

15.1 Indigenous Values

15.1.1 Introduction

The Barada Barna Kabalbara and Yetimarla People #3 (BBKY#3) and Barada Barna Kabalbara and Yetimarla People #4 (BBKY#4) indigenous groups have been identified as the Traditional Owner representatives of the ECMP area as defined in Section 6.1.3. Both of these groups nominated Woorra Consulting Pty Ltd (Woorra) as their representative organisation to undertake the Indigenous cultural heritage assessments in the project area. Initial cultural heritage surveys were undertaken in the project area at the commencement of exploration drilling operations in 2005, with subsequent surveys having been conducted on an 'as needs' basis in parallel with the exploration program to determine whether Indigenous cultural heritage exists in those areas prior to disturbance. Cultural heritage inspections of specific sites proposed for drilling in 2006, as well as more general area surveys undertaken in May 2007, were conducted by Woorra and their nominated Archaeologist. The survey work was conducted under a draft cultural heritage management plan (CHMP) which was finalised and signed by all parties and their representatives on the 15 September 2008.

The Indigenous cultural heritage assessments to date have entailed on-site surveys of areas potentially affected by exploration works. As part of the CHMP, prior to disturbance of any of the ECMP area, a cultural heritage survey will be undertaken. Due to the staged nature of ECMP development, further surveys, will be undertaken over the coming years, covering the ECMP mining lease areas.

15.1.2 Legislation

Aboriginal cultural heritage sites are protected under Federal and State heritage legislation. This legislation recognises the importance of sites and cultural landscapes to Aboriginal people and to science, and provides measures for their identification and protection.

15.1.2.1 Commonwealth

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act): At the National level, the EPBC Act is the key piece of heritage legislation protecting sites of national or international heritage significance. The Act is administered by the Commonwealth DEWHA. Under this Act, it is necessary for assessment and approval of actions likely to impact on locations of national environmental or heritage significance. A Commonwealth Heritage List has been prepared, comprising places of national significance on Commonwealth land or under Commonwealth control. In Queensland, these are primarily natural and historical sites. None are located within the vicinity of the ECMP.

Sites and places of outstanding National significance under private or State government control have been entered on the National Heritage List. Approvals are required before any actions likely to have a significant impact on the heritage values of these places can occur. Only three such locations have been listed in Queensland. None are located in close proximity to the ECMP.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSI Act): The purpose of the ATSI Act is to protect areas and objects of special significance to Aboriginal people from damage or desecration. The Act is particularly concerned with the protection of locations and areas that are significant according to Aboriginal tradition. The Act provides Aboriginal people with the opportunity to request intervention from the Federal Minister to protect sites they consider to be at risk.

Australian Heritage Council Act 2003 (AHC Act): The Heritage Council, which was established under this Act, is responsible for the maintenance of the Register of the National Estate and the Australian Heritage Places Inventory. Listing on the Register of the National Estate provides no additional protection to that provided by State heritage legislation, and places no constraints on owners. No listed sites occur in the ECMP area.

15.1.2.2 State

Aboriginal Cultural Heritage Act 2003 (ACH Act): The ACH Act is the principal legislation protecting Aboriginal cultural heritage in Queensland. It provides strong protection, recognising the interests that Aboriginal people have in their cultural heritage. The ACH Act states that its main purpose is to provide effective recognition, protection and conservation of Aboriginal cultural heritage. Under the ACH Act, Aboriginal cultural heritage is defined as:

- a significant Aboriginal area, or
- a significant Aboriginal object, or
- evidence of archaeological or historical significance, of Aboriginal occupation in Queensland.

During the exploration site clearance program, the Indigenous cultural heritage survey focussed on identifying evidence of archaeological or historical significance. A number of locations in the ECMP area were identified as being of cultural significance and/or archaeologically sensitive to the Traditional Owners.

In addition to the protection measures provided by the ACH Act, there is a requirement for Proponents whose activities that could potentially affect items protected under the Act to observe their 'Cultural Heritage Duty of Care' to ensure that Aboriginal sites and places are not damaged. By meeting one or more conditions specified under Section 23(3) of the Act, a person or corporation is deemed to have complied with the cultural heritage duty of care. These conditions include operating under an approved CHMP or a native title agreement where cultural heritage is specifically considered. As detailed in Section 15.1.1 an agreed CHMP is in place for the ECMP.

15.1.3 Description of Environmental Values

The area surveyed as part of the 2006 and 2007 Indigenous cultural heritage assessments generally coincides with ECMP portion of EPC 1036 (refer to Figure 2.3.3), in the north-western section of the ECMP area. This north-western area is enclosed by the following boundaries.

- Western - Burton Coal haul road.
- Northern - Northing line 7597000.
- Southern - Northing line 7590000.
- Eastern - Easting line 624000.

Much, but not all, of the land enclosed within these boundaries was inspected during May 2007 in enough detail to establish reasonably reliable predictions for the occurrence of Indigenous cultural heritage throughout the area.

