

China First Project Non-Indigenous Cultural Heritage Assessment

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A report for Waratah Coal Pty Ltd

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Thom Blake Historian

1 Foch Street
Ashgrove Qld 4060
t 33661177 f 33663178
e thom@thomblake.com.au

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Introduction

China First Project

The China First project includes a coal mine, railway and coal terminal facility to export quality thermal coal to international markets.

The mine

The project is being developed by Waratah Coal. Waratah Coal is a private Australian company managed by an Australian team with the company's headquarters located in Brisbane. In January 2009, Mineralogy Pty Ltd successfully acquired Waratah Coal. China First Pty Ltd, a fully owned subsidiary of Resourcehouse, was subsequently created and provided the right to mine 1.4 billion tonnes of raw coal from Exploration Permit for Coal tenements (EPC) 1040 and 1079.

The proposed China First mine is located in the middle of the Galilee Basin, Queensland, at a point 30 km north-west of the township of Alpha and 160 km to the west of Emerald. The proposed development will include the construction of four 9 million-tonnes-per-annum (Mtpa) underground long-wall coal mines, two 10 Mtpa-open-cut-pits, two coal-preparation plants with raw washing capacity of 28 Mtpa. The mine may also require associated supporting infrastructure such as worker accommodation. The planned annual Run-of-Mine (ROM) coal production will be 56 Mtpa to produce 40 Mtpa of saleable export product coal.

The railway

Processed coal will be transported by a proposed railway system from the Galilee Basin to the existing Port of Abbot Point. The rail component will include the construction and operation of a state-of-the-art, heavy haul, standard-gauge railway. The project will include, but is not limited to the construction and operation of: accommodation camps, bridges, culverts, stockpiles, pipelines, communications, power, water storages, fuel-storage facilities, and plant and equipment maintenance areas.

The railway system will be approximately 447 km in length, with the final length depending on the route selected. The final railway alignment will be confirmed at detailed design.

The coal terminal

The China First project's coal terminal will be integrated within the planned expansion strategies of the Port of Abbot Point to further consolidate its operability as a state-of-the-art export facility. The China First project proposes to develop a new terminal, with an estimated capacity of 40 Mtpa, as well as new stockyards and unloading facilities within the Abbot Point State Development Area.

Ancillary facilities for the overall project will include the provision of new power supply infrastructure, water supply and storages, wastewater treatment facilities, fire-fighting and first-aid infrastructure, machinery maintenance centre, fuel storage, accommodation and an airport. The construction period for the project is estimated to last 18 months.

The Coordinator-General has declared the Galilee Coal Project to be a significant project requiring an Environmental Impact Statement (EIS) under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971* (SDPWOA).

The terms of reference for the EIS included an assessment of non-Indigenous Cultural Heritage. This study provides an detailed assessment of what places of potential cultural heritage significance are present within the mine site, rail corridor and coal terminal facility.

Location – China First Coal project

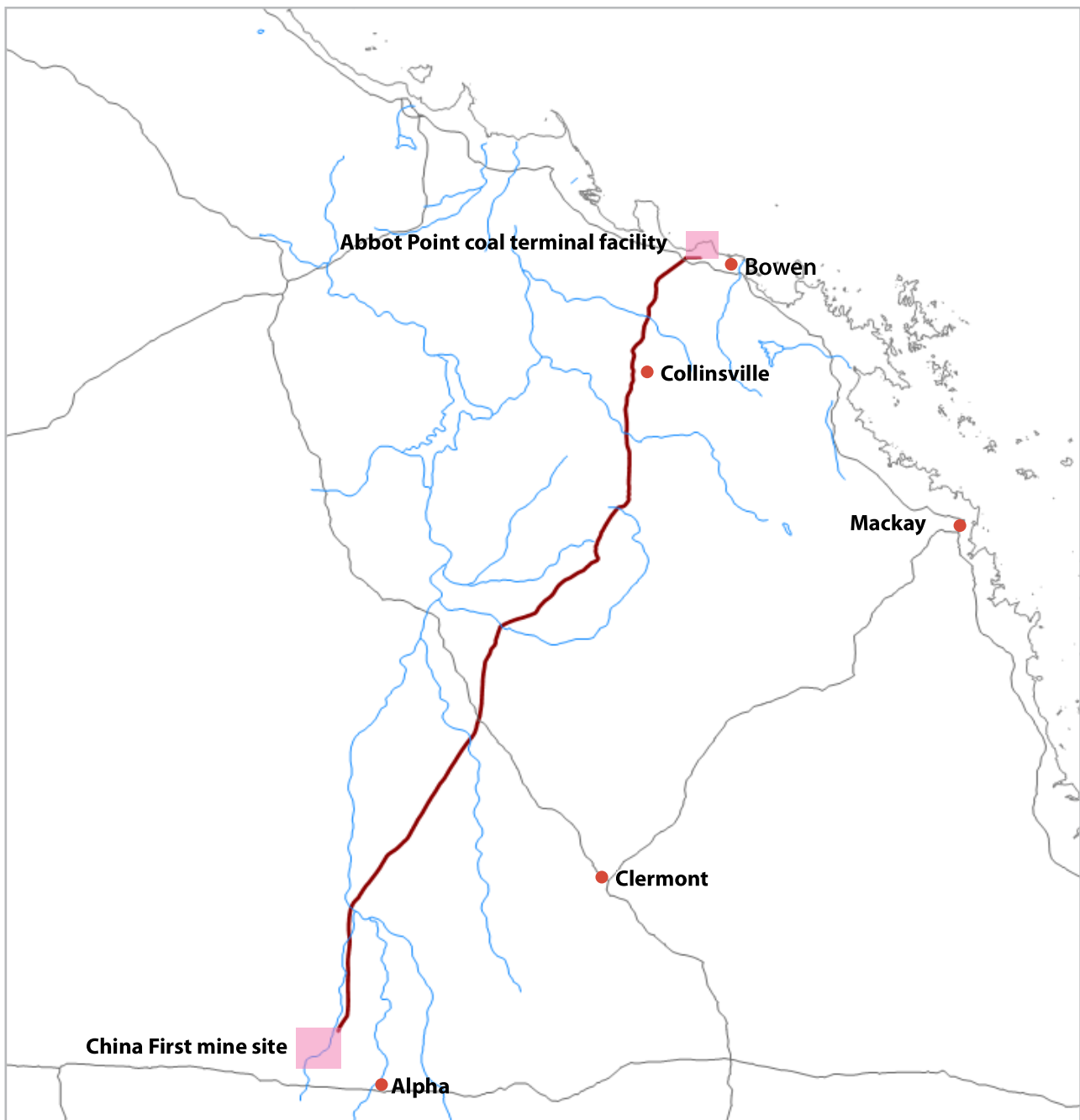


Figure 1 China First project area and rail line

1 Method

The method adopted for this assessment is as outlined in the Terms of References, with additional stages.

1 Desktop study and review of literature

The first task was to examine existing heritage registers and inventories and other relevant studies and reports as to places of significance within the proposed project areas. The principal registers included the Australian Heritage Places Inventory and the Queensland Heritage Register, as well as local government registers if they exist within the project area.

2 Historical overview – key themes

In order to understand the type of places of cultural heritage significance that may exist within the project area, key historical themes were identified and discussed to provide a context for understanding what types of places with cultural heritage values may be present.

3 Consultation with community groups, interested parties

Consultation was undertaken with several stakeholders from the project area who have an interest in the history of the region and a knowledge of historic sites. Kevin Hoffman from Collinsville identified the location of the changing station site on the original road south from Bowen. Andrew Rea from Eton Vale identified a number of significant features associated with the Old Bowen Downs Road on his property. Maurie O'Dell from Toarbee was most helpful with background information on the recent history of the pastoral industry in the Alpha district.

It was proposed to also consult local historical organisations that have an understanding of the history of the region, where considered necessary. However, two organisations – the Bowen Historical Society and the Alpha Historical Society – have produced excellent publications of relevance to the project area and it was considered unnecessary to consult further.

4 Survey

The survey was undertaken in two parts. An aerial survey of the rail corridor and Abbot Point facilities was undertaken by helicopter. Given the extent of the study area and the time constraints, it was considered the most efficient method of surveying for places of potential cultural heritage significance. While there is always the possibility that significant places could be overlooked, the potential is low given the history of the region, remoteness and lack of development generally.

