requirements for public participation in the EP&A Regulation.

During the exhibition period, the Department received 27 submissions on the proposal, 14 of them objecting to the proposal:

- 5 from Government agencies (Department of Primary Industry - Minerals, Department of Environment and Conservation (DEC), Liverpool Plains Shire Council, Australian Rail Track Corporation and Roads and Traffic Authority);
- 1 from a special interest group (Australian Railway Monument Management Inc.); and
- 21 from members of the public (14 objecting and 7 supporting the proposal).

The public submissions raised several concerns about the proposal (see Table 1):

Issues	Submissions
Air quality	14
Groundwater management	13
Lifestyle & amenity	12
Noise	12
Blasting	10

Economic loss	9
Visual	7
Traffic	5
Surface water management	5
Night-lighting	4
Health	4
Inaccurate EIS	4
Flora & fauna	3
Poor consultation	2
Other issues	6

Table 1: Summary of Issues Raised In Submissions

The Department has assessed these concerns in detail in Section 6 of this report.

The public submissions supporting the proposal did so on the basis that it would provide economic development and employment for the Werris Creek area. During the assessment process, the Department consulted with DEC about potential flora and fauna impacts, noise impact criteria and water and groundwater issues. This consultation ensured a coordinated approach by the DEC and the Department to:

- the proposed Biodiversity Offset Strategy;
- establishing appropriate noise criteria for assessment;
- methods of ensuring predicted noise impacts would not be exceeded;
- the treatment of noise impacts from the rail spur line;
- negotiated agreements between affected landowners and the Applicant in respect of predicted noise exceedances; and
- water quality monitoring.

The Department also consulted with the Liverpool Plains Shire Council to ensure a coordinated approach to the construction and management of road intersections and section 94 contributions.

6. CONSIDERATION OF KEY ISSUES

The Department has assessed the proposal, EIS, and submissions on the proposal, and believes that the following issues require further consideration.

6.1 FLORA AND FAUNA

6.1.1 Flora and Fauna Impact Assessment

The Applicant has assessed the potential flora and fauna impacts of the proposal, using database searches, literature reviews, consultation with government agencies and ecologists, and field survey work (see Parts 4 & 5 of the EIS Compendium).

The vegetation communities within the proposed 679 ha project site have been described following a field survey and review of past flora studies in the area.

The project site comprises a mix of cleared cultivation land and remnant native vegetation. The ground cover on many sections of the project site is invaded by introduced weed and pasture species.

No Threatened Flora species, Endangered Flora Populations or Critical Habitat have been recorded within the project site. However, remnants of two Endangered Ecological Communities (EECs) (see Figure 6) do occur within the project site:

- Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains; and
- White Box Yellow Box Blakely's Red Gum Woodland.

The proposed development would not result in any clearing of the Brigalow Community and so there would be no significant impact on this EEC.

However, the proposed development would remove 43 ha of the White Box Yellow Box Blakely's Red Gum Community. A survey of the occurrences of this EEC in a 9,400 ha area in the vicinity of the project site indicates that remnants of this community cover 1,800 ha. The removal of 43 ha (or 0.7%) of this EEC within the local survey area does not constitute a significant impact locally, regionally or nationally and so a Species Impact Statement was not required to be prepared for the DA.

Threatened Species

The 2 threatened species are known to occur in the study area are:

- Hooded Robin (*Melanodrya cucullata*); and
- Large Bentwing-bat (*Miniopterus schreibersii*).

Threatened species that have the potential to occur on the project site are:

- Brown Treecreeper (*Climacteris picumnus*);
- Diamond Firetail (*Stagonopleura guttata*);
- Regent Honeyeater (*Xanthomyza phrygia*);
- Speckled Warbler (*Pyrrholaemus sagittatus*); and
- Turquoise Parrot (*Neophelma pulchella*).

The EIS assessed the potential impacts of the proposal on these species in accordance with Section 5A of the EP&A Act (eight part tests). The EIS concluded that the proposal would be unlikely to significantly affect any threatened fauna species.

The EIS also assessed the potential of the proposal to impact Koala habitat in accordance with *State Environmental Planning Policy 44 – Koala Habitat Protection*, as the Koala feed tree species, White Box (*Eucalyptus albens*), comprises more than 15% of the trees on the site. However, as no Koalas have been recorded within 10 km of the site, and the proposal would remove only 0.7% of the White Box trees of the district, the EIS assessed that there would be no significant impact on Koala habitat.