During the survey it was noted that as a result of the broadscale clearing, active downslope and gully erosion was widespread and loss of topsoil was evident. Much of this erosion had concentrated near creeks and drainage lines and has had a destructive effect on many artefact scatters that were found in the area. A more comprehensive description of the watercourse and site ecology attributes is presented in Sections 9.2.6 and 14.2.4 respectively.

The area surveyed was divided into the following five zones, based mainly on topography and vegetation, with detailed surveys undertaken of each.

- Creek banks and terraces.
- The sides and tops of the mesas.
- The lower slopes of the mesas.
- Cleared Brigalow lands.
- Open, mainly Box forest.

The locations of all findings were recorded by GPS. To maintain consistency of information gathered, similar standard attributes of artefacts and sites were recorded for each zone.

15.1.3.1 Existing Values

Previous Indigenous cultural heritage investigations on the neighbouring mining leases have resulted in the recording of both a rich variety and great numbers of cultural heritage items and areas. It has been established that the following landscape features are culturally and/or archaeologically sensitive.

- Creek and watercourse corridors including banks and terraces.
- A range of vegetation within old, remnant Box and Brigalow forests.
- The environs of standing water e.g. lagoons, gilgai (melonholes among Brigalow), and swamps.
- Sandstone beds and rocky bars in creeks.
- Rock shelters in the sides of mesas and escarpments.
- Large surface outcrops of silcrete, basalt and other stone.
- Unusual features in the landscape.

Surveys of the area established that these features are also important in the ECMP area.

The 2007 Indigenous cultural heritage survey recorded several hundred items, features and sites within the surveyed area. These items, sites and features comprised scarred trees, several natural features, single artefacts, and artefact scatters ranging from several small items representing an isolated event to others that may have contained many thousands of artefacts spaced over several kilometers. Though the scatters recorded in this survey were affected by erosion, the larger scatters contained great varieties of stone tools and still retained visible evidence of discrete activities such as food preparation and cooking, artefact knapping, and axe sharpening. These extensive artefact scatters were mostly located:

- wherever there was disturbance along watercourse terraces. It is thought that the scatters may be almost continuous and may continue subsurface in undisturbed sections of the terraces; and
- on gently sloping, eroded land between the bases of some of the mesas and watercourses.

The artefact scatters in the gently sloping, eroded land between the bases of some of the mesas and watercourses were particularly prominent in the ECMP area and appear to be primarily associated with the mesa landscape. These sites suggest people in pre-European times in the ECMP area camped on a large scale in the scrub at slightly more elevated positions than the creek terraces.

15.1.4 Potential Impacts and Mitigation Measures

The ECMP area will be disturbed directly as a result of activities including excavation of the box cut, creation of overburden and waste emplacement facilities and the construction of infrastructure including roads, dams and the mining infrastructure area and indirectly by subsiding the land surface above the underground workings. Remediation of subsidence effects may also result in direct impacts. Most of these activities will be localised and their potential impacts on the cultural landscape can be anticipated. Potential impacts on Indigenous cultural heritage that may result from construction activities will vary according to the nature of the activity, with minor impacts predicted in areas of potential mine subsidence and significant impacts more likely in the areas of the box cut and emplacement facilities.

15.1.4.1 Impact Management

Practical strategies to manage potential impacts on Indigenous cultural heritage sites and artefacts/items have been formulated in consultation with the BBKY#3 and BBKY#4 Traditional Owners. Site avoidance is the preferred option for cultural heritage protection, although where impacts are unavoidable, alternative management practices will be necessary. These will range from recovery of artefacts through surface collection, localised test pitting, or detailed, open-area excavation. The locations where artefact/item recovery is necessary will be decided between the Proponent and the other CHMP signatories in line with the agreed requirements stipulated in the CHMP.

The Traditional Owners recognise the balance to be achieved in protecting cultural heritage and development of the ECMP and have identified the following Indigenous cultural heritage management measures in the CHMP.

- In accordance with provisions of the ACH Act, the Proponent will exercise a duty of care to ensure that measures are implemented for the protection of identified Indigenous cultural heritage, and cultural heritage artefacts/items detected during ground disturbance.
- A committee comprising Traditional Owner representatives and representatives of Vale has been formed to assist with the management of cultural heritage issues. This committee is responsible for ensuring that information is circulated to the various stakeholder groups. The committee will decide on the most appropriate strategies for managing impacts to identified cultural heritage sites and locations, and on expeditiously managing artefacts/items discovered in the process of mining.
- A procedure for on-going Indigenous cultural heritage surveys has been developed and documented. This procedure is designed to allow for the monitoring, auditing and management of the survey work undertaken and governs:
 - notice of surveys before commencement of project activities;
 - performance of surveys;
 - assessment of survey results;
 - salvages; and
 - management of areas outside direct impact.
- Where it has been recognised that there is a significant potential for the presence of subsurface Indigenous cultural heritage in an area that is planned to be subject to significant ground disturbance caused by project activities, cultural heritage monitors will be engaged during the stripping of surface materials.
- Sites of Indigenous cultural heritage located during a cultural heritage survey will be assessed in accordance with a Trigger/Action/Response Plan (TARP) matrix which is appended to the CHMP. This matrix is designed to provide a quantitative method for the assessment and handling of cultural heritage finds.
- A procedure to apply in the event that any project personnel locate items of Indigenous cultural heritage that were not salvaged or identified by the Traditional Owners, including guidance on how to deal with skeletal material if discovered.
- All personnel employed on the ECMP are required to undergo training in relation to cultural heritage and be aware of the significance of cultural heritage finds to the Traditional Owners.
- A conflict resolution process.