The approach taken in the aerial survey was to identify all cultural features and sites within and immediately adjacent to the corridor. A 'cultural feature or site' is broadly interpreted as evidence of any human activity in the landscape. Thus, apart from the obvious features such as buildings and structures, for example, homesteads, cattle yards and windmills, it also includes dams, earth-formed tanks, fences, roads and telegraph lines. The purpose of identifying all cultural sites on the route was to ensure that all places could be assessed for heritage significance and not dismissed out of hand. From experience in undertaking heritage surveys throughout Queensland, sites that might initially appear to have no significance, may indeed have heritage values when further research is undertaken and the site is considered in a wider context.

With a few exceptions, all sites were photographed with a DSLR camera using either a 70 or 200 mm lens. For sites that were of potential or known cultural heritage significance, multiple images were taken. The GPS tracklog of the route was used to insert GPS data into the meta-data so each image has an exact location recorded.

The second component of the survey involved two field surveys. The first survey was a section of the rail corridor between Collinsville and Bowen that contained remnants of early coach roads. Potential places of significance were documented. Landowners Kevin Hoffman and Andrew Rea provided transport and identified the location of sites.

The field survey of the mine site was undertaken with the assistance of Kelvin Sypher, project manager for Waratah coal. Kelvin resides at Kia Ora and has an indepth knowledge of the area and current land use. The mine site was surveyed by inspecting the main homesteads (with the exception of Glen Innes) and other facilities including dams, tanks and windmills.

Assessment

The approach to assessing cultural heritage significance is broadly similar at a local, regional, state and national level. Standard criteria are used to identify what are the cultural heritage values of a place depending on the level of significance. The difference is a question of threshold and whether a place is significant at a local, regional, state or national level. The criteria are for assessing cultural heritage significance are:

(a) The place is important in demonstrating the evolution or pattern of history of a locality, region, state or Australia.

- (b) The place demonstrates rare, uncommon or endangered aspects of cultural heritage of a locality, region, state or Australia.
- (c) The place has potential to yield information that will contribute to an understanding of the history of a locality, region, state or Australia.
- (d) The place is important in demonstrating the principal characteristics of a particular class of cultural places in a locality, region, state or Australia.
- (e) The place is important because of its aesthetic significance in a locality, region, state or Australia.
- (f) The place is important in demonstrating a high degree of creative or technical achievement at a particular period in a locality, region, state or Australia.
- (g) The place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons in a locality, region, state or Australia.
- (h) The place has a special association with the life or work of a particular person, group or organisation of importance in the history of a locality, region, state or Australia.

5 Potential impact and mitigation strategies

The terms of reference included a stage for developing appropriate strategies to conserve the significant values and minimise impacts of any places of significance. Three types of impacts were discussed:

- Permanent impacts – impacts on places that were unavoidable and strategies recommended to minimise or compensate the impact if possible.
- Temporary impacts – impacts on places during construction that could be reversed at the completion of the project or inadvertent impacts of places in the vicinity of the project area
- Artifacts – the potential exists that artifacts may be discovered during construction. The possibility of a find, however, cannot be discounted. The *Queensland Heritage Act 1992* contains provisions relating to the discovery of archaeological artefacts and it is vital that appropriate procedures are established in the event of the discovery of an artifact of heritage significance. .

2 Review of registers and literature

The initial task was to review relevant heritage registers and lists including the Australian Heritage Places Inventory, the Queensland Heritage Register, and local government registers.

Australian Heritage Places Inventory

The Australian Heritage Places Inventory (AHPi) contains summary information about places listed in State, Territory and Commonwealth Heritage Registers and Lists. It includes the Register of National Estate which is a list of places established under the *Australian Heritage Commission Act 1975* and that are protected by provisions in the *Environment Protection and Biodiversity Conservation Act 1999*. The AHPi also includes the National Heritage List, which is a list of places with outstanding heritage value to the nation, and the Commonwealth Heritage List which is a list of places owned or managed by the Commonwealth and considered to have Commonwealth heritage values. Places on these lists are protected under provisions of the *Environment Protection and Biodiversity Conservation Act 1999*.

No places were identified in the AHPi within or in close proximity to the project area.

Queensland Heritage Register

The Queensland Heritage Register is administered by the Queensland Heritage Council under provisions in the *Queensland Heritage Act 1992*. The register contains approximately 1600 places throughout Queensland that are of heritage significance to the state.

No places were identified within the project area or immediately adjacent. However, five places were identified within 20 kilometres of the rail corridor. While these places will clearly not be impacted, it is useful to note what places are in the vicinity as an indication of what type of place with heritage value could be present in the project area.

The sites identified were:

- Strathmore Homestead (QHR 602683)

Strathmore homestead is located 11 km west of the rail corridor on Strathmore Road. It is significant as one of the earliest pastoral runs established in north Queensland and comprises a 1860s slab hut and c. 1900 house.

- Bowen River Hotel (QHR 600042)

The Bowen River Hotel is located 18 km west of the rail corridor on Strathmore Road. It is significant as an 1860s structure built as a hotel on the Bowen Down road, which was the main route from Bowen to the central west and north Queensland pastoral districts.

- Bowen Consolidated Colliery (QHR 601850)

The Bowen Consolidated Colliery is located 10 km east of the rail corridor at Scottville. The colliery is significant as an intact coal mine of the early 20th century and as evidence of the development of the coal mining industry in the region.

- Bowen Cemetery (QHR 602730)

The Bowen Cemetery is located 12 km east of the rail corridor on the Collinsville-Scottsville Road. The cemetery is significant for its association as the burial place of 23 miners killed in mining accidents including seven killed in a major accident at the Collinsville State mine in October 1954.

- Barclay's Battery (QHR 602242)

Barclay's Battery is located 10 km north-west of the rail corridor at Mount Coolon. Barclay's Battery is significant as evidence of gold-mining operations in the earlier part of the 20th century in north Queensland.

Local government registers

Under the *Queensland Heritage Act 1992*, local government authorities are required to establish and maintain a register of places of local cultural heritage significance and include policies for the protection of such places in their planning schemes. This requirement was part of changes to the Act in 2008. Previously, only some local authorities in Queensland had included the protection of heritage places in their planning schemes. Now, as part of reviewing existing planning schemes, local authorities are gradually undertaking heritage surveys and including provisions for the protection of heritage places.

The project area traverses three local authorities: Whitsunday Regional Council, Isaac Regional Council and the Barcaldine Regional Council. None of these local authorities currently have heritage registers or provision for the protection of heritage places in their planning schemes.

Other reports and studies

Although specific heritage studies have been undertaken that specifically include the project area, three historical publications were most useful with background information

- Janice Cooper, *Sufficient for living: a History of Pastoral industries in the Alpha district*, Alpha Historical Society, 2005.

This publication provided an invaluable historical context on the history of the pastoral industry in the Alpha region.

- Vic Jones, *Bowen Downs and the Road to Bowen*, Bowen Historical Society 1964

This article provided an historical context on the development of the Bowen Downs road in the early 1860s.

- Colin Hooper *Angor to Zillmanton: Stories of North Queensland's Deserted Towns*, 1993.

This publication contained critical information about the Bowen Downs road and its route immediately south of Bowen.

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3 Historical overview

While many parts of inland Australia share a similar history, each has a distinctive story. The purpose of this historical overview is not to provide a detailed history of the region/s through which the rail corridor traverses, but to highlight key themes. An appreciation of the key historical themes is important to identify what places of cultural heritage significance may exist in the area covered by this study.

Exploring and knowing the land

For the indigenous inhabitants of the region, knowledge of the land was intimate, profound and encyclopaedic: the movement and behaviour of animals, the flowering of trees and shrubs, the sources of water in an often dry landscape, what plants, grasses and fruits were edible, the medicinal properties of plants, the appropriate time to regenerate the land through burning, and the timing of the seasons.

For Europeans the region remained unknown, uncharted, and a mystery until the 1840s. In 1841, John Lort Stokes had explored the Gulf of Carpentaria in the *Beagle*. He briefly explored the land beyond the Gulf and reportedly in highly favourable terms of the country, calling it the 'Plains of Promise'. The NSW Legislative Council was impressed and in 1843 resolved to establish an overland route to Port Essington (near Darwin) from NSW. In May 1844, Ludwig Leichhardt and a small party left the Darling Downs to investigate such a route. They travelled northwards through central Queensland following rivers and creeks in the Fitzroy River system, and then journeyed through the Peak Downs region and followed the Suttor River northwards through to the Burdekin River system. Leichhardt reported favourably on the prospects along the Burdekin River, but in the Peak Downs district and along the Suttor River he was more circumspect. He wrote in 1848:

But they are a country which must be well examined, before stock should be taken to it. There is very little encouragement for those who

are going to establish stations and to bring into bearing new and perhaps remote country.¹

Leichhardt's words were indeed most prescient. Unlike other explorers, politicians and advocates for unlimited development of the continent, Leichhardt foreshadowed that pastoral development along the Suttor River and adjacent regions would not be easy – and pastoralists even today would probably agree with Leichhardt.