Mitigation Measures

The Applicant intends, as part of a Biodiversity Offset Strategy, to:

- protect, manage and enhance additional areas (147 ha) of the White Box Yellow Box Blakely's Red Gum Community within the project site to enhance linkages between the existing remnants (see Figure 7);
- implement a vegetation and habitat clearance protocol (delineation of vegetation to be cleared, pre-clearance surveys, reuse of habitat features); and
- progressively rehabilitate mined areas (including 53 ha planted with species of the White Box Yellow Box Blakely's Red Gum EEC).

The EIS considers that these measures would mitigate or minimise potential impacts (including impacts associated with connectivity of remnant vegetation) of the proposal on flora and fauna.

6.1.2 Issues Raised in Submissions

The Department received 3 submissions from the general public and 1 from the DEC on the potential flora and fauna impacts of the proposal. These submissions raised concerns about the:

- impact of the proposal on fragmentation of remnant vegetation; and
- impact on habitat removal on local native fauna.

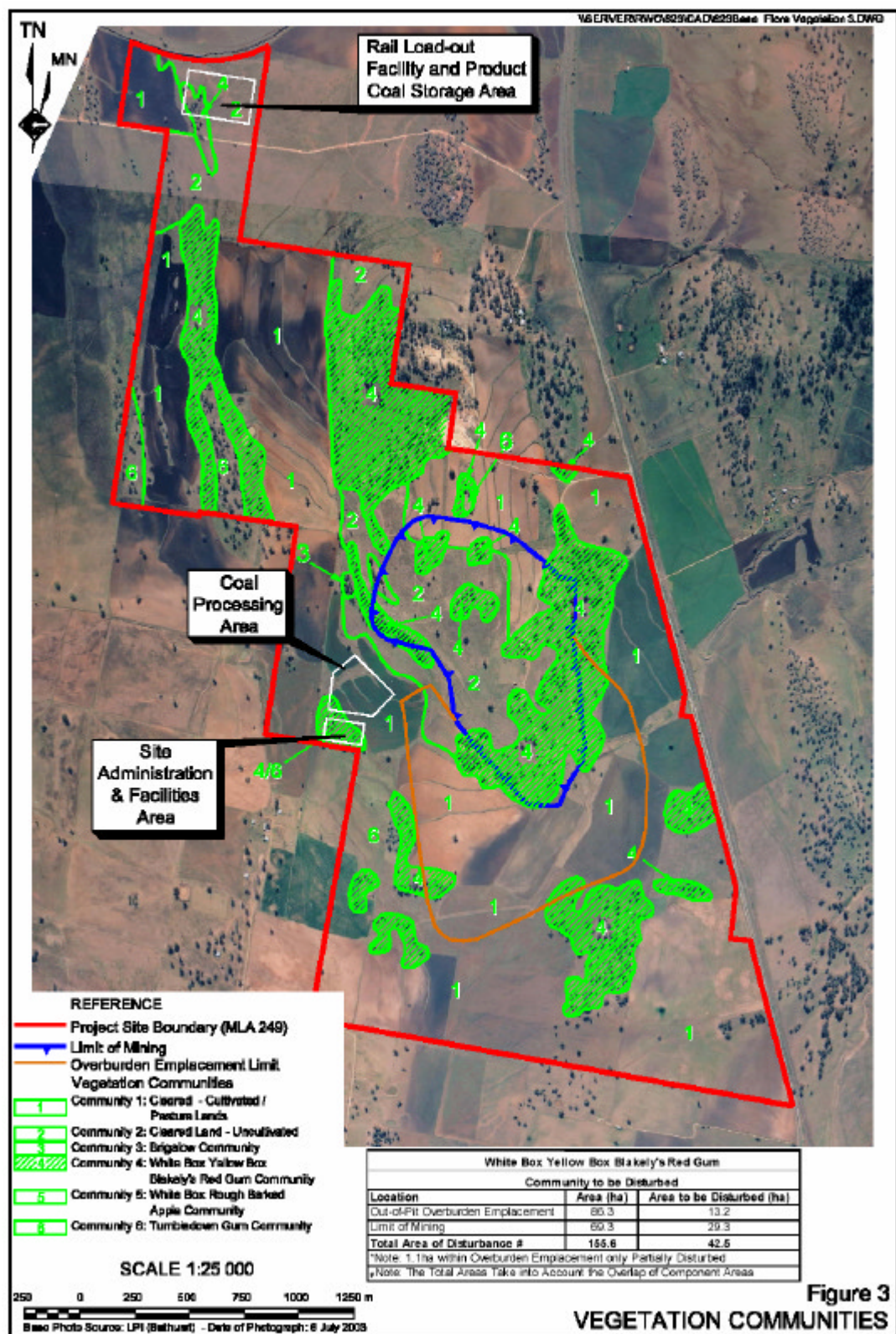


Figure 6: Vegetation Communities