The development and finalisation of the CHMP was undertaken with the involvement of the DNRW, now DERM, and appropriate stakeholder representatives.

15.2 Non-indigenous Values

15.2.1 Description of Environmental Values

This section addresses non-indigenous cultural heritage issues in relation to the ECMP area and summarises a technical report prepared under permitting arrangements for the Queensland EPA, now DERM. The technical report is included in Appendix M.

15.2.1.1 Historical Background

The following discussion provides an historical overview of the broad areas under consideration and presents a suitable platform for discussions regarding cultural heritage significance and management recommendations.

Early European Pastoralism

German explorer Ludwig Leichhardt was the first European to enter the northern Bowen Basin (Killin 1984). Ludwig spent January and February 1845 camped in and exploring the region that he later named Peak Downs and noted that it contained a number of both well grassed and luxuriant plains and scrubby sandstone ridges (Leichhardt 1964). Ludwig also noted the presence of coal after his party attempted to sink a waterhole, but this was not of prime concern as he sought areas for pastoral use (Murray 1996).

While passing through the area of modern Moranbah in February 1845, Leichhardt encountered a river that he named 'Isaac' in honour of his friend and supporter F. Isaacs from the Darling Downs (Leichhardt 1964).

Encouraged by the reports of Leichhardt and other explorers, various figures took up pastoral leases in the area in the decade that followed. In 1854 Ludwig's friend Jeremiah Rolfe squatted on a run he called 'Belyando Waters' until it later became a part of a legal pastoral division (Killin 1984). Rolfe's unauthorised squatting was by no means unique as during the 1850's land acquisitions in inland central Queensland had been a 'free-for-all' (Murray 1996).

After the Leichhardt District was officially opened for pastoral settlement in 1856, a number of other runs were taken up. The Archer brothers, also acquaintances of Leichhardt's, took up 'Capella', 'Boree', 'Upper Crinum', 'Lower Crinum', and 'Laguna' (O'Donnell c.1989). Oscar de Satge gained 'Wolfgang' in 1861 and John Muirhead established a massive sheep run at "Banchory" in May 1860 (O'Donnell c.1989). These holdings established a pattern of private pastoral leases that typified the region for the first 100 years of its settlement.

Early development was tempered by a tendency of some settlers to claim land purely for speculation with no intent to improve or make productive use of the land (Murray 1996). This practice was eventually prohibited by Queensland colonial government legislation forcing settlers to 'to occupy and work their properties' (Murray 1996).

The encroachment of these settlers caused significant disruption to the existing patterns of life among the Aboriginal inhabitants of the area, and significant 'racial disharmony' followed (Killin 1984). Contemporary records noted a number of massacres of pastoralists by Aboriginal groups in the region (O'Donnell c.1989). Reports of European brutality toward Aboriginal people included a number of incidents associated with the notorious Lieutenant Fredrick Wheeler of the Native Mounted Police in the mid-1870s (Lack and Stafford 1965). The unease caused by this racial tension meant that as late as 1895 station managers were choosing to live in 'fort like dwellings ... with slits for fighting blacks' (O'Donnell c.1989).

Much of the area around what became the town of Moranbah was thus dedicated to pastoral activity during the 1860s and 1870s. Most land was available in leases of one to two years, but unfortunately records of these early leases remain sparse. Mr Andrew Scott is credited with taking up 'Moranbah' as a pastoral lease prior to 1880 (Belyando Shire Council 2006). After the 1880s, Scott's Moranbah was combined with other local leases to form 'Grosvenor Downs' station (Murray 1996). However 'Moranbah Holding' appears in the official records again in 1920, as a grazing homestead for Mr H.R. Hart, and again

in 1929 when Mr C.H. Clements acquired the station and renamed it simply 'Moranbah' (Belyando Shire Council 2006).