Just 12 months after Leichhardt and his party had travelled through the region, Surveyor General Sir Thomas Mitchell and his party reached the Belyando River after exploring the northern tributaries of the Darling River system, including the Balonne River, with the intention of also finding a route to Port Essington.

While Leichhardt and Mitchell's expedition pointed to the potential of the Belyando Downs and lower Burdekin regions for pastoral development, the influx of pastoralists did not begin until the early 1860s.

Pastoral development

The slowness of pastoralists to move into the region was due in part to the remoteness and also because other areas were initially more accessible and attractive. The gold rushes in NSW and Victoria also dampened pastoral expansion in the early 1850s. As more and more runs were taken up, pastoralists began seeking out what were previously less desirable areas. The discovery of a fine harbour at Port Denison (Bowen) provided an entry point into north Queensland and the interior. Indeed, pastoralists quickly took up land along the Burdekin River and its tributaries. But pastoralists also moved into the area from the south from Peak Downs and into the Belyando Downs from the south-west. Oscar De Sagte, a pastoralist in the Peak Downs region, noted that in the early 1860s that 'the number of stock on the road was hardly to be credited'.

By the mid-1860s, pastoral runs had been established throughout the region. But the viability and long-term future of many runs was highly uncertain. The initial confidence and triumphalism about quickly subduing the land was soon checked by a multitude of problems: drought, flood, resistance by indigenous groups, disease, shortage of labour, lack of capital and uncertainty over land tenure. Runs were abandoned, re-occupied and then abandoned again. Between 1866 and 1870, 175 runs were abandoned in the North and South Kennedy pastoral districts.

Most pastoralists initially brought sheep, but within a decade many in north Queensland realised that cattle were more suited to the conditions. Sheep were more prone to diseases such as footrot and lungworm, and grasses such as speargrass damaged the wool on the sheep's back. The initial impediment to cattle was lack of markets. However, the emergence of a number of large goldfields in the north provided a market for local beef. More important for the beef industry was the

¹ Quoted in Dan O'Donnell, *A History of Clermont and District*, Belyando Shire Council. Clermont, 1989, p. 9.

introduction of technology for canning meat and then freezing meat. The Central Queensland Meat Preserving Company opened a canning factory in 1870 at Rockhampton and provided an outlet for central Queensland meat producers for almost a decade until it went into liquidation. The Central Queensland Meat Export Company was formed in 1880 to process and export meat using recently developed freezing technology. A meat works was opened at Lakes Creek, Rockhampton in 1883 and was instrumental in developing the beef cattle industry in central Queensland.² Similarly in north Queensland, the establishment of a meat works at Ross Creek, Townsville provided an outlet for north Queensland beef producers.³

Despite more certainty with markets and the development of the railway to transport stock to the meat works, pastoralists still faced ongoing challenges and obstacles in developing viable cattle properties. Some of the larger runs were considerably reduced in size as leases expired, and the government was keen to open up land for smaller selections. For example, in the 1890s, more than a quarter of the total area of the five largest runs in the Alpha district were resumed, with the intention of subdividing for smaller selections and agricultural farms.⁴

Regardless of the reduction in size, drought was a major periodic problem for pastoralists. The great drought of 1898-1902 was particularly devastating. The Surbiton run in the Alpha district had 19,295 head of cattle in 1900 but by 1904 the number had declined to just 500.⁵ The loss was mirrored on other properties not only in the immediate region but throughout Queensland. Less severe, but still major droughts occurred in 1915, 1926, the mid-1930s and the mid-1960s.

Another battle pastoralists faced with cattle was disease, most notably tick or redwater fever. The cattle tick, *Boophilus microplus*, was probably introduced into Australia at Darwin in 1872 with cattle brought from Indonesia. The tick spread to Queensland, reaching Burketown in 1894. It quickly spread south and became a major problem for the cattle industry.⁶ Dipping in arsenic was introduced as a relatively successful method of killing ticks and reducing the impact of the tick on cattle. Dipping, however, had to be undertaken on a regular basis to keep cattle 'clean'.

Yet another problem pastoralists faced was the presence of poisonous plants. In parts of the Alpha district, poison bush (*Gastrolobium grandiflorum*) was, and is, a major problem that affected both sheep and cattle. An 1890 report on the Surbiton run in the Alpha district noted that the poison bush was so 'thoroughly scattered' that it severely limited the

² Lorna McDonald, *Cattle Country: The Beef Cattle Industry in Central Queensland 1850's-1980's*, Booralong Publications, Brisbane, 1988, p. 136

³ Dawn May, *Arctic Regions in a Torrid Zone: The History of the Ross River Meatworks, Townsville, 1892-1992*, James Cook University of North Queensland, Townsville, 1990, pps 2-13.

⁴ Janice Cooper, *Sufficient for Living: A History of Pastoral Industries in the Alpha District*, Alpha Historical Society, Alpha, 2005, p. 15.

⁵ Cooper, p. 31.

⁶ Thom Blake, *Department of Primary Industries Cultural Heritage Survey*, 2002, p. 61.

potential for pastoral development.⁷ The only solution (and one which remains) was simply to fence off the area to exclude stock.

Various improvements after World War II improved the viability of the cattle industry. Mechanisation of land clearing made possible more areas for grazing in the brigalow scrub. Mechanisation also made possible the sinking of tanks for water storage easy and increasing water facilities on properties. Undoubtedly, the most significant change was the introduction of *Bos indicus* (Indian/African) breeds in favour of the *Bos taurus* (European/British) breeds. Since the beginning of the cattle industry in Queensland the main breeds were Herefords and Shorthorns but they were not well suited for the arid conditions of inland Queensland. Many pastoralists were initially sceptical of the value of *Bos indicus* but with extensive breeding and cross breeding, breeds such as Brahman, Droughmaster and Santa Gertrudis now dominate and have proved to be well suited for the environment.

Mining

While pastoralism has been the dominant industry in the Belyando Downs and lower Burdekin, mining has been an important industry. Coal was discovered at Collinsville in 1866 but mining commercially did not begin until 1917 when the Bowen Consolidated Coal Company commenced operations. A state-owned mine opened in 1919. Production at both mines was boosted by the construction of a railway line from Collinsville to Bowen in 1922. The mines were for a long period underground operations but now mining in the district is open-cut on an extensive scale.

Traces of gold and silver was discovered in the Mount Coolon district, 130 kilometres southwest of Collinsville in 1913. Mining commenced in 1917 and for a brief period in the 1930s Mt Coolon was one of the most profitable gold mines in Queensland. Industrial disputes and the onset of World War II led to the closure of the mine, but other small mines, continue to operate in the district.

⁷ Report 19 August 1890, QSA LAN A/974.

4 Rail corridor–survey and assessment

An aerial survey of the rail corridor was undertaken on 1 September 2010 and a field survey conducted of two specific sites on 15 October 2010. Thirty-eight sites were identified and in addition the crossing of the Bowen River was noted.

Physical and natural features of corridor

The proposed corridor transverses the norther end of Queensland's Brigalow Belt and the southern end of the Burdekin River catchment. The southern half of the corridor comprises lowlands and the flood plains of the Belyando and Suttor Rivers. The vegetation generally comprises brigalow *Acaria harpophylla* and *Eucalyptus* open forest and areas of bluegrass downs. The northern section is more undulating and hilly as it crosses the Clarke and Leichhardt Ranges. The vegetation is generally *Eucalyptus* woodlands with areas of *Acacia* open forest.

