Alpha Coal Project Environmental Impact Statement

Non Indigenous Cultural Heritage





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Section 19 Non-Indigenous Cultural Heritage

19.1 Introduction

This section addresses non-Indigenous cultural heritage issues in relation to the Alpha Coal Project (Rail) (herein referred to as the Project) and is summarised from the Desktop Non-Indigenous Cultural Heritage Report (Phase One) prepared by Converge Heritage + Community in August 2010 (refer to Volume 6, Appendix J).

19.2 Description of Environmental Values

19.2.1 Historical Background

The Project will cross two distinct regions: the Belyando and the Bowen districts. The history of these two regions forms the bulk of the contextual history which is provided in detail in Volume 6, Appendix J.

Complementing this information, the historical context set out in Volume 6, Appendix J confirms a number of key historical themes that describe the Project study area. These are:

- Early Exploration and European Settlement;
- Mining;
- Farming;
- Transport and Communication; and
- Community Development.

The main township of the Belyando district is Clermont, which was established in 1862 and flourished in the late nineteenth century as the central location for the supply of provisions and services to the surrounding farming and mining settlements. Smaller townships in the Belyando district contiguous to the Project include Blair Athol, Copperfield, Frankfield, Kilcummin and Moranbah. The Project also cuts across the Belyando River, whose headwaters begin in the Drummond Range east of the town of Alpha before continuing in a northerly direction to flow into the Burdekin Dam.

The centre of the Bowen district is the port town of Bowen. It was once anticipated that Bowen would form the capital of a separate northern colony. The northern colony did not eventuate and Townsville eventually became the predominant centre in the north. Nonetheless, Bowen continued to be integral to the development of the agricultural and mining industries in the region. Other communities in the Bowen district in proximity to the Project include Mt Coolon, Collinsville, Springlands, Binbee, Bogie and Guthalungra. In some sections the Project also follows the course of the Bowen River, one of several important waterways in the area.

The history of both districts is similar and therefore can be investigated through the same set of themes. Both regions were the subject of European exploration in the 1840s and 1850s and settled by pastoralists in the late 1850s and early 1860s. The development of both regions was boosted considerably by the discovery of mineral deposits and the continued exploitation of these resources, including gold, copper and coal. However, pastoralism and agriculture have historically remained the principle economic activities of each district. The Belyando has been reliant for many years on its sheep and dairy industry and Bowen on its wide variety of agricultural produce, including sugar cane.

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Isolation and the need to communicate also meant the development of transportation and communication links were important in both areas. Finally, the growth of communities – represented by hospitals, schools, government authorities, police and recreational facilities – are important from a historical perspective, as they represent the culmination of the European presence in the landscape since the early nineteenth century.

19.2.2 Methodology

19.2.2.1 Study Area

The study area for the Project forms a long corridor extending from the Alpha Coal Mine to Abbot Point, west of Bowen. It is therefore necessary to establish the width of the Project corridor for the purposes of determining the location of, and potential for, sites and places of cultural heritage significance. A width of five km in total was used for this assessment, which is taken from the proposed centre line of the Project corridor. Although the actual Project corridor is likely to be smaller in width, and the direct impact corridor is only 60 m in width, the potential for impact on sites and places may extend beyond the immediate Project corridor, particularly during the construction phase.

The identification of the potential non-Indigenous cultural heritage resources within the study area (in addition to identified sites and places listed on heritage registers) is based on historical research, an analysis of historical plans, aerial photographs, review of heritage registers and databases, and consultation with a number of local historical societies and museums. This enabled an initial assessment of the Project area known to be of historical interest and the development of a predictive model for the types and places of heritage significance that have the potential to be present in the study area. This methodology forms part of a purposive (as opposed probabilistic) sampling strategy that will be utilised during the field investigations to be undertaken in the Supplementary Report for the Environmental Impact Statement (EIS) at a later stage.

A number of other sources were utilised, including the Department of Mines and Energy's Interactive Resource Tenure Map (DME IRTM). These enabled the identification of further sites and places of potential cultural heritage significance within, or in close proximity to, the Project corridor, including mining heritage. These will be the focus of further assessment during phase two field survey.