Although there was some early optimism about farming in the Moranbah district, sustainable agriculture proved difficult to establish. The Queensland State Farm at Gindie that ran from 1897-1932 failed to encourage widespread agriculture in the district (Killin 1984). Another State-sponsored venture after the Second World War, The Queensland British Food Corporation, failed due to adverse weather conditions (Rogers 1964). Nonetheless, a number of individuals saw the possibility to succeed on smaller plots. This smaller scale grazing was somewhat successful, but during the 1960s the area remained sparsely populated and underdeveloped in terms of infrastructure (Murray 1996).

Early Mining

Gold and copper were the first minerals to be extracted from the Bowen Basin mineral field in large quantities. Although the existence of coal had been known since Leichhardt's first explorations, the absence of reliable transport infrastructure retarded its development as an industry. Since the first discovery of gold in 1861 (Killin 1984) mining has substantially dictated the fortunes of the region alongside the pastoral industry, and many small towns and settlements appeared to capitalise on the mineral deposits.

Following the discovery of gold, the area experienced its first gold rush which was centred on the town of Clermont in August 1863 (Killin 1984). Commensurate with the perception of quickly earned fortunes, the town became renowned as 'an enterprising little township' remarkable only for its 'debauchery and bad language' (Bolton 1963). The gold deposits were soon exhausted and by 1887 Queensland Mining Warden Edmund Morey concluded that the area was no more than a 'poor man's field' where 'washing-up' and 'fossicking' were the only remaining activities (Morey 1888).

Copper soon replaced gold as the 'life-blood' of the Bowen Basin (O'Donnell c1989). The first discovery of copper was made by Jack Mollard in 1861 (O'Donnell c.1989). Reflecting the future trend in mining operations in the region in 1862 Sydney entrepreneur John Manton formed the Peak Downs Copper Mining Company with £100,000 capital (Killin 1984). Although this was the largest copper mining concern in the area, copper was still largely mined by individuals.

In concert with the discovery of copper and gold, there was a 'boom and bust' cycle in many of the Bowen Basin settlements. Small towns situated at or close to gold and copper fields relied heavily on minerals for their well-being. Often when the deposits were exhausted, the town ended too. Copperfield, Birimgan, Blackridge, Douglas Creek, McDonald's Flat and Theresa Creek were all mining towns that once were large enough to have schools and other basic services, but which were eventually deserted (O'Donnell c.1989).

Coal Mining to 1968

From the time of Leichhardt's explorations there were 'tantalizing reports of coal' in the region (Whitmore 1991, p. 318). However, there was little incentive to extract these reserves as there was limited local demand and no reliable means of transporting coal to the coastal markets. With the extension of the railways into central Queensland before the end of the 19th century, the 'impetus for extending coal mining' in the area grew (Whitmore 1985).

Following the exhaustion of the goldfields, the town of Blair Athol began to produce coal in a limited capacity for the central railways (Killin 1984). But the lack of a local market and absence of a rail link made the mine uncompetitive (Whitmore 1985). With the extension of the Northern (later Central) railway line to Clermont in 1884, a small market for local coal evolved. Although this development was not enough to generate large-scale production, the Chief Inspector of Mines, C.F.V. Jackson, estimated that there were '44,000,000 tonnes' of coal in the Clermont coal fields (Jackson 1909).

To this point underground mining had been the dominant technique in the Bowen Basin, but this method proved dangerous, costly, and inefficient. In order to competitively extract coal, John William Hetherington committed his Blair Athol Coal and Timber Company to experiment with open cut mining methods in 1921 (Whitmore 1991). Beset by a variety of technological, weather, and transportation problems and coupled with a low world demand for coal, this experiment in open cut mining ended suddenly in 1923 (Whitmore 1991).

It was not until Blair Athol Opencut Collieries Limited that the open cut method was successfully applied to the coal seams of the northern Bowen Basin. Assisted by technological developments Blair Athol Opencut Collieries began open cut mining in 1937 (Killin 1984). This decision was rewarded with increased demand caused by improved world markets and World War II. Following 1945, Blair Athol Coal and Timer also reverted to open cut mining at their mines with some success (Killin 1984).

However, the economic viability of coal from the region was beset by the same problems as primarily the distance from large markets and lack of reliable transportation. These traditional problems were exacerbated when Queensland Rail changed to diesel locomotives in 1952 (Killin 1984). These developments forced Blair Athol Opencut Collieries and the Blair Athol Coal and Timber Company to merge and form Blair Athol Coal Pty. Ltd. in 1965 (Killin 1984). Despite technological advances, coal from Blair Athol was not competitive on the international market leading to large amounts of stockpiling (Martin and Hargraves 1993).

With the purchase of Blair Athol Coal by a joint venture of Conzinc Riotinto of Australia (CRA) and Clutha in 1968, the era of multi-national companies in the Bowen Basin began (Killin 1984). In a move that was to have direct implications for the Belyando Shire, the US multinational Utah Development Corporation (UDC) opened their first open cut coal mine in Blackwater in 1968, 290 kilometres south-east of current day Moranbah (Martin and Hargraves 1993). These large multinationals bought the necessary capital to modernise mining, ready access to large domestic and international markets, and enough political influence to ensure the necessary infrastructure developments.