Location of sites

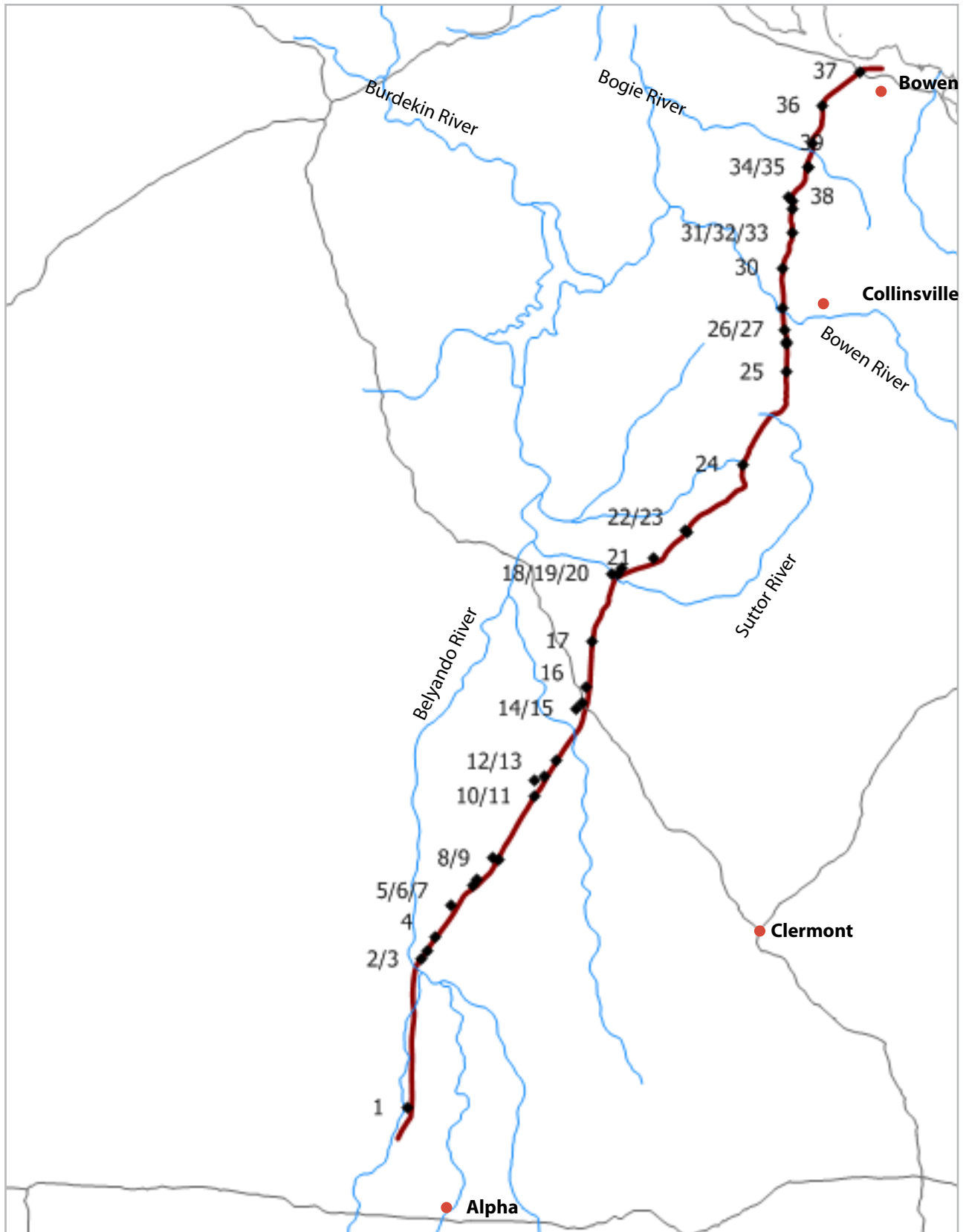














Figure 2 Location of cultural features and sites identified in survey





Inventory of sites





No	Location	Site	Image
1	-23°18'4.42" 146°30'30.11"	Hobartville station. Early pastoral run in Alpha district. House possibly early 20th century. Homestead 1.3 km from rail corridor	
2	-22°49'32.27" 146°33'22.01"	Tank 700 m SE of rail corridor	
3	-22°47'40.93" 146°34'28.53"	Tank 200 m SE of rail corridor	
4	-22°45'15.03" 146°36'18.93"	Tank 650 m SE of rail corridor	
5	-22°39'42.49" 146°39'25.57"	Tank 600 m NW of rail corridor	
6	-22°35'16.26" 146°43'32.96"	Tank 300 m N of rail corridor	
7	-22°34'34.00" 146°44'1.11"	Tank 600 m NW of rail corridor	
8	-22°30'32.43" 146°47'17.27"	Bigara Tank – (1000 x 400 m) 330 m NW of rail corridor	





No	Location	Site	Image
9	-22°30'32.43" 146°47'17.27"	Clermont Lagan Road	
10	-22°18'6.21" 146°55'0.30"	Tank 150 m E of rail corridor	
11	-22°15'54.41" 146°55'58.40"	Tank and feed lot	
12	-22°14'58.81" 146°57'5.90"	Tank 130 m SE of rail corridor	
13	-22°11'12.20" 146°59'29.37"	Tanks 200 m SE of rail corridor	

No	Location	Site	Image
14	-22° 1'46.68" 147° 3'55.13"	Feed lot (Laurel Hills) 730 m NW of rail corridor	
15	-22° 0'45.13" 147° 4'51.62"	Gregory Developmental Road	
16	-21°57'59.40"S 147° 5'5.85"E	Tank 400m W of rail corridor	
17	-21°48'48.75" 147° 6'12.56"	Tank 150 m E of rail corridor	
18	-21°35'41.61" 147°10'54.54"	Tank 130 m N of rail corridor	

No	Location	Site	Image
19	-21°35'9.51" 147°11'14.26"	Weetalaba homestead 640 m N of rail corridor	
20	-21°34'30.44" 147°12'35.44"	Tanks 450 m N of rail corridor	
21	-21°32'18.16" 147°18'59.27"	Tank and cultivation 500 m N of rail corridor	
22	-21°26'56.58" 147°24'17.72"	Suttor Developmental Road	

No	Location	Site	Image
23	- 21°26'40.29" 147°24'9.30"	Cattle yards and tank 400 m NNW of rail corridor	
24	-21°14'34.94" 147°35'2.23"	Bowen Developmental Road	
25	-20°56'11.83" 147°43'36.22"	Tank 60 m E of rail corridor	
26	-20°50'41.11" 147°43'37.98"	Cattle yards 5m W of rail corridor	

No	Location	Site	Image
27	-20°50'8.28" 147°43'42.90"	Tank	
28	-20°47'57.32" 147°43'19.07"	Tank 250 m E of rail corridor	
29	-20°43'46.95" 147°43'19.07"	Bowen River	
30	-20°35'58.24" 147°42'37.84"	Colinton homestead 600 m W of rail corridor	
31	-20°29'22.30" 147°44'36.26"	Windmill and tank 70 m E of rail corridor	

No	Location	Site	Image
32	-20°24'31.31" 147°44'49.28"	Cattle yards 40 m E of rail corridor	
33	-20°23'16.40" 147°44'42.46"	Tank 50 m W of rail corridor	
34	-20°16'37.25" 147°47'45.34"	Cattle yards 550 E of rail corridor	
35	-20°16'26.09" 147°47'45.26"	Glenalpine homestead and outbuildings 500 m E of rail corridor	

No	Location	Site	Image
36	-19°20'4'40.16" 147°50'35.54"	Dam 100 m E of rail corridor	
37	-19°58'8.66" 147°57'47.49"	Bruce Highway	
38	-20°22'13.44" 147°44'10.01"	Mountain Creek Changing station The remnants of a changing station are located 600 m west of the proposed rail corridor. The remnants include stone flagging that was probably the floor of a kitchen (top). An ant bed floor 8 x 10 m was located near the kitchen. Fragments of 19th century pottery and also bottle fragments were scattered throughout the site a (middle). A small depression, possibly a well, was located 50 m to the west of the main site and immediately adjacent to the road. (bottom) This changing station appears to be located on a branch road that joined the main Bowen Downs Road at Eton Vale.	  

39 -20°11'58.32"
147°48'40.68"

Bowen Downs Road

The Bowen Downs Road traverses Eton Vale station. Evidence of the road survives in the Bogie River and Sandy Creek crossings, stone pitching, small quarries adjacent to the road and water facilities. The road follows an existing stock from the Bogie River to Bowen.

Site of intersection of Bowen Downs road with proposed rail line.(top)

Small quarry adjacent to road (middle).

Crossing of Bogie River (bottom).



The survey identified 38 cultural features or sites within one kilometre of the rail corridor.

The land along the corridor is used almost exclusively for grazing and rearing cattle. One paddock was used for cultivation. Not surprisingly, the majority of sites and features identified were associated with cattle production.

This survey revealed seven types of cultural features or sites along the corridor.

Homesteads	4
Cattle yards	4
Stock-watering facilities	21
Windmill	1
Cattle feed lot	1
Roads	5
Historic roads	2

Homesteads

With the exception of Hobartville, the other four homesteads are typical post- World War II complexes comprised of low-set timber houses with metal roofs and an assortment of metal clad sheds used for machinery and equipment. Of these four homesteads, none are unusual or exceptional or have any significant cultural heritage values. Hobartville may have local values but is well outside the corridor and will not be impacted.