19.2.2.2 Limitations

The principle limitation and constraint of this desktop report is that field survey of the study area has not yet been undertaken. Consequently, it has not yet been possible to ground truth the register search results, consultation or the potential places identified within the study area. A field survey will be undertaken in October 2010 as part of the Supplementary Report for the EIS and the results of this survey presented in an updated technical report.

19.2.2.3 Register and Database Searches

In addition to contextual research, this report has completed a series of register and database searches for the study area, including consultation with:

- The Australian Heritage Places Inventory (APHI), including the National Heritage List, Commonwealth Heritage List and former Register of the National Estate;
- The Queensland Heritage Register (QHR);
- The Queensland National Trust Register (QNTR); and

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- The Barcaldine, Isaac and Whitsunday Regional Council Local Government Heritage Registers (LGHR), including the previous planning schemes for:
 - Jericho Shire Council;
 - Nebo Shire Council;
 - Belyando Shire Council; and
 - Bowen Shire Council.

The following places of cultural heritage listed on statutory or non-statutory registers were found within the study area (Table 19-1).

Table 19-1: Results of database searches

Location	APHI	QHR	LHR	QNT
Strathmore Homestead		\checkmark	-	
Old Bowen Downs Road (in part), Bowen Downs Road, (between Strathmore and Mt Douglas)	V		-	V

It is important to note that a number of places not currently identified on a statutory or non-statutory heritage register are considered likely to exist within the study area, including places of potential historical heritage and/or archaeological potential, requiring further assessment under the provisions of the Queensland Heritage Act 1992 (QH Act). Phase two of the cultural heritage assessment which will form part of the Supplementary Report for the EIS is proposed to be undertaken in the final quarter of 2010. This work will include field surveys to identify such sites.

19.2.2.4 Consultation

Consultation with the following local historical societies was conducted as part of the research and methodology development for this assessment during July 2010. Their assistance is acknowledged with gratitude:

- Bowen Historical Society;
- Nebo Shire Museum;
- · Clermont and District Historical Society Museum; and
- Alpha Historical Society.

The purpose of the consultation was to discuss in general the origins and history of key settlements located along the Project corridor and important historical themes for the relevant districts.

Key historical themes outlined in Section 19.2.1 above were confirmed during consultation. No additional historical themes were identified. No specific sites or places of potential heritage significance were identified in addition to those noted in the register searches and described further in the sections below.

Specific landowner consultation is to be undertaken during Phase two works. However, landowner consultation was undertaken for the Alpha Coal Project (Mine) and some of that consultation is relevant to this assessment.

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The Alpha Coal Mine terminus of the Project corridor is located in the property of Surbiton, which was established in the 1860s. Consultation was conducted with the current owner of Surbiton South. The consultation provided additional information about coach route hotel sites (part of the former Clermont to Aramac coach route that operated in the nineteenth century). Information was also provided that indicates the original site of Surbiton is located further to the north in Surbiton (the entire area was once part of Surbiton). No specific sites were identified during this consultation, but the potential for sites of cultural heritage significance was established.

19.2.2.5 Other Sources

Liaison with DERM stakeholders in July 2010 revealed a previously reported but unqualified place (Sutter Aboriginal Camp) within the Project corridor, that may have non-Indigenous cultural heritage value. There is generally very little information on this site other than its name and location (coordinates). The location of this site is shown on Figure 19-1.

Field surveys of these sites will be undertaken in the Supplementary Report for the EIS at a later stage establish if this potential site exists and whether it contains any cultural heritage significance and if so, the nature of this significance.

The DME maintains the IRTM. The IRTM enables the user to search and display mining tenure and exploration information. In particular, it is possible to search and display historic mining leases. The information is generally limited to the last 100 years and therefore excludes mining activity in the nineteenth century. However, it provides some ability to determine the location of historic mining leases and potential mines that are located in the study area.

The IRTM was consulted in relation to the Project corridor and any sites within the study area were noted. No sites of historical mining significance were noted during the review.