By 1990, Queensland had taken the mantle of Australian largest coal producing state (Martin and Hargraves 1993, p. 163) and by 1997 two thirds of Queensland's \$10 billion production of coal came from the Bowen Basin ("Advances in Mine Site Rehabilitation" 1997).

Development of Moranbah

Located approximately 200 km south west of Mackay the township of Moranbah has developed as the major social hub in the vicinity of the study area. The origin of the word Moranbah remains somewhat unclear. The earliest record use of the term was to describe Andrew Scott's run prior to the 1880s. By the 1920s the designation had changed to Moranbah, but when the town name was gazetted in 1969 the original Moranbah had returned (Murray 1996).

Although there were reports of high grade coal in vast quantities in central Queensland (Chas. R. Hetherington & Co. Ltd. 1964), it was not until the discovery of a large seam of coal at Goonyella near the Isaac River that the town of Moranbah was built (Williams 1979). American multi-national UDC took up the mining rights to the land and with the forecast of approximately 400 employees, 1,100 acres of the 'Moranbah' lease was purchased and became crown land (Belyando Shire Council 2006). On 4 October 1969, the Queensland Government Gazette announced 'notification of intention to assign a place name, Moranbah, in the Parish of Moranbah, County of Grosvenor, in the shire of Belyando' (Murray 1996, p. 16). This action was complete on 22 January 1970 when the land for both Moranbah and Goonyella was transferred from the Nebo Shire Council to the Belyando Shire Council (Nebo Shire Council 2005).

The town of Moranbah was purpose built as a "supportive town" for the Goonyella and Peak Downs mines (Murray 1996). Ullman and Nolan Consulting Engineers of Mackay were contracted to design a town 30 km south of the proposed mine site (Kingston 1986). The estimated cost of the town, between \$2,142,000 and \$2,242,000, was borne by UDC, with the Belyando Shire Council supplying some infrastructure (Kingston 1986).

Coupled with the lack of suitable accommodation, the isolation of the town meant that most residents were transitory. Many public servants, police officers, and teachers remained in Moranbah for the minimum required period and the Salvation Army reported that a number of miners wives 'ran away' from their husbands due to the hardships of living in an isolated location (Murray 1996).

Belyando Shire Council and the UDC sought to reverse the trend that saw only 18% of home ownership in Moranbah (Bertoldi 1978). A 'Home Purchasing Scheme' was begun in October 1977 that allowed residents to buy their current rental home at a 20% discount off the market price (Bertoldi 1978). This scheme was not an initial success, for as one local put it 'most people never really thought that mining would last' so there was no point in purchasing a house (Murray 1996). Nonetheless, infrastructure and service improvements were made to the town and a number of essential and recreational services were

added. By the mid 1970s the town boasted a shopping centre, a Little Athletics club, dentists, an air charter service, an Aussie rules football club, the 14 bed Moranbah Hospital, a race track, and golf course (Murray 1996). With the growth in mining operations the town continued to develop and by the late 1990's Moranbah was 'a slow and easy going place' with 'a shopping centre, hospital, library, banks, video rental stores, a travel agency, churches, and even a modest zoo' (Murray 1996). By 1996, a small pensioner housing development, increased home ownership, and a high school showed that some residents in the town had come to see Moranbah as home (Murray 1996).

Coal Mining at Ellensfield

The ECMP area is located on a portion of the original pastoral run described as Mountain Station on historical maps from 1860. This run was created under the *Unoccupied Crown Lands Occupation Act of 1860*. The survey plans for the study area show that Mountain Station was resumed into the Annandale run after the *Crown Lands Act of 1884* was passed, which allowed landholders owning adjacent land to consolidate their runs.

Survey plans of the study area show no homesteads or other relevant amenities or infrastructure within or close to the study area. Therefore it is likely that the study area was used to service the then neighbouring Broadlea property to the north-west. Indeed, other than depicting a few paddocks, survey plans throughout the early 20th century note the quality of the pasture land (Figure 15.2.1).