Dams/earth tanks

Dams or earth tanks were the most common feature within the corridor – a total of 21 tanks of varying capacity were identified. More than half were in the southern section of the corridor, indicating more intensive grazing on the Belyando Downs and Suttor River plains compared with the northern section through the Clarke and Leichhardt ranges

Earth tanks are ubiquitous on pastoral properties and none identified within the corridor have significant cultural heritage values.

Windmills

Windmills have been and are widely used on pastoral properties to pump sub-artesian groundwater to water stock. Mass-produced windmills were available from the late 19th century, and in Queensland the two most common locally produced brands were Comet and Southern Cross. The one windmill close to the corridor is certainly a typical example of a windmill found throughout rural Australia and not significant.

Roads

Roads and paths are not normally considered as having heritage values place but they can be important in demonstrating early tracks and transportation routes.

The rail corridor crosses four major roads: the Gregory Developmental Road, the Suttor Developmental Road, the Bowen Developmental Road and the Bruce Highway. The Gregory Development Road had its origins in a major inland route planned prior to World War II linking Brisbane to Cairns. However, events during World War II overtook the proposal and only part of the road was built.¹ The other developmental roads were planned in the 1950s to improve road transport for the pastoral industry and have been gradually upgraded in subsequent decades. The proposed design of the rail line will not impact on the roads.

Cattle yards

Three cattle yards were identified within and immediately adjacent to rail corridor. Like tanks, yards for mustering and branding are an integral part of a cattle property and none of these yards are either unusual or exceptional.

Early roads and associated facilities

When Bowen became the point of entry to the northern and north-west hinterland in 1861, the need for a trafficable road from newly established pastoral runs was a high priority. Bowen Downs station, near Muttaborra, was one of the first properties to be established in the north-west. The owners of Bowen Downs were proactive in developing a road from their property to Bowen. The route they developed soon became the major inland road from Bowen to the inland. The main route followed a south-west direction from Bowen, following a section of Eurie Creek and then crossing the Bogie River near Eton Vale station.² The main road continued in a south-west direction while an alternate route went in a more southerly direction (see Figure 3).

Significant sections of the Bowen Downs road survive in river crossings, location of hotels, coaching stops, cuttings, stone pitching and roadside quarries. The road later became a designated stock route and is therefore a gazetted road. A substantial stone causeway survives where the road crossed the Suttor River.

Eton Vale remnants

On Eton Vale station, evidence of the road is still clearly visible in the crossing of the Bogie River and Spring Creek. Other remnants include quarries, and stone flagging that was possibly the base of a water tank. Remnants of a hotel that was to become the site of a township known as Kinnahaird also remain.

¹ Marion Diamond, *Main Roads: The First 50 Years*, Queensland Main Roads, Brisbane, 1999, p. 81.

² Anne Allingham, *Taming the Wilderness*, p. 63

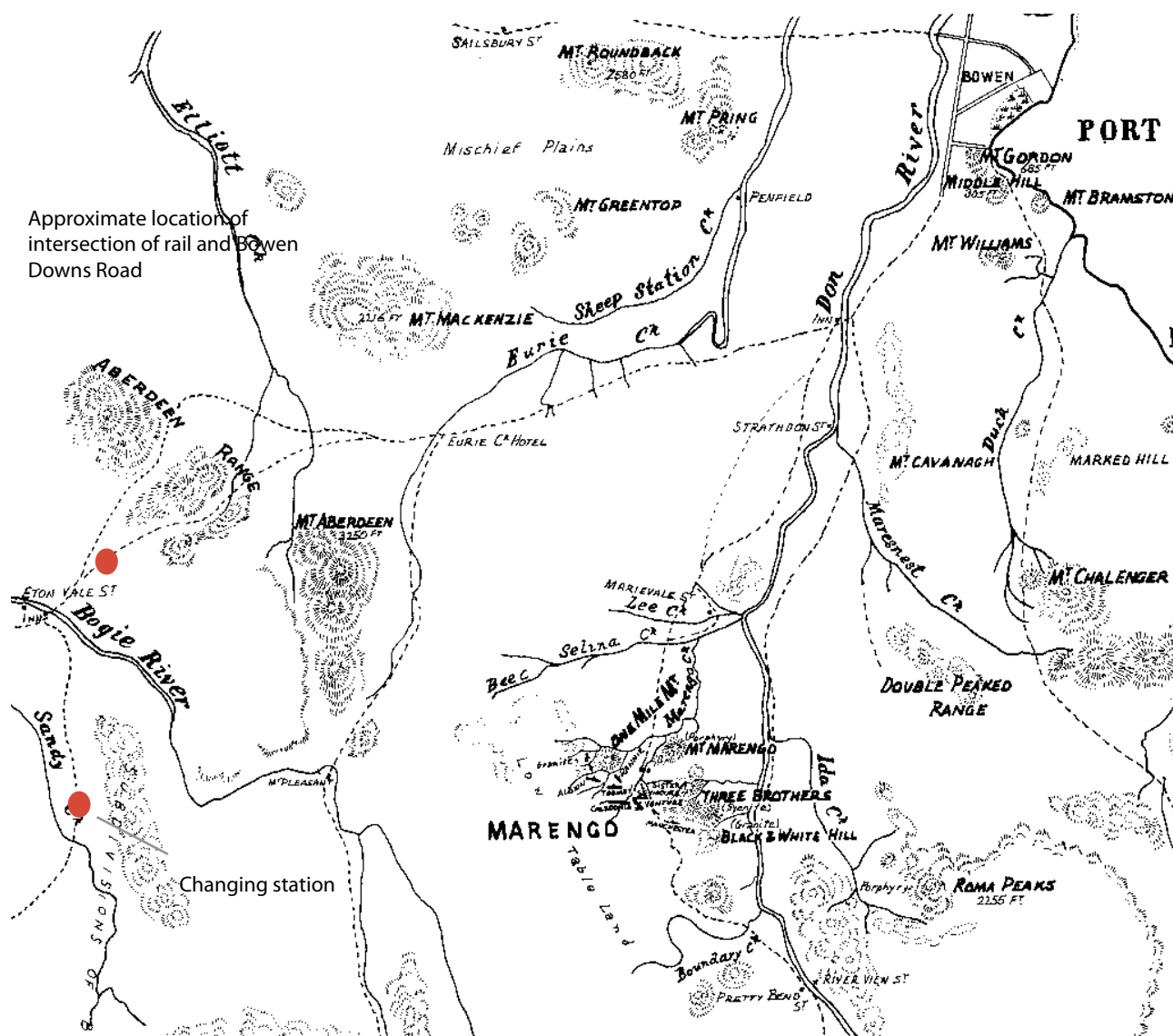


Figure 3 Map of Port Denison and Bowen district prepared by Government Geologist Robert L Jack 1879. This map indicates the route of the roads from Bowen to the south-west and south.