19.2.2.6 Identified Non-Indigenous Places within the Study Area

Three non-Indigenous places of cultural heritage significance were identified to be within the study area (refer to Table 19-2) and Figure 19-1):

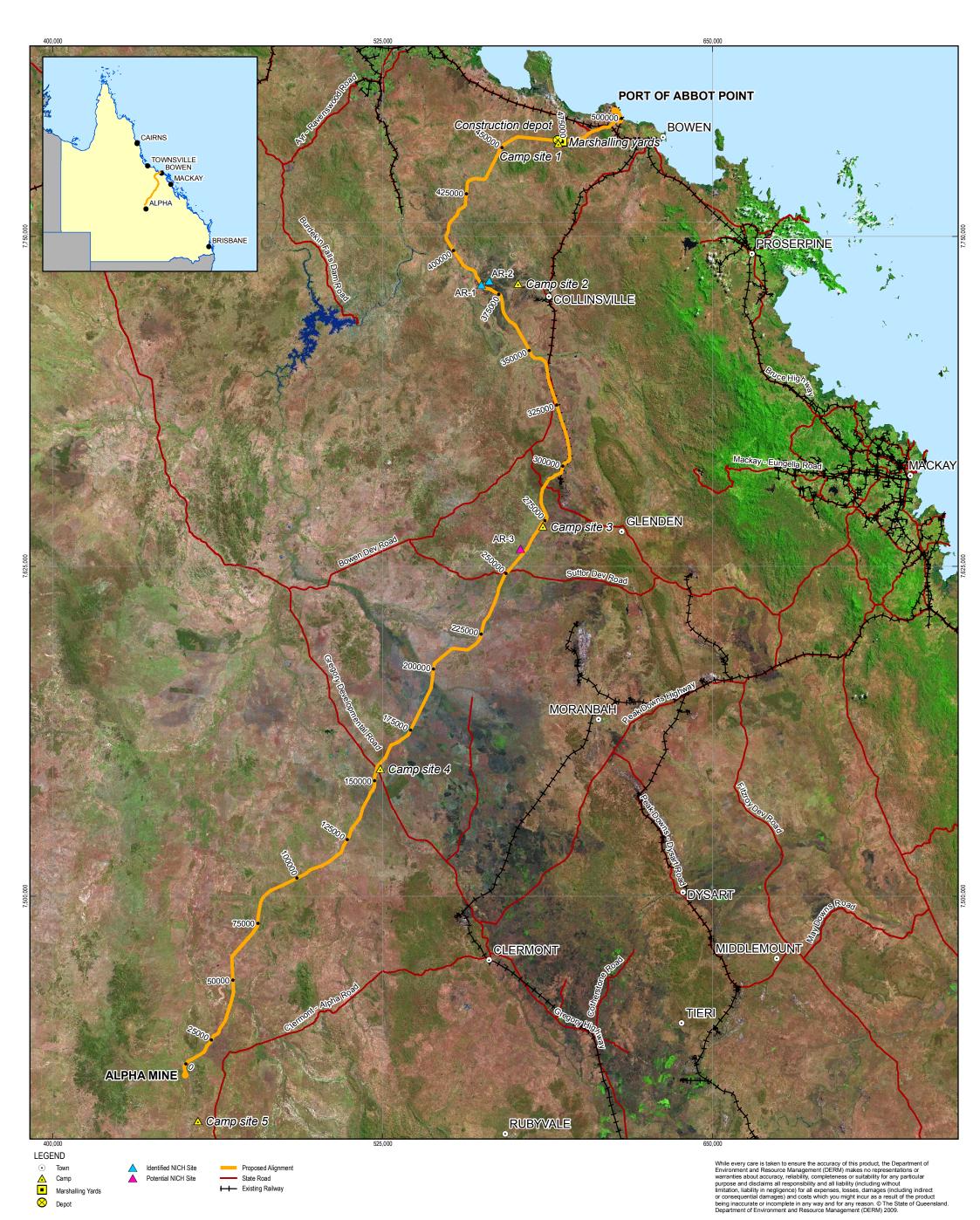
- one site (Strathmore Homestead) is listed on the Queensland Heritage Register and the former Bowen Shire Council heritage register;
- one site (Old Bowen Downs Road) is listed on the Register of the National Estate and Queensland
 National Trust register; and
- one site (Suttor Creek Aboriginal Camp) was identified within the study area as a potential cultural heritage site.

No historic mining leases were identified within, or in close proximity, to the study area.