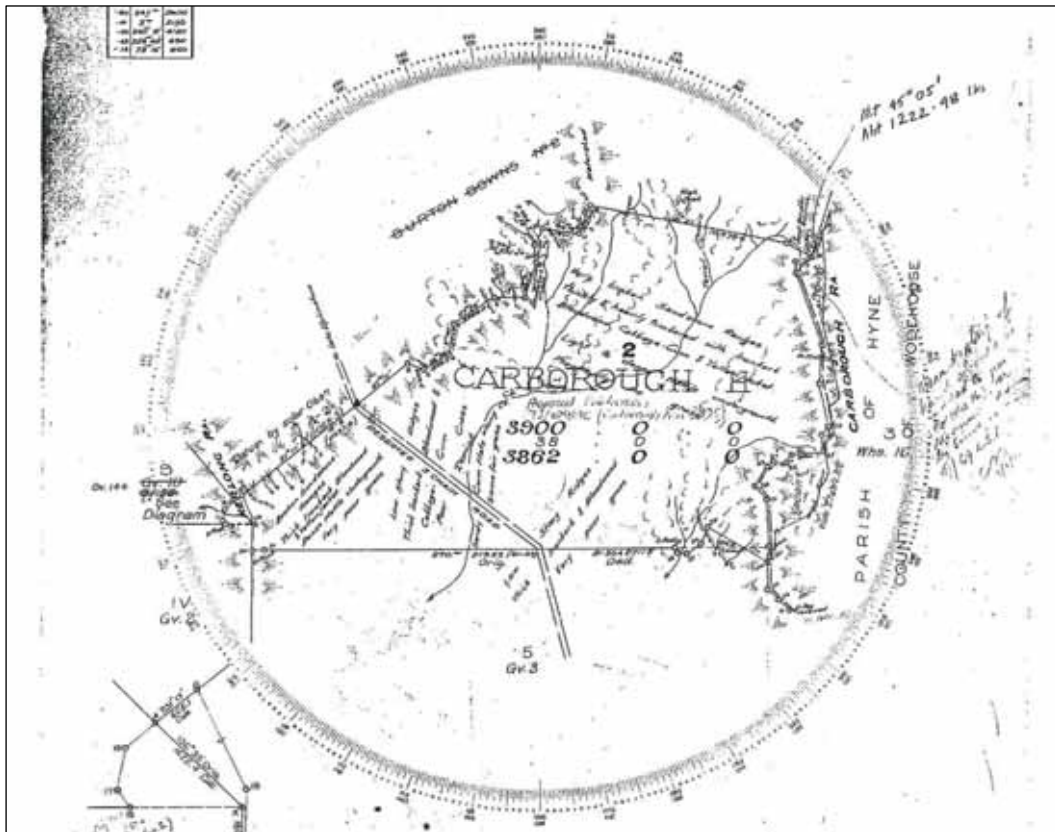


Figure 15.2.1 The study area, surveyed in 1928 ((GV 26 V) Department of Natural Resources and Water)

During the latter half of the 20th century, several portions of the Annandale run were sold off, one of which now forms the land known as Ellensfield in which the ECMP area is located.

15.2.1.2 Register Searches

On-line searches of the National and Commonwealth Heritage Registers, the former Register of the National Estate and the Queensland Heritage Register web sites were conducted to identify places and sites of cultural heritage significance located within the ECMP area. The National and Commonwealth Heritage Registers, along with the former Register of the National Estate are compiled by the Australian Heritage Commission and are inventories of Australia's natural and cultural heritage places that are worth conserving for the future.

No sites within the ECMP area were identified on these registers.

15.2.1.3 Field Survey Results

Methodology

The survey methodology adopted for this study incorporated a vehicle and pedestrian survey across the ECMP area. Landmark areas were targeted, such as property boundaries, easements, and known locations of structures, dams and holding yards. It is estimated that approximately 50% of the ECMP area was surveyed. For this particular survey, a purposive sampling strategy was employed. Historical research and consultation with landowners enabled a comprehensive survey of areas known to be of historical interest and significance whilst remaining within the survey timeframes.