Figure 4 Stone pitching on side of road at Bogie River crossing



Figure 5 Bowen Downs Road at Spring Creek crossing



Figure 6 Quarry adjacent to road north of Spring Creek crossing



Figure 7 Site of Kinnahaird hotel on southern bank of Bogie River

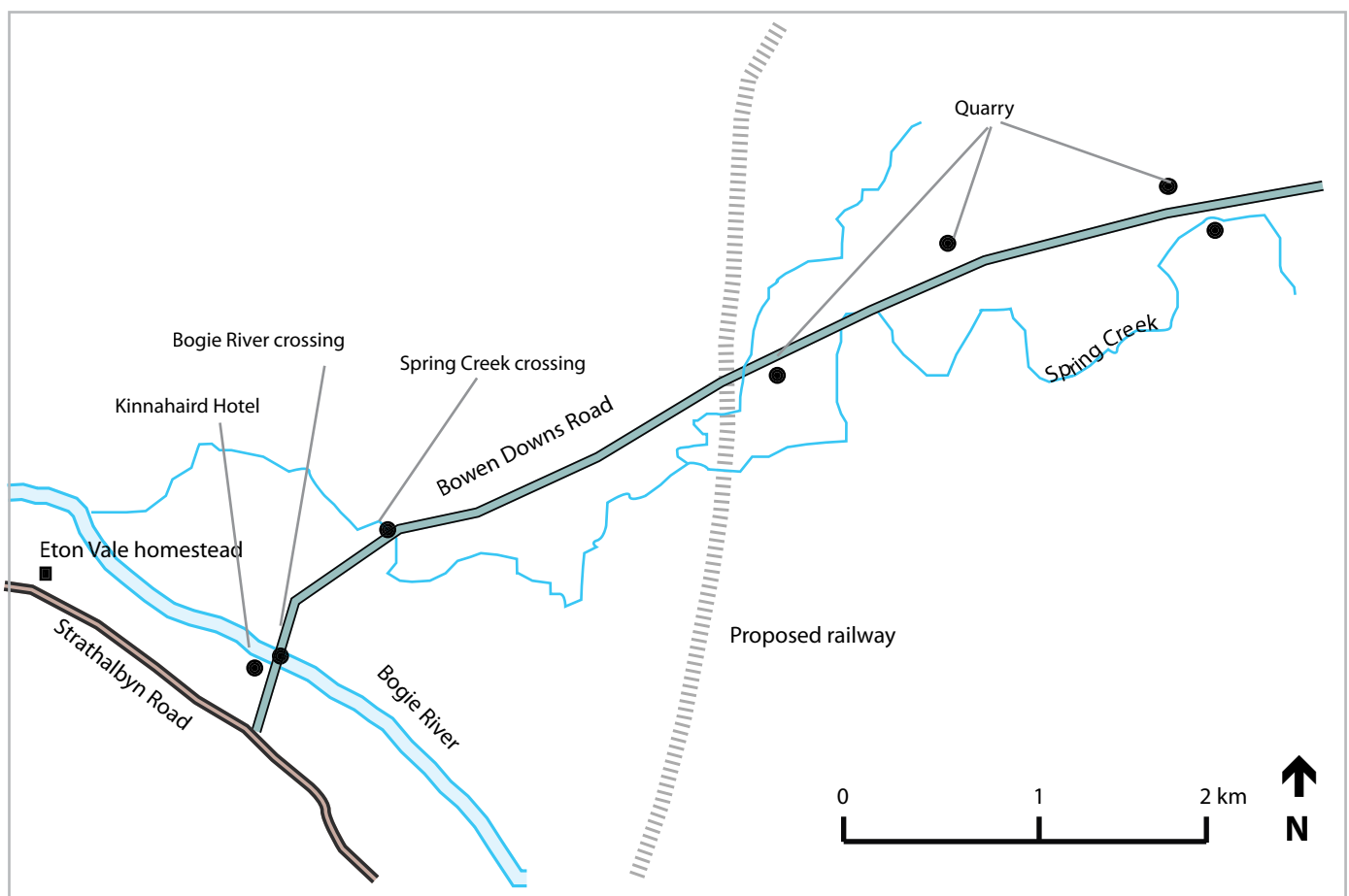


Figure 8 Plan of Bowen Downs road sites

Changing station

Approximately 20 kilometres south where the proposed railway intersects the Bowen Downs road, are remnants of small changing station. It is located near a tributary of Machinery Creek. These remnants comprise stone flagging, the ant-bed base of a building, well, and fragments of pottery and bottles. The pottery and bottle fragments date from the 19th century and it is likely that this was the site of a modest inn or changing station.

Historic roads – assessment of significance

The remnants of both the main Bowen Downs Road and changing station are highly significant as evidence of one of the most important early roads in north Queensland. This section of the road was developed at some cost and effort and was probably funded by the consortium who owned Bowen Downs station. The owners of Bowen Downs station considered it was vital for the success of their station for a suitable road to the most accessible port.

This site, in conjunction with other sites on the early coach roads from Bowen, would meet the criteria for entry on the Queensland Heritage Register and evidence of an highly significant early road in north Queensland.

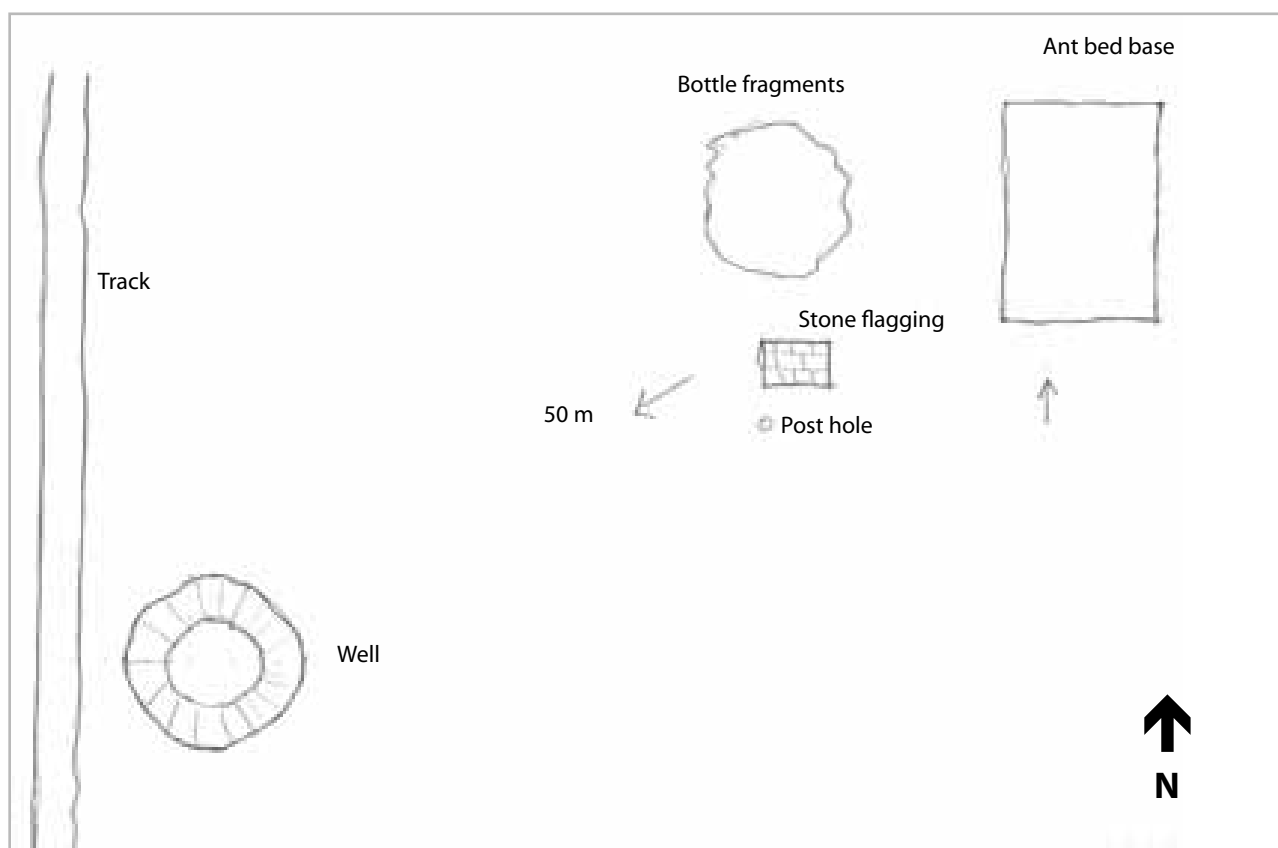


Figure 9 Sketch plan of changing station in vicinity of Mountain Creek



Figure 10 Ant bed base approximately 10 x 8 metres



Figure 12 Detail of stone flagging



Figure 11 19th century bottle fragments



Figure 13 Detail of post hole near stone flagging

5 Abbot Point – survey and assessment

The coal stockyards and infrastructure are located immediately to the west of the existing facilities at Abbot Point. Most of the proposed infrastructure lies within the Abbot Point State Development Area except for rail facilities to the south-west.