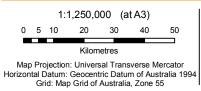
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Table 19-2: Summary table of desktop survey results for non-Indigenous cultural heritage

Non-Indigenous heritage survey results						
Site ID	Name	GPS Location (WGS84 Zone 55K)		Description		
1		Easting	Northing			
AR-1	Strathmore Homestead	565410	7733202	Homestead complex c1860s. Includes the main residence, kitchen and utility section wing, laundry and toilet block, office (former school house), slab hut and additions, staff quarters (former teacher's residence), meathouses, cottages, station oven, station sheds and outbuildings, garage, cattle yards, stables, swimming pool, private zoo, weir and cemetery.		
AR-2	Old Bowen Downs Road (beginning Strathmore Homestead)	562398	7731653	Part of supply route to Central Western Queensland and route to Bowen Downs Station, a prominent nineteenth and twentieth century station northwest of Aramac. Potential for evidence of early road construction and artefact material (larger alignment which intersects the corridor at co-ordinates provided).		
AR-3	Suttor Creek Aboriginal Camp	577270	7631615	Potential site identified from consultation with DERM. Requires further investigation.		



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Figure: 19-1

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19.2.2.7 Potential for Further Cultural Heritage Sites

19.2.2.7.1 Potential Cultural Heritage Sites

At approximately 495 km in length, the Project area is vast. Due to the size of the study area, its remoteness in places, and the lack of representation of expected historical themes, the study area is considered likely to contain a greater selection of potential sites across the study area than the three currently identified. Field work and landowner consultation during the compilation of the Supplementary Report for the EIS has been planned to cater for the potential for further sites in the study area.

In particular, the Project corridor crosses numerous former (and likely current) pastoral stations and mine leases. It is therefore likely that associated sites and places (such as homestead complexes and related infrastructure and/or machinery) are present in the study area and may be identified during the field survey.

It has previously been identified in the EIS assessment for non-Indigenous cultural heritage matters for the Alpha Coal Mine area that a historic coach route from Clermont to Aramac was located in part of the Alpha Coal Mine area and may be impacted by the Project. However, there appears to be a general absence of roads, including coach routes, in historical sources for the remainder of the Project corridor. The exception to this is Old Bowen Downs Road, near Strathmore. Nonetheless, given the large number of pastoral stations and potential mining activity in or near the study area, there is potential for evidence of early road construction and camp sites associated with travel between stations and mines. Moreover, a network of stock routes criss-crossed the study area. There is potential for camp sites utilised by stockmen from the nineteenth and twentieth centuries.

Although no specific sites or places were identified for the historical theme of farming, potential exists for such sites closer to Bowen and the coastal region, particularly related to sugar cane. This might include cane barracks and evidence of a Pacific Islander presence (principally in the sugar industry). Evidence of a Chinese presence in the landscape (such as market gardens and places of worship) may also be present throughout the entirety of the study area, as Chinese people were present throughout much of Queensland from the mid-late nineteenth century onward. The potential is further reinforced by the presence of mining activities, including gold mining.

There is also potential for early telegraph lines and survey trees. In particular, the Project corridor crosses part of Ludwig Leichardt's exploration route in 1845 on the Suttor River.

19.2.2.7.2 Archaeological Potential

The term 'archaeological potential' is defined as the likelihood that a site may contain physical evidence related to an earlier phase of occupation, activity or development. This term is differentiated from 'archaeological significance' and 'archaeological research potential', which are more subjective statements on the value of the archaeological resource.

There is a clear potential for archaeological remains to exist across the study area, due to its relatively large size and remote nature in places. Any other sites or places identified during field survey may also possess archaeological potential, although the extent of the potential cannot obviously be gauged until the proposed field survey is completed.

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19.2.3 Significance Assessment

The Project study area has a layered history reflected in a variety of physical and intangible elements and embodies a range of values which vary in their levels of significance.

Cultural heritage significance relates to peoples perspective of place and sense of value, within the context of history, environment, aesthetics and social organisation. This section assesses the heritage values and significance of the site at a number of levels in order to establish a baseline for the Project to manage those values.