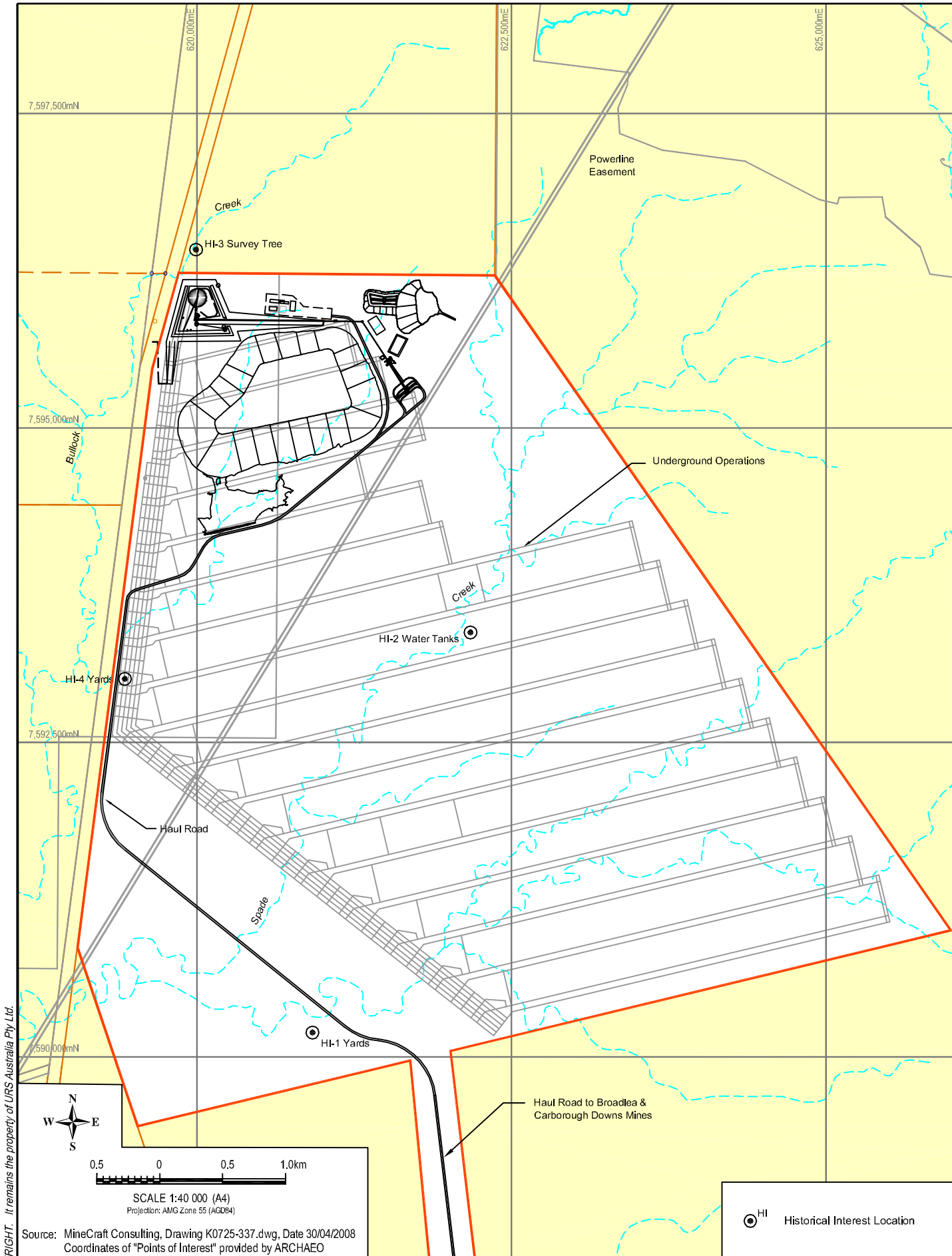
Historic Sites and Places located within the ECMP area

Historical sites of cultural heritage significance are those sites which contain suitable value to warrant a significance and impact assessment. Such sites are considered to contain suitable significance and value to the area as a result of contextual research conducted prior to a field survey, consultation with relevant stakeholders and other best practice cultural heritage assessment techniques. There were no historical sites of cultural heritage significance located within the ECMP area during this survey.

Places of historical interest are those which contribute to the broader discussion of historic cultural heritage sites and places, they do not, however, provide a suitable level of cultural heritage significance in their own right to justify further assessment or specific mitigation strategies. Four places of historic interest were located and are identified below by the prefix HI (Table 15.2.1 and Figure 15.2.2).



Table 15.2.1 Location data for places of historical interest

Site ID	GPS co-ordinates ¹		Comments
	Eastings	Northings	
HI-1	620919	7590194	Yards, windmill and dam
HI-2	622175	7593374	Water Tanks
HI-3	619993	7596416	Survey Tree
HI-4	619427	7593005	Yards, windmill and dam
1. Geodetic datum = WGS84. Position format = UTM/UPS grid. Grid Zone = 55K			



This drawing is subject to COPYRIGHT. It remains the property of URS Australia Pty. Ltd.

Source: MineCraft Consulting, Drawing K0725-337.dwg, Date 30/04/2008
 Coordinates of "Points of Interest" provided by ARCHAEO

Client  	Project ELLENSFIELD COAL MINE PROJECT ENVIRONMENTAL IMPACT STATEMENT		Title LOCATION OF PLACES OF HISTORICAL INTEREST	
	Drawn: VH Job No.: 42626093	Approved: RS File No.: 42626093-g-542b.dwg	Date: 22/06/2009	Figure: 15.2.2

15.2.1.4 Significance Assessment

Nature of Significance

Cultural heritage significance relates to people's perspective of place and sense of value, within the context of history, environment, aesthetics and social organisation.

A range of standards and criteria are available to assist with determining cultural heritage significance. The cultural heritage significance of the ECMP area was evaluated using recognised benchmarks such as *The Burra Charter* (Marquis-Kyle and Walker 1999) and *Queensland Heritage Act 1992*. The cultural heritage significance findings are summarised in Table 15.2.2.