Location of sites

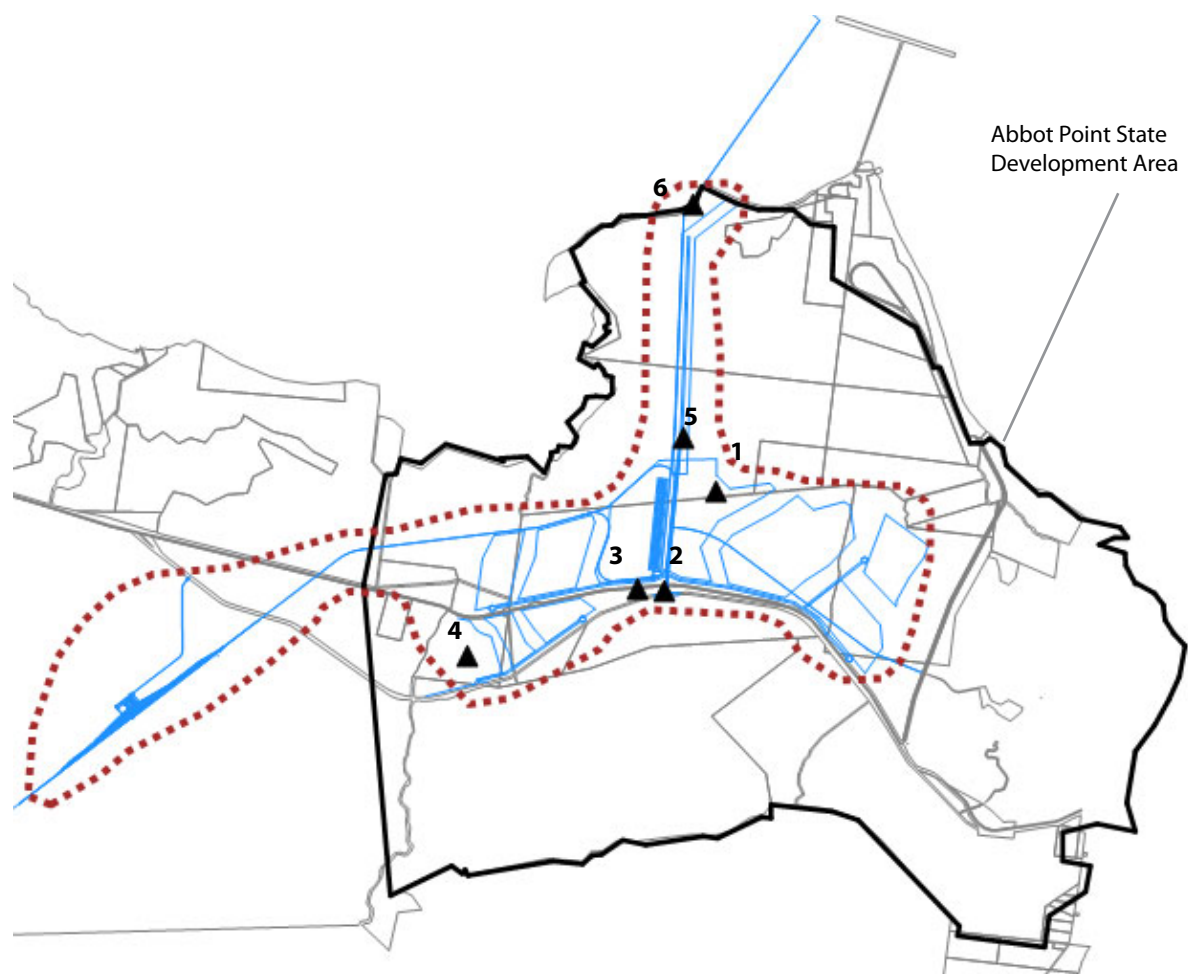




Figure 14 Location of sites within Abbot Point coal terminal facility area

Inventory of sites

No	Location	Site	Image
1	-19°58'37.42" 148° 0'10.34"	Homestead	
2	-19°57'50.99" 148° 2'8.90"	Dam	
3	-19°57'51.46" 148° 2'26.72"	Dam	
4	-19°56'42.45" 148° 3'2.65"	Homestead	
5	-19°56'6.06" 148° 2'40.61"	Dam	
6	-19°53'23.84" 148° 2'46.62"	Beach house	 

Assessment of significance

Of the six sites identified within the Abbot Point, five are associated with two cattle properties. Two sites are homesteads and three are dams. Both homesteads are relatively recent and not significant. The improvements on these properties are also not significant.

The beach house

The beach house is located very close to the beach with views to the Pacific Ocean partly obscured by mature vegetation. The form and materials indicate the building has been extended over time and is a typical example of a beach house constructed along the Queensland coast.

The tradition of building beach houses began in Queensland in the mid-19th century. Beach houses were characterised by informal planning and minimal hierarchy of internal spaces, frequent use of second-hand or recycled materials, simple window openings or shutters, and no fences or physical boundaries. These attributes are evident in this house. Also this house does not appear to be on a separate lot.

While beach houses have now become more formal and planned, the practice of constructing basic fishing or beach huts is still widespread in north Queensland. In 1999, the Member for Burdekin in the Queensland Parliament Jeff Knuth, introduced a private member's bill – The Temporary Coastal Dwelling Protection Bill – to 'clear up the current state of confusion and perplexity that surrounds the future of coastal fishing huts'. In his speech he claimed that there were estimated to be about 1000 beach or fishing huts in his electorate on Crown land. The Burdekin electorate extends approximately 200 kilometres along the coast, and even if the number claimed was exaggerated, it indicates the extent to which the traditional beach house survives in this region.¹

The beach house at Abbot Point is in this tradition and has local significance in demonstrating the custom of building houses for recreation close to the beach with basic planning and materials.

¹ Thom Blake, Gerard Murtagh and Catherine Brouwer, *At the Beach: the cultural significance of beach settlements and beach houses*, 2001.

6 China First mine site – survey and assessment

The proposed China First coal mine site is located 30 kilometres north-west of Alpha. The open cut mine and associated facilities extends over 120 km². This area extends over three pastoral properties: Kia Ora, Glenn Innes, and Monkland. A further area of underground mining will be below Cavendish, Spring Creek and Lambton Meadows.

These properties were originally part of the Hobartville run, which was consolidated from a series of smaller runs in the 1880s. With the consolidation, Hobartville became one of the largest runs in the Alpha district comprising 2200 km². In the 1890s, however, the Queensland government began resuming parts of Hobartville under provisions of the *Crown Lands Act of 1884*. The blocks Hobartville No 3 and No 5 were part of the resumption. By the 1920s, the area had been subdivided into a number of grazing farm and grazing homestead leases including Cavendish, Kia Ora, Monkland and Hazelbush. These blocks

Figure 15 Detail of plan showing blocks resumed from Hobartville run c 1920 (QSA LAN A/974)



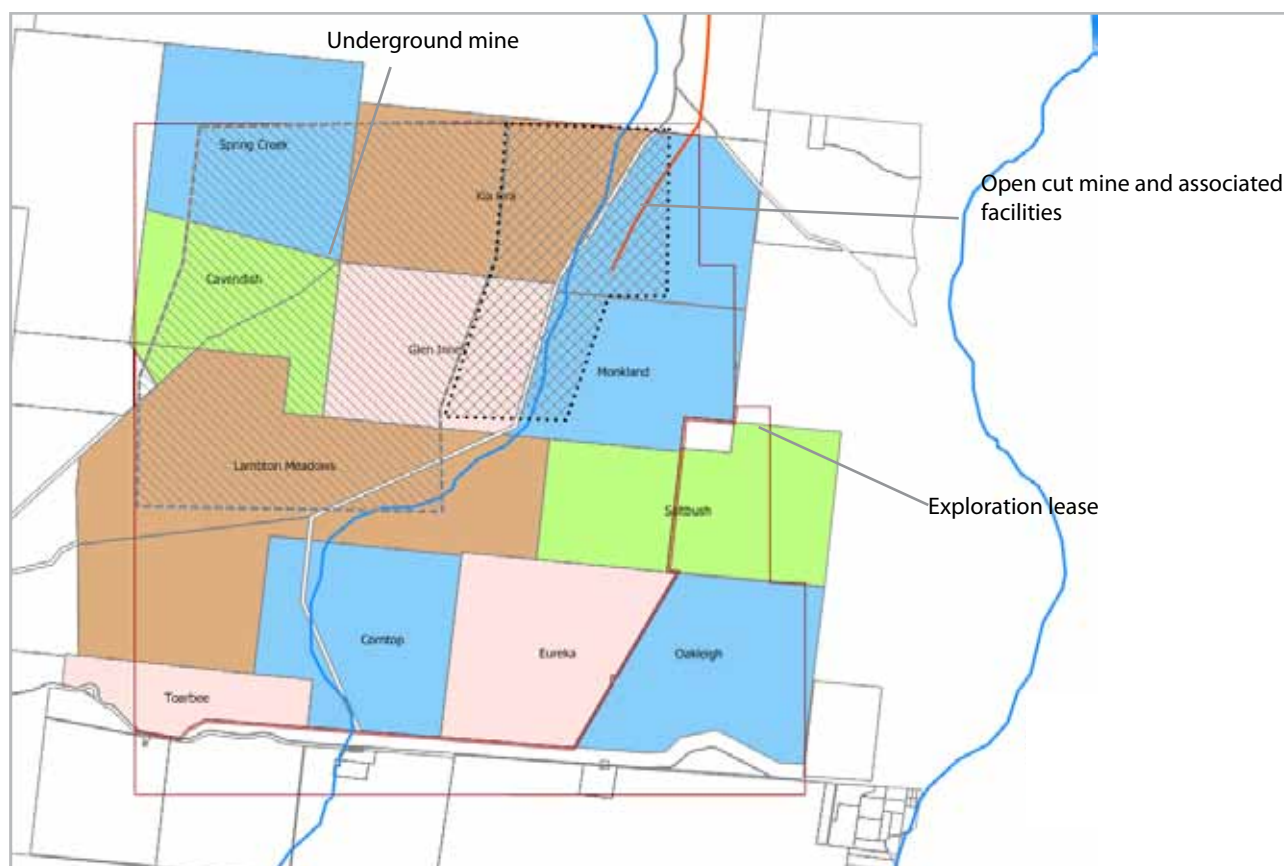


Figure 17 China First mine site

have remained substantially unchanged, although for periods some blocks have been amalgamated into larger holdings. Cavendish, for example, included Kia Ora and Glen Innes, while Monkland and Saltbush have been worked as a single property for an extended period. Until the 1960s these properties, like most other in the Alpha district, principally carried sheep.