Assessing cultural heritage significance against set criteria is a widely recognised method of achieving consistent, rational and unbiased assessments. A range of standards and criteria are available to assist with determining cultural heritage significance including the Burra Charter and aspects from the recognised legislative frameworks, such as Section 35 of the QH Act. These findings are summarised in Table 19-3.

Table 19-3: Sites of non-Indigenous cultural heritage significance

Site ID	Description	Significance
AR-1	Strathmore Homestead	State
AR-2	Old Bowen Downs Road	Potentially State (1)

This assessment in Section 19.2.2.6 concluded that there is a clear likelihood for further potential sites of cultural heritage significance to exist within the study area, including Suttor Creek Aboriginal Camp (Site AR -3, refer to Figure 19-1) previously identified. A field survey will be undertaken in October 2010 to cater for potential heritage sites located in the Project corridor. These results will be incorporated into the Supplementary Report for the EIS.

19.3 Potential Impacts and Mitigation Measures

19.3.1 Potential Impacts

This assessment has identified two known and one potential non-Indigenous cultural heritage sites within the vicinity of the study area of which none are directly impacted by the Project. Due to the size and scale of the Project however, there is a clear likelihood for further potential sites of cultural heritage significance to exist within the study area, and therefore be potentially impacted by the Project.

Following analysis of the Project's nature, and the proposed impact corridor of 60 m outlined in Section 19.2.2.1 above, the following conclusions are provided in relation to identified and potential sites of non-Indigenous cultural heritage (refer to Table 19-4).

¹ The Old Bowen Road requires further assessment during Phase Two. Until such time the site is assumed to possess state significance levels.

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Site No.	Name	Site Type	Significance Rating	Impact
AR-1	Strathmore Homestead	Identified	State	No Impact. (Outside the 30 m impact corridor)
AR-2	Old Bowen Downs Road	Identified	State	No Impact. (Outside the 30 m impact corridor)

The number of heritage sites identified from the desktop survey was not substantial with only three sites being identified (refer to Figure 19-1).

Site AR-3 (refer to Figure 19-1) has been identified as a potential cultural heritage site within the study area (Table 19-5). However, this site is not impacted by the Project. Filed surveys to be conducted in the final quarter of 2010 and reported in the Supplementary EIS may identify further sites of cultural significance.

Table 19-5: Impact on potential places of cultural heritage significance

Table 19-4: Impact on sites and places of cultural heritage significance

Site No.	Name	Site Type	Significance Rating	Impact
AR-3	Suttor Aboriginal Camp	Potential	N/A	No Impact. (Outside the 30 m impact corridor)

Proposed strategies to mitigate Project impacts on potential sites of non-Indigenous cultural heritage are provided in Section 19.3.2 below.

19.3.2 Mitigation Measures

19.3.2.1 Overview

This section provides general mitigation strategies to manage unknown and unexpected historic cultural heritage sites located within the Project corridor that may potentially be impacted, as no sites are directly impacted by the Project. Assuming the strategies below are suitably implemented, this report finds the nature and level of impact by the Project is acceptable.

19.3.2.2 Recommendation 1 - Avoidance of Sites

The best form of cultural heritage management is to avoid impact on sites and places of significance. It is recommended that the design of the Project takes into account each of the heritage sites and places discussed in this report, and, where possible, avoids impacting on these sites, or if this is not possible, implements the relevant mitigation measures as recommended in this report.

Currently identified sites and potential sites described in Section 19.3.1 have been avoided and therefore no mitigation is needed for these sites.

19.3.2.3 Recommendation 2 – Field Survey of the Corridor

This report has completed the first phase of desktop assessment required for the Project in relation to the location and management of historic cultural heritage sites for the Project EIS. From this assessment, it is deemed highly likely that further sites and places of cultural heritage significance exist. For this reason, targeted field survey is required and will be undertaken during phase two of the EIS assessment, planned for October 2010.

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The results of this assessment will be incorporated into an updated Field Survey Report and incorporated into the Supplementary Report for the EIS reporting for non-Indigenous Cultural Heritage, including site specific mitigation measures should it be found that potential sites are found to be impacted by the Project.

19.3.2.4 Recommendation 3 – Alternate Rail Corridor Routes

This assessment is based on alignment information for the proposed rail infrastructure which is current at August 2010. Should the proposed alignment vary by more than one kilometre from the current centre line, further assessment will be required in these areas.