Table 15.2.2 The nature of the cultural heritage significance for the ECMP area

Value	Significance Rating	Justification	Legislative Status
Aesthetic	Low	Surviving today is what has remained a relatively rural setting, the ECMP area presents a basic level of aesthetic qualities related to natural and historic nature of the site (relevant to the local community).	Does not satisfy listing on the Local Heritage Register or Queensland Heritage Register (currently unlisted).
Historic	None to Low	Representing pastoral lease and settlement activities commonplace to the area from the 1850s, including the many challenges and activities associated with pastoral pursuits from this time. Evidence of mining pursuits more recently overtaking these earlier pursuits.	Does not satisfy criteria for listing on the Local Heritage Register or Queensland Heritage Register (currently unlisted).
Scientific	None to Low	Some elements survive as remnants of the ECMP areas pastoral pursuits, which collectively have potential to contribute to an understanding of the local areas history. No elements of the ECMP area display any significant level of technical flare or ingenuity for their time.	Does not satisfy criteria for listing on the Local Heritage Register or the Queensland Heritage Register (currently unlisted).
Social	Low	Properties in the ECMP area have a connection with the families who have lived and worked on them.	Does not satisfy listing on the Local Heritage Register or Queensland Heritage Register (currently unlisted).

Statement of Non-Indigenous Cultural Heritage Significance

Drawing from Table 15.2.2, the following statement of significance has been provided to reflect the ECMP area's cultural heritage significance within the current legislative frameworks.

The ECMP area has significance because:

- it represents settlement and pastoral pursuits within the district from early times and, more recently coal mining activities, and *contributes in demonstrating the evolution or pattern of the local area's history;*
- it contains a number of working pastoral enterprises and their associated remnants, including a series of yards, dams and windmills, and *has potential to yield information that will contribute to an understanding of the local area's history;*

- it survives today in a rural setting, including the historic environment associated with pastoral activities and the natural setting alongside various creek lines, and exhibits a level of *aesthetic* value considered important to the local community; and
- surveying and land division has been an important theme in the area, and much of the historical fabric associated with the wider area is connected to the exploration and demarcation of land. The blazed survey tree, although modern, shows the continuation of methods such as survey tree markings. These methods *have a special association with the life or work of a particular person, group or organisation of importance in the local areas history.*

Conclusion

Although the field survey identified no sites of cultural heritage significance within the ECMP area, it did identify four places of historical interest as outlined in Table 15.2.1. These places are not considered to contain enough heritage value to warrant further assessment or specific mitigation strategies, but do however provide a good indicator to potential heritage values within the region.

Limited historic material and the low levels of historic activity observed within the surveyed area indicate that the ECMP area has nil to low archaeological potential. It is concluded that there is some potential for further historic places/items to exist within the study area as the nature of field survey did not allow for a comprehensive survey of 100% of the ECMP area. These are likely to be remnant sites relating to pastoral and settlement activities, such as historic survey trees, roads and stock routes, remnant boundary fence lines and station dumps. Elements associated with early roads, such as mile markers and historic camp remnants, may also exist within the ECMP area.

From a heritage perspective, it is concluded that the ECMP area is likely to contain low levels of local cultural heritage significance. There were no sites or places located within the ECMP area that contain levels of cultural significance important to Queensland under Section 35 of the *Queensland Heritage Act 1992*.

15.2.2 Potential Impacts and Mitigation Measures

15.2.2.1 Project Impact on Places of Historical Interest

The field survey has identified four places of historical interest. These places are not considered to contain enough heritage value to warrant further assessment or specific mitigation strategies. However, some may be subject to potential impact by the ECMP. Potential direct impact will generally be in the form of surface and sub-surface disturbance and vegetation clearance related to the mine's development. Impacts may also occur from the construction of roads and infrastructure associated with mining activities, including the day to day movement of vehicles across the broader site.

Project Impact on Potential Places of Cultural Heritage Significance

There is some potential for further historic places/items to exist within the ECMP area. These historic places/items are likely to be remnant sites relating to pastoral and settlement activities, such as historic survey trees, roads and stock routes, remnant boundary fence lines and station dumps. Elements associated with early roads, such as mile markers and historic camp remnants, may also exist and potentially be impacted by the ECMP.

Impact Mitigation and Recommendations

As no sites of cultural heritage significance and only four places of historic interest were identified within the ECMP area during the field survey, it is considered that there is not enough cultural heritage value to warrant further assessment or specific mitigation strategies.

It is however possible that unexpected historic cultural heritage sites, including archaeological places, located within the ECMP area may be identified and have the potential to be impacted by the ECMP. These unknown sites or places may include or be related to:

- an important historic event that took place;
- remains from early settlement activities;
- remains of old mines or early camps;
- remote graves;
- survey trees; or
- old Station dumps.

Should any such site or place be identified it will be handled in accordance with the applicable legislation and the ECMP environmental management plan (Section 22.2.8.3). The mitigation measures will include the following and if practical the identified site shall be avoided.

- Training of site employees in cultural heritage awareness, both Indigenous and non-Indigenous.
- Survey of any potential unexpected sites that may be impacted prior to disturbance.
- Regular communications between the Traditional Owners and the mine management team.