Kia Ora has been operated as a separate block for more than 20 years. Most of the current infrastructure on Kia Ora has been erected in this period and includes a house, sheds, dams, tanks, yards, windmills and fencing.

The infrastructure on Monkland/Saltbush has been developed from the early 20th century, and includes houses, sheds, yards, shearing shed, tanks, dams and fences.

The shearing shed possibly dates from the 1920s or earlier when the property was first established. It is a relatively small shearing shed with two stands and associated yards. The woolpress remains although no shearing has long ceased.

Figure 16 Windmill and tank, Kia Ora station. This is typical of the infrastructure on Kia Ora built in the past 20 years.





Figure 19 Aerial view of Monkland homestead

Assessment of significance

On Kia Ora, none of the infrastructure has heritage significance as it has all been erected in the past 20 years.

The Monkland homestead complex comprising two houses, sheds and shearing shed could potentially have local significance as an example of a small-scale pastoral property in the Alpha district that was developed in the early in the 20th century. The shearing shed, in particular, is intact with some machinery in situ and also the wool press. Monkland is a typical and good example of a smaller holding that was developed following the resumption of the larger runs in the late 19th century.



Figure 18 Monkland shearing shed



Figure 20 Wool press in Monkland shearing shed

7 Impacts and mitigation strategies

The survey and assessment of the mine site, rail corridor and coal terminal facility revealed that the China First project will have only a minimal impact on places of cultural heritage significance. The approach in the survey was to identify all cultural sites in the project area and assess for significance. Given the history of land use it was not surprising that few places of heritage significance were identified. The most important places of heritage significance were the Bowen Downs Road and changing station. Both places would meet the threshold for entry on the Queensland Heritage Register.

Two other places, the beach house at Abbot Point and Monkland homestead at the mine site, would potentially meet the threshold for local significance.

Rail corridor – Historic roads and changing stations

The Mountain Creek changing station is located 600 m west of the rail corridor. While it will not be permanently impacted, the potential exists that the site may be inadvertently disturbed during construction.

Recommendation

The Mountain Creek changing station should be identified and marked as a exclusion zone to ensure that no disturbance occurs during construction.

The rail line passes over the former Bowen Downs road near Spring Creek. This original road from Bowen to Bowen Downs station near Muttaborra is still clearly evident in the landscape for a substantial length. Part of the road is still a gazetted road as a stock route. It is important that the road is not divided at the rail crossing.

Recommendation

Through access on the Bowen Downs Road should be maintained where it will be crossed by the proposed rail line.

Remnants of the Bowen Downs Road within a five-kilometre radius of the rail corridor should be identified and marked as an exclusion zone to ensure no disturbance occurs during construction.

Abbot Point coal terminal facilities

The development of the Abbot Point coal terminal facilities will necessitate the removal or demolition of the beach house at Abbot Point. This dwelling has local significance as an example of a local beach house/fishing hut and should be archivally documented prior to demolition or removal. The significance of the site should be incorporated where possible in interpretation.

Recommendation

That an archival record including photographs and plans as specified by the Department of Environment and Resource Management for heritage places be undertaken of the Abbot Point Beach House and its setting. Copies of the archival record should be deposited with the State Library of Queensland and the Bowen library.

The history and significance of the beach house should be incorporated in interpretative facilities associated with the coal terminal.

China First mine site

The development of the China First mine and associated infrastructure will require the demolition or removal of the homesteads and facilities on Kia Ora, Glen Innes and Monkland. Monkland has local significance as a former sheep property with evidence of this use in the shearing shed and wire-netting fence.

These properties may also have moveable heritage that demonstrate the history of the pastoral industry that could be donated to local or regional museum.

Recommendation

That an archival record including photographs and plans as specified by the Department of Environment and Resource Management for heritage places be undertaken of Kia Ora, Glen Innes and Monkland homesteads and surrounding landscape. Copies of the photographic record should be deposited with the State Library of Queensland and the local Alpha library.

The history and significance of the properties should be incorporated in interpretative facilities associated with the China First mine.

Significant objects associated with the pastoral industry that the owners may wish to dispose of should be assessed and consideration given to donating to a local or regional museum.

Monitoring archaeological artifacts

This assessment has focused on assessing places that have potential cultural heritage significance. During construction, it is possible that archaeological artifacts may be discovered. The history of land use

along the rail corridor suggests that significant archaeological finds are unlikely to be discovered.

The possibility of a find, however, cannot be discounted. The *Queensland Heritage Act 1992* contains provisions relating to the discovery of archaeological artefacts.

Sec 89 Requirement to give notice about discovery of archaeological artefact

(1) A person who discovers a thing the person knows or ought reasonably to know is an archaeological artefact that is an important source of information about an aspect of Queensland's history must give the chief executive a notice under this section.

Maximum penalty—1000 penalty units.

(2) The notice must—

- (a) be given to the chief executive as soon as practicable after the person discovers the thing; and*
- (b) state where the thing was discovered; and*
- (c) include a description or photographs of the thing.*

Sec 90 Offence about interfering with discovery

(1) This section applies to a thing for which a person has, under section 89, given the chief executive a notice.

(2) A person who knows that the notice has been given must not, without the chief executive's written consent or unless the person has a reasonable excuse, interfere with the thing until at least 20 business days after the giving of the notice.

Maximum penalty—1000 penalty units.

The Act defines archaeological artifact as:

1 Archaeological artefact means any artefact that is evidence of an aspect of Queensland's history, whether it is located in, on or below the surface of land.

2 Archaeological artefact does not include a thing that is aboriginal cultural heritage under the Aboriginal Cultural Heritage Act 2003 or Torres Strait Islander cultural heritage under the Torres Strait Islander Cultural Heritage Act 2003.

These provisions highlight the importance of ensuring the appropriate processes are in place to minimise delays in the event of a find.

Cultural Heritage Management Plan

The Department of Environment and Resource Management has issued guidelines to assist in developing appropriate procedures and protocols for monitoring places where archaeological artifacts may be found. It is recommended that a Cultural Heritage Management Plan is

prepared to inform contractors and outline the appropriate procedures to adopt in the event of the discovery of an archaeological artifact.

The Cultural Heritage Management Plan should include:

- statutory obligations of all parties involved
- the role of the contractor
- the role of the heritage consultant
- procedures to be adopted in the event of a find including notification of heritage consultant to assess significance of find, stop-work requirements, establishment of buffer zone
- procedures for informing DERM
- documenting and recording of in-situ
- removal and conservation of find if assessed as significant
- management and deposition of find in an appropriate museum or interpretative facility
- report format and contents.

8 Conclusion

The proposed China First project will only have a minimal impact on places of cultural heritage significance.

Development of the mine site will require the removal of the Monkland homestead complex which includes a shearing shed of local significance.

The development of the coal terminal facilities will require the removal of a beach house which is good example of a typical beach in on the north Queensland coast.

The recommended action in relation to Monkland and the beach house is that these places should be documented to DERM standards prior to demolition.

The rail corridor traverse a relatively sparsely populated area of north Queensland. One site is the Bowen Downs Road which the rail line is proposed to cross north of the Bogie River.

A changing station and other remnants associated with the road were identified within close proximity to the rail corridor. There is the potential that during construction these sites may be inadvertently disturbed so it will be necessary to clear identify their location and demarcate an exclusion zone.

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