19.3.2.5 Recommendation 4 – Places of State Significance

State significant sites are protected by the QH Act and should be avoided in all cases. All staff will be educated as to where these sites are and what they consist of so that full avoidance of these sites is maintained.

Should any works need to be conducted in these areas they will be governed by Part 6 of the QH Act and a qualified heritage consultant should be engaged to advise on mitigation measures. Any works which may potentially disturb these sites will require a project specific Statement of Heritage Impact Report which considers available options for the Project to mitigate impacts on cultural heritage significance during all phases of the Project and includes approval from the DERM through the Integrated Development Assessment System (IDAS).

19.3.2.6 Recommendation 5 – Places of State Archaeological Significance

State significant archaeological sites require special consideration under the provisions of the QH Act, as they represent a heritage asset that has potential to contain an archaeological artefact that is an important source of information about Queensland's history. Avoidance of these sites will be practised and all staff made aware of their location. If a place is registered on the QHR, development at that place will fall under IDAS. As a result, the DERM may require an archaeological investigation to be conducted on an archaeological place as part of the consent conditions, particularly if the proposed development may damage or impact the significance of the site. The DERM defines archaeological investigations as "physical investigations of a place carried out by professionals qualified for investigating, recording or conserving archaeological artefacts at a place".

19.3.2.7 Recommendation 6 – Locally Significant Sites

Heritage sites of significance are important to the local community for the role they have played in their development. These sites are often associated with important local people, many of whose descendants still live in or close to the area. These sites will be avoided, unless there is no other feasible alternative, and then only when following the best practice guidelines of the Burra Charter. The relevant local government department will be liaised with prior to disturbing these sites.

19.3.2.8 Recommendation 7 – Unexpected Finds

This report has found that the study area has clear potential to contain historic cultural heritage material, and of a wide and varied nature.

Accordingly, the Environmental Management Plan (EM Plan) developed for the Project will include a procedure for managing unexpected cultural heritage material or sites that may be encountered. This will include:

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- all work at the location of the potential material or site must cease and reasonable efforts to secure
 the site will be made a buffer zone of 20 m around the find is suitable;
- work can continue at a distance of 20 m from a find area. Note that the material or site will not be removed or disturbed any further (barriers or temporary fences may be erected as a buffer around the find if required);
- The Site Manager will be notified. They will then notify the Historical Archaeologist appointed to the Project; and
- The Historical Archaeologist will provide a management recommendation to the Site Manager and will liaise with the DERM to ensure that the archaeological provisions of the QH Act are followed.

These procedures will be integrated into HPPLs procedures for impact assessment and site scouting, as well as any procedures for managing cultural heritage.

19.3.2.9 Recommendation 8 – Archaeologist "On-Call"

It is recommended that a historic archaeologist be appointed during the construction phase of the Project, so that a call-out can be made as soon as potential archaeological material is noted.

19.3.2.10 Recommendation 9 – Regular Monitoring

The Project will undertake a bi-annual survey of all heritage items identified on Hancock owned or leased land (i.e. land on which Hancock operates), or on land directly affected by current operations, to ensure that the general recommendations outlined above and those for individual heritage items are being followed and having a positive effect. Any damage to items can be catalogued and actions taken to ensure that the process suitably protects cultural heritage in these areas in the future.

19.4 Conclusions

To date a desktop assessment of non-indigenous cultural heritage matters has been undertaken. This assessment has identified three non-Indigenous places of cultural heritage significance were identified to be within the study area:

- one site (Strathmore Homestead) is listed on the Queensland Heritage Register and the former Bowen Shire Council heritage register;
- one site (Old Bowen Downs Road) is listed on the Register of the National Estate and Queensland
 National Trust register; and
- one site (Suttor Creek Aboriginal Camp) was identified within the study area as a potential cultural heritage site.

No historic mining leases were identified within, or in close proximity, to the study area.

The proposed rail corridor does not impact upon any of the three identified sites.

Field surveys of the proposed rail corridor are scheduled for completion in the final quarter of 2010. These surveys may identify further sites of significance. Therefore standard mitigation measures have been identified to manage potential impacts to any additional sites of significance.